



Environmental
Protection Agency

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

4/21/2010

JEFF ALTOM
Georgia Pacific Corrugated III, LLC
9048 PORT UNION-RIALTO RD
WEST CHESTER, OH 45069

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1409000859
Permit Number: P0106291
Permit Type: Administrative Modification
County: Butler

Certified Mail

Yes	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

Enclosed please find a final 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. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

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

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

If you have any questions, please contact Hamilton County Dept. of Environmental Services at (513)946-7777 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: HCDOES



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Georgia Pacific Corrugated III, LLC**

Facility ID: 1409000859
Permit Number: P0106291
Permit Type: Administrative Modification
Issued: 4/21/2010
Effective: 4/21/2010
Expiration: 3/24/2015



Division of Air Pollution Control
Permit-to-Install and Operate
for
Georgia Pacific Corrugated III, LLC

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 5
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
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? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 6
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 7
15. What happens if a portion of this permit is determined to be invalid? 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions 11
1. K001, Paper Web Rod Coater..... 12
2. K002, Continuous Paper Web Rod Coater..... 20
3. K003, Continuous Paper Web Rod Coater..... 28



Authorization

Facility ID: 1409000859
Application Number(s): M0000797
Permit Number: P0106291
Permit Description: The permit, P0105912, did not include the PER due date in the Authorization section.
This administrative modification is being issued to correct that error.
Permit Type: Administrative Modification
Permit Fee: \$0.00
Issue Date: 4/21/2010
Effective Date: 4/21/2010
Expiration Date: 3/24/2015
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

Georgia Pacific Corrugated III, LLC
9048 PORT UNION-RIALTO RD
West Chester Twp., OH 45069

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

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

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

The above named entity is hereby granted 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

Chris Korleski
Director



Authorization (continued)

Permit Number: P0106291
Permit Description: The permit, P0105912, did not include the PER due date in the Authorization section.
This administrative modification is being issued to correct that error.

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

Emissions Unit ID:	K001
Company Equipment ID:	Paper Web Rod Coater
Superseded Permit Number:	P0105912
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K002
Company Equipment ID:	Continuous Paper Web Rod Coater
Superseded Permit Number:	P0105912
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K003
Company Equipment ID:	Continuous Paper Web Rod Coater
Superseded Permit Number:	P0105912
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Hamilton County Dept. of Environmental Services 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 submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) 2., 3., 4., and 5.
2. The actual emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units K001 (Paper roll stock coater line #1), K002 (Paper roll stock coater line #2), K003 (Paper roll stock coater line #3), K004 (Flexographic printing press), and any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt emissions units pursuant to OAC rule 3745-31-03, or future constructed emissions units, combined, shall not exceed 9.9 tons per year (TPY) for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with this emissions limitation upon permit issuance.
3. The permittee shall collect and record the following information each month for the emissions units identified in 2. above:
 - a) The name and identification number of each coating employed.
 - b) The individual HAP* content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied.
 - c) The total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied [sum all the individual HAP contents from b)].
 - d) The number of gallons of each coating employed.
 - e) The name and identification number of each cleanup material employed.
 - f) The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied.
 - g) The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from f)].
 - h) The number of gallons of each cleanup material employed.
 - i) The total individual HAP emissions from all coatings and cleanup materials employed, in pounds or tons [for each HAP, the sum of b) times d) for all coatings plus the sum of f) times h) for all cleanup materials, and divided by 2,000 pounds per ton, if the units are in tons].

- j) The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons [the sum of c) times d) for all coatings plus the sum of g) times h) for all cleanup materials, and divided by 2,000 pounds per tons, if the units are in tons].
- k) The updated rolling, 12-month summation of emissions for each individual HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.
- l) The updated rolling, 12-month summation of emissions for the total combined HAP emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

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

4. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations outlined in 2. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).

5. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs, based on a rolling 12-month summation for the emissions units identified in 2.

Applicable Compliance Method:

Compliance with the HAP emission limitations shall be demonstrated by the record keeping requirements specified in 3.

C. Emissions Unit Terms and Conditions



1. K001, Paper Web Rod Coater

Operations, Property and/or Equipment Description:

Michaelman Coater No. 1

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 24.8 pounds per hour excluding cleanup from emissions units K001, K002 and K003 combined.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule OAC rule 3745-21-09(F) and OAC rule 3745-31-05(D).</p>
b.	OAC rule 3745-31-05(D)	VOC emissions shall not exceed 16.44 tons per year including cleanup from emissions units K001, K002 and K003 combined based on a rolling 12-month summation.
c.	OAC rule 3745-21-09(F)	See b)(2)c.

- (2) Additional Terms and Conditions
- a. The volatile organic compound (VOC) content of each coating employed in emissions units K001 through K003 shall not exceed 0.55 lb/gallon, as applied, including water.
 - b. The VOC content of the coatings used in emissions units K001, K002 and K003 shall not exceed 0.09 pound of VOC per gallon of coating, including water, based on a monthly volume-weighted average.
 - c. The VOC content of any coating used in emissions units K001, K002 and K003 shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents.
 - d. The VOC content of the cleanup materials used in emissions units K001, K002 and K003 shall not exceed 3.5 pounds of VOC per gallon.
- c) Operational Restrictions
- (1) The maximum amount of coatings employed in emissions unit K001, K002 and K003 combined shall not exceed 318,660 gallons per year including water based on a rolling, 12- month summation.
 - (2) The amount of organic cleanup materials employed in this emissions unit shall not exceed 400 gallons per year based on a rolling, 12- month summation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each month for emissions units K001, K002 and K003 combined:
 - a. The company identification of each coating and cleanup material employed.
 - b. The number of gallons of each coating employed.
 - c. The number of gallons of each cleanup material employed.
 - d. The volatile organic compound (VOC) content of each coating employed, in pounds per gallon, as applied, including water.
 - e. The VOC content of each cleanup material employed, in pounds per gallon, as applied.
 - f. The VOC content from each coating employed, as applied, in pounds per gallon, excluding water and exempt solvents.
 - g. The VOC emissions from each coating employed, in pounds.
The VOC emissions from each cleanup material employed, in pounds.
 - h. The total VOC emissions from this emissions unit, in pounds.

- i. The updated rolling, 12-month summation of the total VOC emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.
 - j. The updated rolling, 12-month summation for usage of all coatings and cleanup materials employed, in gallons. This shall include the information for the current month and the preceding eleven calendar months.
 - k. The monthly, volume weighted average VOC content of all the coatings employed during the calendar month, in pounds of VOC/gallon, as applied, including water.
- (2) The federally enforceable permit-to-install and operate (FEPTIO) application for these emissions units (K001, K002, and K003) was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or "worst case" toxic contaminant(s):

Toxic Contaminant: Ammonia

TLV (ug/m3): 17,414

Maximum Hourly Emission Rate (lbs/hr): 5.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 409.9

MAGLC (ug/m3): 414.6

The permittee, having demonstrated that emissions of ammonia, from emissions units K001, K002 and K003 combined, are estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute", ORC 3704.03(F), will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- (5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.
- e) Reporting Requirements
- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. The rolling, 12-month summation of the material usage limitations outlined in c)(1) and c)(2).
 - ii. The VOC emissions outlined in b)(1)b.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

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

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

- (2) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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 Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
- (3) The permittee shall also submit annual reports that specify the total volatile organic compound emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Synthetic Minor Fee Emission Report.
- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

f) Testing Requirements

- (1) Compliance with the emission limitations and voluntary restrictions in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 24.8 pounds per hour, excluding cleanup material for emissions units K001, K002 and K003, combined.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation:

Hourly VOC emissions = (45 gallons/hour maximum coating usage) x (0.55 pounds VOC/gallon maximum VOC content).

b. Emission Limitation:

VOC emissions shall not exceed 16.44 tons per year including cleanup from emissions units K001, K002 and K003 combined based on a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the rolling, 12-month VOC emissions limitation in b)(1)b. shall be determined by the record keeping in d)(1).

The annual VOC emission limitation was calculated using the following equation:

Annual VOC emissions = (318,660 gallons of coating/year x 0.09 lb of VOC/gallon of coating x ton/2000 lbs) + (1200 gallons of cleanup material/year x 3.5 lbs of VOC/gallon of cleanup material x ton)/ 2000 lbs = 16.44 TPY VOC.

c. Emission Limitation:

The VOC content of each coating employed in emissions units K001 through K003 shall not exceed 0.55 lb/gallon, as applied, including water.

The VOC content of any coating used in emissions units K001, K002 and K003 shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water.

The VOC content of the cleanup materials used in emissions units K001, K002 and K003 shall not exceed 3.5 pounds of VOC per gallon.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in d)(1). Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of the inks and coatings.

d. Emission Limitation:

The VOC content of the coatings used in emissions units K001, K002 and K003 shall not exceed 0.09 pound of VOC per gallon of coating, including water, based on a monthly volume-weighted average.

Applicable Compliance Method:

Compliance with the monthly volume-weighted average VOC content limitation shall be demonstrated by the recordkeeping in d)(1)k.

e. Usage restriction:

The combined maximum total amount of coatings employed in emissions unit K001, K002 and K003 combined shall not exceed 318,660 gallons per year including water.

The amount of organic cleanup materials employed at emissions units K001 through K003 shall not exceed 400 gallons per year per emissions unit.

Applicable Compliance Method:

Compliance shall be determined by the recordkeeping in d)(1)j.

g) Miscellaneous Requirements

(1) None.

2. K002, Continuous Paper Web Rod Coater

Operations, Property and/or Equipment Description:

Michaelman Coater No. 2

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 24.8 pounds per hour excluding cleanup from emissions units K001, K002 and K003 combined.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule OAC rule 3745-21-09(F) and OAC rule 3745-31-05(D).</p>
b.	OAC rule 3745-31-05(D)	VOC emissions shall not exceed 16.44 tons per year including cleanup from emissions units K001, K002 and K003 combined based on a rolling 12-month summation.
c.	OAC rule 3745-21-09(F)	See b)(2)c.

- (2) Additional Terms and Conditions
- a. The volatile organic compound (VOC) content of each coating employed in emissions units K001 through K003 shall not exceed 0.55 lb/gallon, as applied, including water.
 - b. The VOC content of the coatings used in emissions units K001, K002 and K003 shall not exceed 0.09 pound of VOC per gallon of coating, including water, based on a monthly volume-weighted average.
 - c. The VOC content of any coating used in emissions units K001, K002 and K003 shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents.
 - d. The VOC content of the cleanup materials used in emissions units K001, K002 and K003 shall not exceed 3.5 pounds of VOC per gallon.
- c) Operational Restrictions
- (1) The maximum amount of coatings employed in emissions unit K001, K002 and K003 combined shall not exceed 318,660 gallons per year including water based on a rolling, 12- month summation.
 - (2) The amount of organic cleanup materials employed in this emissions unit shall not exceed 400 gallons per year based on a rolling, 12- month summation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each month for emissions units K001, K002 and K003 combined:
 - a. The company identification of each coating and cleanup material employed.
 - b. The number of gallons of each coating employed.
 - c. The number of gallons of each cleanup material employed.
 - d. The volatile organic compound (VOC) content of each coating employed, in pounds per gallon, as applied, including water.
 - e. The VOC content of each cleanup material employed, in pounds per gallon, as applied.
 - f. The VOC content from each coating employed, as applied, in pounds per gallon, excluding water and exempt solvents.
 - g. The VOC emissions from each coating employed, in pounds.
The VOC emissions from each cleanup material employed, in pounds.
 - h. The total VOC emissions from this emissions unit, in pounds.

- i. The updated rolling, 12-month summation of the total VOC emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.
 - j. The updated rolling, 12-month summation for usage of all coatings and cleanup materials employed, in gallons. This shall include the information for the current month and the preceding eleven calendar months.
 - k. The monthly, volume weighted average VOC content of all the coatings employed during the calendar month, in pounds of VOC/gallon, as applied, including water.
- (2) The federally enforceable permit-to-install and operate (FEPTIO) application for these emissions units (K001, K002, and K003) was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or "worst case" toxic contaminant(s):

Toxic Contaminant: Ammonia

TLV (ug/m3): 17,414

Maximum Hourly Emission Rate (lbs/hr): 5.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 409.9

MAGLC (ug/m3): 414.6

The permittee, having demonstrated that emissions of ammonia, from emissions units K001, K002 and K003 combined, are estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute", ORC 3704.03(F), will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- (5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.
- e) Reporting Requirements
- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. The rolling, 12-month summation of the material usage limitations outlined in c)(1) and c)(2).
 - ii. The VOC emissions outlined in b)(1)b.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

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

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

- (2) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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 Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
- (3) The permittee shall also submit annual reports that specify the total volatile organic compound emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Synthetic Minor Fee Emission Report.
- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

f) Testing Requirements

- (1) Compliance with the emission limitations and voluntary restrictions in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 24.8 pounds per hour, excluding cleanup material for emissions units K001, K002 and K003, combined.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation:

Hourly VOC emissions = (45 gallons/hour maximum coating usage) x (0.55 pounds VOC/gallon maximum VOC content).

b. Emission Limitation:

VOC emissions shall not exceed 16.44 tons per year including cleanup from emissions units K001, K002 and K003 combined based on a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the rolling, 12-month VOC emission limitation in b)(1)b. shall be determined by the record keeping in d)(1).

The annual VOC emissions limitation was calculated using the following equation:

Annual VOC emissions = (318,660 gallons of coating/year x 0.09 lb of VOC/gallon of coating x ton/2000 lbs) + (1200 gallons of cleanup material/year x 3.5 lbs of VOC/gallon of cleanup material x ton)/2000 lbs = 16.44 TPY of VOC.

c. Emission Limitation:

The VOC content of each coating employed in emissions units K001 through K003 shall not exceed 0.55 lb/gallon, as applied, including water.

The VOC content of any coating used in emissions units K001, K002 and K003 shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water.

The VOC content of the cleanup materials used in emissions units K001, K002 and K003 shall not exceed 3.5 pounds of VOC per gallon.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in d)(1). Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of the inks and coatings.

d. Emission Limitation:

The VOC content of the coatings used in emissions units K001, K002 and K003 shall not exceed 0.09 pound of VOC per gallon of coating, including water, based on a monthly volume-weighted average.

Applicable Compliance Method:

Compliance with the monthly volume-weighted average VOC content limitation shall be demonstrated by the recordkeeping in d)(1)k.

e. Usage restriction:

The combined maximum total amount of coatings employed in emissions unit K001, K002 and K003 combined shall not exceed 318,660 gallons per year including water.

The amount of organic cleanup materials employed at emissions units K001 through K003 shall not exceed 400 gallons per year per emissions unit.

Applicable Compliance Method:

Compliance shall be determined by the recordkeeping in d)(1)j.

- g) Miscellaneous Requirements
 - (1) None.



3. K003, Continuous Paper Web Rod Coater

Operations, Property and/or Equipment Description:

Michaelman Coater No. 3

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 24.8 pounds per hour excluding cleanup from emissions units K001, K002 and K003 combined.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule OAC rule 3745-21-09(F) and OAC rule 3745-31-05(D).</p>
b.	OAC rule 3745-31-05(D)	VOC emissions shall not exceed 16.44 tons per year including cleanup from emissions units K001, K002 and K003 combined based on a rolling 12-month summation.
c.	OAC rule 3745-21-09(F)	See b)(2)c.

- (2) Additional Terms and Conditions
- a. The volatile organic compound (VOC) content of each coating employed in emissions units K001 through K003 shall not exceed 0.55 lb/gallon, as applied, including water.
 - b. The VOC content of the coatings used in emissions units K001, K002 and K003 shall not exceed 0.09 pound of VOC per gallon of coating, including water, based on a monthly volume-weighted average.
 - c. The VOC content of any coating used in emissions units K001, K002 and K003 shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents.
 - d. The VOC content of the cleanup materials used in emissions units K001, K002 and K003 shall not exceed 3.5 pounds of VOC per gallon.
- c) Operational Restrictions
- (1) The maximum amount of coatings employed in emissions unit K001, K002 and K003 combined shall not exceed 318,660 gallons per year including water based on a rolling, 12- month summation.
 - (2) The amount of organic cleanup materials employed in this emissions unit shall not exceed 400 gallons per year based on a rolling, 12- month summation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each month for emissions units K001, K002 and K003 combined:
 - a. The company identification of each coating and cleanup material employed.
 - b. The number of gallons of each coating employed.
 - c. The number of gallons of each cleanup material employed.
 - d. The volatile organic compound (VOC) content of each coating employed, in pounds per gallon, as applied, including water.
 - e. The VOC content of each cleanup material employed, in pounds per gallon, as applied.
 - f. The VOC content from each coating employed, as applied, in pounds per gallon, excluding water and exempt solvents.
 - g. The VOC emissions from each coating employed, in pounds.
The VOC emissions from each cleanup material employed, in pounds.
 - h. The total VOC emissions from this emissions unit, in pounds.

- i. The updated rolling, 12-month summation of the total VOC emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.
 - j. The updated rolling, 12-month summation for usage of all coatings and cleanup materials employed, in gallons. This shall include the information for the current month and the preceding eleven calendar months.
 - k. The monthly, volume weighted average VOC content of all the coatings employed during the calendar month, in pounds of VOC/gallon, as applied, including water.
- (2) The federally enforceable permit-to-install and operate (FEPTIO) application for these emissions units (K001, K002, and K003) was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or “worst case” toxic contaminant(s):

Toxic Contaminant: Ammonia

TLV (ug/m3): 17,414

Maximum Hourly Emission Rate (lbs/hr): 5.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 409.9

MAGLC (ug/m3): 414.6

The permittee, having demonstrated that emissions of ammonia, from emissions units K001, K002 and K003 combined, are estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).

- (3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration”, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute”, ORC 3704.03(F), will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. The rolling, 12-month summation of the material usage limitations outlined in c)(1) and c)(2).
 - ii. The VOC emissions outlined in b)(1)b.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

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

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

- (2) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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 Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
- (3) The permittee shall also submit annual reports that specify the total volatile organic compound emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Synthetic Minor Fee Emission Report.
- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

f) Testing Requirements

- (1) Compliance with the emission limitations and voluntary restrictions in b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 24.8 pounds per hour, excluding cleanup material for emissions units K001, K002 and K003, combined.

Applicable Compliance Method:

The hourly emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation:

Hourly VOC emissions = (45 gallons/hour maximum coating usage) x (0.55 pound of VOC/gallon maximum VOC content).

b. Emission Limitation:

VOC emissions shall not exceed 16.44 tons per year including cleanup from emissions units K001, K002 and K003 combined based on a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the rolling, 12-month VOC emission limitation in b)(1)b. shall be determined by the record keeping in d)(1).

The annual VOC emission limitation was calculated using the following equation:

Annual VOC emissions = (318,660 gallons of coating/year x 0.09 lb of VOC/gallon of coating x ton/2000 lbs) + (1200 gallons of cleanup material/year x 3.5 lbs of VOC/gallon of cleanup material x ton)/2000 lbs = 16.44 TPY of VOC.

c. Emission Limitation:

The VOC content of each coating employed in emissions units K001 through K003 shall not exceed 0.55 lb/gallon, as applied, including water.

The VOC content of any coating used in emissions units K001, K002 and K003 shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water.

The VOC content of the cleanup materials used in emissions units K001, K002 and K003 shall not exceed 3.5 pounds of VOC per gallon.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in d)(1). Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of the inks and coatings.

d. Emission Limitation:

The VOC content of the coatings used in emissions units K001, K002 and K003 shall not exceed 0.09 pound of VOC per gallon of coating, including water, based on a monthly volume-weighted average.

Applicable Compliance Method:

Compliance with the monthly volume-weighted average VOC content limitation shall be demonstrated by the recordkeeping in d)(1)k.

e. Usage restriction:

The combined maximum total amount of coatings employed in emissions unit K001, K002 and K003 combined shall not exceed 318,660 gallons per year including water.

The amount of organic cleanup materials employed at emissions units K001 through K003 shall not exceed 400 gallons per year per emissions unit.

Applicable Compliance Method:

Compliance shall be determined by the recordkeeping in d)(1)j.

g) Miscellaneous Requirements

(1) None.