



State of Ohio Environmental Protection Agency

STREET ADDRESS:

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

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

MAILING ADDRESS:

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

10/1/2008

Certified Mail

Dan Stapleton  
BAE Systems  
9113 Le Saint Drive  
Fairfield, OH 45014-5453

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

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 1409031040  
Permit Number: 14-06043  
Permit Type: Initial Installation  
County: Butler

Dear Permit Holder:

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

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

and Hamilton County Dept. of Environmental Services  
250 William Howard Taft Pkwy.  
Cincinnati, OH 45219-2660

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install and operate will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install and Operate is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Hamilton County Dept. of Environmental Services at (513)946-7777.

Sincerely,

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*  
HCDOES; Indiana; Kentucky

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





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description: BAE Systems has proposed to relocate three paint booths (K001, K002, and K003) from the BAE Systems location at 4175 Mulhauser Road (PN: 1409030972) to the BAE Systems location at 8779 Le Saint Drive (PN: 1409031040), and to install a new paint booth (K004) at the 8779 Le Saint Drive location. The paint booths at this facility are used to coat and touch-up finishes on armored commercial vehicles. The armored commercial vehicles are frequently purchased by government officials. The facility was granted a Director's exemption to relocate the existing booths (K001, K002, and K003) and install the new booth (K004) before receiving a final FEPTIO. This facility is in close proximity to another BAE Systems facility located at 9113 Le Saint Drive (PN: 1409030600). The potential emissions from both facilities must be evaluated together when evaluating Title V applicability.
3. Facility Emissions and Attainment Status: The facility is located in Butler County which is currently non-attainment for the 8-hour ozone standard (VOC and NOx), non-attainment for particulate matter 2.5 microns and less in diameter (PM2.5), and attainment for all other criteria pollutants. The facility has requested annual coating and cleanup material usage restrictions to avoid Title V applicability. This permit will institute federally enforceable emission limitations which restrict the VOC emissions to less than 100 tons/year, and the Hazardous Air Pollutant (HAP) emissions to less than 10 and 25 tons/year.
4. Source Emissions: The potential emissions of emissions units K001, K002, K003, K004, and the emissions units from the BAE Systems facility located at 9113 Le Saint Drive, combined, are greater than 100 tons/year, and the potential HAPs are greater than 25 tons/year for combined HAPs. This permit will limit the VOC emissions from K001 to 5.07 tons/year, K002 to 2.5 tons/year, K003 to 2.5 tons/year, and K004 to 5.07 tons/year. This permit will also limit the Hazardous Air Pollutant emissions to less than 10 tons/year for any individual HAP and less than 25 tons/year for the combined HAPs.
5. Conclusion: The permittee has proposed to comply with the federally enforceable emission limitations of 5.07 tons/year VOC for K001, 2.5 tons/year VOC for K002, 2.5 tons/year VOC for K003, 5.07 tons/year VOC for K004, and 9.9/24.9 tons/year HAPs as 12-month rolling summations; has proposed associated operational and emissions record keeping and reporting to demonstrate compliance with these limitations; and, will accept the terms and conditions of this permit which will limit emissions of VOC and HAPs as Synthetic Minor so that the paint booths and facility will not trigger Title V. The facility will maintain records and be subject to reporting as outlined in the permit to ensure compliance with the voluntary synthetic minor emissions limitations.
6. Please provide additional notes or comments as necessary:

None

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

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| VOC              | 15.14                |
| Individual HAP   | 9.9                  |
| Combined HAPs    | 24.9                 |

PUBLIC NOTICE  
Issuance of Draft Air Pollution Permit-To-Install and Operate  
BAE Systems

Issue Date: 10/1/2008

Permit Number: 14-06043

Permit Type: Initial Installation

Permit Description: Relocating 3 paint booths from another location, and the installation of a new paint booth.

Facility ID: 1409031040

Facility Location: BAE Systems  
8779 Le Saint Drive,  
Fairfield, OH 45014

Facility Description: Automobile Manufacturing

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Paul Tedtman at Hamilton County Dept. of Environmental Services, 250 William Howard Taft Pkwy. or (513)946-7777. The permit can be downloaded from the Web page: [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc)





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**DRAFT**

**Air Pollution Permit-to-Install and Operate  
for  
BAE Systems**

Facility ID: 1409031040  
Permit Number: 14-06043  
Permit Type: Initial Installation  
Issued: 10/1/2008  
Effective: To be entered upon final issuance  
Expiration: To be entered upon final issuance





**Air Pollution Permit-to-Install and Operate**  
for  
BAE Systems

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State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** 14-06043

**Facility ID:** 1409031040

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

# Authorization

Facility ID: 1409031040

Application Number(s): A0010243

Permit Number: 14-06043

Permit Description: Relocating 3 paint booths from another location, and the installation of a new paint booth.

Permit Type: Initial Installation

Permit Fee: \$800.00 *DO NOT send payment at this time - subject to change before final issuance*

Issue Date: 10/1/2008

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

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

This document constitutes issuance to:

BAE Systems  
8779 Le Saint Drive  
Fairfield, OH 45014

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



## Authorization (continued)

Permit Number: 14-06043

Permit Description: Relocating 3 paint booths from another location, and the installation of a new paint booth.

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

|                                   |                            |
|-----------------------------------|----------------------------|
| <b>Emissions Unit ID:</b>         | <b>K001</b>                |
| Company Equipment ID:             | Paint Spray Booth Number 1 |
| Superseded Permit Number:         |                            |
| General Permit Category and Type: | Not Applicable             |
| <b>Emissions Unit ID:</b>         | <b>K002</b>                |
| Company Equipment ID:             | Paint Spray Booth Number 2 |
| Superseded Permit Number:         |                            |
| General Permit Category and Type: | Not Applicable             |
| <b>Emissions Unit ID:</b>         | <b>K003</b>                |
| Company Equipment ID:             | Paint Spray Booth Number 3 |
| Superseded Permit Number:         |                            |
| General Permit Category and Type: | Not Applicable             |
| <b>Emissions Unit ID:</b>         | <b>K004</b>                |
| Company Equipment ID:             | Paint Spray Booth Number 4 |
| Superseded Permit Number:         |                            |
| General Permit Category and Type: | Not Applicable             |



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** 14-06043

**Facility ID:** 1409031040

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

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



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

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

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

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

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

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

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

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

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

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

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

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** 14-06043

**Facility ID:** 1409031040

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

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

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

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

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** 14-06043

**Facility ID:** 1409031040

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

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



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.  
  
None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.  
  
(1) 2., 3., 4., and 5.
2. The actual emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units K001 (Paint Spray Booth Number 1), K002 (Paint Spray Booth Number 2), K003 (Paint Spray Booth Number 3), and K004 (Paint Spray Booth Number 4), any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt emissions units pursuant to OAC rule 3745-31-03, or future constructed emissions units, and all such emissions units located at BAE Systems, 9113 Le Saint Drive, Fairfield, Ohio (PN: 1409030600), combined, shall not exceed 9.9 tons per year (TPY) for any single HAP, as a rolling, 12-month summation and 24.9 TPY for any combination of HAPs, as a rolling, 12-month summation.  
  
The permittee has existing records to demonstrate compliance with this emissions limitation upon permit issuance.
3. The permittee shall collect and record the following information each month for the emissions units identified in 2. above:
  - a) The name and identification number of each coating employed.
  - b) The individual HAP\* content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied.
  - c) The total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied [sum all the individual HAP contents from b)].
  - d) The number of gallons of each coating employed.
  - e) The name and identification number of each cleanup material employed.
  - f) The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied.
  - g) The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from f)].
  - h) The number of gallons of each cleanup material employed.
  - i) The total individual HAP emissions from all coatings and cleanup materials employed, in pounds or tons [for each HAP, the sum of b) times d) for all coatings plus the sum of f) times h) for all cleanup materials, and divided by 2,000 pounds per ton, if the units are in tons].



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

\*A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a line-by-line basis.

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

5. Emission Limitation:

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

Applicable Compliance Method:

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** 14-06043

**Facility ID:** 1409031040

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

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



**1. K001, Paint Spray Booth Number 1**

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

Paint Spray Booth Number 1

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

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

a. d)(6), d)(7), d)(8), and d)(9).

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

a. b)(1)a., c)(1), c)(2), d)(1), e)(1), f)(1)b., and f)(2).

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(D)<br>Synthetic Minor to Avoid<br>Title V and BAT | <p>Volatile organic compound (VOC) emissions shall not exceed 82.8 pounds per day and 5.07 tons per year (TPY), based on a rolling, 12-month summation, including cleanup material.</p> <p>See b)(2)a., c)(1), and c)(2).</p> |
| b. | OAC rule 3745-17-11(C)  | See b)(2)d.   |
| c. | 40 CFR Part 63, Subpart HHHHHH<br>(40 CFR 63.11169-11180)             | See b)(2)e., b)(2)f., b)(2)g., and b)(2)h.  |
| d. | 40 CFR 63.1-16 (40 CFR 63.11174)                                      | Table 1 to Subpart HHHHHH of 40 CFR Part 63 - Applicability of General Provisions to Subpart HHHHHH shows which parts of the General Provisions in 40 CFR 63.1-16 apply.  |

(2) Additional Terms and Conditions

a. Federally Enforceable Permit to Install 14-06043 for this air contaminant source takes into account the following voluntary restrictions (including the use of any



applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. for Volatile Organic Compound (VOC) emissions: the maximum combined amount of coatings and cleanup materials employed in this emissions unit shall not exceed 1407 gallons per year.
- b. In order to demonstrate compliance with the AToxic Air Contaminant Statute<sup>e</sup>, the Director has established, per ORC 3704.03(F)(4)(c), a limit for toluene, which shall not exceed 21.7 pounds per day. This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).
- c. The daily emission limitation for VOC outlined above is based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.
- d. The permittee shall install, operate, and maintain a dry particulate filter for the coating operations in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by permittee. The dry filtration system shall be employed during all periods of coating application to control particulate emissions.
- e. All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment per 40 CFR 63.11173 (f). [40 CFR 63.11173(e)(1)]
- f. All spray-applied coatings must be applied in a spray booth fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray that meets the requirements of 40 CFR 63.11173 (e)(2)(i), and (e)(2)(ii), (e)(2)(iii), or (e)(2)(iv). [40 CFR 63.11173 (e)(2)]
- g. All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator. [40 CFR 63.11173 (e)(3)]
- h. All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. Spray gun cleaning may be done with, for example, hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used. [40 CFR 63.11173 (e)(4)]



c) Operational Restrictions

- (1) The maximum annual combined amount of coatings and cleanup materials employed in this emissions unit shall not exceed 1407 gallons, based on a rolling, 12-month summation.

To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the production limits specified in the following table:

| <u>Months</u> | <u>Maximum allowable cumulative coatings and cleanup materials, in gallons</u> |
|---------------|--|
| 1-            | 140  |
| 1-2           | 281  |
| 1-3           | 422  |
| 1-4           | 562  |
| 1-5           | 703  |
| 1-6           | 844  |
| 1-7           | 984  |
| 1-8           | 1125   |
| 1-9           | 1266   |
| 1-10          | 1407   |
| 1-11          | 1407   |
| 1-12          | 1407   |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual usage limitation shall be based on a rolling, 12-month summation of the coating and cleanup material usage figures.

- (2) The total VOC input from coatings and cleanup materials employed in emissions unit K001 (Paint Spray Booth Number 1) shall not exceed 5.07 tons per year (TPY). Compliance with the above limitation shall be based upon a rolling, 12-month summation of the VOC input. The VOC input shall be determined by multiplying the number of gallons of each coating and cleanup material employed per month by the VOC content of each coating and cleanup material, in pounds per gallon. The VOC input of coatings and cleanup materials shall be assumed to be 100 percent of the VOC content of the coatings and cleanup materials employed, and, as such, is equivalent to the VOC emission rate.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following for this emissions unit:
  - a. The company identification of each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The volatile organic compound (VOC) content of each coating and cleanup material employed, in pounds per gallon, as applied;
  - d. The VOC input/emissions from each coating and cleanup material employed, i.e.,  $d)(1)b. \times d)(1)c.$ , in pounds;



- e. The total VOC input/emissions from this emissions unit, i.e., the sum of d)(1)d. for all coatings and cleanup materials employed, in pounds;
  - f. The updated rolling, 12-month summation of the total VOC input/emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the FEPTIO;
  - g. The total gallons of all coatings and cleanup materials employed, i.e., the sum of d)(1)b. for all coatings and cleanup materials employed; and,
  - h. The updated rolling, 12-month summation for usage of all coatings and cleanup materials employed, in gallons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit this shall be a cumulative total for all months since the issuance of the FEPTIO.
- (2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry filtration system with any modifications deemed necessary by the permittee during the time period in which the dry filtration system is utilized. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (3) The permittee shall conduct periodic inspections of the dry filtration system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. The periodic inspections of the dry filtration system shall be performed at a frequency that is based upon the recommendation of the manufacturer, and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency. In addition to these periodic inspections, the permittee shall conduct a comprehensive inspection of the dry filtration system, not less than once each calendar year, while the emissions unit is shut down; and shall perform any needed maintenance and repair for the control device to ensure that it is operated in accordance with the manufacturer's recommendations.

The permittee shall document each inspection of the dry filtration system by maintaining a record that includes the date of the inspection, a description of each problem identified and the date it was corrected, a description of the maintenance and repairs performed, and the name of the person who performed the inspection. These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (4) In the event that the dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee, the dry filtration system shall be expeditiously repaired or otherwise returned to operation in accordance with such requirements. The permittee shall maintain a record of those periods when the dry filtration system is not operating in accordance with such requirements. These records shall be maintained at the facility for not less than five years from the date of completion

and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (5) The permittee shall maintain records of the following for this emissions unit:
- a. Certification that each painter has completed the training specified in b)(2)e. with the date the initial training and the most recent refresher training was completed.
  - b. Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in 40 CFR 63.11173 (e)(2)(i).
  - c. Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air assisted airless spray gun, has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the procedure in 40 CFR 63.11173 (e)(3).
  - d. Copies of any notification submitted as required by 40 CFR 63.11175 and copies of any report submitted as required by 40 CFR 63.11176.
  - e. Records of any deviation from the requirements of 40 CFR 63.11173, 40 CFR 63.11174, 40 CFR 63.11175, or 40 CFR 63.11176. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation.
  - f. Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report.
- (6) The FEPTIO application for these emissions units, K001, K002, K003, and K004, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The <sup>A</sup>Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted 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 <sup>A</sup>Review of New Sources of Air Toxic Emissions, Option A<sup>@</sup>, as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) <sup>A</sup>Threshold Limit Values for



Chemical Substances and Physical Agents Biological Exposure Indices;  
or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

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

Toxic Contaminant: Toluene

TLV (ug/m3): 75,362

Maximum Hourly Emission Rate (lbs/hr): 28.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,588.4

MAGLC (ug/m3): 1,794

Toxic Contaminant: Xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 38

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2,566

MAGLC (ug/m3): 10,333

The permittee, having demonstrated that emissions of toluene, from emissions units K001, K002, K003, and K004, are estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).



The permittee, has demonstrated that emissions of xylene, from emissions units K001, K002, K003 and K004, are 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 AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F).

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

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

- (8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic Air Contaminant Statute<sup>®</sup>:
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);



- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- (9) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.
- e) Reporting Requirements
- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
    - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
      - VOC emissions limitation outlined in b)(1)a.;
      - VOC input limitation outlined in c)(2);
      - Coating and cleanup material usage limitation outlined in c)(1); and
      - HAP emissions limitation outlined in Section B.2.
    - b. the probable cause of each deviation (excursion);
    - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
    - d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted (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).
  - (2) The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which specify the total VOC emissions and the total combined



coating and cleanup material usage from this emissions unit, and the total individual HAP emissions and total combined HAP emissions from the emissions units specified in Section B.2 for the previous calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

- (3) The permittee shall include in the permit evaluation report any record of the date and length of time the dry filtration system was not in service during coating application. The permit evaluation report shall be submitted annually, at a minimum, to the appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency.
- (4) See 40 CFR Part 63, Subpart HHHHHH (40 CFR 63.11169-11180).
  - a. Initial Notification.
  - b. Annual Notification of Changes Report. The permittee is required to submit this report in each calendar year in which information previously submitted in either the initial notification required by 40 CFR 63.11175 (a), Notification of Compliance, or a previous annual notification of changes report, has changed. Deviations from the relevant requirements in 40 CFR 63.11173 (a) through (d) or 40 CFR 63.11173 (e) through (g) on the date of the report will be deemed to be a change. This report shall include the following:
    - i. The facility's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.
    - ii. The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.

This report shall be submitted prior to March 1 of each calendar year when reportable changes have occurred in the previous calendar year.

- (5) The permittee shall submit quarterly deviation reports, to the appropriate Ohio EPA District Office or local air agency, documenting any exceedance of the daily limitation on toxic air emissions or any deviation from a restriction on the process or hours of operation, as established by the Director in order to maintain any toxic air contaminant below its MAGLC. The permittee shall also report any changes made, during the calendar quarter, to a parameter or value entered into the dispersion model that demonstrate compliance with the A Toxic Air Contaminant Statute, ORC 3704.03(F). If no exceedances occurred or no changes to the emissions unit(s), emissions, or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
- (6) 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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** 14-06043

**Facility ID:** 1409031040

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

identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.



f) Testing Requirements

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

a. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 82.8 pounds per day, including cleanup material.

Applicable Compliance Method:

The daily emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in FEPTIO application 14-06043 as submitted on April 23, 2008:

VOC emissions = (3.83 gal/hr maximum coating and cleanup usage) x (1 hour/vehicle) x (3 vehicles/day maximum) x (7.2 lbs VOC/gal maximum VOC content).

b. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 5.07 tons per year (TPY), based on a rolling, 12-month summation, including cleanup material.

Applicable Compliance Method:

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

Actual VOC emissions shall be determined based on the following equation from the permittee-supplied information in FEPTIO application 14-06043 as submitted on April 23, 2008:

VOC emissions = Sum of [(VOC content of coating or cleanup material) x (gallons of coating or cleanup material employed)] for all coatings and cleanup materials employed.

(2) Compliance with the rolling, 12-month usage restriction in c)(1) shall be determined by the record keeping in d)(1).

g) Miscellaneous Requirements

None.



**2. K002, Paint Spray Booth Number 2**

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

Paint Spray Booth Number 2

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

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

a. d)(6), d)(7), d)(8), and d)(9).

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

a. b)(1)a., c)(1), c)(2), d)(1), e)(1), f)(1)b., and f)(2).

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(D)<br>Synthetic Minor to Avoid<br>Title V and BAT | Volatile organic compound (VOC) emissions shall not exceed 82.8 pounds per day and 2.5 tons per year (TPY), based on a rolling, 12-month summation, including cleanup material.<br><br>See b)(2)a., c)(1), and c)(2). |
| b. | OAC rule 3745-17-11(C)  | See b)(2)d.   |
| c. | 40 CFR Part 63, Subpart HHHHHH<br>(40 CFR 63.11169-11180)             | See b)(2)e., b)(2)f., b)(2)g., and b)(2)h.  |
| d. | 40 CFR 63.1-16 (40 CFR 63.11174)                                      | Table 1 to Subpart HHHHHH of 40 CFR Part 63 - Applicability of General Provisions to Subpart HHHHHH shows which parts of the General Provisions in 40 CFR 63.1-16 apply.  |

(2) Additional Terms and Conditions

a. Federally Enforceable Permit to Install 14-06043 for this air contaminant source takes into account the following voluntary restrictions (including the use of any



applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. for Volatile Organic Compound (VOC) emissions: the maximum combined amount of coatings and cleanup materials employed in this emissions unit shall not exceed 701 gallons per year.
- b. In order to demonstrate compliance with the “Toxic Air Contaminant Statute”, the Director has established, per ORC 3704.03(F)(4)(c), a limit for toluene, which shall not exceed 21.7 pounds per day. This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).
- c. The daily emission limitation for VOC outlined above is based on the emissions unit’s potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.
- d. The permittee shall install, operate, and maintain a dry particulate filter for the coating operations in accordance with the manufacturer’s recommendations, instructions, and/or operating manual, with any modifications deemed necessary by permittee. The dry filtration system shall be employed during all periods of coating application to control particulate emissions.
- e. All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment per 40 CFR 63.11173 (f). [40 CFR 63.11173(e)(1)]
- f. All spray-applied coatings must be applied in a spray booth fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray that meets the requirements of 40 CFR 63.11173 (e)(2)(i), and (e)(2)(ii), (e)(2)(iii), or (e)(2)(iv). [40 CFR 63.11173 (e)(2)]
- g. All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator. [40 CFR 63.11173 (e)(3)]
- h. All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. Spray gun cleaning may be done with, for example, hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used. [40 CFR 63.11173 (e)(4)]



c) Operational Restrictions

- (1) The maximum annual combined amount of coatings and cleanup materials employed in this emissions unit shall not exceed 701 gallons, based on a rolling, 12-month summation.

To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the production limits specified in the following table:

| <u>Months</u> | <u>Maximum allowable cumulative coatings and cleanup materials, in gallons</u> |
|---------------|--|
| 1-            | 70   |
| 1-2           | 140  |
| 1-3           | 210  |
| 1-4           | 280  |
| 1-5           | 350  |
| 1-6           | 420  |
| 1-7           | 490  |
| 1-8           | 560  |
| 1-9           | 630  |
| 1-10          | 701  |
| 1-11          | 701  |
| 1-12          | 701  |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual usage limitation shall be based on a rolling, 12-month summation of the coating and cleanup material usage figures.

- (2) The total VOC input from coatings and cleanup materials employed in emissions unit K002 (Paint Spray Booth Number 2) shall not exceed 2.5 tons per year (TPY). Compliance with the above limitation shall be based upon a rolling, 12-month summation of the VOC input. The VOC input shall be determined by multiplying the number of gallons of each coating and cleanup material employed per month by the VOC content of each coating and cleanup material, in pounds per gallon. The VOC input of coatings and cleanup materials shall be assumed to be 100 percent of the VOC content of the coatings and cleanup materials employed, and, as such, is equivalent to the VOC emission rate.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following for this emissions unit:
  - a. The company identification of each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The volatile organic compound (VOC) content of each coating and cleanup material employed, in pounds per gallon, as applied;
  - d. The VOC input/emissions from each coating and cleanup material employed, i.e.,  $d)(1)b. \times d)(1)c.$ , in pounds;



- e. The total VOC input emissions from this emissions unit, i.e., the sum of d)(1)d. for all coatings and cleanup materials employed, in pounds;
  - f. The updated rolling, 12-month summation of the total VOC input/emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the FEPTIO;
  - g. The total gallons of all coatings and cleanup materials employed, i.e., the sum of d)(1)b. for all coatings and cleanup materials employed; and,
  - h. The updated rolling, 12-month summation for usage of all coatings and cleanup materials employed, in gallons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit this shall be a cumulative total for all months since the issuance of the FEPTIO.
- (2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry filtration system with any modifications deemed necessary by the permittee during the time period in which the dry filtration system is utilized. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (3) The permittee shall conduct periodic inspections of the dry filtration system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. The periodic inspections of the dry filtration system shall be performed at a frequency that is based upon the recommendation of the manufacturer, and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency. In addition to these periodic inspections, the permittee shall conduct a comprehensive inspection of the dry filtration system, not less than once each calendar year, while the emissions unit is shut down; and shall perform any needed maintenance and repair for the control device to ensure that it is operated in accordance with the manufacturer's recommendations.

The permittee shall document each inspection of the dry filtration system by maintaining a record that includes the date of the inspection, a description of each problem identified and the date it was corrected, a description of the maintenance and repairs performed, and the name of the person who performed the inspection. These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (4) In the event that the dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee, the dry filtration system shall be expeditiously repaired or otherwise returned to operation in accordance with such requirements. The permittee shall maintain a record of those periods when the dry filtration system is not operating in accordance with such requirements. These records shall be maintained at the facility for not less than five years from the date of completion



and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (5) The permittee shall maintain records of the following for this emissions unit:
  - a. Certification that each painter has completed the training specified in b)(2)e. with the date the initial training and the most recent refresher training was completed.
  - b. Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in 40 CFR 63.11173 (e)(2)(i).
  - c. Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air assisted airless spray gun, has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the procedure in 40 CFR 63.11173 (e)(3).
  - d. Copies of any notification submitted as required by 40 CFR 63.11175 and copies of any report submitted as required by 40 CFR 63.11176.
  - e. Records of any deviation from the requirements of 40 CFR 63.11173, 40 CFR 63.11174, 40 CFR 63.11175, or 40 CFR 63.11176. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation.
  - f. Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report.
  
- (6) The FEPTIO application for these emissions units, K001, K002, K003, and K004, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
  - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions units, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for



Chemical Substances and Physical Agents Biological Exposure Indices”;  
or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists’ (ACGIH) “Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices”; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., “24” hours per day and “7” days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or “worst case” toxic contaminant(s):

Toxic Contaminant: Toluene

TLV (ug/m3): 75,362

Maximum Hourly Emission Rate (lbs/hr): 28.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,588.4

MAGLC (ug/m3): 1,794

Toxic Contaminant: Xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 38

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2,566

MAGLC (ug/m3): 10,333

The permittee, having demonstrated that emissions of toluene, from emissions units K001, K002, K003, and K004, are estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).



The permittee, has demonstrated that emissions of xylene, from emissions units K001, K002, K003, and K004, are 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).

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

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

- (8) 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.

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

e) Reporting Requirements

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

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

VOC emissions limitation outlined in b)(1)a.;

VOC input limitation outlined in c)(2);

Coating and cleanup material usage limitation outlined in c)(1); and

HAP emissions limitation outlined in Section B.2.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted (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).

(2) The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which specify the total VOC emissions and the total combined coating and cleanup material usages from this emissions unit, and the total individual HAP emissions and total combined HAP emissions from the emissions units specified in



Section B.2 for the previous calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

- (3) The permittee shall include in the permit evaluation report any record of the date and length of time the dry filtration system was not in service during coating application. The permit evaluation report shall be submitted annually, at a minimum, to the appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency.
- (4) See 40 CFR Part 63, Subpart HHHHHH (40 CFR 63.11169-11180).
  - a. Initial Notification.
  - b. Annual Notification of Changes Report. The permittee is required to submit this report in each calendar year in which information previously submitted in either the initial notification required by 40 CFR 63.11175 (a), Notification of Compliance, or a previous annual notification of changes report, has changed. Deviations from the relevant requirements in 40 CFR 63.11173 (a) through (d) or 40 CFR 63.11173 (e) through (g) on the date of the report will be deemed to be a change. This report shall include the following:
    - i. The facility's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.
    - ii. The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.

This report shall be submitted prior to March 1 of each calendar year when reportable changes have occurred in the previous calendar year.

- (5) The permittee shall submit quarterly deviation reports, to the appropriate Ohio EPA District Office or local air agency, documenting any exceedance of the daily limitation on toxic air emissions or any deviation from a restriction on the process or hours of operation, as established by the Director in order to maintain any toxic air contaminant below its MAGLC. The permittee shall also report any changes made, during the calendar quarter, to a parameter or value entered into the dispersion model that demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F). If no exceedances occurred or no changes to the emissions unit(s), emissions, or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
- (6) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall



cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

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

a. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 82.8 pounds per day, including cleanup material.

Applicable Compliance Method:

The daily emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in FEPTIO application 14-06043 as submitted on April 23, 2008:

VOC emissions = (3.83 gal/hr maximum coating and cleanup usage) x (1 hour/vehicle) x (3 vehicles/day maximum) x (7.2 lbs VOC/gal maximum VOC content).

b. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 2.5 tons per year (TPY), based on a rolling, 12-month summation, including cleanup material.

Applicable Compliance Method:

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

Actual VOC emissions shall be determined based on the following equation from the permittee-supplied information in FEPTIO application 14-06043 as submitted on April 23, 2008:

VOC emissions = Sum of [(VOC content of coating or cleanup material) x (gallons of coating or cleanup material employed)] for all coatings and cleanup materials employed.

(2) Compliance with the rolling, 12-month usage restriction in c)(1) shall be determined by the record keeping in d)(1).

g) Miscellaneous Requirements

None.



**3. K003, Paint Spray Booth Number 3**

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

Paint Spray Booth Number 3

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

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

a. d)(6), d)(7), d)(8), and d)(9).

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

a. b)(1)a., c)(1), c)(2), d)(1), e)(1), f)(1)b., and f)(2).

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(D)<br>Synthetic Minor to Avoid<br>Title V and BAT | <p>Volatile organic compound (VOC) emissions shall not exceed 82.8 pounds per day and 2.5 tons per year (TPY), based on a rolling, 12-month summation, including cleanup material.</p> <p>See b)(2)a., c)(1), and c)(2).</p> |
| b. | OAC rule 3745-17-11(C)  | See b)(2)d.  |
| c. | 40 CFR Part 63, Subpart HHHHHH<br>(40 CFR 63.11169-11180)             | See b)(2)e., b)(2)f., b)(2)g., and b)(2)h.   |
| d. | 40 CFR 63.1-16 (40 CFR 63.11174)                                      | Table 1 to Subpart HHHHHH of 40 CFR Part 63 - Applicability of General Provisions to Subpart HHHHHH shows which parts of the General Provisions in 40 CFR 63.1-16 apply.   |

(2) Additional Terms and Conditions

a. Federally Enforceable Permit to Install 14-06043 for this air contaminant source takes into account the following voluntary restrictions (including the use of any



applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. for Volatile Organic Compound (VOC) emissions: the maximum combined amount of coatings and cleanup materials employed in this emissions unit shall not exceed 701 gallons per year.
- b. In order to demonstrate compliance with the “Toxic Air Contaminant Statute”, the Director has established, per ORC 3704.03(F)(4)(c), a limit for toluene, which shall not exceed 21.7 pounds per day. This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).
- c. The daily emission limitation for VOC outlined above is based on the emissions unit’s potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.
- d. The permittee shall install, operate, and maintain a dry particulate filter for the coating operations in accordance with the manufacturer’s recommendations, instructions, and/or operating manual, with any modifications deemed necessary by permittee. The dry filtration system shall be employed during all periods of coating application to control particulate emissions.
- e. All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment per 40 CFR 63.11173 (f). [40 CFR 63.11173(e)(1)]
- f. All spray-applied coatings must be applied in a spray booth fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray that meets the requirements of 40 CFR 63.11173 (e)(2)(i), and (e)(2)(ii), (e)(2)(iii), or (e)(2)(iv). [40 CFR 63.11173 (e)(2)]
- g. All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator. [40 CFR 63.11173 (e)(3)]
- h. All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. Spray gun cleaning may be done with, for example, hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used. [40 CFR 63.11173 (e)(4)]



c) Operational Restrictions

- (1) The maximum annual combined amount of coatings and cleanup materials employed in this emissions unit shall not exceed 701 gallons, based on a rolling, 12-month summation.

To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the production limits specified in the following table:

| <u>Months</u> | <u>Maximum allowable cumulative coatings and cleanup materials, in gallons</u> |
|---------------|--|
| 1-            | 70   |
| 1-2           | 140  |
| 1-3           | 210  |
| 1-4           | 280  |
| 1-5           | 350  |
| 1-6           | 420  |
| 1-7           | 490  |
| 1-8           | 560  |
| 1-9           | 630  |
| 1-10          | 701  |
| 1-11          | 701  |
| 1-12          | 701  |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual usage limitation shall be based on a rolling, 12-month summation of the coating and cleanup material usage figures.

- (2) The total VOC input from coatings and cleanup materials employed in emissions unit K003 (Paint Spray Booth Number 3) shall not exceed 2.5 tons per year (TPY). Compliance with the above limitation shall be based upon a rolling, 12-month summation of the VOC input. The VOC input shall be determined by multiplying the number of gallons of each coating and cleanup material employed per month by the VOC content of each coating and cleanup material, in pounds per gallon. The VOC input of coatings and cleanup materials shall be assumed to be 100 percent of the VOC content of the coatings and cleanup materials employed, and, as such, is equivalent to the VOC emission rate.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following for this emissions unit:
  - a. The company identification of each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The volatile organic compound (VOC) content of each coating and cleanup material employed, in pounds per gallon, as applied;
  - d. The VOC input/emissions from each coating and cleanup material employed, i.e.,  $d)(1)b. \times d)(1)c.$ , in pounds;



- e. The total VOC input/emissions from this emissions unit, i.e., the sum of d)(1)d. for all coatings and cleanup materials employed, in pounds;
  - f. The updated rolling, 12-month summation of the total VOC input/emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the FEPTIO;
  - g. The total gallons of all coatings and cleanup materials employed, i.e., the sum of d)(1)b. for all coatings and cleanup materials employed; and,
  - h. The updated rolling, 12-month summation for usage of all coatings and cleanup materials employed, in gallons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit this shall be a cumulative total for all months since the issuance of the FEPTIO.
- (2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry filtration system with any modifications deemed necessary by the permittee during the time period in which the dry filtration system is utilized. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (3) The permittee shall conduct periodic inspections of the dry filtration system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. The periodic inspections of the dry filtration system shall be performed at a frequency that is based upon the recommendation of the manufacturer, and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency. In addition to these periodic inspections, the permittee shall conduct a comprehensive inspection of the dry filtration system, not less than once each calendar year, while the emissions unit is shut down; and shall perform any needed maintenance and repair for the control device to ensure that it is operated in accordance with the manufacturer's recommendations.

The permittee shall document each inspection of the dry filtration system by maintaining a record that includes the date of the inspection, a description of each problem identified and the date it was corrected, a description of the maintenance and repairs performed, and the name of the person who performed the inspection. These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (4) In the event that the dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee, the dry filtration system shall be expeditiously repaired or otherwise returned to operation in accordance with such requirements. The permittee shall maintain a record of those periods when the dry filtration system is not operating in accordance with such requirements. These records shall be maintained at the facility for not less than five years from the date of completion



and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (5) The permittee shall maintain records of the following for this emissions unit:
  - a. Certification that each painter has completed the training specified in b)(2)e. with the date the initial training and the most recent refresher training was completed.
  - b. Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in 40 CFR 63.11173 (e)(2)(i).
  - c. Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air assisted airless spray gun, has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the procedure in 40 CFR 63.11173 (e)(3).
  - d. Copies of any notification submitted as required by 40 CFR 63.11175 and copies of any report submitted as required by 40 CFR 63.11176.
  - e. Records of any deviation from the requirements of 40 CFR 63.11173, 40 CFR 63.11174, 40 CFR 63.11175, or 40 CFR 63.11176. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation.
  - f. Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report.
  
- (6) The FEPTIO application for these emissions units, K001, K002, K003, and K004, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
  - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions units, (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”;  
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ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists’ (ACGIH) “Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices”; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., “24” hours per day and “7” days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

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

Toxic Contaminant: Toluene

TLV (ug/m3): 75,362

Maximum Hourly Emission Rate (lbs/hr): 28.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,588.4

MAGLC (ug/m3): 1,794

Toxic Contaminant: Xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 38

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MAGLC (ug/m3): 10,333

The permittee, having demonstrated that emissions of toluene, from emissions units K001, K002, K003, and K004, are estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).



The permittee, has demonstrated that emissions of xylene, from emissions units K001, K002, K003, and K004, are 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).

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

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

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



initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

- d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

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

e) Reporting Requirements

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

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

VOC emissions limitation outlined in b)(1)a.;

VOC input limitation outlined in c)(2);

Coating and cleanup material usage limitation outlined in c)(1); and

HAP emissions limitation outlined in Section B.2.

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

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

The quarterly reports shall be submitted (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).

- (2) The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which specify the total VOC emissions and the total combined coating and cleanup material usage from this emissions unit, and the total individual HAP emissions and total combined HAP emissions from the emissions units specified in Section B.2. for the previous calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.



- (3) The permittee shall include in the permit evaluation report any record of the date and length of time the dry filtration system was not in service during coating application. The permit evaluation report shall be submitted annually, at a minimum, to the appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency.
  
- (4) See 40 CFR Part 63, Subpart HHHHHH (40 CFR 63.11169-11180).
  - a. Initial Notification.
  
  - b. Annual Notification of Changes Report. The permittee is required to submit this report in each calendar year in which information previously submitted in either the initial notification required by 40 CFR 63.11175 (a), Notification of Compliance, or a previous annual notification of changes report, has changed. Deviations from the relevant requirements in 40 CFR 63.11173 (a) through (d) or 40 CFR 63.11173 (e) through (g) on the date of the report will be deemed to be a change. This report shall include the following:
    - i. The facility's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.
  
    - ii. The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.

This report shall be submitted prior to March 1 of each calendar year when reportable changes have occurred in the previous calendar year.

- (5) The permittee shall submit quarterly deviation reports, to the appropriate Ohio EPA District Office or local air agency, documenting any exceedance of the daily limitation on toxic air emissions or any deviation from a restriction on the process or hours of operation, as established by the Director in order to maintain any toxic air contaminant below its MAGLC. The permittee shall also report any changes made, during the calendar quarter, to a parameter or value entered into the dispersion model that demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F). If no exceedances occurred or no changes to the emissions unit(s), emissions, or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
  
- (6) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.



f) Testing Requirements

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

a. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 82.8 pounds per day, including cleanup material.

Applicable Compliance Method:

The daily emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in FEPTIO application 14-06043 as submitted on April 23, 2008:

VOC emissions = (3.83 gal/hr maximum coating and cleanup usage) x (1 hour/vehicle) x (3 vehicles/day maximum) x (7.2 lbs VOC/gal maximum VOC content).

b. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 2.5 tons per year (TPY), based on a rolling, 12-month summation, including cleanup material.

Applicable Compliance Method:

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

Actual VOC emissions shall be determined based on the following equation from the permittee-supplied information in FEPTIO application 14-06043 as submitted on April 23, 2008:

VOC emissions = Sum of [(VOC content of coating or cleanup material) x (gallons of coating or cleanup material employed)] for all coatings and cleanup materials employed.

(2) Compliance with the rolling, 12-month usage restriction in c)(1) shall be determined by the record keeping in d)(1).

g) Miscellaneous Requirements

None.



4. **K004, Paint Spray Booth Number 4**

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

Paint Spray Booth Number 4

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)(6), d)(7), d)(8), and d)(9).

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

a. b)(1)a., c)(1), c)(2), d)(1), e)(1), f)(1)b., and f)(2).

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(C)<br>Synthetic Minor to Avoid<br>Title V and BAT | Volatile organic compound (VOC) emissions shall not exceed 82.8 pounds per day and 5.07 tons per year (TPY), based on a rolling, 12-month summation, including cleanup material.<br><br>See b)(2)a., c)(1), and c)(2). |
| b. | OAC rule 3745-17-11(C)  | See b)(2)d.  |
| c. | 40 CFR Part 63, Subpart HHHHHH<br>(40 CFR 63.11169-11180)             | See b)(2)e., b)(2)f., b)(2)g., and b)(2)h.   |
| d. | 40 CFR 63.1-16 (40 CFR 63.11174)                                      | Table 1 to Subpart HHHHHH of 40 CFR Part 63 - Applicability of General Provisions to Subpart HHHHHH shows which parts of the General Provisions in 40 CFR 63.1-16 apply.   |

(2) Additional Terms and Conditions

a. Federally Enforceable Permit to Install 14-06043 for this air contaminant source takes into account the following voluntary restrictions (including the use of any



applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. for Volatile Organic Compound (VOC) emissions: the maximum combined amount of coatings and cleanup materials employed in this emissions unit shall not exceed 1407 gallons per year.
- b. In order to demonstrate compliance with the “Toxic Air Contaminant Statute”, the Director has established, per ORC 3704.03(F)(4)(c), a limit for toluene, which shall not exceed 21.7 pounds per day. This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).
- c. The daily emission limitation for VOC outlined above is based on the emissions unit’s potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.
- d. The permittee shall install, operate, and maintain a dry particulate filter for the coating operations in accordance with the manufacturer’s recommendations, instructions, and/or operating manual, with any modifications deemed necessary by permittee. The dry filtration system shall be employed during all periods of coating application to control particulate emissions.
- e. All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment per 40 CFR 63.11173 (f). [40 CFR 63.11173(e)(1)]
- f. All spray-applied coatings must be applied in a spray booth fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray that meets the requirements of 40 CFR 63.11173 (e)(2)(i), and (e)(2)(ii), (e)(2)(iii), or (e)(2)(iv). [40 CFR 63.11173 (e)(2)]
- g. All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator. [40 CFR 63.11173 (e)(3)]
- h. All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. Spray gun cleaning may be done with, for example, hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used. [40 CFR 63.11173 (e)(4)]



c) Operational Restrictions

- (1) The maximum annual combined amount of coatings and cleanup materials employed in this emissions unit shall not exceed 1407 gallons, based on a rolling, 12-month summation.

To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the production limits specified in the following table:

| <u>Months</u> | <u>Maximum allowable cumulative coatings and cleanup materials, in gallons</u> |
|---------------|--|
| 1-            | 140  |
| 1-2           | 281  |
| 1-3           | 422  |
| 1-4           | 562  |
| 1-5           | 703  |
| 1-6           | 844  |
| 1-7           | 984  |
| 1-8           | 1125   |
| 1-9           | 1266   |
| 1-10          | 1407   |
| 1-11          | 1407   |
| 1-12          | 1407   |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual usage limitation shall be based on a rolling, 12-month summation of the coating and cleanup material usage figures.

- (2) The total VOC input from coatings and cleanup materials employed in emissions unit K004 (Paint Spray Booth Number 4) shall not exceed 5.07 tons per year (TPY). Compliance with the above limitation shall be based upon a rolling, 12-month summation of the VOC input. The VOC input shall be determined by multiplying the number of gallons of each coating and cleanup material employed per month by the VOC content of each coating and cleanup material, in pounds per gallon. The VOC input of coatings and cleanup materials shall be assumed to be 100 percent of the VOC content of the coatings and cleanup materials employed, and, as such, is equivalent to the VOC emission rate.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following for this emissions unit:
  - a. The company identification of each coating and cleanup material employed;
  - b. The number of gallons of each coating and cleanup material employed;
  - c. The volatile organic compound (VOC) content of each coating and cleanup material employed, in pounds per gallon, as applied;
  - d. The VOC input/emissions from each coating and cleanup material employed, i.e., d)(1)b. x d)(1)c., in pounds;



- e. The total VOC input/emissions from this emissions unit, i.e., the sum of d)(1)d. for all coatings and cleanup materials employed, in pounds;
  - f. The updated rolling, 12-month summation of the total VOC input/emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the FEPTIO;
  - g. The total gallons of all coatings and cleanup materials employed, i.e., the sum of d)(1)b. for all coatings and cleanup materials employed; and,
  - h. The updated rolling, 12-month summation for usage of all coatings and cleanup materials employed, in gallons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit this shall be a cumulative total for all months since the issuance of the FEPTIO.
- (2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry filtration system with any modifications deemed necessary by the permittee during the time period in which the dry filtration system is utilized. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (3) The permittee shall conduct periodic inspections of the dry filtration system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. The periodic inspections of the dry filtration system shall be performed at a frequency that is based upon the recommendation of the manufacturer, and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency. In addition to these periodic inspections, the permittee shall conduct a comprehensive inspection of the dry filtration system, not less than once each calendar year, while the emissions unit is shut down; and shall perform any needed maintenance and repair for the control device to ensure that it is operated in accordance with the manufacturer's recommendations.

The permittee shall document each inspection of the dry filtration system by maintaining a record that includes the date of the inspection, a description of each problem identified and the date it was corrected, a description of the maintenance and repairs performed, and the name of the person who performed the inspection. These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (4) In the event that the dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee, the dry filtration system shall be expeditiously repaired or otherwise returned to operation in accordance with such requirements. The permittee shall maintain a record of those periods when the dry filtration system is not operating in accordance with such requirements. These records shall be maintained at the facility for not less than five years from the date of completion



and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (5) The permittee shall maintain records of the following for this emissions unit:
- a. Certification that each painter has completed the training specified in b)(2)e. with the date the initial training and the most recent refresher training was completed.
  - b. Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in 40 CFR 63.11173 (e)(2)(i).
  - c. Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air assisted airless spray gun, has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the procedure in 40 CFR 63.11173 (e)(3).
  - d. Copies of any notification submitted as required by 40 CFR 63.11175 and copies of any report submitted as required by 40 CFR 63.11176.
  - e. Records of any deviation from the requirements of 40 CFR 63.11173, 40 CFR 63.11174, 40 CFR 63.11175, or 40 CFR 63.11176. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation.
  - f. Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report.
- (6) The FEPTIO application for these emissions units, K001, K002, K003, and K004, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions units, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for



Chemical Substances and Physical Agents Biological Exposure Indices”;  
or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists’ (ACGIH) “Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices”; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., “24” hours per day and “7” days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

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

Toxic Contaminant: Toluene

TLV (ug/m3): 75,362

Maximum Hourly Emission Rate (lbs/hr): 28.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,588.4

MAGLC (ug/m3): 1,794

Toxic Contaminant: Xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 38

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2,566

MAGLC (ug/m3): 10,333

The permittee, having demonstrated that emissions of toluene, from emissions units K001, K002, K003, and K004, are estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).



The permittee, has demonstrated that emissions of xylene, from emissions units K001, K002, K003, and K004, are 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).

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

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

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



initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

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

e) Reporting Requirements

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

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

VOC emissions limitation outlined in b)(1)a.;

VOC input limitation outlined in c)(2);

Coating and cleanup material usage limitation outlined in c)(1); and

HAP emissions limitation outlined in Section B.2.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted (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).

(2) The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which specify the total VOC emissions and the total combined coating and cleanup material usage from this emissions unit, and the total individual HAP emissions and total combined HAP emissions from the emissions units specified in Section B.2. for the previous calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.



- (3) The permittee shall include in the permit evaluation report any record of the date and length of time the dry filtration system was not in service during coating application. The permit evaluation report shall be submitted annually, at a minimum, to the appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency.
  
- (4) See 40 CFR Part 63, Subpart HHHHHH (40 CFR 63.11169-11180).
  - a. Initial Notification.
  
  - b. Annual Notification of Changes Report. The permittee is required to submit this report in each calendar year in which information previously submitted in either the initial notification required by 40 CFR 63.11175 (a), Notification of Compliance, or a previous annual notification of changes report, has changed. Deviations from the relevant requirements in 40 CFR 63.11173 (a) through (d) or 40 CFR 63.11173 (e) through (g) on the date of the report will be deemed to be a change. This report shall include the following:
    - i. The facility's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.
  
    - ii. The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.

This report shall be submitted prior to March 1 of each calendar year when reportable changes have occurred in the previous calendar year.

- (5) The permittee shall submit quarterly deviation reports, to the appropriate Ohio EPA District Office or local air agency, documenting any exceedance of the daily limitation on toxic air emissions or any deviation from a restriction on the process or hours of operation, as established by the Director in order to maintain any toxic air contaminant below its MAGLC. The permittee shall also report any changes made, during the calendar quarter, to a parameter or value entered into the dispersion model, that demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F). If no exceedances occurred or no changes to the emissions unit(s), emissions, or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
  
- (6) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.



f) Testing Requirements

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

a. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 82.8 pounds per day, including cleanup material.

Applicable Compliance Method:

The daily emission limitation is based upon the emissions unit's potential to emit. Potential VOC emissions were determined based on the following equation from the permittee-supplied information in FEPTIO application 14-06043 as submitted on April 23, 2008:

VOC emissions = (3.83 gal/hr maximum coating and cleanup usage) x (1 hour/vehicle) x (3 vehicles/day maximum) x (7.2 lbs VOC/gal maximum VOC content).

b. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 5.07 tons per year (TPY), based on a rolling, 12-month summation, including cleanup material.

Applicable Compliance Method:

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

Actual VOC emissions shall be determined based on the following equation from the permittee-supplied information in FEPTIO application 14-06043 as submitted on April 23, 2008:

VOC emissions = Sum of [(VOC content of coating or cleanup material) x (gallons of coating or cleanup material employed)] for all coatings and cleanup materials employed.

(2) Compliance with the rolling, 12-month usage restriction in c)(1) shall be determined by the record keeping in d)(1).

g) Miscellaneous Requirements

None.