



Environmental Protection Agency

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

4/11/2011

Ms. Leslie Stalker  
Kings Island  
6300 KINGS ISLAND DR  
KINGS ISLAND, OH 45034

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 1483000394  
Permit Number: P0107764  
Permit Type: Renewal  
County: Warren

Certified Mail

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
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

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

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

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

If you have any questions, please contact Hamilton County Dept. of Environmental Services at (513)946-7777 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc), by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: HCDOES





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Kings Island**

Facility ID:	1483000394
Permit Number:	P0107764
Permit Type:	Renewal
Issued:	4/11/2011
Effective:	4/11/2011
Expiration:	4/11/2021





Division of Air Pollution Control
Permit-to-Install and Operate
for
Kings Island

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## Authorization

Facility ID: 1483000394  
Application Number(s): A0041455  
Permit Number: P0107764  
Permit Description: PTIO renewal for two paint booths: each permitted to coat wood, metal, and fiberglass.  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 4/11/2011  
Effective Date: 4/11/2011  
Expiration Date: 4/11/2021  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Kings Island  
6300 KINGS ISLAND DR  
KINGS ISLAND, OH 45034

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

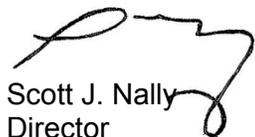
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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

  
Scott J. Nally  
Director



## Authorization (continued)

Permit Number: P0107764

Permit Description: PTIO renewal for two paint booths: each permitted to coat wood, metal, and fiberglass.

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

**Emissions Unit ID:**

Company Equipment ID:	K001
Superseded Permit Number:	Bench booth
General Permit Category and Type:	P0100441
	Not Applicable

**Emissions Unit ID:**

Company Equipment ID:	K002
Superseded Permit Number:	Downdraft booth
General Permit Category and Type:	P0100442
	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 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<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

**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.

**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) None.
2. The Ohio EPA has determined that this facility may be applicable to the requirements of an area source MACT/GACT rule that the Ohio EPA does not have the delegated authority to implement. Although Ohio EPA has determined that an area source MACT (also known as the GACT) may apply, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised that all requirements associated with these rules are in effect and are enforceable by U.S. EPA. For more information on the area source rules, please refer to the follow U.S. EPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>

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



1. K001, Bench booth

Operations, Property and/or Equipment Description:

Custom made miscellaneous metal parts, wood, and fiberglass parts paint spray booth (Bench Booth); solvent pre-clean operation; brushed coatings

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

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

a. d)(3) and b)(2)d.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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)	VOC emissions shall not exceed 37.7 lbs/day or 2.27 tons per year (TPY), including emissions from cleanup materials.  VOC emissions shall not exceed 5.01 lbs/gallon of coating used on non-metal surfaces.  VOC emissions shall not exceed 6.31 lbs/gallon of cleanup material.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(c).  See b)(2)b. – e., and c)(1) – (4)
b.	OAC rule 3745-21-09(U)(1)(c)	See b)(2)a.
c.	OAC rule 3745-17-11(C)	See c)(5), c)(6), and d)(4) – d)(8)

- (2) Additional Terms and Conditions
- a. The VOC content of each coating applied to miscellaneous metal parts or products, as defined by OAC rule 3745-21-01, shall not exceed 3.5 pounds per gallon of coating, excluding water and exempt solvents.
  - b. The VOC content of each coating applied to non-metal parts shall not exceed 5.01 pounds per gallon of coating.
  - c. The VOC content of each cleaning solvent used in the pre-coating parts cleaning operation and gun cleanup operation shall not exceed 6.31 pounds per gallon of cleaning solvent.
  - d. Emissions of toluene from emissions unit K001 shall not exceed 1 pound per hour.
  - e. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the material usage limits, compliance with the VOC content limits, and compliance with the VOC and toluene emissions limits.
- c) Operational Restrictions
- (1) The maximum daily coating usage for emissions unit K001 shall not exceed 5 gallons per day based on a summation of all coatings applied by spray gun and/or brush on miscellaneous metal and/or non-metal parts.
  - (2) The maximum annual coating usage for emissions unit K001 shall not exceed 780 gallons per year based on a summation of all coatings applied by spray gun and/or brush on miscellaneous metal and/or non-metal parts.
  - (3) The maximum daily cleaning solvent usage from the pre-coating parts cleaning operation and gun cleanup operation, combined, for emissions unit K001 shall not exceed 2 gallons per day based on a summation of all cleaning solvents applied.
  - (4) The maximum annual cleaning solvent usage from the pre-coating parts cleaning operation and gun cleanup operation, combined, for emissions unit K001 shall not exceed 100 gallons per year based on a summation of all cleaning solvents applied.
  - (5) The permittee shall operate a 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.
  - (6) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each day for emissions unit K001:

- a. the name and identification number of each coating and cleaning solvent;
  - b. the volume, in gallons, of each coating employed on miscellaneous metal parts and on non-metal parts, as applied;
  - c. the total volume, in gallons, of all of the coatings employed, as applied;
  - d. the volume, in gallons, of each cleaning solvent employed, as applied;
  - e. the VOC content of each coating applied to miscellaneous metal and non-metal parts, in pounds VOC per gallon of coating, as applied, excluding water and exempt solvents;
  - f. the VOC content of each cleaning solvent used to pre-clean metal and/or non-metal parts and the clean-up of the spray guns, in pounds of VOC per gallon of cleaning solvent, as applied;
  - g. the VOC emissions from the application of coatings and cleaning solvents, in pounds of VOC per day [the summation of b. multiplied by e. for the coating(s), and d. multiplied by f. for the cleaning solvents(s) employed in K001];
  - h. toluene content of the coatings used; and
  - i. the hourly toluene emission rate for all coatings, in pounds per hour.
- (2) The permittee shall maintain monthly records of the total volume, in gallons, of all coatings and cleaning materials employed in this emissions unit. The monthly usage records shall be summarized in gallons per year at the end of each calendar year.
- (3) The permit to install for emissions units K001 and K002 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions units' exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by emissions units K001 and K002 using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutants(s):

Pollutant: Toluene

TLV (mg/m<sup>3</sup>): 75.4

Maximum Hourly Emission Rate (lbs/hr): 1, K001 (2, K001 and K002, combined)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1689.4 (K001 and K002, combined)

MAGLC (ug/m<sup>3</sup>): 1794.3

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the

"Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled: and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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 the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is(are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- (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.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.
  - (2) The permittee shall notify the Hamilton County Department of Environmental Services of any daily record showing that emissions unit K001 employed coatings that exceeded the applicable maximum VOC content limits outlined in terms and conditions b)(2)a., b)(2)b., and b)(2)c. A copy of such record shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance(s) occurred.
- f) Testing Requirements
- (1) Compliance with the emission limitations and VOC content limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

## a. Emission Limitation

37.7 lbs of VOC emissions/ day, including emissions from cleanup materials.

Applicable Compliance Method

$(5.01 \text{ lbs VOC/ gallon of coating}) \times (5 \text{ gallons/ day}) = 25.1 \text{ lbs/day}$

$(6.31 \text{ lbs VOC/ gallon of cleanup}) \times (2 \text{ gallons/ day}) = 12.62 \text{ lbs/day}$

$(25.1 \text{ lbs/day}) + (12.62 \text{ lbs/day}) = 37.7 \text{ lbs/day total from K001}$

## b. Emission Limitation

2.27 tons per year (TPY) VOC emissions, including emissions from cleanup materials.

Applicable Compliance Method

$(5.01 \text{ lbs VOC/ gallon of coating}) \times (780 \text{ gallons/ year}) / (1 \text{ ton/ } 2000 \text{ lbs}) = 1.95 \text{ TPY}$

$(6.31 \text{ lbs VOC/ gallon of cleanup}) \times (100 \text{ gallons/ year}) / (1 \text{ ton/ } 2000 \text{ lbs}) = 0.32 \text{ TPY}$

$(1.95 \text{ TPY}) + (0.32 \text{ TPY}) = 2.27 \text{ TPY total from K001}$

## c. Emission Limitation

1 pound of toluene emissions per hour

Applicable Compliance Method

Compliance with the hourly toluene emission limitation shall be demonstrated by the record keeping requirement in the term and condition d)(1).

## d. Emission Limitation

3.5 pounds VOC per gallon of coating, excluding water and exempt solvents of each coating applied to metal parts.

Applicable Compliance Method

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

e. Emission Limitation

5.01 pounds VOC per gallon of coating of each coating applied to non-metal parts.

6.31 pounds VOC per gallon of cleaning solvent of each cleaning solvent used in the pre-coating parts cleaning operation and gun cleanup operation.

Applicable Compliance Method

Formulation data or USEPA method 24 shall be used to determine the VOC contents of the coatings and cleanup.

f. Compliance with the coating and cleanup usage limitation in terms and conditions c)(1) and c)(2) shall be determined by the record keeping requirements as specified in terms and conditions d)(1) and d)(2), respectively.

g. Compliance with the cleaning solvent usage limitation in terms and conditions c)(3) and c)(4) shall be determined by the record keeping requirements as specified in terms and conditions d)(1) and d)(2), respectively.

g) Miscellaneous Requirements

(1) None.



2. K002, Downdraft booth

Operations, Property and/or Equipment Description:

Miscellaneous metal parts, wood, and fiberglass parts paint spray booth (Concept II downdraft booth); solvent pre-clean operation; brushed coatings

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

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

a. d)(3) and b)(2)d.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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>VOC emissions shall not exceed 37.7 lbs/day or 2.50 tons per year (TPY), including emissions from cleanup materials.</p> <p>VOC emissions shall not exceed 4.92 lbs/gallon of coating used on metal surfaces.</p> <p>VOC emissions shall not exceed 5.01 lbs/gallon of coating used on non-metal surfaces.</p> <p>VOC emissions shall not exceed 6.31 lbs/gallon of cleanup material.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e)(ii).</p> <p>See b)(2)b. – e., and c)(1) – (4)</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-21-09(U)(2)(e)(ii)	See c)(1)
c.	OAC rule 3745-17-11(3)	See c)(6), c)(7), and d)(4) – d)(8)

(2) Additional Terms and Conditions

- a. The VOC content of each coating applied to miscellaneous metal parts or products, as defined by OAC rule 3745-21-01, shall not exceed 4.92 pounds per gallon of coating, excluding water and exempt solvents.
- b. The VOC content of each coating applied to non-metal parts shall not exceed 5.01 pounds per gallon of coating.
- c. The VOC content of each cleaning solvent used in the pre-coating parts cleaning operation and gun cleanup operation shall not exceed 6.31 pounds per gallon of cleaning solvent.
- d. Emissions of toluene from emissions unit K002 shall not exceed 1 pound per hour.
- e. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the material usage limits, compliance with the VOC content limits, and compliance with the VOC and toluene emissions limits.

c) Operational Restrictions

- (1) The maximum daily coating usage for emissions unit K002 shall not exceed 3 gallons per day based on a summation of all coatings applied by spray gun and/or brush on miscellaneous metal parts, per OAC rule 3745-21-09(U)(2)(e)(ii).
- (2) The maximum daily coating usage for emissions unit K002 shall not exceed 5 gallons per day based on a summation of all coatings applied by spray gun and/or brush on miscellaneous metal and non-metal parts combined.
- (3) The maximum annual coating usage for emissions unit K002 shall not exceed 870 gallons per year based on a summation of all coatings applied by spray gun and/or brush on miscellaneous metal and/or non-metal parts.
- (4) The maximum daily cleaning solvent usage from the pre-coating parts cleaning operation and gun cleanup operation, combined, for emissions unit K002 shall not exceed 2 gallons per day based on a summation of all cleaning solvents applied.
- (5) The maximum annual cleaning solvent usage from the pre-coating parts cleaning operation and gun cleanup operation, combined, for emissions unit K002 shall not exceed 100 gallons per year based on a summation of all cleaning solvents applied.
- (6) 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.

- (7) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each day for emissions unit K002:
- a. the name and identification number of each coating and cleaning solvent;
  - b. the volume, in gallons, of each coating employed on miscellaneous metal parts and on non-metal parts, as applied;
  - c. the total volume, in gallons, of all of the coatings employed, as applied;
  - d. the volume, in gallons, of each cleaning solvent employed, as applied;
  - e. the VOC content of each coating applied to miscellaneous metal parts, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents;
  - f. the VOC content of each coating applied to metal and non-metal parts, in pounds VOC per gallon of coating, as applied;
  - g. the VOC content of each cleaning solvent used to pre-clean metal and/or non-metal parts and the clean-up of the spray guns, in pounds VOC per gallon of cleaning solvent, as applied;
  - h. the VOC emissions from the application of coatings and cleaning solvents, in pounds VOC per day [the summation of b. multiplied by f. for the coating(s), and d. multiplied by g. for the cleaning solvents(s) employed in K002];
  - i. toluene content of the coatings used; and
  - j. the hourly toluene emission rate for all coatings, in pounds per hour.
- (2) The permittee shall maintain monthly records of the total volume, in gallons, of all coatings and cleaning materials employed in this emissions unit. The monthly usage records shall be summarized in gallons per year at the end of each calendar year.
- (3) The permit to install for emissions units K001 and K002 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions units' exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by emissions units K001 and K002 using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration

from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutants(s):

Pollutant: Toluene

TLV (mg/m<sup>3</sup>): 75.4

Maximum Hourly Emission Rate (lbs/hr): 1, K002 (2, K001 and K002, combined)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1689.4 (K001 and K002, combined)

MAGLC (ug/m<sup>3</sup>): 1794.3

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled: and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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 the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is(are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- (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.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.

- (2) The permittee shall notify the Hamilton County Department of Environmental Services of any daily record showing that emissions unit K002 employed coatings that exceeded the applicable maximum VOC content limits outlined in terms and conditions b)(2)a., b)(2)b., and b)(2)c. A copy of such record shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance(s) occurred.

f) Testing Requirements

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

a. Emission Limitation

37.7 lbs of VOC emissions/ day, including emissions from cleanup materials.

Applicable Compliance Method

$(5.01 \text{ lbs VOC/ gallon of coating}) \times (5 \text{ gallons/ day}) = 25.1 \text{ lbs/day}$

$(6.31 \text{ lbs VOC/ gallon of cleanup}) \times (2 \text{ gallons/ day}) = 12.62 \text{ lbs/day}$

$(25.1 \text{ lbs/day}) + (12.62 \text{ lbs/day}) = 37.7 \text{ lbs/day total from K002}$

Emission Limitation

2.50 tons per year (TPY) VOC emissions, including emissions from cleanup materials.

Applicable Compliance Method

$(5.01 \text{ lbs VOC/ gallon of coating}) \times (870 \text{ gallons/ year}) / (1 \text{ ton/ } 2000 \text{ lbs}) = 2.18 \text{ TPY}$

$(6.31 \text{ lbs VOC/ gallon of cleanup}) \times (100 \text{ gallons/ year}) / (1 \text{ ton/ } 2000 \text{ lbs}) = 0.32 \text{ TPY}$

$(2.18 \text{ TPY}) + (0.32 \text{ TPY}) = 2.50 \text{ TPY total from K002}$

b. Emission Limitation

1 pound of toluene emissions per hour

Applicable Compliance Method

Compliance with the hourly toluene emission limitation shall be demonstrated by the record keeping requirement in the term and condition d)(1).

c. Emission Limitation

4.92 pounds of VOC per gallon of coating, excluding water and exempt solvents of each coating applied to metal parts.

Applicable Compliance Method

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

d. Emission Limitations

5.01 pounds VOC per gallon of coating of each coating applied to non-metal parts.

6.31 pounds VOC per gallon of cleaning solvent of each cleaning solvent used in the pre-coating parts cleaning operation and gun cleanup operation.

Applicable Compliance Method

Formulation data or USEPA method 24 shall be used to determine the VOC contents of the coatings and cleanup.

e. Compliance with the coating and cleanup usage limitation in terms and conditions c)(1) and d)(2) shall be determined by the record keeping requirements as specified in terms and conditions d)(1) and d)(2), respectively.

f. Compliance with the cleaning solvent usage limitation in terms and conditions c)(3) and c)(4) shall be determined by the record keeping requirements as specified in terms and conditions d)(1) and d)(2), respectively.

g) Miscellaneous Requirements

(1) None.