Ohio Environmental Protection Agency

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

Certified Mail

9/17/2010

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

BRAD WALLS
ARIEL CORP
35 BLACKJACK RD
MOUNT VERNON, OH 43050

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0142000060
Permit Number: P0106078
Permit Type: Initial Installation
County: Knox

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Mt. Vernon News. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. 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

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049

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 will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778.

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*
Ohio EPA-CDO

Permit Strategy Write-Up

1. Check all that apply:

   X Synthetic Minor Determination

   ___ Netting Determination

2. Source Description: On February 16, 2010, Ariel Corporation of Mt Vernon, Knox County, a non-Title V facility (ID No. 0142000060), submitted application (A0039075) for five spray booths at the existing facility. Four of the units have previously been permitted under PTIs 01-08607 and 01-12066. The allowable VOC limitations in the current PTIs total greater than 100 TPY wide. An Administrative modification, P010634, is proposed for spray booths K003, K004, K006 and K007 and new installation permit, P0106078, is proposed for K008, both permits include a facility wide, federally enforceable single HAP limit of 9.9 TPY and a facility federally enforceable combined HAP limit of 24.9 TPY to avoid Title V and MACT MMMM applicability.

3. Facility Emissions and Attainment Status: Knox County is in full attainment for all pollutant standards. Ariel Corp. will not be a "Major Source" for volatile organic compound (VOC) emissions, single hazardous air pollutant (HAP) or combined total HAPs, based upon the restrictions of HAP emissions from units K003, K004, K006, K007 and K008. Therefore, this facility is not subject to the requirements of Title V.

4. Applicable Regulations:
   NESHAP (MACT) Standard: Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, Subpart XXXXXX **-** Specifically, this rule applies to area sources in these nine source categories that use or have the potential to emit compounds of cadmium, chromium, lead, manganese, or nickel from metal fabrication or finishing operations. Although Ariel does fall into one of the nine source categories, "Establishments primarily engaged in construction machinery manufacturing; oil and gas field machinery manufacturing; and pumps and pumping equipment manufacturing", (NAICS codes 333120, 333132, 333911), they do not have the potential to emit MFHAP, which are compounds of cadmium, chromium, lead, manganese, or nickel from metal fabrication or finishing operations. These requirements do not apply when spray-applied paints that do not contain MFHAP are being applied.

   OAC rule 3745-21-09(U)(1) - The permittee shall not employ more than ten gallons of coating per day for the miscellaneous metal parts and products coating line. The daily usage limitation for the coating line shall not include coatings applied to parts or products which are not metal.

   OAC rule 3745-17-07(A)(1) "Visible Particulate Emission Limitations for Stack Emissions" – This regulation is applicable to the spray booths. The regulation states that "visible particulate emissions from any stack shall not exceed twenty percent opacity as a six-minute average." The spray booth will be equipped with dry filters to minimize particulate matter and visible emissions. Compliance with this rule is expected.

   OAC rule 3745-17-11(B) "Particulate Emissions Limitations" - This rule states, for Knox County, the allowable particulate emission rate shall be determined using "Table 1", process weight less than 100 lb/hr.

   OAC rule 3745-17-11(C) "Requirements for Surface Coating Processes" - This rule is applicable to the spray booths and outlines work practice standards, recordkeeping, inspection and maintenance requirements for coating operations. It specifically addresses operating and maintaining the dry filter system.

OAC rule 3745-31-05(A)(3), as effective 11/30/01 - According to Mike Hopkins' memo, dated February 19, 2010, a case by case BAT must be determined for emissions <10 TPY until the exemption becomes approved as part of the SIP. The PE emissions will be <10 TPY. The PE emission limit from 17-11(B) was used as the BAT determination, with reference to the sunset language, deeming the limit void after SIP approval.

ORC rule 3704.03(T) - The VOC emissions are >10 TPY. The annual VOC emission limit was based on the facility wide paint usage limitation. Ariel only uses one coating for all the spray booths, facility wide. See this calculation below, under VOC emissions - The annual rolling 12-month VOC emission limit.

OAC rule 3745-31-05(D) "Federally Enforceable" and ORC 3704.03(T) - The facility wide single HAP, facility wide total HAP, and facility wide VOC emissions were established to ensure Title V non-applicability. See annual VOC limitation calculation below.

OAC rule 3745-114 "Toxic Air Contaminants" – According to information provided by the applicant, toxic emissions associated with these emissions sources include toluene, xylene, and ethyl benzene. Maximum worst-case toxics emissions from coatings were modeled as follows:

Unit	*Coatings*	*xylene*	*toluene*	*ethylbenzene*	*Application rate*	*Xylene emission*	*toluene*	*ebz*
K003	11.01 #/gal	12.3%	0.75%	3.12%	5.15 gal/hr	7.0 lb xylene/hr	0.43 toluene/hr	1.8 ebz/hr
K004	11.01	12.3	0.75%	3.12	7.03	9.5	0.58	2.4
K006	11.01	12.3	0.75%	3.12	7.03	9.5	0.58	2.4
K007	11.01	12.3	0.75%	3.12	7.03	9.5	0.58	2.4
K008	11.01	12.3	0.75%	3.12	7.03	9.5	0.58	2.4

Because the emissions of the worst-case toxic air pollutant are above one ton per year, screen modeling was performed to demonstrate compliance with the respective MAGLCs as shown in the table below.

Unit	Pollutant	Emission Rate (lb/hr)	Modeled Emission Rate (ug/m^3)	TLV (ug/m^3)	MAGLC (ug/m^3)
K003	Xylene	7.0	2145	434.19	6202.7
K004	Xylene	9.5	2803	434.19	6202.7
K006	Xylene	9.5	3224	434.19	6202.7
K007	Xylene	9.5	3224	434.19	6202.7
K008	Xylene	9.5	1235	434.19	6202.7

Unit	Pollutant	Emission Rate (lb/hr)	Modeled Emission Rate (ug/m^3)	TLV (ug/m^3)	MAGLC (ug/m^3)
K003	Ethylbenzene	1.8	551.5	434.19	6202.7
K004	Ethylbenzene	2.4	708.1	434.19	6202.7
K006	Ethylbenzene	2.4	814.5	434.19	6202.7
K007	Ethylbenzene	2.4	814.5	434.19	6202.7
K008	Ethylbenzene	2.4	121.4	434.19	6202.7

All toxic emissions modeled demonstrated compliance. A toxics condition will be included in the permit outlining the parameters and the results of the modeling performed.

5. Source Emissions:

This FEPTIO contains terms and conditions that restrict the facility wide VOC emissions from emissions units K003, K004, K006, K007 and K008 to 17.3 tons per year to avoid Title V requirements for HAPs through a federally enforceable rolling 12 month coating usage limitation. Due to the limitation of the coating usage, all units will be inherently limited to single HAP emissions less than 10 tons per year and combined total HAPs emissions to less than 25 tons per year. Therefore, the Title V requirements will not apply to this facility. Ariel Corp is also required by this permit to track VOC emissions, coating usage, keep records, and submit reports. Facility-wide emissions of HAPS are inherently limited based upon established limits on VOC emissions for K003, K004, K006, K007 and K008.

Summary of HAP emissions facility-wide:

Single Highest Hazardous Air Pollutant Emission	Tons/Year
Xylene	9.9
Ethylbenzene	2.07
Toluene	0.25

VOC EMISSIONS

Unit	*Coatings*	*VOC content*	*Application rate*	*Hourly Limit*
K003	Ariel Blue	3.44 lb/gal	5.15 gal/hr	17.72 lb VOC/hr
K004	Ariel Blue	3.44	7.03	24.18
K006	Ariel Blue	3.44	7.03	24.18
K007	Ariel Blue	3.44	7.03	24.18
K008	Ariel Blue	3.44	7.03	24.18

Clean-up
The clean up material used is Sherwin Williams Xylene/SW, with a VOC/HAP content of 7.17 lb/gal (85% xylene, 15% ethyl benzene)

Unit	*Annual Usage*	*Annual VOC emissions*
K003	700 gal	2.5 TPY
K004	210	0.75 TPY
K006	210	0.75 TPY
K007	87.5	0.31 TPY
K008	700	2.5 TPY

The annual rolling 12-month VOC emission limit was back calculated from the total single-HAP limit of 9.9 TPY xylene.

HAP content of the coating, 16.17% HAP (xylene 12.3%, ethylbenzene 3.12%, toluene 0.75% = 16.17%).

The coating specific gravity is 1.32, multiplied by 8.34 #/gal water is 11.01 #/gal coating.
(11.01 #/gal)(12.3% xylene) = 1.35 # xylene/gal

9.9 TPY HAP minus (6.8 TPY)(85% xylene) from clean up material is 4.12 TPY= 8240 lb xylene
8240 lb xylene / 1.35 lb xylene/gal = 6103.7 gal coating
(6103.7 gal coating)(3.44 lb VOC/gal coating) / 2000 = 10.5 TPY VOC

10.5 TPY VOC plus 6.8 TPY from clean up material is 17.3 TPY VOC.

The facility wide Total HAP emission limit was calculated using the max coating usage of 6103.7 gallons per year.
(6103.7 gal/yr)(11.01lb/gal)(16.17% HAP) / 2000 lb/ton = 5.4TPY + 6.8 TPY clean up mat'l = 12.2 TPY Total HAP

6. Conclusion: The issuance of PTI P0106034 is recommended. The emission limitations contained in this FEPTIO are adequate to provide federally enforceable limitations to ensure that the applicable Title V thresholds will not be exceeded.

7. Please provide additional notes or comments as necessary: No ovens are used with the coating operations at this facility.

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

Pollutant	Tons Per Year
VOC	17.3
PE	9.64

Knox County

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
ARIEL CORP

Issue Date: 9/17/2010
Permit Number: P0106078
Permit Type: Initial Installation
Permit Description: Initial Installation of K008, synthetic minor to avoid Title V
Facility ID: 0142000060
Facility Location: ARIEL CORP
35 BLACKJACK RD,
MOUNT VERNON, OH 43050
Facility Description: Air and Gas Compressor 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 Sara Geary at Ohio EPA DAPC, Central District Office, 50 West Town Street, 6th Floor P.O. Box 1049, Columbus, OH 43216-1049 or (614)728-3778. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio | Environmental Protection Agency

DRAFT

Division of Air Pollution Control
Permit-to-Install and Operate
for
ARIEL CORP

Facility ID:	0142000060
Permit Number:	P0106078
Permit Type:	Initial Installation
Issued:	9/17/2010
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio | Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
ARIEL CORP

Table of Contents

Authorization 1

A. Standard Terms and Conditions 3

1. What does this permit-to-install and operate ("PTIO") allow me to do? 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them? 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 5
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator? 6
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 6
15. What happens if a portion of this permit is determined to be invalid? 7

B. Facility-Wide Terms and Conditions 8

C. Emissions Unit Terms and Conditions 10

1. K008, Booth 720 - Global GIDB-2221630-S 11

Authorization

Facility ID: 0142000060
Application Number(s): A0039075
Permit Number: P0106078
Permit Description: Initial Installation of K008, synthetic minor to avoid Title V
Permit Type: Initial Installation
Permit Fee: $400.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 9/17/2010
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:

ARIEL CORP
35 BLACKJACK RD
MOUNT VERNON, OH 43050

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0106078
Permit Description: Initial Installation of K008, synthetic minor to avoid Title V

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

Emissions Unit ID:	**K008**
Company Equipment ID:	Booth 720 - Global GIDB-2221630-S
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.
The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

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

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

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

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

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

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

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

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

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

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

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

7. What reports must I submit under this permit?

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

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

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).
The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

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

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

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

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

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

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

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

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

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.
You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting[1] a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.
You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.
Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

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

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

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

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated 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.

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

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

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

B. Facility-Wide Terms and Conditions

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

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

      (1) None.

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

      (1) The emissions of a single Hazardous Air Pollutant (HAP) from all emissions units shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation of the emissions.

      (2) The emissions of total HAPs from all emissions units shall not exceed 12.2 tons per year, based upon a rolling, 12-month summation of the emissions.

      (3) The emissions of total Volatile Organic Compounds (VOC) from all emissions units shall not exceed 17.3 tons per year, based upon a rolling, 12-month summation of the emissions.

      (4) The maximum annual total coating usage shall not exceed 6103.7 gallons, based upon a rolling, 12-month summation of the coating usage figures.

      (5) The maximum annual total clean up material usage for emissions shall not exceed 1907.5 gallons, based upon a rolling, 12-month summation of the coating usage figures.

C. Emissions Unit Terms and Conditions

1. K008, Booth 720 - Global GIDB-2221630-S

Operations, Property and/or Equipment Description:

Paint Spray Booth, metal parts

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)(2)(c), c)(1), d)(9), d)(10), d(11), d)(12), e)(1), (2) & (3)(f) thru (h)

(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)c, d)(1), d)(2), d)(3)

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), as effective 11/30/01	Particulate matter (PM) emissions shall not to exceed 0.551 lb/hr and 2.41 TPY. Volatile Organic Compound (VOC) emissions from all coatings employed in this emissions unit shall not exceed 24.18 pounds per hour and 6.73 tons per year. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(ii), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V]	VOC emissions from all coatings and cleanup materials employed in emissions units K003, K004, K006, K007 and K008 shall not exceed 17.3 tons per rolling, 12-month period. Individual HAP emissions from all coatings and cleanup materials employed in emissions units K003, K004, K006,

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		K007 and K008 shall not exceed 9.9 tons per rolling, 12-month period. Combined HAP emissions from all coatings and cleanup materials employed in emissions units K003, K004, K006, K007 and K008 shall not exceed 12.2 tons per rolling, 12-month period. See b)(2)e. & f. below
d.	OAC rule 3745-21-09(U)(1)	The permittee shall not employ more than ten gallons of coating per day for the miscellaneous metal parts and products coating line. The daily usage limitation for the coating line shall not include coatings applied to parts or products which are not metal.
e.	OAC rule 3745-17-07(A)(1)	Visible Particulate Emissions (VE) from any stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.
f.	OAC rule 3745-17-11(B)(1)	The requirements established pursuant to this rule are equivalent to the short term particulate emission limitation included in OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-17-11(C)	See b)(2)d. below
h.	ORC 3704.03(F)(4)(c)	See d)(9), d)(10), d(11) & d)(12).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006, (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

b. The following terms and conditions apply once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan:

i. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM emissions from this air contaminant source since the calculated annual emission rate for PM is less than 10 tons/year, taking into account the federally enforceable rule limit of 0.551 pound per hour under OAC rule 3745-17-11(B).

ii. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the calculated annual emission rate for VOC is less than 10 tons/year, taking into account the federally enforceable rule limit established under OAC rule 3745-31-05(D).

c. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the emissions, upon issuance of this permit.

d. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.

e. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coating usage, upon issuance of this permit. The maximum annual total coating usage for emissions units K003, K004, K006, K007 and K008 shall not exceed 6103.7 gallons, based upon a rolling, 12-month summation of the coating usage figures.

f. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coating usage, upon issuance of this permit. The maximum annual total clean up mateial usage for emissions units K003, K004, K006, K007 and K008 shall not exceed 1907.5 gallons, based upon a rolling, 12-month summation of the coating usage figures.

c) Operational Restrictions

(1) 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 collect and record the following information on a daily basis for the coating and cleanup materials applied in this emissions unit:

a. the number of gallons of each coating applied or all coatings applied;

b. the maximum VOC content for each or the maximum VOC content for any coating applied, in pounds per gallon;

c. the total VOC emissions from all coatings applied, i.e., the summation of the products of "a" times "b" for each individual coating applied; or the product of the maximum VOC content of any coating applied times the total gallons of coating employed during the quarter, i.e., "a" times "b" for worst case coating;

d. the name and identification of each cleanup material employed;

e. the VOC content of each cleanup material, in pounds per gallon;

f. the number of gallons of each cleanup material employed;

g. the total VOC emission rate from all cleanup materials, i.e., the summation of the products of "e" times "f" for all cleanup materials employed; and

h. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons, the sum of "c" and "g".

These montly records shall be maintained for the purpose of determining the rolling 12-month VOC emissions for the emissions unit.

(2) The permittee shall collect and record the following information each day for all materials containing any HAP that are applied in the emissions unit:

a. the name and identification number/code of each coating, thinner, additive, cleanup material, and any other material containing any HAP;

b. the name/identification of each individual HAP contained in each material applied (and identified in "a" above) and the pound(s) of each HAP per gallon of each HAP-containing material applied;

c. the number of gallons of each coating, thinner, additive, cleanup material, and other material applied during the month;

d. for each individual HAP, the total emissions from all the materials employed, in ton(s), i.e., for each individual HAP, the summation of the products of "b" times "c" for all the materials applied during the month, divided by 2,000 pounds;

e. the total combined HAPs emissions from all the materials employed during the month, in ton(s), i.e., the summation of all the individual HAPs emissions from "d" above;

f. for each individual HAP, the total emissions during the rolling, 12-month period, i.e., the summation of the individual HAP emissions, as recorded in "d" above, for the present month plus the previous 11 months of operation, in ton(s); and

g. the total combined HAP emissions during the rolling 12-month period, i.e., the summation of all HAP emissions, as recorded in "e" above, for the present month plus the previous 11 months of operation, in ton(s).

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. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings and cleanup materials.

(3) The permittee shall calculate and maintain monthly records, for emissions units K003, K004, K006, K007 and K008, for the following information:

a. the rolling 12-month summation of VOC emissions;
b. the rolling 12-month summation of each single HAP emissions;
c. the rolling 12-month summation of total HAP emissions;
d. the rolling, 12-month summation of the coating usage; and
e. the rolling, 12-month summation of the clean up material usage.

(4) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. 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.

(5) 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 Ohio EPA upon request.

(6) 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.

(7) 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.

(8) 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 Ohio EPA upon request.

(9) The federally enforceable permit-to-install and operate (FEPTIO) application for this emissions unit, K003, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

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

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

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "**X**" hours per day and "**Y**" days per week, from that of 4 hours per day and 7 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

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

Toxic Contaminant: **Xylene**
TLV (mg/m3): **434.19**
Maximum Hourly Emission Rate (lbs/hr): **9.5**
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): **1235**
MAGLC (ug/m3): **6202.7**

Toxic Contaminant: **Ethylbenzene**
TLV (mg/m3): **434.19**
Maximum Hourly Emission Rate (lbs/hr): **1.8**
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): **551.5**
MAGLC (ug/m3): **6202.7**

The permittee, has demonstrated that emissions of xylene from emissions unit K003, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(10) 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 FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(11) 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.

(12) 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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation reports containing the following information:

a. all exceedances of the rolling, 12-month emission limitation for VOC;

b. all exceedances of the rolling, 12-month individual HAP emission limitation for each HAP for all the coatings, thinners, additives, and cleanup materials employed;

c. all exceedances of the rolling, 12-month total combined HAPs emission limitation for all the coatings, thinners, additives, and cleanup materials employed;

d. all exceedances of the rolling, 12-month coating usage limitation;

e. all exceedances of the rolling, 12-month clean up material usage limitation;

f. any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit;

g. any daily record showing that the dry particulate filter system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation; and

h. 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.

These reports shall include a description of the deviation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted as required in the General Terms and Conditions of this permit.

f) Testing Requirements

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

a. Emission Limitation:
PM emissions shall not to exceed 0.551 lb/hr.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with the hourly allowable PM emission limitation in accordance with Method 5 of 40 CFR Part 60, Appendix A.

b. Emission Limitation:
PM shall not exceed 2.41 tons per year.

Applicable Compliance Method:
Compliance with the lb/hr emission limit demonstrates compliance with this limit because this limit is based on the lb/hr limit assuming the source operated 8760 hours per year.

c. Emissions Limitation:
VOC emissions from all coatings and cleanup materials employed in this emissions unit shall not exceed 24.18 pounds per hour.

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

d. Emissions Limitation:
VOC emissions from all coatings and cleanup materials employed in emissions units K003, K004, K006, K007 and K008 shall not exceed 17.3 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in Section d)(3).

e. Emissions Limitation:
Individual HAP emissions from all coatings and cleanup materials employed in emissions units K003, K004, K006, K007 and K008 shall not exceed 9.9 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in Section d)(3).

f. Emissions Limitation:
Combined HAP emissions from all coatings and cleanup materials employed in emissions units K003, K004, K006, K007 and K008 shall not exceed 12.2 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in Section d)(3).

g. Emission Limitation:
VE from any stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with this emission limitation shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

h. USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24 as outlined in 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

g) Miscellaneous Requirements

(1) None.