



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

12/31/2008

Gary Avalon
ChemDevelopment Plant 2
9079 Tyler Blvd.
Mentor, OH 44060

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0243081428
Permit Number: P0104161
Permit Type: Initial Installation
County: Lake

Certified Mail

Yes	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Lake County News-Herald. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control Web page <http://www.epa.state.oh.us/dapc> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

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

and Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install and operate will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install and Operate is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171.

Sincerely,

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA-NEDO; Pennsylvania; Canada

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

This Permit to Install/Permit to Operate modification (P0104161) is a synthetic minor permit mod of PTI 02-22020, issue date 9/5/06 (FEPTIO) to add a new pilot coater (K005) and restrict its potential to emit of VOCs and HAPs along with restricting the PTE of the three remaining pilot coaters (K001, K002, and K004) from Title V and non- attainment new source review (Emission Offset).

Through synthetic minor restrictions of material usage of individual HAPs, total HAPs and volatile organic compounds based on a rolling annual summation, and the fact that this facility coats paper and fabric exclusively for the purpose of research and development, this facility is no longer subject to the following MACT standards:

- 40 CFR Part 63 Subpart JJJJ (Paper and Other Web Coating)
- 40 CFR Part 63 Subpart OOOO (Fabric Coating)
- 40 CFR Part 63 Subpart DDDDD (Boilers and Process Heaters)

Total permissible (allowable) VOC emissions and HAPs:

K001	5.47 TPY
K002	2.81 TPY
K004	5.47 TPY
K005	3.15 TPY

Total allowable: 24.9 TPY VOC

9.9 TPY HAPs

Modeling for toluene, the worst case Air Toxic, was completed and screen results were below the MAGLC. (Please see modeling in "Attachments" section of the application).

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
ChemDevelopment Plant 2

Issue Date: 12/31/2008

Permit Number: P0104161

Permit Type: Initial Installation

Permit Description: A modification to include emissions unit number K005 in a synthetic minor permit to restrict facility wide potential to emit to below Title V and MACT major source threshold values.

Facility ID: 0243081428

Facility Location: ChemDevelopment Plant 2
9079 Tyler Blvd.,
Mentor, OH 44060

Facility Description: Testing Laboratories

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Nancy Meli at Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road or (330)425-9171. The permit can be downloaded from the Web page: www.epa.state.oh.us/dapc



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

DRAFT

**Air Pollution Permit-to-Install and Operate
for
ChemDevelopment Plant 2**

Facility ID: 0243081428
Permit Number: P0104161
Permit Type: Initial Installation
Issued: 12/31/2008
Effective: To be entered upon final issuance
Expiration: To be entered upon final issuance



Air Pollution Permit-to-Install and Operate
for
ChemDevelopment Plant 2

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104161

Facility ID: 0243081428

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0243081428

Application Number(s): A0036414

Permit Number: P0104161

Permit Description: A modification to include emissions unit number K005 in a synthetic minor permit to restrict facility wide potential to emit to below Title V and MACT major source threshold values.

Permit Type: Initial Installation

Permit Fee: \$200.00 *DO NOT send payment at this time - subject to change before final issuance*

Issue Date: 12/31/2008

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

ChemDevelopment Plant 2
9079 Tyler Blvd.
Mentor, OH 44060

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:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104161

Facility ID: 0243081428

Effective Date: To be entered upon final issuance

Authorization (continued)

Permit Number: P0104161

Permit Description: A modification to include emissions unit number K005 in a synthetic minor permit to restrict facility wide potential to emit to below Title V and MACT major source threshold values.

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

Emissions Unit ID:	K005
Company Equipment ID:	Coater TPC-2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104161

Facility ID: 0243081428

Effective Date: To be entered upon final issuance

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 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 Ohio EPA DAPC, Northeast District Office 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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104161

Facility ID: 0243081428

Effective Date: To be entered upon final issuance

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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104161

Facility ID: 0243081428

Effective Date: To be entered upon final issuance

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) d)(5), d)(6) and d)(7)
[Ohio Administrative Code 3745-114 Toxic Air Contaminants (Air Toxic Policy)]
 - 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) b)(1)b



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104161

Facility ID: 0243081428

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. K005, Coater TPC-2 restricted emissions along with coaters K001, K002, K004

Operations, Property and/or Equipment Description:

TPC-2 pilot coater for paper and other web coating coaters at Plant 2

The requirements of this permit to install (PTI) supercede the requirements of PTI modification 02-22020, effective date 9/5/2006

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)(5), d)(6) and d)(7)

[Ohio Administrative Code 3745-114 Toxic Air Contaminants (Air Toxic Policy)]

(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

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)	Volatile organic compound (VOC) emissions from this emissions unit, including cleanup, shall not exceed 22.0 pounds per day and 4.02 tons per year.
b.	OAC rule 3745-31-05(D)	Based on rolling, 12-month summations of emissions, facility-wide, for this emissions unit and all other non-trivial emissions units [Pilot coater lines 1, 2, and 4, and TPC-2 ; (emissions units K001, K002, K004 and K005)] the following limits apply: the maximum annual individual and total hazardous air pollutant (HAP) emissions shall not exceed 9.9 tons per year and



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		24.9 tons per year, respectively; and the maximum annual VOC emissions shall not exceed 99.0 tons per year.
	OAC rule 3745-21-09(F) and OAC rule 3745-21-09(G)	The VOC content for any coating employed in this emissions unit shall not exceed 2.9 pounds per gallon, based on a daily volume-weighted average, as applied to paper and/or fabric, excluding water and exempt solvents.
	40 CFR Part 60, Subpart RR (NSPS)	The permittee shall not discharge VOC emissions into the atmosphere of more than 0.2 kg of VOC per kg of coating solids applied, calculated as a mass-weighted average for each month. If all coatings are less than 0.2 kg of VOC per kg of coating solids, no mass weighted average for each month needs to be calculated.
	OAC rule 3745-21-07(G)(2)	While coating plastic, the emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a.) This is a synthetic minor Permit to Install (P0104161) to restrict the facility-wide potential to emit of VOCs from four pilot coaters, (K001, K002 and K004) and one newly installed pilot coater (K005), in order to avoid the requirements of Title V and nonattainment new source review (Emission Offset). Through synthetic minor emission limitations of individual HAPs, total HAPs and VOC listed in b)(1) of the terms and conditions for this emissions unit, and the fact that this facility coats paper and fabric exclusively for the purpose of research and development, this facility is no longer or not at all subject to the following MACT standards nor the requirements of the Title V Permitting Program:

40 CFR Part 63, Subpart JJJJ (Paper and Other Web Coating);

40 CFR Part 63, Subpart OOOO (Fabric Coating); and

40 CFR Part 63, Subpart DDDDD [Boilers and Process Heaters(vacated)].

To ensure these emission limitations are met, the permittee shall keep records as specified in section C.1.d) below.



c) Operational Restrictions

- (1) Based on rolling, 12 month summations, the maximum annual individual and total HAP(s) emissions, facility-wide, for this emissions unit (K005) and all other non-trivial emissions units (emissions units, K001, K002, K004 and K005) shall not exceed 9.9 tons per year and 24.9 tons per year, respectively.

Also, based on rolling, 12 month summations, the maximum annual VOC emissions, facility-wide, for this emissions unit (K005) and all other non-trivial emissions units (emissions units K001, K002, K004 and K005) shall not exceed 99.0 tons per year.

- (2) The weight of VOCs applied/used at this facility shall not exceed 99.0 tons per rolling, 12-months, calculated using the following formula:

$$99.0 \text{ tons VOC} \geq \sum_{i=1}^n [(P_i)(VOC_i)] / 2000 \text{ lbs/ton}$$

where:

P_i = usage of the coating and cleanup material i , in gallons during the last 12 months; and

VOC_i = volatile organic compound content of all coating i , cleanup material i , in pounds per gallon.

- a. To ensure enforceability during the first twelve (12) calendar months of operation following the effective date of this FEPTIO, the permittee shall not exceed the following VOC levels, individual HAP levels and total HAPs levels for all coating lines (emissions units K001, K002, K004 and K005):

Month(s) following PTI effective date	Maximum allowable VOC cumulative emissions including cleanup (in tons)	Maximum allowable individual HAP cumulative emissions including cleanup (in tons)	Maximum allowable total HAPs cumulative emissions including cleanup (in tons)
1	9.0	0.90	2.25
1-2	18.0	1.8	4.50
1-3	27.0	2.7	6.75
1-4	36.0	3.6	9.00
1-5	45.0	4.5	11.25



1-6	54.0	5.4	13.50
1-7	63.0	6.3	15.75
1-8	72.0	7.2	18.00
1-9	81.0	8.1	20.25
1-10	90.0	9.0	22.50
1-11	98.9	9.9	24.75
1-12	99.0	9.9	24.90

After the first 12 calendar months of operation following the issuance of this permit, compliance shall be based upon a rolling, 12-month summation of VOC, individual HAP and total HAPs emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for coating lines PC-1, PC-2, PC-4 and TPC-2 (emissions units K001, K002, K004, and K005):
 - a. the name and identification number of each coating and cleanup material employed;
 - b. the VOC content of each coating and cleanup material employed, in pounds per gallon;
 - c. the individual HAP* content for each HAP of each coating and cleanup material, in pounds of individual HAP per gallon of coating/cleanup material, as applied;
 - d. the total combined HAP content of each coating and cleanup material, in pounds of combined HAPs per gallon of coating/cleanup material, as applied [sum all the individual HAP contents per gallon of coating from (c)];
 - e. the number of gallons of each coating and cleanup material employed;
 - f. the total VOC emissions from all coatings and cleanup materials, in pounds and tons per month;
 - g. the total individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds per month [for each HAP (c) times (e) for each coating and cleanup material];
 - h. the total combined HAP emissions from all coatings and cleanup materials employed, in pounds per month [(d) times (e) for each coating and cleanup material];
 - i. the updated rolling, 12-month summation of the emissions for each individual HAP, in pounds. This shall include the information for the current month and the preceding eleven calendar months;



- j. the updated rolling, 12-month summation of the emissions for total combined HAPs, in pounds. This shall include the information for the current month and the preceding eleven calendar months; and
- k. the updated rolling, 12-month summation of the emissions of VOCs, in pounds and 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, on the Ohio EPA website or can be obtained by contacting your Northeast District Office contact. This information does not have to be kept on a line-by-line basis.

(2) The permittee shall collect and record the following information each day for this emissions unit TPC-2 (emissions unit K005):

- a. the name and identification number of each coating and cleanup material employed;
- b. the VOC content of each coating and cleanup material employed, in pounds per gallon;
- c. the number of gallons of each coating and cleanup material employed; and
- d. the total VOC emissions from all coatings and cleanup materials, in pounds per day.

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

- a. The name and identification number of each coating employed;
- b. The weighted average of the mass of solvent (VOC) used per mass of coating solids applied, in kg VOC/kg coating solids applied, calculated in accordance with the equation in section 60.443(a)(2) of 40 CFR 60, Subpart RR, and as follows:

- i. The weight fraction of volatile organic compounds and the weight fraction coating solids of each coating applied shall be determined by 40 CFR Part 60, Appendix A, Reference Method 24, or other test method approved by U.S. EPA, or by the coating manufacturer's formulation data, strictly based on Method 25, if approved by U.S. EPA. In accordance with the USEPA's written approval of February 11, 1998, GCMS, Capillary Column Technique Method 8260A may be used to determine the VOC content of the water-based coatings, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A.
- ii. The weighted average (G) shall be calculated using the following equation:

$$G = (TWM_o) / (TWM_s)$$

where: n

$$TWM_o = \frac{\sum_{i=1}^n (W_{oi} \times M_{ci})}{\sum_{i=1}^n M_{ci}}$$



$(TWM_O = \text{the sum, from } i = 1 \text{ to } i = n, \text{ of } (W_{oi} \times M_{ci})_i); \text{ and}$ n

$TWM_s = \sum_{i=1}^n (W_{si} \times M_{ci})_i$

$(TWM_s = \text{the sum, from } i = 1 \text{ to } i = n, \text{ of } (W_{si} \times M_{ci})_i)$

where:

i = subscript denoting an individual coating;

n = the number of different coatings employed;

M_{ci} = the total mass (kg) of each coating (i) applied during the calendar month as determined from facility records;

W_{oi} = the weight fraction of volatile organic compounds of each coating (i) applied during the calendar month as determined by Reference Method 24 or other test method approved by U.S. EPA, or by the coating manufacturer's formulation data; and

W_{si} = the weight fraction of coating solids of each coating (i) applied during the calendar month as determined by Reference Method 24 or other test method approved by U.S. EPA, or by the coating manufacturer's formulation data.

- (4) The permittee shall collect and record the following information daily for all coatings employed in this emissions unit:
 - a. the name and identification number of each coating employed;
 - b. the VOC content of each coating employed, in pounds per gallon;
 - c. the total number of gallons of each coating employed; and
 - d. the VOC content of each coating in pounds per gallon, based on a daily volume weighted average, as applied.

- (5) The permit-to-install for this emissions unit (K005) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied 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):



Pollutant: Toluene

TLV (mg/m3): 188 mg/m3

Maximum Hourly Emission Rate (lbs/hr): 4.66 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1733.0 ug/m3

MAGLC (ug/m3): 10,710 ug/m3

(6) 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
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

(7) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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

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



- b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- e) Reporting Requirements
- (1) The permittee shall submit deviation (excursion) reports to the Director (the Northeast District of the Ohio EPA) which include the following information for these emissions units:
 - a. an identification of each day during which the daily VOC emissions exceeded 22.0 lbs from K005;
 - b. an identification of any record indicating that the rolling, 12-month summation of VOC emissions, or the annual VOC emissions exceeded 99.0 tons year, facility-wide, and the actual rolling, 12-month summation and/or the actual annual VOC emissions, facility-wide;
 - c. an identification of any record indicating that the rolling, 12-month summation of any individual HAP exceeded 9.9 tons year, facility wide, and the actual rolling, 12-month summation, facility-wide; and
 - d. an identification of any record indicating that the rolling, 12-month summation of total HAPs, facility-wide, exceeded 24.9 tons year, facility-wide; and the actual rolling, 12-month summation, facility-wide of total HAP emissions;
 - e. an identification of each month during which the mass-weighted average VOC emissions from coatings in this emissions unit exceeded 0.20 kg VOC/kg of coating solids applied, and the actual mass-weighted average VOC emissions from coatings in kg VOC per kg of coating solids applied, for each such month; and
 - f. an identification of any record indicating that the VOC content of any coating used in this emissions unit exceeded 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents.
 - (2) 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 emissions limits in b)(1) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

The VOC content for any coating employed in this emissions unit shall not exceed 2.9 pounds per gallon, based on a daily volume-weighted average, as applied to paper and/or fabric, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(4) of these terms and conditions. In accordance with OAC rule 3745-21-04(B)(5), 40 CFR Part 60, Appendix A, Method 24 shall be used to determine the VOC content of the coatings.

b. Emission Limitations:

VOC emissions from this emissions unit, including cleanup, shall not exceed 22.0 pounds per day and 4.02 tons per year.

The maximum, facility-wide annual VOC emissions shall not exceed 99.0 tons per year based on a rolling, 12-month summation.

Applicable Compliance Methods:

Compliance with the short-term VOC emission limitation of 22.0 lbs/day shall be demonstrated based upon the record keeping requirements specified in d)(2) and d)(4) of these terms and conditions.

The VOC emission limitation of 4.02 tpy was developed by multiplying the short-term allowable VOC emission limitation (22.0 lbs/day) by the maximum annual days of operation (365 days), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

Compliance with the VOC emission limitation of 99.0 tons per year based on a rolling, 12-month summation shall be demonstrated based upon the record keeping requirements specified in d)(1) of these terms and conditions.

c. Emission Limitation:

The maximum, facility-wide annual individual HAP emissions shall not exceed 9.9 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1) of these terms and conditions.

d. Emission Limitation:

The maximum, facility-wide annual total combined HAP emissions shall not exceed 24.9 tons per year based on a rolling, 12-month summation.



Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1) of these terms and conditions.

e. Emission Limitation:

The permittee shall not discharge VOC emissions into the atmosphere of more than 0.20 kg VOC/kg coating solids applied, calculated as a mass-weighted average for each calendar month.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(3) of these terms and conditions.

g) Miscellaneous Requirements

(1) None.