



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
WARREN COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 14-05601

Fac ID: 1483000394

DATE: 10/7/2004

Paramounts Kings Island
Jeff Hetzer
901 6300 Kings Island Drive
Kings Island, OH 450340000

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. 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, Ohio 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: USEPA

HCDES



**Permit To Install
Terms and Conditions**

**Issue Date: 10/7/2004
Effective Date: 10/7/2004**

FINAL PERMIT TO INSTALL 14-05601

Application Number: 14-05601
Facility ID: 1483000394
Permit Fee: **\$800**
Name of Facility: Paramounts Kings Island
Person to Contact: Jeff Hetzer
Address: 901 6300 Kings Island Drive
Kings Island, OH 450340000

Location of proposed air contaminant source(s) [emissions unit(s)]:
**6300 Kings Island Drive
Kings Island, Ohio, Ohio**

Description of proposed emissions unit(s):
Chapter 31 Modification of emissions units K001 and K002 to account for brushed on coatings.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS**A. Permit to Install General Terms and Conditions****1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

Paramounts Kings Island
PTI Application: 14-05601
Issued: 10/7/2004

Facility ID: 1483000394

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

Paramounts Kings Island
PTI Application: 14-05601
Issued: 10/7/2004

Facility ID: 1483000394

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	4.77

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
K001 - Custom made miscellaneous metal parts, wood, and fiberglass parts paint spray booth (Bench Booth); pre-coating parts cleaning operation; brushed coatings; gun cleanup	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-09(U)(1)(c)

OAC rule 3745-21-07(G)(2)

Applicable Emissions
Limitations/Control Measures

Organic compound (OC) emissions shall not exceed 8 lbs/hr when applying coatings identified as Photochemically Reactive Materials coatings to non-metal parts, including emissions from cleaning materials identified as Photochemically Reactive Materials.

OC emissions shall not exceed 37.7 lbs/day, including emissions from cleaning materials.

OC emissions shall not exceed 2.27 tons per year (TPY), including emissions from cleaning materials.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(c).

See terms and conditions A.2.b., A.2.c., A.2.d., A.2.e. and B.1. through B.4.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term and condition A.2.a.

2. Additional Terms and Conditions

- 2.a** The VOC/OC content of each coating applied to miscellaneous metal parts or products, as defined by OAC rule 3745-21-01(D)(40), shall not exceed 3.5 pounds per gallon of coating, excluding water and exempt solvents.
- 2.b** The OC content of each coating applied to non-metal parts shall not exceed 5.01 pounds per gallon of coating.
- 2.c** The OC 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.
- 2.d** Emissions of toluene from emissions unit K001 shall not exceed 1.75 pounds per hour (lbs/hr.)
- 2.e** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the material usage limits, compliance with the OC and VOC content limits, and compliance with the OC and toluene emissions limits.

B. 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.

C. 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 total volume in gallons of each cleaning solvent employed, as applied;
 - f. the VOC content of each coating applied to miscellaneous metal parts, in pounds VOC per gallon of coating, as applied, excluding water and exempt solvents;
 - g. the OC content of each coating applied to metal and non-metal parts, in pounds OC per gallon of coating, as applied;
 - h. the OC 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 OC per gallon of cleaning solvent, as applied;
 - i. the OC emissions from the application of coatings and cleaning solvents, in pounds OC per day [the summation of b. multiplied by g. for the coating(s), and d. multiplied by h. for the cleaning solvents(s) employed in K001].
 - j. the hours of actual operation of the booth;
 - k. the hourly OC emission rate for all coatings applied to non-metal parts, in pounds per hour [i. divided by j.];
 - l. the toluene content of the coatings used;
 - m. the hourly toluene emission rate for all coatings, in pounds per hour [l. multiplied by b. divided by j.]; and

- n. the identification of each coating and cleaning material as a photochemically reactive material.

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

2. The permittee shall maintain 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 permittee shall collect and record the following information for each hour when applying coatings and/or cleaning materials identified as Photochemically Reactive Materials (PRMs) on non-metal parts in emissions unit K001:
- a. the company identification for each coating employed;
 - b. for each day during which a photochemically reactive material is employed, the volume, in gallons, of each coating, as applied, each hour of the day;
 - c. the OC content of each coating, in pounds OC per gallon of coating, as applied; and
 - d. for each hour during which a photochemically reactive material is employed, the total OC emission rate for all coatings, in pounds per hour (b. multiplied by c. for the non-metal PRM coating(s) employed in K001).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the definitions of "photochemically reactive" and "nonphotochemically" are based upon OAC rule 3745-21-01(C)(5)].

4. 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" pollutant(s):

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 1.75, K001 (3.50, K001 and K002, combined)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4428 (K001 and K002, combined)

MAGLC (ug/m3): 4476

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.

Emissions Unit ID: **K001**

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.

D. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services of any daily record showing that emissions unit K001 employed coatings and/or cleanup materials that exceeded the applicable maximum OC content limits outlined in terms and conditions A.2.b. and A.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. For each OC content limit exceedance the permittee shall also identify if an exceedance of the applicable hourly and daily OC emissions limit occurred.
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 A.2.a. A copy of such record shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance(s) occurred. For each VOC content limit exceedance the permittee shall also identify if an exceedance of the applicable daily OC emissions limit occurred.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any daily record showing that emissions unit K001 employed more than the applicable maximum daily coating usage limit and/or cleanup material usage limit outlined in terms and conditions B.1. and B.3. A copy of such record shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurred. For each usage limit exceedance the permittee shall also identify if an exceedance of the applicable daily OC emissions limit occurred.
4. The permittee shall notify the Hamilton County Department of Environmental Services of any daily record showing:
 - a. an identification of each hour during which the organic compound emissions from the non-metal parts coatings and cleaning materials when applying photochemically reactive

materials exceeded 8 pounds per hour, and the actual organic compound emissions for each such hour; and

- b. an identification of each day during which the organic compound emissions from the coatings and cleanup materials exceeded 37.7 pounds per day, and the actual organic compound emissions for each such day.

A copy of such record shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance(s) occurred.

5. The permittee shall notify the Hamilton County Department of Environmental Services of any daily record showing that toluene emissions exceeded the allowable maximum toluene emissions limit, as outlined in term and condition A.2.d. A copy of such record, including the actual toluene emissions for each such hour, shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance(s) occurred.
6. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which specify the total OC emissions from emissions unit K001 for the previous calendar year. This report shall also specify the total volume, in gallons, of coatings employed in emissions unit K001 and the total volume, in gallons, of cleaning materials employed in emissions unit K001 for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Compliance with the emission limitations and OC content limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation

8 lbs OC emissions/hr when applying PRM coatings on non-metal parts

Applicable Compliance Method

Compliance with the hourly OC emissions limitation shall be demonstrated by the record keeping requirement in term and condition C.1 and C.3.
 - b. Emissions Limitation

37.7 lbs OC emissions/day, including emissions from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitation shall be demonstrated by the record keeping requirement in term and condition C.1.

c. Emissions Limitation

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

Applicable Compliance Method

Compliance with the annual OC emissions limitation shall be demonstrated by a calendar year summation of the actual daily emissions as calculated according to the record keeping requirement in term and condition C.1.

d. Emissions Limitation

1.75 pounds toluene emissions per hour

Applicable Compliance Method

Compliance with the hourly toluene emissions limitation shall be demonstrated by the record keeping requirement in term and condition C.1.

e. Emissions Limitations

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.

f. Emissions Limitations

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

6.31 pounds OC 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 (for coatings) shall be used to determine the OC contents of the coatings.

2. Compliance with the coating usage limitation in term and condition B.1. and B.2. shall be determined by the record keeping requirements as specified in term and condition C.1. and C.2., respectively.
3. Compliance with the cleaning solvent usage limitation in term and condition B.3. and B.4. shall be determined by the record keeping requirements as specified in term and condition C.1. and C.2., respectively.

F. Miscellaneous Requirements

1. This terms and conditions of this permit to install supercede the terms and conditions for emissions unit K001 in Permit To Install 14-04321 as issued September 10, 1997.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
K002 - Miscellaneous metal parts, wood, and fiberglass parts paint spray booth (Concept II downdraft booth); solvent pre-clean operation; brushed coatings	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-21-09(U)(2)(e)(ii)</p> <p>OAC rule 3745-21-07(G)(2)</p>

Paran**PTI A****Issued: 10/7/2004**Emissions Unit ID: **K002**

Applicable Emissions
Limitations/Control Measures

Organic compound (OC) emissions shall not exceed 8 lbs/hr when applying coatings identified as Photochemically Reactive Materials coatings to non-metal parts, including emissions from cleaning materials identified as Photochemically Reactive Materials.

OC emissions shall not exceed 37.7 lbs/day, including emissions from cleaning materials.

OC emissions shall not exceed 2.50 tons per year (TPY), including emissions from cleaning materials.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e)(ii).

See terms and conditions A.2.a. through A.2.e. and B.1. through B.4.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term and condition B.1.

2. Additional Terms and Conditions

- 2.a** The OC content of each coating applied to miscellaneous metal parts or products, as defined by OAC rule 3745-21-01(D)(40), shall not exceed 4.92 pounds per gallon of coating, excluding water and exempt solvents.
- 2.b** The OC content of each coating applied to non-metal parts shall not exceed 5.01 pounds per gallon of coating.
- 2.c** The OC 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.
- 2.d** Emissions of toluene from emissions unit K002 shall not exceed 1.75 pounds per hour (lbs/hr.)
- 2.e** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the material usage limits, compliance with the OC and VOC content limits, and compliance with the OC and toluene emissions limits.

B. Operational Restrictions

- 1. The maximum daily coating usage for emissions unit K002 shall not exceed 3 gallons per day based on a summation of those coatings applied by spray gun and/or brush on miscellaneous metal parts, per OAC rule 3745-21-09(U)(2)(e)(ii); and 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.
- 2. 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.
- 3. 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.
- 4. 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.

C. 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 on miscellaneous metal parts and on non-metal parts, as applied;
 - d. the volume, in gallons, of each cleaning solvent employed, as applied;
 - e. the total volume in gallons of each cleaning solvent employed, as applied;
 - f. the OC content of each coating applied to miscellaneous metal parts, in pounds OC per gallon of coating, as applied, excluding water and exempt solvents;
 - g. the OC content of each coating applied to non-metal parts, in pounds OC per gallon of coating, as applied;
 - h. the OC content of each cleaning solvent used to clean metal and/or non-metal parts, in pounds OC per gallon of cleaning solvent, as applied;
 - i. the OC emissions from the application of coatings and cleaning solvents, in pounds OC per day [the summation of b. multiplied by f. for the miscellaneous metal coating(s), b. multiplied by g. for the non-metal coating(s), and d. multiplied by h. for the cleaning solvents(s) employed in K002].
 - j. the hours of actual operation of the booth;
 - k. the hourly OC emission rate for all coatings applied to non-metal parts, in pounds per hour [i. divided by j.];
 - l. the toluene content of the coatings used;
 - m. the hourly toluene emission rate for all coatings, in pounds per hour [l. multiplied by b. divided by j.] ;and

Emissions Unit ID: **K002**

- n. the identification of each coating and cleaning material as a photochemically reactive material.
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 permittee shall collect and record the following information for each hour when applying coatings and/or cleaning materials identified as Photochemically Reactive Materials (PRMs) on non-metal parts in emissions unit K002:
 - a. the company identification for each coating employed;
 - b. for each day during which a photochemically reactive material is employed, the volume, in gallons, of each coating, as applied, each hour of the day;
 - c. the OC content of each coating, in pounds OC per gallon of coating, as applied; and
 - d. for each hour during which a photochemically reactive material is employed, the total OC emission rate for all coatings, in pounds per hour (b. multiplied by c. for the non-metal PRM coating(s) employed in K002).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the definitions of "photochemically reactive" and "nonphotochemically" are based upon OAC rule 3745-21-01(C)(5)].

4. 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" pollutant(s):

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 1.75, K002 (3.50, K001 and K002, combined)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4428 (K001 and K002, combined)

MAGLC (ug/m3): 4476

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 it's 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.

D. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services of any daily record showing that emissions unit K002 employed coatings and/or cleanup materials that exceeded the applicable maximum OC content limits outlined in terms and conditions A.2.b. and A.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. For each OC content limit exceedance the permittee shall also identify if an exceedance of the applicable hourly and daily OC emissions limit occurred.
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 A.2.a. A copy of such record shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance(s) occurred. For each VOC content limit exceedance the permittee shall also identify if an exceedance of the applicable daily OC emissions limit occurred.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any daily record showing that emissions unit K002 employed more than the applicable maximum daily coating usage limit and/or cleanup material usage limit outlined in terms and conditions B.1. and B.3. A copy of such record shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurred. For each usage limit exceedance the permittee shall also identify if an exceedance of the applicable daily OC emissions limit occurred.
4. The permittee shall notify the Hamilton County Department of Environmental Services of any daily record showing:
 - a. an identification of each hour during which the organic compound emissions from the non-metal parts coatings and cleaning materials exceeded 8 pounds per hour, and the actual organic compound emissions for each such hour; and
 - b. an identification of each day during which the organic compound emissions from the coatings and cleanup materials exceeded 37.7 pounds per day, and the actual organic compound emissions for each such day.

A copy of such record shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance(s) occurred.

5. The permittee shall notify the Hamilton County Department of Environmental Services of any

Emissions Unit ID: **K002**

daily record showing that toluene emissions exceeded the allowable maximum toluene emissions limit, as outlined in term and condition A.2.d. A copy of such record, including the actual toluene emissions for each such hour, shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance(s) occurred.

6. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which specify the total OC emissions from emissions unit K002 for the previous calendar year. This report shall also specify the total volume, in gallons, of coatings employed in emissions unit K002 and the total volume, in gallons, of cleaning materials employed in emissions unit K002 for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Compliance with the emission limitations and OC content limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation

8 lbs OC emissions/hr when applying PRM coatings on non-metal parts

Applicable Compliance Method

Compliance with the hourly OC emissions limitation shall be demonstrated by the record keeping requirement in term and condition C.1 and C.3.
 - b. Emissions Limitation

37.7 lbs OC emissions/day, including emissions from cleanup materials

Applicable Compliance Method

Compliance with the daily OC emissions limitation shall be demonstrated by the record keeping requirement in term and condition C.1.
 - c. Emissions Limitation

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

Applicable Compliance Method

Compliance with the annual OC emissions limitation shall be demonstrated by a calendar

26

Paran

PTI A

Issued: 10/7/2004

Emissions Unit ID: **K002**

year summation of the actual daily emissions as calculated according to the record keeping requirement in term and condition C.1.

d. Emissions Limitation

1.75 pounds toluene emissions per hour

Applicable Compliance Method

Compliance with the hourly toluene emissions limitation shall be demonstrated by the record keeping requirement in term and condition C.1.

e. Emissions Limitations

4.92 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.

f. Emissions Limitations

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

6.31 pounds OC 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 (for coatings) shall be used to determine the OC contents of the coatings.

2. Compliance with the coating and cleanup usage limitation in term and condition B.1. and B.2. shall be determined by the record keeping requirements as specified in term and condition C.1. and C.2., respectively.

Paran

PTI A

Issued: 10/7/2004

Emissions Unit ID: **K002**

3. Compliance with the cleaning solvent usage limitation in term and condition B.3. and B.4. shall be determined by the record keeping requirements as specified in term and condition C.1. and C.2., respectively.

F. Miscellaneous Requirements

1. This terms and conditions of this permit to install supercede the terms and conditions for K002 in Permit To Install 14-04321 as issued September 10, 1997.