



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

07/31/02

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

03-72-03-0199  
Aeroquip Inoac Company  
Shawn M. Reinhart  
1410 Motor Drive  
Fremont, OH 43420

Dear Shawn M. Reinhart:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Northwest District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

**If you have any questions or comments concerning this draft Title V permit, please contact Northwest District Office.**

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA (electronically submitted)  
File, DAPC PMU  
Northwest District Office



State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 07/31/02

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 03-72-03-0199 to:

Aeroquip Inoac Company
1410 Motor Drive
Fremont, OH 43420

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include P004, P005, P008, P018, P019, R006, R007, R008, R009, R011, and R018.

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419) 352-8461

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. *State and Federally Enforceable Section*

#### 1. **Monitoring and Related Record Keeping and Reporting Requirements**

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

- i. The date, place (as defined in the permit), and time of sampling or measurements.
- ii. The date(s) analyses were performed.
- iii. The company or entity that performed the analyses.
- iv. The analytical techniques or methods used.
- v. The results of such analyses.
- vi. The operating conditions existing at the time of sampling or measurement.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

b. 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 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.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*

c. The permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

ii. **For emission limitations, operational restrictions, and control device operating parameter limitations:**

(a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring and record keeping requirements specified in this permit; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the

deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))*

- (b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))*

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and

reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

## **2. 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 unit(s) 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 OAC rule 3745-15-06, 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).

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))*

## **3. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

## **4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

*(Authority for term: OAC rule 3745-77-07(A)(5))*

## **5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

## **6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

*(Authority for term: OAC rule 3745-77-07(A)(7))*

**7. 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.

*(Authority for term: OAC rule 3745-77-07(A)(8))*

**8. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(9))*

**9. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(10))*

**10. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

## **11. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

*(Authority for term: OAC rule 3745-77-07(B))*

## **12. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

- i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.
    - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

### **13. Permit Shield**

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

*(Authority for term: OAC rule 3745-77-07(F))*

#### **14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

#### **15. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

*(Authority for term: OAC rule 3745-77-07(G))*

#### **16. Off-Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as

insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

*(Authority for term: OAC rule 3745-77-07(I))*

#### **17. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

*(This term is provided for informational purposes only.)*

#### **18. Insignificant Activities**

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

#### **19. Permit to Install Requirement**

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

#### **20. 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.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

## **B. State Only Enforceable Section**

### **1. Reporting Requirements Related to Monitoring and Record Keeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping 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 (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

### **2. 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.

### **3. 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.

**4. 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).

**5. 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.

**6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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.

## **Part II - Specific Facility Terms and Conditions**

### **A. State and Federally Enforcable Section**

**None**

### **B. State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility:

Cleaver-Brooks 150 hp Boiler (B001); Binks Oven #79 (P003); Paint Suppliers Lab (R001); Design Studio (R004); Blow Mold #1 (Z001); Blow Mold #2 (Z002); Blow Mold #3 (Z003); Blow Mold #4 (Z004); Blow Mold #5 (Z005); Blow Mold #6 (Z006); Robot Room #1 (Z007); Robot Room #2 (Z008); Robot Room #3 (Z009); Robot Room #4 (R010); Post-Op Rework (Z011); Assembly and Post-Op Rework (Z012); Paint Line #3 Paint/Waste Storage (Z014); Paint Line #3 Paint and Solvent Storage Area (Z015); Paint Line #3 Air Makeup Unit #851 (Z016); Paint Line #3 Air Makeup Unit #852 (Z017); Paint Line #3 Air Makeup Unit #853 (Z018); Paint Line #4 Air Makeup Unit Primer Booth (Z019); Paint Line #4 Air Makeup Unit Color Booth (Z020); Paint Line #4 Air Makeup Unit Clear Booth (Z021); Propane Vaporizer (Z043); Post-Op Rework Vacuum System (Z044); Blow Mold Natural Gas Material Dryer (Z045); Glue Machine & Booth (Z046); Storage Silo #1 (Z047); Storage Silo #2 (Z048); Storage Silo #3 (Z049); Storage Silo #4 (Z050); Storage Silo #5 (Z051); Storage Silo #6 (Z052); Storage Silo #7 (Z053); Storage Silo #8 (Z054); Blow Molding Machines - Robotic Sanders (Z056); Dual Head Blow Molding Machine (Z059); Vacuum Pump Blow Mold Pellet Delivery System (Z060); Electric Curing Oven (Z062); and Paint Supplier Lab Electric Curing Oven (Z063).

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations as well as any emission limitations and/or control requirements contained within a PTI for the unit.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Paint Line #4 - Primer Oven (P004)  
**Activity Description:** TKS Industrial Co. Cure Oven for Paint Line #4 Primer Booth

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
primer cure oven, with thermal incinerator; paint line #4	OAC rule 3745-31-05(A)(3) (PTI #03-8365)	0.36 lb organic compounds (OC)/hr  The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(A), 3745-21-08(B), 3745-23-06(B), 3745-17-10(B), 3745-17-07(A) and 3745-31-05(D).
	OAC rule 3745-21-07(G)(1)	See A.I.2.a.
	OAC rule 3745-17-10(B)	0.020 lb particulate emissions (PE)/mmBtu of actual heat input
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-18-06(A)	See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a The hourly emission limitation specified by this rule is less stringent than the hourly emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-8365.

## **2. Additional Terms and Conditions (continued)**

- 2.c** OAC rule 3745-18-06(A) does not establish sulfur dioxide emission limitations for this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emissions unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).
- 2.d** For purposes of calculating the OC emission rates for this emissions unit and the associated spray booth (R006), the permittee shall utilize a value of 98 percent as the maximum percentage of the OCs employed in the spray booth that are emitted uncontrolled from the spray booth. The remaining 2 percent of the OCs employed in the spray booths shall be considered to be the uncontrolled emissions for this emissions unit. This "split" of OC emissions between this emissions unit and the associated spray booth is based upon emission testing conducted by the permittee. The "split" of OC emissions between this emissions unit and the associated spray booth shall be revised in accordance with the results of any future testing to determine the oven/booth split (weight %).

## **II. Operational Restrictions**

1. The average combustion temperature within a thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance; and
- b. a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall collect and record the following information each day for this emissions unit:
  - a. the total potential (prior to applying the booth/oven "split") uncontrolled OC emissions for the spray booth associated with this emissions unit, in pounds, calculated by summing (the number of gallons of each coating employed in emissions unit R006 x the OC content of each coating employed) for all coatings;
  - b. the total potential OC emission rate, in pounds, calculated by multiplying A.III.2.a by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.d. of this permit), in pounds;
  - c. the total controlled OC emission rate, in pounds, calculated by multiplying A.III.2.b by (1 - the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance);
  - d. the number of hours of operation; and
  - e. the average hourly controlled OC emission rate, i.e., (c)/(d), in pounds per hour (average).

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified above; and
  - b. all exceedances of the hourly OC emission limitation of 0.36 pound.
2. The permittee shall submit quarterly summaries that include a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation.
3. The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

1. Compliance with the emission limitation specified in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method:
  - 1.a Emission Limitation  
0.36 lb OC/hr  
  
Applicable Compliance Method  
Compliance with the hourly allowable OC emission limitation shall be determined by emission testing conducted in accordance with Methods 18, 25, or 25 A, as appropriate, of 40 CFR, Part 60, Appendix A and also the record keeping requirements established in section A.III.2 of this permit.
  - 1.b Emission Limitation: Visible PE shall not exceed 20%, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

## V. Testing Requirements (continued)

- 1.c** Emission Limitation: 0.020 lb PE/mmBtu of actual heat input

**Applicable Compliance Method:**

The permittee may determine compliance with the PE limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the emissions unit (mmBtu/hr).

If required, compliance with the lb/mmBtu PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- 2.a** The emission testing shall be conducted within 3 months of permit issuance and within 6 months prior to permit expiration
- 2.b** The emission testing shall be conducted to demonstrate compliance with the allowable hourly mass emission rate for OC.
- 2.c** The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for OC, Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- 2.d** The test(s) shall be conducted while this emissions unit and the associated coating line are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
- 3.** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

## V. Testing Requirements (continued)

4. OC emission testing also shall be conducted at the inlet of this oven (P004) to determine the uncontrolled mass rate of OC emissions for this emissions unit, for purposes of determining the oven/booth split as defined in section A.I.2.d of this permit. To determine the oven/booth split, the permittee shall employ the following equations during the period of emission testing:

$$UOC_{booth} = TOC_{booth} - UOC_{oven}$$

$$B_{split} (wt\%) = (UOC_{booth}/TOC_{booth}) \times 100\%$$

$$O_{split} (wt\%) = 100 - B_{split}$$

Where,

$UOC_{booth}$  : uncontrolled OC emissions from the spray booth (R006) [lbs/t]

$TOC_{booth}$  : total potential (prior to applying the booth/oven split) uncontrolled OC emission rate for all the coatings employed in the spray booth (R006) [lbs/t]

$UOC_{oven}$  : uncontrolled VOC emissions from this emissions unit (P004), in lbs/t, [this value is obtained from the results of the stack testing required above]

$B_{split}$  : the portion of the "TOC\_Booth" emitted in the booth (wt%)

$O_{split}$  : the portion of the "TOC\_Booth" emitted in the oven (wt%)

t : the duration of the emission testing, in minutes or hours

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
primer cure oven with thermal oxidizer; paint line #4	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Benzene\*

TLV (mg/m3): 32

Maximum Hourly Emission Rate (lbs/hr): 15.60

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 248

MAGLC (ug/m3): 762

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Paint Line #4 - Clear Oven (P005)

**Activity Description:** TKS Industrial Co. Cure Oven for Paint Line #4 Clearcoat Booth

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
primer cure oven, with thermal incinerator; paint line #4	OAC rule 3745-31-05(A)(3) (PTI #03-8365)	0.36 lb organic compounds (OC)/hr  The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(A), 3745-21-08(B), 3745-23-06(B), 3745-17-10(B), 3745-17-07(A) and 3745-31-05(D).
	OAC rule 3745-21-07(G)(1)	See A.I.2.a.
	OAC rule 3745-17-10(B)	0.020 lb particulate emissions (PE)/mmBtu of actual heat input
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-18-06(A)	See A.I.2.c.

**2. Additional Terms and Conditions**

- 2.a The hourly emission limitation specified by this rule is less stringent than the hourly emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-8365.

## **2. Additional Terms and Conditions (continued)**

- 2.c** OAC rule 3745-18-06(A) does not establish sulfur dioxide emission limitations for this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emissions unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).
- 2.d** For purposes of calculating the OC emission rates for this emissions unit and the associated spray booths (R007 and R008), the permittee shall utilize a value of 98 percent as the maximum percentage of the OCs employed in the spray booths that are emitted uncontrolled from the spray booths. The remaining 2 percent of the OCs employed in the spray booths shall be considered to be the uncontrolled emissions for this emissions unit. This "split" of OC emissions between this emissions unit and the associated spray booths is based upon emission testing conducted by the permittee. The "split" of OC emissions between this emissions unit and the associated spray booths shall be revised in accordance with the results of any future testing to determine the oven/booth split (weight %).

## **II. Operational Restrictions**

1. The average combustion temperature within a thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance; and
- b. a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall collect and record the following information each day for this emissions unit:
  - a. the total potential (prior to applying the booth/oven "split") uncontrolled OC emissions for the spray booths associated with this emissions unit, in pounds, calculated by summing (the number of gallons of each coating employed in emissions units R007 and R008, combined, x the OC content of each coating employed) for all coatings;
  - b. the total potential OC emission rate, in pounds, calculated by multiplying A.III.2.a by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.d. of this permit), in pounds;
  - c. the total controlled OC emission rate, in pounds, calculated by multiplying A.III.2.b by (1 - the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance);
  - d. the number of hours of operation; and
  - e. the average hourly controlled OC emission rate, i.e., (c)/(d), in pounds per hour (average).

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified above; and
  - b. all exceedances of the hourly OC emission limitation of 0.36 pound.
2. The permittee shall submit quarterly summaries that include a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation.
3. The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

1. Compliance with the emission limitation specified in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method:
  - 1.a Emission Limitation  
0.36 lb OC/hr  
  
Applicable Compliance Method  
Compliance with the hourly allowable OC emission limitation shall be determined by emission testing conducted in accordance with Methods 18, 25, or 25 A, as appropriate, of 40 CFR, Part 60, Appendix A and also the record keeping requirements established in section A.III.2 of this permit.
  - 1.b Emission Limitation: Visible PE shall not exceed 20%, as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

## V. Testing Requirements (continued)

- 1.c** Emission Limitation: 0.020 lb PE/mmBtu of actual heat input

**Applicable Compliance Method:**

The permittee may determine compliance with the PE limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the emissions unit (mmBtu/hr).

If required, compliance with the lb/mmBtu PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- 2.a** The emission testing shall be conducted within 3 months of permit issuance and within 6 months prior to permit expiration
- 2.b** The emission testing shall be conducted to demonstrate compliance with the allowable hourly mass emission rate for OC.
- 2.c** The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for OC, Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- 2.d** The test(s) shall be conducted while this emissions unit and the associated coating line are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
- 3.** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

## V. Testing Requirements (continued)

4. OC emission testing also shall be conducted at the inlet of this oven (P005) to determine the uncontrolled mass rate of OC emissions for this emissions unit, for purposes of determining the oven/booth split as defined in section A.I.2.d of this permit. To determine the oven/booth split, the permittee shall employ the following equations during the period of emission testing:

$$UOC_{booth} = TOC_{booth} - UOC_{oven}$$

$$B_{split} (wt\%) = (UOC_{booth}/TOC_{booth}) \times 100\%$$

$$O_{split} (wt\%) = 100 - B_{split}$$

Where,

$UOC_{booth}$  : uncontrolled OC emissions from the spray booths (R007 and R008) [lbs/t]

$TOC_{booth}$  : total potential (prior to applying the booth/oven split) uncontrolled OC emission rate for all the coatings employed in the spray booths (R007 and R008) [lbs/t]

$UOC_{oven}$  : uncontrolled VOC emissions from this emissions unit (P005), in lbs/t, [this value is obtained from the results of the stack testing required above]

$B_{split}$  : the portion of the "TOC\_Booth" emitted in the booths (wt%)

$O_{split}$  : the portion of the "TOC\_Booth" emitted in the oven (wt%)

t : the duration of the emission testing, in minutes or hours

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
primer cure oven with thermal oxidizer; paint line #4	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Benzene\*

TLV (mg/m3): 32

Maximum Hourly Emission Rate (lbs/hr): 15.60

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 248

MAGLC (ug/m3): 762

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Paint Line #3 - Clear Oven (P008)  
**Activity Description:** Protect Aire Cure Oven for Paint Line #3 with flash zone

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
clearcoat cure oven, with flash zone and regenerative thermal oxidizer (RTO); paint line #3	OAC rule 3745-31-05 (A)(3) (PTI #03-10891)	0.38 lb organic compounds (OC)/hr 1.51 tons OC/yr
		combustion emissions from the RTO:
		0.62 lb nitrogen oxides (NOx)/hr 2.73 tons NOx/yr (See A.I.2.a.)
		combustion emissions from the oven:
		0.57 lb NOx/hr 2.29 tons NOx/yr
		See A.I.2.b.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(A), 3745-21-08(B), 3745-23-06(B), 3745-17-10(B), 3745-17-07(A) and 3745-31-05(D).
		See A.I.2.c.
		See A.I.2.e.
		0.020 lb particulate emissions (PE)/mmBtu of actual heat input
	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.	
	See A.I.2.f.	
	OAC rule 3745-21-07(G)(1)	
	OAC rules 3745-21-08(B) and 3745-23-06(B)	
	OAC rule 3745-17-10(B)	
	OAC rule 3745-17-07(A)	
	OAC rule 3745-18-06(A)	

## 2. Additional Terms and Conditions

- 2.a Emissions units R009, R011, R018, P008, P018 and P019 are vented to a common RTO. The emission limitations of 0.62 pound NO<sub>x</sub>/hour and 2.73 tons NO<sub>x</sub>/year represent the total allowable emissions from the RTO for all these emissions units.
- 2.b Best available technology (BAT) for this emissions unit shall be the use of a RTO with a 100 percent capture efficiency and a minimum 90 percent destruction efficiency for OC, by weight.
- 2.c The emission limits/control requirements specified by this rule are less stringent than the emission limits/control requirements established pursuant to OAC rule 3745-31-05 (A)(3).
- 2.d For purposes of calculating the OC emission rates for this emissions unit and the associated spray booths (R011 and R018), the permittee shall utilize a value of 98 percent as the maximum percentage of the OCs employed in the spray booths that are emitted uncontrolled from the spray booths. The remaining 2 percent of the OCs employed in the spray booths shall be considered to be the uncontrolled emissions for this emissions unit. This "split" of OC emissions between this emissions unit and the associated spray booths is based upon emission testing conducted by the permittee. The "split" of OC emissions between this emissions unit and the associated spray booths shall be revised in accordance with the results of any future testing to determine the oven/booth split (weight %).
- 2.e The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-10891.
- 2.f OAC rule 3745-18-06(A) does not establish sulfur dioxide emission limitations for this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emissions unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).

## II. Operational Restrictions

- 1. The emissions unit shall be equipped with a permanent total enclosure (PTE) which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:
  - a. any natural draft opening (NDO) shall be at least 4 equivalent opening diameters from each OC emitting point unless otherwise specified by the Administrator;
  - b. the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's 4 walls, floor, and ceiling;
  - c. the average facial velocity (FV) of air through all NDO's shall be at least 3,600 m/hr (200 fpm). The direction of air flow through all NDO's shall be into the enclosure;
  - d. all access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process; and
  - e. all OC the emissions must be captured and contained for discharge through a control device.
- 2. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, whenever this emissions unit is in operation.

## II. Operational Restrictions (continued)

3. The average combustion temperature within the RTO, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
4. The annual number of hours of operation for this emissions unit shall not exceed 8,030.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO whenever this emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation; and
  - b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated that the emissions unit was in compliance.
2. The permittee shall maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the difference in pressure between the permanent total enclosure and the surrounding area(s) on a daily basis.

3. The permittee shall collect and record the following information each day for this emissions unit:
  - a. the total potential uncontrolled OC emissions for the spray booths associated with this emissions unit (section A.III.4.d of emissions unit R011 + section A.III.4.d of emissions unit R018), in pounds;
  - b. the total potential OC emission rate, in pounds, calculated by multiplying A.III.3.a by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.d. of this permit), in pounds;
  - c. the total controlled OC emission rate, in pounds, calculated by multiplying A.III.3.b by (1 - the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance); and
  - d. the number of hours of operation;
  - e. the average hourly controlled OC emission rate, i.e., (c)/(d), in pounds per hour (average).

### III. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall collect and record each year the following information for this emissions unit:
  - a. the total controlled OC emission rate, in tons, calculated by summing the daily OC emission rates, from section A.III.3.c, for the calendar year, and dividing by 2000; and
  - b. the total number of hours of operation, calculated by summing the daily numbers of hours of operation, from section A.III.3.d, for the calendar year.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions units were in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated that the emissions unit was in compliance; and
  - b. all exceedances of the hourly OC emission limitation of 0.38 pound.
2. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified above.
3. The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that specify the total OC emissions and the total number of hours of operation from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations:  
0.38 lb OC/hr and 1.51 tons OC/yr

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation shall be determined by emission testing conducted in accordance with Methods 18, 25, or 25 A, as appropriate, of 40 CFR, Part 60, Appendix A and also the record keeping requirements established in section A.III.3 of this permit.

Compliance with the annual limitation shall be determined by the record keeping requirements established in sections A.III.3 and 4 of this permit.

## V. Testing Requirements (continued)

- 1.b** Emission Limitations:  
0.62 lb NO<sub>x</sub>/hr and 2.73 TPY NO<sub>x</sub>, from the RTO

**Applicable Compliance Method:**

Compliance with the hourly emission limitation may be determined by multiplying the maximum rated capacity of the RTO (6.54 mmBtu/hr) by the emission factor in AP-42, Chapter 1.4 (revised 7/98) of 100 lbs NO<sub>x</sub>/mm cu. ft. of natural gas, and then dividing by 1020 mmBtu/mm cu. ft. of natural gas.

If required, compliance shall be determined in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the hourly NO<sub>x</sub> limitation by 8,760 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- 1.c** Emission Limitations:  
0.57 lb NO<sub>x</sub>/hr and 2.29 tons NO<sub>x</sub>/yr, from the oven

**Applicable Compliance Method:**

Compliance with the hourly emission limitation may be determined by multiplying the maximum rated capacity of the oven (6.0 mmBtu/hr) by the emission factor in AP-42, Chapter 1.4 (revised 7/98) of 100 lbs NO<sub>x</sub>/mm cu. ft. of natural gas, and then dividing by 1020 mmBtu/mm cu. ft. of natural gas.

If required, compliance shall be determined in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual NO<sub>x</sub> emission limitation was established by multiplying the hourly NO<sub>x</sub> emission limitation by 8030 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly emission limitation and with the restriction on the annual number of hours of operation, compliance shall also be shown with the annual emission limitation.

- 1.d** Emissions Limitation:  
100% capture and 90% destruction efficiencies, by weight, for OC

**Applicable Compliance Method:**

Compliance with the efficiency requirements above shall be determined based upon the results of emission testing conducted in accordance with the methods outlined in Section A.V.2. of this permit.

- 1.e** Emission Limitation:  
8,030 hours of operation/yr

**Applicable Compliance Method:**

Compliance with the annual restriction on the number of hours of operation shall be determined by the record keeping requirements specified in sections A.III.3 and 4 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 3 months of permit issuance and within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly OC mass emission rate and the capture and control efficiency requirements for OC.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for OC, Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - d. For testing of the capture and control efficiencies, the test(s) shall be conducted while emissions units R009, R011, R018, P008, P018 and P019 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - e. For testing of the hourly OC emission rate, the test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - f. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR, Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement. ) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in the approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

## V. Testing Requirements (continued)

4. OC emission testing also shall be conducted at the inlet of this oven (P008) to determine the uncontrolled mass rate of OC emissions for this emissions unit, for purposes of determining the oven/booth split as defined in section A.I.2.d of this permit. To determine the oven/booth split, the permittee shall employ the following equations during the period of emission testing:

$$UOC_{booth} = TOC_{booth} - UOC_{oven}$$

$$B_{split} (wt\%) = (UOC_{booth}/TOC_{booth}) \times 100\%$$

$$O_{split} (wt\%) = 100 - B_{split}$$

Where,

$UOC_{booth}$  : uncontrolled OC emissions from the spray booths (R011 and R018) [lbs/t]

$TOC_{booth}$  : total potential (prior to applying the booth/oven split) uncontrolled OC emission rate for all the coatings employed in the spray booths (R011 and R018) [lbs/t]

$UOC_{oven}$  : uncontrolled VOC emissions from this emissions unit (P008), in lbs/t, [this value is obtained from the results of the stack testing required above]

$B_{split}$  : the portion of the "TOC\_Booth" emitted in the booths (wt%)

$O_{split}$  : the portion of the "TOC\_Booth" emitted in the oven (wt%)

t : the duration of the emission testing, in minutes or hours

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
clearcoat cure oven, with flash zone and regenerative thermal oxidizer; paint line #3	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit using data from the permit to install application and the BREEZE AIR ISCST3, v. 2.03 model. The predicted 1-hour maximum ground-level concentration from the use of the BREEZE AIR ISCST3, v. 2.03 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

### III. Monitoring and/or Record Keeping Requirements (continued)

Pollutant: ethyl benzene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.37  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: methyl ethyl ketone  
TLV (ug/m3): 590  
Maximum Hourly Emission Rate (lbs/hr): 2.54  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 14,048.00

Pollutant: xylene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.06  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: toluene  
TLV (ug/m3): 188  
Maximum Hourly Emission Rate (lbs/hr): 0.26  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 4,476.00

Pollutant: methanol  
TLV (ug/m3): 262  
Maximum Hourly Emission Rate (lbs/hr): 0.01  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 6,238.00

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Paint Line #3 - Paint Mix Operations (P018)  
**Activity Description:** Paint mixing, storage, and clean-up area for Paint Line #3

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paint mix operations, with regenerative thermal oxidizer (RTO); paint line #3.	OAC rule 3745-31-05 (A)(3) (PTI #03-10819)	0.37 lb organic compounds (OC)/hr, 0.33 ton OC/yr  combustion emissions from the RTO:  0.62 lb nitrogen oxides (NOx)/hr 2.73 tons NOx/yr (See A.I.2.a.)  See A.I.2.b.

**2. Additional Terms and Conditions**

- 2.a Emissions units R009, R011, R018, P008, P018 and P019 are vented to a common RTO. The emission limitations of 0.62 pound NOx/hour and 2.73 tons NOx/year represent the total allowable emissions from the RTO for all these emissions units.
- 2.b Best available technology (BAT) for this emissions unit shall be the use of a RTO with a 100 percent capture efficiency and a minimum 90 percent destruction efficiency for OC, by weight.
- 2.c OAC rule 3745-21-07(G) is not applicable to this emissions unit because the emissions unit does not employ, apply, evaporate, or dry any liquid organic material.

## II. Operational Restrictions

1. The emissions unit shall be equipped with a permanent total enclosure (PTE) which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:
  - a. any natural draft opening (NDO) shall be at least 4 equivalent opening diameters from each OC emitting point unless otherwise specified by the Administrator;
  - b. the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's 4 walls, floor, and ceiling;
  - c. the average facial velocity (FV) of air through all NDO's shall be at least 3,600 m/hr (200 fpm). The direction of air flow through all NDO's shall be into the enclosure;
  - d. all access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process; and
  - e. all OC the emissions must be captured and contained for discharge through a control device.
2. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, whenever this emissions unit is in operation.
3. The average combustion temperature within the RTO, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO whenever this emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation; and
  - b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated that the emissions unit was in compliance.
2. The permittee shall maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the difference in pressure, in inches of water, between the permanent total enclosure and the surrounding area(s) on a daily basis for this emissions unit.

### III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall collect and record the following information each day for this emissions unit:
  - a. the company identification for each coating mixed;
  - b. the number of hours this emissions unit was in operation;
  - c. the number of gallons of each coating mixed;
  - d. the OC content of each coating mixed, in pounds per gallon;
  - e. the total uncontrolled OC emission rate for all the coatings mixed [(summation of (c x d) for all the coatings) x 0.01\*], in pounds;
  - f. the total controlled OC emission rate for all the coatings mixed [A.III.3.e x (1 - the overall control efficiency from the most recent performance test that demonstrated the emissions unit was in compliance)]; and
  - g. the average hourly OC emission rate for all the coatings mixed [A.III.3.f/A.III.3.b], in pounds per hour (average).

\* it is assumed that 1%, by weight, of the solvents in the coatings mixed evaporates
4. The permittee shall collect and record each year the total OC emission rate for this emissions unit, in tons, calculated by summing the daily OC emission rates, from section A.III.3.f, for the calendar year, and then dividing by 2000.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All 3-hour blocks of time during which the average combustion temperature within the RTO, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
  - b. All periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified above.
  - c. All exceedances of the hourly OC emission limitation of 0.37 pound.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c, Part I, General Terms and Conditions, of this permit.

2. The permittee shall submit annual reports that specify the actual annual OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

- 1.a** Emission Limitations:  
0.37 lb OC/hr and 0.33 ton OC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly limitation above based upon the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A and the record keeping requirements established in section A.III.3 of this permit.

Compliance with the annual limitation shall be determined by the record keeping requirements specified in sections A.III.3 and 4 of this permit.

- 1.b** Emission Limitations:  
0.62 lb NO<sub>x</sub>/hr and 2.73 TPY NO<sub>x</sub>, from the RTO

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the maximum rated capacity of the RTO (6.54 mmBtu/hr) by the emission factor in AP-42, Chapter 1.4 (revised 7/98) of 100 lbs NO<sub>x</sub>/mm cu. ft. of natural gas, and then dividing by 1020 mmBtu/mm cu. ft. of natural gas.

If required, compliance shall be determined in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the hourly NO<sub>x</sub> limitation by 8,760 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- 1.c** Emissions Limitation:  
100% capture and 90% destruction efficiencies, by weight, for OC

Applicable Compliance Method:

Compliance with the efficiency requirements above shall be determined based upon the results of emission testing conducted in accordance with the methods outlined in Section A.V.3. of this permit.

- 2.** Formulation data or USEPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.
- 3.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly OC mass emission rate and the capture and control efficiency limitations for OC.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for OC, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for OC are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - d. For testing of the capture and control efficiencies, the test(s) shall be conducted while emissions units R009, R011, R018, P008, P018 and P019 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - e. For testing of the hourly OC emission rate, the test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.

## **V. Testing Requirements (continued)**

f. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR, part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement. ) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in the approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

a. The emission testing shall be conducted within 3 months of permit issuance and within 6 months prior to permit expiration.

4. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paint mix operations, with RTO; paint line #3.	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit using data from the permit to install application and the BREEZE AIR ISCST3, v. 2.03 model. The predicted 1-hour maximum ground-level concentration from the use of the BREEZE AIR ISCST3, v. 2.03 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

**III. Monitoring and/or Record Keeping Requirements (continued)**

Pollutant: ethyl benzene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.37  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: methyl ethyl ketone  
TLV (ug/m3): 590  
Maximum Hourly Emission Rate (lbs/hr): 2.54  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 14,048.00

Pollutant: xylene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.06  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: toluene  
TLV (ug/m3): 188  
Maximum Hourly Emission Rate (lbs/hr): 0.26  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 4,476.00

Pollutant: methanol  
TLV (ug/m3): 262  
Maximum Hourly Emission Rate (lbs/hr): 0.01  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 6,238.00

### III. Monitoring and/or Record Keeping Requirements (continued)

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Paint Line #3 - Primer Oven (P019)

**Activity Description:** 1.0 MMBTU/hr Natural Gas Fired Primer Oven for plastic auto parts with flash and cooling zone

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
primer oven, with flash and cooling zone and thermal incinerator (RTO); paint line #3	OAC rule 3745-31-05 (A)(3) (PTI #03-10891)	0.37 lb organic compounds (OC)/hr, 1.48 tons OC/yr  combustion emissions from the RTO:  0.62 lb nitrogen oxides (NOx)/hr 2.73 tons NOx/yr (See A.I.2.a.)  combustion emissions from the oven:  0.15 lb NOx/hr 0.61 ton NOx/yr  See A.I.2.b.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(A), 3745-21-08(B), 3745-23-06(B), 3745-17-10(B) and 3745-17-07(A).
	OAC rule 3745-21-07(G)(1)	See A.I.2.c.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.e.
	OAC rule 3745-17-10(B)	0.020 lb particulate emissions (PE)/mmBtu of actual heat input
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-18-06(A)	See A.I.2.f.

## 2. Additional Terms and Conditions

- 2.a Emissions units R009, R011, R018, P008, P018 and P019 are vented to a common RTO. The emission limitations of 0.62 pound NO<sub>x</sub>/hour and 2.73 tons NO<sub>x</sub>/year represent the total allowable emissions from the RTO for all these emissions units.
- 2.b Best available technology (BAT) for this emissions unit shall be the use of a RTO with a 100 percent capture efficiency and a minimum 90 percent destruction efficiency for OC, by weight.
- 2.c The emission limits/control requirements specified by this rule are less stringent than the emission limits/control requirements established pursuant to OAC rule 3745-31-05 (A)(3).
- 2.d For purposes of calculating the OC emission rates for this emissions unit and the associated spray booth (R009), the permittee shall utilize a value of 98 percent as the maximum percentage of the OCs employed in the spray booth that are emitted uncontrolled from the spray booth. The remaining 2 percent of the OCs employed in the spray booth shall be considered to be the uncontrolled emissions for this emissions unit. This "split" of OC emissions between this emissions unit and the associated spray booth is based upon emission testing conducted by the permittee. The "split" of OC emissions between this emissions unit and the associated spray booth shall be revised in accordance with the results of any future testing to determine the oven/booth split (weight %).
- 2.e The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-10891.
- 2.f OAC rule 3745-18-06(A) does not establish sulfur dioxide emission limitations for this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emissions unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).

## II. Operational Restrictions

- 1. The emissions unit shall be equipped with a permanent total enclosure (PTE) which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:
  - a. any natural draft opening (NDO) shall be at least 4 equivalent opening diameters from each OC emitting point unless otherwise specified by the Administrator;
  - b. the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's 4 walls, floor, and ceiling;
  - c. the average facial velocity (FV) of air through all NDO's shall be at least 3,600 m/hr (200 fpm). The direction of air flow through all NDO's shall be into the enclosure;
  - d. all access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process; and
  - e. all OC the emissions must be captured and contained for discharge through a control device.
- 2. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, whenever this emissions unit is in operation.

## II. Operational Restrictions (continued)

3. The average combustion temperature within the RTO, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
4. The annual number of hours of operation for this emissions unit shall not exceed 8,030.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO whenever this emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation; and
  - b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated that the emissions unit was in compliance.
2. The permittee shall maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the difference in pressure between the permanent total enclosure and the surrounding area(s) on a daily basis.

3. The permittee shall collect and record the following information each day for this emissions unit:
  - a. the total potential uncontrolled OC emissions for the spray booths associated with this emissions unit (from section A.III.4.d of emissions unit R009), in pounds;
  - b. the total potential OC emission rate, in pounds, calculated by multiplying A.III.3.a by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.d. of this permit), in pounds;
  - c. the total controlled OC emission rate, in pounds, calculated by multiplying A.III.3.b by (1 - the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance); and
  - d. the number of hours of operation;
  - e. the average hourly controlled OC emission rate, i.e., (c)/(d), in pounds per hour (average).
4. The permittee shall collect and record each year the following information for this emissions unit:
  - a. the total controlled OC emission rate, in tons, calculated by summing the daily OC emission rates, from section A.III.3.c, for the calendar year, and dividing by 2000; and
  - b. the total number of hours of operation, calculated by summing the daily numbers of hours of operation, from section A.III.3.d, for the calendar year.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions units were in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated that the emissions unit was in compliance; and
  - b. all exceedances of the hourly OC emission limitation of 0.37 pound.
2. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified above.
3. The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that specify the total OC emissions and the total number of hours of operation from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

#### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations:  
0.37 lb OC/hr and 1.48 tons OC/yr

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation shall be determined by emission testing conducted in accordance with Methods 18, 25, or 25 A, as appropriate, of 40 CFR, Part 60, Appendix A and also the record keeping requirements established in section A.III.3 of this permit.

Compliance with the annual limitation shall be determined by the record keeping requirements established in sections A.III.3 and 4 of this permit.

- 1.b Emission Limitations:  
0.62 lb NO<sub>x</sub>/hr and 2.73 TPY NO<sub>x</sub>, from the RTO

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the maximum rated capacity of the RTO (6.54 mmBtu/hr) by the emission factor in AP-42, Chapter 1.4 (revised 7/98) of 100 lbs NO<sub>x</sub>/mm cu. ft. of natural gas, and then dividing by 1020 mmBtu/mm cu. ft. of natural gas.

If required, compliance shall be determined in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the hourly NO<sub>x</sub> limitation by 8,760 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

## V. Testing Requirements (continued)

- 1.c** Emission Limitations:  
0.15 lb NO<sub>x</sub>/hr and 0.61 ton NO<sub>x</sub>/yr, from the oven

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the maximum rated capacity of the oven (1.0 mmBtu/hr) by the emission factor in AP-42, Chapter 1.4 (revised 7/98) of 100 lbs NO<sub>x</sub>/mm cu. ft. of natural gas, and then dividing by 1020 mmBtu/mm cu. ft. of natural gas.

If required, compliance shall be determined in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual NO<sub>x</sub> emission limitation was established by multiplying the hourly NO<sub>x</sub> emission limitation by 8030 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly emission limitation and with the restriction on the annual number of hours of operation, compliance shall also be shown with the annual emission limitation.

- 1.d** Emissions Limitation:  
100% capture and 90% destruction efficiencies, by weight, for OC

Applicable Compliance Method:

Compliance with the efficiency requirements above shall be determined based upon the results of emission testing conducted in accordance with the methods outlined in Section A.V.2. of this permit.

- 1.e** Emission Limitation:  
8,030 hours of operation/yr

Applicable Compliance Method:

Compliance with the annual restriction on the number of hours of operation shall be determined by the record keeping requirements specified in sections A.III.3 and 4 of this permit.

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 3 months of permit issuance and within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly OC mass emission rate and the capture and control efficiencies for OC.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for OC, Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - d. For testing of the capture and control efficiencies, the test(s) shall be conducted while emissions units R009, R011, R018, P008, P018 and P019 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - e. For testing of the hourly OC emission rate, the test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.

## V. Testing Requirements (continued)

f. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR, Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement. ) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in the approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

4. An OC emission testing also shall be conducted at the inlet of this oven (P019) to determine the uncontrolled mass rate of OC emissions for this emissions unit, for purposes of determining the oven/booth split as defined in section A.I.2.d of this permit. To determine the oven/booth split, the permittee shall employ the following equations during the period of emission testing:

$$UOC_{booth} = TOC_{booth} - UOC_{oven}$$

$$Bsplit \text{ (wt\%)} = (UOC_{booth}/TOC_{booth}) \times 100\%$$

$$Osplit \text{ (wt\%)} = 100 - Bsplit$$

Where,

$UOC_{booth}$  : uncontrolled OC emissions from the spray booth (R009) [lbs/t]

$TOC_{booth}$  : total potential (prior to applying the booth/oven split) uncontrolled OC emission rate for all the coatings employed in the spray booths (R009) [lbs/t]

$UOC_{oven}$  : uncontrolled VOC emissions from this emissions unit (P019), in lbs/t, [this value is obtained from the results of the stack testing required above]

$Bsplit$  : the portion of the "TOC\_Booth" emitted in the booths (wt%)

$Osplit$  : the portion of the "TOC\_Booth" emitted in the oven (wt%)

$t$  : the duration of the emission testing, in minutes or hours

Facility Name: **Aeroquip Inoac Company**  
Facility ID: **03-72-03-0199**  
Emissions Unit: **Paint Line #3 - Primer Oven (P019)**

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
primer oven, with flash and cooling zone and thermal incinerator (RTO); paint line #3	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit using data from the permit to install application and the BREEZE AIR ISCST3, v. 2.03 model. The predicted 1-hour maximum ground-level concentration from the use of the BREEZE AIR ISCST3, v. 2.03 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

### III. Monitoring and/or Record Keeping Requirements (continued)

Pollutant: ethyl benzene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.37  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: methyl ethyl ketone  
TLV (ug/m3): 590  
Maximum Hourly Emission Rate (lbs/hr): 2.54  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 14,048.00

Pollutant: xylene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.06  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: toluene  
TLV (ug/m3): 188  
Maximum Hourly Emission Rate (lbs/hr): 0.26  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 4,476.00

Pollutant: methanol  
TLV (ug/m3): 262  
Maximum Hourly Emission Rate (lbs/hr): 0.01  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 6,238.00

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Paint Line #4 - Primer Booth (R006)  
**Activity Description:** Paint Spray Booth for Coating Plastic Automobile Parts

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
primer paint booth, with water curtain; paint line #4	OAC rule 3745-31-05 (A)(3) (PTI #03-8365)	51.0 lbs organic compounds (OC)/hr, from the coatings
	OAC rule 3745-31-05(D) (PTI #03-8365)	5 tons OC/month, from the cleanup materials (for emissions units R006, R007 and R008, combined)
	OAC rule 3745-31-05(D) (PTI #03-8365)	See A.I.2.b. 208.65 tons OC/rolling 365-day period, from coatings (for emissions units R006, R007 and R008, combined)
	OAC rule 3745-17-11(B)	35.0 tons OC/rolling, 12-month period, from the cleanup materials (for emissions units R006, R007 and R008, combined)
	OAC rule 3745-17-07(A)	See A.I.2.a. 0.70 lb particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule. See A.II.1.

##### 2. Additional Terms and Conditions

- 2.a This permit was written as a synthetic minor permit to avoid PSD applicability.

Combined annual OC emissions from the coating operations (from emissions units R006, R007 and R008) shall not exceed 208.65 tons per year, based on a rolling, 365-day summation of the daily input OC rates. Combined OC emissions from the cleanup operations (from emissions units R006, R007 and R008) shall not exceed 35 tons/rolling, 12-month period.

**2. Additional Terms and Conditions (continued)**

- 2.b** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11(B), OAC rule 3745-17-07(A), OAC rule 3745-21-07(G) and OAC rule 3745-31-05(D).
- 2.c** The 51.0 lbs OC/hr emission limitation was established for PTI purposes to reflect the potential to emit of this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with this limitation.

**II. Operational Restrictions**

- 1. The use of any photochemically reactive coating or cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2. The permittee shall operate the water curtain whenever this emissions unit is in operation.

**III. Monitoring and/or Record Keeping Requirements**

- 1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the company identification of each coating and cleanup material employed; and
  - b. documentation on whether or not each coating and cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each day for emissions units R006, R007 and R008, combined:
  - a. the company identification for each coating employed;
  - b. the OC content of each coating employed, in pounds per gallon;
  - c. the number of gallons of each coating employed;
  - d. the OC emission rate for each coating employed (b x c), in pounds;
  - e. the total OC emissions for all the coatings employed (summation of d for all coatings), in pounds; and
  - f. the rolling, 365-day summation of the daily OC emission rates, in tons.

### III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall collect and record the following information each month for emissions units R006, R007 and R008, combined:
  - a. the company identification for each cleanup material employed;
  - b. the OC content of each cleanup material employed, in pounds per gallon;
  - c. the number of gallons of each cleanup material employed;
  - d. the OC emission rate for each cleanup material employed (b x c), in pounds;
  - e. the total OC emissions for all the cleanup materials employed (summation of d for all cleanup materials), in pounds; and
  - f. the rolling, 12-month summation of the monthly OC emission rates, in tons.

The company may calculate OC emissions from the cleanup operations in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

OC from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off site for disposal or reclamation minus the solids content of said material) x solvent density).

4. The permittee shall maintain daily records that document any time periods when the water curtain was not in service when the emissions unit was in operation.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports, in accordance with paragraph A.1.c., Part I, of the General Terms and Conditions of this permit, that identify all exceedances of the rolling, 365-day OC emission limitation (from coatings) of 208.65 tons (for emissions units R006, R007 and R008, combined).
2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with paragraph A.1.c., Part I, of the General Terms and Conditions of this permit, that identify all exceedances of the rolling, 12-month OC emission limitation (from cleanup materials) of 35 tons (for emissions units R006, R007 and R008, combined).
3. The permittee shall submit quarterly deviation (excursion) reports, in accordance with paragraph A.1.c., Part I of the General Terms and Conditions of this permit, that identify all exceedances of the monthly OC emission limitation (from cleanup materials) of 5 tons (for emissions units R006, R007 and R008, combined).
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office) in writing of any daily record showing the use of any coating or cleanup material in this emissions unit that is a photochemically reactive material. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 45 days after the event occurs.
5. The permittee shall notify the Director (the appropriate Ohio EPA District Office) in writing of any daily record showing that the water curtain was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 30 days after the event occurs.

### V. Testing Requirements

1. Compliance with the emissions limitations specified in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

**V. Testing Requirements (continued)**

**1.a** Emission Limitation:  
51.0 lbs OC/hr, from the coatings

Applicable Compliance Method:  
Compliance with the hourly limitation may be determined by multiplying the maximum coating usage rate (gallons/hr) by the maximum OC content of all the coatings (lbs/gallon), as applied.

If required, the permittee shall demonstrate compliance with the hourly OC limitation above in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

**1.b** Emission Limitation:  
5.0 tons OC/month, from the cleanup materials (for emissions units R006, R007 and R008, combined)

Applicable Compliance Method:  
The record keeping requirements in Section A.III.3 of this permit shall be used to determine compliance with the monthly allowable OC emission limitation above.

**1.c** Emission Limitation:  
208.65 tons OC/rolling, 365-day period, from the coatings (for emissions units R006, R007 and R008, combined)

Applicable Compliance Method:  
The record keeping requirements in Section A.III.2 of this permit shall be used to determine compliance with the rolling, 365-day allowable OC emission limitation above.

**1.d** Emission Limitation:  
35.0 tons OC/rolling 12-month period, from the cleanup materials (for emissions units R006, R007 and R008, combined)

Applicable Compliance Method:  
The record keeping requirements in Section A.III.1 of this permit shall be used to determine compliance with the rolling, 12-month allowable OC emission limitation above.

**1.e** Emission Limitation:  
0.70 lb PE/hr

Applicable Compliance Method:  
The permittee may demonstrate compliance with the actual worst case PE rate (E), using the following equation for the paint spraying operations:

$$E = \text{PE rate (lbs/hr)}$$

$$E = \text{maximum coating solids usage rate, in pounds per hour} \times (1-TE) \times (1-CE)$$

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, compliance with the PE limitation above shall be determined in accordance with OAC rule 3745-17-03(B)(10).

**V. Testing Requirements (continued)**

- 1.f** Emission Limitation:  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
primer paint booth, with water curtain; paint line #4	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Benzene\*

TLV (mg/m3): 32

Maximum Hourly Emission Rate (lbs/hr): 15.60

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 248

MAGLC (ug/m3): 762

\* The following additional conservative assumptions were made in the Screen modeling:

For the following emission units: R006, R007, R008, P004, P005, P801 all emissions of toxic compounds in the coatings or cleanup materials were assumed to be benzene, which has the lowest TLV of the remaining toxic compounds.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Paint Line #4 - Color Booth (R007)  
**Activity Description:** Paint Spray Booth for Coating Plastic Automobile Parts

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
color paint booth, with water curtain; paint line #4	OAC rule 3745-31-05 (A)(3) (PTI #03-8365)	77.0 lbs organic compounds (OC)/hr, from the coatings
	OAC rule 3745-31-05(D) (PTI #03-8365)	5 tons OC/month, from the cleanup materials (for emissions units R006, R007 and R008, combined)
	OAC rule 3745-31-05(D) (PTI #03-8365)	See A.I.2.b. 208.65 tons OC/rolling 365-day period, from coatings (for emissions units R006, R007 and R008, combined)
	OAC rule 3745-17-11(B)	35.0 tons OC/rolling, 12-month period, from the cleanup materials (for emissions units R006, R007 and R008, combined)
	OAC rule 3745-17-07(A)	See A.I.2.a. 0.75 lb particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule. See A.II.1.

**2. Additional Terms and Conditions**

- 2.a This permit was written as a synthetic minor permit to avoid PSD applicability.

Combined annual OC emissions from the coating operations (from emissions units R006, R007 and R008) shall not exceed 208.65 tons per year, based on a rolling, 365-day summation of the daily input OC rates. Combined OC emissions from the cleanup operations (from emissions units R006, R007 and R008) shall not exceed 35 tons/rolling, 12-month period.

**2. Additional Terms and Conditions (continued)**

- 2.b** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11(B), OAC rule 3745-17-07(A), OAC rule 3745-21-07(G) and OAC rule 3745-31-05(D).
- 2.c** The 77.0 lbs OC/hr emission limitation was established for PTI purposes to reflect the potential to emit of this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with this limitation.

**II. Operational Restrictions**

- 1. The use of any photochemically reactive coating or cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2. The permittee shall operate the water curtain whenever this emissions unit is in operation.

**III. Monitoring and/or Record Keeping Requirements**

- 1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the company identification of each coating and cleanup material employed; and
  - b. documentation on whether or not each coating and cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each day for emissions units R006, R007 and R008, combined:
  - a. the company identification for each coating employed;
  - b. the OC content of each coating employed, in pounds per gallon;
  - c. the number of gallons of each coating employed;
  - d. the OC emission rate for each coating employed (b x c), in pounds;
  - e. the total OC emissions for all the coatings employed (summation of d for all coatings), in pounds; and
  - f. the rolling, 365-day summation of the daily OC emission rates, in tons.

### III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall collect and record the following information each month for emissions units R006, R007 and R008, combined:
  - a. the company identification for each cleanup material employed;
  - b. the OC content of each cleanup material employed, in pounds per gallon;
  - c. the number of gallons of each cleanup material employed;
  - d. the OC emission rate for each cleanup material employed (b x c), in pounds;
  - e. the total OC emissions for all the cleanup materials employed (summation of d for all cleanup materials), in pounds; and
  - f. the rolling, 12-month summation of the monthly OC emission rates, in tons.

The company may calculate OC emissions from the cleanup operations in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

OC from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off site for disposal or reclamation minus the solids content of said material) x solvent density).

4. The permittee shall maintain daily records that document any time periods when the water curtain was not in service when the emissions unit was in operation.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports, in accordance with paragraph A.1.c., Part I, of the General Terms and Conditions of this permit, that identify all exceedances of the rolling, 365-day OC emission limitation (from coatings) of 208.65 tons (for emissions units R006, R007 and R008, combined).
2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with paragraph A.1.c., Part I, of the General Terms and Conditions of this permit, that identify all exceedances of the rolling, 12-month OC emission limitation (from cleanup materials) of 35 tons (for emissions units R006, R007 and R008, combined).
3. The permittee shall submit quarterly deviation (excursion) reports, in accordance with paragraph A.1.c., Part I of the General Terms and Conditions of this permit, that identify all exceedances of the monthly OC emission limitation (from cleanup materials) of 5 tons (for emissions units R006, R007 and R008, combined).
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office) in writing of any daily record showing the use of any coating or cleanup material in this emissions unit that is a photochemically reactive material. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 45 days after the event occurs.
5. The permittee shall notify the Director (the appropriate Ohio EPA District Office) in writing of any daily record showing that the water curtain was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 30 days after the event occurs.

### V. Testing Requirements

1. Compliance with the emissions limitations specified in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

**V. Testing Requirements (continued)**

**1.a** Emission Limitation:  
77.0 lbs OC/hr, from the coatings

Applicable Compliance Method:  
Compliance with the hourly limitation may be determined by multiplying the maximum coating usage rate (gallons/hr) by the maximum OC content of all the coatings (lbs/gallon), as applied.

If required, the permittee shall demonstrate compliance with the hourly OC limitation above in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

**1.b** Emission Limitation:  
5.0 tons OC/month, from the cleanup materials (for emissions units R006, R007 and R008, combined)

Applicable Compliance Method:  
The record keeping requirements in Section A.III.3 of this permit shall be used to determine compliance with the monthly allowable OC emission limitation above.

**1.c** Emission Limitation:  
208.65 tons OC/rolling, 365-day period, from the coatings (for emissions units R006, R007 and R008, combined)

Applicable Compliance Method:  
The record keeping requirements in Section A.III.2 of this permit shall be used to determine compliance with the rolling, 365-day allowable OC emission limitation above.

**1.d** Emission Limitation:  
35.0 tons OC/rolling 12-month period, from the cleanup materials (for emissions units R006, R007 and R008, combined)

Applicable Compliance Method:  
The record keeping requirements in Section A.III.1 of this permit shall be used to determine compliance with the rolling, 12-month allowable OC emission limitation above.

**1.e** Emission Limitation:  
0.75 lb PE/hr

Applicable Compliance Method:  
The permittee may demonstrate compliance with the actual worst case PE rate (E), using the following equation for the paint spraying operations:

$$E = \text{PE rate (lbs/hr)}$$

$$E = \text{maximum coating solids usage rate, in pounds per hour} \times (1-TE) \times (1-CE)$$

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, compliance with the PE limitation above shall be determined in accordance with OAC rule 3745-17-03(B)(10).

**V. Testing Requirements (continued)**

- 1.f** Emission Limitation:  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
color paint booth, with water curtain; paint line #4	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Benzene\*

TLV (mg/m3): 32

Maximum Hourly Emission Rate (lbs/hr): 15.60

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 248

MAGLC (ug/m3): 762

\* The following additional conservative assumptions were made in the Screen modeling:

For the following emission units: R006, R007, R008, P004, P005, P801 all emissions of toxic compounds in the coatings or cleanup materials were assumed to be benzene, which has the lowest TLV of the remaining toxic compounds.

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Paint Line #4 - Clear Booth (R008)  
**Activity Description:** Paint Spray Booth for Coating Plastic Automobile Parts

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
clearcoat paint booth, with water curtain; paint line #4	OAC rule 3745-31-05 (A)(3) (PTI #03-8365)	51.0 lbs organic compounds (OC)/hr, from the coatings
	OAC rule 3745-31-05(D) (PTI #03-8365)	5 tons OC/month, from the cleanup materials (for emissions units R006, R007 and R008, combined)
	OAC rule 3745-31-05(D) (PTI #03-8365)	See A.I.2.b. 208.65 tons OC/rolling 365-day period, from coatings (for emissions units R006, R007 and R008, combined)
	OAC rule 3745-17-11(B)	35.0 tons OC/rolling, 12-month period, from the cleanup materials (for emissions units R006, R007 and R008, combined)
	OAC rule 3745-17-07(A)	See A.I.2.a. 0.55 lb particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule. See A.II.1.

**2. Additional Terms and Conditions**

- 2.a This permit was written as a synthetic minor permit to avoid PSD applicability.

Combined annual OC emissions from the coating operations (from emissions units R006, R007 and R008) shall not exceed 208.65 tons per year, based on a rolling, 365-day summation of the daily input OC rates. Combined OC emissions from the cleanup operations (from emissions units R006, R007 and R008) shall not exceed 35 tons/rolling, 12-month period.

**2. Additional Terms and Conditions (continued)**

- 2.b** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11(B), OAC rule 3745-17-07(A), OAC rule 3745-21-07(G) and OAC rule 3745-31-05(D).
- 2.c** The 51.0 lbs OC/hr emission limitation was established for PTI purposes to reflect the potential to emit of this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with this limitation.

**II. Operational Restrictions**

- 1. The use of any photochemically reactive coating or cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2. The permittee shall operate the water curtain whenever this emissions unit is in operation.

**III. Monitoring and/or Record Keeping Requirements**

- 1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the company identification of each coating and cleanup material employed; and
  - b. documentation on whether or not each coating and cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each day for emissions units R006, R007 and R008, combined:
  - a. the company identification for each coating employed;
  - b. the OC content of each coating employed, in pounds per gallon;
  - c. the number of gallons of each coating employed;
  - d. the OC emission rate for each coating employed (b x c), in pounds;
  - e. the total OC emissions for all the coatings employed (summation of d for all coatings), in pounds; and
  - f. the rolling, 365-day summation of the daily OC emission rates, in tons.

### III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall collect and record the following information each month for emissions units R006, R007 and R008, combined:
  - a. the company identification for each cleanup material employed;
  - b. the OC content of each cleanup material employed, in pounds per gallon;
  - c. the number of gallons of each cleanup material employed;
  - d. the OC emission rate for each cleanup material employed (b x c), in pounds;
  - e. the total OC emissions for all the cleanup materials employed (summation of d for all cleanup materials), in pounds; and
  - f. the rolling, 12-month summation of the monthly OC emission rates, in tons.

The company may calculate OC emissions from the cleanup operations in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

OC from cleanup operations = (total gallons of cleanup material used x solvent density of cleanup material) - (total gallons cleanup material sent off site for disposal or reclamation minus the solids content of said material) x solvent density).

4. The permittee shall maintain daily records that document any time periods when the water curtain was not in service when the emissions unit was in operation.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports, in accordance with paragraph A.1.c., Part I, of the General Terms and Conditions of this permit, that identify all exceedances of the rolling, 365-day OC emission limitation (from coatings) of 208.65 tons (for emissions units R006, R007 and R008, combined).
2. The permittee shall submit quarterly deviation (excursion) reports, in accordance with paragraph A.1.c., Part I, of the General Terms and Conditions of this permit, that identify all exceedances of the rolling, 12-month OC emission limitation (from cleanup materials) of 35 tons (for emissions units R006, R007 and R008, combined).
3. The permittee shall submit quarterly deviation (excursion) reports, in accordance with paragraph A.1.c., Part I of the General Terms and Conditions of this permit, that identify all exceedances of the monthly OC emission limitation (from cleanup materials) of 5 tons (for emissions units R006, R007 and R008, combined).
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office) in writing of any daily record showing the use of any coating or cleanup material in this emissions unit that is a photochemically reactive material. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 45 days after the event occurs.
5. The permittee shall notify the Director (the appropriate Ohio EPA District Office) in writing of any daily record showing that the water curtain was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 30 days after the event occurs.

### V. Testing Requirements

1. Compliance with the emissions limitations specified in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

**V. Testing Requirements (continued)**

- 1.a** Emission Limitation:  
51.0 lbs OC/hr, from the coatings

Applicable Compliance Method:

Compliance with the hourly limitation may be determined by multiplying the maximum coating usage rate (gallons/hr) by the maximum OC content of all the coatings (lbs/gallon), as applied.

If required, the permittee shall demonstrate compliance with the hourly OC limitation above in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

- 1.b** Emission Limitation:  
5.0 tons OC/month, from the cleanup materials (for emissions units R006, R007 and R008, combined)

Applicable Compliance Method:

The record keeping requirements in Section A.III.3 of this permit shall be used to determine compliance with the monthly allowable OC emission limitation above.

- 1.c** Emission Limitation:  
208.65 tons OC/rolling, 365-day period, from the coatings (for emissions units R006, R007 and R008, combined)

Applicable Compliance Method:

The record keeping requirements in Section A.III.2 of this permit shall be used to determine compliance with the rolling, 365-day allowable OC emission limitation above.

- 1.d** Emission Limitation:  
35.0 tons OC/rolling 12-month period, from the cleanup materials (for emissions units R006, R007 and R008, combined)

Applicable Compliance Method:

The record keeping requirements in Section A.III.1 of this permit shall be used to determine compliance with the rolling, 12-month allowable OC emission limitation above.

- 1.e** Emission Limitation:  
0.55 lb PE/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the actual worst case PE rate (E), using the following equation for the paint spraying operations:

$$E = \text{PE rate (lbs/hr)}$$

$$E = \text{maximum coating solids usage rate, in pounds per hour} \times (1-TE) \times (1-CE)$$

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, compliance with the PE limitation above shall be determined in accordance with OAC rule 3745-17-03(B)(10).

**V. Testing Requirements (continued)**

**1.f** Emission Limitation:

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
clearcoat paint booth, with water curtain; paint line #4	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Benzene\*

TLV (mg/m3): 32

Maximum Hourly Emission Rate (lbs/hr): 15.60

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 248

MAGLC (ug/m3): 762

\* The following additional conservative assumptions were made in the Screen modeling:

For the following emission units: R006, R007, R008, P004, P005, P801 all emissions of toxic compounds in the coatings or cleanup materials were assumed to be benzene, which has the lowest TLV of the remaining toxic compounds.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Paint Line #3 - Primer Booth (R009)  
**Activity Description:** Paint Spray Booth for Coating Plastic Automobile Parts

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
primer spray booth No. 1, with regenerative thermal oxidizer (RTO); paint line #3	OAC rule 3745-31-05 (A)(3) (PTI #03-10819)	1.94 lbs organic compounds (OC)/hr 7.76 tons OC/yr (for this emissions unit)
		0.068 lb particulate emissions (PE)/hr, 0.28 ton PE/yr
		Visible PE shall not exceed 0% opacity, as a six-minute average.
		combustion emissions from the RTO:
		0.62 lb nitrogen oxides (NOx)/hr 2.73 tons NOx/yr (See A.I.2.a.)
		See A.I.2.b.
	OAC rule 3745-21-07(G)(2)	See A.I.2.c.
OAC rule 3745-17-11(B)	See A.I.2.e.	
OAC rule 3745-17-07(A)	See A.I.2.e.	

##### 2. Additional Terms and Conditions

- 2.a Emissions units R009, R011, R018, P008, P018 and P019 are vented to a common RTO. The emission limitations of 0.62 pound NOx/hour and 2.73 tons NOx/year represent the total allowable emissions from the RTO for all these emissions units.
- 2.b Best available technology (BAT) for this emissions unit shall be the use of a RTO with a 100 percent capture efficiency and a minimum 90 percent destruction efficiency for OC, by weight.
- 2.c The hourly emission limitation and control efficiency requirements based on this rule are less stringent than the hourly emission limitation and control efficiency requirements established pursuant to OAC rule 3745-31-05(A)(3).

## **2. Additional Terms and Conditions (continued)**

- 2.d** For purposes of calculating the organic compound emission rates for this emissions unit and the associated oven (P019), the permittee shall utilize a value of 98 percent as the maximum percentage of the OCs employed in the paint booth that are emitted uncontrolled from the paint booth. The remaining 2 percent of the OCs employed in the paint booth shall be considered to be the uncontrolled emissions for the associated oven. This "split" of organic compound emissions between this emissions unit and the associated oven was based upon emission testing conducted by the permittee. The "split" of OC emissions between this emissions unit and the associated oven shall be revised in accordance with the results of any future testing to determine the booth/oven split (weight %).
- 2.e** The emission limitation based on this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

## **II. Operational Restrictions**

- 1.** The emissions unit shall be equipped with a permanent total enclosure (PTE) which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:
  - a.** any natural draft opening (NDO) shall be at least 4 equivalent opening diameters from each OC emitting point unless otherwise specified by the Administrator;
  - b.** the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's 4 walls, floor, and ceiling;
  - c.** the average facial velocity (FV) of air through all NDO's shall be at least 3,600 m/hr (200 fpm). The direction of air flow through all NDO's shall be into the enclosure;
  - d.** all access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process; and
  - e.** all OC the emissions must be captured and contained for discharge through a control device.
- 2.** The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, whenever this emissions unit is in operation.
- 3.** The average combustion temperature within the RTO, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
- 4.** The permittee shall operate the water wash system whenever this emissions unit is in operation.
- 5.** The annual number of hours of operation for this emissions unit shall not exceed 8,030.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall maintain daily records that document any time periods when the water wash system was not in service when the emissions unit was in operation.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO whenever this emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation; and
- b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated that the emissions unit was in compliance.

3. The permittee shall maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. These monitoring devices shall be placed at the entrance and exit (the only openings) of the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the difference in pressure, in inches of water, between the permanent total enclosure and the surrounding area(s) on a daily basis for this emissions unit.

4. The permittee shall collect and record the following information each day for this emissions unit:
- a. the company identification for each coating and cleanup material employed;
  - b. the number of gallons of each coating and cleanup material employed;
  - c. the OC content of each coating and cleanup material employed, in pounds per gallon;
  - d. the total potential (prior to applying the booth/oven "split") OC emission rate for all the coatings employed [summation of (b x c) for all coatings], in pounds;
  - e. the total potential OC emission rate for all the coatings employed, in pounds, calculated by multiplying the OC emissions (from section A.III.4.d) by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.d. of this permit);
  - f. the total controlled OC emission rate for all the coatings and cleanup materials employed, in pounds, calculated by multiplying the [OC emissions (from section A.III.4.e) + summation of (b x c) for all cleanup materials] by (1 - the overall control efficiency from the most recent performance test that demonstrated the emissions unit was in compliance);
  - g. the number of hours of operation; and
  - e. the average hourly controlled OC emission rate, i.e., (f)/(g), in pounds per hour (average).

### III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee shall collect and record each year the following information for this emissions unit:
  - a. the total controlled OC emission rate for all the coatings and cleanup materials, in tons, calculated by summing the daily OC emission rates, from section A.III.4.f, for the calendar year, and dividing by 2000; and
  - b. the total number of hours of operation, calculated by summing the daily numbers of hours of operation, from section A.III.4.g, for the calendar year.

### IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District office) in writing of any daily record showing that the water wash system was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District office) within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All 3-hour blocks of time during which the average combustion temperature within the RTO, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
  - b. All periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified above.
  - c. All exceedances of the hourly OC emission limitation of 1.94 pounds.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c., Part I, General Terms and Conditions, of this permit.

3. The permittee shall submit annual reports that specify the total OC emissions and the total number of hours of operation from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations:  
1.94 lbs OC/hr & 7.76 tons OC/yr

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation shall be determined by emission testing conducted in accordance with Methods 18, 25, or 25 A, as appropriate, of 40 CFR, Part 60, Appendix A and also the record keeping requirements established in section A.III.4 of this permit.

Compliance with the annual limitation shall be determined by the record keeping requirements specified in sections A.III.4 and 5 of this permit.

## V. Testing Requirements (continued)

- 1.b** Emission Limitations:  
0.068 lb PE/hr & 0.28 ton PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the actual worst case hourly PE rate (E) using the following equation for the paint spraying operations:

$E = \text{PE rate (lbs/hr)}$

$E = \text{maximum coating solids usage rate, in pounds per hour} \times (1-TE) \times (1-CE)$

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, compliance with the PE limitation above shall be determined in accordance with the test methods specified in 40 CFR, Part 60, Appendix A, Methods 1 - 5.

The annual limitation was established by multiplying the hourly PE limitation by 8030 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly emission limitation and the annual restriction on the number of hours of operation, compliance shall also be shown with the annual PE limitation.

- 1.c** Emission Limitations:  
0.62 lb NO<sub>x</sub>/hr and 2.73 TPY NO<sub>x</sub>, from the RTO

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the maximum rated capacity of the RTO (6.54 mmBtu/hr) by the emission factor in AP-42, Chapter 1.4 (revised 7/98) of 100 lbs NO<sub>x</sub>/mm cu. ft. of natural gas, and then dividing by 1020 mmBtu/mm cu. ft. of natural gas.

If required, compliance shall be determined in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the hourly NO<sub>x</sub> limitation by 8,760 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- 1.d** Emission Limitation:  
Visible PE shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

- 1.e** Emissions Limitation:  
100% capture and 90% destruction efficiencies, by weight, for OCs

Applicable Compliance Method:

Compliance with the efficiency requirements above shall be determined based upon the results of emission testing conducted in accordance with the methods outlined in Section A.V.3. of this permit.

## V. Testing Requirements (continued)

- 1.f Emission Limitation:  
8,030 hours of operation/yr

Applicable Compliance Method:

Compliance with the annual restriction on the number of hours of operation shall be determined by the record keeping requirements specified in sections A.III.4 and 5 of this permit.

2. Formulation data or USEPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.
3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- The emission testing shall be conducted within 3 months of permit issuance and within 6 months prior to permit expiration.
  - The emission testing shall be conducted to demonstrate compliance with the allowable hourly OC mass emission rate and the capture and control efficiency limitations for OC.
  - The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for OC, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for OCs are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - For testing of the capture and control efficiencies, the test(s) shall be conducted while emissions units R009, R011, R018, P008, P018 and P019 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - For testing of the hourly OC emission rate, the test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR, Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement. ) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in the approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

## **V. Testing Requirements (continued)**

4. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
primer spray booth No. 1, with RTO; paint line #3	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit using data from the permit to install application and the BREEZE AIR ISCST3, v. 2.03 model. The predicted 1-hour maximum ground-level concentration from the use of the BREEZE AIR ISCST3, v. 2.03 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

**III. Monitoring and/or Record Keeping Requirements (continued)**

Pollutant: ethyl benzene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.37  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: methyl ethyl ketone  
TLV (ug/m3): 590  
Maximum Hourly Emission Rate (lbs/hr): 2.54  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 14,048.00

Pollutant: xylene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.06  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: toluene  
TLV (ug/m3): 188  
Maximum Hourly Emission Rate (lbs/hr): 0.26  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 4,476.00

Pollutant: methanol  
TLV (ug/m3): 262  
Maximum Hourly Emission Rate (lbs/hr): 0.01  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 6,238.00

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Paint Line #3 - Clear Booth (R011)  
**Activity Description:** Paint Spray Booth for Coating Plastic Automobile Parts

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
clearcoat spray booth, with RTO; paint line #3	OAC rule 3745-31-05 (A)(3) (PTI #03-10819)	1.96 lbs organic compounds (OC)/hr 7.88 tons OC/yr (for this emissions unit)
		0.096 lb particulate emissions (PE)/hr, 0.38 ton PE/yr
		Visible PE shall not exceed 0% opacity, as a six-minute average.
		combustion emissions from the RTO:
		0.62 lb nitrogen oxides (NOx)/hr 2.73 tons NOx/yr (See A.I.2.a.)
	OAC rule 3745-21-07(G)(2)	See A.I.2.b.
	OAC rule 3745-17-11(B)	See A.I.2.c.
	OAC rule 3745-17-07(A)	See A.I.2.e.

**2. Additional Terms and Conditions**

- 2.a Emissions units R009, R011, R018, P008, P018 and P019 are vented to a common RTO. The emission limitations of 0.62 pound NOx/hour and 2.73 tons NOx/year represent the total allowable emissions from the RTO for all these emissions units.
- 2.b Best available technology (BAT) for this emissions unit shall be the use of a RTO with a 100 percent capture efficiency and a minimum 90 percent destruction efficiency for OC, by weight.
- 2.c The hourly emission limitation and control efficiency requirements based on this rule are less stringent than the hourly emission limitation and control efficiency requirements established pursuant to OAC rule 3745-31-05(A)(3).

## **2. Additional Terms and Conditions (continued)**

- 2.d** For purposes of calculating the organic compound emission rates for this emissions unit and the associated oven (P008), the permittee shall utilize a value of 98 percent as the maximum percentage of the OCs employed in the paint booth that are emitted uncontrolled from the paint booth. The remaining 2 percent of the OCs employed in the paint booth shall be considered to be the uncontrolled emissions for the associated oven. This "split" of organic compound emissions between this emissions unit and the associated oven was based upon emission testing conducted by the permittee. The "split" of OC emissions between this emissions unit and the associated oven shall be revised in accordance with the results of any future testing to determine the booth/oven split (weight %).
- 2.e** The emission limitation based on this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

## **II. Operational Restrictions**

- 1.** The emissions unit shall be equipped with a permanent total enclosure (PTE) which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:
  - a.** any natural draft opening (NDO) shall be at least 4 equivalent opening diameters from each OC emitting point unless otherwise specified by the Administrator;
  - b.** the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's 4 walls, floor, and ceiling;
  - c.** the average facial velocity (FV) of air through all NDO's shall be at least 3,600 m/hr (200 fpm). The direction of air flow through all NDO's shall be into the enclosure;
  - d.** all access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process; and
  - e.** all OC the emissions must be captured and contained for discharge through a control device.
- 2.** The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, whenever this emissions unit is in operation.
- 3.** The average combustion temperature within the RTO, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
- 4.** The permittee shall operate the water wash system whenever this emissions unit is in operation.
- 5.** The annual number of hours of operation for this emissions unit shall not exceed 8,030.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall maintain daily records that document any time periods when the water wash system was not in service when the emissions unit was in operation.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO whenever this emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation; and
- b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated that the emissions unit was in compliance.

3. The permittee shall maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. These monitoring devices shall be placed at the entrance and exit (the only openings) of the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the difference in pressure, in inches of water, between the permanent total enclosure and the surrounding area(s) on a daily basis for this emissions unit.

4. The permittee shall collect and record the following information each day for this emissions unit:
- a. the company identification for each coating and cleanup material employed;
  - b. the number of gallons of each coating and cleanup material employed;
  - c. the OC content of each coating and cleanup material employed, in pounds per gallon;
  - d. the total potential (prior to applying the booth/oven "split") OC emission rate for all the coatings employed [summation of (b x c) for all coatings], in pounds;
  - e. the total potential OC emission rate for all the coatings employed, in pounds, calculated by multiplying the OC emissions (from section A.III.4.d) by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.d. of this permit);
  - f. the total controlled OC emission rate for all the coatings and cleanup materials employed, in pounds, calculated by multiplying the [OC emissions (from section A.III.4.e) + summation of (b x c) for all cleanup materials] by (1 - the overall control efficiency from the most recent performance test that demonstrated the emissions unit was in compliance);
  - g. the number of hours of operation; and
  - e. the average hourly controlled OC emission rate, i.e., (f)/(g), in pounds per hour (average).

### III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee shall collect and record each year the following information for this emissions unit:
  - a. the total controlled OC emission rate for all the coatings and cleanup materials, in tons, calculated by summing the daily OC emission rates, from section A.III.4.f, for the calendar year, and dividing by 2000; and
  - b. the total number of hours of operation, calculated by summing the daily numbers of hours of operation, from section A.III.4.g, for the calendar year.

### IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District office) in writing of any daily record showing that the water wash system was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District office) within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All 3-hour blocks of time during which the average combustion temperature within the RTO, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
  - b. All periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified above.
  - c. All exceedances of the hourly OC emission limitation of 1.96 pounds.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c., Part I, General Terms and Conditions, of this permit.

3. The permittee shall submit annual reports that specify the total OC emissions and the total number of hours of operation from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations:  
1.96 lbs OC/hr & 7.88 tons OC/yr

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation shall be determined by emission testing conducted in accordance with Methods 18, 25, or 25 A, as appropriate, of 40 CFR, Part 60, Appendix A and also the record keeping requirements established in section A.III.4 of this permit.

Compliance with the annual limitation shall be determined by the record keeping requirements specified in sections A.III.4 and 5 of this permit.

## V. Testing Requirements (continued)

- 1.b** Emission Limitations:  
0.096 lb PE/hr & 0.38 ton PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the actual worst case hourly PE rate (E) using the following equation for the paint spraying operations:

$E = \text{PE rate (lbs/hr)}$

$E = \text{maximum coating solids usage rate, in pounds per hour} \times (1-TE) \times (1-CE)$

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, compliance with the PE limitation above shall be determined in accordance with the test methods specified in 40 CFR, Part 60, Appendix A, Methods 1 - 5.

The annual limitation was established by multiplying the hourly PE limitation by 8030 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly emission limitation and the annual restriction on the number of hours of operation, compliance shall also be shown with the annual PE limitation.

- 1.c** Emission Limitations:  
0.62 lb NO<sub>x</sub>/hr and 2.73 TPY NO<sub>x</sub>, from the RTO

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the maximum rated capacity of the RTO (6.54 mmBtu/hr) by the emission factor in AP-42, Chapter 1.4 (revised 7/98) of 100 lbs NO<sub>x</sub>/mm cu. ft. of natural gas, and then dividing by 1020 mmBtu/mm cu. ft. of natural gas.

If required, compliance shall be determined in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the hourly NO<sub>x</sub> limitation by 8,760 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- 1.d** Emission Limitation:  
Visible PE shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

- 1.e** Emissions Limitation:  
100% capture and 90% destruction efficiencies, by weight, for OCs

Applicable Compliance Method:

Compliance with the efficiency requirements above shall be determined based upon the results of emission testing conducted in accordance with the methods outlined in Section A.V.3. of this permit.

## V. Testing Requirements (continued)

- 1.f Emission Limitation:  
8,030 hours of operation/yr

Applicable Compliance Method:

Compliance with the annual restriction on the number of hours of operation shall be determined by the record keeping requirements specified in sections A.III.4 and 5 of this permit.

2. Formulation data or USEPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.
3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 3 months of permit issuance and within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly OC mass emission rate and the capture and control efficiency limitations for OC.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for OC, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for OCs are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - d. For testing of the capture and control efficiencies, the test(s) shall be conducted while emissions units R009, R011, R018, P008, P018 and P019 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - e. For testing of the hourly OC emission rate, the test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - f. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR, Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement. ) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in the approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

## **V. Testing Requirements (continued)**

4. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
clearcoat spray booth, with RTO; paint line #3	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit using data from the permit to install application and the BREEZE AIR ISCST3, v. 2.03 model. The predicted 1-hour maximum ground-level concentration from the use of the BREEZE AIR ISCST3, v. 2.03 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

**III. Monitoring and/or Record Keeping Requirements (continued)**

Pollutant: ethyl benzene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.37  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: methyl ethyl ketone  
TLV (ug/m3): 590  
Maximum Hourly Emission Rate (lbs/hr): 2.54  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 14,048.00

Pollutant: xylene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.06  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: toluene  
TLV (ug/m3): 188  
Maximum Hourly Emission Rate (lbs/hr): 0.26  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 4,476.00

Pollutant: methanol  
TLV (ug/m3): 262  
Maximum Hourly Emission Rate (lbs/hr): 0.01  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 6,238.00

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Paint Line #3 - Color Booth (R018)  
**Activity Description:** Color Paint Spray Booth for Coating Plastic Automobile Parts

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
color spray booth No. 5, with flash zone and RTO; paint line #3	OAC rule 3745-31-05 (A)(3) (PTI #03-10819)	3.53 lbs organic compounds (OC)/hr 14.16 tons OC/yr (for this emissions unit)
		0.021 lb particulate emissions (PE)/hr, 0.09 ton PE/yr
		Visible PE shall not exceed 0% opacity, as a six-minute average.
		combustion emissions from the RTO:
		0.62 lb nitrogen oxides (NOx)/hr 2.73 tons NOx/yr (See A.I.2.a.)
	OAC rule 3745-21-07(G)(2)	See A.I.2.b.
	OAC rule 3745-17-11(B)	See A.I.2.c.
	OAC rule 3745-17-07(A)	See A.I.2.e.

##### 2. Additional Terms and Conditions

- 2.a Emissions units R009, R011, R018, P008, P018 and P019 are vented to a common RTO. The emission limitations of 0.62 pound NOx/hour and 2.73 tons NOx/year represent the total allowable emissions from the RTO for all these emissions units.
- 2.b Best available technology (BAT) for this emissions unit shall be the use of a RTO with a 100 percent capture efficiency and a minimum 90 percent destruction efficiency for OC, by weight.
- 2.c The hourly emission limitation and control efficiency requirements based on this rule are less stringent than the hourly emission limitation and control efficiency requirements established pursuant to OAC rule 3745-31-05(A)(3).

## **2. Additional Terms and Conditions (continued)**

- 2.d** For purposes of calculating the organic compound emission rates for this emissions unit and the associated oven (P008), the permittee shall utilize a value of 98 percent as the maximum percentage of the OCs employed in the paint booth that are emitted uncontrolled from the paint booth. The remaining 2 percent of the OCs employed in the paint booth shall be considered to be the uncontrolled emissions for the associated oven. This "split" of organic compound emissions between this emissions unit and the associated oven was based upon emission testing conducted by the permittee. The "split" of OC emissions between this emissions unit and the associated oven shall be revised in accordance with the results of any future testing to determine the booth/oven split (weight %).
- 2.e** The emission limitation based on this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

## **II. Operational Restrictions**

- 1.** The emissions unit shall be equipped with a permanent total enclosure (PTE) which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:
  - a.** any natural draft opening (NDO) shall be at least 4 equivalent opening diameters from each OC emitting point unless otherwise specified by the Administrator;
  - b.** the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's 4 walls, floor, and ceiling;
  - c.** the average facial velocity (FV) of air through all NDO's shall be at least 3,600 m/hr (200 fpm). The direction of air flow through all NDO's shall be into the enclosure;
  - d.** all access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process; and
  - e.** all OC the emissions must be captured and contained for discharge through a control device.
- 2.** The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, whenever this emissions unit is in operation.
- 3.** The average combustion temperature within the RTO, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
- 4.** The permittee shall operate the water wash system whenever this emissions unit is in operation.
- 5.** The annual number of hours of operation for this emissions unit shall not exceed 8,030.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall maintain daily records that document any time periods when the water wash system was not in service when the emissions unit was in operation.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the RTO whenever this emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation; and
- b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated that the emissions unit was in compliance.

3. The permittee shall maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. These monitoring devices shall be placed at the entrance and exit (the only openings) of the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the difference in pressure, in inches of water, between the permanent total enclosure and the surrounding area(s) on a daily basis for this emissions unit.

4. The permittee shall collect and record the following information each day for this emissions unit:
- a. the company identification for each coating and cleanup material employed;
  - b. the number of gallons of each coating and cleanup material employed;
  - c. the OC content of each coating and cleanup material employed, in pounds per gallon;
  - d. the total potential (prior to applying the booth/oven "split") OC emission rate for all the coatings employed [summation of (b x c) for all coatings], in pounds;
  - e. the total potential OC emission rate for all the coatings employed, in pounds, calculated by multiplying the OC emissions (from section A.III.4.d) by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.d. of this permit);
  - f. the total controlled OC emission rate for all the coatings and cleanup materials employed, in pounds, calculated by multiplying the [OC emissions (from section A.III.4.e) + summation of (b x c) for all cleanup materials] by (1 - the overall control efficiency from the most recent performance test that demonstrated the emissions unit was in compliance);
  - g. the number of hours of operation; and
  - e. the average hourly controlled OC emission rate, i.e., (f)/(g), in pounds per hour (average).

### III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee shall collect and record each year the following information for this emissions unit:
  - a. the total controlled OC emission rate for all the coatings and cleanup materials, in tons, calculated by summing the daily OC emission rates, from section A.III.4.f, for the calendar year, and dividing by 2000; and
  - b. the total number of hours of operation, calculated by summing the daily numbers of hours of operation, from section A.III.4.g, for the calendar year.

### IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District office) in writing of any daily record showing that the water wash system was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District office) within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All 3-hour blocks of time during which the average combustion temperature within the RTO, when the emissions unit was in operation, was not more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
  - b. All periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified above.
  - c. All exceedances of the hourly OC emission limitation of 3.53 pounds.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c., Part I, General Terms and Conditions, of this permit.

3. The permittee shall submit annual reports that specify the total OC emissions and the total number of hours of operation from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations:  
3.53 lbs OC/hr & 14.16 tons OC/yr

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation shall be determined by emission testing conducted in accordance with Methods 18, 25, or 25 A, as appropriate, of 40 CFR, Part 60, Appendix A and also the record keeping requirements established in section A.III.4 of this permit.

Compliance with the annual limitation shall be determined by the record keeping requirements specified in sections A.III.4 and 5 of this permit.

## V. Testing Requirements (continued)

- 1.b** Emission Limitations:  
0.021 lb PE/hr & 0.09 ton PE/yr

Applicable Compliance Method:

The permittee may demonstrate compliance with the actual worst case hourly PE rate (E) using the following equation for the paint spraying operations:

$$E = \text{PE rate (lbs/hr)}$$

$$E = \text{maximum coating solids usage rate, in pounds per hour} \times (1 - \text{TE}) \times (1 - \text{CE})$$

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, compliance with the PE limitation above shall be determined in accordance with the test methods specified in 40 CFR, Part 60, Appendix A, Methods 1 - 5.

The annual limitation was established by multiplying the hourly PE limitation by 8030 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly emission limitation and the annual restriction on the number of hours of operation, compliance shall also be shown with the annual PE limitation.

- 1.c** Emission Limitations:  
0.62 lb NO<sub>x</sub>/hr and 2.73 TPY NO<sub>x</sub>, from the RTO

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the maximum rated capacity of the RTO (6.54 mmBtu/hr) by the emission factor in AP-42, Chapter 1.4 (revised 7/98) of 100 lbs NO<sub>x</sub>/mm cu. ft. of natural gas, and then dividing by 1020 mmBtu/mm cu. ft. of natural gas.

If required, compliance shall be determined in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the hourly NO<sub>x</sub> limitation by 8,760 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- 1.d** Emission Limitation:  
Visible PE shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

- 1.e** Emissions Limitation:  
100% capture and 90% destruction efficiencies, by weight, for OCs

Applicable Compliance Method:

Compliance with the efficiency requirements above shall be determined based upon the results of emission testing conducted in accordance with the methods outlined in Section A.V.3. of this permit.

## V. Testing Requirements (continued)

- 1.f Emission Limitation:  
8,030 hours of operation/yr

Applicable Compliance Method:

Compliance with the annual restriction on the number of hours of operation shall be determined by the record keeping requirements specified in sections A.III.4 and 5 of this permit.

2. Formulation data or USEPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.
3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 3 months of permit issuance and within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly OC mass emission rate and the capture and control efficiency limitations for OC.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for OC, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for OCs are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - d. For testing of the capture and control efficiencies, the test(s) shall be conducted while emissions units R009, R011, R018, P008, P018 and P019 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - e. For testing of the hourly OC emission rate, the test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.
  - f. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR, Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement. ) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in the approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

## **V. Testing Requirements (continued)**

4. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
color spray booth No. 5, with flash zone and RTO; paint line #3	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's 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 this emissions unit using data from the permit to install application and the BREEZE AIR ISCST3, v. 2.03 model. The predicted 1-hour maximum ground-level concentration from the use of the BREEZE AIR ISCST3, v. 2.03 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

**III. Monitoring and/or Record Keeping Requirements (continued)**

Pollutant: ethyl benzene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.37  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: methyl ethyl ketone  
TLV (ug/m3): 590  
Maximum Hourly Emission Rate (lbs/hr): 2.54  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 14,048.00

Pollutant: xylene  
TLV (ug/m3): 434  
Maximum Hourly Emission Rate (lbs/hr): 0.06  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 10,333.00

Pollutant: toluene  
TLV (ug/m3): 188  
Maximum Hourly Emission Rate (lbs/hr): 0.26  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 4,476.00

Pollutant: methanol  
TLV (ug/m3): 262  
Maximum Hourly Emission Rate (lbs/hr): 0.01  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 43.7  
MAGLC (ug/m3): 6,238.00

### III. Monitoring and/or Record Keeping Requirements (continued)

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

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