



7/30/2014

Mr. Pierre El-Hindi  
TREMCO INC. - MAMECO DIVISION  
4475 E. 175th Street  
Cleveland, OH 44128

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

Facility ID: 1318002813  
Permit Number: P0116825  
Permit Type: Initial Installation  
County: Cuyahoga

Certified Mail

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

Dear Permit Holder:

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

Andrew Hall Permit Review/Development Section Ohio EPA, DAPC 50 West Town Street Suite 700 PO Box 1049 Columbus, Ohio 43216-1049	and	Cleveland Division of Air Quality 2nd Floor 75 Erieview Plaza Cleveland, OH 44114
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Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297.

Sincerely,

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

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





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination (FEPTIO to avoid Title V)

Netting Determination

2. Source Description:

Emissions unit P024 is a mixing kettle which was installed and declared DeMinimis in 2006. P024 will now be used for solvent based coatings and adhesives, with dry raw materials handling equipment being added to the process. This permit action is being processed as an initial permit because there is no previous permit upon which to base a Chapter 31 modification.

3. Facility Emissions and Attainment Status:

Facility actual volatile organic compound (VOC) emissions reported for calendar year 2013 were 2.51 tons. Cuyahoga County is currently designated as nonattainment for ozone and partial nonattainment for lead.

4. Source Emissions:

Emissions unit P024 has a potential to emit for PE and VOC that are each less than 10 tons/year. The permit is written as a FEPTIO because the facility-wide potential to emit for HAP (xylene) is 13 tons/year. The facility has accepted a facility-wide limitation on HAPs of 9.5 tons/year for a single HAP and 24.5 tons/year for combined HAPs as a rolling, 12-month summation of emissions. Recordkeeping requirements have been included to demonstrate compliance with the facility-wide HAP limitations.

5. Conclusion:

This is a FEPTIO permit requiring facility-wide single HAP does not exceed 9.5 tons/year and combined HAP 24.5 tons/year as a rolling, 12-month summation. Compliance will be demonstrated through the recordkeeping for facility-wide HAP emissions. Consequently, this facility is not subject to the Title V permitting requirements.

6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	1.18
VOC	3.12



PUBLIC NOTICE  
7/30/2014 Issuance of Draft Air Pollution Permit-To-Install and Operate

TREMCO INC. - MAMECO DIVISION

4475 EAST 175TH ST.,  
CLEVELAND, OH 44128

Cuyahoga County

FACILITY DESC.: Adhesive Manufacturing

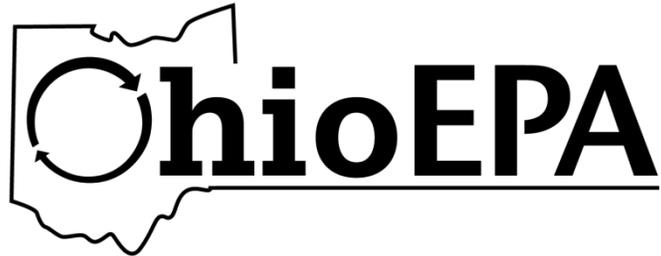
PERMIT #: P0116825

PERMIT TYPE: Initial Installation

PERMIT DESC: Initial FEPTIO for emissions unit P024 which is a blending vessel with powder dryer and vented to a dust collector located outdoors and a product collector fabric filter located indoors. P024 was declared DeMinimis and installed in 2006. P024 will now be used for solvent based coatings and adhesives, with dry raw materials handling equipment being added to the process.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitonline.aspx> by entering the permit # or: David Hearne, Cleveland Division of Air Quality, 2nd Floor 75 Erieview Plaza, Cleveland, OH 44114. Ph: (216)664-2297





**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
TREMCO INC. - MAMECO DIVISION**

Facility ID:	1318002813
Permit Number:	P0116825
Permit Type:	Initial Installation
Issued:	7/30/2014
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
TREMCO INC. - MAMECO DIVISION**

**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? .....	4
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? ...	5
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 .....	10
1. P024, K24 .....	11





**Draft Permit-to-Install and Operate**  
TREMCO INC. - MAMECO DIVISION  
**Permit Number:** P0116825  
**Facility ID:** 1318002813

**Effective Date:** To be entered upon final issuance

## Authorization

Facility ID: 1318002813  
Application Number(s): A0050719, A0050843  
Permit Number: P0116825  
Permit Description: Initial FEPTIO for emissions unit P024 which is a blending vessel with powder dryer and vented to a dust collector located outdoors and a product collector fabric filter located indoors. P024 was declared DeMinimis and installed in 2006. P024 will now be used for solvent based coatings and adhesives, with dry raw materials handling equipment being added to the process.  
Permit Type: Initial Installation  
Permit Fee: \$200.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 7/30/2014  
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:

TREMCO INC. - MAMECO DIVISION  
4475 EAST 175TH ST.  
CLEVELAND, OH 44128

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler  
Director



**Draft Permit-to-Install and Operate**

TREMCO INC. - MAMECO DIVISION

**Permit Number:** P0116825

**Facility ID:** 1318002813

**Effective Date:** To be entered upon final issuance

## Authorization (continued)

Permit Number: P0116825

Permit Description: Initial FEPTIO for emissions unit P024 which is a blending vessel with powder dryer and vented to a dust collector located outdoors and a product collector fabric filter located indoors. P024 was declared DeMinimis and installed in 2006. P024 will now be used for solvent based coatings and adhesives, with dry raw materials handling equipment being added to the process.

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

<b>Emissions Unit ID:</b>	<b>P024</b>
Company Equipment ID:	K24
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Draft Permit-to-Install and Operate**

TREMCO INC. - MAMECO DIVISION

**Permit Number:** P0116825

**Facility ID:** 1318002813

**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 of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

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

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

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



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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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



**Draft Permit-to-Install and Operate**

TREMCO INC. - MAMECO DIVISION

**Permit Number:** P0116825

**Facility ID:** 1318002813

**Effective Date:** To be entered upon final issuance

## **B. Facility-Wide Terms and Conditions**



**Draft Permit-to-Install and Operate**

TREMCO INC. - MAMECO DIVISION

**Permit Number:** P0116825

**Facility ID:** 1318002813

**Effective Date:** To be entered upon final issuance

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) None.



**Draft Permit-to-Install and Operate**

TREMCO INC. - MAMECO DIVISION

**Permit Number:** P0116825

**Facility ID:** 1318002813

**Effective Date:** To be entered upon final issuance

## **C. Emissions Unit Terms and Conditions**



**1. P024, K24**

**Operations, Property and/or Equipment Description:**

Kettle 24, 1500 gallon blending vessel with powder dryer, vented to a dust collector (located outdoors) at the end of the blending process (during the process, when solids are added, there is a fabric filter used for product recovery that is vented indoors).

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)(4), d)(5), d)(6), and e)(4)

(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)e., b)(2)d., d)(3), e)(3), f)(1)e., and f)(1)f.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b., b)(2)c., and b)(2)f. below.
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/1/06	See b)(2)g. below.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions from the baghouse stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-11(B)	Particulate emissions (PE) shall not exceed 6.85 lbs/hour.



**Effective Date:**To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-31-05(D) FEPTIO to avoid Title V and MACT	See b)(2)d. below.

(2) Additional Terms and Conditions

- a. This emissions unit operates using a batch cycle. The minimum batch size for this emissions unit is 400 gallons. The minimum amount of time for one batch cycle is 8 hours, with a maximum number of batches produced per year of 1095.
- b. Particulate emissions from P024 shall not exceed 0.10 tons per month averaged over a 12-month rolling period.
- c. VOC emissions from P024 shall not exceed 0.26 tons per month averaged over a 12-month rolling period.
- d. The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from all emissions units at this facility, (listed in b)(2)e. below) shall not exceed 9.5 tons/year for any individual HAP or 24.5 tons/year for a combination of HAPs. Compliance with the above limitations shall be based upon a rolling, 12-month summation of emissions for this emissions unit plus the annual HAP contribution from all other emissions units at this facility (listed in b)(2)e. below).
- e. The current emissions units located at this facility are, P004, P008, P009, P011, P012, P013, P014, P015, P016, P017, P024, P027, P028, P029, T017, T019, T020, T021, T023, T024, T025, T026, T027, T028, T029, T030, T031, T032, T033, T034, T035, T036, T037, T038, T039, T040, T041, T043, B001, B002, B004, B005, and 14 (< 10,000 gallon) storage tanks without separate EU identification numbers.
- f. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001 in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S.EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- g. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.



The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for PE is less than 10 tons/year taking into account the federally enforceable rule limit of 6.85 lbs/hour under OAC rule 3745-17-11(B). The calculated annual emissions rate was determined by multiplying the federally enforceable rule limit (6.85 lbs/hour) by the maximum annual number of hours solids are loaded (1095 batches/year @ 1 hr/batch) and dividing by 2000 lbs/ton.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compound (VOC) emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions are less than 10 tons/year.

c) Operational Restrictions

- (1) The emissions from this emissions unit shall be vented to a dust collector at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate and maintain equipment to continuously monitor the pressure drop, in inches of water, across the dust collector during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the the pressure drop, in inches of water, across the dust collector on a daily basis.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- f. a description of the corrective action;



- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications, until such time as any required performance testing is conducted and an alternative pressure drop range and/or limit is established.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (2) The permittee shall collect and record the following information each day for emissions unit P024:
- a. the company identification of each final product produced;
  - b. the vapor pressure of the loaded material for each batch (according to MSDS of each material), in psia;
  - c. the volume of the each material loaded, in gallons for each step of the batch;
  - d. the molecular weight of each material loaded, in lb/lb mole;
  - e. the final vapor pressure of the material, if heated, in psia;
  - f. the flow rate of the purge into the vessel, in ft<sup>3</sup>/min;
  - g. the temperature of the exhaust gas (conservatively determined by measuring the temperature of the final product);
  - h. the total emissions for each batch produced (calculated as shown by the equations and methodologies in f)(1)b., in pounds; and
  - i. the annual summation of the VOC emissions [sum of (h)], in tons



- (3) The permittee shall collect and record the following information each month for the entire facility (list of emissions units identified in b)(2)e.):
- a. the name and identification number of each HAP containing material employed;
  - b. the individual HAP content contained in the final product for each HAP, in percent weight;
  - c. the total of each individual HAP emissions from the emissions unit in pounds or tons per month. [The individual HAP emissions will be determined by applying the equations\* found in f)(1)b. for each individual HAP species or by multiplying the VOC emissions rate, as determined by the equations\* found in f)(1)b. below for all blending vessels (P004, P008, P009, P011, P012, P013, P014, P015, P016, P017, P024, P027, P028, and P029), and the latest version of U.S. EPA's TANKS or U.S. EPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollution Emission Factors, Section 7.1, Organic Liquid Storage Tanks (9/97) for all storage tanks (T017, T019, T020, T021, T023, T024, T025, T026, T027, T028, T029, T030, T031, T032, T033, T034, T035, T036, T037, T038, T039, T040, T041, T043, and 14 exempt storage tanks) by the individual HAP content of each solvent contained in the final product for each HAP, in percent weight. In order to determine individual HAP emissions from boilers B001, B002, B004, and B005, U.S. EPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, External Combustion Sources, Section 1.4, Natural Gas Combustion (7/98) will be used. Any emission factors shall be updated based on the results of any new emissions data or stack testing data obtained.
- \*These equations are the calculation methodologies found in the STAPPA/ALAPCO-EPA document, "Emission Inventory Improvement Program (EIIP), Methods for Estimating Air from Paint, Ink, and Other Coating Manufacturing Facilities, Volume II: Chapter 8";
- d. the total combined HAP emissions from the emissions unit in pounds or tons per month [the sum of (c) for all individual HAPs];
  - e. the updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.; and
  - f. the updated rolling, 12-month summation of emissions for total combined HAPs, in pounds or 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 Cleveland DAQ contact. This information does not have to be kept on an individual emission unit basis.

- (4) The FEPTIO application for this/these emissions unit(s), P024, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') 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 at over one ton per year 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., "X" hours per day and "Y" 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 (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Xylene

TLV (mg/m<sup>3</sup>): 434.19

Maximum Hourly Emission Rate (lbs/hr): 5.70

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 599.0

MAGLC (ug/m<sup>3</sup>): 10338



The permittee, has demonstrated that emissions of Xylene, from emissions unit(s) P024, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); 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).

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:

- e. 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;
- f. 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
- g. 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" 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 FEPTIO 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.

- (5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
  - 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.
  - (6) 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 an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.
  - (2) The permittee shall include in the annual PER the following information concerning the operation of the control equipment during the operation of this emissions unit:
    - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration; and
    - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse.
  - (3) 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. an identification of each month during which the rolling, 12-month individual HAP emissions rate (from the list of emissions units referenced in b)(2)e.) exceeded 9.5 tons, and the actual rolling, 12-month summation of each individual HAP emissions rate (from the list of emissions units referenced in b)(2)e.) for each such month; and



- ii. an identification of each month during which the rolling, 12-month combination of all HAP emissions rates (from the list of emissions units referenced in b)(2)e.) exceeded 24.5 tons, and the actual rolling, 12-month summation of the combination of all HAP emissions rates (from the list of emissions units referenced in b)(2)e.) for each such month.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Cleveland Division of Air Quality.

- (4) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

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

- a. Emission Limitation

Particulate emissions from P024 shall not exceed 0.10 tons per month averaged over a 12-month rolling period.

- Applicable Compliance Method

The monthly PE limit has been established according to the following emission calculation:

$$4300 \text{ lbs/batch} * (1-0.95) * (1-0.99) * 1095 \text{ batch/yr} * \text{ton}/2000 \text{ lbs} * \text{yr}/12 \text{ months} = 0.10 \text{ ton PE/month}$$

Where:

4300 lbs = maximum process feed rate

0.95 = conservative assumption of the amount of solids captured by solvent

0.99 = conservative control efficiency of the baghouse



b. Emission Limitation

VOC emissions from P024 shall not exceed 0.26 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method

Compliance shall be based off of the record keeping found in d)(2) and the following equations taken from the STAPPA/ALAPCO-EPA document, "Emission Inventory Improvement Program (EIIP), Methods for Estimating Air from Paint, Ink, and Other Coating Manufacturing Facilities, Volume II: Chapter 8."

Loading Loss Equation, EIIP Equation 8.4-1

$$E_{voc} = (12.46)(S)(P)(M)(Q)/(T)$$

Where:

12.46 = Universal gas constant

S = Saturation factor

P = System vapor pressure, (psia)

M = Vapor molecular weight, (lb/lb mole)

Q = Volume of material loaded, (1000 gal)

T = Temperature of liquid loaded, (R)

Gas Sweep or Purge Equation, EIIP Equation 8.4-23

$$EXP = ((P_x)(F)(M_x)(60)(OH)/(R)(T)) * (PT)/(PT \sum P_x)$$

Where:

EXP = Emission of VOC species x, (lbs)

P<sub>x</sub> = Partial pressure of VOC species x, (psia)

F = Flow rate into vessel, (ft<sup>3</sup>/min)

M<sub>x</sub> = Molecular weight of VOC species x, (lb/lb-mole)

60 = Minutes per hour

OH = Hours of purge, (hr)

R = 10.73 gas constant

T = Temperature of exhaust gas, (R)

PT = Total system pressure, (psia)

Heatup Loss Equation, EIIP Equation 8.4-10

$$E_{voc} = (((\sum(P_x)T_1 / 14.7 - \sum(P_x)T_1) + (\sum(P_x)T_2 / 14.7 - \sum(P_x)T_2)) / 2) * (n)(M_a)$$

Where:

E<sub>voc</sub> = VOC emissions from heat up, (lbs)

(P<sub>x</sub>)T<sub>1</sub> = Initial partial pressure of VOC species x at T<sub>1</sub>, (psia)

(P<sub>x</sub>)T<sub>2</sub> = Final partial pressure of VOC species x at T<sub>2</sub>, (psia)

M<sub>a</sub> = Vapor molecular weight, (lb/lb-mole)

n = Number of pound-moles of gas displaced, (lb-mole)

$$n = [(V/R) * (P_{a1}/T_1 - P_{a2}/T_2)]$$

Where:



$$\begin{aligned} V &= \text{vessel free volume, ft}^3 \\ R &= 10.73 \text{ gas constant} \\ Pa1 &= 14.7 - (Px)T1 \\ Pa2 &= 14.7 - (Px)T2 \\ T1 &= R (F + 460) \\ T2 &= R (F + 460) \end{aligned}$$

The batch cycle steps for initial kettle inerting, kettle washing, loading raws, and packaging shall use the loading loss EIIP equation 8.4-1. The batch cycle steps for purging from powder loading and nitrogen line purging shall use the gas sweep or purge EIIP Equation 8.4-23. The batch cycle steps for blending heatup shall use the heatup loss EIIP Equation 8.4-10. Any contributing fugitive emissions shall be calculated using SOCMI emission factors found in "Protocol for Equipment Leak Emission Estimates" EPA453/R-95-017, November 1995.

Any additional batch cycle steps shall be calculated using the equations contained in the STAPPA/ALAPCO-EPA documents, "Emission Inventory Improvement Program (EIIP), Methods for Estimating Air from Paint, Ink, and Other Coating Manufacturing Facilities, Volume II: Chapter 8 and/or Methods for Estimating Air emissions from Chemical Manufacturing Facilities, Volume II: Chapter 16." The short-term (lb/batch) emissions shall be determined by summing the values calculated from all batch steps and adding any contributing fugitive emissions calculated.

c. Emission Limitation

Visible particulate emissions from the baghouse stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using methods and procedures specified in U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

d. Emission Limitation

PE shall not exceed 6.85 lbs/hour.

Applicable Compliance Method

If required, compliance with the PE limitation shall be determined through emission testing conducted in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60, Appendix A, or any Ohio EPA approved alternative testing method.

e. Emission Limitation

9.5 tons individual HAPs/year for the list of emissions units in b)(2)e., as a 12-month, rolling summation.



Applicable Compliance Method

Compliance shall be determined based upon the record keeping specified in d)(3).

f. Emission Limitation

24.5 tons combined HAPs/year for the list of emissions units in b)(2)e., as a 12-month, rolling summation.

Applicable Compliance Method

Compliance shall be determined based upon the record keeping specified in d)(3).

g) Miscellaneous Requirements

- (1) This emissions unit was installed in 2006 and declared DeMinimis. It will now be repurposed for solvent coatings and adhesive mixing.