



Environmental  
Protection Agency

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

6/11/2010

DAN DIFRANCO  
American Japanning Inc.  
4917 VAN EPPS RD  
BROOKLYN HEIGHTS, OH 44131

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 1318110513  
Permit Number: P0106074  
Permit Type: Administrative Modification  
County: Cuyahoga

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

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

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

If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc), by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: CDAQ





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
American Japanning Inc.**

Facility ID: 1318110513  
Permit Number: P0106074  
Permit Type: Administrative Modification  
Issued: 6/11/2010  
Effective: 6/11/2010  
Expiration: 1/26/2015





Division of Air Pollution Control
Permit-to-Install and Operate
for
American Japanning Inc.

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## Authorization

Facility ID: 1318110513  
Application Number(s): M0000743  
Permit Number: P0106074  
Permit Description: FEPTIO permit containing eight coating operations with facility- wide emission limitations to avoid Title V permitting. Admin mod is to revise emission unit descriptions and correct several air toxic emission rates for the emission units.  
Permit Type: Administrative Modification  
Permit Fee: \$0.00  
Issue Date: 6/11/2010  
Effective Date: 6/11/2010  
Expiration Date: 1/26/2015  
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

American Japanning Inc.  
4917 VAN EPPS RD  
BROOKLYN HEIGHTS, OH 44131

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:

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

  
Chris Korleski  
Director



## Authorization (continued)

Permit Number: P0106074  
Permit Description: FEPTIO permit containing eight coating operations with facility- wide emission limitations to avoid Title V permitting. Admin mod is to revise emission unit descriptions and correct several air toxic emission rates for the emission units.

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

**Emissions Unit ID: K001**  
Company Equipment ID: Binks Paint Booth #1, Oven #1  
Superseded Permit Number: P0095217  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: K002**  
Company Equipment ID: Paint Booth K002  
Superseded Permit Number: P0095217  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: K003**  
Company Equipment ID: Paint Booth #3, Oven #3  
Superseded Permit Number: P0095217  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: K004**  
Company Equipment ID: paint booth #4, Oven #4  
Superseded Permit Number: P0095217  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: K005**  
Company Equipment ID: Binks Paint Booth #5  
Superseded Permit Number: P0095217  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: K006**  
Company Equipment ID: Paint Booth K006 booth #6  
Superseded Permit Number: P0095217  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: K007**  
Company Equipment ID: Paint Booth K007 booth #7  
Superseded Permit Number: P0095217  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: K008**  
Company Equipment ID: Spin/Dip Coater K008  
Superseded Permit Number: P0095217  
General Permit Category and Type: Not Applicable

## **A. Standard Terms and Conditions**

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

**7. What reports must I submit under this permit?**

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

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

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

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

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the 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<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

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

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

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



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

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

(1) None.

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

(1) 2, 4., 5. and 6.

2. Applicable Emissions Limitations and/or Control Requirements

a) Emissions from emissions units K001-K008 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
(1)	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V and MACT	See b)(1)

b) Additional Terms and Conditions

(1) The facility-wide combined VOC, OC, and HAP emissions from all materials applied in emissions units K001-K008 combined shall not exceed the following limits:

- a. 67.2 tons of VOC from coating miscellaneous metal parts and materials; and 21.9 tons of OC from coating non-metal parts and materials, each as a rolling, 12-month summation;
- b. 9.75 tons of each single HAP, as a rolling, 12-month summation; and
- c. 24.25 tons of all HAPs combined, as a rolling, 12-month summation.

3. Operational Restrictions

a) None.

4. Monitoring and Recordkeeping Requirements

a) The permittee shall collect and record the following information each month for emissions units K001-K008 combined:

(1) the total VOC emissions from coating and cleanup of miscellaneous metal parts/materials, and the total OC emissions from coating and cleanup of all other materials (non-metals), in pounds or tons (sum of daily emissions for each month);

- (2) the rolling, 12-month VOC emissions from coating and clean-up of miscellaneous metal parts/materials; and the rolling, 12 month OC emissions from coating and cleanup of non-metals;
- (3) the total emissions of each individual HAP from all coatings and cleanup materials employed, in pounds or tons (sum of daily emissions for each month);
- (4) the rolling, 12-month emissions of each individual HAP;
- (5) the total HAP emissions from all coatings and cleanup materials employed, in pounds or tons (sum of daily emissions for each month); and
- (6) the total rolling, 12-month emissions of all HAPs.

## 5. Reporting Requirements

- a) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - (1) 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:
    - a. 67.2 tons of VOC from coating miscellaneous metal parts and materials; and 21.9 tons of OC from coating non-metal parts and materials, each as a rolling, 12-month summation;
    - b. 9.75 tons of each single HAP, as a rolling, 12-month summation; and
    - c. 24.25 tons of all HAPs combined, as a rolling, 12-month summation.
  - (2) the probable cause of each deviation (excursion);
  - (3) any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - (4) 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.
- b) The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

## 6. Testing Requirements

- a) Compliance with the emission limitation(s) in 2.a) of these terms and conditions shall be determined in accordance with the following method(s):

(1) Emission Limitation:

67.2 tons/yr of VOC from coating miscellaneous metal parts and 21.9 tons/yr of OC from coating other materials (non-metal parts) for emissions units K001-K008 combined, as a rolling, 12-month summation

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in 4.a) and shall be the sum of the monthly emission rates for any rolling, 12-month period.

(2) Emission Limitation:

9.75 tons/yr of each single HAP for emissions units K001-K008 combined, as a rolling, 12-month summation

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in 4.a) and shall be the sum of the monthly emission rates for any rolling, 12-month period.

(3) Emission Limitation:

24.25 tons/yr of combined HAPs for emissions units K001-K008 combined, as a rolling, 12-month summation

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in 4.a) and shall be the sum of the monthly emission rates for any rolling, 12-month period.

U.S. EPA method 24 shall be used to determine the VOC contents of the coatings and formulation data shall be used to determine the VOC contents of the cleanup material.

Formulation data shall be used to determine the HAP contents of the coatings and any cleanup materials.

7. Miscellaneous Requirements

a) None.

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



1. K001, Binks Paint Booth #1, Oven #1

Operations, Property and/or Equipment Description:

Binks spray paint booth #1, oven #1

This FEPTIO supercedes Permit No. P0095217 issued January 26, 2010

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)(3), d)(4), d)(5), d)(6).

(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#13-03985 issued 4/8/2003)	<p>Volatile organic compound (VOC) emissions shall not exceed 21.9 lbs/day and 4.0 tons as a rolling, 12-month summation, both including cleanup emissions.</p> <p>See c)(2).</p> <p>The requirements established pursuant to this rule also include the requirements of OAC rule 3745-21-09(U)(2)(e)(ii).</p>
b.	OAC rule 3745-21-09(U)(2)(e)(ii)	The permittee shall use not more than 3 gallons of coatings per day for the coating of metal parts.
c.	OAC rule 3745-17-11(C)	Exempt, pursuant to OAC rule 3745-17-11(C)(3). See b)(2)a.

- (2) Additional Terms and Conditions
- a. OAC rule 3745-17-11(C)(3) states that any surface coating process with a permit-to-install issued after January 1, 1990 that identifies particulate emission limitations and control measures based on best available technology, best available control technology, or the lowest achievable emission rate shall comply with such limitations and measures instead of paragraphs (C)(1) and (C)(2) of this rule.
- c) Operational Restrictions
- (1) The permittee shall employ no more than 3 gallons of coating in any one day for this emissions unit.
- (2) The permittee shall operate the dry filtration system for control of particulate emissions whenever this emissions unit is in operation.
- (3) The maximum annual volatile organic material usage\* (from coatings and clean up materials) for K001 shall not exceed 4.0 tons, based upon a rolling, 12-month summation of the volatile organic material.
- \* For the purposes of demonstrating compliance with the annual emission limit, the permittee shall calculate the annual emission limit by assuming 100% of the volatile organic material used is emitted.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each day for this emissions unit:
- a. the name and identification number of each coating and cleanup material;
- b. the VOC content of each coating and cleanup material, in pounds per gallon;
- c. the single HAP content of each coating and cleanup material, in pounds per gallon;
- d. the combined HAPs content of each coating and cleanup material, in pounds per gallon;
- e. the number of gallons of each coating and cleanup material employed;
- f. the total number of gallons of all coatings employed;
- g. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons (sum of b x e);
- h. the emissions of each single HAP from all coatings and cleanup materials employed, in pounds or tons (sum of c x e); and

- i. the emissions of combined HAPs from all coatings and cleanup materials employed, in pounds or tons (sum of d x e or the sum of all HAPs from each coating and cleanup material applied, from h above).
  - (2) 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.
  - (3) The permit to install and operate application for this emissions unit, 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 "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):

Pollutant: MEK  
TLV (ug/m3): 590,000  
Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 14,048

Pollutant: MIBK  
TLV (ug/m3): 205,000  
Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 4881

Pollutant: Xylene  
TLV (ug/m3): 434,000  
Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 10,333

Pollutant: Toluene  
TLV (ug/m3): 188,000  
Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 4476

The permittee, has demonstrated that emissions of the toxic contaminants listed above from emissions unit K001, 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).

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

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

If the permittee determines that the "Toxic Air Contaminant Statute" 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 permit to install and operate 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 notify the Cleveland Division of Air Quality (Cleveland DAQ) or regulating agency in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit of 3 gallons per day. The

notification shall include a copy of such record and shall be sent to the Cleveland DAQ or regulating agency within 45 days after the exceedance occurs.

- (2) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.
- (3) 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.
- (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 emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emissions Limitation:  
21.9 lbs/day of VOC emissions

Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).

- b. Emissions Limitation:  
4.0 TPY of VOC emissions

Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily emission rates for the calendar year.

U.S. EPA method 24 shall be used to determine the VOC contents of the coatings and formulation data shall be used to determine the VOC contents of the cleanup material.

Formulation data shall be used to determine the HAP contents of the coatings and any cleanup materials.

g) Miscellaneous Requirements

- (1) None.



2. K002, Paint Booth K002

Operations, Property and/or Equipment Description:

Paint spray booth # 2

This FEPTIO supercedes Permit No. P0095217 issued January 26, 2010.

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)(3), d)(4), d)(5), d)(6).

(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#13-03985 issued 4/8/2003)	See b)(2)a., b)(2)b. and c)(1).  The requirements established pursuant to this rule also include the requirements of OAC rules 3745-21-07(G)(2), 3745-21-09(U)(1)(d),(a),(b),(c),(e),(f),(h), and (i).
b.	OAC rule 3745-17-11(C)	Exempt, pursuant to OAC rule 3745-17-11(C)(3). See b)(2)c.
c.	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds/hour and 40 pounds/day from all coatings and photochemically reactive cleanup materials, on any day when photochemically reactive materials are employed. See b)(2)d.
d.	OAC rule 3745-21-09(U)(1)(d)	3.5 pounds of VOC per gallon, excluding water and exempt solvents for any



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		coating that is dried at temperatures not exceeding two hundred degrees Fahrenheit.
e.	OAC rule 3745-21-09(U)(1)(a)	4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for a clear coating.
f.	OAC rule 3745-21-09(U)(1)(b)	4.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for a zinc rich primer coating.
g.	OAC rule 3745-21-09(U)(1)(c)	3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for an extreme performance coating.
h.	OAC rule 3745-21-09(U)(1)(e)	4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for the interior coating of a steel pail or drum.
i.	OAC rule 3745-21-09(U)(1)(f)	3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for the exterior coating of a steel pail or drum.
j.	OAC rule 3745-21-09(U)(1)(h)	6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents for a high performance architectural aluminum coating.
k.	OAC rule 3745-21-09(U)(1)(i)	3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for any coating that is not regulated under paragraphs (U)(1)(a) to (U)(1)(h) of the OAC rule 3745-21-09.

(2) Additional Terms and Conditions

- a. When coating non-metal materials not subject to OAC rule 3745-21-09(U)(1)(d), Organic compound (OC) emissions shall not exceed 7.3 tons, including cleanup emissions from coating non-metal parts and materials, as a rolling, 12-month summation.
- b. When coating miscellaneous metal parts and materials, Volatile organic compounds (VOC) emissions shall not exceed 21.0 lbs/hr and 13.2 tons per year as a rolling, 12-month summation, including cleanup emissions from coating metal parts.
- c. OAC rule 3745-17-11(C)(3) states that any surface coating process with a permit-to-install issued after January 1, 1990 that identifies particulate emission limitations and control measures based on best available technology, best available control technology, or the lowest achievable emission rate shall comply

with such limitations and measures instead of paragraphs (C)(1) and (C)(2) of this rule.

- d. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(1)(c) and f)(1)b.

c) **Operational Restrictions**

- (1) The permittee shall operate the filtration system for control of particulate emissions whenever this emissions unit is in operation.
- (2) The maximum annual volatile organic material usage\* (from coatings and clean up materials) for K002 shall not exceed 13.2 tons, based upon a rolling, 12-month summation of the volatile organic material figures.

\* For the purposes of demonstrating compliance with the annual emission limit, the permittee shall calculate the annual emission limit by assuming 100% of the volatile organic material used is emitted.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall collect and record the following information each day for this emissions unit:
  - a. the name and identification number of each coating and cleanup material;
  - b. the type of material to which the coating is applied;
  - c. for each coating and cleanup material to be applied to or used in the cleanup of and/or coating of non-metal parts/materials, a statement as to if each material is photochemically reactive (PRM\*) or non-photochemically reactive (non-PRM), (documentation must be maintained on file);
  - d. the VOC content of each coating applied to metal parts, in pounds per gallon;
  - e. the VOC content\* of each coating applied to metal parts, in pounds per gallon less water and exempt solvents;
  - f. the OC content\* of each coating applied to non-metal parts/materials, in pounds per gallon;
  - g. the OC and/or VOC content\* of each cleanup material, in pounds per gallon;

- h. when coating non-metal parts/materials and using a PRM, the number of gallons of each coating and each PRM cleanup material applied in the emissions unit;
- i. the number of gallons of each coating and each cleanup material applied to/for non-metal parts/materials;
- j. the number of gallons of each coating and each cleanup material applied to/for metal parts/materials;
- k. on any day when applying a PRM coating or cleanup material to/for non-metal parts/materials, the total OC emissions from all coatings and PRM cleanup materials applied (sum of the products for all applicable materials, for coatings {f x h}, for cleanup {g x h}), in pounds per day;
- l. the total hours of operation of this emissions unit;
- m. the total hours of operation in the coating and cleanup of non-metal parts and materials;
- n. the total hours of operation in the coating and cleanup of metal parts and materials;
- o. on any day when applying a PRM coating or cleanup material to non-metal parts/materials, the average hourly OC emissions from all coatings and PRM cleanup materials (k / m), in pounds per hour;
- p. the total OC emissions from all coatings and cleanup materials applied to/for non-metal parts/materials (sum of products of all applicable materials {f x h} + {g x h}), in pounds per day;
- q. the total OC emissions from all coatings and cleanup materials applied to/for metal parts/materials (sum of products of all applicable materials {d x j} + {g x j}), in pounds per day;
- r. the average hourly VOC emissions from all coating and cleanup applied to/for metal parts (q / n), in pounds per hour;
- s. the individual HAP content of each coating and cleanup material, in pounds of each HAP per gallon;
- t. the total HAPs content of each coating and cleanup material, in pound per gallon;
- u. the emissions of each HAP from all coating and cleanup material applied (sum of the products for each material, {s x i} and {s x j}), in pounds per day;
- v. the emissions of the combined HAPs from all coatings and cleanup materials employed (sum of all HAP emissions from {u} above; or the sum of the products of each material {t x i} and {t x j}), in pounds per day;
- w. the rolling 12-month OC emissions from the coating and cleanup of non-metal parts and materials; and

- x. the rolling 12-month VOC emissions from the coating and cleanup of metal parts and materials.

\* VOC, OC (definition as: organic material), and PRM shall include all materials and shall be defined as found in OAC 3745-21-01

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

- (2) The permittee shall maintain daily records that document any time periods when the filtration system was not in service when the emissions unit was in operation.
- (3) The permit to install and operate application for this emissions unit, 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 "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):

Pollutant: MEK

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6

MAGLC (ug/m3): 14,048

Pollutant: MIBK

TLV (ug/m3): 205,000

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6

MAGLC (ug/m3): 4881

Pollutant: Xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6

MAGLC (ug/m3): 10,333

Pollutant: Toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6

MAGLC (ug/m3): 4476

The permittee, has demonstrated that emissions of the toxic contaminants listed above from emissions unit K002, 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).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration”, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

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

If the permittee determines that the "Toxic Air Contaminant Statute" 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 permit to install and operate 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 notify the Cleveland Division of Air Quality (Cleveland DAQ) of any daily record showing the exceedance of the hourly VOC emission limitation for this emissions unit when coating metal parts. A copy of such record shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.
- (2) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing the use of non-complying coatings. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month.
- (3) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.
- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (5) 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 emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation:  
3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents when coating metal parts for any coating that is dried at temperatures not exceeding two hundred degrees Fahrenheit  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
  - b. Emission Limitation:  
8 pounds/hour and 40 pounds/day of OC emissions when coating non-metal parts  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).

- c. Emission Limitation:  
7.3 TPY of OC emissions when coating non-metal parts
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily OC emissions due to the coating of non-metal parts.
- d. Emission Limitation:  
21.0 lbs/hr of VOC emissions when coating metal parts
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) for the coating of metal parts.
- e. Emission Limitation:  
13.2 TPY of VOC emissions when coating metal parts
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily emission rates for the calendar year due to coating metal parts.
- f. Emission Limitation:  
4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for a clear coating
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
- g. Emission Limitation:  
4.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for a zinc rich primer coating
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
- h. Emission Limitation:  
3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for an extreme performance coating
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
- i. Emission Limitation:  
4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for the interior coating of a steel pail or drum

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

j. Emission Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for the exterior coating of a steel pail or drum

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

k. Emission Limitation:

6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents for a high performance architectural aluminum coating

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

l. Emission Limitation:

3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for any coating that is not regulated under paragraphs (U)(1)(a) to (U)(1)(h) of the OAC rule 3745-21-09

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

U.S. EPA method 24 shall be used to determine the VOC and OC contents of the coatings and formulation data shall be used to determine the VOC contents of the cleanup material.

Formulation data shall be used to determine the HAP contents of the coatings and any cleanup materials.

g) Miscellaneous Requirements

(1) None.



3. K003, Paint Booth #3, Oven #3

Operations, Property and/or Equipment Description:

spray paint booth #3, Oven #3

This FEPTIO supercedes Permit No. P0095217 issued January 26, 2010.

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)(3), d)(4), d)(5), and d)(6).

(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#13-03985 issued 4/8/2003)	<p>Volatile organic compound (VOC) emissions shall not exceed 21.9 lbs/day and 4.0 tons as a rolling, 12-month summation, both including cleanup emissions.</p> <p>See c)(1), c)(2) and c)(3).</p> <p>The requirements established pursuant to this rule also include the requirements of OAC rule 3745-21-09(U)(2)(e)(ii).</p>
b.	OAC rule 3745-21-09(U)(2)(e)(ii)	The permittee shall use not more than 3 gallons of coatings per day for the coating of metal parts.
c.	OAC rule 3745-17-11(C)	Exempt, pursuant to OAC rule 3745-17-11(C)(3). See b)(2)a.

- (2) Additional Terms and Conditions
- a. OAC rule 3745-17-11(C)(3) states that any surface coating process with a permit-to-install issued after January 1, 1990 that identifies particulate emission limitations and control measures based on best available technology, best available control technology, or the lowest achievable emission rate shall comply with such limitations and measures instead of paragraphs (C)(1) and (C)(2) of this rule.
- c) Operational Restrictions
- (1) The permittee shall employ no more than 3 gallons of coating in any one day for this emissions unit.
- (2) The permittee shall operate the dry filtration system for control of particulate emissions whenever this emissions unit is in operation.
- (3) The maximum annual volatile organic material usage\* (from coatings and clean up materials) for K003 shall not exceed 4.0 tons, based upon a rolling, 12-month summation of the volatile organic material.
- \* For the purposes of demonstrating compliance with the annual emission limit, the permittee shall calculate the annual emission limit by assuming 100% of the volatile organic material used is emitted.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each day for this emissions unit:
- a. the name and identification number of each coating and cleanup material;
- b. the VOC content of each coating and cleanup material, in pounds per gallon;
- c. the single HAP content of each coating and cleanup material, in pounds per gallon;
- d. the combined HAPs content of each coating and cleanup material, in pounds per gallon;
- e. the number of gallons of each coating and cleanup material employed;
- f. the total number of gallons of all coatings employed;
- g. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons (sum of b x e);
- h. the emissions of each single HAP from all coatings and cleanup materials employed, in pounds or tons (sum of c x e); and

- i. the emissions of combined HAPs from all coatings and cleanup materials employed, in pounds or tons (sum of d x e or the sum of all HAPs from each coating and cleanup material applied, from h above).
- (2) 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.
- (3) The permit to install application for this emissions unit, 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 "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):

Pollutant: MEK  
TLV (ug/m3): 590,000  
Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 14,048

Pollutant: MIBK  
TLV (ug/m3): 205,000  
Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 4881

Pollutant: Xylene  
TLV (ug/m3): 434,000  
Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 10,333

Pollutant: Toluene  
TLV (ug/m3): 188,000  
Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 4476

The permittee, has demonstrated that emissions of the toxic contaminants listed above 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 “Toxic Air Contaminant Statute”, ORC 3704.03(F).

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

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

If the permittee determines that the "Toxic Air Contaminant Statute" 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 permit to install and operate 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 notify the Cleveland Division of Air Quality (Cleveland DAQ) or regulating agency in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit of 3 gallons per day. The

notification shall include a copy of such record and shall be sent to the Cleveland DAQ or regulating agency within 45 days after the exceedance occurs.

- (2) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.
- (3) 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.
- (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 emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emissions Limitation:  
21.9 lbs/day of VOC emissions

Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1)

- b. Emissions Limitation:  
4.0 TPY of VOC emissions

Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily emission rates for the calendar year.

U.S. EPA method 24 shall be used to determine the VOC contents of the coatings and formulation data shall be used to determine the VOC contents of the cleanup material.

Formulation data shall be used to determine the HAP contents of the coatings and any cleanup materials.

g) Miscellaneous Requirements

- (1) None.



4. K004, paint booth #4, Oven #4

Operations, Property and/or Equipment Description:

paint spray booth #4, Oven #4

This FEPTIO supercedes Permit No. P0095217 issued January 26, 2010.

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)(3), d)(4), d)(5) and d)(6).

(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#13-03985 issued 4/8/2003)	<p>Volatile organic compound (VOC) emissions shall not exceed 21.9 lbs/day and 4.0 tons as a rolling, 12-month summation, both including cleanup emissions.</p> <p>See c)(1).</p> <p>The requirements established pursuant to this rule also include the requirements of OAC rule 3745-21-09(U)(2)(e)(ii).</p>
b.	OAC rule 3745-21-09(U)(2)(e)(ii)	The permittee shall use not more than 3 gallons of coatings per day for the coating of metal parts.
c.	OAC rule 3745-17-11(C)	See b)(2)a.

- (2) Additional Terms and Conditions
- a. OAC rule 3745-17-11(C)(3) states that any surface coating process with a permit-to-install issued after January 1, 1990 that identifies particulate emission limitations and control measures based on best available technology, best available control technology, or the lowest achievable emission rate shall comply with such limitations and measures instead of paragraphs (C)(1) and (C)(2) of this rule.
- c) Operational Restrictions
- (1) The permittee shall employ no more than 3 gallons of coating in any one day for this emissions unit.
- (2) The permittee shall operate the dry filtration system for control of particulate emissions whenever this emissions unit is in operation.
- (3) The maximum annual volatile organic material usage\* (from coatings and clean up materials) for K004 shall not exceed 4.0 tons, based upon a rolling, 12-month summation of the volatile organic material.
- \* For the purposes of demonstrating compliance with the annual emission limit, the permittee shall calculate the annual emission limit by assuming 100% of the volatile organic material used is emitted.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each day for this emissions unit:
- a. the name and identification number of each coating and cleanup material;
- b. the VOC content of each coating and cleanup material, in pounds per gallon;
- c. the single HAP content of each coating and cleanup material, in pounds per gallon;
- d. the combined HAPs content of each coating and cleanup material, in pounds per gallon;
- e. the number of gallons of each coating and cleanup material employed;
- f. the total number of gallons of all coatings employed;
- g. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons (sum of b x e);
- h. the emissions of each single HAP from all coatings and cleanup materials employed, in pounds or tons (sum of c x e); and

- i. the emissions of combined HAPs from all coatings and cleanup materials employed, in pounds or tons (sum of d x e or the sum of all HAPs from each coating and cleanup material applied, from h above).
- (2) 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.
- (3) The permit to install application for this emissions unit, K004 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):

Pollutant: MEK

TLV (ug/m<sup>3</sup>): 590,000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 620.6

MAGLC (ug/m<sup>3</sup>): 14,048

Pollutant: MIBK

TLV (ug/m<sup>3</sup>): 205,000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 620.6

MAGLC (ug/m<sup>3</sup>): 4881

Pollutant: Xylene

TLV (ug/m<sup>3</sup>): 434,000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 620.6

MAGLC (ug/m<sup>3</sup>): 10,333

Pollutant: Toluene

TLV (ug/m<sup>3</sup>): 188,000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 620.6

MAGLC (ug/m<sup>3</sup>): 4476

The permittee, has demonstrated that emissions of the toxic contaminants listed above from emissions unit K004, 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).

- (4) 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:
- 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 "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 permit to install and operate 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 notify the Cleveland Division of Air Quality (Cleveland DAQ) or regulating agency in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit of 3 gallons per day. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ or regulating agency within 45 days after the exceedance occurs.

- (2) The permittee shall notify the Cleveland DAQ of any daily record showing the exceedance of the daily VOC emission limitation for this emissions unit. A copy of such record shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.
  - (3) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.
  - (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
  - (5) 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 emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):
    - a. Emissions Limitation:  
21.9 lbs/day of VOC emissions  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
    - b. Emissions Limitation:  
4.0 TPY of VOC emissions  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily emission rates for the calendar year.
- U.S. EPA method 24 shall be used to determine the VOC contents of the coatings and formulation data shall be used to determine the VOC contents of the cleanup material.
- Formulation data shall be used to determine the HAP contents of the coatings and any cleanup materials.
- g) Miscellaneous Requirements
- (1) None.



5. K005, Binks Paint Booth #5

Operations, Property and/or Equipment Description:

paint spray booth #5

This FEPTIO supercedes Permit No. P0095217 issued January 26, 2010.

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)(3), d)(4), d)(5), and d)(6).

(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.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Row a: OAC rule 3745-31-05(A)(3) (PTI#13-03985 issued 4/8/2003) | Organic compound (OC) emissions shall not exceed 7.3 tons... Volatile organic compounds (VOC) emissions shall not exceed 21.0 lbs/hr and 17.0 tons... See c)(1). The requirements established pursuant to this rule also include the requirements of OAC rules 3745-21-



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		09(U)(1)(d),(a),(b),(c),(e),(f),(h), and (i).  The requirements established pursuant to this rule also include the requirements of OAC rule 3745-21-07(G)(2).
b.	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds/hour and 40 pounds/day from all coatings and photochemically reactive cleanup materials, on any day when photochemically reactive materials are employed. See b)(2)a.
c.	OAC rule 3745-21-09(U)(1)(d)	3.5 pounds of VOC per gallon, excluding water and exempt solvents for any coating that is dried at temperatures not exceeding two hundred degrees Fahrenheit.
d.	OAC rule 3745-21-09(U)(1)(a)	4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for a clear coating.
e.	OAC rule 3745-21-09(U)(1)(b)	4.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for a zinc rich primer coating.
f.	OAC rule 3745-21-09(U)(1)(c)	3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for an extreme performance coating.
g.	OAC rule 3745-21-09(U)(1)(e)	4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for the interior coating of a steel pail or drum.
h.	OAC rule 3745-21-09(U)(1)(f)	3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for the exterior coating of a steel pail or drum.
i.	OAC rule 3745-21-09(U)(1)(h)	6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents for a high performance architectural aluminum coating.
j.	OAC rule 3745-21-09(U)(1)(i)	3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for any coating that is not regulated under paragraphs (U)(1)(a) to (U)(1)(h) of the OAC rule 3745-21-09.
k.	OAC rule 3745-17-11(C)	See b)(2)b.

- (2) Additional Terms and Conditions
- a. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:
- b)(1)(b) and f)(1)b.
- b. OAC rule 3745-17-11(C)(3) states that any surface coating process with a permit-to-install issued after January 1, 1990 that identifies particulate emission limitations and control measures based on best available technology, best available control technology, or the lowest achievable emission rate shall comply with such limitations and measures instead of paragraphs (C)(1) and (C)(2) of this rule.
- c) Operational Restrictions
- (1) The permittee shall operate the filtration system for control of particulate emissions whenever this emissions unit is in operation.
- (2) The maximum annual volatile organic material usage\* (from coatings and clean up materials) for K005 shall not exceed 17.0 tons, based upon a rolling, 12-month summation of the volatile organic material figures.
- \* For the purposes of demonstrating compliance with the annual emission limit, the permittee shall calculate the annual emission limit by assuming 100% of the volatile organic material used is emitted.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each day for this emissions unit:
- a. the name and identification number of each coating and cleanup material;
- b. the type of material to which the coating is applied;
- c. for each coating and cleanup material to be applied to or used in the cleanup of and/or coating of non-metal parts/materials, a statement as to if each material is photochemically reactive (PRM\*) or non-photochemically reactive (non-PRM), (documentation must be maintained on file);
- d. the VOC content of each coating applied to metal parts, in pounds per gallon;
- e. the VOC content\* of each coating applied to metal parts, in pounds per gallon less water and exempt solvents;

- f. the OC content\* of each coating applied to non-metal parts/materials, in pounds per gallon;
- g. the OC and/or VOC content\* of each cleanup material, in pounds per gallon;
- h. when coating non-metal parts/materials and using a PRM, the number of gallons of each coating and each PRM cleanup material applied in the emissions unit;
- i. the number of gallons of each coating and each cleanup material applied to/for non-metal parts/materials;
- j. the number of gallons of each coating and each cleanup material applied to/for metal parts/materials;
- k. on any day when applying a PRM coating or cleanup material to/for non-metal parts/materials, the total OC emissions from all coatings and PRM cleanup materials applied (sum of the products for all applicable materials, for coatings {f x h}, for cleanup {g x h}), in pounds per day;
- l. the total hours of operation of this emissions unit;
- m. the total hours of operation in the coating and cleanup of non-metal parts and materials;
- n. the total hours of operation in the coating and cleanup of metal parts and materials;
- o. on any day when applying a PRM coating or cleanup material to non-metal parts/materials, the average hourly OC emissions from all coatings and PRM cleanup materials (k / m), in pounds per hour;
- p. the total OC emissions from all coatings and cleanup materials applied to/for non-metal parts/materials (sum of products of all applicable materials {f x h} + {g x h}), in pounds per day;
- q. the total OC emissions from all coatings and cleanup materials applied to/for metal parts/materials (sum of products of all applicable materials {d x j} + {g x j}), in pounds per day;
- r. the average hourly VOC emissions from all coating and cleanup applied to/for metal parts (q / n), in pounds per hour;
- s. the individual HAP content of each coating and cleanup material, in pounds of each HAP per gallon;
- t. the total HAPs content of each coating and cleanup material, in pound per gallon;
- u. the emissions of each HAP from all coating and cleanup material applied (sum of the products for each material, {s x i} and {s x j}), in pounds per day;

- v. the emissions of the combined HAPs from all coatings and cleanup materials employed (sum of all HAP emissions from {u} above; or the sum of the products of each material {t x i} and {t x j}), in pounds per day;
- w. the rolling 12-month OC emissions from the coating and cleanup of non-metal parts and materials; and
- x. the rolling 12-month VOC emissions from the coating and cleanup of metal parts and materials.

\* VOC, OC (definition as: organic material), and PRM shall include all materials and shall be defined as found in OAC 3745-21-01

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

- (2) The permittee shall maintain daily records that document any time periods when the filtration system was not in service when the emissions unit was in operation.
- (3) The permit to install and operate application for this emissions unit, K005 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):

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

- 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):

Pollutant: MEK

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1862

MAGLC (ug/m3): 14,048

Pollutant: MIBK

TLV (ug/m3): 205,000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1862

MAGLC (ug/m3): 4881

Pollutant: Xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1862

MAGLC (ug/m3): 10,333

Pollutant: Toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1862

MAGLC (ug/m3): 4476

The permittee, has demonstrated that emissions of the toxic contaminants listed above from emissions unit K005, 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).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration”, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can

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

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

If the permittee determines that the "Toxic Air Contaminant Statute" 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 permit to install and operate 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 notify the Cleveland Division of Air Quality (Cleveland DAQ) of any daily record showing the exceedance of the hourly VOC emission limitation for this emissions unit when coating metal parts. A copy of such record shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.
- (2) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing the use of non-complying coatings. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month.
- (3) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.
- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (5) 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 emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):
- a. Emission Limitation:  
3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents when coating metal parts for any coating that is dried at temperatures not exceeding two hundred degrees Fahrenheit
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1)

- b. Emission Limitation:  
8 pounds/hour and 40 pounds/day of OC emissions when coating non-metal parts
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
- c. Emission Limitation:  
7.3 TPY of OC emissions when coating non-metal parts
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily OC emissions due to the coating of non-metal parts.
- d. Emission Limitation:  
21.0 lbs/hr of VOC emissions when coating metal parts
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) for the coating of metal parts.
- e. Emission Limitation:  
17.0 TPY of VOC emissions when coating metal parts
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily emission rates for the calendar year due to coating metal parts.
- f. Emission Limitation:  
4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for a clear coating
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
- g. Emission Limitation:  
4.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for a zinc rich primer coating
- Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
- h. Emission Limitation:  
3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for an extreme performance coating

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

i. Emission Limitation:

4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for the interior coating of a steel pail or drum

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

j. Emission Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for the exterior coating of a steel pail or drum

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

k. Emission Limitation:

6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents for a high performance architectural aluminum coating

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

l. Emission Limitation:

3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for any coating that is not regulated under paragraphs (U)(1)(a) to (U)(1)(h) of the OAC rule 3745-21-09

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

U.S. EPA method 24 shall be used to determine the VOC and OC contents of the coatings and formulation data shall be used to determine the VOC contents of the cleanup material.

Formulation data shall be used to determine the HAP contents of the coatings and any cleanup materials.

g) Miscellaneous Requirements

(1) None.



6. K006, Paint Booth K006 booth #6

Operations, Property and/or Equipment Description:

paint spray booth #6

This FEPTIO supercedes Permit No. P0095217 issued January 26, 2010.

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)(3), d)(4), d)(5) and d)(6).

(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#13-03985 issued 4/8/2003)	Organic compound (OC) emissions shall not exceed 7.3 tons, including cleanup emissions from coating non-metal parts and materials, as a rolling, 12-month summation.  Volatile organic compounds (VOC) emissions shall not exceed 21.0 lbs/hr and 17.0 tons as a rolling, 12-month summation, including cleanup emissions from coating metal parts.  The requirements established pursuant to this rule also include the requirements of OAC rules 3745-21-07(G)(2), 3745-21-09(U)(1)(d),(a),(b),(c),(e),(f),(h), and (i)..
b.	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds/hour and 40



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		pounds/day from all coatings and photochemically reactive cleanup materials, on any day when photochemically reactive materials are employed. See b)(2)a.
c.	OAC rule 3745-21-09(U)(1)(d)	3.5 pounds of VOC per gallon, excluding water and exempt solvents for any coating that is dried at temperatures not exceeding two hundred degrees Fahrenheit.
d.	OAC rule 3745-21-09(U)(1)(a)	4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for a clear coating.
e.	OAC rule 3745-21-09(U)(1)(b)	4.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for a zinc rich primer coating.
f.	OAC rule 3745-21-09(U)(1)(c)	3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for an extreme performance coating.
g.	OAC rule 3745-21-09(U)(1)(e)	4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for the interior coating of a steel pail or drum.
h.	OAC rule 3745-21-09(U)(1)(f)	3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for the exterior coating of a steel pail or drum.
i.	OAC rule 3745-21-09(U)(1)(h)	6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents for a high performance architectural aluminum coating.
j.	OAC rule 3745-21-09(U)(1)(i)	3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for any coating that is not regulated under paragraphs (U)(1)(a) to (U)(1)(h) of the OAC rule 3745-21-09.
k.	OAC rule 3745-17-11(C)	See b)(2)b.

(2) Additional Terms and Conditions

- a. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(1)(b), and f)(1)b.

- b. OAC rule 3745-17-11(C)(3) states that any surface coating process with a permit-to-install issued after January 1, 1990 that identifies particulate emission limitations and control measures based on best available technology, best available control technology, or the lowest achievable emission rate shall comply with such limitations and measures instead of paragraphs (C)(1) and (C)(2) of this rule.

c) **Operational Restrictions**

- (1) The permittee shall operate the filtration system for control of particulate emissions whenever this emissions unit is in operation.
- (2) The maximum annual volatile organic material usage\* (from coatings and clean up materials) for K006 shall not exceed 17.0 tons, based upon a rolling, 12-month summation of the volatile organic material figures.

\* For the purposes of demonstrating compliance with the annual emission limit, the permittee shall calculate the annual emission limit by assuming 100% of the volatile organic material used is emitted.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall collect and record the following information each day for this emissions unit:
- a. the name and identification number of each coating and cleanup material;
  - b. the type of material to which the coating is applied;
  - c. for each coating and cleanup material to be applied to or used in the cleanup of and/or coating of non-metal parts/materials, a statement as to if each material is photochemically reactive (PRM\*) or non-photochemically reactive (non-PRM), (documentation must be maintained on file);
  - d. the VOC content of each coating applied to metal parts, in pounds per gallon;
  - e. the VOC content\* of each coating applied to metal parts, in pounds per gallon less water and exempt solvents;
  - f. the OC content\* of each coating applied to non-metal parts/materials, in pounds per gallon;
  - g. the OC and/or VOC content\* of each cleanup material, in pounds per gallon;
  - h. when coating non-metal parts/materials and using a PRM, the number of gallons of each coating and each PRM cleanup material applied in the emissions unit;
  - i. the number of gallons of each coating and each cleanup material applied to/for non-metal parts/materials;

- j. the number of gallons of each coating and each cleanup material applied to/for metal parts/materials;
- k. on any day when applying a PRM coating or cleanup material to/for non-metal parts/materials, the total OC emissions from all coatings and PRM cleanup materials applied (sum of the products for all applicable materials, for coatings {f x h}, for cleanup {g x h}), in pounds per day;
- l. the total hours of operation of this emissions unit;
- m. the total hours of operation in the coating and cleanup of non-metal parts and materials;
- n. the total hours of operation in the coating and cleanup of metal parts and materials;
- o. on any day when applying a PRM coating or cleanup material to non-metal parts/materials, the average hourly OC emissions from all coatings and PRM cleanup materials (k / m), in pounds per hour;
- p. the total OC emissions from all coatings and cleanup materials applied to/for non-metal parts/materials (sum of products of all applicable materials {f x h} + {g x h}), in pounds per day;
- q. the total OC emissions from all coatings and cleanup materials applied to/for metal parts/materials (sum of products of all applicable materials {d x j} + {g x j}), in pounds per day;
- r. the average hourly VOC emissions from all coating and cleanup applied to/for metal parts (q / n), in pounds per hour;
- s. the individual HAP content of each coating and cleanup material, in pounds of each HAP per gallon;
- t. the total HAPs content of each coating and cleanup material, in pound per gallon;
- u. the emissions of each HAP from all coating and cleanup material applied (sum of the products for each material, {s x i} and {s x j}), in pounds per day;
- v. the emissions of the combined HAPs from all coatings and cleanup materials employed (sum of all HAP emissions from {u} above; or the sum of the products of each material {t x i} and {t x j}), in pounds per day;
- w. the rolling 12-month OC emissions from the coating and cleanup of non-metal parts and materials; and
- x. the rolling 12-month VOC emissions from the coating and cleanup of metal parts and materials.

\* VOC, OC (definition as: organic material), and PRM shall include all materials and shall be defined as found in OAC 3745-21-01

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

- (2) The permittee shall maintain daily records that document any time periods when the filtration system was not in service when the emissions unit was in operation.
- (3) The permit to install and operate application for this emissions unit, K006 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):

Pollutant: MEK

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1862

MAGLC (ug/m3): 14,048

Pollutant: MIBK

TLV (ug/m3): 205,000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1862

MAGLC (ug/m3): 4881

Pollutant: Xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1862

MAGLC (ug/m3): 10,333

Pollutant: Toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 4.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1862

MAGLC (ug/m3): 4476

The permittee, has demonstrated that emissions of the toxic contaminants listed above from emissions unit K006, 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).

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

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

If the permittee determines that the "Toxic Air Contaminant Statute" 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 permit to install and operate 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 notify the Cleveland Division of Air Quality (Cleveland DAQ) of any daily record showing the exceedance of the hourly VOC emission limitation for this

emissions unit when coating metal parts. A copy of such record shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.

- (2) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing the use of non-complying coatings. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month.
  - (3) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.
  - (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
  - (5) 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 emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):
    - a. Emission Limitation:  
3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents when coating metal parts for any coating that is dried at temperatures not exceeding two hundred degrees Fahrenheit  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
    - b. Emission Limitation:  
8 pounds/hour and 40 pounds/day of OC emissions when coating non-metal parts  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
    - c. Emission Limitation:  
7.3 TPY of OC emissions when coating non-metal parts

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily OC emissions due to the coating of non-metal parts.

d. Emission Limitation:

21.0 lbs/hr of VOC emissions when coating metal parts

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1) for the coating of metal parts.

e. Emission Limitation:

17.0 TPY of VOC emissions when coating metal parts

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily emission rates for the calendar year due to coating metal parts.

f. Emission Limitation:

4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for a clear coating

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

g. Emission Limitation:

4.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for a zinc rich primer coating

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

h. Emission Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for an extreme performance coating

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

i. Emission Limitation:

4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents for the interior coating of a steel pail or drum

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

j. Emission Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for the exterior coating of a steel pail or drum

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

k. Emission Limitation:

6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents for a high performance architectural aluminum coating

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

l. Emission Limitation:

3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents for any coating that is not regulated under paragraphs (U)(1)(a) to (U)(1)(h) of the OAC rule 3745-21-09

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1).

U.S. EPA method 24 shall be used to determine the VOC and OC contents of the coatings and formulation data shall be used to determine the VOC contents of the cleanup material.

Formulation data shall be used to determine the HAP contents of the coatings and any cleanup materials.

g) Miscellaneous Requirements

(1) None.



7. K007, Paint Booth K007 booth #7

Operations, Property and/or Equipment Description:

Binks spray booth #7

This FEPTIO supercedes Permit No. P0095217 issued January 26, 2010.

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)(3), d)(4), d)(5) and d)(6).

(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#13-03985 issued 4/8/2003)	<p>Volatile organic compound (VOC) emissions shall not exceed 21.9 lbs/day and 4.0 tons as a rolling, 12-month summation, both including cleanup emissions.</p> <p>The requirements established pursuant to this rule also include the requirements of OAC rule 3745-21-09(U)(2)(e)(ii).</p>
b.	OAC rule 3745-21-09(U)(2)(e)(ii)	The permittee shall use not more than 3 gallons of coatings per day for the coating of metal parts.
c.	OAC rule 3745-17-11(C)	See b)(2)a.

- (2) Additional Terms and Conditions
- a. OAC rule 3745-17-11(C)(3) states that any surface coating process with a permit-to-install issued after January 1, 1990 that identifies particulate emission limitations and control measures based on best available technology, best available control technology, or the lowest achievable emission rate shall comply with such limitations and measures instead of paragraphs (C)(1) and (C)(2) of this rule.
- c) Operational Restrictions
- (1) The permittee shall employ no more than 3 gallons of coating in any one day for this emissions unit.
- (2) The permittee shall operate the dry filtration system for control of particulate emissions whenever this emissions unit is in operation.
- (3) The maximum annual volatile organic material usage\* (from coatings and clean up materials) for K007 shall not exceed 4.0 tons, based upon a rolling, 12-month summation of the volatile organic material.
- \* For the purposes of demonstrating compliance with the annual emission limit, the permittee shall calculate the annual emission limit by assuming 100% of the volatile organic material used is emitted.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each day for this emissions unit:
- a. the name and identification number of each coating and cleanup material;
- b. the VOC content of each coating and cleanup material, in pounds per gallon;
- c. the single HAP content of each coating and cleanup material, in pounds per gallon;
- d. the combined HAPs content of each coating and cleanup material, in pounds per gallon;
- e. the number of gallons of each coating and cleanup material employed;
- f. the total number of gallons of all coatings employed;
- g. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons (sum of b x e);
- h. the emissions of each single HAP from all coatings and cleanup materials employed, in pounds or tons (sum of c x e); and

- i. the emissions of combined HAPs from all coatings and cleanup materials employed, in pounds or tons (sum of d x e or the sum of all HAPs from each coating and cleanup material applied, from h above).
  - (2) 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.
  - (3) The permit to install and operate application for this emissions unit, K007 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):

Pollutant: MEK

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6

MAGLC (ug/m3): 14,048

Pollutant: MIBK

TLV (ug/m3): 205,000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6

MAGLC (ug/m3): 4881

Pollutant: Xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6

MAGLC (ug/m3): 10,333

Pollutant: Toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6

MAGLC (ug/m3): 4476

The permittee, has demonstrated that emissions of the toxic contaminants listed above from emissions unit K007, 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).

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

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

If the permittee determines that the "Toxic Air Contaminant Statute" 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 permit to install and operate 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 notify the Cleveland Division of Air Quality (Cleveland DAQ) or regulating agency in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit of 3 gallons per day. The

notification shall include a copy of such record and shall be sent to the Cleveland DAQ or regulating agency within 45 days after the exceedance occurs.

- (2) The permittee shall notify the Cleveland DAQ of any daily record showing the exceedance of the daily VOC emission limitation for this emissions unit. A copy of such record shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.
- (3) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.
- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (5) 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 emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emissions Limitation:  
21.9 lbs/day of VOC emissions  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
  - b. Emissions Limitation:  
4.0 TPY of VOC emissions  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily emission rates for the calendar year.

U.S. EPA method 24 shall be used to determine the VOC contents of the coatings.

Formulation data shall be used to determine the HAP contents of the coatings and any cleanup materials.

- g) Miscellaneous Requirements
  - (1) None.



8. K008, Spin/Dip Coater K008

Operations, Property and/or Equipment Description:

spin/dip coating line K008

This FEPTIO supercedes Permit No. P0095217 issued January 26, 2010.

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)(3), d)(4), d)(5) and d)(6).

(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#13-03985 issued 4/8/2003)	<p>Volatile organic compound (VOC) emissions shall not exceed 21.9 lbs/day and 4.0 tons as a rolling, 12-month summation, both including cleanup emissions.</p> <p>See c)(2).</p> <p>The requirements established pursuant to this rule also include the requirements of OAC rule 3745-21-09(U)(2)(e)(ii).</p>
b.	OAC rule 3745-21-09(U)(2)(e)(ii)	The permittee shall use not more than 3 gallons of coatings per day for the coating of metal parts.
c.	OAC rule 3745-17-11(C)	See b)(2)a.

- (2) Additional Terms and Conditions
- a. OAC rule 3745-17-11(C)(3) states that any surface coating process with a permit-to-install issued after January 1, 1990 that identifies particulate emission limitations and control measures based on best available technology, best available control technology, or the lowest achievable emission rate shall comply with such limitations and measures instead of paragraphs (C)(1) and (C)(2) of this rule.
- c) Operational Restrictions
- (1) The permittee shall employ no more than 3 gallons of coating in any one day for this emissions unit.
- (2) The permittee shall operate the dry filtration system for control of particulate emissions whenever this emissions unit is in operation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each day for this emissions unit:
- a. the name and identification number of each coating and cleanup material;
- b. the VOC content of each coating and cleanup material, in pounds per gallon;
- c. the single HAP content of each coating and cleanup material, in pounds per gallon;
- d. the combined HAPs content of each coating and cleanup material, in pounds per gallon;
- e. the number of gallons of each coating and cleanup material employed;
- f. the total number of gallons of all coatings employed;
- g. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons (sum of b x e);
- h. the emissions of each single HAP from all coatings and cleanup materials employed, in pounds or tons (sum of c x e); and
- i. the emissions of combined HAPs from all coatings and cleanup materials employed, in pounds or tons (sum of d x e or the sum of all HAPs from each coating and cleanup material applied, from h above).
- (2) 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.
- (3) The permit to install and operate application for this emissions unit, K008 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):

Pollutant: MEK

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6

MAGLC (ug/m3): 14,048

Pollutant: MIBK

TLV (ug/m3): 205,000

Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 4881

Pollutant: Xylene  
TLV (ug/m3): 434,000  
Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 10,333

Pollutant: Toluene  
TLV (ug/m3): 188,000  
Maximum Hourly Emission Rate (lbs/hr): 1.0  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 620.6  
MAGLC (ug/m3): 4476

The permittee, has demonstrated that emissions of the toxic contaminants listed above from emissions unit K008, 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).

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

If the permittee determines that the "Toxic Air Contaminant Statute" 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 permit to install and operate 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 notify the Cleveland Division of Air Quality (Cleveland DAQ) or regulating agency in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit of 3 gallons per day. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ or regulating agency within 45 days after the exceedance occurs.
  - (2) The permittee shall notify the Cleveland DAQ of any daily record showing the exceedance of the daily VOC emission limitation for this emissions unit. A copy of such record shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.
  - (3) The permittee shall notify the Cleveland DAQ, in writing, of any monthly record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the event occurs.

- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
  - (5) 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 emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):
    - a. Emissions Limitation:  
21.9 lbs/day of VOC emissions  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1).
    - b. Emissions Limitation:  
4.0 TPY of VOC emissions  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping specified in d)(1) and shall be the sum of the daily emission rates for the calendar year.  
  
U.S. EPA method 24 shall be used to determine the VOC contents of the coatings and formulation data shall be used to determine the VOC contents of the cleanup material.  
  
Formulation data shall be used to determine the HAP contents of the coatings and any cleanup materials.
- g) Miscellaneous Requirements
- (1) None.