



State of Ohio Environmental Protection Agency

Street Address:

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P.O. Box 1049  
Columbus, OH 43216-1049

03/31/00

**CERTIFIED MAIL**

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

08-19-07-0190  
Greenville Technology, Inc.  
Ms. Gayla Mitchell- Metzcar  
P.O. Box 974  
Greenville, OH 45331

Dear Gayla Mitchell- Metzcar:

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 RAPCA 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 RAPCA.**

Very truly yours,

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

cc: USEPA (electronic)  
Jim Orlemann, DAPC Engineering  
Michael Ahern, DAPC PMU  
RAPCA  
Indiana



## Ohio EPA

State of Ohio Environmental Protection Agency

### DRAFT TITLE V PERMIT

Issue Date: 03/31/00

Effective Date:

Expiration Date:

*The duration of this permit will be five years.*

This document constitutes issuance to:

Greenville Technology, Inc.  
5755 State Route 571E  
Greenville, OH 45331

of a Title V permit for Facility ID: 08-19-07-0190

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

K001 (Coating Line #1)  
Plastic Parts Coating Line #1

K002 (Rotary Coating Line #2)  
Plastic Parts Coating Line #2

K003 (CY Spray Booth/Dryer)  
Gluing CY Armrest Assembly

K005 (Coating Line #3)  
Plastic Parts Spray Coating Line #3

K007 (Coating Line #5)  
Coating Line #5 for Plastic Automotive Parts

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. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

RAPCA  
451 West Third Street  
PO Box 972  
Dayton, OH 45422  
(937) 225-4435

OHIO ENVIRONMENTAL PROTECTION AGENCY

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Christopher Jones  
Director

# PART I - GENERAL TERMS AND CONDITIONS

## A. State and Federally Enforceable Section

### 1. Monitoring and Related Recordkeeping 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.
- 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping 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. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.6 below if no deviations occurred during the quarter.
  - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, 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. 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, recordkeeping, 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.
  - 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 are true, accurate, and complete.

## **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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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 emission unit(s) that is (are) served by such control system(s).

## **3. Risk Management Plans**

If applicable, the permittee shall 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”); and, pursuant to 40 CFR 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 CFR Part 68 by the date specified in 40 CFR 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

## **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.

## **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.

## **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. 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.

**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.

**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.

**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.

## 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 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.

## 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.

## 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 appropriate Ohio EPA District Office or local air agency and to the Administrator of U.S. EPA in the following manner 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.

### **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.

### **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).

## 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.

## 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, 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; and
- 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 further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

## 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.

## **18. Title VI Provisions**

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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

### **1. 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.

### **2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

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

### **3. 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).

### **4. 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.

### **5. 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.

### **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:

P001: Plastic resin silo  
P002: 18 plastic injection mold machines  
P004: Plastic parts cleaning operations  
P005: 15 injection mold machines  
P006: 6 injection mold machines  
P007: 15 injection mold machines

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 Permit to Install for the emissions unit.

2. The permittee shall comply with any applicable State and federal requirements governing the storage, treatment, transport, and disposal of any waste material generated by the operation of the source(s).
3. This permittee is hereby notified that this permit and all agency records concerning the operation of these permitted emissions units are subject to public disclosure in accordance with OAC rule 3745-49-03.

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

**Emissions Unit ID:** Coating Line #1 (K001)  
**Activity Description:** Plastic Parts Coating Line #1

**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>
plastic parts coating line #1, including oven, with a PTE, fume concentrator, and thermal incinerator	OAC rule 3745-31-05 (D) PTI # 08-3960	8.57 tons per month of organic compounds (OC), including cleanup (for coating lines K001, K002, K005, and K007 combined)  See Section A.2.a.
	OAC rule 3745-31-05 (A)(3) PTI # 08-3960	29.13 lbs/hr of OC, excluding cleanup (for this emissions unit)  102.83 TPY of OC, including cleanup (for this emissions unit)
	OAC rule 3745-21-07(G)(1)	The control efficiencies specified by this rule are less stringent than the efficiencies established pursuant to OAC rule 3745-31-05 (D).
	OAC rule 3745-21-07(G)(2)	The control efficiencies specified by this rule are less stringent than the efficiencies established pursuant to OAC rule 3745-31-05 (D).

**2. Additional Terms and Conditions**

- 2.a The OC emissions from this emissions unit shall be controlled through the application of a permanent total enclosure with a 100% capture efficiency and a fume concentrator and thermal incinerator system with a minimum 90% removal/destruction efficiency.
- 2.b The 29.13 lbs/hr OC emission limitation was established for PTI purposes to reflect the potential to emit for 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 coating line 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 diameters from each OC emission point;
  - b. the total area of all NDOs shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling;
  - c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inch of water, and the direction of air through all NDOs shall be into the enclosure;
  - d. all access doors and windows whose areas are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and
  - e. all OC emissions must be captured and vented to the OC control devices.

By satisfying the above criteria for a permanent total enclosure, the OC capture efficiency shall be assumed to be 100%.

\* Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

2. The average combustion temperature within the 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.
3. 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, as a 3-hour average, whenever the emissions unit is in operation.
4. The maximum monthly OC input rates (from coatings and cleanup material usages) for emissions units K001, K002, K005, and K007 combined shall not exceed the following:
  - a. for coatings: 78.43 tons OC (usage rate before recovery and control); and
  - b. for cleanup materials: 9.09 tons OC (usage rate before recovery and control).
5. The average temperature of the desorption air stream prior to the fume concentrator wheel, for any 3-hour block of time, shall not be less than 260 degrees Fahrenheit.
6. The average temperature of the concentrated OC laden air stream prior to the thermal incinerator, for any 3-hour block of time, shall not be less than 120 degrees Fahrenheit.
7. The number of revolutions per hour (RPH) of the fume concentrator shall be continuously maintained, when the emissions unit is in operation, at a value that is within +/- 10 percent of the value established during the most recent emission test that demonstrated that the emissions unit was in compliance.

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

1. The permittee shall operate and maintain continuous temperature monitors and recorders that measure and record the temperature at the following points when the emissions unit is in operation:
  - a. the temperature of the exhaust gases in the combustion zone of the thermal incinerator;
  - b. the temperature of the desorption air stream prior to the OC concentrator wheel; and
  - c. the temperature of the concentrated OC laden air stream prior to the incinerator.

Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within 1 percent of the temperature being measured or 5 degrees Fahrenheit, whichever is greater. The temperature monitors and recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the average temperature from the monitoring points listed in a, b, and c above for each of the 8 3-hour blocks during the day. The permittee also shall maintain a log or record of operating time for the capture (collection) system, control devices, monitoring equipment, and the associated emissions unit.

2. The permittee shall maintain and operate monitoring devices and a recorder that 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 maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

3. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the company identification of each coating and cleanup material employed;
  - b. the number of gallons of each coating employed;
  - c. the OC content of each coating employed, in pounds per gallon;
  - d. the total uncontrolled OC usage rate (OC input rate) for all coatings employed, i.e., the summation of (b x c) for all coatings, in tons;
  - e. the number of gallons of each cleanup material employed;
  - f. the OC content of each cleanup material employed, in pounds per gallon;
  - g. the total uncontrolled, before recovery, OC usage rate (OC input rate) for all cleanup materials employed, i.e., the summation of (e x f) for all cleanup materials, in tons;
  - h. the number of gallons of each cleanup material recovered;
  - i. the uncontrolled, after recovery, OC usage rate (OC input rate) for all cleanup materials employed, i.e., the summation of [(e - h) x f] for all cleanup materials, in tons;
  - j. the total uncontrolled OC emission rate for all coatings and cleanup materials, i.e., (d + i) , in tons;
  - k. the total calculated controlled OC emission rate for all coatings and cleanup materials, in tons (the controlled OC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance, i.e., (j) multiplied by a factor of (1 - the overall control efficiency);

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

l. the total calculated controlled OC emission rate for all coatings and cleanup materials, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of k for emissions units K001, K002, K005, and K007];

m. the total uncontrolled OC usage rate for all coatings employed, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of d for emissions units K001, K002, K005, and K007]; and

n. the uncontrolled, after recovery, OC usage rate for all cleanup materials employed, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of i for emissions units K001, K002, K005, and K007].

4. The permittee shall operate and maintain a continuous monitor which measures the number of revolutions per hour for the fume concentrator when the emissions unit is in operation. The monitoring device shall be capable of accurately measuring the desired parameter. The monitor 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 for each day the number of RPH, on a once/shift basis, when the emissions unit is in operation.

### IV. Reporting Requirements

1. The permittee shall submit quarterly temperature deviation (excursion) reports that identify:
  - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
  - b. all 3-hour blocks of time during which the average temperature of the desorption air stream prior to the OC concentrator wheel did not comply with the temperature limitation specified in section A.II of these terms and conditions; and
  - c. all 3-hour blocks of time during which the average temperature of the concentrated OC laden air stream prior to the incinerator did not comply with the temperature limitation specified in section A.II of these terms and conditions.
2. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a 3-hour average.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the RPH of the fume concentrator was not within +/- 10 percent of the RPH measured during the most recent emission test that demonstrated that the emissions unit was in compliance.
4. The permittee shall submit deviation (excursion) reports that include the following information for emissions units K001, K002, K005, and K007 combined:
  - a. an identification of each month during which the total monthly controlled OC emission rate exceeded the allowable monthly emission limit of 8.57 tons, and the actual monthly OC emission rate for each such month; and
  - b. an identification of each month during which the total monthly OC usage rates from coatings and cleanup materials exceeded the allowable monthly usage restrictions of 78.43 and 9.09 tons, respectively, and the actual monthly usage rates for each such month.
5. If no deviations occurred during a reporting period then the deviation reports submitted by the permittee shall state so. The permittee shall submit the reports to the Director (appropriate District Office or local air agency). Refer to General Term and Condition A.1.c. for the required quarterly report due dates.

**IV. Reporting Requirements (continued)**

6. The permittee shall submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the total actual annual OC emissions from this emissions unit and from emissions units K001, K002, K005, and K007 combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year .

**V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

**1.a** Emission Limitation-

8.57 tons/month of OC, including cleanup ( for coating lines K001, K002, K005, and K007 combined)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

**1.b** Emission Limitation-

78.43 tons/month OC usage (from all applied coatings)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

**1.c** Emission Limitation-

9.09 tons tons/month OC usage (from all applied cleanup materials)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

**1.d** Emission Limitation-

90% removal/destruction OC control efficiency (for the fume concentrator and thermal incinerator system)

Applicable Compliance Method-

The permittee shall demonstrate compliance with the limitation above in accordance with the methods and procedures as specified in Section A.V.2 of this permit.

## V. Testing Requirements (continued)

### 1.e Emission Limitation-

29.13 lbs/hr OC, excluding cleanup

Applicable Compliance Method-

Compliance shall be determined as follows:

- i. multiply the maximum primer coating usage rate (gallons/hr) by the maximum OC content of all primer coatings;
- ii. multiply the maximum basecoat material usage rate (gallons/hr) by the maximum OC content of all basecoat materials;
- iii. multiply the maximum clearcoat material usage rate (gallons/hr) by the maximum OC content of all clearcoat materials;
- iv. add i + ii + iii; and
- v. multiply the result from 1.a.iv above by a factor of (1 minus the minimum overall control efficiency of 90 percent).

### 1.f Emission Limitation-

102.83 TPY OC, including cleanup

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3 of this permit and shall be the summation of the 12 monthly organic compound emission rates for the calendar year.

## 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 six months prior to the expiration of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the overall control system efficiency for OCs which will be determined as the product of the capture efficiency and the overall control efficiency of the thermal incinerator and fume concentrator system.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

The capture efficiency shall be determined using the test methods specified in 40 CFR Part 51, Appendix M, Method 204 through 204F, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency as specified in the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. 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 of the fume concentrator and thermal incinerator system shall be conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and shall measure the percent reduction in mass emissions of organic compounds or organic materials between the inlet and outlet of the vapor control system. For the purpose of this testing, the sampling

shall be conducted at the inlet stream to the thermal incinerator (prior to combining with the outlet stream from the concentrator), at the inlet stream to the fume concentrator, and in the exhaust stack.

- d. The test(s) shall be conducted while emissions units K001, K002, K005, and K007 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 unit and the testing procedures provide a valid characterization of the emissions from the emissions unit 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

4. The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the coatings and cleanup materials.

## **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>
plastic parts coating line #1, including oven, with a PTE, fume concentrator, and thermal incinerator	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

- The permit to install for emissions units K001, K002, K005, and K007 was evaluated based on the actual materials (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: cyclohexane

TLV (ug/m3): 1,010,000

Maximum Hourly Emission Rate (lbs/hr): 4.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.49

MAGLC (ug/m3): 10,100

Pollutant: ethyl acetate

TLV (ug/m3): 1,440,000

Maximum Hourly Emission Rate (lbs/hr): 4.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.87

MAGLC (ug/m3): 14,400

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

Pollutant: isobutyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 20.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136.3

MAGLC (ug/m3): 7,130

Pollutant: methyl ethyl ketone

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 9.81

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 64.01

MAGLC (ug/m3): 5,900

Pollutant: methyl propyl ketone

TLV (ug/m3): 705,000

Maximum Hourly Emission Rate (lbs/hr): 8.55

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 55.75

MAGLC (ug/m3): 7,050

Pollutant: n-butyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 7.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 51.10

MAGLC (ug/m3): 7,130

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 8.01

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52.13

MAGLC (ug/m3): 1,880

Pollutant: xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 2.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 14.97

MAGLC (ug/m3): 4,340

Pollutant: methyl n-amyl ketone

TLV (ug/m3): 233,000

Maximum Hourly Emission Rate (lbs/hr): 3.63

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.74

MAGLC (ug/m3): 2,330

Pollutant: ethyl benzene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.70

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.46

MAGLC (ug/m3): 4,340

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 (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.

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

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that a 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:** Rotary Coating Line #2 (K002)  
**Activity Description:** Plastic Parts Coating Line #2

#### 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>
plastic parts coating line #2, including oven, with a PTE, fume concentrator, and thermal incinerator	OAC rule 3745-31-05 (D) PTI # 08-3960	8.57 tons per month of organic compounds (OC), including cleanup (for coating lines K001, K002, K005, and K007 combined)  See Section A.2.a.
	OAC rule 3745-31-05 (A)(3) PTI # 08-3960	12.37 lbs/hr of OC, excluding cleanup (for this emissions unit)  56.57 TPY of OC, including cleanup (for this emissions unit)
	OAC rule 3745-21-07(G)(1)	The control efficiencies specified by this rule are less stringent than the efficiencies established pursuant to OAC rule 3745-31-05 (D).
	OAC rule 3745-21-07(G)(2)	The control efficiencies specified by this rule are less stringent than the efficiencies established pursuant to OAC rule 3745-31-05 (D).

##### 2. Additional Terms and Conditions

- 2.a The OC emissions from this emissions unit shall be controlled through the application of a permanent total enclosure with a 100% capture efficiency and a fume concentrator and thermal incinerator system with a minimum 90% removal/destruction efficiency.
- 2.b The 12.37 lbs/hr OC emission limitation was established for PTI purposes to reflect the potential to emit for 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 coating line 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 diameters from each OC emission point;
  - b. the total area of all NDOs shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling;
  - c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inch of water, and the direction of air through all NDOs shall be into the enclosure;
  - d. all access doors and windows whose areas are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and
  - e. all OC emissions must be captured and vented to the OC control devices.

By satisfying the above criteria for a permanent total enclosure, the OC capture efficiency shall be assumed to be 100%.

\* Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

2. The average combustion temperature within the 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.
3. 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, as a 3-hour average, whenever the emissions unit is in operation.
4. The maximum monthly OC input rates (from coatings and cleanup material usages) for emissions units K001, K002, K005, and K007 combined shall not exceed the following:
  - a. for coatings: 78.43 tons OC (usage rate before recovery and control); and
  - b. for cleanup materials: 9.09 tons OC (usage rate before recovery and control).
5. The average temperature of the desorption air stream prior to the fume concentrator wheel, for any 3-hour block of time, shall not be less than 260 degrees Fahrenheit.
6. The average temperature of the concentrated OC laden air stream prior to the thermal incinerator, for any 3-hour block of time, shall not be less than 120 degrees Fahrenheit.
7. The number of revolutions per hour (RPH) of the fume concentrator shall be continuously maintained, when the emissions unit is in operation, at a value that is within +/- 10 percent of the value established during the most recent emission test that demonstrated that the emissions unit was in compliance.

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

1. The permittee shall operate and maintain continuous temperature monitors and recorders that measure and record the temperature at the following points when the emissions unit is in operation:
  - a. the temperature of the exhaust gases in the combustion zone of the thermal incinerator;
  - b. the temperature of the desorption air stream prior to the OC concentrator wheel; and
  - c. the temperature of the concentrated OC laden air stream prior to the incinerator.

Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within 1 percent of the temperature being measured or 5 degrees Fahrenheit, whichever is greater. The temperature monitors and recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the average temperature from the monitoring points listed in a, b, and c above for each of the 8 3-hour blocks during the day. The permittee also shall maintain a log or record of operating time for the capture (collection) system, control devices, monitoring equipment, and the associated emissions unit.

2. The permittee shall maintain and operate monitoring devices and a recorder that 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 maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

3. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the company identification of each coating and cleanup material employed;
  - b. the number of gallons of each coating employed;
  - c. the OC content of each coating employed, in pounds per gallon;
  - d. the total uncontrolled OC usage rate (OC input rate) for all coatings employed, i.e., the summation of (b x c) for all coatings, in tons;
  - e. the number of gallons of each cleanup material employed;
  - f. the OC content of each cleanup material employed, in pounds per gallon;
  - g. the total uncontrolled, before recovery, OC usage rate (OC input rate) for all cleanup materials employed, i.e., the summation of (e x f) for all cleanup materials, in tons;
  - h. the number of gallons of each cleanup material recovered;
  - i. the uncontrolled, after recovery, OC usage rate (OC input rate) for all cleanup materials employed, i.e., the summation of [(e - h) x f] for all cleanup materials, in tons;
  - j. the total uncontrolled OC emission rate for all coatings and cleanup materials, i.e., (d + i) , in tons;
  - k. the total calculated controlled OC emission rate for all coatings and cleanup materials, in tons (the controlled OC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance, i.e., (j) multiplied by a factor of (1 - the overall control efficiency);

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

l. the total calculated controlled OC emission rate for all coatings and cleanup materials, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of k for emissions units K001, K002, K005, and K007];

m. the total uncontrolled OC usage rate for all coatings employed, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of d for emissions units K001, K002, K005, and K007]; and

n. the uncontrolled, after recovery, OC usage rate for all cleanup materials employed, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of i for emissions units K001, K002, K005, and K007].

4. The permittee shall operate and maintain a continuous monitor which measures the number of revolutions per hour for the fume concentrator when the emissions unit is in operation. The monitoring device shall be capable of accurately measuring the desired parameter. The monitor 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 for each day the number of RPH, on a once/shift basis, when the emissions unit is in operation.

### IV. Reporting Requirements

1. The permittee shall submit quarterly temperature deviation (excursion) reports that identify:
  - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
  - b. all 3-hour blocks of time during which the average temperature of the desorption air stream prior to the OC concentrator wheel did not comply with the temperature limitation specified in section A.II of these terms and conditions; and
  - c. all 3-hour blocks of time during which the average temperature of the concentrated OC laden air stream prior to the incinerator did not comply with the temperature limitation specified in section A.II of these terms and conditions.
2. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a 3-hour average.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the RPH of the fume concentrator was not within +/- 10 percent of the RPH measured during the most recent emission test that demonstrated that the emissions unit was in compliance.
4. The permittee shall submit deviation (excursion) reports that include the following information for emissions units K001, K002, K005, and K007 combined:
  - a. an identification of each month during which the total monthly controlled OC emission rate exceeded the allowable monthly emission limit of 8.57 tons, and the actual monthly OC emission rate for each such month; and
  - b. an identification of each month during which the total monthly OC usage rates from coatings and cleanup materials exceeded the allowable monthly usage restrictions of 78.43 and 9.09 tons, respectively, and the actual monthly usage rates for each such month.
5. If no deviations occurred during a reporting period then the deviation reports submitted by the permittee shall state so. The permittee shall submit the reports to the Director (appropriate District Office or local air agency). Refer to General Term and Condition A.1.c. for the required quarterly report due dates.

#### **IV. Reporting Requirements (continued)**

- 6.** The permittee shall submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the total actual annual OC emissions from this emissions unit and from emissions units K001, K002, K005, and K007 combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year .

#### **V. Testing Requirements**

- 1.** Compliance with the emission limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a** Emission Limitation-

8.57 tons/month of OC, including cleanup ( for coating lines K001, K002, K005, and K007 combined)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

- 1.b** Emission Limitation-

78.43 tons/month OC usage (from all applied coatings)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

- 1.c** Emission Limitation-

9.09 tons tons/month OC usage (from all applied cleanup materials)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

- 1.d** Emission Limitation-

90% removal/destruction OC control efficiency (for the fume concentrator and thermal incinerator system)

Applicable Compliance Method-

The permittee shall demonstrate compliance with the limitation above in accordance with the methods and procedures as specified in Section A.V.2 of this permit.

## V. Testing Requirements (continued)

### 1.e Emission Limitation-

12.37 lbs/hr OC, excluding cleanup

Applicable Compliance Method-

Compliance shall be determined as follows:

- i. multiply the maximum primer coating usage rate (gallons/hr) by the maximum OC content of all primer coatings;
- ii. multiply the maximum basecoat material usage rate (gallons/hr) by the maximum OC content of all basecoat materials;
- iii. multiply the maximum clearcoat material usage rate (gallons/hr) by the maximum OC content of all clearcoat materials;
- iv. add i + ii + iii; and
- v. multiply the result from 1.a.iv above by a factor of (1 minus the minimum overall control efficiency of 90 percent).

### 1.f Emission Limitation-

56.57 TPY OC, including cleanup

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3 of this permit and shall be the summation of the 12 monthly organic compound emission rates for the calendar year.

## 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 six months prior to the expiration of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the overall control system efficiency for OCs which will be determined as the product of the capture efficiency and the overall control efficiency of the thermal incinerator and fume concentrator system.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

The capture efficiency shall be determined using the test methods specified in 40 CFR Part 51, Appendix M, Method 204 through 204F, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency as specified in the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. 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 of the fume concentrator and thermal incinerator system shall be conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and shall measure the percent reduction in mass emissions of organic compounds or organic materials between the inlet and outlet of the vapor control system. For the purpose of this testing, the sampling

shall be conducted at the inlet stream to the thermal incinerator (prior to combining with the outlet stream from the concentrator), at the inlet stream to the fume concentrator, and in the exhaust stack.

- d. The test(s) shall be conducted while emissions units K001, K002, K005, and K007 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 unit and the testing procedures provide a valid characterization of the emissions from the emissions unit 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

4. The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the coatings and cleanup materials.

## **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>
plastic parts coating line #2, including oven, with a PTE, fume concentrator, and thermal incinerator	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

- The permit to install for emissions units K001, K002, K005, and K007 was evaluated based on the actual materials (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: cyclohexane

TLV (ug/m3): 1,010,000

Maximum Hourly Emission Rate (lbs/hr): 4.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.49

MAGLC (ug/m3): 10,100

Pollutant: ethyl acetate

TLV (ug/m3): 1,440,000

Maximum Hourly Emission Rate (lbs/hr): 4.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.87

MAGLC (ug/m3): 14,400

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

Pollutant: isobutyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 20.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136.3

MAGLC (ug/m3): 7,130

Pollutant: methyl ethyl ketone

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 9.81

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 64.01

MAGLC (ug/m3): 5,900

Pollutant: methyl propyl ketone

TLV (ug/m3): 705,000

Maximum Hourly Emission Rate (lbs/hr): 8.55

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 55.75

MAGLC (ug/m3): 7,050

Pollutant: n-butyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 7.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 51.10

MAGLC (ug/m3): 7,130

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 8.01

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52.13

MAGLC (ug/m3): 1,880

Pollutant: xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 2.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 14.97

MAGLC (ug/m3): 4,340

Pollutant: methyl n-amyl ketone

TLV (ug/m3): 233,000

Maximum Hourly Emission Rate (lbs/hr): 3.63

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.74

MAGLC (ug/m3): 2,330

Pollutant: ethyl benzene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.70

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.46

MAGLC (ug/m3): 4,340

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 (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.

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

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that a 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:** CY Spray Booth/Dryer (K003)  
**Activity Description:** Gluing CY Armrest Assembly

**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>
gluing CY armrest assembly spray booth/dryer	OAC rule 3745-21-07(G)	See Section A.II.1.
	OAC rule 3745-31-05(A)(3) PTI 08-2662	164.9 lbs/day organic compounds (OC), excluding cleanup;
		1.18 tons/month OC, including cleanup;
		14.12 TPY OC, including cleanup
		See A.II.2.

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

- The permittee shall not use any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The maximum OC content of the coatings employed in this emissions unit shall not exceed 5.87 lbs/gallon of coating.

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

- The permittee shall collect and record the following information each month for this emissions unit:
  - the company identification of each coating and cleanup material employed in this emissions unit; and
  - whether or not each coating and cleanup material employed is a photochemically reactive material.

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

2. The permittee shall collect and record the following information each day for the coating line:
  - a. the company identification of each coating employed;
  - b. the number of gallons of each coating employed;
  - c. the organic compound content of each coating employed, in pounds per gallon; and
  - d. the total organic compound emission rate for all coatings employed [summation of (b x c) for all coatings], in pounds.
3. The permittee shall collect and record the following information each month for the coating line:
  - a. the company identification of each cleanup material employed;
  - b. the number of gallons of each cleanup material employed;
  - c. the organic compound content of each cleanup material employed, in pounds per gallon;
  - d. the total organic compound emission rate for all cleanup materials employed [summation of (b x c) for all cleanup materials], in pounds;
  - e. the total organic compound emission rate for all coatings [summation of the daily OC emissions (from section 1.d) for the calendar month], in pounds; and
  - f. the total organic compound emission rate for all coatings and cleanup materials employed (2.d + 2.e), in tons.

### IV. Reporting Requirements

1. The permittee shall submit deviation reports which identify the days during which any photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s), and the estimated total quantity of material(s) emitted during each such day, in pounds. Each report shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of the deviation.
2. In accordance with paragraph A.1.c. of the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports to the Director (the appropriate Ohio EPA District Office or local air agency) which include the following information for this emissions unit:
  - a. an identification of any exceedance of the daily OC emission limitation of 164.9 lbs, and the actual OC emission limitation for each such day; and
  - b. an identification of any exceedance of the monthly OC emission limitation of 1.18 tons, and the actual organic compound emission rate for each such month.
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of noncomplying coatings (i.e., for OC content). The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
4. The permittee shall submit annual reports which specify the total actual annual OC emissions from this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**V. Testing Requirements (continued)**

**1.a** Emission Limitation -

164.9 lbs/day organic compounds, excluding cleanup

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in Section A.III.2 of this permit.

**1.b** Emission Limitation -

1.18 tons/month organic compounds, including cleanup

Applicable Compliance Methods -

Compliance shall be based on the record keeping requirements specified in Section A.III.3 of this permit.

**1.c** Emission Limitation -

14.12 TPY organic compounds, including cleanup

Applicable Compliance Limitation -

Compliance shall be based on the record keeping requirements specified in Section A.III.3 of this permit and shall be the sum of the 12 monthly organic compound emission rates for the calendar year.

**2.** The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the coatings and cleanup materials.

**VI. Miscellaneous Requirements**

**None**

**B. State 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Coating Line #3 (K005)  
**Activity Description:** Plastic Parts Spray Coating 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>
plastic parts coating line #3, including oven, with a PTE, fume concentrator, and thermal incinerator	OAC rule 3745-31-05 (D) PTI # 08-3960	8.57 tons per month of organic compounds (OC), including cleanup (for coating lines K001, K002, K005, and K007 combined)  See Section A.2.a.
	OAC rule 3745-31-05 (A)(3) PTI # 08-3960	6.32 lbs/hr of OC, excluding cleanup (for this emissions unit)  28.92 TPY of OC, including cleanup (for this emissions unit)
	OAC rule 3745-21-07(G)(1)	The control efficiencies specified by this rule are less stringent than the efficiencies established pursuant to OAC rule 3745-31-05 (D).
	OAC rule 3745-21-07(G)(2)	The control efficiencies specified by this rule are less stringent than the efficiencies established pursuant to OAC rule 3745-31-05 (D).

**2. Additional Terms and Conditions**

- 2.a The OC emissions from this emissions unit shall be controlled through the application of a permanent total enclosure with a 100% capture efficiency and a fume concentrator and thermal incinerator system with a minimum 90% removal/destruction efficiency.
- 2.b The 6.32 lbs/hr OC emission limitation was established for PTI purposes to reflect the potential to emit for 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 coating line 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 diameters from each OC emission point;
  - b. the total area of all NDOs shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling;
  - c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inch of water, and the direction of air through all NDOs shall be into the enclosure;
  - d. all access doors and windows whose areas are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and
  - e. all OC emissions must be captured and vented to the OC control devices.

By satisfying the above criteria for a permanent total enclosure, the OC capture efficiency shall be assumed to be 100%.

\* Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

2. The average combustion temperature within the 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.
3. 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, as a 3-hour average, whenever the emissions unit is in operation.
4. The maximum monthly OC input rates (from coatings and cleanup material usages) for emissions units K001, K002, K005, and K007 combined shall not exceed the following:
  - a. for coatings: 78.43 tons OC (usage rate before recovery and control); and
  - b. for cleanup materials: 9.09 tons OC (usage rate before recovery and control).
5. The average temperature of the desorption air stream prior to the fume concentrator wheel, for any 3-hour block of time, shall not be less than 260 degrees Fahrenheit.
6. The average temperature of the concentrated OC laden air stream prior to the thermal incinerator, for any 3-hour block of time, shall not be less than 120 degrees Fahrenheit.
7. The number of revolutions per hour (RPH) of the fume concentrator shall be continuously maintained, when the emissions unit is in operation, at a value that is within +/- 10 percent of the value established during the most recent emission test that demonstrated that the emissions unit was in compliance.

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

1. The permittee shall operate and maintain continuous temperature monitors and recorders that measure and record the temperature at the following points when the emissions unit is in operation:
  - a. the temperature of the exhaust gases in the combustion zone of the thermal incinerator;
  - b. the temperature of the desorption air stream prior to the OC concentrator wheel; and
  - c. the temperature of the concentrated OC laden air stream prior to the incinerator.

Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within 1 percent of the temperature being measured or 5 degrees Fahrenheit, whichever is greater. The temperature monitors and recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the average temperature from the monitoring points listed in a, b, and c above for each of the 8 3-hour blocks during the day. The permittee also shall maintain a log or record of operating time for the capture (collection) system, control devices, monitoring equipment, and the associated emissions unit.

2. The permittee shall maintain and operate monitoring devices and a recorder that 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 maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

3. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the company identification of each coating and cleanup material employed;
  - b. the number of gallons of each coating employed;
  - c. the OC content of each coating employed, in pounds per gallon;
  - d. the total uncontrolled OC usage rate (OC input rate) for all coatings employed, i.e., the summation of (b x c) for all coatings, in tons;
  - e. the number of gallons of each cleanup material employed;
  - f. the OC content of each cleanup material employed, in pounds per gallon;
  - g. the total uncontrolled, before recovery, OC usage rate (OC input rate) for all cleanup materials employed, i.e., the summation of (e x f) for all cleanup materials, in tons;
  - h. the number of gallons of each cleanup material recovered;
  - i. the uncontrolled, after recovery, OC usage rate (OC input rate) for all cleanup materials employed, i.e., the summation of [(e - h) x f] for all cleanup materials, in tons;
  - j. the total uncontrolled OC emission rate for all coatings and cleanup materials, i.e., (d + i) , in tons;
  - k. the total calculated controlled OC emission rate for all coatings and cleanup materials, in tons (the controlled OC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance, i.e., (j) multiplied by a factor of (1 - the overall control efficiency);

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

l. the total calculated controlled OC emission rate for all coatings and cleanup materials, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of k for emissions units K001, K002, K005, and K007];

m. the total uncontrolled OC usage rate for all coatings employed, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of d for emissions units K001, K002, K005, and K007]; and

n. the uncontrolled, after recovery, OC usage rate for all cleanup materials employed, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of i for emissions units K001, K002, K005, and K007].

4. The permittee shall operate and maintain a continuous monitor which measures the number of revolutions per hour for the fume concentrator when the emissions unit is in operation. The monitoring device shall be capable of accurately measuring the desired parameter. The monitor 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 for each day the number of RPH, on a once/shift basis, when the emissions unit is in operation.

### IV. Reporting Requirements

1. The permittee shall submit quarterly temperature deviation (excursion) reports that identify:
  - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
  - b. all 3-hour blocks of time during which the average temperature of the desorption air stream prior to the OC concentrator wheel did not comply with the temperature limitation specified in section A.II of these terms and conditions; and
  - c. all 3-hour blocks of time during which the average temperature of the concentrated OC laden air stream prior to the incinerator did not comply with the temperature limitation specified in section A.II of these terms and conditions.
2. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a 3-hour average.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the RPH of the fume concentrator was not within +/- 10 percent of the RPH measured during the most recent emission test that demonstrated that the emissions unit was in compliance.
4. The permittee shall submit deviation (excursion) reports that include the following information for emissions units K001, K002, K005, and K007 combined:
  - a. an identification of each month during which the total monthly controlled OC emission rate exceeded the allowable monthly emission limit of 8.57 tons, and the actual monthly OC emission rate for each such month; and
  - b. an identification of each month during which the total monthly OC usage rates from coatings and cleanup materials exceeded the allowable monthly usage restrictions of 78.43 and 9.09 tons, respectively, and the actual monthly usage rates for each such month.
5. If no deviations occurred during a reporting period then the deviation reports submitted by the permittee shall state so. The permittee shall submit the reports to the Director (appropriate District Office or local air agency). Refer to General Term and Condition A.1.c. for the required quarterly report due dates.

**IV. Reporting Requirements (continued)**

6. The permittee shall submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the total actual annual OC emissions from this emissions unit and from emissions units K001, K002, K005, and K007 combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year .

**V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

**1.a** Emission Limitation-

8.57 tons/month of OC, including cleanup ( for coating lines K001, K002, K005, and K007 combined)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

**1.b** Emission Limitation-

78.43 tons/month OC usage (from all applied coatings)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

**1.c** Emission Limitation-

9.09 tons tons/month OC usage (from all applied cleanup materials)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

**1.d** Emission Limitation-

90% removal/destruction OC control efficiency (for the fume concentrator and thermal incinerator system)

Applicable Compliance Method-

The permittee shall demonstrate compliance with the limitation above in accordance with the methods and procedures as specified in Section A.V.2 of this permit.

## V. Testing Requirements (continued)

### 1.e Emission Limitation-

6.32 lbs/hr OC, excluding cleanup

Applicable Compliance Method-

Compliance shall be determined as follows:

- i. multiply the maximum primer coating usage rate (gallons/hr) by the maximum OC content of all primer coatings;
- ii. multiply the maximum basecoat material usage rate (gallons/hr) by the maximum OC content of all basecoat materials;
- iii. multiply the maximum clearcoat material usage rate (gallons/hr) by the maximum OC content of all clearcoat materials;
- iv. add i + ii + iii; and
- v. multiply the result from 1.a.iv above by a factor of (1 minus the minimum overall control efficiency of 90 percent).

### 1.f Emission Limitation-

28.92 TPY OC, including cleanup

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3 of this permit and shall be the summation of the 12 monthly organic compound emission rates for the calendar year.

## 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 six months prior to the expiration of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the overall control system efficiency for OCs which will be determined as the product of the capture efficiency and the overall control efficiency of the thermal incinerator and fume concentrator system.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

The capture efficiency shall be determined using the test methods specified in 40 CFR Part 51, Appendix M, Method 204 through 204F, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency as specified in the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. 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 of the fume concentrator and thermal incinerator system shall be conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and shall measure the percent reduction in mass emissions of organic compounds or organic materials between the inlet and outlet of the vapor control system. For the purpose of this testing, the sampling

shall be conducted at the inlet stream to the thermal incinerator (prior to combining with the outlet stream from the concentrator), at the inlet stream to the fume concentrator, and in the exhaust stack.

- d. The test(s) shall be conducted while emissions units K001, K002, K005, and K007 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 unit and the testing procedures provide a valid characterization of the emissions from the emissions unit 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

4. The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the coatings and cleanup materials.

## **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>
plastic parts coating line #3, including oven, with a PTE, fume concentrator, and thermal incinerator	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

- The permit to install for emissions units K001, K002, K005, and K007 was evaluated based on the actual materials (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: cyclohexane

TLV (ug/m3): 1,010,000

Maximum Hourly Emission Rate (lbs/hr): 4.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.49

MAGLC (ug/m3): 10,100

Pollutant: ethyl acetate

TLV (ug/m3): 1,440,000

Maximum Hourly Emission Rate (lbs/hr): 4.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.87

MAGLC (ug/m3): 14,400

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

Pollutant: isobutyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 20.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136.3

MAGLC (ug/m3): 7,130

Pollutant: methyl ethyl ketone

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 9.81

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 64.01

MAGLC (ug/m3): 5,900

Pollutant: methyl propyl ketone

TLV (ug/m3): 705,000

Maximum Hourly Emission Rate (lbs/hr): 8.55

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 55.75

MAGLC (ug/m3): 7,050

Pollutant: n-butyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 7.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 51.10

MAGLC (ug/m3): 7,130

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 8.01

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52.13

MAGLC (ug/m3): 1,880

Pollutant: xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 2.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 14.97

MAGLC (ug/m3): 4,340

Pollutant: methyl n-amyl ketone

TLV (ug/m3): 233,000

Maximum Hourly Emission Rate (lbs/hr): 3.63

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.74

MAGLC (ug/m3): 2,330

Pollutant: ethyl benzene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.70

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.46

MAGLC (ug/m3): 4,340

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 (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.

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

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that a 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:** Coating Line #5 (K007)  
**Activity Description:** Coating Line #5 for Plastic Automotive 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>
plastic parts coating line #5, including oven, with a PTE, fume concentrator, and thermal incinerator	OAC rule 3745-31-05 (D) PTI # 08-3960	8.57 tons per month of organic compounds (OC), including cleanup (for coating lines K001, K002, K005, and K007 combined)  See Section A.2.a.
	OAC rule 3745-31-05 (A)(3) PTI # 08-3960	16.56 lbs/hr of OC, excluding cleanup (for this emissions unit)  75.23 TPY of OC, including cleanup (for this emissions unit)
	OAC rule 3745-21-07(G)(1)	The control efficiencies specified by this rule are less stringent than the efficiencies established pursuant to OAC rule 3745-31-05 (D).
	OAC rule 3745-21-07(G)(2)	The control efficiencies specified by this rule are less stringent than the efficiencies established pursuant to OAC rule 3745-31-05 (D).

**2. Additional Terms and Conditions**

- 2.a The OC emissions from this emissions unit shall be controlled through the application of a permanent total enclosure with a 100% capture efficiency and a fume concentrator and thermal incinerator system with a minimum 90% removal/destruction efficiency.
- 2.b The 16.56 lbs/hr OC emission limitation was established for PTI purposes to reflect the potential to emit for 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 coating line 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 diameters from each OC emission point;
  - b. the total area of all NDOs shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling;
  - c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inch of water, and the direction of air through all NDOs shall be into the enclosure;
  - d. all access doors and windows whose areas are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and
  - e. all OC emissions must be captured and vented to the OC control devices.

By satisfying the above criteria for a permanent total enclosure, the OC capture efficiency shall be assumed to be 100%.

\* Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

2. The average combustion temperature within the 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.
3. 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, as a 3-hour average, whenever the emissions unit is in operation.
4. The maximum monthly OC input rates (from coatings and cleanup material usages) for emissions units K001, K002, K005, and K007 combined shall not exceed the following:
  - a. for coatings: 78.43 tons OC (usage rate before recovery and control); and
  - b. for cleanup materials: 9.09 tons OC (usage rate before recovery and control).
5. The average temperature of the desorption air stream prior to the fume concentrator wheel, for any 3-hour block of time, shall not be less than 260 degrees Fahrenheit.
6. The average temperature of the concentrated OC laden air stream prior to the thermal incinerator, for any 3-hour block of time, shall not be less than 120 degrees Fahrenheit.
7. The number of revolutions per hour (RPH) of the fume concentrator shall be continuously maintained, when the emissions unit is in operation, at a value that is within +/- 10 percent of the value established during the most recent emission test that demonstrated that the emissions unit was in compliance.

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

1. The permittee shall operate and maintain continuous temperature monitors and recorders that measure and record the temperature at the following points when the emissions unit is in operation:
  - a. the temperature of the exhaust gases in the combustion zone of the thermal incinerator;
  - b. the temperature of the desorption air stream prior to the OC concentrator wheel; and
  - c. the temperature of the concentrated OC laden air stream prior to the incinerator.

Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within 1 percent of the temperature being measured or 5 degrees Fahrenheit, whichever is greater. The temperature monitors and recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the average temperature from the monitoring points listed in a, b, and c above for each of the 8 3-hour blocks during the day. The permittee also shall maintain a log or record of operating time for the capture (collection) system, control devices, monitoring equipment, and the associated emissions unit.

2. The permittee shall maintain and operate monitoring devices and a recorder that 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 maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

3. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the company identification of each coating and cleanup material employed;
  - b. the number of gallons of each coating employed;
  - c. the OC content of each coating employed, in pounds per gallon;
  - d. the total uncontrolled OC usage rate (OC input rate) for all coatings employed, i.e., the summation of (b x c) for all coatings, in tons;
  - e. the number of gallons of each cleanup material employed;
  - f. the OC content of each cleanup material employed, in pounds per gallon;
  - g. the total uncontrolled, before recovery, OC usage rate (OC input rate) for all cleanup materials employed, i.e., the summation of (e x f) for all cleanup materials, in tons;
  - h. the number of gallons of each cleanup material recovered;
  - i. the uncontrolled, after recovery, OC usage rate (OC input rate) for all cleanup materials employed, i.e., the summation of [(e - h) x f] for all cleanup materials, in tons;
  - j. the total uncontrolled OC emission rate for all coatings and cleanup materials, i.e., (d + i) , in tons;
  - k. the total calculated controlled OC emission rate for all coatings and cleanup materials, in tons (the controlled OC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance, i.e., (j) multiplied by a factor of (1 - the overall control efficiency);

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

l. the total calculated controlled OC emission rate for all coatings and cleanup materials, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of k for emissions units K001, K002, K005, and K007];

m. the total uncontrolled OC usage rate for all coatings employed, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of d for emissions units K001, K002, K005, and K007]; and

n. the uncontrolled, after recovery, OC usage rate for all cleanup materials employed, in tons, for emissions units K001, K002, K005, and K007 combined [this is the summation of i for emissions units K001, K002, K005, and K007].

4. The permittee shall operate and maintain a continuous monitor which measures the number of revolutions per hour for the fume concentrator when the emissions unit is in operation. The monitoring device shall be capable of accurately measuring the desired parameter. The monitor 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 for each day the number of RPH, on a once/shift basis, when the emissions unit is in operation.

### IV. Reporting Requirements

1. The permittee shall submit quarterly temperature deviation (excursion) reports that identify:
  - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
  - b. all 3-hour blocks of time during which the average temperature of the desorption air stream prior to the OC concentrator wheel did not comply with the temperature limitation specified in section A.II of these terms and conditions; and
  - c. all 3-hour blocks of time during which the average temperature of the concentrated OC laden air stream prior to the incinerator did not comply with the temperature limitation specified in section A.II of these terms and conditions.
2. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a 3-hour average.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the RPH of the fume concentrator was not within +/- 10 percent of the RPH measured during the most recent emission test that demonstrated that the emissions unit was in compliance.
4. The permittee shall submit deviation (excursion) reports that include the following information for emissions units K001, K002, K005, and K007 combined:
  - a. an identification of each month during which the total monthly controlled OC emission rate exceeded the allowable monthly emission limit of 8.57 tons, and the actual monthly OC emission rate for each such month; and
  - b. an identification of each month during which the total monthly OC usage rates from coatings and cleanup materials exceeded the allowable monthly usage restrictions of 78.43 and 9.09 tons, respectively, and the actual monthly usage rates for each such month.
5. If no deviations occurred during a reporting period then the deviation reports submitted by the permittee shall state so. The permittee shall submit the reports to the Director (appropriate District Office or local air agency). Refer to General Term and Condition A.1.c. for the required quarterly report due dates.

**IV. Reporting Requirements (continued)**

6. The permittee shall submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the total actual annual OC emissions from this emissions unit and from emissions units K001, K002, K005, and K007 combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year .

**V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

**1.a** Emission Limitation-

8.57 tons/month of OC, including cleanup ( for coating lines K001, K002, K005, and K007 combined)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

**1.b** Emission Limitation-

78.43 tons/month OC usage (from all applied coatings)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

**1.c** Emission Limitation-

9.09 tons tons/month OC usage (from all applied cleanup materials)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III of this permit.

**1.d** Emission Limitation-

90% removal/destruction OC control efficiency (for the fume concentrator and thermal incinerator system)

Applicable Compliance Method-

The permittee shall demonstrate compliance with the limitation above in accordance with the methods and procedures as specified in Section A.V.2 of this permit.

## V. Testing Requirements (continued)

### 1.e Emission Limitation-

16.56 lbs/hr OC, excluding cleanup

Applicable Compliance Method-

Compliance shall be determined as follows:

- i. multiply the maximum primer coating usage rate (gallons/hr) by the maximum OC content of all primer coatings;
- ii. multiply the maximum basecoat material usage rate (gallons/hr) by the maximum OC content of all basecoat materials;
- iii. multiply the maximum clearcoat material usage rate (gallons/hr) by the maximum OC content of all clearcoat materials;
- iv. add i + ii + iii; and
- v. multiply the result from 1.a.iv above by a factor of (1 minus the minimum overall control efficiency of 90 percent).

### 1.f Emission Limitation-

75.23 TPY OC, including cleanup

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3 of this permit and shall be the summation of the 12 monthly organic compound emission rates for the calendar year.

## 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 six months prior to the expiration of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the overall control system efficiency for OCs which will be determined as the product of the capture efficiency and the overall control efficiency of the thermal incinerator and fume concentrator system.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

The capture efficiency shall be determined using the test methods specified in 40 CFR Part 51, Appendix M, Method 204 through 204F, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency as specified in the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. 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 of the fume concentrator and thermal incinerator system shall be conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and shall measure the percent reduction in mass emissions of organic compounds or organic materials between the inlet and outlet of the vapor control system. For the purpose of this testing, the sampling

shall be conducted at the inlet stream to the thermal incinerator (prior to combining with the outlet stream from the concentrator), at the inlet stream to the fume concentrator, and in the exhaust stack.

- d. The test(s) shall be conducted while emissions units K001, K002, K005, and K007 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 unit and the testing procedures provide a valid characterization of the emissions from the emissions unit 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

4. The permittee shall employ USEPA Method 24 or formulation data to determine the OC contents of all the coatings and cleanup materials.

## **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>
plastic parts coating line #5, including oven, with a PTE, fume concentrator, and thermal incinerator	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

- The permit to install for emissions units K001, K002, K005, and K007 was evaluated based on the actual materials (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: cyclohexane

TLV (ug/m3): 1,010,000

Maximum Hourly Emission Rate (lbs/hr): 4.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.49

MAGLC (ug/m3): 10,100

Pollutant: ethyl acetate

TLV (ug/m3): 1,440,000

Maximum Hourly Emission Rate (lbs/hr): 4.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.87

MAGLC (ug/m3): 14,400

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

Pollutant: isobutyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 20.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136.3

MAGLC (ug/m3): 7,130

Pollutant: methyl ethyl ketone

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 9.81

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 64.01

MAGLC (ug/m3): 5,900

Pollutant: methyl propyl ketone

TLV (ug/m3): 705,000

Maximum Hourly Emission Rate (lbs/hr): 8.55

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 55.75

MAGLC (ug/m3): 7,050

Pollutant: n-butyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 7.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 51.10

MAGLC (ug/m3): 7,130

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 8.01

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52.13

MAGLC (ug/m3): 1,880

Pollutant: xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 2.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 14.97

MAGLC (ug/m3): 4,340

Pollutant: methyl n-amyl ketone

TLV (ug/m3): 233,000

Maximum Hourly Emission Rate (lbs/hr): 3.63

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.74

MAGLC (ug/m3): 2,330

Pollutant: ethyl benzene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.70

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.46

MAGLC (ug/m3): 4,340

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 (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.

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

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that a 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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