



State of Ohio Environmental Protection Agency

Street Address:

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

12/18/02

**RE: Proposed Title V Chapter 3745-77 Permit  
02-47-03-0471  
Ford Motor Company - Ohio Assembly Plant**

Attn: Genevieve Damico AR-18J  
United States Environmental Protection Agency  
Region V  
77 West Jackson Blvd.  
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Ford Motor Company - Ohio Assembly Plant, has been created in Ohio EPA's State Air Resources System (STARS) on 12/18/02, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit +C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact me at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

Michael W. Ahern, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: Northeast District Office  
File, DAPC PMU



State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 12/18/02

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 02-47-03-0471 to:
Ford Motor Company - Ohio Assembly Plant
650 Miller Road
Avon Lake, OH 44012-0000

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

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include units like B004 (Phosphate Heaters), B024 (Trim shop air supply), K016 (Topcoat (Enamel) system #2), etc.

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.

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

Northeast District Office

2110 East Aurora Road  
Twinsburg, OH 44087  
(330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

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Christopher Jones  
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Section

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

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

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

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

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

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

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

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

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

ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

- (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-

07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

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

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

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

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

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

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

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

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

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

## 2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))*

## 3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.  
*(Authority for term: OAC rule 3745-77-07(A)(4))*

## 4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.  
*(Authority for term: OAC rule 3745-77-07(A)(5))*

## 5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.  
*(Authority for term: OAC rule 3745-77-07(A)(6))*

## 6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

**7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

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

**8. Marketable Permit Programs**

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

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

**9. Reasonably Anticipated Operating Scenarios**

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

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

**10. Reopening for Cause**

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the

permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

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

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

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

#### **12. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

- iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.
    - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

### **13. Permit Shield**

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

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

**14. Operational Flexibility**

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

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

**15. Emergencies**

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

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

**16. Off-Permit Changes**

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.) *(Authority for term: OAC rule 3745-77-07(I))*

**17. Compliance Method Requirements**

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

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

**18. Insignificant Activities**

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

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

**19. Permit to Install Requirement**

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

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

**20. Air Pollution Nuisance**

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

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

**B. State Only Enforceable Section**

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

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii)

any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**2. Records Retention Requirements**

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

**3. Inspections and Information Requests**

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

**4. Scheduled Maintenance/Malfunction Reporting**

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

**5. Permit Transfers**

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

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

**Facility Name: Ford Motor Company - Ohio Assembly Plant**  
**Facility ID: 02-47-03-0471**

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**

1. In accordance with Ohio EPA PTI 02-9278, issued and effective January 18, 1996, the permittee shall limit light-duty truck (van) production at the Ohio Assembly Plant to the following maximum levels:
  - a. multi-purpose vehicles (MPV) - 700 jobs per day and 164,500 jobs per rolling 12-month period; and
  - b. cargo vans (CV) - 1,300 jobs per day and 305,500 jobs per rolling 12-month period.

The above altered production mix of CVs and MPVs was approved by Ohio EPA in a letter to Ford Motor Co. dated, July 13, 1999, based upon a written request from Ford, in accordance with the provisions for same listed in PTI 02-9278.

The above production limitations may be modified by the Ohio EPA provided the permittee submits a demonstration that an alternative mix would not result in an increase in the daily emissions from the plant.

2. The permittee shall collect and keep daily and monthly production records of the following:
  - a. the number of MPV produced, in terms of jobs per day and in jobs per rolling 12-month period; and
  - b. the number of CV produced, in terms of jobs per day and in jobs per rolling 12-month period.
3. By January 31st of each year, the permittee shall submit annual reports of the MPV and CV produced at the Ohio Assembly Plant during the previous calendar year.
4. The permittee shall submit deviation (excursion) reports that identify each day and each month the production limits were exceeded. Each report shall be submitted within 30 days after the deviation occurs.
5. The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Automobile and Light Duty Truck Coating/Manufacturing, 40 CFR Part 63, Subpart IIII. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.
6. If the final NESHAP standard is not promulgated by the deadline specified by U.S. EPA, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted within 60 days after the deadline to promulgate the respective standard or by May 15, 2003, whichever is later. It must contain the following information, in accordance to 40 CFR Part 63.53(b):
  - a. for a new affected source, the anticipated date of startup of operation;
  - b. the hazardous air pollutants (HAPs) emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
  - c. any existing federal, State, or local limitations or requirements applicable to the affected source;
  - d. for each affected emission point or group of affected emission points, an identification of control technology in place;
  - e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
  - f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.

**A. State and Federally Enforcable Section (continued)**

The Part II application for a MACT determination may, but is not required to, contain the following information:

- a. recommended emission limitations for the affected source and support information (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
- b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied; and
- c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

7. If the NESHAP is promulgated before the Part II application is due for the relevant source category, the permittee may be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. If subject, the permittee shall submit the following notifications:

- a. Unless otherwise specified in the relevant Subpart, within 120 days after promulgation of a 40 CFR Part 63 Subpart to which the source is subject, the permittee shall submit an Initial Notification Report that contains the following information, in accordance with 40 CFR Part 63.9(b)(2):
  - i. the name and mailing address of the permittee;
  - ii. the physical location of the source if it is different from the mailing address;
  - iii. identification of the relevant MACT standard and the source's compliance date;
  - iv. a brief description of the nature, design, size, and method of operation of the source, and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and
  - v. a statement confirming the facility is a major source for HAPs.

Unless otherwise specified in the relevant Subpart, within 60 days following completion of any required compliance demonstration activity specified in the relevant Subpart, the permittee shall submit a notification of compliance status that contains the following information:

- i. the methods used to determine compliance;
- ii. the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;
- iii. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
- iv. the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in the relevant Subpart;
- v. an analysis demonstrating whether the affected source is a major source or an area source;
- vi. a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and
- vii. a statement of whether or not the permittee has complied with the requirements of the relevant Subpart.

**B. State Only Enforceable Section**

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

B005 - E-coat scuff booth air supply heater  
B006 - E-coat scuff booth air supply heater  
B007 - Under body air supply heater  
B019 - Wax & touchup booth air supply heater  
B021 - Tutone & repair dry off oven air supply heater  
B026 - Carbon wheel desorption preheat burners  
B027 - Carbon wheels desorption boiler  
G001 - Plant pool vehicle gasoline dispenser  
G002 - New vehicle gasoline dispenser  
K022 - Maintenance paint spray booth  
P015 - Body welding of MPV and CV  
P012 - Paint mix room  
P016 - Brazing  
P017 - Brazing finish  
P018 - Phosphate system  
P019 - E-coat scuff MPV  
P020 - E-coat scuff CV  
P021 - Prime & tutone cuff  
P022 - D-Pillar braze booth  
T001 - Waste purge solvent storage tank  
T002 - Waste purge solvent storage tank  
T004 - Used oil storage tank  
T005 - Metal cleaner storage tank  
T006 - Brake fluid  
T007 - Transmission fluid  
T008 - Power steering fluid  
T010 - Antifreeze  
T011 - Refrigerant  
T012 - E-coat dump  
T013 - E-coat dump  
T014 - E-coat resin  
T019 - E-coat pigment  
T020 - Propane storage tank  
T021 - Propane storage tank  
T022 - Propane storage tank  
T023 - Propane storage tank  
T024 - Propane storage tank  
Z004 - Metal line finish grind  
Z005 - Small containers (e.g., totes, drums, day tanks, etc.)  
Z013 - Solvent cold cleaners

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

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

**Emissions Unit ID:** Phosphate Heaters (B004)  
**Activity Description:** Phosphate Heaters (2) - 20.90 MMBtu/hr each

#### 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>
Phosphate coating machine heater (20.9 mmBtu/hr heat input capacity rated, natural gas and LPG fired heater) and an identical back-up heater, indirect fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.07 ton per year particulate emissions 2.27 tons per year nitrogen oxides 0.13 ton per year organic compounds 0.11 ton per year sulfur dioxide 1.88 tons per year carbon monoxide  See additional terms and conditions.
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07, 3745-21-08 and 3745-23-06.  Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-10(B) OAC rule 3745-18-06(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- PTI No. 02-4022, issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the visible particulate emission limitations in OAC rule 3745-17-07(A) shall be determined in accordance with the test methods and procedures in OAC rule 3745-17-03(B) and US EPA Method 9, if required by Ohio EPA.

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

2. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Prime booth (CV) air supply (B008)  
**Activity Description:** Prime booth (CV) air supply - 50.00 MMBtu/hr

#### 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>
Air supply heater for CV prime booth (50.0 MMBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.2 ton per year particulate emissions 5.43 tons per year nitrogen oxides 0.3 ton per year organic compounds 0.26 ton per year sulfur dioxide 4.51 tons per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a PTI No. 02-4022, issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.
- 2.c There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- 2.d Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e** For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Prime Booth (MPV) air supply (B009)  
**Activity Description:** Prime Booth (MPV) air supply - 50.00 MMBtu/hr

#### 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>
Air supply heater for MPV prime booth (50.0 MMBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.2 ton per year particulate emissions 5.43 tons per year nitrogen oxides 0.3 ton per year organic compounds 0.26 ton per year sulfur oxides 4.51 tons per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a PTI No. 02-4022, issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.
- 2.c There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- 2.d Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Tutone and repair scuff booth air supply (B010)  
**Activity Description:** Tutone and repair scuff booth air supply - 13.20 MMBtu/hr

#### 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>
Air supply heater for tutone & repair scuff booth (13.2 mmBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.04 ton per year particulate emissions 1.44 tons per year nitrogen oxides 0.08 ton per year organic compounds 0.07 ton per year sulfur oxides 1.19 tons per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- PTI No. 02-4022 issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.
- There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## **V. Testing Requirements**

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Enamel Booth #1 air supply (B011)  
**Activity Description:** Enamel Booth #1 air supply - 98.00 MMBtu/hr

#### 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>
Air supply heater for enamel booth #1 (98.0 mmBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.3 ton per year particulate emissions 10.65 tons per year nitrogen oxides 0.58 ton per year organic compounds 0.5 ton per year sulfur oxides 8.84 tons per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a PTI No. 02-4022 issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.
- 2.c There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- 2.d Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e** For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Enamel Booth #2 air supply (B013)  
**Activity Description:** Enamel Booth #2 air supply - 98.00 MMBtu/hr

#### 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>
Air supply heater for enamel booth #2 (98.0 mmBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.3 ton per year particulate emissions 10.65 tons per year nitrogen oxides 0.58 ton per year organic compounds 0.5 ton per year sulfur oxides 8.84 tons per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07, 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a PTI No. 02-4022, issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.
- 2.c There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- 2.d Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Enamel Booth #3 air supply (B015)  
**Activity Description:** Enamel Booth #3 air supply - 234.00 MMBtu/hr

#### 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>
Air supply heater for enamel booth #3 (234.0 mmBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.73 ton per year particulate emissions 25.43 tons per year nitrogen oxides 1.38 tons per year organic compound 1.21 tons per year sulfur oxides 21.1 tons per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a PTI No. 02-4022, issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.
- 2.c There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- 2.d Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** (MPV) Wax and touch-up booth air supply (B020)

**Activity Description:** (MPV) Wax and touch-up booth air supply - 16.80 MMBtu/hr

#### 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>
Air supply heater for MPV wax & touch-up booth (16.8 mmBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.05 ton per year particulate emissions 1.82 tons per year nitrogen oxides 0.10 ton per year organic compounds 0.09 ton per year sulfur oxides 1.51 tons per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a PTI No. 02-4022, issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022
- 2.c There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- 2.d Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Prime dry off oven air supply (B022)  
**Activity Description:** Prime dry off oven air supply - 12.90 MMBtu/hr

#### 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>
Air supply heater for prime dry off oven (12.9 mmBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.04 ton per year particulate emissions 1.40 tons per year nitrogen oxides 0.07 ton per year organic compounds 0.07 ton per year sulfur oxides 1.16 tons per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a PTI No. 02-4022, issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.
- 2.c There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- 2.d Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Body shop air supply (B023)  
**Activity Description:** Body shop air supply - 130.30 MMBtu/hr

#### 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>
Air supply heater for the body shop (130.3 mmBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.41 ton per year particulate emissions 14.15 tons per year nitrogen oxides 0.77 ton per year organic compounds 0.67 ton per year sulfur oxides 11.75 tons per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a PTI No. 02-4022, issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.
- 2.c There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- 2.d Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e** For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Trim shop air supply (B024)  
**Activity Description:** Trim shop air supply - 24.90 MMBtu/hr

#### 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>
Air supply heater for the trim shop (24.9 mmBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.07 ton per year particulate emissions 2.70 tons per year nitrogen oxides 0.15 ton per year organic compounds 0.13 ton per year sulfur oxides 2.24 ton per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a PTI No. 02-4022, issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.
- 2.c There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- 2.d Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Predelivery booth air supply (B025)  
**Activity Description:** Predelivery booth air supply - 24.60 MMBtu/hr

#### 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>
Air supply heater for the predelivery spray booth (24.6 mmBtu/hr rated heat input capacity, natural gas and LPG fired), direct fired combustor.	OAC rule 3745-31-05 PTI 02-4022	0.07 ton per year particulate emissions 2.61 tons per year nitrogen oxides 0.14 ton per year organic compounds 0.13 ton per year sulfur oxides 2.16 ton per year carbon monoxide  See additional terms and conditions.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08 and 3745-23-06.
	OAC rule 3745-17-07(A)	Not applicable. See A.I.2.d.
	OAC rule 3745-17-11(B)	Not applicable. See A.I.2.e.
	OAC rule 3745-18-06(E)	Not applicable. See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a PTI No. 02-4022, issued and effective on December 14, 1988 and as modified August 22, 1990 and November 3, 1999, lists only annual emissions limits for this emissions unit.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-23-06, respectively, by committing to comply with the best available technology requirements established in PTI No. 02-4022.
- 2.c There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because it is not considered "fuel burning equipment" and the process weight rate is less than 1,000 pounds/hour.
- 2.d Pursuant to OAC rule 3745-17-07(A)(3)(h), the visible particulate emission limitations established by rule 3745-17-07(A)(1) do not apply to any air contaminant source which is not subject to the requirements of rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.e For equipment that combust natural gas, but are not "fuel burning equipment" as defined by OAC rule 3745-17-01(B)(5), gaseous fuels are not considered as part of the process weight for any single, specific process and, therefore, are not included in the process weight rate for determining the allowable particulate emission rate pursuant to Table I of OAC rule 3745-17-11. In addition, the uncontrolled mass rate of particulate emissions from any such piece of equipment are less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

## II. Operational Restrictions

1. Only natural gas and LPG shall be combusted as fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall maintain annual records of the volumes of natural gas and LPG burned plantwide in this facility. The permittee shall calculate the prorated volumes of said fuels burned in this emissions unit for the purpose of calculating annual air pollution emissions.

The following formula shall be used to calculate the annual prorated volume of each type of fuel burned in this emissions unit:

$$APV = (X_i / \text{Sum of } X_i) \text{ multiplied by TPV}$$

where:

APV is the annual prorated volume of the fuel used, either natural gas or LPG.

$X_i$  is the heat input capacity of this emissions unit, in mmBtu/hr.

Sum of  $X_i$  is the summed total heat input, in mmBtu/hr of all operational combustion emissions units located at this facility.

TPV is the annual, total plantwide volume of the fuel used, either natural gas or LPG.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

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

Multiply the total annual volume of natural gas burned, in millions of cubic feet, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Tables 1.4-1 and 1.4-2 (7/98), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 1.9 lbs/million cubic feet;
- b. sulfur dioxide: 0.6 lb/million cubic feet;
- c. nitrogen oxides: 100 lbs/million cubic feet;
- d. carbon monoxide: 84.0 lbs/million cubic feet; and
- e. organic compounds: 5.5 lbs/million cubic feet.

Multiply the total annual volume of LPG burned, in 1,000 gallon amounts, by the following emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.5, Table 1.5-1 (10/96), and by the conversion factor 1.0 ton/2,000 lbs:

- a. particulate emissions: 0.6 lbs/1,000 gallons;
- b. sulfur dioxide: 0.10S lb/1,000 gallons;
- c. nitrogen oxides: 19.0 lbs/1,000 gallons;
- d. carbon monoxide: 3.2 lbs/1,000 gallons; and
- e. organic compounds: 0.5 lbs/1,000 gallons.

S = the sulfur content expressed in grains/100 cu. ft. of propane vapor.

The permittee shall then sum the tons per year calculated for each pollutant resulting from the combustion of natural gas and LPG fuels to determine compliance with the annual tpy emissions limitations.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** E-coat system (K007)  
**Activity Description:** Dip tank, oven, and RTO

#### 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>
E-coat prime coating line for light duty trucks (includes totally enclosed E-coat tank and oven with 100% VOC emission capture system and a regenerative thermal oxidizer (RTO))	40 CFR Part 60, Subpart MM	0.16 Kg of VOC per liter of applied coating solids, or 1.33 lbs of VOC per gallon of applied solids, on a monthly volume-weighted basis
	OAC rule 3745-21-09(C)(1)(a)	1.4 lbs VOC per gallon of solids, as a daily volume-weighted average
	PTI's 02-7873 and 02-4022 OAC rule 3745-31-05	43.9 lbs/day OC and 5.16 tons/year OC
		The requirements of this rule also include compliance with the requirements of Subpart MM and OAC rule 3745-21-09(C)(1)(a).

##### 2. Additional Terms and Conditions

- 2.a The permittee shall employ a permanent total enclosure VOC capture system that captures VOC emissions from the E-Coat system. The total capture efficiency shall be 100 percent, by weight, at all times the emissions unit is in operation.

The E-Coat system is by design and operation a permanent total enclosure. This emissions unit's VOC capture efficiency shall, therefore, be presumed to be 100 percent, by weight. This determination was made by Ohio EPA at the permittee's request, based on the submission of data which verify that the entrance and exit of the E-Coat system are not natural draft openings as defined in USEPA Methods 204 through 204F, 40 CFR, Part 51, Appendix M.

The regenerative thermal oxidizer shall provide a VOC emission destruction efficiency of not less than 95%, by weight, at all times the emissions unit is in operation.

## II. Operational Restrictions

### 1. Thermal Oxidizer Operational Restriction

The average temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,150 degrees F.

## III. Monitoring and/or Record Keeping Requirements

### 1. Thermal Oxidizer Temperature Monitoring and Record keeping Requirements

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

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was less than 1,150 degrees F.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

### 2. The permittee shall collect and record the following information each day for this emissions unit:

- 2.a** The name and identification number of each material (coating, solvent, etc.) added to the E-coat tank.
  - 2.b** The VOC content, in pounds VOC per gallon and in pounds VOC per gallon of solids, of each material added to the E-coat tank.
  - 2.c** The volume, in gallons, and the solids content, in gallon of solids per gallon, of each material added to the E-coat tank.
  - 2.d** The daily, uncontrolled, volume-weighted average VOC content of all the materials added to the E-coat tank, in pounds VOC per gallon of solids, calculated in accordance with the appropriate equation in OAC rule 3745-21-10.
  - 2.e** The daily, controlled volume-weighted average VOC content of the materials employed, in pounds of VOC per gallon of solids. The daily, controlled VOC emission rate shall be calculated using (i) the daily, uncontrolled, volume-weighted average VOC content and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.
  - 2.f** The total uncontrolled VOC emissions from all the materials added to the E-coat tank, in pounds.
  - 2.g** The total, controlled VOC emissions from all the materials added to the E-coat tank, in pounds. The controlled VOC emission rate shall be calculated using (i) the total VOC emissions from 2.f above and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.
- 3.** The permittee shall collect and record the following information for each month for this emissions unit:
    - 3.a** The name and identification number of each coating material added to the E-coat tank.
    - 3.b** The VOC content, in pounds of VOC per gallon of solids, of each material added to the E-coat tank.
    - 3.c** The volume, in gallons and the solids content, in gallon of solids per gallon, of each material employed.

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

- 3.d** The monthly, uncontrolled, volume-weighted average VOC content of the materials added to the E-coat tank, in pounds VOC per gallon of solids, calculated in accordance with the appropriate equation in OAC rule 3745-21-10.
- 3.e** The monthly, controlled volume-weighted average VOC content of the materials employed, in pounds of VOC per gallon of solids. The monthly, controlled VOC emission rate shall be calculated using (i) the monthly volume-weighted VOC content and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.

### **IV. Reporting Requirements**

- 1.** Thermal Incinerator Temperature Reporting Requirements:

The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer did not comply with the temperature limitation specified above.

- 2.** The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing that the calculated, controlled, volume-weighted VOC content exceeded the 1.4 pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
- 3.** The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing that the maximum daily emission rate of 43.9 pounds of VOC was exceeded. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
- 4.** The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any monthly record showing that the calculated, controlled, volume-weighted VOC content exceeded the 1.33 pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
- 5.** The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit during the previous calendar year. These reports shall be submitted by January 31 of each year.

### **V. Testing Requirements**

- 1.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - 1.a** The emission testing shall be conducted during the last year of the permit prior to permit expiration.
  - 1.b** The emission testing shall be conducted to demonstrate compliance with the VOC control efficiency requirements specified in Section A.II.1.
  - 1.c** The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
  - 1.d** The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

## V. Testing Requirements (continued)

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

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

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

- 2.** Emission Limitation -  
43.9 pounds of VOC per day and 5.16 tons VOC per year

Applicable Compliance Method -  
Compliance shall be based upon the record keeping specified in Section A.III.

- 3.** Emission Limitation-  
1.33 pounds of VOC per gallon of applied solids, as a monthly volume-weighted average.

Applicable Compliance Method -  
Compliance shall be based upon the record keeping specified in Section A.III.

- 4.** Emission Limitation-  
1.40 pounds of VOC per gallon of applied solids, as a daily volume-weighted average.

Applicable Compliance Method -  
Compliance shall be based upon the record keeping specified in Section A.III.

- 5.** USEPA Method 24 shall be used to determine the volatile organic compound contents of the coatings and cleanup materials employed in this emissions unit.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Sealer (MPV) (K008)  
**Activity Description:** Sealer (MPV)

#### 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>
Sealer coating line for light-duty trucks (MPV). Sealer coatings are dried in the MPV sealer oven (P010) which is controlled with a thermal oxidizer.	OAC rule 3745-31-05(A) PTI's 02-7873 and 02-4022.	24.1lbs of OC per day, and 2.83 tons OC per year. See A.I.2.e below.  These limits do not include OC emissions resulting from cleanup solvent usage, all which is accounted for under emissions unit Z003.
	OAC rule 3745-21-09(U)(1)(i)	See A.I.2.a, A.I.2.b and A.I.2.c below.  The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- The combined emissions of organic compounds from emissions units K008 and K009 shall not exceed 78.0 lbs per day and 9.16 tons per year. Each emissions unit can be operated independently or in conjunction with the other, as long as the overall emissions from the two do not exceed the combined limitations.
- The VOC content of the sealer coatings employed shall not exceed 6.0%, by weight, as a daily volume-weighted average.
- The sealer coatings are high-solids, caulk-like, materials applied directly to the vehicle bodies. There is no coating overspray and, therefore, no particulate emissions resulting from the operation of this emissions unit.
- E-coated vehicle bodies are processed through emissions units K008, K009 (sealer lines), K010 (underbody booth), K011 and K012 (anti-chip booths) for various lower body and underbody coating applications prior to entering either P010 or P011 (designated by the permittee as the "sealer ovens"), where they are dried.
- The listed daily and annual emission limits were established for this emissions unit only to determine the combined potential to emit for the dual coating lines K008 and K009, for which there are combined daily and annual emission limits. The permittee is, therefore, not required to maintain records or perform testing to verify compliance with the separate daily and annual emission limits.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

1. For purposes of calculating the organic compound emission rates for this emissions unit and the associated oven (P010), the permittee shall utilize a value of 20.0% as the maximum percentage of the organic compounds employed in this emissions unit that are emitted uncontrolled from the emissions unit. The remaining 80.0% of the organic compounds employed in this emissions unit shall be considered to be a portion of the total uncontrolled emissions for the associated oven. This "split" of organic compound emissions between this emissions unit and the associated oven is based upon design estimates. The OC split and may be adjusted based on future test results, with prior approval from the Ohio EPA, Northeast District Office.
2. The permittee shall collect and record the following information for each day for emissions units K008 and K009:
  - a. The name and identification number of each sealer coating, employed.
  - b. The VOC content, in lbs per gallon, of each sealer coating, as applied.
  - c. The volume, in gallons, of each sealer coating employed.
  - d. The calculated, daily, uncontrolled VOC emission rate (prior to applying the booth/oven "split"), in lbs per day.
  - e. The calculated, daily, uncontrolled VOC emission rate multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.III.1 of this permit), in lbs per day.
  - f. The VOC content, in percent by weight, of each sealer coating, as applied.
  - g. The VOC content of all sealer coatings applied, in percent by weight, as a daily volume-weighted average.
3. The permittee shall maintain daily records of the combined VOC emission rate for emissions units K008 and K009, in lbs per day.

## IV. Reporting Requirements

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily combined emissions of organic compounds from emissions units K008 and K009 exceeded 78.0 pounds. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the volume-weighted average VOC content of all sealer coatings employed exceeded 6.0 percent, by weight. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
3. The permittee shall also submit annual reports that specify the total combined emissions of organic compounds from emissions units K008 and K009 for the previous calendar year. These reports shall be submitted by January 31 of each year.

## V. Testing Requirements

1. USEPA Method 24 shall be used to determine the organic compound contents of the sealer coatings employed.

**V. Testing Requirements (continued)**

2. Emission Limitation -  
Combined emissions from K008 and K009 shall not exceed 78.0 pounds of OC per day and 9.16 tons OC per year

Applicable Compliance Method -  
Compliance shall be based upon the record keeping specified in Sections A.III.2 and A.III.3. The annual OC emission rate shall be determined by summing the daily emission rates for K008 and K009 and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

3. Emission Limitation -  
24.1lbs of OC per day, and 2.83 tons OC per year.

Applicable Compliance Method -  
If required, compliance shall be based upon the record keeping specified in Section A.III.2. However, as explained in A.I.2.e., if the permittee demonstrates compliance with the combined emission limitations, the permittee will be deemed to be in compliance with the emission limitations for this emissions unit.

4. Emission Limitation -  
The VOC content of the sealer coatings employed shall not exceed 6.0%, by weight, as a daily volume-weighted average.

Applicable Compliance Method -  
Compliance shall be based upon the record keeping specified in Section A.III.2.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Sealer (CV) (K009)  
**Activity Description:** Sealer (CV)

#### 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>
Sealer coating line for light-duty trucks (CV). Sealer coatings are dried in the MPV sealer oven (P011) which is controlled with a thermal oxidizer.	OAC rule 3745-31-05(A) PTI's 02-7873 and 02-4022.	53.9 lbs of OC per day, and 6.33 tons OC per year. See A.I.2.e below.  These limits do not include OC emissions resulting from cleanup solvent usage, all which is accounted for under emissions unit Z003.  See A.I.2.a, A.I.2.b and A.I.2.c below.
	OAC rule 3745-21-09(U)(1)(i)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a** The combined emissions of organic compounds from emissions units K008 and K009 shall not exceed 78.0 lbs per day and 9.16 tons per year. Each emissions unit can be operated independently or in conjunction with the other, as long as the overall emissions from the two do not exceed the combined limitations.
- 2.b** The VOC content of the sealer coatings employed shall not exceed 6.0%, by weight, as a daily volume-weighted average.
- 2.c** The sealer coatings are high-solids, caulk-like, materials applied directly to the vehicle bodies. There is no coating overspray and, therefore, no particulate emissions resulting from the operation of this emissions unit.
- 2.d** E-coated vehicle bodies are processed through emissions units K008, K009 (sealer lines), K010 (underbody booth), K011 and K012 (anti-chip booths) for various lower body and underbody coating applications prior to entering either P010 or P011 (designated by the permittee as the "sealer ovens"), where they are dried.
- 2.e** The listed daily and annual emission limits were established for this emissions unit only to determine the combined potential to emit for the dual coating lines K008 and K009, for which there are combined daily and annual emission limits. The permittee is, therefore, not required to maintain records or perform testing to verify compliance with the separate daily and annual emission limits.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

1. For purposes of calculating the organic compound emission rates for this emissions unit and the associated oven (P010), the permittee shall utilize a value of 20.0% as the maximum percentage of the organic compounds employed in this emissions unit that are emitted uncontrolled from the emissions unit. The remaining 80.0% of the organic compounds employed in this emissions unit shall be considered to be a portion of the total of the uncontrolled emissions for the associated oven. This "split" of organic compound emissions between this emissions unit and the associated oven is based upon design estimates. The OC split and may be adjusted based on future test results, with prior approval from the Ohio EPA, Northeast District Office.
2. The permittee shall collect and record the following information for each day for emissions units K008 and K009:
  - a. The name and identification number of each sealer coating, employed.
  - b. The VOC content, in lbs per gallon, of each sealer coating, as applied.
  - c. The volume, in gallons, of each sealer coating employed.
  - d. The calculated, daily, uncontrolled VOC emission rate (prior to applying the booth/oven "split"), in lbs per day.
  - e. The calculated, daily, uncontrolled VOC emission rate multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.III.1 of this permit), in lbs per day.
  - f. The VOC content, in percent by weight, of each sealer coating, as applied.
  - g. The VOC content of all sealer coatings applied, in percent by weight, as a daily volume-weighted average.
3. The permittee shall maintain daily records of the combined VOC emission rate for emissions units K008 and K009, in lbs per day.

## IV. Reporting Requirements

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily combined emissions of organic compounds from emissions units K008 and K009 exceeded 78.0 pounds. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the volume-weighted average VOC content of all sealer coatings employed exceeded 6.0 percent, by weight. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
3. The permittee shall also submit annual reports that specify the total combined emissions of organic compounds from emissions units K008 and K009 for the previous calendar year. These reports shall be submitted by January 31 of each year.

## V. Testing Requirements

1. USEPA Method 24 shall be used to determine the organic compound contents of the sealer coatings employed.

**V. Testing Requirements (continued)**

2. Emission Limitation -  
Combined emissions from K008 and K009 shall not exceed 78.0 pounds of OC per day and 9.16 tons OC per year

Applicable Compliance Method -  
Compliance shall be based upon the record keeping specified in Sections A.III.2 and A.III.3. The annual OC emission rate shall be determined by summing the daily emission rates for K008 and K009 and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

3. Emission Limitation -  
53.9 lbs of OC per day, and 6.33 tons OC per year.

Applicable Compliance Method -  
If required, compliance shall be based upon the record keeping specified in Section A.III.2. However, as explained in A.I.2.e., if the permittee demonstrates compliance with the combined emission limitations, the permittee will be deemed to be in compliance with the emission limitations for this emissions unit.

4. Emission Limitation -  
The VOC content of the sealer coatings employed shall not exceed 6.0%, by weight, as a daily volume-weighted average.

Applicable Compliance Method -  
Compliance shall be based upon the record keeping specified in Section A.III.2.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Underbody Booth (K010)  
**Activity Description:** Underbody Booth

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Underbody spray booth for the application of protective coatings to light-duty trucks. Coatings are dried in the MPV sealer oven (P010) which is equipped with a thermal oxidizer.	OAC rule 3745-31-05 PTI 02-4022	0.48 lb VOC per gallon of coating, excluding water and exempt solvents  133.36 lbs VOC per day, and 15.67 tons VOC per year  These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.
	OAC rule 3745-21-09(U)(1)	12.4 tons particulate emissions per year (See A.I.2.c below.) The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a E-coated vehicle bodies are processed through emissions units K008, K009 (sealer lines), K010 (underbody booth), K011 and K012 (anti-chip booths) for various lower body and underbody coating applications prior to entering either P010 or P011 (designated by the permittee as the "sealer ovens") where they are dried.
- 2.b The underbody coatings are applied to the wheel wells and cavities in vehicle bodies. There is no coating overspray and, therefore, no particulate emissions resulting from the operation of this emissions unit.
- 2.c An annual particulate emission limit was listed in PTI 02-4022 for this emissions unit. Since there are no particulate emissions from this emissions unit it is not necessary to establish monitoring, record keeping, and reporting requirements to ensure compliance with said limit.

##### II. Operational Restrictions

**None**

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

1. For purposes of calculating the organic compound emission rates for this emissions unit and the associated oven (P010), the permittee shall utilize a value of 20.0% as the maximum percentage of the organic compounds employed in this emissions unit that are emitted uncontrolled from the emissions unit. The remaining 80.0% of the organic compounds employed in this emissions unit shall be considered to be a portion of the total uncontrolled emissions for the associated oven. This "split" of organic compound emissions between this emissions unit and the associated oven is based upon design estimates. The OC split and may be adjusted based on future test results, with prior approval from the Ohio EPA, Northeast District Office.
2. The permittee shall collect and record the following information each day for this emissions unit:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content, in lbs per gallon excluding water and exempt solvents, of each coating, as applied.
  - c. The volume, in gallons, excluding water and exempt solvents, of each coating employed.
  - d. The calculated, daily uncontrolled VOC emission rate (prior to applying the booth/oven "split"), in lbs per day.
  - e. The calculated, daily uncontrolled VOC emission rate multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.III.1 of this permit), in lbs per day.
  - f. The percent coating solids, by weight, and the density of the coating solids, in lbs per gallon.

### IV. Reporting Requirements

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily emission limit of 133.36 pounds of VOC was exceeded. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (the Ohio EPA Northeast District Office ) in writing of each daily record showing that the VOC content of the coatings employed exceeded 0.48 lb/gallon of coating, excluding water and exempt solvents. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
3. The permittee shall also submit annual reports that specify the total VOC and particulate emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. USEPA Method 24 shall be used to determine the VOC contents of the coating materials employed.
2. Emission Limitation -  
133.36 pounds of OC per day and 15.67 tons OC per year  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping specified in Section A.III.2. The annual OC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.
3. Emission Limitation -  
0.48 lb VOC per gallon of coating, excluding water and exempt solvents  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping specified in Section A.III.2.

Facility Name: **Ford Motor Company - Ohio Assembly Plant**  
Facility ID: **02-47-03-0471**  
Emissions Unit: **Underbody Booth (K010)**

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Anti-chip (MPV) (K011)

**Activity Description:** Anti-chip (MPV)

#### 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>
Anti-chip coating spray booth (MPV) for the application of vinyl coatings to light-duty trucks. Anti-chip coatings are dried in the MPV sealer oven (P010) which is equipped with a thermal oxidizer.	OAC rule 3745-31-05(A) PTI 02-4022	0.62 lb VOC per gallon of coating, excluding water and exempt solvents  20.1 lbs VOC per day, and 2.36 tons VOC per year. See A.I.2.d below.  These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.  See A.I.2.a below.
	OAC rule 3745-21-09(U)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The combined emissions of organic compounds from emissions units K011 and K012 shall not exceed 49.46 lbs per day and 5.81 tons per year. Each emissions unit can be operated independently or in conjunction with the other, as long as the overall emissions from the two do not exceed the combined limitations.
- 2.b The anti-chip coatings are applied to vehicle bodies aligned against a drip rail which captures and recycles overspray and run-off as liquid coating. There are, therefore, no particulate emissions resulting from the operation of this emissions unit.
- 2.c E-coated vehicle bodies are processed through emissions units K008, K009 (sealer lines), K010 (underbody booth), K011 and K012 (anti-chip booths) for various lower body and underbody coating applications prior to entering either P010 or P011 (designated by the permittee as the "sealer ovens") where they are dried.

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

- 2.d** The listed daily and annual emission limits were established for this emissions unit only to determine the combined potential to emit for the dual coating lines K011 and K012, for which there are combined daily and annual emission limits. The permittee is, therefore, not required to maintain records or perform testing to verify compliance with the separate daily and annual emission limits.

## **II. Operational Restrictions**

**None**

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

- 1.** For purposes of calculating the organic compound emission rates for this emissions unit and the associated oven (P010), the permittee shall utilize a value of 20.0% as the maximum percentage of the organic compounds employed in this emissions unit that are emitted uncontrolled from the emissions unit. The remaining 80.0% of the organic compounds employed in this emissions unit shall be considered to be a portion of the total uncontrolled emissions for the associated oven. This "split" of organic compound emissions between this emissions unit and the associated oven is based upon design estimates. The OC split and may be adjusted based on future test results, with prior approval from the Ohio EPA, Northeast District Office.
- 2.** The permittee shall collect and record the following information for each day for emissions units K011 and K012:
  - a.** The name and identification number of each anti-chip coating, as applied.
  - b.** The VOC content, in lbs per gallon, excluding water and exempt solvents, of each anti-chip coating, as applied.
  - c.** The volume, in gallons excluding water and exempt solvents, of each anti-chip coating employed.
  - d.** The calculated, daily uncontrolled VOC emission rate (prior to the booth/oven "split") in lbs per day.
  - e.** The calculated, daily uncontrolled total VOC emission rate multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.III.1 of this permit), in lbs per day.
- 3.** The permittee shall maintain records of the calculated, daily, combined VOC emission rate for emissions units K011 and K012, in lbs per day.

## **IV. Reporting Requirements**

- 1.** The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily combined emissions of organic compounds from emissions units K011 and K012 exceeded 49.46 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
- 2.** The permittee shall notify the Director (the Ohio EPA Northeast District Office ) in writing of each daily record showing that the VOC content of coatings employed exceeded 0.62 lb/gallon of coating, excluding water and exempt solvents. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
- 3.** The permittee shall also submit annual reports that specify the total combined emissions of organic compounds from emissions units K011 and K012 for the previous calendar year. These reports shall be submitted by January 31 of each year.

## **V. Testing Requirements**

- 1.** USEPA Method 24 shall be used to determine the volatile organic compound content of the anti-chip coatings employed.

**V. Testing Requirements (continued)**

2. Emission Limitation -  
Combined emissions from K011 and K012 shall not exceed 49.46 pounds of VOC per day and 5.81 tons VOC per year

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in Section A.III.2 and A.III.3. The annual VOC emission rate shall be determined by summing the daily emission rates for K011 and K012 and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

3. Emission Limitation -  
20.1 lbs of OC per day, and 2.36 tons OC per year.

Applicable Compliance Method -

If required, compliance shall be based upon the record keeping specified in Section A.III.2. However, as explained in A.I.2.d., if the permittee demonstrates compliance with the combined emission limitations, the permittee will be deemed to be in compliance with the emission limitations for this emissions unit.

4. Emission Limitation -  
0.62 lb VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in Section A.III.2.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Anti-chip (CV) (K012)

**Activity Description:** Anti-chip (CV)

#### 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>
Anti-chip coating spray booth (MPV) for the application of vinyl coatings to light-duty trucks. Anti-chip coatings are dried in the MPV sealer oven (P010) which is equipped with a thermal oxidizer.	OAC rule 3745-31-05(A) PTI 02-4022	0.62 lb VOC per gallon of coating, excluding water and exempt solvents  29.36 lbs VOC per day, and 3.45 tons VOC per year. See A.I.2.d below.  These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.  See A.I.2.a below.
	OAC rule 3745-21-09(U)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The combined emissions of organic compounds from emissions units K011 and K012 shall not exceed 49.46 lbs per day and 5.81 tons per year. Each emissions unit can be operated independently or in conjunction with the other, as long as the overall emissions from the two do not exceed the combined limitations.
- 2.b The anti-chip coatings are applied to vehicle bodies aligned against a drip rail which captures and recycles overspray and run-off as liquid coating. There are, therefore, no particulate emissions resulting from the operation of this emissions unit.
- 2.c E-coated vehicle bodies are processed through emissions units K008, K009 (sealer lines), K010 (underbody booth), K011 and K012 (anti-chip booths) for various lower body and underbody coating applications prior to entering either P010 or P011 (designated by the permittee as the "sealer ovens") where they are dried.

## 2. Additional Terms and Conditions (continued)

- 2.d The listed daily and annual emission limits were established for this emissions unit only to determine the combined potential to emit for the dual coating lines K011 and K012, for which there are combined daily and annual emission limits. The permittee is, therefore, not required to maintain records or perform testing to verify compliance with the separate daily and annual emission limits.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

1. For purposes of calculating the organic compound emission rates for this emissions unit and the associated oven (P011), the permittee shall utilize a value of 20.0% as the maximum percentage of the organic compounds employed in this emissions unit that are emitted uncontrolled from the emissions unit. The remaining 80.0% of the organic compounds employed in this emissions unit shall be considered to be a portion of the total uncontrolled emissions for the associated oven. This "split" of organic compound emissions between this emissions unit and the associated oven is based upon design estimates. The OC split and may be adjusted based on future test results, with prior approval from the Ohio EPA, Northeast District Office.
2. The permittee shall collect and record the following information for each day for emissions units K011 and K012:
  - a. The name and identification number of each anti-chip coating, as applied.
  - b. The VOC content, in lbs per gallon, excluding water and exempt solvents, of each anti-chip coating, as applied.
  - c. The volume, in gallons excluding water and exempt solvents, of each anti-chip coating employed.
  - d. The calculated, daily uncontrolled VOC emission rate (prior to the booth/oven "split") in lbs per day.
  - e. The calculated, daily uncontrolled total VOC emission rate multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.III.1 of this permit), in lbs per day.
3. The permittee shall maintain records of the calculated, daily, combined VOC emission rate for emissions units K011 and K012, in lbs per day.

## IV. Reporting Requirements

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily combined emissions of organic compounds from emissions units K011 and K012 exceeded 49.46 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (the Ohio EPA Northeast District Office ) in writing of each daily record showing that the VOC content of coatings employed exceeded 0.62 lb/gallon of coating, excluding water and exempt solvents. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
3. The permittee shall also submit annual reports that specify the total combined emissions of organic compounds from emissions units K011 and K012 for the previous calendar year. These reports shall be submitted by January 31 of each year.

## V. Testing Requirements

1. USEPA Method 24 shall be used to determine the volatile organic compound content of the anti-chip coatings employed.

**V. Testing Requirements (continued)**

2. Emission Limitation -  
Combined emissions from K011 and K012 shall not exceed 49.46 pounds of VOC per day and 5.81 tons VOC per year

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in Section A.III.2 and A.III.3. The annual VOC emission rate shall be determined by summing the daily emission rates for K011 and K012 and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

3. Emission Limitation -  
29.36 lbs of OC per day, and 3.45 tons OC per year.

Applicable Compliance Method -

If required, compliance shall be based upon the record keeping specified in Section A.III.2. However, as explained in A.I.2.d., if the permittee demonstrates compliance with the combined emission limitations, the permittee will be deemed to be in compliance with the emission limitations for this emissions unit.

4. Emission Limitation -  
0.62 lb VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in Section A.III.2.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Prime (Guidecoat) System (MPV) (K013)

**Activity Description:** Prime booth, oven, and RTO (MPV)

#### 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>
MPV guidecoat coating line for light-duty trucks. (Includes the application of hood anti-chip and blackout coatings. VOC emissions from the oven are controlled by a regenerative thermal oxidizer (RTO).)	40 CFR Part 60, Subpart MM	1.40 Kg VOC per liter of applied coating solids or 11.68 lbs VOC per gallon of applied (deposited) solids, as a monthly volume-weighted average
	OAC rule 3745-21-09(C)(1)(a)	2.8 lbs of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 lbs VOC per gallon of deposited solids, as a daily volume-weighted average
	OAC rule 3745-31-05(A) PTI's 02-9278, 02-7873 and 02-4022	734.8 lbs/day OC and 86.34 tons/year OC. See A.1.2.c below.
		These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.
		0.39 ton particulates per year
		See Additional Terms & Conditions.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and rule 3745-17-11(B).
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-11(B)	0.551 pound PE per hour

## 2. Additional Terms and Conditions

- 2.a The combined emissions of organic compounds from emissions units K013 and K014 shall not exceed 2,158.1 lbs per day and 253.58 tons per year. Each emissions unit can be operated independently or in conjunction with the other, as long as the overall emissions from the two do not exceed the combined limitations.
- 2.b The RTO incinerator shall be operated at a VOC emission destruction efficiency of not less than 95%, by weight, at all times the emissions unit is in operation.
- 2.c The listed daily and annual emission limits were established for this emissions unit only to determine the combined potential to emit for the dual coating lines K013 and K014, for which there are combined daily and annual emission limits. The permittee is, therefore, not required to maintain records or perform testing to verify compliance with the separate daily and annual emission limits.

## II. Operational Restrictions

### 1. Thermal Oxidizer Operational Restriction

The average temperature within the regenerative thermal oxidizer, for each 3-hour block of time, when the emissions unit is in operation, shall not be less than 1,150 degrees F.

- 2. The permittee shall operate the spray booth's water wash filtration system whenever this emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

### 1. Thermal Oxidizer Temperature Monitoring and Record keeping Requirements

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

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was less than 1,150 degrees F.
  - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
- 2. The permittee shall maintain records for emissions units K013 and K014 that will enable, for each calendar day, the calculation of the daily combined VOC emission rate in both lbs VOC per day and lbs VOC per gallon of deposited solids, in accordance with the U.S.EPA's " Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobiles and Light-Duty Truck Topcoat Operations" (EPA-450/3-88-028, Dec.1988) and any subsequent revisions thereof. The permittee shall perform such calculations on a daily basis and shall maintain records of the results of the calculations.

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

**3.a** The following has been excerpted, in part, from 40 CFR Part 60, Subpart MM - 'Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations', Section 60.393. The paragraph designations below are as they appear in Subpart MM.

(60.393(b)) The owner or operator of an affected facility shall conduct an initial performance test in accordance with Section 60.8(a) and thereafter for each calendar month for each affected facility according to the procedures in this section.

(60.393(c)) The owner or operator shall use the following procedures for determining the monthly volume weighted average mass of VOC emitted per volume of applied coating solids (N).

(60.393(c)(2)) The owner or operator shall use the following procedures for each affected facility which uses a capture system and a control device that destroys VOC (e.g., incinerator) to comply with the applicable emission limit specified under Section 60.392.

(60.393(c)(2)(i)) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility as described under Section 60.393(c)(1)(i)

**3.b** (60.393(c)(1)(i)) Calculate the volume weighted average mass of VOC per volume of applied coating solids for each calendar month for each affected facility. The owner or operator shall determine the composition of coatings by formulation data supplied by the manufacturer of the coatings or from data determined by an analysis of each coating, as received, by Reference Method 24. The Administrator may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine data used in the calculation of the VOC content of coatings by Reference Method 24 or an equivalent or alternative method. The owner or operator shall determine from company records on a monthly basis the volume of coating consumed, as received, and the mass of solvent used for thinning purposes. The volume weighted average of the total mass of VOC per volume of coating solids used each calendar month will be determined by the following procedures.

(60.393(c)(1)(i)(A)) Calculate the mass of VOC used in each calendar month for each affected facility by the following equation where "n" is the total number of coatings used and "m" is the total number of VOC solvents used:

$M_o + M_d = (\text{the summation of the products of } L_{ci} \times D_{ci} \times W_{ci}, \text{ for } i = 1 \text{ through } n) \text{ plus } (\text{the summation of } L_{dj} \times D_{dj}, \text{ for } j = 1 \text{ through } m)$

where:

$D_{ci}$  = density of each coating (i) as received (kilograms per liter),

$D_{dj}$  = density of each type of VOC dilution solvent (j) added to the coatings, as received (kilograms per liter),

$L_{ci}$  = volume of each coating (i) consumed, as received (liters),

$L_{dj}$  = volume of each type VOC dilution solvent (j) added to the coatings, as received (liters),

$M_d$  = total mass of VOC in dilution solvent (kilograms),

$M_o$  = total mass of VOC in coatings as received (kilograms), and

$W_{ci}$  = proportion of VOC by weight in each coating (i), as received (kilograms VOC/kilograms coating).

(The summation of  $L_{dj} \times D_{dj}$  will be zero if no VOC solvent is added to the coatings, as received.)

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

**3.c** (60.393(c)(1)(i)(B)) Calculate the total volume of coating solids used in each calendar month for each affected facility by the following equation where "n" is the number of coatings used:

$$L_s = (\text{the summation of } L_{ci} \times V_{si}, \text{ for } i = 1 \text{ through } n)$$

where:

$L_s$  = volume of solids in coatings consumed (liters), and

$V_{si}$  = proportion of solids by volume in each coating (i) as received (liter solids/liter coating).

(60.393(c)(1)(i)(C)) Select the appropriate transfer efficiency (T) from the following tables for each surface coating operation:

Application method	Transfer efficiency
Air Atomized Spray (waterborne coating)	0.39
Air Atomized Spray (solvent-borne coating)	0.50
Manual Electrostatic Spray	0.75
Automatic Electrostatic Spray	0.95
Electrodeposition	1.00

The values in the table above represent an overall system efficiency which includes a total capture of purge. If a spray system uses line purging after each vehicle and does not collect any of the purge material, the following table shall be used:

Application method	Transfer efficiency
Air Atomized Spray (waterborne coating)	0.30
Air Atomized Spray (solvent-borne coating)	0.40
Manual Electrostatic Spray	0.62
Automatic Electrostatic Spray	0.75

If the owner or operator can justify to the Administrator's satisfaction that other values for transfer efficiencies are appropriate, the Administrator will approve their use on a case-by-case basis. If actual test values for transfer efficiencies are available, then those values may be used in lieu of the table values provided above.

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

**3.d** (60.393(c)(1)(i)(C)(1)) When more than one application method (l) is used on an individual surface coating operation, the owner or operator shall perform an analysis to determine an average transfer efficiency by the following equation where "n" is the total number of coatings used and "p" is the total number of applications methods:

$T = (\text{the summation of the products of } Tl \times Vsi \times Lcil, \text{ for } l = 1 \text{ through } p \text{ and for } i = 1 \text{ through } n) \text{ divided by } (Ls)$

where:

$Lcil = \text{volume of each coating (i) consumed by each application method (l), as received (liters),}$

$Ls = \text{volume of solids in coatings consumed (liters),}$

$T = \text{overall transfer efficiency,}$

$Tl = \text{transfer efficiency for application method (l), and}$

$Vsi = \text{proportion of solids by volume in each coating (i) as received (liter solids/liter coating).}$

(60.393(c)(1)(l)(D)) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility by the following equation:

$G = (Mo + Md) \text{ divided by } (Ls \times T)$

where:

$G = \text{volume weighted average mass of VOC per volume of applied solids (kilograms per liter),}$

$Md = \text{total mass of VOC in dilution solvent (kilograms),}$

$Mo = \text{total mass of VOC in coatings as received (kilograms),}$

$Ls = \text{volume of solids in coatings consumed (liters), and}$

$T = \text{overall transfer efficiency.}$

(60.393(c)(2)(ii)) Calculate the volume weighted average mass of VOC per volume of applied solids emitted after the control device, by the following equation:

$N = G[1 - FE]$

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

- 3.e** (60.393(c)(2)(ii)(A)) Determine the fraction of total VOC which is emitted by an affected facility that enters the control device by using the following equation where "n" is the total number of stacks entering the control device and "p" is the total number of stacks not connected to the control device:

$F = \frac{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n)}{\text{[(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n) \text{ plus (the summation of the products of } Q_{fk} \times C_{fk}, \text{ for } k = 1 \text{ through } p)]}$

where:

F = fraction of total VOC which is emitted by an affected facility that enters the control device,

$C_{bi}$  = concentration of VOC (as carbon) in the effluent gas flowing through stack (i) entering the control device (parts per million by volume),

$C_{fk}$  = concentration of VOC (as carbon) in the effluent gas flowing through exhaust stack (k) not entering the control device (parts per million by volume),

$Q_{bi}$  = volumetric flow rate of the effluent gas flowing through stack (i) entering the control device (dry standard cubic meters per hour),

$Q_{fk}$  = volumetric flow rate of the effluent gas flowing through exhaust stack (k) not entering the control device (dry standard cubic meters per hour),

n = is the total number of stacks entering the control device, and

p = is the total number of stacks not connected to the control device.

If the owner can justify to the Administrator's satisfaction that another method will give comparable results, the Administrator will approve its use on a case-by-case basis.

In subsequent months, the owner or operator shall use the most recently determined capture fraction for the performance test.

- 3.f** (60.393(c)(2)(ii)(B)) Determine the destruction efficiency of the control device using values of the volumetric flow rate of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation where "n" is the total number of stacks entering the control device and "m" is the total number of stacks leaving the control device:

$E = \frac{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n) \text{ minus (the summation of the products of } Q_{aj} \times C_{aj}, \text{ for } j = 1 \text{ through } m)}{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n)}$

where:

E = VOC destruction efficiency of the control device,

$C_{aj}$  = concentration of VOC (as carbon) in the effluent gas flowing through stack (j) leaving the control device (parts per million by volume),

$Q_{aj}$  = volumetric flow rate of the effluent gas flowing through stack (j) leaving the control device (dry standard cubic meters per hour),

m = is the total number of stacks leaving the control device, and

n = is the total number of stacks entering the control device.

In subsequent months, the owner or operator shall use the most recently determined VOC destruction efficiency for the performance test.

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

- 3.g** (60.393(c)(2)(ii)(C)) If an emission control device controls the emissions from more than one affected facility, the owner or operator shall measure the VOC concentration ( $C_{bi}$ ) in the effluent gas entering the control device (in parts per million by volume) and the volumetric flow rate ( $Q_{bi}$ ) of the effluent gas (in dry standard cubic meters per hour) entering the device through each stack. The destruction or removal efficiency determined using these data shall be applied to each affected facility served by the control device.

(60.393(c)(2)(iii)) If the volume weighted average mass of VOC per volume of applied solids emitted after the control device ( $N$ ) calculated on a calendar month basis is less than or equal to the applicable emission limit specified in section 60.392, the affected facility is in compliance. Each monthly calculation is a performance test for the purposes of this subpart.

4. The permittee shall maintain monthly records for emissions units K013 and K014 of the volume weighted average mass of the VOC per volume of applied coating solids and the calculations required by 40 CFR, Part 60, Subpart MM, Section 60.393.
5. The permittee shall maintain daily records of the calculated, daily, combined VOC emission rate for emissions units K013 and K014, in lbs per day, and the number of hours of operation for each emissions unit.
6. The permittee shall maintain daily records of the date, duration and reason for any periods during which the spray booth's water wash filtration system was not in service and this emissions unit was in operation.

### IV. Reporting Requirements

1. Thermal Oxidizer Temperature Reporting Requirements

The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified above.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the daily volume-weighted average VOC emissions limitation, in lbs VOC per gallon of deposited solids, has been exceeded. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 45 days after the exceedance occurs.
3. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily combined emissions of organic compounds from emissions units K013 and K014 exceeded 2,158.1lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
4. The permittee shall also submit annual reports that specify the total combined emissions of organic compounds from emissions units K013 and K014 for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing that the spray booth water wash filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

### V. Testing Requirements

1. USEPA Method 24 shall be used to determine the volatile organic compound content of the coatings and cleanup materials employed.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the 95%, by weight, VOC control efficiency requirement and the mass emissions limits in Section A.I. via simultaneous inlet-outlet testing of the thermal oxidizer air pollution control device in accordance with USEPA Method 25A of 40 CFR Part 60, Appendix A.

Capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) Capture efficiency testing shall be performed by the permittee whenever the permittee is required to perform transfer efficiency testing pursuant to USEPA's "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobiles and Light-Duty Truck Topcoat Operations" (EPA-450/3-88-028, Dec.1988) and any subsequent revisions thereof.

The VOC destruction and removal efficiency testing shall be conducted during the last year of the permit prior to permit expiration.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

3. Emission Limitation-  
1.40 Kg VOC per liter of applied coating solids or 11.68 lbs VOC per gallon of applied (deposited) solids, as a monthly volume-weighted average.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.3.

4. Emission Limitation-  
2.8 lbs of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 lbs VOC per gallon of deposited solids, as a daily volume-weighted average.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.2.

## V. Testing Requirements (continued)

5. Emission Limitation -  
Combined emissions from K013 and K014 shall not exceed 2,158.1 pounds of OC per day and 253.58 tons OC per year

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in Section A.III.2 and A.III.4. The annual OC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor 1.0 ton/2,000 lbs.

6. Emission Limitation -  
734.8 lbs of OC per day, and 86.34 tons OC per year.

Applicable Compliance Method -

If required, compliance shall be based upon the record keeping specified in Section A.III.2. However, as explained in A.I.2.c., if the permittee demonstrates compliance with the combined emission limitations, the permittee will be deemed to be in compliance with the emission limitations for this emissions unit.

7. Emission Limitation:  
0.551 lb PE/hr and 0.39 ton per year

Applicable Compliance Method:

To determine the actual worst case emission rate for particulate emissions, the following equation may be used:

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

where,

$$E = \text{particulate emissions rate (lb/hr)}$$

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

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual particulate emission limit shall be determined by multiplying the calculated hourly emissions rate by the number of hours of operation per year and dividing by 2,000.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Prime (Guidecoat) Booth System (CV) (K014)

**Activity Description:** Prime booth, oven, and RTO (CV)

#### 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>
CV guidecoat coating line for light-duty trucks. (Includes the application of hood anti-chip and blackout coatings. VOC emissions from the oven are controlled by a regenerative thermal oxidizer (RTO).)	40 CFR Part 60, Subpart MM	1.40 Kg VOC per liter of applied coating solids or 11.68 lbs VOC per gallon of applied (deposited) solids, as a monthly volume-weighted average
	OAC rule 3745-21-09(C)(1)(a)	2.8 lbs of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 lbs VOC per gallon of deposited solids, as a daily volume-weighted average
	OAC rule 3745-31-05(A) PTI's 02-9278, 02-7873 and 02-4022	1,423.3 lbs/day OC and 167.24 tons/year OC. See A.1.2.c below.
		These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.
		0.73 ton particulates per year
		See Additional Terms & Conditions.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and rule 3745-17-11(B).
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-11(B)	0.551 pound PE per hour

## 2. Additional Terms and Conditions

- 2.a The combined emissions of organic compounds from emissions units K013 and K014 shall not exceed 2,158.1 lbs per day and 253.58 tons per year. Each emissions unit can be operated independently or in conjunction with the other, as long as the overall emissions from the two do not exceed the combined limitations.
- 2.b The RTO incinerator shall be operated at a VOC emission destruction efficiency of not less than 95%, by weight, at all times the emissions unit is in operation.
- 2.c The listed daily and annual emission limits were established for this emissions unit only to determine the combined potential to emit for the dual coating lines K013 and K014, for which there are combined daily and annual emission limits. The permittee is, therefore, not required to maintain records or perform testing to verify compliance with the separate daily and annual emission limits.

## II. Operational Restrictions

### 1. Thermal Oxidizer Operational Restriction

The average temperature within the regenerative thermal oxidizer, for each 3-hour block of time, when the emissions unit is in operation, shall not be less than 1,150 degrees F.

- 2. The permittee shall operate the spray booth's water wash filtration system whenever this emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

### 1. Thermal Oxidizer Temperature Monitoring and Record keeping Requirements

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

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was less than 1,150 degrees F.
  - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
- 2. The permittee shall maintain records for emissions units K013 and K014 that will enable, for each calendar day, the calculation of the daily VOC emission rate in both lbs VOC per day and lbs VOC per gallon of deposited solids, in accordance with the U.S.EPA's " Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobiles and Light-Duty Truck Topcoat Operations" (EPA-450/3-88-028, Dec.1988) and any subsequent revisions thereof. The permittee shall perform such calculations on a daily basis and shall maintain records of the results of the calculations.

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

**3.a** The following has been excerpted, in part, from 40 CFR Part 60, Subpart MM - 'Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations', Section 60.393. The paragraph designations below are as they appear in Subpart MM.

(60.393(b)) The owner or operator of an affected facility shall conduct an initial performance test in accordance with Section 60.8(a) and thereafter for each calendar month for each affected facility according to the procedures in this section.

(60.393(c)) The owner or operator shall use the following procedures for determining the monthly volume weighted average mass of VOC emitted per volume of applied coating solids (N).

(60.393(c)(2)) The owner or operator shall use the following procedures for each affected facility which uses a capture system and a control device that destroys VOC (e.g., incinerator) to comply with the applicable emission limit specified under Section 60.392.

(60.393(c)(2)(i)) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility as described under Section 60.393(c)(1)(i)

**3.b** (60.393(c)(1)(i)) Calculate the volume weighted average mass of VOC per volume of applied coating solids for each calendar month for each affected facility. The owner or operator shall determine the composition of coatings by formulation data supplied by the manufacturer of the coatings or from data determined by an analysis of each coating, as received, by Reference Method 24. The Administrator may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine data used in the calculation of the VOC content of coatings by Reference Method 24 or an equivalent or alternative method. The owner or operator shall determine from company records on a monthly basis the volume of coating consumed, as received, and the mass of solvent used for thinning purposes. The volume weighted average of the total mass of VOC per volume of coating solids used each calendar month will be determined by the following procedures.

(60.393(c)(1)(i)(A)) Calculate the mass of VOC used in each calendar month for each affected facility by the following equation where "n" is the total number of coatings used and "m" is the total number of VOC solvents used:

$$M_o + M_d = (\text{the summation of the products of } L_{ci} \times D_{ci} \times W_{ci}, \text{ for } i = 1 \text{ through } n) \text{ plus } (\text{the summation of } L_{dj} \times D_{dj}, \text{ for } j = 1 \text{ through } m)$$

where:

$D_{ci}$  = density of each coating (i) as received (kilograms per liter),

$D_{dj}$  = density of each type of VOC dilution solvent (j) added to the coatings, as received (kilograms per liter),

$L_{ci}$  = volume of each coating (i) consumed, as received (liters),

$L_{dj}$  = volume of each type VOC dilution solvent (j) added to the coatings, as received (liters),

$M_d$  = total mass of VOC in dilution solvent (kilograms),

$M_o$  = total mass of VOC in coatings as received (kilograms), and

$W_{ci}$  = proportion of VOC by weight in each coating (i), as received (kilograms VOC/kilograms coating).

(The summation of  $L_{dj} \times D_{dj}$  will be zero if no VOC solvent is added to the coatings, as received.)

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

**3.c** (60.393(c)(1)(i)(B)) Calculate the total volume of coating solids used in each calendar month for each affected facility by the following equation where "n" is the number of coatings used:

$$L_s = (\text{the summation of } L_{ci} \times V_{si}, \text{ for } i = 1 \text{ through } n)$$

where:

$L_s$  = volume of solids in coatings consumed (liters), and

$V_{si}$  = proportion of solids by volume in each coating (i) as received (liter solids/liter coating).

(60.393(c)(1)(i)(C)) Select the appropriate transfer efficiency (T) from the following tables for each surface coating operation:

Application method	Transfer efficiency
Air Atomized Spray (waterborne coating)	0.39
Air Atomized Spray (solvent-borne coating)	0.50
Manual Electrostatic Spray	0.75
Automatic Electrostatic Spray	0.95
Electrodeposition	1.00

The values in the table above represent an overall system efficiency which includes a total capture of purge. If a spray system uses line purging after each vehicle and does not collect any of the purge material, the following table shall be used:

Application method	Transfer efficiency
Air Atomized Spray (waterborne coating)	0.30
Air Atomized Spray (solvent-borne coating)	0.40
Manual Electrostatic Spray	0.62
Automatic Electrostatic Spray	0.75

If the owner or operator can justify to the Administrator's satisfaction that other values for transfer efficiencies are appropriate, the Administrator will approve their use on a case-by-case basis. If actual test values for transfer efficiencies are available, then those values may be used in lieu of the table values provided above. If actual test values for transfer efficiencies are available, then those values may be used in lieu of the table values provided above.

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

**3.d** (60.393(c)(1)(i)(C)(1)) When more than one application method (l) is used on an individual surface coating operation, the owner or operator shall perform an analysis to determine an average transfer efficiency by the following equation where "n" is the total number of coatings used and "p" is the total number of applications methods:

$T = (\text{the summation of the products of } T_l \times V_{si} \times L_{cil}, \text{ for } l = 1 \text{ through } p \text{ and for } i = 1 \text{ through } n) \text{ divided by } (L_s)$

where:

$L_{cil}$  = volume of each coating (i) consumed by each application method (l), as received (liters),

$L_s$  = volume of solids in coatings consumed (liters),

T = overall transfer efficiency,

$T_l$  = transfer efficiency for application method (l), and

$V_{si}$  = proportion of solids by volume in each coating (i) as received (liter solids/liter coating).

(60.393(c)(1)(l)(D)) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility by the following equation:

$G = (M_o + M_d) \text{ divided by } (L_s \times T)$

where:

G = volume weighted average mass of VOC per volume of applied solids (kilograms per liter),

$M_d$  = total mass of VOC in dilution solvent (kilograms),

$M_o$  = total mass of VOC in coatings as received (kilograms),

$L_s$  = volume of solids in coatings consumed (liters), and

T = overall transfer efficiency.

(60.393(c)(2)(ii)) Calculate the volume weighted average mass of VOC per volume of applied solids emitted after the control device, by the following equation:

$N = G[1 - FE]$

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

- 3.e** (60.393(c)(2)(ii)(A)) Determine the fraction of total VOC which is emitted by an affected facility that enters the control device by using the following equation where "n" is the total number of stacks entering the control device and "p" is the total number of stacks not connected to the control device:

$F = \frac{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n)}{\text{[(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n) \text{ plus (the summation of the products of } Q_{fk} \times C_{fk}, \text{ for } k = 1 \text{ through } p)]}$

where:

F = fraction of total VOC which is emitted by an affected facility that enters the control device,

$C_{bi}$  = concentration of VOC (as carbon) in the effluent gas flowing through stack (i) entering the control device (parts per million by volume),

$C_{fk}$  = concentration of VOC (as carbon) in the effluent gas flowing through exhaust stack (k) not entering the control device (parts per million by volume),

$Q_{bi}$  = volumetric flow rate of the effluent gas flowing through stack (i) entering the control device (dry standard cubic meters per hour),

$Q_{fk}$  = volumetric flow rate of the effluent gas flowing through exhaust stack (k) not entering the control device (dry standard cubic meters per hour),

n = is the total number of stacks entering the control device, and

p = is the total number of stacks not connected to the control device.

If the owner can justify to the Administrator's satisfaction that another method will give comparable results, the Administrator will approve its use on a case-by-case basis.

In subsequent months, the owner or operator shall use the most recently determined capture fraction for the performance test.

- 3.f** (60.393(c)(2)(ii)(B)) Determine the destruction efficiency of the control device using values of the volumetric flow rate of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation where "n" is the total number of stacks entering the control device and "m" is the total number of stacks leaving the control device:

$E = \frac{\text{[(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n) \text{ minus (the summation of the products of } Q_{aj} \times C_{aj}, \text{ for } j = 1 \text{ through } m)]}{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n)}$

where:

E = VOC destruction efficiency of the control device,

$C_{aj}$  = concentration of VOC (as carbon) in the effluent gas flowing through stack (j) leaving the control device (parts per million by volume),

$Q_{aj}$  = volumetric flow rate of the effluent gas flowing through stack (j) leaving the control device (dry standard cubic meters per hour),

m = is the total number of stacks leaving the control device, and

n = is the total number of stacks entering the control device.

In subsequent months, the owner or operator shall use the most recently determined VOC destruction efficiency for the performance test.

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

- 3.g** (60.393(c)(2)(ii)(C)) If an emission control device controls the emissions from more than one affected facility, the owner or operator shall measure the VOC concentration ( $C_{bi}$ ) in the effluent gas entering the control device (in parts per million by volume) and the volumetric flow rate ( $Q_{bi}$ ) of the effluent gas (in dry standard cubic meters per hour) entering the device through each stack. The destruction or removal efficiency determined using these data shall be applied to each affected facility served by the control device.

(60.393(c)(2)(iii)) If the volume weighted average mass of VOC per volume of applied solids emitted after the control device ( $N$ ) calculated on a calendar month basis is less than or equal to the applicable emission limit specified in section 60.392, the affected facility is in compliance. Each monthly calculation is a performance test for the purposes of this subpart.

4. The permittee shall maintain monthly records for emissions units K013 and K014 of the volume weighted average mass of the VOC per volume of applied coating solids and the calculations required by 40 CFR, Part 60, Subpart MM, Section 60.393.
5. The permittee shall maintain daily records of the calculated, daily, combined VOC emission rate for emissions units K013 and K014, in lbs per day, and the number of hours of operation for each emissions unit.
6. The permittee shall maintain daily records of the date, duration and reason for any periods during which the spray booth's water wash filtration system was not in service and this emissions unit was in operation.

### IV. Reporting Requirements

1. Thermal Oxidizer Temperature Reporting Requirements

The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified above.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the daily volume-weighted average VOC emissions limitation, in lbs VOC per gallon of deposited solids, has been exceeded. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 45 days after the exceedance occurs.
3. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily combined emissions of organic compounds from emissions units K013 and K014 exceeded 2,158.1lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
4. The permittee shall also submit annual reports that specify the total combined emissions of organic compounds from emissions units K013 and K014 for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing that the spray booth water wash filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

### V. Testing Requirements

1. USEPA Method 24 shall be used to determine the volatile organic compound content of the coatings and cleanup materials employed.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the 95%, by weight, VOC control efficiency requirement and the mass emissions limits in Section A.I. via simultaneous inlet-outlet testing of the thermal oxidizer air pollution control device in accordance with USEPA Method 25A of 40 CFR Part 60, Appendix A.

Capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) Capture efficiency testing shall be performed by the permittee whenever the permittee is required to perform transfer efficiency testing pursuant to USEPA's "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobiles and Light-Duty Truck Topcoat Operations" (EPA-450/3-88-028, Dec.1988) and any subsequent revisions thereof.

The VOC destruction and removal efficiency testing shall be conducted during the last year of the permit prior to permit expiration.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

3. Emission Limitation-  
1.40 Kg VOC per liter of applied coating solids or 11.68 lbs VOC per gallon of applied (deposited) solids, as a monthly volume-weighted average.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.3.

4. Emission Limitation-  
2.8 lbs of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 lbs VOC per gallon of deposited solids, as a daily volume-weighted average.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.2.

## V. Testing Requirements (continued)

5. Emission Limitation -  
Combined emissions from K013 and K014 shall not exceed 2,158.1 pounds of OC per day and 253.58 tons OC per year

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in Section A.III.2 and A.III.4. The annual OC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor 1.0 ton/2,000 lbs.

6. Emission Limitation -  
1,423.3 lbs of OC per day, and 167.24 tons OC per year.

Applicable Compliance Method -

If required, compliance shall be based upon the record keeping specified in Section A.III.2. However, as explained in A.I.2.c., if the permittee demonstrates compliance with the combined emission limitations, the permittee will be deemed to be in compliance with the emission limitations for this emissions unit.

7. Emission Limitation:  
0.551 lb PE/hr and 0.73 ton per year

Applicable Compliance Method:

To determine the actual worst case emission rate for particulate emissions, the following equation may be used:

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

where,

E = particulate emissions rate (lb/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

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual particulate emission limit shall be determined by multiplying the calculated hourly emissions rate by the number of hours of operation per year and dividing by 2,000.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Topcoat (Enamel) system #1 (K015)

**Activity Description:** Enamel booth, oven, and RTO

#### 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>
Enamel booth #1 and oven, topcoat coating line for light-duty trucks. (Includes basecoat and clear coat application. VOC emissions from the booth's automatic sections are controlled by a carbon adsorption unit and [regenerative thermal oxidizer (RTO). VOC emissions from the oven are controlled by a separate RTO.)	40 CFR Part 60, Subpart MM	1.47 Kg VOC per liter of applied coating solids or 12.27 lbs VOC per gallon of applied (deposited) solids, as a monthly volume-weighted average
	OAC rule 3745-21-09(C)(1)(c)	2.8 lbs of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 lbs VOC per gallon of deposited solids, as a daily volume-weighted average
	OAC rule 3745-31-05(A) PTI's 02-9278, 02-7873 and 02-4022	3,672.4 lbs/day OC and 431.51 tons/year OC. See A.1.2.c below.  These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.
		1.39 tons particulates per year
		See Additional Terms & Conditions.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and rule 3745-17-11(B).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	0.551 pound PE per hour

**2. Additional Terms and Conditions**

- 2.a** The combined emissions of organic compounds from emissions units K015, K016 and K017 shall not exceed 11,170.3 lbs per day and 1,321.51 tons per year. Each emissions unit can be operated independently or in conjunction with the others, as long as the overall emissions from the three do not exceed the combined limitations.
- 2.b** The RTO incinerators shall be operated at a VOC emission destruction efficiency of not less than 95%, by weight, at all times the emissions unit is in operation.
- 2.c** The listed daily and annual emission limits were established for this emissions unit only to determine the combined potential to emit for the dual coating lines K015, K016 and K017, for which there are combined daily and annual emission limits. The permittee is, therefore, not required to maintain records or perform testing to verify compliance with the separate daily and annual emission limits.

**II. Operational Restrictions**

- 1. Thermal Oxidizer Operational Restriction

The average temperature within the regenerative thermal oxidizers, for each 3-hour block of time, when the emissions unit is in operation, shall not be less than 1,150 degrees F.

- 2. The permittee shall operate the spray booth's water wash filtration system whenever this emissions unit is in operation.

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

- 1. Thermal Oxidizer Temperature Monitoring and Record keeping Requirements

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

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizers, when the emissions unit was in operation, was less than 1,150 degrees F.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

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

2. The permittee shall maintain records for emissions units K015, K016 and K017 that will enable, for each calendar day, the calculation of the daily VOC emission rate in both lbs VOC per day and lbs VOC per gallon of deposited solids, in accordance with the U.S.EPA's " Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobiles and Light-Duty Truck Topcoat Operations" (EPA-450/3-88-028, Dec.1988) and any subsequent revisions thereof. The permittee shall perform such calculations on a daily basis and shall maintain records of the results of the calculations.

3.a The following has been excerpted, in part, from 40 CFR Part 60, Subpart MM - 'Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations', Section 60.393. The paragraph designations below are as they appear in Subpart MM.

(60.393(b)) The owner or operator of an affected facility shall conduct an initial performance test in accordance with Section 60.8(a) and thereafter for each calendar month for each affected facility according to the procedures in this section.

(60.393(c)) The owner or operator shall use the following procedures for determining the monthly volume weighted average mass of VOC emitted per volume of applied coating solids (N).

(60.393(c)(2)) The owner or operator shall use the following procedures for each affected facility which uses a capture system and a control device that destroys VOC (e.g., incinerator) to comply with the applicable emission limit specified under Section 60.392.

(60.393(c)(2)(i)) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility as described under Section 60.393(c)(1)(i)

3.b (60.393(c)(1)(i)) Calculate the volume weighted average mass of VOC per volume of applied coating solids for each calendar month for each affected facility. The owner or operator shall determine the composition of coatings by formulation data supplied by the manufacturer of the coatings or from data determined by an analysis of each coating, as received, by Reference Method 24. The Administrator may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine data used in the calculation of the VOC content of coatings by Reference Method 24 or an equivalent or alternative method. The owner or operator shall determine from company records on a monthly basis the volume of coating consumed, as received, and the mass of solvent used for thinning purposes. The volume weighted average of the total mass of VOC per volume of coating solids used each calendar month will be determined by the following procedures.

(60.393(c)(1)(i)(A)) Calculate the mass of VOC used in each calendar month for each affected facility by the following equation where "n" is the total number of coatings used and "m" is the total number of VOC solvents used:

$M_o + M_d = (\text{the summation of the products of } L_{ci} \times D_{ci} \times W_{ci}, \text{ for } i = 1 \text{ through } n) \text{ plus } (\text{the summation of } L_{dj} \times D_{dj}, \text{ for } j = 1 \text{ through } m)$

where:

$D_{ci}$  = density of each coating (i) as received (kilograms per liter),

$D_{dj}$  = density of each type of VOC dilution solvent (j) added to the coatings, as received (kilograms per liter),

$L_{ci}$  = volume of each coating (i) consumed, as received (liters),

$L_{dj}$  = volume of each type VOC dilution solvent (j) added to the coatings, as received (liters),

$M_d$  = total mass of VOC in dilution solvent (kilograms),

$M_o$  = total mass of VOC in coatings as received (kilograms), and

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

$W_{ci}$  = proportion of VOC by weight in each coating (i), as received (kilograms VOC/kilograms coating).

(The summation of  $L_{dj} \times D_{dj}$  will be zero if no VOC solvent is added to the coatings, as received.)

- 3.c** (60.393(c)(1)(i)(B)) Calculate the total volume of coating solids used in each calendar month for each affected facility by the following equation where "n" is the number of coatings used:

$L_s$  = (the summation of  $L_{ci} \times V_{si}$ , for  $i = 1$  through  $n$ )

where:

$L_s$  = volume of solids in coatings consumed (liters), and

$V_{si}$  = proportion of solids by volume in each coating (i) as received (liter solids/liter coating).

(60.393(c)(1)(i)(C)) Select the appropriate transfer efficiency (T) from the following tables for each surface coating operation:

Application method	Transfer efficiency
Air Atomized Spray (waterborne coating)	0.39
Air Atomized Spray (solvent-borne coating)	0.50
Manual Electrostatic Spray	0.75
Automatic Electrostatic Spray	0.95
Electrodeposition	1.00

The values in the table above represent an overall system efficiency which includes a total capture of purge. If a spray system uses line purging after each vehicle and does not collect any of the purge material, the following table shall be used:

Application method	Transfer efficiency
Air Atomized Spray (waterborne coating)	0.30
Air Atomized Spray (solvent-borne coating)	0.40
Manual Electrostatic Spray	0.62
Automatic Electrostatic Spray	0.75

If the owner or operator can justify to the Administrator's satisfaction that other values for transfer efficiencies are appropriate, the Administrator will approve their use on a case-by-case basis. If actual test values for transfer efficiencies are available, then those values may be used in lieu of the table values provided above.

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

**3.d** (60.393(c)(1)(i)(C)(1)) When more than one application method (l) is used on an individual surface coating operation, the owner or operator shall perform an analysis to determine an average transfer efficiency by the following equation where "n" is the total number of coatings used and "p" is the total number of applications methods:

$T = (\text{the summation of the products of } Tl \times Vsi \times Lcil, \text{ for } l = 1 \text{ through } p \text{ and for } i = 1 \text{ through } n) \text{ divided by } (Ls)$

where:

$Lcil = \text{volume of each coating (i) consumed by each application method (l), as received (liters),}$

$Ls = \text{volume of solids in coatings consumed (liters),}$

$T = \text{overall transfer efficiency,}$

$Tl = \text{transfer efficiency for application method (l), and}$

$Vsi = \text{proportion of solids by volume in each coating (i) as received (liter solids/liter coating).}$

(60.393(c)(1)(l)(D)) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility by the following equation:

$G = (Mo + Md) \text{ divided by } (Ls \times T)$

where:

$G = \text{volume weighted average mass of VOC per volume of applied solids (kilograms per liter),}$

$Md = \text{total mass of VOC in dilution solvent (kilograms),}$

$Mo = \text{total mass of VOC in coatings as received (kilograms),}$

$Ls = \text{volume of solids in coatings consumed (liters), and}$

$T = \text{overall transfer efficiency.}$

(60.393(c)(2)(ii)) Calculate the volume weighted average mass of VOC per volume of applied solids emitted after the control device, by the following equation:

$N = G[1 - FE]$

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

- 3.e** (60.393(c)(2)(ii)(A)) Determine the fraction of total VOC which is emitted by an affected facility that enters the control device by using the following equation where "n" is the total number of stacks entering the control device and "p" is the total number of stacks not connected to the control device:

$F = \frac{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n)}{\text{[(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n) \text{ plus (the summation of the products of } Q_{fk} \times C_{fk}, \text{ for } k = 1 \text{ through } p)]}$

where:

F = fraction of total VOC which is emitted by an affected facility that enters the control device,

$C_{bi}$  = concentration of VOC (as carbon) in the effluent gas flowing through stack (i) entering the control device (parts per million by volume),

$C_{fk}$  = concentration of VOC (as carbon) in the effluent gas flowing through exhaust stack (k) not entering the control device (parts per million by volume),

$Q_{bi}$  = volumetric flow rate of the effluent gas flowing through stack (i) entering the control device (dry standard cubic meters per hour),

$Q_{fk}$  = volumetric flow rate of the effluent gas flowing through exhaust stack (k) not entering the control device (dry standard cubic meters per hour),

n = is the total number of stacks entering the control device, and

p = is the total number of stacks not connected to the control device.

If the owner can justify to the Administrator's satisfaction that another method will give comparable results, the Administrator will approve its use on a case-by-case basis.

In subsequent months, the owner or operator shall use the most recently determined capture fraction for the performance test.

- 3.f** (60.393(c)(2)(ii)(B)) Determine the destruction efficiency of the control device using values of the volumetric flow rate of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation where "n" is the total number of stacks entering the control device and "m" is the total number of stacks leaving the control device:

$E = \frac{\text{[(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n) \text{ minus (the summation of the products of } Q_{aj} \times C_{aj}, \text{ for } j = 1 \text{ through } m)]}{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n)}$

where:

E = VOC destruction efficiency of the control device,

$C_{aj}$  = concentration of VOC (as carbon) in the effluent gas flowing through stack (j) leaving the control device (parts per million by volume),

$Q_{aj}$  = volumetric flow rate of the effluent gas flowing through stack (j) leaving the control device (dry standard cubic meters per hour),

m = is the total number of stacks leaving the control device, and

n = is the total number of stacks entering the control device.

In subsequent months, the owner or operator shall use the most recently determined VOC destruction efficiency for the performance test.

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

- 3.g** (60.393(c)(2)(ii)(C)) If an emission control device controls the emissions from more than one affected facility, the owner or operator shall measure the VOC concentration ( $C_{bi}$ ) in the effluent gas entering the control device (in parts per million by volume) and the volumetric flow rate ( $Q_{bi}$ ) of the effluent gas (in dry standard cubic meters per hour) entering the device through each stack. The destruction or removal efficiency determined using these data shall be applied to each affected facility served by the control device.

(60.393(c)(2)(iii)) If the volume weighted average mass of VOC per volume of applied solids emitted after the control device ( $N$ ) calculated on a calendar month basis is less than or equal to the applicable emission limit specified in section 60.392, the affected facility is in compliance. Each monthly calculation is a performance test for the purposes of this subpart.

4. The permittee shall maintain monthly records for emissions units K015, K016 and K017 of the volume weighted average mass of the VOC per volume of applied coating solids and the calculations required by 40 CFR, Part 60, Subpart MM, Section 60.393.
5. The permittee shall maintain daily records of the calculated, daily, combined VOC emission rate for emissions units K015, K016 and K017, in lbs per day, and the number of hours of operation for each emissions unit.
6. The permittee shall maintain daily records of the date, duration and reason for any periods during which the spray booth's water wash filtration system was not in service and this emissions unit was in operation.

### IV. Reporting Requirements

1. Thermal Oxidizer Temperature Reporting Requirements

The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizers does not comply with the temperature limitation specified above.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the daily volume-weighted average VOC emissions limitation, in lbs VOC per gallon of deposited solids, has been exceeded. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 45 days after the exceedance occurs.
3. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily combined emissions of organic compounds from emissions units K015, K016 and K017 exceeded 11,170.3 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
4. The permittee shall also submit annual reports that specify the total combined emissions of organic compounds from emissions units K015, K016 and K017 for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing that the spray booth water wash filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

### V. Testing Requirements

1. USEPA Method 24 shall be used to determine the volatile organic compound content of the coatings and cleanup materials employed.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the 95%, by weight, VOC control efficiency requirement and the mass emissions limits in Section A.I. via simultaneous inlet-outlet testing of the thermal oxidizer air pollution control device in accordance with USEPA Method 25A of 40 CFR Part 60, Appendix A.

Capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) Capture efficiency testing shall be performed by the permittee whenever the permittee is required to perform transfer efficiency testing pursuant to USEPA's "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobiles and Light-Duty Truck Topcoat Operations" (EPA-450/3-88-028, Dec.1988) and any subsequent revisions thereof.

The VOC destruction and removal efficiency testing shall be conducted during the last year of the permit prior to permit expiration.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

3. Emission Limitation-  
1.47 Kg VOC per liter of applied coating solids or 12.27 lbs VOC per gallon of applied (deposited) solids, as a monthly volume-weighted average.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.3.

4. Emission Limitation-  
2.8 lbs of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 lbs VOC per gallon of deposited solids, as a daily volume-weighted average.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.2.

## V. Testing Requirements (continued)

5. Emission Limitation -  
Combined emissions from K015, K016 and K017 shall not exceed 11,170.3 lbs of OC per day and 1,321.51 tons OC per year.

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in Section A.III.2 and A.III.4. The annual OC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor 1.0 ton/2,000 lbs.

6. Emission Limitation -  
3,672.4 lbs of OC per day, and 431.51 tons OC per year.

Applicable Compliance Method -

If required, compliance shall be based upon the record keeping specified in Section A.III.2. However, as explained in A.I.2.c., if the permittee demonstrates compliance with the combined emission limitations, the permittee will be deemed to be in compliance with the emission limitations for this emissions unit.

7. Emission Limitation:  
0.551 lb PE/hr and 1.39 tons per year

Applicable Compliance Method:

To determine the actual worst case emission rate for particulate emissions, the following equation may be used:

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

where,

E = particulate emissions rate (lb/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

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual particulate emission limit shall be determined by multiplying the calculated hourly emissions rate by the number of hours of operation per year and dividing by 2,000.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Topcoat (Enamel) system #2 (K016)

**Activity Description:** Enamel booth, oven, and RTO

#### 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>
Enamel booth #2 and oven, topcoat coating line for light-duty trucks. (Includes basecoat and clear coat application. VOC emissions from the booth's automatic sections are controlled by a carbon adsorption unit and [regenerative thermal oxidizer (RTO). VOC emissions from the oven are controlled by a separate RTO.)	40 CFR Part 60, Subpart MM	1.47 Kg VOC per liter of applied coating solids or 12.27 lbs VOC per gallon of applied (deposited) solids, as a monthly volume-weighted average
	OAC rule 3745-21-09(C)(1)(c)	2.8 lbs of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 lbs VOC per gallon of deposited solids, as a daily volume-weighted average
	OAC rule 3745-31-05(A) PTI's 02-9278, 02-7873 and 02-4022	2,188.0 lbs/day OC and 257.09 tons/year OC. See A.1.2.c below.  These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.
		0.82 ton particulates per year
		See Additional Terms & Conditions.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and rule 3745-17-11(B).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	0.551 pound PE per hour

## 2. Additional Terms and Conditions

- 2.a The combined emissions of organic compounds from emissions units K015, K016 and K017 shall not exceed 11,170.3 lbs per day and 1,321.51 tons per year. Each emissions unit can be operated independently or in conjunction with the others, as long as the overall emissions from the three do not exceed the combined limitations.
- 2.b The RTO incinerators shall be operated at a VOC emission destruction efficiency of not less than 95%, by weight, at all times the emissions unit is in operation.
- 2.c The listed daily and annual emission limits were established for this emissions unit only to determine the combined potential to emit for the dual coating lines K015, K016 and K017, for which there are combined daily and annual emission limits. The permittee is, therefore, not required to maintain records or perform testing to verify compliance with the separate daily and annual emission limits.

## II. Operational Restrictions

### 1. Thermal Oxidizer Operational Restriction

The average temperature within the regenerative thermal oxidizers, for each 3-hour block of time, when the emissions unit is in operation, shall not be less than 1,150 degrees F.

- 2. The permittee shall operate the spray booth's water wash filtration system whenever this emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

### 1. Thermal Oxidizer Temperature Monitoring and Record keeping Requirements

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

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizers, when the emissions unit was in operation, was less than 1,150 degrees F.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

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

2. The permittee shall maintain records for emissions units K015, K016 and K017 that will enable, for each calendar day, the calculation of the daily VOC emission rate in both lbs VOC per day and lbs VOC per gallon of deposited solids, in accordance with the U.S.EPA's " Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobiles and Light-Duty Truck Topcoat Operations" (EPA-450/3-88-028, Dec.1988) and any subsequent revisions thereof. The permittee shall perform such calculations on a daily basis and shall maintain records of the results of the calculations.

3.a The following has been excerpted, in part, from 40 CFR Part 60, Subpart MM - 'Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations', Section 60.393. The paragraph designations below are as they appear in Subpart MM.

(60.393(b)) The owner or operator of an affected facility shall conduct an initial performance test in accordance with Section 60.8(a) and thereafter for each calendar month for each affected facility according to the procedures in this section.

(60.393(c)) The owner or operator shall use the following procedures for determining the monthly volume weighted average mass of VOC emitted per volume of applied coating solids (N).

(60.393(c)(2)) The owner or operator shall use the following procedures for each affected facility which uses a capture system and a control device that destroys VOC (e.g., incinerator) to comply with the applicable emission limit specified under Section 60.392.

(60.393(c)(2)(i)) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility as described under Section 60.393(c)(1)(i)

3.b (60.393(c)(1)(i)) Calculate the volume weighted average mass of VOC per volume of applied coating solids for each calendar month for each affected facility. The owner or operator shall determine the composition of coatings by formulation data supplied by the manufacturer of the coatings or from data determined by an analysis of each coating, as received, by Reference Method 24. The Administrator may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine data used in the calculation of the VOC content of coatings by Reference Method 24 or an equivalent or alternative method. The owner or operator shall determine from company records on a monthly basis the volume of coating consumed, as received, and the mass of solvent used for thinning purposes. The volume weighted average of the total mass of VOC per volume of coating solids used each calendar month will be determined by the following procedures.

(60.393(c)(1)(i)(A)) Calculate the mass of VOC used in each calendar month for each affected facility by the following equation where "n" is the total number of coatings used and "m" is the total number of VOC solvents used:

$M_o + M_d = (\text{the summation of the products of } L_{ci} \times D_{ci} \times W_{ci}, \text{ for } i = 1 \text{ through } n) \text{ plus } (\text{the summation of } L_{dj} \times D_{dj}, \text{ for } j = 1 \text{ through } m)$

where:

$D_{ci}$  = density of each coating (i) as received (kilograms per liter),

$D_{dj}$  = density of each type of VOC dilution solvent (j) added to the coatings, as received (kilograms per liter),

$L_{ci}$  = volume of each coating (i) consumed, as received (liters),

$L_{dj}$  = volume of each type VOC dilution solvent (j) added to the coatings, as received (liters),

$M_d$  = total mass of VOC in dilution solvent (kilograms),

$M_o$  = total mass of VOC in coatings as received (kilograms), and

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

$W_{ci}$  = proportion of VOC by weight in each coating (i), as received (kilograms VOC/kilograms coating).

(The summation of  $L_{dj} \times D_{dj}$  will be zero if no VOC solvent is added to the coatings, as received.)

- 3.c** (60.393(c)(1)(i)(B)) Calculate the total volume of coating solids used in each calendar month for each affected facility by the following equation where "n" is the number of coatings used:

$L_s$  = (the summation of  $L_{ci} \times V_{si}$ , for  $i = 1$  through  $n$ )

where:

$L_s$  = volume of solids in coatings consumed (liters), and

$V_{si}$  = proportion of solids by volume in each coating (i) as received (liter solids/liter coating).

(60.393(c)(1)(i)(C)) Select the appropriate transfer efficiency (T) from the following tables for each surface coating operation:

Application method	Transfer efficiency
Air Atomized Spray (waterborne coating)	0.39
Air Atomized Spray (solvent-borne coating)	0.50
Manual Electrostatic Spray	0.75
Automatic Electrostatic Spray	0.95
Electrodeposition	1.00

The values in the table above represent an overall system efficiency which includes a total capture of purge. If a spray system uses line purging after each vehicle and does not collect any of the purge material, the following table shall be used:

Application method	Transfer efficiency
Air Atomized Spray (waterborne coating)	0.30
Air Atomized Spray (solvent-borne coating)	0.40
Manual Electrostatic Spray	0.62
Automatic Electrostatic Spray	0.75

If the owner or operator can justify to the Administrator's satisfaction that other values for transfer efficiencies are appropriate, the Administrator will approve their use on a case-by-case basis. If actual test values for transfer efficiencies are available, then those values may be used in lieu of the table values provided above.

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

**3.d** (60.393(c)(1)(i)(C)(1)) When more than one application method (l) is used on an individual surface coating operation, the owner or operator shall perform an analysis to determine an average transfer efficiency by the following equation where "n" is the total number of coatings used and "p" is the total number of applications methods:

$T = (\text{the summation of the products of } Tl \times Vsi \times Lcil, \text{ for } l = 1 \text{ through } p \text{ and for } i = 1 \text{ through } n) \text{ divided by } (Ls)$

where:

$Lcil = \text{volume of each coating (i) consumed by each application method (l), as received (liters),}$

$Ls = \text{volume of solids in coatings consumed (liters),}$

$T = \text{overall transfer efficiency,}$

$Tl = \text{transfer efficiency for application method (l), and}$

$Vsi = \text{proportion of solids by volume in each coating (i) as received (liter solids/liter coating).}$

(60.393(c)(1)(l)(D)) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility by the following equation:

$G = (Mo + Md) \text{ divided by } (Ls \times T)$

where:

$G = \text{volume weighted average mass of VOC per volume of applied solids (kilograms per liter),}$

$Md = \text{total mass of VOC in dilution solvent (kilograms),}$

$Mo = \text{total mass of VOC in coatings as received (kilograms),}$

$Ls = \text{volume of solids in coatings consumed (liters), and}$

$T = \text{overall transfer efficiency.}$

(60.393(c)(2)(ii)) Calculate the volume weighted average mass of VOC per volume of applied solids emitted after the control device, by the following equation:

$N = G[1 - FE]$

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

- 3.e** (60.393(c)(2)(ii)(A)) Determine the fraction of total VOC which is emitted by an affected facility that enters the control device by using the following equation where "n" is the total number of stacks entering the control device and "p" is the total number of stacks not connected to the control device:

$F = \frac{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n)}{\text{[(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n) \text{ plus (the summation of the products of } Q_{fk} \times C_{fk}, \text{ for } k = 1 \text{ through } p)]}$

where:

F = fraction of total VOC which is emitted by an affected facility that enters the control device,

$C_{bi}$  = concentration of VOC (as carbon) in the effluent gas flowing through stack (i) entering the control device (parts per million by volume),

$C_{fk}$  = concentration of VOC (as carbon) in the effluent gas flowing through exhaust stack (k) not entering the control device (parts per million by volume),

$Q_{bi}$  = volumetric flow rate of the effluent gas flowing through stack (i) entering the control device (dry standard cubic meters per hour),

$Q_{fk}$  = volumetric flow rate of the effluent gas flowing through exhaust stack (k) not entering the control device (dry standard cubic meters per hour),

n = is the total number of stacks entering the control device, and

p = is the total number of stacks not connected to the control device.

If the owner can justify to the Administrator's satisfaction that another method will give comparable results, the Administrator will approve its use on a case-by-case basis.

In subsequent months, the owner or operator shall use the most recently determined capture fraction for the performance test.

- 3.f** (60.393(c)(2)(ii)(B)) Determine the destruction efficiency of the control device using values of the volumetric flow rate of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation where "n" is the total number of stacks entering the control device and "m" is the total number of stacks leaving the control device:

$E = \frac{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n) \text{ minus (the summation of the products of } Q_{aj} \times C_{aj}, \text{ for } j = 1 \text{ through } m)}{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n)}$

where:

E = VOC destruction efficiency of the control device,

$C_{aj}$  = concentration of VOC (as carbon) in the effluent gas flowing through stack (j) leaving the control device (parts per million by volume),

$Q_{aj}$  = volumetric flow rate of the effluent gas flowing through stack (j) leaving the control device (dry standard cubic meters per hour),

m = is the total number of stacks leaving the control device, and

n = is the total number of stacks entering the control device.

In subsequent months, the owner or operator shall use the most recently determined VOC destruction efficiency for the performance test.

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

- 3.g** (60.393(c)(2)(ii)(C)) If an emission control device controls the emissions from more than one affected facility, the owner or operator shall measure the VOC concentration ( $C_{bi}$ ) in the effluent gas entering the control device (in parts per million by volume) and the volumetric flow rate ( $Q_{bi}$ ) of the effluent gas (in dry standard cubic meters per hour) entering the device through each stack. The destruction or removal efficiency determined using these data shall be applied to each affected facility served by the control device.

(60.393(c)(2)(iii)) If the volume weighted average mass of VOC per volume of applied solids emitted after the control device ( $N$ ) calculated on a calendar month basis is less than or equal to the applicable emission limit specified in section 60.392, the affected facility is in compliance. Each monthly calculation is a performance test for the purposes of this subpart.

4. The permittee shall maintain monthly records for emissions units K015, K016 and K017 of the volume weighted average mass of the VOC per volume of applied coating solids and the calculations required by 40 CFR, Part 60, Subpart MM, Section 60.393.
5. The permittee shall maintain daily records of the calculated, daily, combined VOC emission rate for emissions units K015, K016 and K017, in lbs per day, and the number of hours of operation for each emissions unit.
6. The permittee shall maintain daily records of the date, duration and reason for any periods during which the spray booth's water wash filtration system was not in service and this emissions unit was in operation.

### IV. Reporting Requirements

1. Thermal Oxidizer Temperature Reporting Requirements

The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizers does not comply with the temperature limitation specified above.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the daily volume-weighted average VOC emissions limitation, in lbs VOC per gallon of deposited solids, has been exceeded. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 45 days after the exceedance occurs.
3. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily combined emissions of organic compounds from emissions units K015, K016 and K017 exceeded 11,170.3 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
4. The permittee shall also submit annual reports that specify the total combined emissions of organic compounds from emissions units K015, K016 and K017 for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing that the spray booth water wash filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

### V. Testing Requirements

1. USEPA Method 24 shall be used to determine the volatile organic compound content of the coatings and cleanup materials employed.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the 95%, by weight, VOC control efficiency requirement and the mass emissions limits in Section A.I. via simultaneous inlet-outlet testing of the thermal oxidizer air pollution control device in accordance with USEPA Method 25A of 40 CFR Part 60, Appendix A.

Capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) Capture efficiency testing shall be performed by the permittee whenever the permittee is required to perform transfer efficiency testing pursuant to USEPA's "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobiles and Light-Duty Truck Topcoat Operations" (EPA-450/3-88-028, Dec.1988) and any subsequent revisions thereof.

The VOC destruction and removal efficiency testing shall be conducted during the last year of the permit prior to permit expiration.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

3. Emission Limitation-  
1.47 Kg VOC per liter of applied coating solids or 12.27 lbs VOC per gallon of applied (deposited) solids, as a monthly volume-weighted average.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.3.

4. Emission Limitation-  
2.8 lbs of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 lbs VOC per gallon of deposited solids, as a daily volume-weighted average.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.2.

## V. Testing Requirements (continued)

5. Emission Limitation -  
Combined emissions from K015, K016 and K017 shall not exceed 11,170.3 lbs of OC per day and 1,321.51 tons OC per year.

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in Section A.III.2 and A.III.4. The annual OC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor 1.0 ton/2,000 lbs.

6. Emission Limitation -  
2,188.0 lbs of OC per day, and 257.09 tons OC per year.

Applicable Compliance Method -

If required, compliance shall be based upon the record keeping specified in Section A.III.2. However, as explained in A.I.2.c., if the permittee demonstrates compliance with the combined emission limitations, the permittee will be deemed to be in compliance with the emission limitations for this emissions unit.

7. Emission Limitation:  
0.551 lb PE/hr and 0.82 ton per year

Applicable Compliance Method:

To determine the actual worst case emission rate for particulate emissions, the following equation may be used:

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

where,

E = particulate emissions rate (lb/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

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual particulate emission limit shall be determined by multiplying the calculated hourly emissions rate by the number of hours of operation per year and dividing by 2,000.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Topcoat (Enamel) system #3 (K017)

**Activity Description:** Enamel booth, oven, and RTO

#### 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>
Enamel booth #3 and oven, topcoat coating line for light-duty trucks. (Includes basecoat and clear coat application. VOC emissions from the booth's automatic sections are controlled by a carbon adsorption unit and [regenerative thermal oxidizer (RTO). VOC emissions from the oven are controlled by a separate RTO.)	40 CFR Part 60, Subpart MM	1.47 Kg VOC per liter of applied coating solids or 12.27 lbs VOC per gallon of applied (deposited) solids, as a monthly volume-weighted average
	OAC rule 3745-21-09(C)(1)(c)	2.8 lbs of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 lbs VOC per gallon of deposited solids, as a daily volume-weighted average
	OAC rule 3745-31-05(A) PTI's 02-9278, 02-7873 and 02-4022	5,309.9 lbs/day OC and 623.9 tons/year OC. See A.1.2.c below.
		These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.
		2.2 tons particulates per year
		See Additional Terms & Conditions.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and rule 3745-17-11(B).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	0.551 pound PE per hour

## 2. Additional Terms and Conditions

- 2.a The combined emissions of organic compounds from emissions units K015, K016 and K017 shall not exceed 11,170.3 lbs per day and 1,321.51 tons per year. Each emissions unit can be operated independently or in conjunction with the others, as long as the overall emissions from the three do not exceed the combined limitations.
- 2.b The RTO incinerators shall be operated at a VOC emission destruction efficiency of not less than 95%, by weight, at all times the emissions unit is in operation.
- 2.c The listed daily and annual emission limits were established for this emissions unit only to determine the combined potential to emit for the dual coating lines K015, K016 and K017, for which there are combined daily and annual emission limits. The permittee is, therefore, not required to maintain records or perform testing to verify compliance with the separate daily and annual emission limits.

## II. Operational Restrictions

### 1. Thermal Oxidizer Operational Restriction

The average temperature within the regenerative thermal oxidizers, for each 3-hour block of time, when the emissions unit is in operation, shall not be less than 1,150 degrees F.

- 2. The permittee shall operate the spray booth's water wash filtration system whenever this emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

### 1. Thermal Oxidizer Temperature Monitoring and Record keeping Requirements

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

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizers, when the emissions unit was in operation, was less than 1,150 degrees F.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

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

2. The permittee shall maintain records for emissions units K015, K016 and K017 that will enable, for each calendar day, the calculation of the daily VOC emission rate in both lbs VOC per day and lbs VOC per gallon of deposited solids, in accordance with the U.S.EPA's " Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobiles and Light-Duty Truck Topcoat Operations" (EPA-450/3-88-028, Dec.1988) and any subsequent revisions thereof. The permittee shall perform such calculations on a daily basis and shall maintain records of the results of the calculations.

3.a The following has been excerpted, in part, from 40 CFR Part 60, Subpart MM - 'Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations', Section 60.393. The paragraph designations below are as they appear in Subpart MM.

(60.393(b)) The owner or operator of an affected facility shall conduct an initial performance test in accordance with Section 60.8(a) and thereafter for each calendar month for each affected facility according to the procedures in this section.

(60.393(c)) The owner or operator shall use the following procedures for determining the monthly volume weighted average mass of VOC emitted per volume of applied coating solids (N).

(60.393(c)(2)) The owner or operator shall use the following procedures for each affected facility which uses a capture system and a control device that destroys VOC (e.g., incinerator) to comply with the applicable emission limit specified under Section 60.392.

(60.393(c)(2)(i)) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility as described under Section 60.393(c)(1)(i)

3.b (60.393(c)(1)(i)) Calculate the volume weighted average mass of VOC per volume of applied coating solids for each calendar month for each affected facility. The owner or operator shall determine the composition of coatings by formulation data supplied by the manufacturer of the coatings or from data determined by an analysis of each coating, as received, by Reference Method 24. The Administrator may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine data used in the calculation of the VOC content of coatings by Reference Method 24 or an equivalent or alternative method. The owner or operator shall determine from company records on a monthly basis the volume of coating consumed, as received, and the mass of solvent used for thinning purposes. The volume weighted average of the total mass of VOC per volume of coating solids used each calendar month will be determined by the following procedures.

(60.393(c)(1)(i)(A)) Calculate the mass of VOC used in each calendar month for each affected facility by the following equation where "n" is the total number of coatings used and "m" is the total number of VOC solvents used:

$$M_o + M_d = (\text{the summation of the products of } L_{ci} \times D_{ci} \times W_{ci}, \text{ for } i = 1 \text{ through } n) \text{ plus } (\text{the summation of } L_{dj} \times D_{dj}, \text{ for } j = 1 \text{ through } m)$$

where:

$D_{ci}$  = density of each coating (i) as received (kilograms per liter),

$D_{dj}$  = density of each type of VOC dilution solvent (j) added to the coatings, as received (kilograms per liter),

$L_{ci}$  = volume of each coating (i) consumed, as received (liters),

$L_{dj}$  = volume of each type VOC dilution solvent (j) added to the coatings, as received (liters),

$M_d$  = total mass of VOC in dilution solvent (kilograms),

$M_o$  = total mass of VOC in coatings as received (kilograms), and

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

$W_{ci}$  = proportion of VOC by weight in each coating (i), as received (kilograms VOC/kilograms coating).

(The summation of  $L_{dj} \times D_{dj}$  will be zero if no VOC solvent is added to the coatings, as received.)

**3.c** (60.393(c)(1)(i)(B)) Calculate the total volume of coating solids used in each calendar month for each affected facility by the following equation where "n" is the number of coatings used:

$L_s$  = (the summation of  $L_{ci} \times V_{si}$ , for  $i = 1$  through  $n$ )

where:

$L_s$  = volume of solids in coatings consumed (liters), and

$V_{si}$  = proportion of solids by volume in each coating (i) as received (liter solids/liter coating).

(60.393(c)(1)(i)(C)) Select the appropriate transfer efficiency (T) from the following tables for each surface coating operation:

Application method	Transfer efficiency
Air Atomized Spray (waterborne coating)	0.39
Air Atomized Spray (solvent-borne coating)	0.50
Manual Electrostatic Spray	0.75
Automatic Electrostatic Spray	0.95
Electrodeposition	1.00

The values in the table above represent an overall system efficiency which includes a total capture of purge. If a spray system uses line purging after each vehicle and does not collect any of the purge material, the following table shall be used:

Application method	Transfer efficiency
Air Atomized Spray (waterborne coating)	0.30
Air Atomized Spray (solvent-borne coating)	0.40
Manual Electrostatic Spray	0.62
Automatic Electrostatic Spray	0.75

If the owner or operator can justify to the Administrator's satisfaction that other values for transfer efficiencies are appropriate, the Administrator will approve their use on a case-by-case basis. If actual test values for transfer efficiencies are available, then those values may be used in lieu of the table values provided above.

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

**3.d** (60.393(c)(1)(i)(C)(1)) When more than one application method (l) is used on an individual surface coating operation, the owner or operator shall perform an analysis to determine an average transfer efficiency by the following equation where "n" is the total number of coatings used and "p" is the total number of applications methods:

$T = (\text{the summation of the products of } Tl \times Vsi \times Lcil, \text{ for } l = 1 \text{ through } p \text{ and for } i = 1 \text{ through } n) \text{ divided by } (Ls)$

where:

$Lcil = \text{volume of each coating (i) consumed by each application method (l), as received (liters),}$

$Ls = \text{volume of solids in coatings consumed (liters),}$

$T = \text{overall transfer efficiency,}$

$Tl = \text{transfer efficiency for application method (l), and}$

$Vsi = \text{proportion of solids by volume in each coating (i) as received (liter solids/liter coating).}$

(60.393(c)(1)(l)(D)) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility by the following equation:

$G = (Mo + Md) \text{ divided by } (Ls \times T)$

where:

$G = \text{volume weighted average mass of VOC per volume of applied solids (kilograms per liter),}$

$Md = \text{total mass of VOC in dilution solvent (kilograms),}$

$Mo = \text{total mass of VOC in coatings as received (kilograms),}$

$Ls = \text{volume of solids in coatings consumed (liters), and}$

$T = \text{overall transfer efficiency.}$

(60.393(c)(2)(ii)) Calculate the volume weighted average mass of VOC per volume of applied solids emitted after the control device, by the following equation:

$N = G[1 - FE]$

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

- 3.e** (60.393(c)(2)(ii)(A)) Determine the fraction of total VOC which is emitted by an affected facility that enters the control device by using the following equation where "n" is the total number of stacks entering the control device and "p" is the total number of stacks not connected to the control device:

$F = \frac{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n)}{\text{[(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n) \text{ plus (the summation of the products of } Q_{fk} \times C_{fk}, \text{ for } k = 1 \text{ through } p)]}$

where:

F = fraction of total VOC which is emitted by an affected facility that enters the control device,

$C_{bi}$  = concentration of VOC (as carbon) in the effluent gas flowing through stack (i) entering the control device (parts per million by volume),

$C_{fk}$  = concentration of VOC (as carbon) in the effluent gas flowing through exhaust stack (k) not entering the control device (parts per million by volume),

$Q_{bi}$  = volumetric flow rate of the effluent gas flowing through stack (i) entering the control device (dry standard cubic meters per hour),

$Q_{fk}$  = volumetric flow rate of the effluent gas flowing through exhaust stack (k) not entering the control device (dry standard cubic meters per hour),

n = is the total number of stacks entering the control device, and

p = is the total number of stacks not connected to the control device.

If the owner can justify to the Administrator's satisfaction that another method will give comparable results, the Administrator will approve its use on a case-by-case basis.

In subsequent months, the owner or operator shall use the most recently determined capture fraction for the performance test.

- 3.f** (60.393(c)(2)(ii)(B)) Determine the destruction efficiency of the control device using values of the volumetric flow rate of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation where "n" is the total number of stacks entering the control device and "m" is the total number of stacks leaving the control device:

$E = \frac{\text{[(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n) \text{ minus (the summation of the products of } Q_{aj} \times C_{aj}, \text{ for } j = 1 \text{ through } m)]}{\text{(the summation of the products of } Q_{bi} \times C_{bi}, \text{ for } i = 1 \text{ through } n)}$

where:

E = VOC destruction efficiency of the control device,

$C_{aj}$  = concentration of VOC (as carbon) in the effluent gas flowing through stack (j) leaving the control device (parts per million by volume),

$Q_{aj}$  = volumetric flow rate of the effluent gas flowing through stack (j) leaving the control device (dry standard cubic meters per hour),

m = is the total number of stacks leaving the control device, and

n = is the total number of stacks entering the control device.

In subsequent months, the owner or operator shall use the most recently determined VOC destruction efficiency for the performance test.

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

- 3.g** (60.393(c)(2)(ii)(C)) If an emission control device controls the emissions from more than one affected facility, the owner or operator shall measure the VOC concentration ( $C_{bi}$ ) in the effluent gas entering the control device (in parts per million by volume) and the volumetric flow rate ( $Q_{bi}$ ) of the effluent gas (in dry standard cubic meters per hour) entering the device through each stack. The destruction or removal efficiency determined using these data shall be applied to each affected facility served by the control device.

(60.393(c)(2)(iii)) If the volume weighted average mass of VOC per volume of applied solids emitted after the control device ( $N$ ) calculated on a calendar month basis is less than or equal to the applicable emission limit specified in section 60.392, the affected facility is in compliance. Each monthly calculation is a performance test for the purposes of this subpart.

4. The permittee shall maintain monthly records for emissions units K015, K016 and K017 of the volume weighted average mass of the VOC per volume of applied coating solids and the calculations required by 40 CFR, Part 60, Subpart MM, Section 60.393.
5. The permittee shall maintain daily records of the calculated, daily, combined VOC emission rate for emissions units K015, K016 and K017, in lbs per day, and the number of hours of operation for each emissions unit.
6. The permittee shall maintain daily records of the date, duration and reason for any periods during which the spray booth's water wash filtration system was not in service and this emissions unit was in operation.

### IV. Reporting Requirements

1. Thermal Oxidizer Temperature Reporting Requirements

The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizers does not comply with the temperature limitation specified above.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the daily volume-weighted average VOC emissions limitation, in lbs VOC per gallon of deposited solids, has been exceeded. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office) within 45 days after the exceedance occurs.
3. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily combined emissions of organic compounds from emissions units K015, K016 and K017 exceeded 11,170.3 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
4. The permittee shall also submit annual reports that specify the total combined emissions of organic compounds from emissions units K015, K016 and K017 for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing that the spray booth water wash filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

### V. Testing Requirements

1. USEPA Method 24 shall be used to determine the volatile organic compound content of the coatings and cleanup materials employed.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the 95%, by weight, VOC control efficiency requirement and the mass emissions limits in Section A.I. via simultaneous inlet-outlet testing of the thermal oxidizer air pollution control device in accordance with USEPA Method 25A of 40 CFR Part 60, Appendix A.

Capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) Capture efficiency testing shall be performed by the permittee whenever the permittee is required to perform transfer efficiency testing pursuant to USEPA's "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobiles and Light-Duty Truck Topcoat Operations" (EPA-450/3-88-028, Dec.1988) and any subsequent revisions thereof.

The VOC destruction and removal efficiency testing shall be conducted during the last year of the permit prior to permit expiration.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

3. Emission Limitation-  
1.47 Kg VOC per liter of applied coating solids or 12.27 lbs VOC per gallon of applied (deposited) solids, as a monthly volume-weighted average.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.3.

4. Emission Limitation-  
2.8 lbs of VOC per gallon of coating, excluding water and exempt solvents, or 15.1 lbs VOC per gallon of deposited solids, as a daily volume-weighted average.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.2.

## V. Testing Requirements (continued)

5. Emission Limitation -  
Combined emissions from K015, K016 and K017 shall not exceed 11,170.3 lbs of OC per day and 1,321.51 tons OC per year.

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in Section A.III.2 and A.III.4. The annual OC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor 1.0 ton/2,000 lbs.

6. Emission Limitation -  
5,309.9 lbs of OC per day, and 623.9 tons OC per year.

Applicable Compliance Method -

If required, compliance shall be based upon the record keeping specified in Section A.III.2. However, as explained in A.I.2.c., if the permittee demonstrates compliance with the combined emission limitations, the permittee will be deemed to be in compliance with the emission limitations for this emissions unit.

7. Emission Limitation:  
0.551 lb PE/hr and 2.2 tons per year

Applicable Compliance Method:

To determine the actual worst case emission rate for particulate emissions, the following equation may be used:

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

where,

E = particulate emissions rate (lb/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

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual particulate emission limit shall be determined by multiplying the calculated hourly emissions rate by the number of hours of operation per year and dividing by 2,000.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Wax and touchup booth (MPV) (K018)

**Activity Description:** Wax and touchup booth (MPV)

#### 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>
Wax and touch-up coating spray booth for light-duty trucks (MPV).	OAC rule 3745-21-09(U)(1)(d)	3.5 lbs VOC per gallon of coating, excluding water and exempt solvents, as a daily volume-weighted basis (for all coatings employed)
	OAC rule 3745-31-05 PTI 02-4022	244.0 lbs VOC per day, and 28.67 tons VOC per year
		These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.
		1.71 tons particulate emissions per year
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and rule 3745-17-11(B).
	OAC rule 3745-17-11(B)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule. 0.551 pound PE per hour

## 2. Additional Terms and Conditions

- 2.a** In accordance with the PTI No. 02-4022 modification issued August 22, 1990, the VOC content (as a daily volume-weighted average) and usage of each type of coating employed in this emissions unit shall be limited as follows:
- i. wax - 2.49 lbs VOC per gallon of coating, excluding water and exempt solvents;
  - ii. repair lacquer - 6.3 lbs VOC per gallon of coating, excluding water and exempt solvents, coating usage shall not exceed 10 gallons per day;
  - iii. repair enamel - 5.1 lbs VOC per gallon of coating, excluding water and exempt solvents; and
  - iv. black-out - 5.0 lbs VOC per gallon of coating, excluding water and exempt solvents.

## II. Operational Restrictions

1. The permittee shall operate the spray booth's dry filtration system whenever this emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
  - a. The name, identification number and type of each coating employed.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons (excluding water and exempt solvents) of each coating employed.
  - c. For each type of coating specified in A.I.2.a, the daily volume-weighted average VOC content of all the coatings employed, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2.
  - d. The number of gallons of all repair lacquers employed.
  - e. The total VOC emission rate for the all coatings employed, in pounds.
  - f. The number of hours of operation.
2. The permittee shall collect and record the following information each day for this emissions unit:
  - a. The name and identification number of each coating employed.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons (excluding water and exempt solvents) of each coating employed.
  - c. The daily volume-weighted average VOC content of all the coatings employed, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2.
3. The permittee shall maintain daily records of the date, duration and reason for any periods during which the spray booth's dry filtration system was not in service and this emissions unit was in operation.

## IV. Reporting Requirements

1. The permittee shall notify the Director (Ohio EPA Northeast District Office) in writing of any daily record showing that the daily volume-weighted average VOC content for any of the types of coatings employed exceeded the limitations specified in A.I.2.a. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

#### IV. Reporting Requirements (continued)

2. The permittee shall notify the Director (Ohio EPA Northeast District Office) in writing of any daily record showing that the daily volume-weighted average VOC content of all the coatings employed exceeded 3.5 lbs VOC per gallon, excluding water and exempt solvents. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
3. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily emissions of organic compounds exceeded 244.0 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
4. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing that the spray booth dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.
6. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily usage of repair lacquers exceeded 10 gallons. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.

#### V. Testing Requirements

1. Emission Limitation-  
The VOC content (as a daily volume-weighted average) of each coating employed in this emissions unit shall be limited as follows:

wax - 2.49 lbs VOC per gallon of coating, excluding water and exempt solvents;

repair lacquer - 6.3 lbs VOC per gallon of coating, excluding water and exempt solvents;

repair enamel - 5.1 lbs VOC per gallon of coating, excluding water and exempt solvents; and

black-out - 5.0 lbs VOC per gallon of coating, excluding water and exempt solvents.

Applicable Compliance Method-

USEPA Method 24 shall be used to determine the VOC contents of the coatings employed.

2. Emission Limitation-  
3.5 lbs VOC per gallon of coating, excluding water and exempt solvents, on a daily volume-weighted average basis (for all the coatings employed).

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements in Section A.III.2.

3. Emission Limitation-  
244.0 lbs VOC per day and 28.67 tons VOC per year.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements in Section A.III.1. The annual VOC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

## V. Testing Requirements (continued)

4. Emission Limitation-  
Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method-

Compliance with the visible particulate emission limitations in OAC rule 3745-17-07(A)(1) shall be determined in accordance with the test methods and procedures in OAC rule 3745-17-03(B), US EPA Method 9, if required by Ohio EPA.

5. Emission Limitation:  
0.551 lb PE/hr and 1.71 tons per year

Applicable Compliance Method:

To determine the actual worst case emission rate for particulate emissions, the following equation may be used:

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

where,

E = particulate emissions rate (lb/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

For certain manually applied coating materials the transfer efficiency is 100%, with no resulting PE.

If required, the permittee shall demonstrate compliance by performing emission testing in accordance with Methods 1 through 5 of 40 CFR, part 60, Appendix A.

Compliance with the annual particulate emission limit shall be determined by multiplying the calculated hourly emissions rate by the number of hours of operation per year, and then dividing by 2,000.

6. Emission Limitation-  
repair lacquer coating usage shall not exceed 10 gallons per day.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements in Section A.III.1.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Wax and touchup booth (CV) (K019)

**Activity Description:** Wax and touchup booth (CV)

#### 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>
Wax and touch-up coating spray booth for light-duty trucks (CV).	OAC rule 3745-21-09(U)(1)(d)	3.5 lbs VOC per gallon of coating, excluding water and exempt solvents, as a daily volume-weighted basis (for all coatings employed)
	OAC rule 3745-31-05 PTI 02-4022	346.89 lbs VOC per day, and 40.75 tons VOC per year  These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.
		2.77 tons particulate emissions per year
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and rule 3745-17-11(B).
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	0.551 pound PE per hour

## 2. Additional Terms and Conditions

- 2.a** In accordance with the PTI No. 02-4022 modification issued August 22, 1990, the VOC content (as a daily volume-weighted average) and usage of each type of coating employed in this emissions unit shall be limited as follows:
- i. wax - 2.49 lbs VOC per gallon of coating, excluding water and exempt solvents;
  - ii. repair lacquer - 6.3 lbs VOC per gallon of coating, excluding water and exempt solvents, coating usage shall not exceed 10 gallons per day;
  - iii. repair enamel - 5.1 lbs VOC per gallon of coating, excluding water and exempt solvents.
  - iv. black-out - 5.0 lbs VOC per gallon of coating, excluding water and exempt solvents; and
  - v. foam - 0.0 lb VOC per gallon of coating, excluding water and exempt solvents.

## II. Operational Restrictions

1. The permittee shall operate the spray booth's dry filtration system whenever this emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
  - a. The name, identification number and type of each coating employed.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons (excluding water and exempt solvents) of each coating employed.
  - c. For each type of coating specified in A.I.2.a, the daily volume-weighted average VOC content of all the coatings employed, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2.
  - d. The number of gallons of all repair lacquers employed.
  - e. The total VOC emission rate for the all coatings employed, in pounds.
  - f. The number of hours of operation.
2. The permittee shall collect and record the following information each day for this emissions unit:
  - a. The name and identification number of each coating employed.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons (excluding water and exempt solvents) of each coating employed.
  - c. The daily volume-weighted average VOC content of all the coatings employed, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2.
3. The permittee shall maintain daily records of the date, duration and reason for any periods during which the spray booth's dry filtration system was not in service and this emissions unit was in operation.

#### **IV. Reporting Requirements**

1. The permittee shall notify the Director (Ohio EPA Northeast District Office) in writing of any daily record showing that the daily volume-weighted average VOC content for any of the types of coatings employed exceeded the limitations specified in A.I.2.a. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (Ohio EPA Northeast District Office) in writing of any daily record showing that the daily volume-weighted average VOC content of all the coatings employed exceeded 3.5 lbs VOC per gallon, excluding water and exempt solvents. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
3. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily emissions of organic compounds exceeded 346.89 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
4. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing that the spray booth dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.
6. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily usage of repair lacquers exceeded 10 gallons. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.

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

1. Emission Limitation-  
The VOC content (as a daily volume-weighted average) of each coating employed in this emissions unit shall be limited as follows:

wax - 2.49 lbs VOC per gallon of coating, excluding water and exempt solvents;

repair lacquer - 6.3 lbs VOC per gallon of coating, excluding water and exempt solvents;

repair enamel - 5.1 lbs VOC per gallon of coating, excluding water and exempt solvents;

black-out - 5.0 lbs VOC per gallon of coating, excluding water and exempt solvents; and

foam - 0.0 lb VOC per gallon of coating, excluding water and exempt solvents.

Applicable Compliance Method-

USEPA Method 24 shall be used to determine the VOC contents of the coatings employed.

2. Emission Limitation-  
3.5 lbs VOC per gallon of coating, excluding water and exempt solvents, on a daily volume-weighted average basis (for all the coatings employed)

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements in Section A.III.2.

## V. Testing Requirements (continued)

3. Emission Limitation-  
346.89 lbs VOC per day and 40.75 tons VOC per year.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements in Section A.III.1. The annual VOC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

4. Emission Limitation-  
Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method-

Compliance with the visible particulate emission limitations in OAC rule 3745-17-07(A)(1) shall be determined in accordance with the test methods and procedures in OAC rule 3745-17-03(B), US EPA Method 9, if required by Ohio EPA.

5. Emission Limitation:  
0.551 lb PE/hr and 2.77 tons per year

Applicable Compliance Method:

To determine the actual worst case emission rate for particulate emissions, the following equation may be used:

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

where,

E = particulate emissions rate (lb/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

For certain manually applied coating materials the transfer efficiency is 100%, with no resulting PE.

If required, the permittee shall demonstrate compliance by performing emission testing in accordance with Methods 1 through 5 of 40 CFR, part 60, Appendix A.

Compliance with the annual particulate emission limit shall be determined by multiplying the calculated hourly emissions rate by the number of hours of operation per year, and then dividing by 2,000.

6. Emission Limitation-  
repair lacquer coating usage shall not exceed 10 gallons per day.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements in Section A.III.1.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Final repair system (MPV) (K021)  
**Activity Description:** Final repair booth, oven, and spot repair (MPV)

#### 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>
Final repair coating booth and infra-red curing oven for assembled light-duty trucks.	OAC rule 3745-21-09(C)(1)(d)	4.8 lbs VOC per gallon of coating, excluding water and exempt solvents (See A.1.2.a.)
	OAC rule 3745-31-05 PTI's 02-9278 and 02-6337	111.7 lbs VOC per day, and 13.13 tons VOC per year  These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	0.551 lb per hour of particulate emissions

##### 2. Additional Terms and Conditions

- 2.a The permittee shall comply with this limitation by demonstrating that each coating employed has a VOC content of 4.8 lbs VOC per gallon of coating, excluding water and exempt solvents.

##### II. Operational Restrictions

1. The permittee shall operate the spray booth's dry filtration system whenever this emissions unit is in operation.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The total volume of coatings, in gallons, excluding water and exempt solvents, employed in topcoat lines 1, 2 and 3 (emissions units K015, K016 and K017).
  - b. The volume-weighted average VOC content of all the coatings (excluding water and exempt solvents) employed in topcoat lines 1, 2 and 3 (emissions units K015, K016 and K017).
  - c. The number of days the emissions unit was in operation.
  - d. The average daily calculated VOC emission rate, in pounds (average), to be calculated by the following formula:  
$$d = [(a \times b) \times 0.005 / c]$$

The 0.5% factor used above (and below) is the assumed the final repair coating usage as a conservative percentage of topcoat usage. It was determined by Ford Motor Co. in studies at their Atlanta and Chicago assembly plants, per the document, dated July 11, 2002, Ford submitted to Ohio EPA.
  - e. The monthly VOC emission rate, in lbs per month, shall be calculated as follows:  
$$e = a \times b \times 0.005$$
  - f. The VOC content, in pounds per gallon, excluding water and exempt solvents, of each coating employed in this emissions unit.
2. The permittee shall maintain daily records of the date, duration and reason for any periods during which the spray booth's dry filtration system was not in service and this emissions unit was in operation.

### IV. Reporting Requirements

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each monthly record showing that the calculated, average daily emissions of VOC exceeded 111.7 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (Ohio EPA Northeast District Office) in writing of any monthly record showing that the VOC content of any of the coatings employed exceeded 4.8 lbs VOC per gallon, excluding water and exempt solvents. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
3. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
4. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of any daily record showing that the spray booth dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 30 days after the exceedance occurs.

### V. Testing Requirements

1. USEPA Method 24 shall be used to determine the volatile organic compound content of the coatings and cleanup materials employed.

## V. Testing Requirements (continued)

2. Emission Limitation-  
4.8 lbs VOC per gallon of coating, excluding water and exempt solvents.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.1.

3. Emission Limitation-  
111.7 lbs VOC per day and 13.13 tons VOC per year.

Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.1. The annual VOC emission rate shall be determined by summing the monthly emission rates and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

4. Emission Limitation-  
Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method-  
Compliance with the visible particulate emission limitations in OAC rule 3745-17-07(A)(1) shall be determined in accordance with the test methods and procedures in OAC rule 3745-17-03(B), US EPA Method 9, if required by Ohio EPA.

5. Emission Limitation:  
0.551 lb PE/hr

Applicable Compliance Method:  
To determine the actual worst case emission rate for particulate emissions, the following equation may be used:

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

where,

E = particulate emissions rate (lb/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

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Sealer oven (MPV) (P010)  
**Activity Description:** Sealer oven and RTO (MPV)

#### 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>
MPV sealer oven for light-duty trucks (The oven is natural gas fired with a maximum heat input capacity of 5.2 mmBtu per hr. Coatings applied in the sealer coating line (K008), anti-chip coating booth (K011) and underbody coating booth (K010) are dried in this oven. VOC emissions from the oven are controlled by a RTO.)	OAC rule 3745-31-05(A)(3) PTI's 02-7873 and 02-4022	35.5 lbs OC per day, and 4.17 tons OC per year  See A.I.2.a.
	OAC rule 3745-21-07(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a All OC emissions from the oven shall be vented to regenerative thermal oxidizer (RTO) that shall provide a VOC destruction efficiency of 95%, by weight, at all times the emissions unit is in operation.

##### II. Operational Restrictions

1. Thermal Oxidizer Operational Restriction

The average temperature within the RTO, for any 3-hour block of time, when the emissions unit is in operation, shall not be less than 1,150 degrees F.

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

#### 1. Thermal Oxidizer Temperature Monitoring and Record keeping Requirements

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

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer when the emissions unit was in operation, was less than 1,150 degrees F.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

#### 2. For purposes of calculating the organic compound emission rates for this emissions unit and the associated spray booths (K008, K010 and K011), the permittee shall utilize a value of 20.0% as the maximum percentage of the organic compounds employed in each spray booth that are emitted uncontrolled from each spray booth. The remaining 80.0% of the organic compounds employed in all three spray booths shall be considered to be the uncontrolled emissions for this emissions unit. This "split" of organic compound emissions between this emissions unit and the associated spray booths is based upon design estimates and testing performed on Feb. 9 and 12, 2001.

#### 3. The permittee shall collect and record the following information each day for this emissions unit:

- a. The total (prior to applying the booths/oven "split") uncontrolled daily organic compound emission rate for all coatings employed in the coating operations (K008, K010 and K011) associated with this emissions unit, multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.III.2 of this permit), in pounds per day.
- b. The total controlled organic compound emission rate for this emissions unit, in pounds per day (i.e., the value from (a) multiplied by the overall control efficiency from the most recent performance test that demonstrated that this emissions unit was in compliance).
- c. The total number of hours this emissions unit was in operation.
- d. The total controlled, average hourly organic compound emission rate for this emissions unit, i.e., (b)/(c), in pounds per hour (average).

### IV. Reporting Requirements

#### 1. Thermal Oxidizer Temperature Reporting Requirements

The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer did not comply with the temperature limitation specified above.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily emissions of organic compounds exceeded 35.5 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
3. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

## V. Testing Requirements

1. The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the 95%, by weight, VOC control efficiency requirement and the mass emissions limits in Section A.I. via simultaneous inlet-outlet testing of the regenerative thermal oxidizer (RTO) air pollution control device in accordance with USEPA Method 25A of 40 CFR Part 60, Appendix A.

The VOC emission testing shall be conducted during the last year of the permit prior to permit expiration.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

3. Emission Limitation-  
35.5 lbs OC per day and 4.17 tons OC per year.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements in Section A.III.3. The annual OC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Sealer oven (CV) (P011)  
**Activity Description:** Sealer oven and RTO (CV)

#### 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>
CV sealer oven for light-duty trucks (The oven is natural gas fired with a maximum heat input capacity of 8.1 mmBtu per hr. Coatings applied in the sealer coating line (K009) and anti-chip coating booth (K012) are dried in this oven. VOC emissions from the oven are controlled by a RTO.)	OAC rule 3745-31-05(A)(3) PTI's 02-7873 and 02-4022	16.7 lbs OC per day, and 1.96 tons OC per year  See A.I.2.a.
	OAC rule 3745-21-07(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a All OC emissions from the oven shall be vented to regenerative thermal oxidizer (RTO) that shall provide a VOC destruction efficiency of 95%, by weight, at all times the emissions unit is in operation.

##### II. Operational Restrictions

1. Thermal Oxidizer Operational Restriction

The average temperature within the RTO, for any 3-hour block of time, when the emissions unit is in operation, shall not be less than 1,150 degrees F.

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

#### 1. Thermal Oxidizer Temperature Monitoring and Record keeping Requirements

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

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer when the emissions unit was in operation, was less than 1,150 degrees F.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

#### 2. For purposes of calculating the organic compound emission rates for this emissions unit and the associated spray booths (K009 and K012), the permittee shall utilize a value of 20.0% as the maximum percentage of the organic compounds employed in each spray booth that are emitted uncontrolled from each spray booth. The remaining 80.0% of the organic compounds employed in all three spray booths shall be considered to be the uncontrolled emissions for this emissions unit. This "split" of organic compound emissions between this emissions unit and the associated spray booths is based upon design estimates and testing performed on Feb. 9 and 12, 2001.

#### 3. The permittee shall collect and record the following information each day for this emissions unit:

- a. The total (prior to applying the booths/oven "split") uncontrolled daily organic compound emission rate for all coatings employed in the coating operations (K009 and K012) associated with this emissions unit, multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.III.2 of this permit), in pounds per day.
- b. The total controlled organic compound emission rate for this emissions unit, in pounds per day (i.e., the value from (a) multiplied by the overall control efficiency from the most recent performance test that demonstrated that this emissions unit was in compliance).
- c. The total number of hours this emissions unit was in operation.
- d. The total controlled, average hourly organic compound emission rate for this emissions unit, i.e., (b)/(c), in pounds per hour (average).

### IV. Reporting Requirements

#### 1. Thermal Oxidizer Temperature Reporting Requirements

The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer did not comply with the temperature limitation specified above.

2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily emissions of organic compounds exceeded 16.7 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
3. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

## V. Testing Requirements

1. The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the 95%, by weight, VOC control efficiency requirement and the mass emissions limits in Section A.I. via simultaneous inlet-outlet testing of the regenerative thermal oxidizer (RTO) air pollution control device in accordance with USEPA Method 25A of 40 CFR Part 60, Appendix A.

The VOC emission testing shall be conducted during the last year of the permit prior to permit expiration.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

3. Emission Limitation-  
16.7 lbs OC per day and 1.96 tons OC per year.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements in Section A.III.3. The annual OC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Manual solvent wipe (P013)

**Activity Description:** Manual solvent wiping

#### 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>
Manual solvent wiping, with hand-held rags, of unpainted light-duty truck bodies	OAC rule 3745-31-05 PTI's 02-9278 and 02-4022	340.4 lbs OC per day, and 40.0 tons OC per year  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(2)	Exempt. See A.II.1 below.

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

1. Only solvents that are not photochemically reactive materials, as defined in OAC rule 3745-21-01(C), shall be used in this emissions unit.

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

1. The permittee shall collect and record the following information each day this emissions unit is in operation:
  - a. The company identification for each liquid organic material employed.
  - b. Documentation as to whether or not each liquid organic material employed is a photochemically reactive material.
  - c. The number of gallons of each liquid organic material employed.
  - d. The density of each liquid organic material, in pounds per gallon.
  - e. The total organic compound emission rate for all liquid organic materials employed, in pounds per day.

#### **IV. Reporting Requirements**

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily emissions of organic compounds exceeded 340.4 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that any of the liquid organic materials employed were photochemically reactive materials. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
3. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

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

1. USEPA Method 24 shall be used to determine the volatile organic compound contents of the liquid organic materials employed.
2. Emission Limitation-  
340.4 lbs OC per day and 40.0 tons OC per year.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements in Section A.III.1. The annual OC emission rate shall be determined by summing the monthly emission rates and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Glass installation (MPV) (P014)

**Activity Description:** Glass installation (MPV)

#### 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>
Glass window installation into light-duty trucks (MPV) by the robotic brushed application of adhesive coatings to flanged surfaces (The adhesives are air-dried.)	OAC rule 3745-21-09(U)(1)(g)	4.9 lbs VOC per gallon of coating, excluding water and exempt solvents, as a daily volume-weighted basis (for all coatings employed)
	OAC rule 3745-31-05 PTI 02-4022	73.8 lbs OC per day, and 8.68 tons OC per year  These limits do not include OC emissions resulting from cleanup solvent usage, all of which is accounted for under emissions unit Z003.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(g).

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

None

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

1. The permittee shall collect and record the following information each day for this emissions unit:
  - a. The name and identification number of each coating, as applied.
  - b. The VOC content of each coating (excluding water and exempt solvents), as applied.
  - c. The number of gallons of each coating employed, excluding water and exempt solvents.
  - d. The number of hours of operation.
  - e. The total VOC emission rate for all the coatings employed, in pounds per day.
  - f. The daily volume-weighted average VOC content of all the coatings employed, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2.

### IV. Reporting Requirements

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the daily emissions of organic compounds exceeded 73.8 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (Ohio EPA Northeast District Office) in writing of any daily record showing that the daily volume-weighted average VOC content of the coatings employed exceeded 4.9 lbs VOC per gallon, excluding water and exempt solvents. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
3. The permittee shall also submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. USEPA Method 24 shall be used to determine the volatile organic compound contents of the coatings employed.
2. Emission Limitation-  
4.9 lbs VOC per gallon of coating, excluding water and exempt solvents, on a daily volume-weighted average basis (for all coatings employed).  
  
Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.1.
3. Emission Limitation-  
73.8 lbs OC per day and 8.68 tons OC per year.  
  
Applicable Compliance Method-  
Compliance shall be based upon the record keeping requirements in Section A.III.1. The annual OC emission rate shall be determined by summing the daily emission rates and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

### VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Purge and clean (Z003)

**Activity Description:** Purge and clean

#### 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>
the purging and cleaning of paint lines, paint spray guns and spray booth walls with solvent throughout the factory, including emissions units K007-K021	OAC rule 3745-31-05 PTI's 02-9278, 02-7873 and 02-4022	2,858.8 lbs OC per day, and 335.91 tons OC per year  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(2)	Exempt. See A.II.1.

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

1. Only solvents that are not photochemically reactive materials, as defined in OAC rule 3745-21-01(C), shall be used in this emissions unit.

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

1. The permittee shall collect and record the following information each day for all purging and cleaning solvents employed throughout the facility:
  - a. The company identification for each liquid organic material employed.
  - b. Documentation as to whether or not each liquid organic material employed is a photochemically reactive material.
  - c. The number of gallons of each liquid organic material employed.
  - d. The density of each liquid organic material, in pounds per gallon.
  - e. The total organic compound emission rate for all liquid organic materials employed throughout the facility, in pounds per day.

#### **IV. Reporting Requirements**

1. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that the maximum daily emissions of organic compounds exceeded 2,858.8 lbs. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (the Ohio EPA Northeast District Office) in writing of each daily record showing that any of the liquid organic materials employed were photochemically reactive materials. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA Northeast District Office) within 45 days after the exceedance occurs.
3. The permittee shall also submit annual reports which specify the total organic compound emissions from this emissions unit for the previous calendar year. These reports shall include the calculation of the annual emissions and shall be submitted by January 31 of each year.

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

1. USEPA Method 24 shall be used to determine the volatile organic compound contents of the purging and cleaning materials employed.
2. Emission Limitation-  
2,585.8 lbs OC per day and 335.91 tons OC per year.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements in Section A.III.1. The annual OC emission rate shall be determined by summing the monthly emission rates and multiplying the result by the conversion factor of 1.0 ton/2,000 lbs.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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