



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

01/30/02

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

03-86-00-0027

Key Plastics, Inc. - Montpelier
John Michael Sheehan
700 Randolph St.
Montpelier, OH 43543

Dear John Michael Sheehan:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

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

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact Northwest District Office.

Very truly yours,

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

cc: Northwest District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: **01/30/02**

Effective Date: **01/30/02**

Expiration Date: **01/30/07**

This document constitutes issuance of a Title V permit for Facility ID: 03-86-00-0027 to:
Key Plastics, Inc. - Montpelier
700 Randolph St.
Montpelier, OH 43543

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

K001 (A-6) Plastics and metal Parts Painting	R030 (A-3) Plastics Parts Painting	R039 (Test Paint Booth) Checking Paint/Paint Color on Sample Plastic Parts before production Quantities Paint Released to Paint Line
R009 (C-1) Plastics Parts Painting	R031 (A-4) Plastics Parts Painting	R040 (D-1A) Plastics Parts Painting
R011 (C-5) Plastics Parts Painting	R032 (A-5) Plastics Parts Painting	R041 (D-2) Plastics Parts Painting
R012 (C-6) Plastics Parts Painting	R034 (C-3) Plastics Parts Painting	R042 (C-9) Plastics Parts Painting
R013 (C-7) Plastics Parts Painting	R035 (C-4) Plastics Parts Painting	R043 (D-1B) Plastics Parts Painting
R014 (C-8) Plastics Parts Painting	R036 (B-1) Plastics Parts Painting	R044 (D-1C) Plastics Parts Painting
R028 (A-1) Plastics Parts Painting	R037 (B-2) Plastics Parts Painting	
R029 (A-2) Plastics Parts Painting	R038 (B-3) Plastics Parts Painting	

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related 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 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.8 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 the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

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 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. Insignificant Activity

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

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with

this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. 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:

pyrolysis cleaning oven, emissions unit N001; and
parts washer & dry off oven, emissions unit P003.

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 (PTI) for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: A-6 (K001)

Activity Description: Plastics and metal Parts Painting

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>
plastic/metal parts spray booth, paint booth A-6	OAC rule 3745-31-05(A)(3) (PTI 03-10757)	<p>231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.)</p> <p>12.3 lbs organic compounds (OC)/hr and 53.8 tons OC/yr (See A.I.2.b.)</p> <p>When coating non-metal parts and no photochemically reactive materials (coatings and cleanup materials) are employed: 5.43 lbs OC/hr and 23.8 tons OC/yr, for the coatings used for the non-metal parts (See A.I.2.c.)</p> <p>0.54 lb particulate emissions (PE)/hr and 2.37 tons PE/yr</p> <p>Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.</p> <p>101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations</p> <p>See A.I.2.d.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(U)(1)(d) and OAC rule 3745-21-07(G)(2).</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-07(G)(2)	On any day when coating non-metal parts and employing a photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day, for the coatings used for non-metal parts
	OAC rule 3745-21-09(U)(1)(d)	On any day when coating metal parts: 3.5 lbs VOC/gallon, excluding water and exempt solvents, for the coatings used for the metal parts
	OAC rule 3745-17-11(B)	none (See A.I.2.e.)
	OAC rule 3745-17-07(A)	none (See A.I.2.f.)

2. Additional Terms and Conditions

- 2.a** The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.
- 2.b** The 12.3 lbs OC/hr and the 53.8 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The 5.43 lbs OC/hr and the 23.8 tons/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.d** The OC emissions from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K00, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.e** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.f** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee shall not employ any cleanup material in this emissions unit that is a volatile organic compound. "Volatile organic compound" is defined in OAC rule 3745-21-01.
3. The permittee shall not place any metal part coated in this emissions unit in an oven in which the temperature exceeds 200 degrees Fahrenheit.
4. Each coating employed in this emissions unit shall comply with the VOC emission limitation of 3.5 lbs per gallon, excluding water and exempt solvents, on an "as applied" basis.

III. Monitoring and/or Record Keeping Requirements

- 1.** On any day when coating non-metal parts, the permittee shall collect and record the following information each day for this emissions unit for the coatings used for the non-metal parts:
 - 1.a** the company identification for each coating employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation, excluding periods when metal parts were being coated; and
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average).
- 2.** On any day when coating metal parts, the permittee shall collect and record the following information each day for this emissions unit for the coatings used for the metal parts:
 - 2.a** the name and identification number of each coating, as applied;
 - 2.b** the VOC content of each coating, in pounds/gallon (excluding water and exempt solvents), on an "as applied" basis;
 - 2.c** the number of gallons, excluding water and exempt solvents, of each coating employed;
 - 2.d** the total VOC emissions from all coatings employed (summation of b x c for all coatings), in pounds; and
 - 2.e** the oven temperature, in degrees Fahrenheit.
- 3.** The permittee shall collect and record the following information each day:
 - 3.a** the daily VOC emissions for the coatings used for the non-metal parts and the coatings used for the metal parts for this emissions unit (1.f + 2.d), in tons;
 - 3.b** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons.
- 4.** The permittee shall record and maintain the following information each day for this emissions unit:
 - 4.a** the company identification of each cleanup material employed;
 - 4.b** documentation on whether or not each cleanup material is a volatile organic compound; and
 - 4.c** documentation on whether or not each cleanup material is a photochemically reactive material.
- 5.** The permittee shall collect and record the following information each month for this emissions unit:

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

- 5.a the name and identification of each cleanup material employed;
- 5.b the number of gallons of each cleanup material employed;
- 5.c the OC content of each cleanup material, in pounds per gallon; and
- 5.d the total OC emission rate for all cleanup materials employed [summation of b x c for all cleanup materials], in pounds.

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 6. The permittee shall collect and record each month the total OC emissions (from cleanup material usage) for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040,R041, R042, R043, R044 and K001, combined, in pounds.

IV. Reporting Requirements

- 1. For the coating of non-metal parts, the permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. For the coating of metal parts, the permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying coatings (i.e., for VOC content) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040,R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 4. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., any cleanup material that is a photochemically reactive material and/or a VOC) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

5. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
7. For the coating of metal parts, permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the oven temperature restriction for metal parts of 200 degrees Fahrenheit. These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.3 of the terms and conditions of this permit.

- 1.b Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined).

Applicable Compliance Method: Compliance shall be determined based upon the record keeping requirements specified in section A.III.6 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

- 1.c Emission Limitations: 0.54 lb PE/hr and 2.37 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

V. Testing Requirements (continued)

- 1.d** Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

- 1.e** Emission Limitations: 12.3 lbs OC/hr and 53.8 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (3.5 gallons/hr) by the maximum OC content (3.5 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 12.3 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

- 1.f** Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.5 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

- 1.g** Emission Limitations: When coating non-metal parts and no photochemically reactive materials (coatings and cleanup materials) are employed, 5.43 lbs OC/hr and 23.8 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (3.5 gallons/hr) by the maximum OC content (1.55 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/yr limitation was developed by multiplying the 5.43 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly limitation is maintained, compliance with the annual limitation shall be assumed.

- 1.h** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Method: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.i** Emission Limitation: 3.5 lbs VOC per gallon, excluding water and exempt solvents

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements specified in section A.III.2 of this permit.

- 2.** Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastic/metal parts spray booth, paint spray booth A-6	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

1.h Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762

1.i Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476

1.j Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976

1.k Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60

1.l Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: C-1 (R009)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth C-1	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 6.2 lbs OC/hr and 27.2 tons OC/yr (See A.I.2.b.)
		101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations
		0.92 lb particulate emissions (PE)/hr and 4.03 tons PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 6.2 lbs OC/hr and the 27.2 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040,R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040,R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.92 lb PE/hr and 4.03 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 6.2 lbs OC/hr and 27.2 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (4 gallons/hr) by the maximum OC content (1.55 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 6.2 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth C-1	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: C-5 (R011)
Activity Description: Plastics Parts Painting

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>	
plastics parts spray booth, paint booth C-5	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day	
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 2.5 lbs OC/hr and 10.95 tons OC/yr (See A.I.2.b.) 101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations 0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average. See A.I.2.c.	
	OAC rule 3745-17-11(B)	none (See A.I.2.d.)	
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)	

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 2.5 lbs OC/hr and the 10.95 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
- These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
5. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)**1.d** Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 2.5 lbs OC/hr and 10.95 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (5 gallons/hr) by the maximum OC content (0.5 lb OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 2.5 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.**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>
plastics parts spray booth, paint booth C-5	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: C-6 (R012)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth C-6	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 2.5 lbs OC/hr and 10.95 tons OC/yr (See A.I.2.b.)
		101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations
		0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 2.5 lbs OC/hr and the 10.95 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1.** The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2.** The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
- These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 2.5 lbs OC/hr and 10.95 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (5 gallons/hr) by the maximum OC content (0.5 lb OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 2.5 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth C-6	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: C-7 (R013)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth C-7	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material:
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	8 lbs organic compounds (OC)/hr and 40 lbs OC/day 231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.)
		2.5 lbs OC/hr and 10.95 tons OC/yr (See A.I.2.b.)
		101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations
		0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 2.5 lbs OC/hr and the 10.95 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 2.5 lbs OC/hr and 10.95 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (5 gallons/hr) by the maximum OC content (0.5 lb OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 2.5 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth C-7	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

1.h Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762

1.i Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476

1.j Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976

1.k Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60

1.l Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: C-8 (R014)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth C-8	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 4.65 lbs OC/hr and 20.4 tons OC/yr (See A.I.2.b.) 50.9 lbs OC/month and 0.31 ton OC/yr, from cleanup operations 0.7 lb particulate emissions (PE)/hr and 3.07 tons PE/yr Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average. See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 4.65 lbs OC/hr and the 20.4 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 50.9 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
5. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.7 lb PE/hr and 3.07 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 4.65 lbs OC/hr and 20.4 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (3 gallons/hr) by the maximum OC content (1.55 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 4.65 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 50.9 lbs OC/month and 0.31 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth C-8	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: A-1 (R028)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth A-1	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 10.36 lbs OC/hr and 45.4 tons OC/yr (See A.I.2.b.)
		101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations
		1.56 lb particulate emissions (PE)/hr and 6.83 tons PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 10.36 lbs OC/hr and the 45.4 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1.** The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2.** The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
5. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 1.56 lbs PE/hr and 6.83 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 10.36 lbs OC/hr and 45.4 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (3.5 gallons/hr) by the maximum OC content (2.96 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 10.36 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth A-1	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

1.h Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762

1.i Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476

1.j Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976

1.k Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60

1.l Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: A-2 (R029)

Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth A-2	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 4.65 lbs OC/hr and 20.4 tons OC/yr (See A.I.2.b.) 101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations 0.7 lb particulate emissions (PE)/hr and 3.07 tons PE/yr Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average. See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 4.65 lbs OC/hr and the 20.4 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1.** The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2.** The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
5. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)**1.d** Emission Limitations: 0.7 lb PE/hr and 3.07 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 4.65 lbs OC/hr and 20.4 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (3 gallons/hr) by the maximum OC content (1.55 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 4.65 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.**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>
plastics parts spray booth, paint booth A-2	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

1.h Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762

1.i Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476

1.j Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976

1.k Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60

1.l Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: A-3 (R030)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth A-3	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 4.65 lbs OC/hr and 20.4 tons OC/yr (See A.I.2.b.) 101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations 0.7 lb particulate emissions (PE)/hr and 3.07 tons PE/yr Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average. See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 4.65 lbs OC/hr and the 20.4 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1.** The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2.** The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.7 lb PE/hr and 3.07 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 4.65 lbs OC/hr and 20.4 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (3 gallons/hr) by the maximum OC content (1.55 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 4.65 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth A-3	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate

TLV (ug/m3): 1,040

Maximum Hourly Emission Rate (lbs/hr): 4.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16

MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene

TLV (ug/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 21.22

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65

MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 17.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56

MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine

TLV (ug/m3): 4.10

Maximum Hourly Emission Rate (lbs/hr): 6.88

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95

MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 5.27

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95

MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: A-4 (R031)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth A-4	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 4.65 lbs OC/hr and 20.4 tons OC/yr (See A.I.2.b.) 101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations 0.7 lb particulate emissions (PE)/hr and 3.07 tons PE/yr Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average. See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 4.65 lbs OC/hr and the 20.4 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.7 lb PE/hr and 3.07 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 4.65 lbs OC/hr and 20.4 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (3 gallons/hr) by the maximum OC content (1.55 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 4.65 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth A-4	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

1.h Pollutant: iso-Propyl Acetate

TLV (ug/m3): 1,040

Maximum Hourly Emission Rate (lbs/hr): 4.31

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 35.16

MAGLC (ug/m3): 24,762

1.i Pollutant: Toluene

TLV (ug/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 21.22

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 193.65

MAGLC (ug/m3): 4,476

1.j Pollutant: iso-Butyl Acetate

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 17.71

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 166.56

MAGLC (ug/m3): 16,976

1.k Pollutant: Triethylamine

TLV (ug/m3): 4.10

Maximum Hourly Emission Rate (lbs/hr): 6.88

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 39.95

MAGLC (ug/m3): 97.60

1.l Pollutant: Butyl Acetate (n-butyl acetate)

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 5.27

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 87.95

MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: A-5 (R032)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth A-5	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 16.7 lbs OC/hr and 73.1 tons OC/yr (See A.I.2.b.) 101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations
		0.77 lb particulate emissions (PE)/hr and 3.37 tons PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 16.7 lbs OC/hr and the 73.1 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
- These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.77 lb PE/hr and 3.37 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 16.7 lbs OC/hr and 73.1 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (3.5 gallons/hr) by the maximum OC content (4.76 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 16.7 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth A-5	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate

TLV (ug/m3): 1,040

Maximum Hourly Emission Rate (lbs/hr): 4.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16

MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene

TLV (ug/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 21.22

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65

MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 17.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56

MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine

TLV (ug/m3): 4.10

Maximum Hourly Emission Rate (lbs/hr): 6.88

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95

MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 5.27

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95

MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: C-3 (R034)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth C-3	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 20.0 lbs OC/hr and 87.6 tons OC/yr (See A.I.2.b.) 203.7 lbs OC/month and 1.22 tons OC/yr, from cleanup operations 0.37 lb particulate emissions (PE)/hr and 1.62 tons PE/yr Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average. See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 20.0 lbs OC/hr and the 87.6 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
- These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 203.7 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.37 lb PE/hr and 1.62 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 20.0 lbs OC/hr and 87.6 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (4 gallons/hr) by the maximum OC content (5 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 20.0 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 203.7 lbs OC/month and 1.22 tons OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth C-3	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: C-4 (R035)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth C-4	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 6.2 lbs OC/hr and 27.2 tons OC/yr (See A.I.2.b.)
		101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations
		0.92 lb particulate emissions (PE)/hr and 4.03 tons PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 6.2 lbs OC/hr and the 27.2 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1.** The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2.** The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
5. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.92 lb PE/hr and 4.03 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 6.2 lbs OC/hr and 27.2 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (4 gallons/hr) by the maximum OC content (1.55 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 6.2 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth C-4	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - 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
 - physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
- If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - 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: B-1 (R036)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth B-1	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 4.52 lbs OC/hr and 19.8 tons OC/yr (See A.I.2.b.)
		203.7 lbs OC/month and 1.22 tons OC/yr, from cleanup operations
		0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 4.52 lbs OC/hr and the 19.8 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 203.7 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 4.52 lbs OC/hr and 19.8 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (0.75 gallon/hr) by the maximum OC content (6.02 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 4.52 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 203.7 lbs OC/month and 1.22 tons OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth B-1	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: B-2 (R037)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth B-2	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 6.02 lbs OC/hr and 26.4 tons OC/yr (See A.I.2.b.) 203.7 lbs OC/month and 1.22 tons OC/yr, from cleanup operations
		0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 6.02 lbs OC/hr and the 26.4 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 203.7 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
5. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 6.02 lbs OC/hr and 26.4 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (1.0 gallon/hr) by the maximum OC content (6.02 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 6.02 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 203.7 lbs OC/month and 1.22 tons OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth B-2	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
- If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: B-3 (R038)
Activity Description: Plastics Parts Painting

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>	
plastics parts spray booth, paint booth B-3	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day	
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 6.02 lbs OC/hr and 26.4 tons OC/yr (See A.I.2.b.) 203.7 lbs OC/month and 1.22 tons OC/yr, from cleanup operations 0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average. See A.I.2.c.	
	OAC rule 3745-17-11(B)	none (See A.I.2.d.)	
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)	

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 6.02 lbs OC/hr and the 26.4 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1.** The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2.** The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 203.7 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 6.02 lbs OC/hr and 26.4 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (1.0 gallon/hr) by the maximum OC content (6.02 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 6.02 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 203.7 lbs OC/month and 1.22 tons OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth B-3	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Test Paint Booth (R039)

Activity Description: Checking Paint/Paint Color on Sample Plastic Parts before production Quantities Paint Released to Paint Line

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>
test paint spray booth	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 0.602 lb OC/hr and 2.64 tons OC/yr (See A.I.2.b.) 203.7 lbs OC/month and 1.22 tons OC/yr, from cleanup operations
		0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 0.602 lb OC/hr and the 2.64 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1.** The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2.** The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 203.7 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 0.602 lbs OC/hr and 2.64 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (0.1 gallon/hr) by the maximum OC content (6.02 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 6.02 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 203.7 lbs OC/month and 1.22 tons OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
test paint spray booth	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

1.h Pollutant: iso-Propyl Acetate

TLV (ug/m3): 1,040

Maximum Hourly Emission Rate (lbs/hr): 4.31

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 35.16

MAGLC (ug/m3): 24,762

1.i Pollutant: Toluene

TLV (ug/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 21.22

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 193.65

MAGLC (ug/m3): 4,476

1.j Pollutant: iso-Butyl Acetate

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 17.71

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 166.56

MAGLC (ug/m3): 16,976

1.k Pollutant: Triethylamine

TLV (ug/m3): 4.10

Maximum Hourly Emission Rate (lbs/hr): 6.88

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 39.95

MAGLC (ug/m3): 97.60

1.l Pollutant: Butyl Acetate (n-butyl acetate)

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 5.27

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 87.95

MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: D-1A (R040)

Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth D-1A	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 4.52 lbs OC/hr and 19.8 tons OC/yr (See A.I.2.b.) 203.7 lbs OC/month and 1.22 tons OC/yr, from cleanup operations 0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average. See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 4.52 lbs OC/hr and the 19.8 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 203.7 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 4.52 lbs OC/hr and 19.8 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (0.75 gallon/hr) by the maximum OC content (6.02 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 4.52 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 203.7 lbs OC/month and 1.22 tons OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth D-1A	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

1.h Pollutant: iso-Propyl Acetate

TLV (ug/m3): 1,040

Maximum Hourly Emission Rate (lbs/hr): 4.31

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 35.16

MAGLC (ug/m3): 24,762

1.i Pollutant: Toluene

TLV (ug/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 21.22

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 193.65

MAGLC (ug/m3): 4,476

1.j Pollutant: iso-Butyl Acetate

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 17.71

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 166.56

MAGLC (ug/m3): 16,976

1.k Pollutant: Triethylamine

TLV (ug/m3): 4.10

Maximum Hourly Emission Rate (lbs/hr): 6.88

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 39.95

MAGLC (ug/m3): 97.60

1.l Pollutant: Butyl Acetate (n-butyl acetate)

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 5.27

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 87.95

MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: D-2 (R041)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth D-2	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 20.0 lbs OC/hr and 87.6 tons OC/yr (See A.I.2.b.) 203.7 lbs OC/month and 1.22 tons OC/yr, from cleanup operations 0.37 lb particulate emissions (PE)/hr and 1.62 tons PE/yr Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average. See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 20.0 lbs OC/hr and the 87.6 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 203.7 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
5. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.37 lb PE/hr and 1.62 tons PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 20.0 lbs OC/hr and 87.6 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (4 gallons/hr) by the maximum OC content (5 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 20.0 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 203.7 lbs OC/month and 1.22 tons OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth D-2	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

1.h Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762

1.i Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476

1.j Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976

1.k Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60

1.l Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: C-9 (R042)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth C-9	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 0.78 lb OC/hr and 3.42 tons OC/yr (See A.I.2.b.) 101.8 lbs OC/month and 0.61 ton OC/yr, from cleanup operations 0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average. See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 0.78 lb OC/hr and the 3.42 ton OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. $[i/j]$, in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 101.8 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 0.78 lb OC/hr and 3.42 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (5 gallons/hr) by the maximum OC content (0.5 lb OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 2.5 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 101.8 lbs OC/month and 0.61 ton OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth C-9	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

- 1.h** Pollutant: iso-Propyl Acetate
TLV (ug/m3): 1,040
Maximum Hourly Emission Rate (lbs/hr): 4.31
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 35.16
MAGLC (ug/m3): 24,762
- 1.i** Pollutant: Toluene
TLV (ug/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 21.22
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 193.65
MAGLC (ug/m3): 4,476
- 1.j** Pollutant: iso-Butyl Acetate
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 17.71
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 166.56
MAGLC (ug/m3): 16,976
- 1.k** Pollutant: Triethylamine
TLV (ug/m3): 4.10
Maximum Hourly Emission Rate (lbs/hr): 6.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.95
MAGLC (ug/m3): 97.60
- 1.l** Pollutant: Butyl Acetate (n-butyl acetate)
TLV (ug/m3): 713
Maximum Hourly Emission Rate (lbs/hr): 5.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 87.95
MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: D-1B (R043)

Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth D-1B	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 6.02 lbs OC/hr and 26.4 tons OC/yr (See A.I.2.b.) 203.7 lbs OC/month and 1.22 tons OC/yr, from cleanup operations
		0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- 2.a The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 6.02 lbs OC/hr and the 26.4 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 203.7 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
5. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
6. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

1. Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 6.02 lbs OC/hr and 26.4 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (1.0 gallon/hr) by the maximum OC content (6.02 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 6.02 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 203.7 lbs OC/month and 1.22 tons OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth D-1B	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

1.h Pollutant: iso-Propyl Acetate

TLV (ug/m3): 1,040

Maximum Hourly Emission Rate (lbs/hr): 4.31

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 35.16

MAGLC (ug/m3): 24,762

1.i Pollutant: Toluene

TLV (ug/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 21.22

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 193.65

MAGLC (ug/m3): 4,476

1.j Pollutant: iso-Butyl Acetate

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 17.71

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 166.56

MAGLC (ug/m3): 16,976

1.k Pollutant: Triethylamine

TLV (ug/m3): 4.10

Maximum Hourly Emission Rate (lbs/hr): 6.88

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 39.95

MAGLC (ug/m3): 97.60

1.l Pollutant: Butyl Acetate (n-butyl acetate)

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 5.27

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 87.95

MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - 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
 - physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
- If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - 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: D-1C (R044)
Activity Description: Plastics Parts Painting

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>
plastics parts spray booth, paint booth D-1C	OAC rule 3745-21-07(G)(2)	On any day when employing any photochemically reactive coating material: 8 lbs organic compounds (OC)/hr and 40 lbs OC/day
	OAC rule 3745-31-05(A)(3) (PTI No. 03-10757)	231.0 tons volatile organic compounds (VOC)/yr (See A.I.2.a.) 6.02 lbs OC/hr and 26.4 tons OC/yr (See A.I.2.b.) 203.7 lbs OC/month and 1.22 tons OC/yr, from cleanup operations
		0.1 lb particulate emissions (PE)/hr and 0.44 ton PE/yr
		Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.
		See A.I.2.c.
	OAC rule 3745-17-11(B)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). none (See A.I.2.d.)
	OAC rule 3745-17-07(A)	none (See A.I.2.e.)

2. Additional Terms and Conditions

- The permittee shall not emit more than 231.0 tons of VOC (from coating material usage) per rolling, 365-day period from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

2. Additional Terms and Conditions (continued)

- 2.b** The 6.02 lbs OC/hr and the 26.4 tons OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c** The OC emissions from cleanup material usage in emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined, shall not exceed 3000 lbs/month and 18 tons/yr.
- 2.d** The uncontrolled mass rate of PE from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Williams County.
- 2.e** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

- 1. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
- 2. The permittee shall not place any part coated in this emissions unit in an oven in which the coating, or solvent vapor from the coating, comes into contact with the flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen. The determination of whether or not the coating is baked, heat-cured, or heat-polymerized is based on whether the coating will redissolve in the original solvent mixture.

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information for each day for this emissions unit:
 - 1.a** the company identification for each coating and cleanup material employed;
 - 1.b** documentation on whether or not each coating is a photochemically reactive material;
 - 1.c** the number of gallons of each coating employed;
 - 1.d** the volatile organic compound content of each coating, in pounds per gallon;
 - 1.e** the volatile organic compound emission rate for each coating, in pounds;
 - 1.f** the volatile organic compound emission rate for all coatings, in pounds [sum of e for all coatings];
 - 1.g** for each day during which a photochemically reactive coating material is employed, the organic compound content of each coating, in pounds per gallon;
 - 1.h** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for each coating, in pounds;
 - 1.i** for each day during which a photochemically reactive coating material is employed, the total organic compound emission rate for all coatings, in pounds;
 - 1.j** for each day during which a photochemically reactive coating material is employed, the total number of hours the emissions unit was in operation;
 - 1.k** for each day during which a photochemically reactive coating material is employed, the average hourly organic compound emission rate for all coatings, i.e. [i/j], in pounds per hour (average);
 - 1.l** documentation on whether or not each coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen;
 - 1.m** the rolling, 365-day summation of the VOC emissions for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044, and K001, combined, in tons; and

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

- 1.n documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 2. The permittee shall collect and record the following information each month:
 - 2.a the name and identification of each cleanup material employed;
 - 2.b the number of gallons of each cleanup material employed;
 - 2.c the OC content of each cleanup material, in pounds per gallon;
 - 2.d the total OC emission rate for all cleanup materials employed, in pounds [summation of b x c for all cleanup materials]; and

Note: The permittee may also calculate the monthly OC emission rate in accordance with the following formula if waste cleanup materials are sent off site for reclamation/disposal:

monthly OC emissions from cleanup operations (pounds/month) = summation of [(Ai-Bi) X di] for i = 1 to n

where:

i = 1, 2, 3,...n

n = the total number of different types of cleanup materials employed

Ai = the number of gallons of cleanup material i consumed (gallons/month)

Bi = the number of gallons of cleanup material i sent off site for disposal or reclamation, minus solids content of said material (gallons/month)

di = density of cleanup material i, in pounds/gallon

- 2.e the total OC emissions (from cleanup material usage), in pounds, for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:
 - 1.a For the days during which a photochemically reactive coating material was employed, an identification of each day that the average hourly organic compound emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - 1.b For the days during which a photochemically reactive coating material was employed, an identification of each day that the organic compound emissions from this emissions unit exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

- 2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and from emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
- 3. The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing the use of noncomplying cleanup materials (i.e., photochemically reactive) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.

IV. Reporting Requirements (continued)

- 4.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emission limitations of 203.7 pounds (from cleanup material usage for this emissions unit) and 3000 pounds (from cleanup material usage for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.
- 5.** The permittee shall notify the Director (Ohio EPA, Northwest District Office) in writing of any daily record showing that a coated part comes into contact with a flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director within 30 days after the exceedance occurs.
- 6.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC emission limitation of 231 tons (for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined). These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit, paragraph A.1.c.

V. Testing Requirements

- 1.** Compliance with the emission limitations in this permit shall be determined in accordance with the following methods:

- 1.a** Emission Limitations: 8 lbs OC/hr and 40 lbs OC/day

Applicable Compliance Methods: Compliance may be determined based upon the record keeping requirements specified in section A.III.1 of the terms and conditions of this permit.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

- 1.b** Emission Limitation: 231.0 tons VOC/yr

Applicable Compliance Method: Compliance shall be demonstrated through the record keeping required in section A.III.1 of the terms and conditions of this permit.

- 1.c** Emission Limitations: 3000 lbs OC/month and 18.0 tons OC/yr (from cleanup operations for emissions units R009, R011, R012, R013, R014, R028, R029, R030, R031, R032, R034, R035, R036, R037, R038, R039, R040, R041, R042, R043, R044 and K001, combined)

Applicable Compliance Method: Compliance with the monthly OC limitation shall be determined based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit.

Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

V. Testing Requirements (continued)

1.d Emission Limitations: 0.1 lb PE/hr and 0.44 ton PE/yr

Applicable Compliance Method: If required, compliance with the hourly PE limitation shall be determined through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

To calculate the worst case PE rate, the permittee may use the following equation:

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

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

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

CE = Control efficiency of the control equipment

Compliance with the annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained. (The annual limitation was calculated by multiplying the hourly PE limitation by 8760, and then dividing by 2000.)

1.e Emission Limitation: Visible PE from the stack associated with this emissions unit shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with Method 9, which is located in 40 CFR, Part 60, Appendix A.

1.f Emission Limitations: 6.02 lbs OC/hr and 26.4 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit determined by multiplying the maximum coating usage rate (1.0 gallon/hr) by the maximum OC content (6.02 lbs OC/gallon of coating), as applied. If required the permittee shall demonstrate compliance through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18 or 25, as appropriate.

The tons/year limitation was developed by multiplying the 6.02 lbs/hr limitation by the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000. Therefore, provided that compliance with the hourly OC limitation is maintained, compliance with the annual OC limitation shall be assumed.

1.g Emission Limitations: 203.7 lbs OC/month and 1.22 tons OC/yr (from cleanup material usage for this emissions unit)

Applicable Compliance Method: Compliance with the monthly emission limitation shall be based upon the record keeping requirements specified in section A.III.2 of the terms and conditions of this permit. Compliance with the annual limitation shall be assumed as long as compliance with the monthly limitation is maintained (the annual limitation was calculated by multiplying the monthly limitation by 12, and then dividing by 2000).

2. Formulation data or USEPA Method 24 shall be used to determine the VOC/OC contents of the coatings.

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>
plastics parts spray booth, paint booth D-1C	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action (PTI 03-10757) as evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

1.a Pollutant: ethanol

TLV (ug/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.82

MAGLC (ug/m3): 44,762

1.b Pollutant: iso-Propanol (iso-Propyl Alcohol Anhydrous)

TLV (ug/m3): 400

Maximum Hourly Emission Rate (lbs/hr): 5.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.56

MAGLC (ug/m3): 9,524

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

1.c Pollutant: Acetone

TLV (ug/m3): 1,780

Maximum Hourly Emission Rate (lbs/hr): 23.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 303.8

MAGLC (ug/m3): 42,381

1.d Pollutant: iso-Butyl Alcohol

TLV (ug/m3): 152

Maximum Hourly Emission Rate (lbs/hr): 11.33

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 106.65

MAGLC (ug/m3): 3,619

1.e Pollutant: Methyl Ethyl Ketone

TLV (ug/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 6.23

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 53.27

MAGLC (ug/m3): 14,048

1.f Pollutant: Propylene Glycol Methyl Ether Acetate (Glycol Ether PM)

TLV (ug/m3): 369

Maximum Hourly Emission Rate (lbs/hr): 15.62

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 147.76

MAGLC (ug/m3): 8,786

1.g Pollutant: Methyl iso-Butyl Ketone

TLV (ug/m3): 205

Maximum Hourly Emission Rate (lbs/hr): 7.12

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 58.69

MAGLC (ug/m3): 4,881

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

1.h Pollutant: iso-Propyl Acetate

TLV (ug/m3): 1,040

Maximum Hourly Emission Rate (lbs/hr): 4.31

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 35.16

MAGLC (ug/m3): 24,762

1.i Pollutant: Toluene

TLV (ug/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 21.22

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 193.65

MAGLC (ug/m3): 4,476

1.j Pollutant: iso-Butyl Acetate

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 17.71

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 166.56

MAGLC (ug/m3): 16,976

1.k Pollutant: Triethylamine

TLV (ug/m3): 4.10

Maximum Hourly Emission Rate (lbs/hr): 6.88

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 39.95

MAGLC (ug/m3): 97.60

1.l Pollutant: Butyl Acetate (n-butyl acetate)

TLV (ug/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 5.27

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 87.95

MAGLC (ug/m3): 16,976

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

1.m Pollutant: Xylene (Xylol)

TLV (ug/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 4.92

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 44.58

MAGLC (ug/m3): 10,333

1.n Pollutant: VM & P Naptha

TLV (ug/m3): 1,370

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.49

MAGLC (ug/m3): 32,619

1.o Pollutant: PM - Acetate

TLV (ug/m3): 0.1

Maximum Hourly Emission Rate (lbs/hr): 0.43

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.78

MAGLC (ug/m3): 2.38

1.p Pollutant: n-Propyl Alcohol

TLV (ug/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 6.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 61.63

MAGLC (ug/m3): 11,714

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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