



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

11/21/2008

Kendra Barzak  
Hamilton Tanks, LLC  
2200 REFUGEE RD  
Columbus, OH 43207

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0125041287  
Permit Number: P0103970  
Permit Type: Renewal  
County: Franklin

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc), from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

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

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Central District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc).

Sincerely,

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

Cc: Ohio EPA-CDO

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





**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**FINAL**

**Air Pollution Permit-to-Install and Operate  
for  
Hamilton Tanks, LLC**

Facility ID: 0125041287  
Permit Number: P0103970  
Permit Type: Renewal  
Issued: 11/21/2008  
Effective: 11/21/2008  
Expiration: 11/21/2013





**Air Pollution Permit-to-Install and Operate**  
for  
Hamilton Tanks, LLC

**Table of Contents**

Authorization ..... 1

A. Standard Terms and Conditions ..... 3

    1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4

    2. Who is responsible for complying with this permit? ..... 4

    3. What records must I keep under this permit? ..... 4

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

    5. When does my PTIO expire, and when do I need to submit my renewal application? ..... 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?..... 6

    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. K001, Fiberglass coating..... 11

    2. K002, Tank spray coating ..... 19

    3. K003, Small spray booth ..... 27

    4. P003, Sand blast enclosure ..... 35





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**  
**Permit Number:** P0103970  
**Facility ID:** 0125041287  
**Effective Date:** 11/21/2008

## Authorization

Facility ID: 0125041287  
Application Number(s): A0036145  
Permit Number: P0103970  
Permit Description: PTO renewal application for enclosed sand blasting with fiberglass coating and 2 paint spray coating booths for steel tanks  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 11/21/2008  
Effective Date: 11/21/2008  
Expiration Date: 11/21/2013  
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15  
This document constitutes issuance to:

Hamilton Tanks, LLC  
2200 REFUGEE RD  
COLUMBUS, OH 15142

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, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614)728-3778

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



## Authorization (continued)

Permit Number: P0103970  
Permit Description: PTO renewal application for enclosed sand blasting with fiberglass coating and 2 paint spray coating booths for steel tanks

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>K001</b>          |
| Company Equipment ID:             | Fiberglass coating   |
| Superseded Permit Number:         |                      |
| General Permit Category and Type: | Not Applicable       |
| <b>Emissions Unit ID:</b>         | <b>K002</b>          |
| Company Equipment ID:             | Tank spray coating   |
| Superseded Permit Number:         |                      |
| General Permit Category and Type: | Not Applicable       |
| <b>Emissions Unit ID:</b>         | <b>K003</b>          |
| Company Equipment ID:             | Small spray booth    |
| Superseded Permit Number:         | 01-08262             |
| General Permit Category and Type: | Not Applicable       |
| <b>Emissions Unit ID:</b>         | <b>P003</b>          |
| Company Equipment ID:             | Sand blast enclosure |
| Superseded Permit Number:         |                      |
| General Permit Category and Type: | Not Applicable       |



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0103970

**Facility ID:** 0125041287

**Effective Date:** 11/21/2008

## **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, Central 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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0103970

**Facility ID:** 0125041287

**Effective Date:** 11/21/2008

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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0103970

**Facility ID:** 0125041287

**Effective Date:** 11/21/2008

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0103970

**Facility ID:** 0125041287

**Effective Date:** 11/21/2008

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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0103970

**Facility ID:** 0125041287

**Effective Date:** 11/21/2008

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



**1. K001, Fiberglass coating**

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

Fiberglass spray coating operation

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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) (PTI 01-06861)	<p>Volatile organic compound (VOC) emissions shall not exceed 20 pounds per hour, excluding cleanup materials, and 3.5 tons per year, including cleanup materials.</p> <p>See b)(2)a and b)(2)b below.</p> <p>The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-31-05(D).</p>
b.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title)	See b)(2)c, c)(1) and c)(2) below.

(2) Additional Terms and Conditions

a. The 20.0 lbs VOC/hr limitation for this emissions unit was established to reflect the maximum hourly potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.



- b. Each emissions unit will be operated and maintained in accordance with manufacturers recommendations. Spray booth exhaust filters shall be maintained (changed or cleaned) regularly per manufacturer's recommendations in order to maintain the highest effective level of particulate emissions control. Maintenance of exhaust filters (cleaning and/or changing of filter elements) shall be recorded in an operations log maintained at this facility.
- c. Facility-wide emissions shall not exceed 31.6 tons of VOC, 9.9 tons of individual HAP emissions and 24.9 tons of total combined HAP emissions per rolling, 12-month period.

Facility-wide emissions shall shall be determined from a summation of monthly emissions from K001, K002 and K003 and all emissions units that are exempt or permit by rule (OAC rule 3745-31-03), and de minimis (OAC rule 3745-15-05).

Therefore, the provisions for Title V permitting will not be applicable.

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact.

c) Operational Restrictions

- (1) The maximum annual resin usage for this emissions unit shall not exceed 70,000 lbs styrene polyester resin.
- (2) The maximum styrene content of the styrene polyester resin shall not exceed 50% by weight of coating.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day in which coatings were applied, for the purposes of determining the monthly VOC and HAP emission rate:
  - a. the name and identification number of each coating, as applied;
  - b. the pounds of each coating employed during each day;
  - c. the VOC/HAP content (styrene) in percent by weight of each coating, as applied;
  - d. calculation of the individual daily VOC/HAP emission rate (i.e., the product of the figures from items (1)b and (1)c);
  - e. calculation of the total individual VOC/HAP emissions for each coating employed, in pounds or tons per month
  - f. summation of rolling, twelve-month individual VOC/HAP emission rate (summation of item (e) for the current month plus the previous 11-month emission rates, above).
  - g. calculation of the total combined VOC/HAP emissions for all coatings employed, in pounds or tons per month; and



- h. Summation of rolling, twelve-month combined VOC/HAP emission rate (summation of item (g) for the current month plus the previous 11-month emission rate, above).

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

- (2) The permittee shall collect and record the following information during each month for the purpose of determining annual VOC and HAP emissions from emissions units K001, K002, and K003:
  - a. the monthly VOC and HAP emission rate for all coatings, in pounds from each of the above emissions units;
  - b. the rolling, 12-month summation of VOC emissions (i.e., the VOC emissions from the current month added to the summation of the VOC emissions from the previous 11 months) for all of the above emissions units;
  - c. the calculated individual HAP emission for the current month, in pounds or tons, for each of the above emissions units;
  - d. the calculated total HAP emissions for the current month, in pounds or tons, for each the above emissions units;
  - e. the rolling 12-month summation of individual HAP emissions (i.e., the individual HAP emissions from the current month added to the summation of the individual HAP emissions from the previous 11 months) for all the above emissions units; and
  - f. the rolling 12-month summation of total combined HAP emissions (i.e., the total combined HAP emissions from the current month added to the summation of the total combined HAP emissions from the previous 11 months) for all of the above emissions units.
- (3) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
- (4) The PTI application for this/these emissions unit(s), K001, 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 AToxic 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 AReview 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)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; 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.,  $\Delta X \Delta$  hours per day and  $\Delta Y \Delta$  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  $\Delta$ worst case $\Delta$  toxic contaminant(s):

Toxic Contaminant: styrene

TLV (mg/m<sup>3</sup>): 85.2

Maximum Hourly Emission Rate (lbs/hr): 20

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 746

MAGLC (ug/m<sup>3</sup>): 2,028

The permittee, has demonstrated that emissions of xylene, from emissions unit K003, 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  $\Delta$ Toxic Air Contaminant Statute $\Delta$ , ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) 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<sup>6</sup>, 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:
- 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;
  - 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
  - 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 <sup>6</sup>Toxic Air Contaminant Statute<sup>6</sup> 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 <sup>6</sup>Toxic Air Contaminant Statute<sup>6</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the <sup>6</sup>Toxic Air Contaminant Statute<sup>6</sup>, ORC 3704.03(F):
- 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.);
  - the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the <sup>6</sup>Toxic Air Contaminant Statute<sup>6</sup>, ORC 3704.03(F);
  - 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 <sup>6</sup>Toxic Air Contaminant Statute<sup>6</sup>, 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 AToxic Air Contaminant Statute<sup>®</sup>, 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.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) 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 AToxic Air Contaminant Statute<sup>®</sup>, 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.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

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

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

- i. the probable cause of each deviation (excursion);
- ii. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- iii. the magnitude and duration of each deviation (excursion).

- b. any month during which the rolling, 12-month VOC emission limitation listed in (2)a.i is exceeded as identified by recordkeeping in d)(2)b; and.

- c. any month during which the rolling 12-month individual HAP and total HAP emission limitations listed in term (2)b. are exceeded as identified by recordkeeping in d)(2)e and d)(2)f.

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 deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)]

- (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.



[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

- a. 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 A Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration in the annual PER. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

f) Testing Requirements

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

- a. Emissions Limitation:

VOC emissions shall not exceed 20.0 pounds per hour.

Applicable Compliance Method:

The permittee may demonstrate compliance based upon an emission factor of 240 lbs styrene/ton resin derived using the Mechanical Atomized Controlled Spray with 47% styrene by use of a Unified Emission Factors for Open Molding of Composites substituted into the following calculation as follows:

$$(20 \text{ gallons/hr} * 8.7 \text{ lbs/gallon} * 1 \text{ ton}/2000 \text{ lbs} * 240 \text{ lb styrene/ton resin sprayed}) \\ (\text{Mechanical Atomized Controlled Spray emission factor}) = 20.1 \text{ lbs/hr}$$

Mechanical Atomized Controlled Spray with the 47% styrene use a Unified Emission Factors for Open Molding of Composites of 240 lb/ton

- b. Emission Limitation:

VOC (styrene) emissions shall not exceed 3.5 tons per rolling, 12-month period.

Applicable Compliance Method:

The permittee may demonstrate compliance based upon an emission factor of 240 lbs styrene/ton based upon the record keeping requirements in section d)(1)f, and deriving the annual emission using the following equation.

$$50,0000 \text{ lbs resin/yr} * 1 \text{ ton}/2000 \text{ lbs} * 240 \text{ lbs styrene/ton resin} * 1 \text{ ton}/2000 \text{ lbs} \\ = 3.0 \text{ tons styrene/yr.}$$

- c. Emission Limitation:

The maximum styrene content shall not exceed 50% by weight for coating.

Applicable Compliance Method:



Hamilton submitted a MSDS sheet dated March 17, 2007 listing the styrene content at 47% by weight. If required, compliance shall be determined in accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

d. Emissions Limitation:

Facility-wide emissions shall not exceed 31.6 tons of VOC per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method

Compliance shall be demonstrated by record keeping in d)(2)b, above.

e. Emissions Limitation

Facility-wide emissions shall not exceed 9.9 of an individual HAP and 24.9 tons total combined HAPs per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method

Compliance shall be demonstrated by record keeping in d)(2)e and d)(2)f, above.

g) Miscellaneous Requirements

(1) None.



**2. K002, Tank spray coating**

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

Final tank spray operation

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. None.
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific 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) (PTI 01-06861)	<p>Volatile organic compound (VOC) emissions shall not exceed 20 pounds per hour, excluding cleanup materials, and 16.5 tons per year, including cleanup materials.</p> <p>See (2)a and (2)b below.</p> <p>The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(d) and OAC rule 3745-31-05-(D)</p>
b.	OAC rule 3745-21-09(U)(1)(d)	3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.
c.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V)	See b)(2)c, c)(1), c)(2) and c)(3) below.



(2) Additional Terms and Conditions

- a. The 20.0 lbs VOC/hr limitation for this emissions unit was established to reflect the maximum hourly potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- b. Each emissions unit will be operated and maintained in accordance with manufacturers recommendations. Spray booth exhaust filters shall be maintained (changed or cleaned) regularly per manufacturer's recommendations in order to maintain the highest effective level of particulate emissions control. Maintenance of exhaust filters (cleaning and/or changing of filter elements) shall be recorded in an operations log maintained at this facility.
- c. Facility-wide emissions shall not exceed 31.6 tons of VOC, 9.9 tons of individual HAP emissions and 24.9 tons of total combined HAP emissions per rolling, 12-month period.

Facility-wide emissions shall be determined from a summation of monthly emissions from K001, K002 and K003 and all emissions units that are exempt or permit by rule (OAC rule 3745-31-03), and de minimis (OAC rule 3745-15-05).

Therefore, the provisions for Title V permitting will not be applicable.

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact.

c) Operational Restrictions

- (1) The maximum annual coating usage for this emissions unit shall not exceed 7,900 gallons.
- (2) The maximum annual cleanup usage for this emissions unit shall not exceed 715 gallons.
- (3) The maximum VOC content of cleanup material shall not exceed 7.6 pounds VOC per gallon.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day in which coatings were applied, for the purposes of determining the annual VOC emission rate:
  - a. the name and identification number of each coating, as applied, and each cleanup material employed;
  - b. the number of gallons of each coating and each cleanup material employed during the day;
  - c. the VOC content of each coating, as applied; and each cleanup material, in pounds per gallon
  - d. summation of the daily coating and cleanup material usage rate for each month;



- e. calculation of the monthly VOC emissions rate (i.e., the sum of the products of the figures from items (1).c and (1) d.
  - f. calculation of the annual VOC emissions rate by summation of item (1) e for the current month plus the previous 11-month emission rates, above
- (2) The permittee shall collect and record the following information during each month for the purpose of determining annual VOC and HAP emissions from emissions units K001, K002, and K003:
- a. the monthly VOC and HAP emission rate for all coatings and cleanup materials in pounds from each of the above emissions units;
  - b. the rolling, 12-month summation of VOC emissions (i.e., the VOC emissions from the current month added to the summation of the VOC emissions from the previous 11 months) for all of the above emissions units;
  - c. the calculated individual HAP emission for the current month, in pounds or tons, for each of the above emissions units;
  - d. the calculated total HAP emissions for the current month, in pounds or tons, for each the above emissions units;
  - e. the rolling 12-month summation of individual HAP emissions (i.e., the individual HAP emissions from the current month added to the summation of the individual HAP emissions from the previous 11 months) for all the above emissions units; and
  - f. the rolling 12-month summation of total combined HAP emissions (i.e., the total combined HAP emissions from the current month added to the summation of the total combined HAP emissions from the previous 11 months) for all of the above emissions units.
- (3) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
- (4) The PTI application for this/these emissions unit(s), K002, 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 AToxic Air Contaminant Statute<sup>6</sup>, 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 AReview of New Sources of Air Toxic Emissions, Option A<sup>6</sup>, 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)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; or
- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; 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.,  $\Delta X \Delta$  hours per day and  $\Delta Y \Delta$  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  $\Delta$ worst case $\Delta$  toxic contaminant(s):

Toxic Contaminant: Toluene

TLV (mg/m3): 188.4

Maximum Hourly Emission Rate (lbs/hr): 20.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,701

MAGLC (ug/m3): 4,476

The permittee, has demonstrated that emissions of xylene, from emissions unit K003, 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  $\Delta$ Toxic Air Contaminant Statute $\Delta$ , ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) 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 $\Delta$ , the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can



affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the AToxic 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 AToxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic 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 AToxic 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 AToxic 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 AToxic 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.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) 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 AToxic Air Contaminant Statute<sup>2</sup>, 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.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. the probable cause of each deviation (excursion);
    - ii. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
    - iii. the magnitude and duration of each deviation (excursion).
  - b. any month during which the rolling, 12-month VOC emission limitation listed in (2)a.i is exceeded as identified by recordkeeping in d)(2)b; and.
  - c. any month during which the rolling 12-month individual HAP and total HAP emission limitations listed in term (2)b. are exceeded as identified by recordkeeping in d)(2)e and d)(2)f.

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 deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)]

- (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.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]



- a. 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 AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration in the annual PER. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

f) Testing Requirements

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

- a. Emissions Limitation:

VOC emissions shall not exceed 20.0 pounds per hour, excluding cleanup material.

Applicable Compliance Method:

The permittee may demonstrate compliance with the above limit based upon emission calculation of the product of the maximum annual usage rate and VOC content divided by the maximum operating hours per year, as follows:

$$7,900 \text{ gal coating/yr} * 3.5 \text{ lbs VOC/gal} * 1 \text{ yr} / 1375 \text{ hr} = 20 \text{ lbs VOC/hr}$$

- b. Emission Limitation:

VOC emissions shall not exceed 16.5 tons per year, including cleanup.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of d)(1)f above, as follows:

$$7,900 \text{ gal coating/yr} * 3.5 \text{ lbs VOC/gal} * 1 \text{ ton}/2000 \text{ lb} = 13.8 \text{ tons VOC/yr}$$

$$715 \text{ gal solvent/yr} * 7.6 \text{ lbs VOC/gal} * 1 \text{ ton}/2000 \text{ lb} = 2.7 \text{ ton VOC/yr.}$$

- c. Emission Limitation:

3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for miscellaneous metal coatings regulated under paragraphs (U)(1)(d) OAC rule 3745-21-09.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in d)(1)c, above

In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 4.3 of



Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

d. Emissions Limitation:

Facility-wide emissions shall not exceed 31.6 tons of VOC per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method

Compliance shall be demonstrated by record keeping in d)(2)b, above.

e. Emissions Limitation

Facility-wide emissions shall not exceed 9.9 of an individual HAP and 24.9 tons total combined HAPs per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method

Compliance shall be demonstrated by record keeping in d)(2)e and d)(2)f, above.

g) Miscellaneous Requirements

(1) None.



**3. K003, Small spray booth**

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

Small tank coating line vented to filter

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. None.
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific 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) (PTI 01-08262)	<p>Volatile organic compound (VOC) emissions shall not exceed 9.45 pounds per hour, excluding cleanup materials, and 11.6 tons per year, including cleanup materials.</p> <p>See b)(2)a and b)(2)c below.</p> <p>The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(d) and OAC rule 3745-31-05(D).</p>
b.	OAC rule 3745-21-09(U)(1)(d)	3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.
d.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V)	See b)(2)b, b)(2)d, c)(1), c)(2) and c)(3) below.



(2) Additional Terms and Conditions

- a. The 9.45 lbs VOC/hr limitation for this emissions unit was established to reflect the maximum hourly potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- b. Each emissions unit will be operated and maintained in accordance with manufacturers recommendations. Spray booth exhaust filters shall be maintained (changed or cleaned) regularly per manufacturer's recommendations in order to maintain the highest effective level of particulate emissions control. Maintenance of exhaust filters (cleaning and/or changing of filter elements) shall be recorded in an operations log maintained at this facility.
- c. Facility-wide emissions shall not exceed 31.6 tons of VOC, 9.9 tons of individual HAP emissions and 24.9 tons of total combined HAP emissions per rolling, 12-month period.

Facility-wide emissions shall shall be determined from a summation of monthly emissions from K001, K002 and K003 and all emissions units that are exempt or permit by rule (OAC rule 3745-31-03), and de minimis (OAC rule 3745-15-05).

Therefore, the provisions for Title V permitting will not be applicable.

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact..

c) Operational Restrictions

- (1) The maximum annual coating usage for this emissions unit shall not exceed 7,270 gallons.
- (2) The maximum monthly cleanup usage for this emissions unit shall not exceed 3 gallons.
- (3) The maximum xylene content shall not exceed 0.98 pound per gallon of coating applied and 7.2 pounds per gallon of cleanup material.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day in which coatings were applied, for the purposes of determining the annual VOC emission rate:
  - a. the name and identification number of each coating, as applied ,and each cleanup material employed;
  - b. the number of gallons of each coating and each cleanup material employed during the day;
  - c. the VOC content of each coating, as applied; and each cleanup material, in pounds per gallon
  - d. summation of the daily coating and cleanup material usage rate for each month;



- e. calculation of the monthly VOC emissions rate (i.e., the sum of the products of the figures from items (1).c and (1) d).
  - f. calculation of the annual VOC emissions rate by summation of item (1) e for the current month plus the previous 11-month emission rates, above
- (2) The permittee shall collect and record the following information during each month for the purpose of determining annual VOC and HAP emissions from emissions units K001, K002, and K003:
- a. the monthly VOC and HAP emission rate for all coatings and cleanup materials in pounds from each of the above emissions units;
  - b. the rolling, 12-month summation of VOC emissions (i.e., the VOC emissions from the current month added to the summation of the VOC emissions from the previous 11 months) for all of the above emissions units;
  - c. the calculated individual HAP emission for the current month, in pounds or tons, for each of the above emissions units;
  - d. the calculated total HAP emissions for the current month, in pounds or tons, for each the above emissions units;
  - e. the rolling 12-month summation of individual HAP emissions (i.e., the individual HAP emissions from the current month added to the summation of the individual HAP emissions from the previous 11 months) for all the above emissions units; and
  - f. the rolling 12-month summation of total combined HAP emissions (i.e., the total combined HAP emissions from the current month added to the summation of the total combined HAP emissions from the previous 11 months) for all of the above emissions units.
- (3) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
- (4) The PTI application for this/these emissions unit(s), K003, 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 AToxic Air Contaminant Statute<sup>e</sup>, 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 AReview of New Sources of Air Toxic Emissions, Option A<sup>e</sup>, 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)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; or
- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; 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.,  $\Delta X \Delta$  hours per day and  $\Delta Y \Delta$  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  $\Delta$ worst case $\Delta$  toxic contaminant(s):

Toxic Contaminant: Xylene

TLV (mg/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 9.17

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,001

MAGLC (ug/m3): 10,333

The permittee, has demonstrated that emissions of xylene, from emissions unit K003, 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  $\Delta$ Toxic Air Contaminant Statute $\Delta$ , ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) 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 $\Delta$ , the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can



affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the AToxic 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 AToxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic 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 AToxic 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 AToxic 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 AToxic 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.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) 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 AToxic Air Contaminant Statute<sup>6</sup>, 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.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. the probable cause of each deviation (excursion);
    - ii. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
    - iii. the magnitude and duration of each deviation (excursion).
  - b. any month during which the rolling, 12-month VOC emission limitation listed in (2)a.i is exceeded as identified by recordkeeping in d)(2)b; and.
  - c. any month during which the rolling 12-month individual HAP and total HAP emission limitations listed in term (2)b. are exceeded as identified by recordkeeping in d)(2)e and d)(2)f.

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 deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)]

- (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.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]



- a. 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 AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration in the annual PER. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

f) Testing Requirements

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

- a. Emissions Limitation:

VOC emissions shall not exceed 9.45 pounds per hour, excluding cleanup material.

Applicable Compliance Method:

The permittee may demonstrate compliance with the above limit based upon emission calculation of the product of the maximum annual usage rate and VOC content divided by the maximum operating hours per year, as follows:

$$7,270 \text{ gal coating/yr} * 3.15 \text{ lbs VOC/gal} * 1 \text{ yr} / 2,423 \text{ hrs} = 9.45 \text{ lbs VOC/hr}$$

- b. Emission Limitation:

VOC emissions shall not exceed 11.6 tons per year, including cleanup.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of d)(1)f, above, as calculated below:

$$7,270 \text{ gal coating/yr} * 3.15 \text{ lbs VOC/gal} * 1 \text{ ton}/2000 \text{ lb} = 11.45 \text{ tons VOC/yr}$$

$$3 \text{ gal cleanup/mo} * 12 \text{ mo/yr} * 7.2 \text{ lb VOC/gal} * 1 \text{ ton}/2000 \text{ lb} = 0.13 \text{ ton VOC/yr.}$$

- c. Emission Limitation:

3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for miscellaneous metal coatings regulated under paragraphs (U)(1)(d) OAC rule 3745-21-09.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in d)(1)c, 7,270 gal coating/yr \* 3.15 lbs VOC/gal, above.

In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 4.3 of



Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

d. Emissions Limitation:

Facility-wide emissions shall not exceed 31.6 tons of VOC per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method

Compliance shall be demonstrated by record keeping in d)(2)b, above.

e. Emissions Limitation

Facility-wide emissions shall not exceed 9.9 of an individual HAP and 24.9 tons total combined HAPs per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method

Compliance shall be demonstrated by record keeping in d)(2)e and d)(2)f, above.

g) Miscellaneous Requirements

(1) None.



**4. P003, Sand blast enclosure**

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

Grit blasting of tank within enclosure vented to baghouse

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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) (PTI 01-06625)	Particulate emissions (PE) shall not exceed 9.63 tons per year.  See (2)a. below.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed twenty percent opacity, as a six minute average, from any stack, except as provided by rule.
c.	OAC rule 3745-17-08 (B)(1)	The emission limitation specified in this rule is less stringent than the emissions limitation established pursuant to OAC rule 374-31-05 (A)(3).



(2) Additional Terms and Conditions

- a. The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.

[OAC rule 3745-31-05(D) or (E)]

c) Operational Restrictions

- a. The permittee shall eliminate visible PE through the employment of BAT, in accordance with the PTI application. These measures shall include, but not be limited to, the following:

- i. the use of an enclosure around the grit blast to achieve a 95% capture efficiency; and
- ii. the venting of captured PE to a baghouse that achieves an outlet emission rate of no greater than 0.020 grain of PE per dry standard cubic foot of exhaust gas that vents inside the building. The hourly and annual PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits. .

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer=s recommendations, instructions, and operating manual. The permittee shall record the following on a daily basis:

- a. the pressure drop across the baghouse for each day when the emission unit operates; and
- b. a log or record of the downtime for the control device and monitoring equipment, when the emissions unit was in operation.

e) Reporting Requirements

- (1) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit(s):

- 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;
- b. an identification of each incident of deviation described in Aa@ (above) where a prompt investigation was not conducted;



- c. an identification of each incident of deviation described in Aa@ where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- d. an identification of each incident of deviation described in Aa@ where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

- (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.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

- (1) Compliance with the emission limitations specified in b)(l) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

PE shall not exceed 9.63 tons per year.

Applicable Compliance Method:

If required, compliance may be demonstrated by calculation based on the grain loading at the stack outlet of  $0.02 \text{ gr/dscf} \times 30,000 \text{ acfm} \times 1 \text{ lb}/7,000 \text{ gr} \times 60 \text{ min/hr} \times 3,744 \text{ hrs/yr} \times 1 \text{ ton}/2,000 \text{ lbs} = 9.63 \text{ tons/yr}$ .

b. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Final Permit-to-Install and Operate**

**Permit Number:** P0103970

**Facility ID:** 0125041287

**Effective Date:** 11/21/2008

g) Miscellaneous Requirements

(1) None.