



State of Ohio Environmental Protection Agency

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50 W. Town St., Suite 700  
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P.O. Box 1049  
Columbus, OH 43216-1049

1/6/2010

Dan Stapleton  
BAE SYSTEMS  
9113 LESAINTE DR  
FAIRFIELD, OH 45014

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 1409030600  
Permit Number: P0105237  
Permit Type: Administrative Modification  
County: Butler

Certified Mail

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

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, 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.ohio.gov/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*  
Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

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





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

BAE Systems is a manufacturer of up-armored military tactical and combat vehicles and commercial vehicles located in Fairfield, Butler County, Ohio. Their operations include research & development, metal fabrication, glass window fabrication, military coating of miscellaneous metal parts, military coating of up-armored tactical and combat vehicles, coating of up-armored commercial vehicles, and vehicle assembly. BAE Systems manufacturing and coating operations are performed in a number of buildings located within a 0.5 mile radius of each other. Historically, the military and commercial coating operations, located in separate buildings, had been permitted as separate stationary sources (facilities). Currently, the military and commercial coating operations are identified as two facility premise numbers 1409030600 and 1409031040, respectively, operating under separate federally enforceable synthetic minor air permits. This permit action is an administrative modification to the existing commercial and military federally enforceable synthetic minor permits to consolidate all existing operations under a single facility designation (premise number 1409030600). This action will clarify that all BAE Systems manufacturing and coatings operations, under SIC 3711 and common control, are considered one facility for the purposes of determining major source status under Title V permitting and new source review (NSR). There is no change to any of the existing federally enforceable synthetic minor emissions limitations or operating restrictions for the military or commercial coating operations as a result of this administrative permit modification.

3. Facility Emissions and Attainment Status:

The facility is a synthetic minor source of volatile organic compounds (VOC) and hazardous air pollutants (HAP) from the existing military coating spray booths (emissions units K007, K008, K009, K010) as established in Permit to Install and Operate (PTIO) #14-06038, issued 11/18/2008, and from the existing commercial coating spray booths (emissions units K001, K002, K003, K004) as established in Permit to Install and Operate #14-06043, issued 11/14/2008. The allowable VOC emissions as established in the previous synthetic minor PTIOs are as follows:

Facility 1409030600 PTIO #14-06038, Emissions units K007-K010:	78.3 tons per year (TPY) VOC
Facility 1409031040 PTIO #14-06043, Emission units K001:	5.07 TPY
Facility 1409031040 PTIO #14-06043, Emission units K002:	2.5 TPY
Facility 1409031040 PTIO #14-06043, Emission units K003:	2.5 TPY
Facility 1409031040 PTIO #14-06043, Emission units K004:	<u>5.07 TPY</u>
Total	93.44 TPY VOC

Actual VOC emissions in 2008 from BAE Systems, as a single consolidated facility, were 59 TPY of VOC (58 TPY from military coating operations and 1 TPY from all commercial coating operations). Actual HAP emissions in 2008 from BAE Systems, as a single consolidated facility, were less than 1 TPY for any single HAP and for combined HAPs.

The facility is located in Butler County which is currently non-attainment for 8-hour ozone standard (VOC and NOx), non-attainment for PM2.5, and attainment for all other criteria pollutants. The synthetic minor



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 Division of Air Pollution Control

**Permit Strategy Write-Up**  
**Permit Number:** P0105237  
**Facility ID:** 1409030600

limitations ensure that the facility is not considered a major source of VOC in an ozone non-attainment area for the purposes of NSR activities and that the facility is not subject to Title V permitting. Without a synthetic minor limitation, the potential to emit from BAE Systems, as a single consolidated facility, is 191.84 TPY of VOC.

4. Source Emissions:

This administrative modification permit action to consolidate all emissions units under the single facility premise number 1409030600 makes no changes to the allowable VOC or HAP limitations previously established. The combined allowable VOC emissions limitations from the military and commercial coating operations will remain at 93.44 TPY to ensure that the potential to emit from all operations as a single entity (facility) do not exceed the 100 TPY major source threshold. The HAP emission limitations for the consolidated facility will remain at 9.9 TPY for any single HAP, and 24.9 TPY for combined HAPs. The commercial coating booths (K001-K004) are re-named in this permit action as emissions units K011-K014 under premise number 1409030600.

The allowable VOC emissions limitations in this administrative modification synthetic minor permit action under the single facility premise number 1409030600 are as follows:

Facility 1409030600 PTIO #P0105237:	
Emissions units K007-K010:	78.3 TPY VOC
Emission units K011:	5.07 TPY
Emission units K012:	2.5 TPY
Emission units K013:	2.5 TPY
Emission units K014:	<u>5.07 TPY</u>
Total	93.44 TPY VOC

5. Conclusion:

The permittee has proposed to comply with the federally enforceable emission limitations of 78.3 TPY VOC for emissions units K007-K010, combined, 5.07 TPY VOC for emissions units K011 and K014, and 2.5 TPY VOC for emissions units K012 and K013, and the facility-wide HAP limitations of 9.9/24.9 TPY all as rolling 12-month 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 a Synthetic Minor so that the facility will not trigger Title V permitting and major source status in a non-attainment area under NSR. The facility will maintain records and be subject to reporting as outlined in the permit to ensure compliance with the voluntary synthetic minor emission limitations.

6. Please provide additional notes or comments as necessary:

None



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Division of Air Pollution Control

**Permit Strategy Write-Up**  
**Permit Number:** P0105237  
**Facility ID:** 1409030600

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	93.44
Individual HAP	9.9
Combined HAPs	24.9



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

Issue Date: 1/6/2010

Permit Number: P0105237

Permit Type: Administrative Modification

Permit Description: Administrative modification to consolidate existing permitted sources in the military and commercial divisions into a federally enforceable synthetic minor permit under a single premise number 1409030600. Supercedes FEPTIO 14-06038, issued 11/18/2008, for K007-K010 under 1409030600, and FEPTIO 14-06043, issued 11/14/2008, for K001-K004 under 1409031040.

Facility ID: 1409030600

Facility Location: BAE SYSTEMS  
9113 LESAINT DR,  
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.ohio.gov/dapc](http://www.epa.ohio.gov/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: 1409030600  
Permit Number: P0105237  
Permit Type: Administrative Modification  
Issued: 1/6/2010  
Effective: To be entered upon final issuance  
Expiration: To be entered upon final issuance





State of Ohio Environmental Protection Agency  
 Division of Air Pollution Control

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

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

**Permit Number:** P0105237

**Facility ID:** 1409030600

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

# Authorization

Facility ID: 1409030600

Application Number(s): A0037688, A0038235

Permit Number: P0105237

Permit Description: Administrative modification to consolidate existing permitted sources in the military and commercial divisions into a federally enforceable synthetic minor permit under a single premise number 1409030600. Supercedes FEPTIO 14-06038, issued 11/18/2008, for K007-K010 under 1409030600, and FEPTIO 14-06043, issued 11/14/2008, for K001-K004 under 1409031040.

Permit Type: Administrative Modification

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

Issue Date: 1/6/2010

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  
9113 LESAINTE DR  
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: P0105237

Permit Description: Administrative modification to consolidate existing permitted sources in the military and commercial divisions into a federally enforceable synthetic minor permit under a single premise number 1409030600. Supercedes FEPTIO 14-06038, issued 11/18/2008, for K007-K010 under 1409030600, and FEPTIO 14-06043, issued 11/14/2008, for K001-K004 under 1409031040.

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>K011</b>
Company Equipment ID:	Booth 1 - Commercial
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

<b>Emissions Unit ID:</b>	<b>K014</b>
Company Equipment ID:	Booth 4 - Commercial
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

**Group Name: Commercial Booths 2 and 3**

<b>Emissions Unit ID:</b>	<b>K012</b>
Company Equipment ID:	Booth 2 - Commercial
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

<b>Emissions Unit ID:</b>	<b>K013</b>
Company Equipment ID:	Booth 3 - Commercial
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

**Group Name: Military Spray Booths**

<b>Emissions Unit ID:</b>	<b>K007</b>
Company Equipment ID:	Paint Booth K007
Superseded Permit Number:	14-06038
General Permit Category and Type:	Not Applicable

<b>Emissions Unit ID:</b>	<b>K008</b>
Company Equipment ID:	Paint Booth K008
Superseded Permit Number:	14-06038
General Permit Category and Type:	Not Applicable

<b>Emissions Unit ID:</b>	<b>K009</b>
Company Equipment ID:	Paint Booth K009
Superseded Permit Number:	14-06038
General Permit Category and Type:	Not Applicable

<b>Emissions Unit ID:</b>	<b>K010</b>
Company Equipment ID:	Paint Booth K010
Superseded Permit Number:	14-06038
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency  
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**Draft Permit-to-Install and Operate**

**Permit Number:** P0105237

**Facility ID:** 1409030600

**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:** P0105237

**Facility ID:** 1409030600

**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.



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Division of Air Pollution Control

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



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) 2., 3., 4., 5., 6., 7., and 8.
  
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 K007 (Paint Spray Booth), K008 (Paint Spray Booth), K009 (Paint Spray Booth), K010 (Paint Spray Booth), K011 (Paint Spray Booth 1 – Commercial), K012 (Paint Spray Booth 2 – Commercial), K013 (Paint Spray Booth 3 – Commercial), and K014 (Paint Spray Booth 4 – Commercial), 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, 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. Compliance with the above limitations shall be based on 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 Ohio EPA District Office or local air agency contact. This information does not have to be kept on a line-by-line basis.

- 4. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:
  - a) all exceedances of the rolling, 12-month individual HAP emission limitation for the emissions units identified in 2. above; and
  - b) all exceedances of the rolling, 12-month total combined HAPs emission limitation for the emissions units identified in 2. above.

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

- 5. Compliance with the emission limitations specified in 2. above shall be determined in accordance with the following method(s) identified below:

- a) 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 identified in 2. above.

Applicable Compliance Method:

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

- 6. The permittee's manufacturing operations, which include, but are not limited to, research and development, engineering, metal fabrication, glass window fabrication, assembly, surface finishing, and warehousing, are housed in multiple separate buildings identified as Building Nos. 100, 200, 600, 700, and 900. All of the permittee's manufacturing operations are considered a single stationary source (facility), under premise number 1409030600, pursuant to the following determinations in accordance to OhioEPA Division of Air Pollution Control Engineering Guide #58:

- a) the manufacturing operations are located in the same county less than 0.5 miles apart;



- b) the manufacturing operations operationally support each other;
  - c) the manufacturing operations are under common control of BAE Systems; and
  - d) the manufacturing operations belong to a single primary major industrial grouping, SIC 3711.
7. Relocation of emissions units K007 (Paint Spray Booth), K008 (Paint Spray Booth), K009 (Paint Spray Booth), K010 (Paint Spray Booth), K011 (Paint Spray Booth 1 – Commercial), K012 (Paint Spray Booth 2 – Commercial), K013 (Paint Spray Booth 3 – Commercial), and K014 (Paint Spray Booth 4 – Commercial), 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 within the permittee’s facility, as defined in accordance with Engineering Guide #58, will not by itself constitute a “modification” under OAC rule 3745-31-01. Prior to relocation, the permittee shall determine that the relocation satisfies the “Toxic Air Contaminant Statute” in accordance with the individual emission unit terms and conditions specified in Sections C.1.d)(8) – d)(10), C.2.d)(8) – d)(10), C.3.d)(8) – d)(10), and C.4.d)(8) – d)(10) of this permit and shall provide appropriate notification as specified in 8. below. If the relocation includes other changes that meet the definition of a “modification”, the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change.
8. The permittee shall provide the appropriate Ohio EPA District Office or local air agency with a minimum of a 15-day written notice of the relocation which shall include a list of the affected emissions unit(s) and the new or existing building number(s) at the facility where the emission unit(s) will be relocated.
9. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart HHHHHH, National Emission Standards for Hazardous Air Pollutants (NESHAP) Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources: K007, K008, K009, K010, K011, K012, K013, and K014. Pursuant to 40 CFR 63.11171(c) and (e), only emissions units K010 and K014 are new sources under this rule. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart HHHHHH. The permittee shall also comply with all the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 1 of 40 CFR Part 63, Subpart HHHHHH. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart HHHHHH and Subpart A.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** P0105237

**Facility ID:** 1409030600

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

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



**1. K011, Booth 1 - Commercial**

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

Blowtherm Paint Spray Booth 1 - Commercial

- 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. b)(1)b., b)(2)b., d)(7), d)(8), d)(9), d)(10), and e)(2).
  - (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)  Synthetic Minor to Avoid 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.  See b)(2)a., b)(2)c., c)(1), and c)(2).  See Section B.2.
b.	ORC 3704.03(F)(4)(c)	See b)(2)b.
c.	OAC rule 3745-17-11(C)	See c)(3).
d.	40 CFR Part 63, Subpart HHHHHH [40 CFR 63.11169-11180]  National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources	See b)(2)d.



(2) Additional Terms and Conditions

- a. Federally Enforceable Permit to Install and Operate (FEPTIO) P0105237 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 1,407 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 emission 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 is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart HHHHHH, promulgated January 9, 2008. The permittee shall comply with all applicable requirements for this emissions unit after the January 10, 2011, compliance date in 40 CFR Part 63, Subpart HHHHHH.

c) Operational Restrictions

- (1) The maximum annual combined amount of coatings and cleanup materials employed in this emissions unit shall not exceed 1,407 gallons, based on a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with this operational limitation upon permit issuance.
- (2) The total VOC input from coatings and cleanup materials employed in this emissions unit 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.

The permittee has existing records to demonstrate compliance with this operational limitation upon permit issuance.
- (3) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry



particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

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;
  - 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.
- (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 particulate filter 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 or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (4) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (5) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:



- a. the date of the inspection;
- b. a description of each/any problem identified and the date it was corrected;
- c. a description of any maintenance and repairs performed; and
- d. the name of 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.

- (6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (7) The federally enforceable permit-to-install and operate (FEPTIO) application for these emissions units (K011, K012, K013, and K014) 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 unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices";  
or
    - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
  - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).



- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., “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 K011, K012, K013, and K014, 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 K011, K012, K013 and K014, 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).

- (8) 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.

- (9) 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.
  - (10) 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:

- i. VOC emissions limitation outlined in b)(1)a.;
  - ii. VOC input limitation outlined in c)(2);
  - iii. Coating and cleanup material usage limitation outlined in c)(1); and
  - iv. 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 deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (2) The permittee shall submit quarterly deviation (excursions) 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. The quarterly deviation (excursions) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
- (3) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency 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.
- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (5) The permittee shall include 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 District Office or local air agency.

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 the application for FEPTIO number 14-06043 as submitted on April 23, 2008:

VOC emissions = (3.83 gallons/hour maximum coating and cleanup usage) x (1 hour/vehicle) x (3 vehicles/day maximum) x (7.2 pounds VOC/gallon 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 the application for FEPTIO number 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

(1) See Sections B.6., B.7., and B.8.



**2. K014, Booth 4 - Commercial**

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

Blowtherm Paint Spray Booth 4 - Commercial

- 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. b)(1)b., b)(2)b., d)(7), d)(8), d)(9), d)(10), and e)(2).
  - (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)  Synthetic Minor to Avoid 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.  See b)(2)a., b)(2)c., c)(1), and c)(2).  See Section B.2.
b.	ORC 3704.03(F)(4)(c)	See b)(2)b.
c.	OAC rule 3745-17-11(C)	See c)(3).
d.	40 CFR Part 63, Subpart HHHHHH [40 CFR 63.11169-11180]  National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources  [In accordance with 63.11170(a)(2), the permittee performs spray	See c)(4), c)(5), c)(6), c)(7), d)(11), and e)(6).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	application of coatings to motor vehicles and mobile equipment subject to the general compliance requirements specified in 40 CFR 63.11173]	
f.	40 CFR 63.1-16, Subpart A [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 and Operate (FEPTIO) P0105237 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 1,407 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 emission 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.

c) Operational Restrictions

- (1) The maximum annual combined amount of coatings and cleanup materials employed in this emissions unit shall not exceed 1,407 gallons, based on a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with this operational limitation upon permit issuance.

- (2) The total VOC input from coatings and cleanup materials employed in this emissions unit 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.

The permittee has existing records to demonstrate compliance with this operational limitation upon permit issuance.

- (3) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (4) 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)]
- (5) 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)]
- (6) 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)]
- (7) 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)].

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;
  - 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.
- (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 particulate filter 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 or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
  - (4) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
  - (5) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
    - a. the date of the inspection;
    - b. a description of each/any problem identified and the date it was corrected;
    - c. a description of any maintenance and repairs performed; and
    - d. the name of 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.

- (6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.



(7) The federally enforceable permit-to-install and operate (FEPTIO) application for these emissions units (K011, K012, K013, and K014) 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 unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

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

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

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "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 K011, K012, K013, and K014, 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 K011, K012, K013 and K014, 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).

- (8) 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.



- (9) 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.
- (10) 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.
- (11) The permittee shall maintain records of the following:
  - a. Certification that each painter has completed the training specified in c)(4) of these terms and conditions 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.

e) Reporting Requirements

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

- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
  - i. VOC emissions limitation outlined in b)(1)a.;
  - ii. VOC input limitation outlined in c)(2);
  - iii. Coating and cleanup material usage limitation outlined in c)(1); and
  - iv. 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 deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(2) The permittee shall submit quarterly deviation (excursions) 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. The quarterly deviation (excursions) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(3) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency 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.



- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (5) The permittee shall include 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 District Office or local air agency.
- (6) The permittee shall comply with the following reporting requirements, as applicable, pursuant to 40 CFR 63.11175 and 40 CFR 63.11176:
  - a. Initial Notification [40CFR 63.11175(a)];
  - b. Notification of Compliance Status [40 CFR 63.11175(b)]; and
  - c. Annual Notification of Changes [40 CFR 63.11176(a)]. The permittee is required to submit this report in each calendar year in which information previously submitted in either the Initial Notification, Notification of Compliance Status, 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.

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 the application for FEPTIO number 14-06043 as submitted on April 23, 2008:

VOC emissions = (3.83 gallons/hour maximum coating and cleanup usage) x (1 hour/vehicle) x (3 vehicles/day maximum) x (7.2 pounds VOC/gallon 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 the application for FEPTIO number 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

- (1) See Sections B.6., B.7., and B.8.



**3. Emissions Unit Group - Commercial Booths 2 and 3: K012, K013**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
K012	Blowtherm Paint Spray Booth 2 - Commercial
K013	Blowtherm Paint Spray Booth 3 - Commercial

- 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. b)(1)b., b)(2)b., d)(7), d)(8), d)(9), d)(10), and e)(2).
  - (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)  Synthetic Minor to Avoid 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.  See b)(2)a., b)(2)c., c)(1), and c)(2).  See Section B.2.
b.	ORC 3704.03(F)(4)(c)	See b)(2)b.
c.	OAC rule 3745-17-11(C)	See c)(3).
d.	40 CFR Part 63, Subpart HHHHHH [40 CFR 63.11169-11180]  National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources	See b)(2)d.



(2) Additional Terms and Conditions

- a. Federally Enforceable Permit to Install and Operate (FEPTIO) P0105237 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 emission 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 is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart HHHHHH, promulgated January 9, 2008. The permittee shall comply with all applicable requirements for this emissions unit after the January 10, 2011, compliance date in 40 CFR Part 63, Subpart HHHHHH.

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.

The permittee has existing records to demonstrate compliance with this operational limitation upon permit issuance.
- (2) The total VOC input from coatings and cleanup materials employed in this emissions unit 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.

The permittee has existing records to demonstrate compliance with this operational limitation upon permit issuance.
- (3) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry



particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

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;
  - 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.
- (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 particulate filter 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 or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (4) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (5) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:



- a. the date of the inspection;
- b. a description of each/any problem identified and the date it was corrected;
- c. a description of any maintenance and repairs performed; and
- d. the name of 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.

- (6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to appropriate Ohio EPA District Office or local air agency upon request.
- (7) The federally enforceable permit-to-install and operate (FEPTIO) application for these emissions units (K011, K012, K013, and K014) 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 unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices";  
or
    - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
  - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).



- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., “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 K011, K012, K013, and K014, 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 K011, K012, K013 and K014, 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).

- (8) 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.

- (9) 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.
- (10) 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:

- i. VOC emissions limitation outlined in b)(1)a.;
  - ii. VOC input limitation outlined in c)(2);
  - iii. Coating and cleanup material usage limitation outlined in c)(1); and
  - iv. 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 deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (2) The permittee shall submit quarterly deviation (excursions) 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. The quarterly deviation (excursions) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
- (3) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency 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.
- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (5) The permittee shall include 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.

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 the application for FEPTIO number 14-06043 as submitted on April 23, 2008:

VOC emissions = (3.83 gallons/hour maximum coating and cleanup usage) x (1 hour/vehicle) x (3 vehicles/day maximum) x (7.2 pounds VOC/gallon 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 the application for FEPTIO number 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

(1) See Sections B.6., B.7., and B.8.



**4. Emissions Unit Group - Military Spray Booths: K007, K008, K009, K010,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
K007	Col-Met Side-Downdraft Paint Spray Booth
K008	Col-Met Side-Downdraft Paint Spray Booth
K009	Col-Met Side-Downdraft Paint Spray Booth
K010	Col-Met Side-Downdraft Paint Spray Booth

- 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)(8), d)(9), d)(10), d)(11), and e)(4).
- (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
- a. b)(1)b., b)(2)a., c)(1), d)(2), e)(1), and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions from the application of coatings shall not exceed 180 pounds per day.</p> <p>See b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(C), 3745-21-09(U)(1)(b), 3745-21-09(U)(1)(c), 3745-21-09(U)(1)(d), 3745-21-09(U)(1)(i), and 3745-31-05(D).</p>
b.	OAC rule 3745-31-05(D)	See b)(2)a., c)(1), and Section B.2.
	Synthetic Minor to Avoid Title V	
c.	OAC rule 3745-17-11(C)	See c)(2).
d.	OAC rule 3745-21-09(U)(1)(c)	See b)(2)d.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-21-09(U)(1)(b)	See b)(2)e.
f.	OAC rule 3745-21-09(U)(1)(d)	See b)(2)f.
g.	OAC rule 3745-21-09(U)(1)(i)	See b)(2)g.
h.	40 CFR Part 63, Subpart HHHHHH [40 CFR 63.11169-11180] National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources  [In accordance with 63.11170(a)(2), the permittee performs spray application of coatings to motor vehicles and mobile equipment subject to the general compliance requirements specified in 40 CFR 63.11173]	<u>For emissions units K007, K009, K009:</u> See b)(2)h.  <u>For emissions unit K010:</u> See c)(3), c)(4), c)(5), c)(6), d)(12), and e)(7).
i.	40 CFR 63.1-16, Subpart A [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. The combined annual volatile organic compound (VOC) emissions from emissions units K007 (Paint Spray Booth), K008 (Paint Spray Booth), K009 (Paint Spray Booth), and K010 (Paint Spray Booth) from the application of coatings and cleanup materials shall not exceed 78.3 tons per year (TPY) based upon a rolling, 12-month summation.  
  
The permittee has existing records to demonstrate compliance with this emissions limitation upon permit issuance.
- b. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content and emission limitations.
- 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 VOC content of extreme performance coatings employed in this emissions unit shall not exceed a daily volume-weighted average of 3.5 pounds per gallon, as applied, excluding water and exempt solvents.



- e. The VOC content of zinc rich primer coatings employed in this emissions unit shall not exceed a daily volume-weighted average of 4.0 pounds per gallon, as applied, excluding water and exempt solvents.
- f. The VOC content of coatings dried at temperatures not exceeding 200 degrees Fahrenheit employed in this emissions unit shall not exceed a daily volume-weighted average of 3.5 pounds per gallon, as applied, excluding water and exempt solvents.
- g. The VOC content of coatings employed in this emissions unit, that are not specified under b)(2)d., b)(2)e., and b)(2)f., shall not exceed a daily volume-weighted average of 3.0 pounds per gallon, as applied, excluding water and exempt solvents.

If a coating is subject to two or more limits as listed in b)(2)d., b)(2)e., b)(2)f., and b)(2)g. above, the limit which is least restrictive shall apply.

- h. Pursuant to 40 CFR 63.11171(c) and (e), emission units K007, K008, and K009 are existing affected sources; therefore, the Subpart HHHHHH compliance date for these emissions units is January 10, 2011. The following terms and conditions shall become applicable to emissions units K007, K008, and K009 on this compliance date: c)(3), c)(4), c)(5), c)(6), d)(12), and e)(7).

c) Operational Restrictions

- (1) The total combined VOC input from coatings and cleanup materials employed in emissions units K007 (Paint Spray Booth), K008 (Paint Spray Booth), K009 (Paint Spray Booth), and K010 (Paint Spray Booth) shall not exceed 78.3 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.

The permittee has existing records to demonstrate compliance with this operational limitation upon permit issuance.

- (2) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (3) 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)]
- (4) 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)]



- (5) All spray-applied coatings must be applied with a high volume, low pressure (HVLV) 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)]
  - (6) 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)].
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each day for this emissions unit:
    - a. the name, identification, and type (zinc rich, extreme performance, dried <200 degrees, other) of each coating, as applied;
    - b. the VOC content (excluding water and exempt solvents) of each coating, as applied; and
    - c. the daily volume-weighted average VOC content of all the coatings used to demonstrate compliance with each of the following terms: b)(2)d. through b)(2)g., individually, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2.
  - (2) The permittee shall collect and record the following information each month for the emissions units listed in b)(2)a. and c)(1), combined:
    - a. the name and identification of each coating and cleanup material employed;
    - b. the VOC content of each coating (excluding water and exempt solvents), in pounds of VOC per gallon of coating, as applied;
    - c. the VOC content of each cleanup material, in pounds of VOC per gallon of cleanup material;
    - d. the number of gallons of each coating (excluding water and exempt solvents), as applied;
    - e. the number of gallons of each cleanup material employed;
    - f. the total VOC input/emissions, in pounds or tons, i.e. the sum of d)(2)b. x d)(2)d. for all coatings plus d)(2)c. x d)(2)e. for all cleanup materials, divided by 2,000 pounds per ton, if the units are to be in tons; and





such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 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: Ethylene glycol butyl ether  
 TLV (ug/m3): 96,663  
 Maximum Hourly Emission Rate (lbs/hr): 5.2  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52.6  
 MAGLC (ug/m3): 2,301.5

Toxic Contaminant: Toluene  
 TLV (ug/m3): 75,362  
 Maximum Hourly Emission Rate (lbs/hr): 7.39  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 658.7  
 MAGLC (ug/m3): 1,794



The permittee, has demonstrated that emissions of ethylene glycol butyl ether and toluene, from emissions units K007, K008, K009, and K010, 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).

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

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final 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.

- (10) 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.
  - (11) 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.
  - (12) The permittee shall maintain records of the following:
    - a. Certification that each painter has completed the training specified in c)(3) of these terms and conditions 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.
- e) Reporting Requirements
  - (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
    - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the



Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

- i. VOC emissions limitation outlined in b)(2)a.;
  - ii. VOC input limitation outlined in c)(1); and
  - iii. 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 deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (2) The permittee shall notify the appropriate Ohio EPA District Office or local air agency in writing of any daily record showing that the daily volume-weighted average VOC content exceeds the limitations specified in b)(2)d., b)(2)e., b)(2)f., and b)(2)g., as applicable. The notification shall include a copy of such record and shall be sent to the appropriate Ohio EPA District Office or local air agency within 45 days following the end of the calendar month.
- (3) The permittee shall submit annual reports which specify the total VOC emissions 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 to the appropriate Ohio EPA District Office or local air agency by January 31 of each year.
- (4) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- (5) 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.
- (6) 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.

- (7) The permittee shall comply with the following reporting requirements, as applicable, pursuant to 40 CFR 63.11175 and 40 CFR 63.11176:
  - a. Initial Notification [40CFR 63.11175(a)];
  - b. Notification of Compliance Status [40 CFR 63.11175(b)]; and
  - c. Annual Notification of Changes [40 CFR 63.11176(a)]. The permittee is required to submit this report in each calendar year in which information previously submitted in either the Initial Notification, Notification of Compliance Status, 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.

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:
 

VOC emissions from the application of coatings shall not exceed 180 pounds per day.

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 the application for FEPTIO number 14-06038 as submitted on April 1, 2008:

$$\text{VOC} = [(2 \text{ gallons of zinc primer/vehicle} \times 4.0 \text{ pounds VOC/gallon of zinc primer}) + (2 \text{ gallons of epoxy primer/vehicle} \times 3.5 \text{ pounds VOC/gallon of epoxy primer})] \times 12 \text{ vehicles maximum primed per day.}$$



b. Emission Limitation:

The combined annual VOC emissions from emissions units K007, K008, K009, and K010 from the application of coatings and cleanup materials shall not exceed 78.3 tons per year (TPY) based upon a rolling, 12-month summation.

Compliance with the rolling, 12-month VOC emissions limitation identified in b)(2)a. shall be demonstrated by the record keeping requirement identified in d)(2).

Actual VOC emissions for emissions units K007, K008, K009, and K010 shall be determined based on the following equation from the permittee-supplied information in the application for FEPTIO number 14-06038 as submitted on April 1, 2008:

VOC = Sum of [(gallons of coating employed x VOC content of coating / 2000 pounds per ton) + (gallons of cleanup material employed x VOC content of cleanup material / 2000 pounds per ton)] for each coating and cleanup material, and for each emissions unit.

c. Emission Limitations:

The VOC content of extreme performance coatings employed in this emissions unit shall not exceed a daily volume-weighted average of 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

The VOC content of zinc rich primer coatings employed in this emissions unit shall not exceed a daily volume-weighted average of 4.0 pounds per gallon, as applied, excluding water and exempt solvents.

The VOC content of coatings dried at temperatures not exceeding 200 degrees Fahrenheit employed in this emissions unit shall not exceed a daily volume-weighted average of 3.5 pounds per gallon, as applied, excluding water and exempt solvents.

The VOC content of coatings employed in this emissions unit, that are not specified under b)(2)d., b)(2)e., and b)(2)f., shall not exceed a daily volume-weighted average of 3.0 pounds per gallon, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance with these VOC content limitations shall be demonstrated by the record keeping requirements specified in d)(1) and d)(2).

In accordance with OAC rule 3745-21-04(B)(5), facilities located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren, and Wood Counties shall use USEPA Method 24 to determine the VOC contents of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** P0105237

**Facility ID:** 1409030600

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

formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

USEPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

g) Miscellaneous Requirements

- (1) See Sections B.6., B.7., and B.8.