



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Craig W. Butler, Director

9/2/2014

Certified Mail

Kenneth Legner  
Kenworth Truck Company  
65 Kenworth Drive  
P.O. Box 2345  
Chillicothe, OH 45601

Facility ID: 0671010121  
Permit Number: P0108610  
County: Ross

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

Enclosed is a final Ohio Environmental Protection Agency (EPA) Air Pollution Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

**How to appeal this permit**

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
77 South High Street, 17th Floor  
Columbus, OH 43215

## **How to save money, reduce pollution and reduce energy consumption**

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: [www.ohioairquality.org/clean\\_air](http://www.ohioairquality.org/clean_air)

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Southeast District Office as indicated on page one of your permit.

Sincerely,



Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*  
Ohio EPA DAPC, Southeast District Office



## Response to Comments

Facility ID:	0671010121
Facility Name:	Kenworth Truck Company
Facility Description:	Assembly of class 8 trucks
Facility Address:	65 Kenworth Drive P.O. Box 2345 Chillicothe, OH 45601 Ross County
Permit:	P0108610, Title V Permit - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the Chillicothe Gazette on 05/08/2014. The comment period ended on 06/07/2014.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

### 1. Topic: Stack testing

- a. Comment: Regarding compliance stack testing requirements for emissions units K026, K028, and/or P002, these emissions units are "non-major emissions units" per OhioEPA Engineering Guide #16, and therefore emissions re-testing is at the discretion of OhioEPA/SEDO. Due to the high cost and difficulty of conducting compliance stack testing, Kenworth requests that the testing be performed only once during the 5-year Title V Permit term, and that this testing be performed within 12 months (instead of 6 months) after issuance of the Title V Permit, in order to allow Kenworth more time to plan for the testing event and to avoid testing during unsafe snowy/icy conditions on the roof. Additionally, Kenworth would like to perform pre-testing (non-compliance or engineering testing) to determine whether the Thermal Oxidizer can be run at a lower temperature and still maintain compliance with the permit requirements, and Kenworth's Environmental Engineer (Ken Legner) is retiring 07/01/2014 after 26 years as head of environmental compliance at the facility, so Kenworth could use more time (12 months) to implement the transition to the new Environmental Engineer before undertaking the complicated pre-testing and compliance stack testing.
- b. Response: OEPA has accepted the testing time frame requested by the facility to accommodate their current organizational changes.



**2. Topic: Emission unit descriptions**

- a. Comment: Revised the names & descriptions of many emissions units, to be consistent with Kenworth's designations in Air Services and in the Title V Permit Renewal application.
- b. Response: DAPC has updated the descriptions in the permit that are designated by the facility in Air Services. These descriptions are populated in the top line of each emissions unit. The 'Operations, Property and/or Equipment Descriptions' section of the permit is populated from the DAPC description of the emissions unit and therefore those descriptions don't always match how the facility describes the emissions unit. Thus, not all changes suggested in the "Operations, Property and/or Equipment Descriptions" section were implemented because they are DAPC descriptions, not the facility's descriptions.



**FINAL**

**Division of Air Pollution Control  
Title V Permit  
for  
Kenworth Truck Company**

Facility ID:	0671010121
Permit Number:	P0108610
Permit Type:	Renewal
Issued:	9/2/2014
Effective:	9/23/2014
Expiration:	9/23/2019





**Division of Air Pollution Control**  
**Title V Permit**  
for  
Kenworth Truck Company

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**Final Title V Permit**  
Kenworth Truck Company  
**Permit Number:** P0108610  
**Facility ID:** 0671010121  
**Effective Date:** 9/23/2014

## Authorization

Facility ID: 0671010121  
Facility Description: Assembly of class 8 trucks  
Application Number(s): A0042502, A0045911, A0047192, A0050109  
Permit Number: P0108610  
Permit Description: Renewal Title V operating permit for a truck assembly facility.  
Permit Type: Renewal  
Issue Date: 9/2/2014  
Effective Date: 9/23/2014  
Expiration Date: 9/23/2019  
Superseded Permit Number: P0090599

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Kenworth Truck Company  
65 Kenworth Drive  
P.O. Box 2345  
Chillicothe, OH 45601

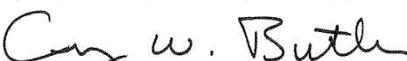
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office  
2195 Front Street  
Logan, OH 43138  
(740)385-8501

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. 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. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Southeast District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



**Final Title V Permit**  
Kenworth Truck Company  
**Permit Number:** P0108610  
**Facility ID:** 0671010121  
**Effective Date:** 9/23/2014

## **A. Standard Terms and Conditions**



**1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (5) Standard Term and Condition A. 30.

*(Authority for term: ORC 3704.036(A))*

**2. 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 (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) 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:

- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

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 OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) 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. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submitted scheduled maintenance requests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

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

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the



probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Ohio EPA DAPC, Southeast District Office. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

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

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Southeast District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally



enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

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

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

- (4) 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." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Southeast District Office unless otherwise specified.

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

### **3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance 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). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

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



#### **4. Risk Management Plans**

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

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

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

#### **5. 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))*

#### **6. 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))*

#### **7. General Requirements**

- a) 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 except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 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.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
  - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
  - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
  - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

*(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

## **8. 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))*

## **9. 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))*



## **10. 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 standard terms and conditions shall apply to all operating scenarios authorized in this permit.

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

## **11. 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))*

## **12. 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))*

## **13. 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:
  - (1) 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.
  - (2) 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.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) 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 Ohio EPA DAPC, Southeast District Office 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:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) 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 Ohio EPA DAPC, Southeast District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - (1) 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.
  - (2) Compliance certifications shall include the following:
    - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.



- b. The permittee's current compliance status.
  - c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
  - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
  - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- (3) 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))*

#### **14. 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))*

#### **15. 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 Ohio EPA DAPC, Southeast District Office 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 Ohio EPA DAPC, Southeast District Office 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))*

#### **16. 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))*

## **17. 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 emissions 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.

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

## **18. 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 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

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



**19. Insignificant Activities or Emissions Levels**

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

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

**20. 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))*

**21. 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))*

**22. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-01)*

**23. Title VI Provisions**

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



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

*(Authority for term: OAC rule 3745-77-01(H)(11))*

**24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only**

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 Ohio EPA DAPC, Southeast District Office.
- 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 Ohio EPA DAPC, Southeast District Office. 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, 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.)

**25. Records Retention Requirements Under State Law Only**

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.

**26. 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.

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

**27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements**

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 Ohio EPA DAPC, Southeast District Office 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).

**28. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Southeast District Office must be notified in writing of any transfer of this permit.

*(Authority for term: OAC rule 3745-77-01(C))*

**29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or
- c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.



**Final Title V Permit**  
Kenworth Truck Company  
**Permit Number:** P0108610  
**Facility ID:** 0671010121  
**Effective Date:** 9/23/2014

**30. Submitting Documents Required by this Permit**

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Southeast District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.



**Final Title V Permit**  
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## **B. Facility-Wide Terms and Conditions**



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

a) None.

2. Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a compliance assurance monitoring (CAM) plan for emissions units K026 and K028. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

[Authority for term: 40 CFR Part 64]

3. The permittee shall maintain a master file that includes the name, identification number, VOC content, and VOC content (excluding water and exempt solvents) of each coating used and/or offered by the facility. The master file shall also include the name, identification number, and VOC content of each cleanup material (solvent-based gun cleaner, water-based gun cleaner, and wipe solvent) used at the facility. This master file shall be updated as new coatings and cleanup materials become available.

[OAC rule 3745-77-07(C)(1)]

4. Facility Emission Limitations:

a) Pursuant to OAC rules 3745-31-10 thru 20 and 3745-31-05(D), the wipe solvent (VOC-based cleanup material) cleanup material usage shall be limited such that the maximum annual VOC usage for all emissions units at this facility shall not exceed 88.01 tons, based upon a rolling, 12-month summation of the VOC usage for the wipe solvent cleanup materials. For the purpose of this usage limitation, VOC usage is equivalent to VOC emissions.

[Authority for term: OAC rule 3745-77-07(C) and PTI# P0116010]

b) Pursuant to OAC rule 3745-31-05(D), the total facility-wide allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, including emissions units K001, K007, K017, K018, K019, K026, K027, K028, K029, and P002, any de minimis air contaminant sources, as defined in OAC rule 3745-15-05, and any permanent exemption air contaminant sources, shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for the total combined HAPs. Compliance with the above limitations shall be based on rolling, 12-month summations.

The permittee shall comply with the rolling, 12-month limitations based on past records of monthly HAP emissions.

[Authority for term: OAC rule 3745-77-07(A) and PTI# P0116010]

5. Facility Monitoring and/or Record Keeping Requirements.

a) The permittee shall collect and record the following information each month:

(1) the name and identification number of each wipe solvent cleanup material used at the facility;

(2) the amount of each wipe solvent cleanup material employed, in gallons;



- (3) the VOC content of each wipe solvent cleanup material employed, in pounds per gallon;
- (4) the VOC emissions for each wipe solvent cleanup material employed, in pounds or tons (i.e., (2) x (3));
- (5) the total VOC emissions for all wipe solvent cleanup materials employed, in pounds or tons; and
- (6) the rolling, 12-month summation of the VOC emissions for all wipe solvent cleanup materials employed, in tons.

[Authority for term: OAC rule 3745-77-07(C) and PTI# P0116010]

- b) The permittee shall collect and record the following information each month for all materials containing any hazardous air pollutant (HAP)<sup>1</sup> that are applied in the emissions units:
- (1) the name and identification number/code of each coating and/or coating component, cleanup material, solvent, and any other material containing any HAP;
  - (2) the name/identification of each individual HAP contained in each material applied (and identified in "(1)" above) and the pound(s) of each HAP per gallon of each HAP-containing material applied;
  - (3) the number of gallons of each materials identified in "(1)" above, and other material applied during the month;
  - (4) for each individual HAP, the total uncontrolled emissions from the controlled coating operations for the month, in ton(s), i.e., for each individual HAP, the summation of the products of "(2)" times "(3)" for all the materials identified in "(1)" above, and other materials applied during the month, where the emissions are captured and introduced to the control system, divided by 2,000 pounds;
  - (5) for each individual HAP, the total uncontrolled emissions from all the materials identified in "(1)" above, and other materials applied from all operations not controlled, in ton(s), i.e., for each individual HAP, the summation of the products of "(2)" times "(3)" for all the materials identified in "(1)" above applied during the month, divided by 2,000 pounds;
  - (6) the total uncontrolled combined HAPs emissions from the controlled operations for all the materials identified in "(1)" above, and other materials applied during the month, in ton(s), i.e., the summation of all the individual HAPs emissions from "(4)" above;
  - (7) the total uncontrolled combined HAPs emissions from all the materials identified in "(1)" above, and other materials applied from all operations not controlled, in ton(s), i.e., the summation of all the individual HAPs emissions from "(5)" above;
  - (8) for each individual HAP, 1) the sum of the calculated, controlled emission rate from all the materials identified in "(1)" above, and other materials employed during the month, in



ton(s), i.e., the total uncontrolled individual HAP emission rate calculated in "(4)" above, multiplied by 1 minus the overall control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emissions unit was in compliance, and 2) the uncontrolled individual HAP emissions from the materials identified in "(1)" above, and other materials employed during the month, as calculated in "(5)" above;

- (9) for combined HAPs, the calculated total combined HAPs emission rate for all the materials applied during the month, i.e., the summation of the total emissions of each of the individual HAP emission rates calculated in "(8)" above;
- (10) for each individual HAP, the calculated total emissions during the rolling, 12-month period, i.e., the summation of the individual HAP emissions, as recorded in "(8)" above, for the present month plus the previous 11 months of operation, in ton(s); and
- (11) the calculated total combined HAP emissions during the rolling 12-month period, i.e., the summation of all HAP emissions, as recorded in "(9)" above, for the present month plus the previous 11 months of operation, in ton(s).

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or can be obtained by contacting your Ohio EPA District Office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings and cleanup materials.

[Authority for term: OAC rule 3745-77-07(C) and PTI# P0116010]

6. Facility Reporting Requirements.

- a) The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the VOC emissions from the wipe solvent cleanup material usage exceeded the rolling, 12-month emission limitation, and the actual VOC emissions for each such month.
- b) The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the HAP emissions from the emissions units identified in B.4.b) exceeded the rolling, 12-month emission limitations, and the actual HAP emissions for each such month.

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C) and PTI# P0116010]

7. Facility Testing Requirements.

- a) Emissions Limitation:

VOC emissions from the use of all wipe solvent cleanup materials at this facility shall not exceed 88.01 tons per year based upon a rolling, 12-month summation of the wipe solvent cleanup material usage rate.



Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitation shall be demonstrated based upon the record keeping requirements specified in B.5.a).

[Authority for term: OAC rule 3745-77-07(C) and PT# P0116010]

b) Emissions Limitation:

Pursuant to OAC rule 3745-31-05(D), the total facility-wide allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, including emissions units K001, K007, K017, K018, K019, K026, K027, K028, K029, and P002, any de minimis air contaminant sources, as defined in OAC rule 3745-15-05, and any permanent exemption air contaminant sources installed subsequent to the issuance of this permit, shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for the total combined HAPs. Compliance with the above limitations shall be based on rolling, 12-month summations.

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitations above shall be demonstrated based upon the record keeping requirements specified in B.5.b).

[Authority for term: OAC rule 3745-77-07(C) and PT# P0116010]

8. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, and/or 40 CFR Part 60 or 63:

EU ID	Operations, Property and/or Equipment Description
P011	Generator - diesel - #0959 - Cummins - 15 kW (20 hp), Emergency backup generator - outside pump house (OAC rule 3745-15-05)
P013	Fire Pump - diesel - #9062 - Cummins - 190 kW (255 hp), Emergency fire pump - pump house (PBR02830)
P015	Generator - diesel - #0990 - Cummins - 80 kW (107 hp), Emergency backup generator - for lights (PBR02836)
P016	Generator - natural gas - #0995 - Cummins - 150 kW (200 hp), Emergency backup generator - IT department ventilation fans (PBR10188)
P017	Generator - natural gas - #0996 - Kohler - 30 kW (40 hp), Emergency backup generator - paint mix area ventilation fans
B008	MAU - MAUP04 - BC Booth ASH - 10.4 mmBtu/hr - Natural gas heater (natural gas, direct-fired) (OAC rule 3745-31-03)
B009	MAU - MAUP11 - West Clean Room ASH - 10.4 mmBtu/hr - Natural gas heater (natural gas, direct-fired) (OAC rule 3745-31-03)
B010	MAU - MAUP10 - East Clean Room ASH - 10.4 mmBtu/hr - Natural gas heater (natural gas, direct-fired) (OAC rule 3745-31-03)

a) [Authority for term: OAC rule 3745-77-07(A)(13)]



9. Existing emergency compression ignition (CI) reciprocating internal combustion engines (RICE), located at an area source for Hazardous Air Pollutants (HAPs), are subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, Part 63, Subpart ZZZZ. The existing stationary CI RICE, **EU#’s P011, P013**, installed before 6/12/06, shall meet the requirements of 63, Subpart ZZZZ no later than 5/3/13.

The RICE must meet the definition of an emergency stationary RICE in section 63.6675, which includes operating according to the provisions specified in section 63.6640(f), and the permittee shall meet the requirements contained in 40 CFR Part 63, Subpart ZZZZ:

[Authority for term: 40 CFR Part 63 Subpart ZZZZ]

10. The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 60, Subpart IIII, in accordance with 40 CFR Parts 60.4200 through 60.4219 (including the Table(s) and Appendix(ices) referenced in Subpart IIII).

The following emissions units in this permit are subject to the aforementioned requirements: P015, P016 and P017.

[Authority for term: 40 CFR Part 60, Subpart IIII]



**Final Title V Permit**  
Kenworth Truck Company  
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**Facility ID:** 0671010121  
**Effective Date:** 9/23/2014

## **C. Emissions Unit Terms and Conditions**



**1. F001, Paved Roadways and Parking Areas**

**Operations, Property and/or Equipment Description:**

Paved Plant Roadways and Parking Areas

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #06-07156 issued 9/16/2003)	Fugitive particulate emissions (PE) shall not exceed 6.47 tons per year.  There shall be no visible fugitive PE except for one minute during any 60-minute period.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.  See b)(2)a. through b)(2)f.
b.	OAC rule 3745-17-08(B)	See b)(2)g.
c.	OAC rule 3745-17-07(B)	See b)(2)h.

(2) Additional Terms and Conditions

a. The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

Paved Roadways and parking areas                      All

b. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to sweep the paved roadways and parking areas at sufficient frequencies to ensure compliance. Nothing in this



paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- c. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- d. The permittee shall promptly remove, in such a manner as to minimize or prevent re-suspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- g. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- h. This emissions unit is exempt from the visible emissions limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of the paved roadways and parking areas in accordance with the following frequencies:

<u>Paved roadways and parking areas</u>	<u>Minimum inspection frequency</u>
All	Weekly

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI#06-07156]



- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI#06-07156]

- (3) The permittee shall maintain records of the following information:
- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in Term d)(3)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI#06-07156]

e) Reporting Requirements

- (1) The permittee shall submit deviation reports that identify any of the following occurrences:
- a. Each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. Each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The quarterly deviation reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI#06-07156]



f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Fugitive PE shall not exceed 6.47 tons per year.

Applicable Compliance Method:

Compliance with fugitive PE limitation shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/11) for paved roadways. Should further updates in AP-42 occur, the most current equations for paved and unpaved roads shall be used.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI#06-07156]

b. Emissions Limitation:

There shall be no visible fugitive PE except for one minute during any 60-minute period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI#06-07156]

g) Miscellaneous Requirements

(1) None.



**2. F002, Unpaved Roadways and Parking Areas**

**Operations, Property and/or Equipment Description:**

Unpaved Roadways and Parking Areas, with a maximum of 120,000 vehicle miles traveled per year. (Model General Permit 5.1.)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #P0111808 issued 11/19/12)	7.4 tons/year of fugitive particulate matter of 10 microns or less (PM10) 25.2 tons/year of fugitive particulate emissions (PE) no visible PE except for 3 minutes during any 60-minute period best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See b)(2)a. through b)(2)f.)
b.	OAC rule 3745-17-07(B)(5)	This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
c.	OAC rule 3745-17-08(B)	This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Ross County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.



(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the unpaved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- b. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for unpaved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- c. The permittee shall promptly remove, in such a manner as to minimize or prevent re-suspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- d. Any unpaved roadway or parking area that is subsequently paved, will require a General Permit for paved roadways and parking areas.
- e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all roads and parking areas	daily

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0111808]



- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0111808]

- (3) The permittee shall maintain records of the following information:
- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in Term d)(3)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0111808]

e) Reporting Requirements

- (1) The permittee shall submit deviation reports that identify any of the following occurrences:
- a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0111808]



f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

7.4 tons/year of fugitive PM10

25.2 tons/year of fugitive PE

Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used. These emission limits in the General Permit were based on a maximum of 120,000 vehicle miles traveled per year, and a 95 % control efficiency for PE and PM10.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0111808]

b. Emission Limitation:

No visible PE from unpaved roadways and parking areas, except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0111808]

g) Miscellaneous Requirements

(1) None.



**3. K001, Chassis Paint & Drying Oven**

**Operations, Property and/or Equipment Description:**

Paint frames/chassis for trucks.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #06-4949 issued 12/3/1998)	<p>Volatile organic compound (VOC) emissions shall not exceed 200.0 lbs/hr and 174.0 tpy from all coatings and cleanup materials (solvent-based gun cleaner).</p> <p>Particulate emissions (PE) shall not exceed 2.58 lbs/hr and 11.3 tpy.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(U)(1)(c) and OAC rule 3745-17-11(C)(3).</p> <p>See b)(2)a., b)(2)b. and c)(1).</p>
b.	OAC rule 3745-21-09(U)(1)(c)	The VOC contents of the coatings employed shall not exceed 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for an extreme performance coating, as a daily volume-weighted average.
c.	OAC rule 3745-17-07(A)	See b)(2)c.
d.	OAC rule 3745-17-11(C)	See b)(2)d.
e.	OAC rule 3745-31-05(D) (PT# P0116010 issued 01/14/14 administrative modification of PT# 06-08317 issued 01/29/08)	See Facility-wide Terms and Conditions, Sections B.4. to B.7.
f.	OAC rule 3745-31-05(D) (PTI # 06-4949 issued 12/03/1998)	VOC emissions shall not exceed 335.0 tons, based upon a rolling, 12-month



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		summation of the VOC usage for all coatings and cleanup materials (solvent-based gun cleaner, water-based gun cleaner, and wipe solvent) for emissions units K001, K007, K017, K018 and K019, combined.  See b)(2)e.

(2) Additional Terms and Conditions

- a. Best Available Technology (BAT) requirements for this emissions unit has been determined to be the use of a water wash system for control of PE.
- b. The VOC emission limitations of 200 lbs/hr and 174 tpy were established to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these emission limitations. "Cleanup materials" shall refer only to solvent-based gun cleaner. Requirements for cleanup materials other than solvent-based gun cleaner (i.e., water-based gun cleaner and wipe solvent) are addressed in b)(1)f.
- c. This emissions unit is exempt from the visible emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h) because it is not subject to a mass emission limitation established pursuant to OAC rule 3745-17-11.
- d. On December 27, 2010, OAC rule 3745-17-11(C) became an effective requirement under the Ohio State Implementation Plan (SIP) regulating particulate emissions (PE). In accordance with OAC rule 3745-17-11(C)(3), the permittee shall comply with the PE limitations established as best available technology requirements in PTI #06-4949.
- e. For the purpose of this usage limitation, VOC usage is equivalent to VOC emissions.

c) Operational Restrictions

- (1) The permittee shall employ a water wash system for the control of particulate emissions when this emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI #06-4949]

d) Monitoring and/or Recordkeeping 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 mass of VOC per volume (excluding water and exempt solvents) and the volume of each coating (excluding water and exempt solvents), as applied; and
- c. the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{VOC,2}$ .

Note: If the VOC content of each of the coatings employed during a day is less than 3.5 lbs per gallon, as applied, excluding water and exempt solvents, the daily volume-weighted average VOC content record is not required for that day.

The permittee shall maintain the information at the facility for a period of three years.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B) and PTI #06-4949]

- (2) The permittee shall collect and record the following information each month for emissions units K001, K007, K017, K018 and K019, combined:
  - a. the number of gallons of each coating and cleanup material employed (solvent-based gun cleaner, water-based gun cleaner, and wipe solvent);
  - b. the total VOC emissions from all coatings and cleanup materials employed in these emissions units, in lbs or tons, [d)(2)a. x VOC content data from Section B.3]; and
  - c. the rolling, 12-month summation of the total VOC emissions from these emissions units, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #06-4949]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# 06-4949]

e) Reporting Requirements

- (1) The permittee shall notify the Ohio EPA Southeast District Office in writing of any daily record showing that the daily, volume-weighted average VOC content exceeded the applicable limitation. The notification shall include a copy of such record and shall be sent within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B) and PTI# 06-4949]

- (2) The permittee shall submit quarterly deviation (excursion) reports that include the following information:



- a. an identification of each month during which the VOC emissions from coatings and cleanup materials employed in emissions units K001, K007, K017, K018 and K019, combined, exceed 335.0 tpy, as a rolling, 12-month summation; and
- b. all days when this emissions unit was in operation and the water wash system was not in service.

The quarterly deviation reports shall be submitted in accordance with Standard Terms and Conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# 06-4949]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for an extreme performance coating, as a daily volume-weighted average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in Term d)(1).

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B) and PTI# 06-4949]

- b. Emissions Limitations:

VOC emissions shall not exceed 200.0 lbs/hr and 174.0 tpy from all coatings and cleanup materials (solvent-based gun cleaner)

Applicable Compliance Method:

The hourly and annual VOC emission limitations above were established to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these emissions limitations.

If required, compliance with the hourly VOC emission limitation shall be demonstrated based upon the results of emission tests performed in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and/or 18, 25 or 25A, as appropriate.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# 06-4949]



- c. Emission Limitations: 2.58 lbs PE/hr and 11.3 tons PE/yr

Applicable Compliance Method:

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

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

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

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

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

CE = Control efficiency of the control equipment

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# 06-4949]

- d. Emission Limitation:

335.0 tpy of VOC, based upon a rolling, 12-month summation of the VOC usage for all coatings and cleanup materials for emissions units K001, K007, K017, K018 and K019, combined.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in Term d)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# 06-4949]

- (2) Formulation data shall be used to determine the VOC contents of the cleanup materials. USEPA Method 24 shall be used to determine the VOC contents for coatings. If any such coating has not been analyzed using Method 24 since January 1, 1991, the permittee shall either conduct a Method 24 analysis of the coating or obtain a Method 24 analysis of the coating from the coating supplier within one year of the issuance of the Permit to Operate. If the permittee determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.



**Final Title V Permit**  
Kenworth Truck Company  
**Permit Number:** P0108610  
**Facility ID:** 0671010121  
**Effective Date:** 9/23/2014

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



**4. K007, Cab Booth #3 & Drying Oven**

**Operations, Property and/or Equipment Description:**

Manual B/C+C/C booth, paint truck cabs, and Drying Oven (3.1 mmBtu/hr, natural gas, direct-fired)

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #06-4949 issued 12/3/1998)	Volatile organic compound (VOC) emissions shall not exceed 200.0 lbs/hr and 80.0 tpy, from all coatings and cleanup materials (solvent-based gun cleaner).  Particulate emissions (PE) shall not exceed 2.58 lbs/hr and 11.3 tpy.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(U)(1)(c) and OAC rule 3745-17-11(C)(3).  See b)(2)a. and b)(2)b.
b.	OAC rule 3745-21-09(U)(1)(c)	The VOC contents of the coatings employed shall not exceed 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for an extreme performance coating, as a daily volume-weighted average.
c.	OAC rule 3745-17-07(A)	See b)(2)c.
d.	OAC rule 3745-17-11(C)	See b)(2)d.
e.	OAC rule 3745-31-05(D) (PT# P0116010 issued 01/14/14 administrative modification of PT# 06-08317 issued 01/29/08)	See Facility-wide Terms and Conditions, Sections B.4. to B.7.
f.	OAC rule 3745-31-05(D) (PTI # 06-4949 issued 12/03/1998)	VOC emissions shall not exceed 335.0 tons, based upon a rolling, 12-month



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		summation of the VOC usage for all coatings and cleanup materials (solvent-based gun cleaner, water-based gun cleaner, and wipe solvent) for emissions units K001, K007, K017, K018 and K019, combined.  See b)(2)e.

(2) Additional Terms and Conditions

- a. Best Available Technology (BAT) requirements for this emissions unit has been determined to be the use of a water wash system from control of PE.
- b. The VOC emission limitations of 200 lbs/hr and 80 tpy were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these emissions limitations. "Cleanup materials" shall refer only to solvent-based gun cleaner. Requirements for cleanup materials other than solvent-based gun cleaner (i.e., water-based gun cleaner and wipe solvent) are addressed in b)(1)f.
- c. This emissions unit is exempt from the visible emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h) because it is not subject to a mass emission limitation established pursuant to OAC rule 3745-17-11.
- d. On December 27, 2010, OAC rule 3745-17-11(C) became an effective requirement under the Ohio State Implementation Plan (SIP) regulating particulate emissions (PE). In accordance with OAC rule 3745-17-11(C)(3), the permittee shall comply with the PE limitations established as best available technology requirements in PTI #06-4949.
- e. For the purpose of this usage limitation, VOC usage is equivalent to VOC emissions.

c) Operational Restrictions

- (1) The permittee shall employ a water wash system for the control of particulate emissions when this emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI #06-4949]

d) Monitoring and/or Recordkeeping 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 mass of VOC per volume (excluding water and exempt solvents) and the volume of each coating (excluding water and exempt solvents), as applied; and
- c. the daily, volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for  $C_{VOC,2}$ .

Note: If the VOC content of each of the coatings employed during a day is less than 3.5 lbs per gallon, as applied, excluding water and exempt solvents, the daily volume-weighted average VOC content record is not required for that day.

The permittee shall maintain the information at the facility for a period of three years.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B) and PTI #06-4949]

- (2) The permittee shall collect and record the following information each month for emissions units K001, K007, K017, K018 and K019, combined:
  - a. the number of gallons of each coating and cleanup material (solvent-based gun cleaner, water-based gun cleaner and wipe solvent) employed;
  - b. the total VOC emissions from all coatings and cleanup materials employed in these emissions units, in lbs or tons, [d)(2)a. x VOC content data from Section B.3]; and
  - c. the rolling, 12-month summation of the total VOC emissions from these emissions units, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #06-4949]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# 06-4949]

e) Reporting Requirements

- (1) The permittee shall notify the Ohio EPA Southeast District Office in writing of any daily record showing that the daily volume-weighted average VOC content exceeds the applicable limitation. The notification shall include a copy of such record and shall be sent within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B) and PTI# 06-4949]

- (2) The permittee shall submit quarterly deviation (excursion) reports that include the following information:



- c. an identification of each month during which the VOC emissions from coatings and cleanup materials employed in emissions units K001, K007, K017, K018 and K019, combined, exceed 335.0 tpy, as a rolling, 12-month summation; and
- d. all days when this emissions unit was in operation and the water wash system was not in service.

The quarterly deviation reports shall be submitted in accordance with Standard Terms and Conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# 06-4949]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents for an extreme performance coating, as a daily volume-weighted average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in Term d)(1).

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B) and PTI# 06-4949]

- b. Emissions Limitation:

VOC emissions shall not exceed 200.0 lbs/hr and 80.0 tpy from all coatings and cleanup materials (solvent-based gun cleaner)

Applicable Compliance Method:

The emission limitations were established to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these emissions limitations.

If required, compliance with the hourly allowable VOC emission limitation shall be demonstrated based upon the results of emission tests performed in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and/or 18, 25 or 25A, as appropriate.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# 06-4949]



- c. Emission Limitations: 2.58 lbs PE/hr and 11.3 tons PE/yr

Applicable Compliance Method:

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

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

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

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

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

CE = Control efficiency of the control equipment

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# 06-4949]

- d. Emission Limitation:

335.0 tpy of VOC, based upon a rolling, 12-month summation of the VOC usage for all coatings and cleanup materials for emissions units K001, K007, K017, K018 and K019, combined.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in Term d)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# 06-4949]

- (2) Formulation data shall be used to determine the VOC contents of the cleanup materials. USEPA Method 24 shall be used to determine the VOC contents for coatings. If any such coating has not been analyzed using Method 24 since January 1, 1991, the permittee shall either conduct a Method 24 analysis of the coating or obtain a Method 24 analysis of the coating from the coating supplier within one year of the issuance of the Permit to Operate. If the permittee determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.



**Final Title V Permit**  
Kenworth Truck Company  
**Permit Number:** P0108610  
**Facility ID:** 0671010121  
**Effective Date:** 9/23/2014

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



**5. K026, Robotic Cab Paint Booths Line #1**

**Operations, Property and/or Equipment Description:**

Robotic Cab Paint Booths Line No. 1 – Robotic Base Coat (B/C) and Clear Coat (C/C) Paint Booths controlled by Venturi Waterwash, Dry Filters, and Thermal Oxidizer.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) b)(1)g., d)(10), d)(11), and d)(12).
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI # P0116010 issued 1/14/2014)	The requirements of this rule include compliance with OAC rule 3745-31-10 thru 20 and OAC rule 3745-17-11(C).  See b)(2)a. and b)(2)e.
b.	OAC rule 3745-31-10 thru 20 (PTI # P0116010 issued 1/14/2014)	Volatile organic compound (VOC) emissions shall not exceed 1.66 lbs/hr and 7.27 tons/yr, based upon a rolling, 12-month summation, including emissions from coatings and cleanup solvents.  See b)(2)c. and b)(2)d.
c.	OAC rule 3745-17-11(C)	See c)(1), c)(2), d)(1) through d)(5) and e)(1)a.
d.	OAC rule 3745-17-07(A)	This emissions unit is exempt from this rule, pursuant to OAC rule 3745-17-07(A)(3)(h).
e.	OAC rule 3745-21-09(B)(6)	The destruction efficiency requirement contained in this rule is less stringent than the destruction efficiency established pursuant to OAC rule 3745-31-10 thru 20.  The capture and control equipment must provide not less than an 81% reduction, by weight, in the overall VOC emissions from the coating line.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)f.
f.	OAC rule 3745-31-05(A)(3), as effective 12/01/06 (PTI # P0116010 issued 1/14/2014)	See b)(2)b.
g.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(10), d)(11), and d)(12).
h.	40 CFR, Part 64 – Compliance Assurance Monitoring (CAM)	See c)(3) through c)(5), d)(6) through d)(8), d)(13) through d)(15) and e)(2).

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, the rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then the requirements of OAC rule 3745-31-05(A)(3), as effective November 30, 2001, will no longer apply.

It should be noted that the requirements established pursuant to OAC rule 3745-31-10 thru 20 will remain applicable after the above SIP revisions are approved by U.S. EPA.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC from this air contaminant source since the calculated annual emissions rate for VOC is less than ten tons per year taking into account the federally enforceable limits established pursuant to OAC rule 3745-31-10 thru 20.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, or CO from this air contaminant source since the uncontrolled potential to emit for the each pollutant is less than ten tons per year.

- c. For purposes of calculating the VOC emission rates for this emissions unit and the associated oven (emissions unit P002), the permittee shall utilize a value of 96% as the percentage of the VOCs employed from coatings only in this emissions unit that are vented to the Thermal Oxidizer. The remaining 4% of the VOCs employed from coatings only in this emissions unit shall be considered to



be uncontrolled emissions for the associated oven, due to paint continuing to dry from the coatings applied in the B/C+C/C booths. All VOC emissions from cleanup solvents are vented to the Thermal Oxidizer in this emissions unit. This "split" of VOC emissions between this emissions unit and the associated oven is based upon engineering evaluations provided by the permittee and may be revised based upon the data collected during the initial compliance demonstration.

- d. The VOC control (destruction) efficiency of the Thermal Oxidizer controlling the B/C+C/C booths shall be equal to or greater than 97%, by weight, while the emissions unit is in operation.
- e. The emissions from natural gas combustion associated with the thermal oxidizer for this emissions unit is considered to be negligible and will not be included in this permit.
- f. The permittee has chosen to comply with this rule in lieu of OAC rule 3745-21-09(U)(1)(c) for this coating line.

c) Operational Restrictions

- (1) The permittee shall operate the waterwash and dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the waterwash and dry filtration system in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0116010]

- (2) In the event the waterwash and dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals, with any modifications deemed necessary by the permittee, the control device(s) shall be expeditiously repaired or otherwise returned to these documented operating conditions.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI# P0116010]

- (3) The permittee shall operate the Thermal Oxidizer for control of VOC emissions from the B/C+C/C booths at all times this emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1), PTI# P0116010 and 40 CFR Part 64]

- (4) The average combustion temperature in the Thermal Oxidizer controlling the B/C+C/C booths, for any rolling, 3-hour periods (i.e., 06:00 - 09:00, 07:00 - 10:00, etc.) when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average combustion temperature during the most recent emission tests that demonstrated that the emissions unit was in compliance. A minimum combustion temperature of 1,250 degrees Fahrenheit shall be used until the initial emission tests are completed.

[Authority for term: OAC rule 3745-77-07(A)(1), PTI# P0116010 and 40 CFR Part 64]



- (5) All of the VOC emissions generated in the B/C+C/C booths shall be captured and vented to the Thermal Oxidizer (except the split of VOC emitted at the drying ovens due to paint continuing to dry from the coatings applied in the B/C+C/C booths, as discussed above, or cleaning of paint application equipment immediately following an unplanned shutdown of the paint application equipment caused by the "electrical interlock system" discussed below).

[Authority for term: OAC rule 3745-77-07(A)(1), PTI# P0116010 and 40 CFR Part 64]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the waterwash and dry filtration system, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0116010]

- (2) The permittee shall conduct periodic inspections of the waterwash and dry filtration controls to determine whether the devices are operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0116010]

- (3) In addition to the periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the waterwash and dry filtration controls while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0116010]

- (4) The permittee shall document each inspection (periodic and annual) of the waterwash and dry filtration control system and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.



[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0116010]

- (5) The permittee shall maintain records that document any time periods when the waterwash and/or dry filtration controls were not in service when the emissions unit(s) was/were in operation, as well as, a record of all time periods during which the waterwash and/or dry filtration controls were not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0116010]

- (6) The permittee shall install, operate, and maintain equipment to continuously monitor the combustion temperature within the Thermal Oxidizer serving the B/C+C/C booths when either booth is in operation. Units shall be measured in degrees Fahrenheit. The monitoring equipment shall be capable of accurately measuring the desired parameter. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1), PTI# P0116010 and 40 CFR Part 64]

- (7) In order to ensure that all VOC emissions are vented from the B/C+C/C booths to the Thermal Oxidizer, the permittee will utilize an electrical interlock system which will continuously monitor the following parameters for indication of inadequate operation (failure) of the VOC capture system when the booths are in operation:
- a. Spot Prime Exhaust Fan (B/C+C/C inlet air): if pressure differential switch fails to close, or to remain closed, when fan reaches operating speed;
  - b. B/C+C/C Booth Exhaust Fans / Abatement Feed Fans: if pressure differential switch fails to close, or to remain closed, when fan reaches operating speed;
  - c. B/C+C/C Booth Recirculation Fans: if fan speed varies by more than  $\pm 8$  Hz\* from the electric input set points used during the initial emission tests that demonstrated that the emissions unit was in compliance (or the electric input set points used in subsequent emission tests that demonstrated that the emissions unit was in compliance);
  - d. B/C+C/C System Exhaust Dry Filter Media: if pressure differential deviates from set point either below 0.1" WC or above 1.5" WC;
  - e. B/C+C/C Sludge Water Interlock: if pressure differential switch or pump motor running contact fail to close, or to remain closed, during operation.

If any of the above scenarios occur, the permissive to the appropriate robotic B/C and/or C/C application equipment will be removed so that the paint application will be automatically shutdown until after the affected operational parameter (and associated electrical interlock system signal) is restored to the appropriate level.



The permittee shall install, operate, and maintain equipment to continuously monitor and record the electrical input to the affected operation(s) described above associated with the B/C+C/C booths. The monitoring and recording equipment shall be capable of accurately measuring the desired parameters. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

\* Since " $\pm 8$  Hz from the electric input setpoint " was based upon an educated estimate by the facility's engineering contractor, a more appropriate setpoint and/or variation range may be established during the initial compliance demonstration or during initial set-up for the emissions unit. If approved by Ohio EPA, a more appropriate set point and/or variation range shall be utilized.

[Authority for term: OAC rule 3745-77-07(C)(1), PTI# P0116010 and 40 CFR Part 64]

- (8) The permittee shall collect and record the following information for each day for the coating line and control equipment:
- a. any time periods when the emissions unit was in operation and the Thermal Oxidizer serving the B/C+C/C booths was not in service;
  - b. all rolling, 3-hour periods (i.e., 06:00 - 09:00, 07:00 - 10:00, etc.) during which the average combustion temperature in the Thermal Oxidizer controlling the B/C+C/C booths, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average combustion temperature in the operation restriction above; and
  - c. any time periods when the emissions unit was in operation and any operational parameter (electrical interlock system signal) indicates inadequate operation (failure) of one of the scenarios documented above, and the paint applicators associated with these booths were not shutdown, indicating that VOC emissions from the B/C and/or C/C booths may not have all been vented to the Thermal Oxidizer.

[Authority for term: OAC rule 3745-77-07(C)(1), PTI# P0116010 and 40 CFR Part 64]

- (9) The permittee shall collect and record the following information each month for the coating line B/C+C/C booths:
- a. the name and/or identification number of each type of coating and each individual cleanup material, as applied;
  - b. the VOC content of each type of coating (excluding water and exempt solvents) and each individual cleanup material, as applied, in pounds per gallon;
  - c. the volume of each type of coating and each individual cleanup material employed, in gallons;
  - d. the total VOC usage of all coatings and cleanup materials employed, in pounds or tons [i.e., summation of d)(9)b. x d)(9)c.];



- e. the total uncontrolled VOC emissions from all coatings and cleanup materials employed, in pounds or tons [i.e., d)(9)d. x percentage of VOC employed in the B/C+C/C booths that is vented to the control system from the B/C+C/C booths - a value of 96% shall be used until the initial compliance demonstration for this coating line is performed];
- f. the total controlled VOC emissions from all coatings and cleanup materials employed, in pounds or tons [i.e., d)(9)e. x{[1 - overall control efficiency established during the most recent emission test that demonstrated that the emissions unit was in compliance, or a value of 97% until the initial compliance demonstration is performed}];
- g. the total number of hours the emissions unit was in operation;
- h. the average hourly controlled VOC emission rate for all coatings and cleanup materials employed, in pounds or tons [i.e., d)(9)f. ÷ d)(9)g.]; and
- i. the rolling, 12-month summation of the VOC emissions from all coatings and cleanup materials employed in this emissions unit, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0116010]

- (10) The Permit to Install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the Permit to Install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the Permit to Install application, and modeling was performed for the toxic pollutant(s) emitted at over 1 ton per year using the SCREEN 3.0 model or other Ohio EPA-approved model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model (or other approved model) was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst-case" pollutant(s):

Pollutant: Aluminum compounds  
TLV (mg/m<sup>3</sup>): 10.00  
Maximum Hourly Emission Rate (lbs/hr): 1.243  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 5.764  
MAGLC (ug/m<sup>3</sup>): 238.1

[Authority for term: PTI #P0116010]

- (11) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:



- a. changes in the composition of the materials used or the use of new materials that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the TLV previously modeled, as documented in the most recent version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

[Authority for term: PTI #P0116010]

- (12) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing Permit to Install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final Permit to Install prior to the change. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
  - a. description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy;" and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

[Authority for term: PTI #P0116010]

- (13) The CAM plan for this emissions unit has been developed for volatile organic compounds. The CAM performance indicator for the regenerative thermal oxidizer controlling this emissions unit is the combustion temperature, which was established in accordance with the manufacturer's recommendations and the electrical interlock system signals specified in d)(7). When the combustion temperature or electrical interlock system signals shows operation outside the indicator range(s), the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with



the reporting requirements specified below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[Authority for term: OAC 3745-77-07(C)(1) and 40 CFR, Part 64]

- (14) At all times, the permittee shall maintain the monitoring systems, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[Authority for term: OAC 3745-77-07(C)(1) and 40 CFR, Part 64]

- (15) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the appropriate Ohio EPA District Office or local air agency, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. any daily record showing that the waterwash and dry filtration control system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation;
  - b. any monthly record showing that the average hourly VOC emission rate from all coatings and cleanup materials employed in this emissions unit exceeded the applicable emission limitation; and
  - c. any exceedances of the rolling, 12-month emission limitation for the combined VOC emissions from all coatings and cleanup materials employed in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0116010]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all periods of time when the emissions unit was in operation and the Thermal Oxidizer controlling the B/C+C/C booths was not in service;



- b. all rolling 3-hour periods (i.e., 06:00 - 09:00, 07:00 - 10:00, etc.) when the emissions unit was in operation that the average combustion temperature in the Thermal Oxidizer did not comply with the temperature limitation specified above; and
- c. all periods of time when the emissions unit was in operation and any operational parameter (electrical interlock system signal) indicates inadequate operation (failure) of one of the scenarios documented above, and the paint applicators associated with these booths were not shutdown, indicating that VOC emissions from the B/C and/or C/C booths may not have all been vented to the Thermal Oxidizer;

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1), PTI# P0116010 and 40 CFR Part 64]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

The VOC control (destruction) efficiency of the Thermal Oxidizer controlling the B/C+C/C booths shall be equal to or greater than 97%, by weight, while the emissions unit is in operation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this destruction efficiency limitation based on the results of emission testing as required in Term f)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0116010]

- b. Emissions Limitations:

VOC emissions shall not exceed 1.66 lbs/hr and 7.27 tons/yr of VOC , based upon a rolling, 12-month summation, including emissions from coatings and cleanup solvents.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation through the record keeping requirements contained in Term d)(9).

The permittee shall also demonstrate compliance with this emission limitation based on the results of emission testing as required in Term f)(2).



Compliance with the rolling, tons per year VOC emission limitation shall be demonstrated through the record keeping requirements contained in Term d)(9).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0116010]

c. Emissions Limitation:

The capture and control equipment must provide not less than an 81% reduction, by weight, in the overall VOC emissions from the coating line.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this removal efficiency limitation through the emission testing requirements contained in Term f)(2) and by dividing the stack test derived controlled VOC emissions by the stack test derived uncontrolled VOC emissions. The uncontrolled emissions shall be determined by summarizing the inlet VOC emissions to the control equipment for K026 and/or K028 and the VOC emissions for P002.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #P0116010]

(2) The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:

- a. The emission testing shall be conducted within 12 months after issuance of the permit (following the effective date for the Title V permit), unless otherwise approved by the Ohio EPA, Southeast District Office (SEDO) or Central Office (CO).
- b. The emission testing shall be conducted on units K026 and/or K028, in addition to P002 to demonstrate compliance with the hourly VOC emission limitation, VOC control (destruction) efficiency of the Thermal Oxidizer, the reduction in overall VOC emissions from the coating line including P002, and to confirm total capture of the VOC emissions from the B/C+C/C booths.
- c. The following test methods shall be employed to demonstrate compliance with the emission limitation and control requirements:
  - i. for the hourly VOC emission limitation and VOC control (destruction) efficiency requirements, Methods 1 through 4 and the appropriate method(s) specified in OAC rule 3745-21-10(C), 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; and
  - ii. for VOC capture, the permittee shall demonstrate initial compliance by showing that there is constant inflow of air throughout the openings into the B/C+C/C booths, using a velocity meter, streamers, smoke tubes, tracer gases, or other means with prior approval from the Ohio EPA.



- iii. for the reduction in the overall VOC emissions from the coating line including P002, the permittee shall stack test K026 and/or K028, in addition to P002 in sequence without a significant delay in testing\*; and
- iv. alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA, SEDO or CO.

\* the permittee, with Ohio EPA approval, may stack test K026 and/or K028, in addition to P002 out of sequence or with a significant lapse in time if the permittee can demonstrate that no significant changes in the coating operation occurred between mass emission tests. This demonstration should be performed using parameters such as coating VOC concentration, transfer efficiency, cab design, etc.

- d. The permittee may conduct the emissions tests while emissions units K026, K028 and P002 are in operation at their maximum capacities. Under this test scenario, compliance with the hourly VOC emissions limitations for emissions units K026 and K028 shall be demonstrated if the tested hourly VOC emission rate is equal to or less than the summation of the hourly VOC emission limitations for emissions units K026 and K028. P002 will be tested separately. For the purpose of efficient operation, during normal operations, exhaust air from emissions unit K027 (S/P booth) is used as inlet air to emissions units K026, K028, and P002 (robot B/C+C/C booths and drying oven). As such, the VOC emissions from K027 are also carried into K026, K028, and P002. Additionally, wipe solvent is normally used in K026 and K028, but is regulated/tracked on a facility-wide basis. However, the VOC emissions limits in this PTI for K026, K028, and P002 do not account for K027's carry-over VOC emissions or for use of wipe solvent. Therefore, emission testing for K026, K028, and P002 shall be conducted while K027 is not operating and without use of wipe solvent in the emissions units or with Ohio EPA approval mass balancing may be used to account for the portion of the stack test emissions that occur due to wipe solvent usage and/or K027.
- e. All monitoring systems and equipment shall be installed, operational, and calibrated prior to the emission tests.
- f. During the emission tests, the permittee shall monitor and record the average combustion temperature within the Thermal Oxidizer at least every 15 minutes. The arithmetic average for the average combustion temperature shall be calculated using all of the recorded measurements collected during the compliance demonstration.

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, SEDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to testing may result in the Ohio EPA, SEDO's or CO's refusal to accept the results of the emission tests. Personnel from the Ohio EPA, SEDO or CO shall be permitted to witness the tests, 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 emission tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, SEDO within 30 days following receipt by Kenworth of the final testing report. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, SEDO or CO.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.



**6. K027, Manual Spot Prime Booth Serving Robotic Lines #1 & #2**

**Operations, Property and/or Equipment Description:**

Manual Spot Prime (S/P) Booth servicing Robotic Cab Paint Booths Lines No. 1 (K026) and No. 2 (K028) controlled by Paint Arrestor.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI # P0116010 issued 1/14/2014)	The requirements of this rule include compliance with OAC rule 3745-31-10 thru 20.  See b)(2)a. and b)(2)c.
b.	OAC rule 3745-10 thru 20 (PTI # P0116010 issued 1/14/2014)	3.36 lbs/hr and 14.72 tons/yr of VOC based upon a rolling, 12-month summation, including emissions from coatings and cleanup solvents.  3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for each coating employed in the Spot Prime (S/P) booth.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06 (PTI # P0116010 issued 1/14/2014)	See b)(2)b.
d.	OAC rule 3745-21-09(U)(1)(c)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 thru 20.
e.	OAC rule 3745-17-07(A)	This emissions unit is exempt from this rule, pursuant to OAC rule 3745-17-07(A)(3)(h).
f.	OAC rule 3745-17-11(C)	See c)(1), c)(2), d)(2) through d)(6) and e)(1)c.



(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, the rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then the requirements of OAC rule 3745-31-05(A)(3), as effective November 30, 2001, will no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of particulate matter less than 10 microns in size ( $PM_{10}$ ) from this air contaminant source since the uncontrolled potential to emit is less than ten tons per year.

- c. The  $PM_{10}$  emissions from this operation are negligible and will not be included in this permit.

c) Operational Restrictions

- (1) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry filtration system in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI# P0116010]

- (2) In the event the dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI# P0116010]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for the coating line S/P booth:

- a. the name and/or identification number of each type of coating and each individual cleanup material, as applied;



- b. the VOC content of each type of coating (excluding water and exempt solvents) and each individual cleanup material, as applied, in pounds per gallon. Documentation from the paint manufacturer/supplier that all paints within a specific type are guaranteed to be at or below the VOC content limit of 3.5 pounds per gallon shall be sufficient to comply with this requirement for those paints;
- c. the volume of each type of coating and each individual cleanup material employed, in gallons;
- d. the total VOC usage (emissions) of all coatings and cleanup materials employed, in pounds or tons [i.e., summation of d)(1)b. x d)(1)c.];
- e. the total number of hours the emissions unit was in operation;
- f. the average hourly VOC emission rate for all coatings and cleanup materials employed, in pounds or tons [i.e., d)(1)d. ÷ d)(1)e]; and
- g. the rolling, 12-month summation of the combined VOC emissions from all coatings and cleanup materials employed in this emissions unit, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry filtration system, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (3) The permittee shall conduct periodic inspections of the dry filtration control to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (4) In addition to the periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry filtration control system while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (5) The permittee shall document each inspection (periodic and annual) of the dry filtration control system and shall maintain the following information:



- a. the date of the inspection;
- b. a description of each/any problem identified and the date it was corrected;
- c. a description of any maintenance and repairs performed; and
- d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (6) The permittee shall maintain records that document any time periods when the dry filtration control was not in service when the emissions unit(s) was/were in operation, as well as, a record of all time periods during which the dry filtration control was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. any monthly record showing that the average hourly VOC emission rate from all coatings and cleanup materials employed in this emissions unit exceeded the applicable emission limitation;
  - b. any exceedances of the rolling, 12-month emission limitation for the combined VOC emissions from all coatings and cleanup materials employed in this emissions unit; and
  - c. any daily record showing that the dry filtration control system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation;

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (2) The permittee shall notify the Director (Ohio EPA, Southeast District Office) showing the use of coatings with a VOC content greater than 3.5 pounds per 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 appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]



f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

3.36 lbs/hr and 14.72 tons/yr of VOC based upon a rolling, 12-month summation, including emissions from coatings and cleanup solvents.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and rolling, tons per year emissions limitations through the record keeping requirements contained in Term d)(1).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

b. Emissions Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for each coating employed in the S/P booth.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through the record keeping requirements contained in Term d)(1). Method 24 of 40 CFR Part 60, Appendix A or formulation data shall be used to determine the VOC content of the coatings.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

g) Miscellaneous Requirements

(1) None.



**7. K028, Robotic Cab Paint Booths Line #2**

**Operations, Property and/or Equipment Description:**

Robotic Cab Paint Booths Line No. 2 – Robotic Base Coat (B/C) and Clear Coat (C/C) Paint Booths capable of operating with either two or four Robotic Spray Guns, controlled by Venturi Waterwash, Dry Filters, and Thermal Oxidizer.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) b)(1)g., d)(10), d)(11), and d)(12).
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI # P0116010 issued 1/14/2014)	The requirements of this rule include compliance with OAC rule 3745-31-10 thru 20 and OAC rule 3745-17-11(C).  See b)(2)a. and b)(2)c.
b.	OAC rule 3745-31-10 thru 20 (PTI # P0116010 issued 1/14/2014)	When 4 robots are operating in both the Base Coat (B/C) and Clear Coat (C/C) booths, VOC emissions shall not exceed 3.32 lbs/hr and 14.54 tons/yr, based upon a rolling, 12-month summation, including emissions from coatings and cleanup solvents.  When 2 robots are operating in both the B/C and C/C booths, VOC emissions shall not exceed 1.66 lbs/hr and 7.27 tons/yr, based upon a rolling, 12-month summation, including emissions from coatings and cleanup solvents.  See b)(2)d. and b)(2)e.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06 (PTI # P0116010 issued 1/14/2014)	See b)(2)b.
d.	OAC rule 3745-21-09(B)(6)	The destruction efficiency requirement contained in this rule is less stringent than the destruction efficiency established



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>pursuant to OAC rule 3745-31-10 thru 20. The capture and control equipment must provide not less than an 81% reduction, by weight, in the overall VOC emissions from the coating line.</p> <p>See b)(2)f.</p>
e.	OAC rule 3745-17-07(A)	This emissions unit is exempt from this rule, pursuant to OAC rule 3745-17-07(A)(3)(h).
f.	OAC rule 3745-17-11(C)	See c)(1), c)(2), d)(1) through d)(5), and e)(1)a.
g.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(10), d)(11) and d)(12).
h.	40 CFR, Part 64 – Compliance Assurance Monitoring (CAM)	See c)(3) through c)(5), d)(6) through d)(8), d)(13) through d)(15) and e)(2).

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, the rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then the requirements of OAC rule 3745-31-05(A)(3), as effective November 30, 2001, will no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.  
  
The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, or CO from this air contaminant source since the uncontrolled potential to emit for the each pollutant is less than ten tons per year.
- c. The emissions from natural gas combustion associated with the thermal oxidizer for this emissions unit is considered to negligible and will not be included in this permit.
- d. For purposes of calculating the VOC emission rates for this emissions unit and the associated oven (emissions unit P002), the permittee shall utilize a value of 96% as the percentage of the VOCs employed from coatings only in this



emissions unit that are vented to the Thermal Oxidizer. The remaining 4% of the VOCs employed from coatings only in this emissions unit shall be considered to be uncontrolled emissions for the associated oven, due to paint continuing to dry from the coatings applied in the B/C+C/C booths. All VOC emissions from cleanup solvents are vented to the Thermal Oxidizer in this emissions unit. This "split" of VOC emissions between this emissions unit and the associated oven is based upon engineering evaluations provided by the permittee and may be revised based upon the data collected during the initial compliance demonstration.

- e. The VOC control (destruction) efficiency of the Thermal Oxidizer controlling the B/C+C/C booths shall be equal to or greater than 97%, by weight, while the emissions unit is in operation.
- f. The permittee has chosen to comply with this rule in lieu of OAC rule 3745-21-09(U)(1)(c) for this coating line.

c) Operational Restrictions

- (1) The permittee shall operate the waterwash and dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the waterwash and dry filtration system in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI# P0116010]

- (2) In the event the waterwash and dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI# P0116010]

- (3) The permittee shall operate the Thermal Oxidizer for control of VOC emissions from the B/C+C/C booths at all times this emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1) PTI# P0116010 and 40 CFR Part 64]

- (4) The average combustion temperature in the Thermal Oxidizer controlling the B/C+C/C booths, for any 3-hour periods (i.e., 06:00 - 09:00, 07:00 - 10:00, etc.) when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average combustion temperature during the most recent emission tests that demonstrated that the emissions unit was in compliance. A minimum combustion temperature of 1,250 degrees Fahrenheit shall be used until the initial emission tests are completed.

[Authority for term: OAC rule 3745-77-07(A)(1) PTI# P0116010 and 40 CFR Part 64]

- (5) All of the VOC emissions generated in the B/C+C/C booths shall be captured and vented to the Thermal Oxidizer (except the split of VOC emitted at the drying ovens due to paint



continuing to dry from the coatings applied in the B/C+C/C booths, as discussed above, or cleaning of paint application equipment immediately following an unplanned shutdown of the paint application equipment caused by the "electrical interlock system" discussed below).

[Authority for term: OAC rule 3745-77-07(A)(1) PTI# P0116010 and 40 CFR Part 64]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the waterwash and dry filtration system, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (2) The permittee shall conduct periodic inspections of the waterwash and dry filtration controls to determine whether the devices are operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (3) In addition to the periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the waterwash and dry filtration controls while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (4) The permittee shall document each inspection (periodic and annual) of the waterwash and dry filtration control system and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]



- (5) The permittee shall maintain records that document any time periods when the waterwash and/or dry filtration controls were not in service when the emissions unit(s) was/were in operation, as well as, a record of all time periods during which the waterwash and/or dry filtration controls were not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (6) The permittee shall install, operate, and maintain equipment to continuously monitor the combustion temperature within the Thermal Oxidizer serving the B/C+C/C booths when either booth is in operation. Units shall be measured in degrees Fahrenheit. The monitoring equipment shall be capable of accurately measuring the desired parameter. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1) PTI# P0116010 and 40 CFR Part 64]

- (7) In order to ensure that all VOC emissions are vented from the B/C+C/C booths to the Thermal Oxidizer, the permittee will utilize an electrical interlock system which will continuously monitor the following parameters for indication of inadequate operation (failure) of the VOC capture system when the booths are in operation:

- a. Spot Prime Exhaust Fan (B/C+C/C inlet air): if pressure differential switch fails to close, or to remain closed, when fan reaches operating speed;
- b. B/C+C/C Booth Exhaust Fans / Abatement Feed Fans: if pressure differential switch fails to close, or to remain closed, when fan reaches operating speed;
- c. B/C+C/C Booth Recirculation Fans: if fan speed varies by more than +/-8 Hz\* from the electric input set points used during the initial emission tests that demonstrated that the emissions unit was in compliance (or the electric input set points used in subsequent emission tests that demonstrated that the emissions unit was in compliance)
- d. B/C+C/C System Exhaust Dry Filter Media: if pressure differential deviates from set point either below 0.1" WC or above 1.5" WC
- e. B/C+C/C Sludge Water Interlock: if pressure differential switch or pump motor running contact fail to close, or to remain closed, during operation

If any of the above scenarios occur, the permissive to the appropriate robotic B/C and/or C/C application equipment will be removed so that the paint application will be automatically shutdown until after the affected operational parameter (and associated electrical interlock system signal) is restored to the appropriate level.

The permittee shall install, operate, and maintain equipment to continuously monitor and record the electrical input to the affected operation(s) described above associated with



the B/C+C/C booths. The monitoring and recording equipment shall be capable of accurately measuring the desired parameters. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

\* Since "±8 Hz from the electric input setpoint " was based upon an educated estimate by the facility's engineering contractor, a more appropriate setpoint and/or variation range may be established during the initial compliance demonstration or during initial set-up for the emissions unit. If approved by Ohio EPA, a more appropriate set point and/or variation range shall be utilized.

[Authority for term: OAC rule 3745-77-07(C)(1) PTI# P0116010 and 40 CFR Part 64]

- (8) The permittee shall collect and record the following information for each day for the coating line and control equipment:
- a. any time periods when the emissions unit was in operation and the Thermal Oxidizer serving the B/C+C/C booths was not in service;
  - b. all rolling 3-hour periods (i.e., 06:00 - 09:00, 07:00 - 10:00, etc.) during which the average combustion temperature in the Thermal Oxidizer controlling the B/C+C/C booths, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average combustion temperature in the operation restriction above; and
  - c. any time periods when the emissions unit was in operation and any operational parameter (electrical interlock system signal) indicates inadequate operation (failure) of one of the scenarios documented above, and the paint applicators associated with these booths were not shutdown, indicating that VOC emissions from the B/C and/or C/C booths may not have all been vented to the Thermal Oxidizer.

[Authority for term: OAC rule 3745-77-07(C)(1), PTI# P0116010 and 40 CFR Part 64]

- (9) The permittee shall collect and record the following information each month for the coating line B/C+C/C booths:
- a. the name and/or identification number of each type of coating and each individual cleanup material, as applied;
  - b. the VOC content of each type of coating (excluding water and exempt solvents) and each individual cleanup material, as applied, in pounds per gallon;
  - c. the volume of each type of coating and each individual cleanup material employed, in gallons;
  - d. the total VOC usage of all coatings and cleanup materials employed, in pounds or tons [i.e., summation of d)(9)b. x d)(9)c.];



- e. the total uncontrolled VOC emissions from all coatings and cleanup materials employed, in pounds or tons [i.e., d)(9)d. x percentage of VOC employed in the B/C+C/C booths that is vented to the control system from the B/C+C/C booths - a value of 96% shall be used until the initial compliance demonstration for this coating line is performed];
- f. the total controlled VOC emissions from all coatings and cleanup materials employed, in pounds or tons [i.e., d)(9)e. x{[1 - overall control efficiency established during the most recent emission test that demonstrated that the emissions unit was in compliance, or a value of 97% until the initial compliance demonstration is performed]}];
- g. the total number of hours the emissions unit was in operation;
- h. the average hourly controlled VOC emission rate for all coatings and cleanup materials employed, in pounds or tons [i.e., d)(9)f. ÷ d)(9)g.]; and
- i. the rolling, 12-month summation of the VOC emissions from all coatings and cleanup materials employed in this emissions unit, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- (10) The Permit to Install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the Permit to Install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the Permit to Install application, and modeling was performed for the toxic pollutant(s) emitted at over 1 ton per year using the SCREEN 3.0 model or other Ohio EPA-approved model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model (or other approved model) was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst-case" pollutant(s):

Pollutant: Aluminum compounds  
TLV (mg/m<sup>3</sup>): 10.00  
Maximum Hourly Emission Rate (lbs/hr): 1.243  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 5.764  
MAGLC (ug/m<sup>3</sup>): 238.1

[Authority for term: PTI #P0116010]

- (11) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:



- a. changes in the composition of the materials used or the use of new materials that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the TLV previously modeled, as documented in the most recent version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

[Authority for term: PTI# P0116010]

- (12) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing Permit to Install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final Permit to Install prior to the change. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy;" and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

[Authority for term: PTI# P0116010]

- (13) The CAM plan for this emissions unit has been developed for volatile organic compounds. The CAM performance indicator for the regenerative thermal oxidizer controlling this emissions unit is the combustion temperature, which was established in accordance with the manufacturer's recommendations and the electrical interlock system signals specified in d)(7). When the combustion temperature or electrical interlock system signals shows operation outside the indicator range(s), the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with



the reporting requirements specified below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan.

[Authority for term: OAC 3745-77-07(C)(1) and 40 CFR, Part 64]

- (14) At all times, the permittee shall maintain the monitoring systems, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[Authority for term: OAC 3745-77-07(C)(1) and 40 CFR, Part 64]

- (15) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the appropriate Ohio EPA District Office or local air agency, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: OAC 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. any daily record showing that the waterwash and dry filtration control system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation;
  - b. any monthly record showing that the average hourly VOC emission rate from all coatings and cleanup materials employed in this emissions unit exceeded the applicable emission limitation; and
  - c. any exceedances of the rolling, 12-month emission limitation for the combined VOC emissions from all coatings and cleanup materials employed in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1), and PT# P0116010]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all periods of time when the emissions unit was in operation and the Thermal Oxidizer controlling the B/C+C/C booths was not in service;



- b. all rolling, 3-hour periods (i.e., 06:00 - 09:00, 07:00 - 10:00, etc.) when the emissions unit was in operation that the average combustion temperature in the Thermal Oxidizer did not comply with the temperature limitation specified above; and
- c. all periods of time when the emissions unit was in operation and any operational parameter (electrical interlock system signal) indicates inadequate operation (failure) of one of the scenarios documented above, and the paint applicators associated with these booths were not shutdown, indicating that VOC emissions from the B/C and/or C/C booths may not have all been vented to the Thermal Oxidizer.

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1), PTI# P0116010 and 40 CFR Part 64]

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

The VOC control (destruction) efficiency of the Thermal Oxidizer controlling the B/C+C/C booths shall be equal to or greater than 97%, by weight, while the emissions unit is in operation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this destruction efficiency limitation through the emission testing requirements contained in Term f)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

- b. Emissions Limitations:

When 2 robots are operating in both the B/C and C/C booths, VOC emissions shall not exceed 1.66 lbs/hr and 7.27 tons/yr, based upon a rolling, 12-month summation, including emissions from coatings and cleanup solvents.

When 4 robots are operating in both the B/C and C/C booths, VOC emissions shall not exceed 3.32 lbs/hr and 14.54 tons/yr, based upon a rolling, 12-month summation, including emissions from coatings and cleanup solvents.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation through the record keeping requirements contained in Term d)(9).



The permittee shall also demonstrate compliance with this emission limitation through the emission testing requirements contained in Term f)(2).

Compliance with the rolling tons per year VOC emission limitation shall be demonstrated through the record keeping requirements contained Term d)(9).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

c. Emissions Limitation:

The capture and control equipment must provide not less than an 81% reduction, by weight, in the overall VOC emissions from the coating line.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this removal efficiency limitation through the emission testing requirements contained in Term f)(2) and by dividing the stack test derived controlled VOC emissions by the stack test derived uncontrolled VOC emissions. The uncontrolled emissions shall be determined by summarizing the inlet VOC emissions to the control equipment for K026 and/or K028 and the VOC emissions for P002.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI# P0116010]

(2) The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:

- a. The emission testing shall be conducted within 12 months after issuance of the permit (following the effective date for the Title V permit), unless otherwise approved by the Ohio EPA, Southeast District Office (SEDO) or Central Office (CO).
- b. The emission testing shall be conducted on units K026 and/or K028, in addition to P002 to demonstrate compliance with the hourly VOC emission limitation, VOC control (destruction) efficiency of the Thermal Oxidizer, the reduction in overall VOC emissions from the coating line including P002, and to confirm total capture of the VOC emissions from the B/C+C/C booths.
- c. The following test methods shall be employed to demonstrate compliance with the emission limitation and control requirements:
  - i. for the hourly VOC emission limitation and VOC control (destruction) efficiency requirements, Methods 1 through 4 and the appropriate method(s) specified in OAC rule 3745-21-10(C), 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; and
  - ii. for VOC capture, the permittee shall demonstrate initial compliance by showing that there is constant inflow of air throughout the openings into



the B/C+C/C booths, using a velocity meter, streamers, smoke tubes, tracer gases, or other means with prior approval from the Ohio EPA.

- iii. for the reduction in the overall VOC emissions from the coating line including P002, the permittee shall stack test K026 and/or K028, in addition to P002 in sequence without a significant delay in testing\*; and
- iv. alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA, SEDO or CO.

\* the permittee, with Ohio EPA approval, may stack test K026 and/or K028, in addition to P002 out of sequence or with a significant lapse in time if the permittee can demonstrate that no significant changes in the coating operation occurred between mass emission tests. This demonstration should be performed using parameters such as coating VOC concentration, transfer efficiency, cab design, etc.

- d. The permittee may conduct the emissions tests while emissions units K026, K028 and P002 are in operation at their maximum capacities. Under this test scenario, compliance with the hourly VOC emissions limitations for emissions units K026 and K028 shall be demonstrated if the tested hourly VOC emission rate is equal to or less than the summation of the hourly VOC emission limitations for emissions units K026 and K028. P002 will be tested separately. For the purpose of efficient operation, during normal operations, exhaust air from emissions unit K027 (S/P booth) is used as inlet air to emissions units K026, K028, and P002 (robot B/C+C/C booths and drying oven). As such, the VOC emissions from K027 are also carried into K026, K028, and P002. Additionally, wipe solvent is normally used in K026 and K028, but is regulated/tracked on a facility-wide basis. However, the VOC emissions limits in this PTI for K026, K028, and P002 do not account for K027's carry-over VOC emissions or for use of wipe solvent. Therefore, emission testing for K026, K028, and P002 shall be conducted while K027 is not operating and without use of wipe solvent in the emissions units or with Ohio EPA approval mass balancing may be used to account for the portion of the stack test emissions that occur due to wipe solvent usage and/or K027.
- e. All monitoring systems and equipment shall be installed, operational, and calibrated prior to the emission tests.
- f. During the emission tests, the permittee shall monitor and record the average combustion temperature within the Thermal Oxidizer at least every 15 minutes. The arithmetic average for the average combustion temperature shall be calculated using all of the recorded measurements collected during the compliance demonstration.

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, SEDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to



testing may result in the Ohio EPA, SEDO's or CO's refusal to accept the results of the emission tests. Personnel from the Ohio EPA, SEDO or CO shall be permitted to witness the tests, 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 emission tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, SEDO within 30 days following receipt by Kenworth of the final testing report. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, SEDO or CO.

[OAC rule 3745-77-07(C)(1)]

- g) Miscellaneous Requirements
  - (1) None



**8. K029, Facility-Wide Spot-Painting**

**Operations, Property and/or Equipment Description:**

Facility-wide (both indoors and outdoors) spot-painting of truck chassis and cabs using spray/rattle cans (limited to less than five gallons per day of paint on all parts) and using brushes – with total spot-painting (spray/rattle cans plus brushes) limited to less than or equal to 10 gallons per day of paint on metal parts.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) d)(4), d)(5), d)(6), d)(7), and e)(4).
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01  (PTI# P0115408 issued 9/19/2013)	Volatile organic compound (VOC) emissions shall not exceed 41.00 lbs/day and 7.49 tons per year from all coatings employed.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06  (PTI# P0115408 issued 9/19/2013)	See b)(2)b. below.
c.	OAC rule 3745-21-09(U)(1)	Exempt, pursuant to OAC rule 3745-21-09(U)(2)(e)(iii).  See b)(2)c. below.
d.	OAC rule 3745-17-11(C)	See b)(2)d. below.
e.	OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B)	See b)(2)e. below.
f.	OAC rule 3745-31-05(F)  (when using spray cans only)	The permittee shall use less than 5 gallons of coatings per day from spray cans.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)d. below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.  
  
The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit is less than 10 tons per year.
- c. The permittee shall not use more than 10 gallons of coating material per day for the spot-coating of miscellaneous metal parts associated with this emissions unit.
- d. When using spray cans, the emissions unit is exempted from the particulate emissions restrictions of this rule per OAC rule 3745-17-11(A)(1)(i). When using brushes, the emissions unit is exempted from the particulate emissions restrictions of this rule per OAC rule 3745-17-11(A)(1)(h).
- e. This facility is located in Ross County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each day for spray applied coatings from this emissions unit:



- a. the name and identification number of each coating employed;
- b. the VOC content of each coating employed, in pounds per gallon, as applied;
- c. the number of gallons of each coating employed;
- d. the total number of gallons of all the coatings employed; and
- e. the total VOC emissions from all the coatings employed, in pounds, i.e., the sum of d)(1)b. times d)(1)c. for each coating employed.

The coating usage records shall be maintained for a minimum of 3 years.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0115408]

- (2) The permittee shall collect and record the following information each day for brush applied coatings from this emissions unit:
  - a. the name and identification number of each coating employed;
  - b. the VOC content of each coating employed, in pounds per gallon, as applied;
  - c. the number of gallons of each coating employed;
  - d. the total number of gallons of all the coatings employed; and
  - e. the total VOC emissions from all the coatings employed, in pounds, i.e., the sum of d)(2)b. times d)(2)c. for each coating employed.

The coating usage records shall be maintained for a minimum of 3 years.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0115408]

- (3) The permittee shall calculate and record the total annual VOC emissions from coatings and cleanup materials, i.e., the sum of the daily VOC emission rates from the coating materials for the calendar year in d)(1)e. plus d)(2)e.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0115408]

- (4) The PTI application for this emissions unit, K029, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:



- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Toluene

TLV (ug/m3): 75,362

Maximum Hourly Emission Rate (lbs/hr): 0.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 209.1

MAGLC (ug/m3): 1,794

The permittee, has demonstrated that emissions of toluene, from emissions unit K029, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[Authority for term: PTI P0115408]



- (5) Prior to making any physical changes to or changes in the method of operation of the emissions unit, that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions units or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[Authority for term: PTI P0115408]

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F),



initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[Authority for term: PTI P0115408]

- (7) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[Authority for term: PTI P0115408]

e) Reporting Requirements

- (1) The permittee shall notify the Director (appropriate District Office or local air agency) in writing of any daily record showing that the spot-painting operation employed more than the applicable maximum daily spray applied coating usage limit of less than 5 gallons per day. The notification shall include a copy of such record and shall be sent to the appropriate District Office or local air agency within 30 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0115408]

- (2) The permittee shall notify the Director (appropriate District Office or local air agency) in writing of any daily record showing that the spot-painting operation employed more than the applicable maximum daily total coating usage limit of not more than 10 gallons per day. The notification shall include a copy of such record and shall be sent to the appropriate District Office or local air agency within 30 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0115408]

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

Compliance with each of the applicable rules and requirements, including the daily coating usage limitations; and whether the records of the coating usage demonstrated that annual emissions, as calculated in d)(3), did not exceed the tons per year VOC limit.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0115408]



- (4) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the "Toxic Air Contaminate Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:
- a. the original model input;
  - b. the updated model input;
  - c. the reason for the change(s) to the input parameter(s); and
  - d. a summary of the results of the updated modeling, including the input changes; and
  - e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[Authority for term: PTI P0115408]

f) Testing Requirements

- (1) Compliance with the Emission Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

VOC emissions shall not exceed 41.00 lbs/day and 7.49 tons per year, from all coatings employed.

Applicable Compliance Method:

Compliance with the lbs/day emission limitation shall be demonstrated by multiplying the highest VOC content coating (minus water and exempt solvents) of 4.1 lbs/gal by the maximum application rate of 10 gal/day, which equals 41.00 lbs/day.

Compliance with the tons per year emission limitation is demonstrated by multiplying the lbs/day emission limitation by 365 days per year, and then dividing by 2,000 lbs/ton, and the record keeping specified in d)(3)

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0115408]

b. Usage Restriction:

The permittee shall not use more than 10 gallons of coating material per day for the spot-coating of miscellaneous metal parts associated with this emissions unit.



Applicable Compliance Method:

Compliance with the above coating usage restrictions shall be based upon the record keeping specified in d)(1)d. and d)(2)d. (sum of these two coating usage numbers to demonstrate compliance with the 10 gallons/day)

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0115408]

c. Emissions Limitation:

When using spray cans, the permittee shall use less than 5 gallons of coating material per day in this emissions unit.

Applicable Compliance Method:

Compliance with the coating usage restriction above shall be based upon the record keeping specified in d)(1)d.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0115408]

- (2) In accordance with OAC rule 3745-21-10, U.S. EPA Method 24 shall be used to determine the VOC content of coatings and cleanup materials, where formulation data is not based on the same method or if it is determined to be necessary by the Director.

If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0115408]

g) Miscellaneous Requirements

- (1) None.



**9. P002, Cab Drying Ovens and Flash Tunnels serving Robotic Lines #1 & #2 (K026 and K028)**

**Operations, Property and/or Equipment Description:**

Two Cab Drying Ovens and Flash Tunnels serving Robotic Cab Paint Booths Lines No. 1 and No. 2 with a total heat input capacity of 4.58 mmBtu/hr, natural gas direct-fired.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) b)(1)g., d)(3) through d)(5).
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI # P0116010 issued 1/14/2014)	The requirements of this rule include compliance with the requirements of OAC rule 3745-31-10 thru 20, and OAC rule 3745-21-09(B)(6), OAC rule 3745-17-11(B)(1) and OAC rule 3745-17-07(A).  Particulate emissions shall not exceed 0.551 lb/hr and 2.41 tpy.  See b)(2)a. and b)(2)d.
b.	OAC rule 3745-31-10 thru 20 (PTI # P0116010 issued 1/14/2014)	VOC emissions from this emissions unit shall not exceed:  9.63 lbs/hr when operating emissions units K026 & K028;  3.21 lbs/hr when operating emissions unit K026 only;  6.42 lbs/hr when operating emissions unit K028 only; and  42.18 tons/yr of VOC based upon a rolling, 12-month summation.  See b)(2)c.
c.	OAC rules 3745-31-05(A)(3), as effective 12/01/06	See b)(2)b.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(PTI # P0116010 issued 1/14/2014)	
d.	OAC rule 3745-21-09(B)(6)	The capture and control equipment must provide not less than an 81% reduction, by weight, in the overall VOC emissions from the coating line.
e.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) shall not exceed 0.551 lb/hr.
f.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
g.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(3), d)(4), and d)(5).

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, the rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then the requirements of OAC rule 3745-31-05(A)(3), as effective November 30, 2001, will no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, or CO from this air contaminant source since the uncontrolled potential to emit for the each pollutant is less than ten tons per year.

- c. For purposes of calculating the VOC emission rates for this emissions unit and the associated spray booths (emissions units K026 and K028), the permittee shall utilize a value of 96% as the percentage of the VOCs employed from coatings only in the spray booths that are vented to the Thermal Oxidizer (which controls VOC emissions from the B/C+C/C booths of emissions units K026 and K028). The remaining 4% of the VOCs employed from coatings only in the spray booths shall be considered to be uncontrolled emissions for this emissions unit, due to paint continuing to dry from the coatings applied in the B/C+C/C booths. All VOC emissions from cleanup solvents in the B/C+C/C booths are vented to the Thermal Oxidizer. This "split" of VOC emissions between this emissions unit



and the associated spray booths is based upon engineering evaluations provided by the permittee and may be revised based upon the data collected during the initial compliance demonstration.

- d. The emissions of PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO are considered to be negligible and will not be included in this permit.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI # P0116010]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI # P0116010]

- (2) The permittee shall collect and record the following information each month for this emissions unit:

- a. the uncontrolled VOC emissions from all coatings employed in the B/C and C/C booths of emissions unit K026, in pounds or tons;
- b. the uncontrolled VOC emissions from all coatings employed in the B/C and C/C booths of emissions unit K028, in pounds or tons;
- c. the uncontrolled VOC emissions from all coatings employed in the B/C and C/C booths of emissions units K026 and K028, combined, in pounds or tons;
- d. the total uncontrolled VOC emissions for this emissions unit, in pounds or tons [i.e., d)(2)c. x percentage of VOC employed in the K026 and K028 B/C+C/C booths that is emitted in this emissions unit - a value of 4% shall be used until the initial compliance demonstration for this coating line is performed];
- e. the total number of hours the emissions unit was in operation;
- f. the average hourly uncontrolled VOC emission rate, in pounds or tons [i.e., d)(2)d. ÷ d)(2)e.]; and
- g. the rolling, 12-month summation of the combined VOC emissions from all coatings and cleanup materials employed in this emissions unit, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI # P0116010]

- (3) The Permit to Install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the Permit to Install application. The Ohio EPA's "Review of New Sources of



Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the Permit to Install application, and modeling was performed for the toxic pollutant(s) emitted at over 1 ton per year using the SCREEN 3.0 model or other Ohio EPA-approved model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model (or other approved model) was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst-case" pollutant(s):

Pollutant: Aluminum compounds  
TLV (mg/m<sup>3</sup>): 10.00  
Maximum Hourly Emission Rate (lbs/hr): 1.243  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 5.764  
MAGLC (ug/m<sup>3</sup>): 238.1

[Authority for term: PTI # P0116010]

- (4) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- a. changes in the composition of the materials used or the use of new materials that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the TLV previously modeled, as documented in the most recent version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

[Authority for term: PTI # P0116010]

- (5) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing Permit to Install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification"



under other provisions of the rule, then the permittee shall obtain a final Permit to Install prior to the change. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy;" and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

[Authority for term: PTI # P0116010]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all periods of time when a fuel other than natural gas was burned in this emissions unit;
  - b. any monthly record showing that the average hourly VOC emission rate from this emissions unit exceeded the applicable emission limitation; and
  - c. any exceedances of the rolling, 12-month emission limitation for the combined VOC emissions from all coatings and cleanup materials employed in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI # P0116010]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emissions Limitations:  
9.63 lbs/hr of VOC, when operating emissions units K026 and K028;  
3.21 lbs/hr of VOC, when operating emissions unit K026 only; and  
6.42 lbs/hr of VOC, when operating emissions unit K028 only.



Applicable Compliance Method:

The permittee shall demonstrate compliance with the above hourly allowable emission limitations through the record keeping requirements contained in Term d)(2).

The permittee shall also demonstrate compliance with the above hourly allowable emission limitation(s) based on the results of emission testing as required in Term f)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI # P0116010]

b. Emissions Limitations:

42.18 tons/yr of VOC based upon a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual allowable VOC emission limitation through the record keeping requirements contained in Term d)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI # P0116010]

c. Emission Limitation:

0.551 lb/hr of PE

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation through emission testing performed in accordance with Methods 1 through 4 and 5 of 40 CFR Part 60, Appendix A, or other USEPA approved test method, with prior approval from Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI # P0116010]

d. Emission Limitation:

2.41 tpy of PE

Applicable Compliance Method:

The emission limitation was established by multiplying the hourly emission limit of 0.551 lb/hr by the maximum operating schedule of 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI # P0116010]



e. Emissions Limitation:

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

Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI # P0116010]

f. Emissions Limitation:

The capture and control equipment must provide not less than an 81% reduction, by weight, in the overall VOC emissions from the coating line.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this removal efficiency limitation through the emission testing requirements contained in section f)(2) and by dividing the stack test derived controlled VOC emissions by the stack test derived uncontrolled VOC emissions. The uncontrolled emissions shall be determined by summarizing the inlet VOC emissions to the control equipment for K026 and/or K028, and the VOC emissions for P002.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI # P0116010]

(2) The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months after issuance of the permit (following the effective date for the Title V permit), unless otherwise approved by the Ohio EPA, Southeast District Office (SEDO) or Central Office (CO).

b. The emission testing shall be conducted on units K026 and/or K028, in addition to P002 to demonstrate compliance with the hourly VOC emission limitation and the reduction in overall VOC emissions from the coating line including P002.

c. The following test methods shall be employed to demonstrate compliance with the emission limitation and control requirements:

i. for the hourly VOC emission limitation, Methods 1 through 4 and the appropriate method(s) specified in OAC rule 3745-21-10(C), 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; and



- ii. for the reduction in the overall VOC emissions from the coating line including K026 and/or K028, the permittee shall stack test K026 and/or K028, in addition to P002 in sequence without a significant delay in testing\*; and
- iii. alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA, SEDO or CO.

\* the permittee, with Ohio EPA approval, may stack test K026 and/or K028, in addition to P002 out of sequence or with a significant lapse in time if the permittee can demonstrate that no significant changes in the coating operation occurred between mass emission tests. This demonstration should be performed using parameters such as coating VOC concentration, transfer efficiency, cab design, etc.

- d. The permittee may conduct the emissions tests while emissions units K026, K028 and P002 are in operation at their maximum capacities. Under this test scenario, compliance with the hourly VOC emissions limitations for emissions units K026 and K028 shall be demonstrated if the tested hourly VOC emission rate is equal to or less than the summation of the hourly VOC emission limitations for emissions units K026 and K028. P002 will be tested separately. For the purpose of efficient operation, during normal operations, exhaust air from emissions unit K027 (S/P booth) is used as inlet air to emissions units K026, K028, and P002 (robot B/C+C/C booths and drying oven). As such, the VOC emissions from K027 are also carried into K026, K028, and P002. Additionally, wipe solvent is normally used in K026 and K028, but is regulated/tracked on a facility-wide basis. However, the VOC emissions limits in this PTI for K026, K028, and P002 do not account for K027's carry-over VOC emissions or for use of wipe solvent. Therefore, emission testing for K026, K028, and P002 shall be conducted while K027 is not operating and without use of wipe solvent in the emissions units or with Ohio EPA approval mass balancing may be used to account for the portion of the stack test emissions that occur due to wipe solvent usage and/or K027.
- e. All monitoring systems and equipment shall be installed, operational, and calibrated prior to the emission tests.

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, SEDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to testing may result in the Ohio EPA, SEDO's or CO's refusal to accept the results of the emission tests. Personnel from the Ohio EPA, SEDO or CO shall be permitted to witness the tests, 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.



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A comprehensive written report on the results of the emission tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, SEDO within 30 days following receipt by Kenworth of the final testing report. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, SEDO or CO.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



**10. Emissions Unit Group -Touch-Up Paint Booths: K017, K018, K019**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
K017	Touch Up Booth #3 controlled with an exhaust filter
K018	Touch Up Booth #4 controlled with an exhaust filter
K019	Cab Touch Up TKS controlled with an exhaust filter

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #06-4949 issued 12/03/1998)	Volatile organic compound (VOC) emissions shall not exceed 50.0 lbs/hr and 20.0 tons/yr from all coatings and cleanup materials (solvent-based gun cleaner).  Particulate emissions (PE) shall not exceed 0.551 lb/hr and 2.41 tpy.  See b)(2)a., b)(2)b., and c)(1).  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e)(iii) and OAC rule 3745-17-11(C)(3).
b.	OAC rule 3745-17-07(A)	See b)(2)c.
c.	OAC rule 3745-21-09(U)(1)	Exempt, pursuant to OAC rule 3745-21-09(U)(2)(e)(iii)  [This emissions unit shall not employ more than 10.0 gallons of coatings on metal parts in any given day.]
d.	OAC rule 3745-17-11(C)	See b)(2)d.
e.	OAC rule 3745-31-05(D) (PT# P0116010 issued 01/14/14 administrative modification of PT# 06-08317 issued 01/29/08)	See Facility-wide Terms and Conditions, Sections B.4. to B.7.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-31-05(D) (PTI # 06-4949 issued 12/03/1998)	VOC emissions shall not exceed 335.0 tons, based upon a rolling, 12-month summation of the VOC usage for all coatings and cleanup materials (solvent-based gun cleaner, water-based gun cleaner, and wipe solvent) for emissions units K001, K007, K017, K018 and K019, combined.  See b)(2)e.

(2) Additional Terms and Conditions

- a. Best Available Technology (BAT) requirements for this emissions unit has been determined to be the use of exhaust filters for control of PE.
- b. The hourly VOC and particulate emissions limits were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these short term emissions limitations. "Cleanup materials" shall refer only to solvent-based gun cleaner. Requirements for cleanup materials other than solvent-based gun cleaner (i.e., water-based gun cleaner and wipe solvent) are addressed in b)(1)f.
- c. This emissions unit is exempt from the visible emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h) because it is not subject to a mass emission limitation established pursuant to OAC rule 3745-17-11.
- d. On December 27, 2010, OAC rule 3745-17-11(C) became an effective requirement under the Ohio State Implementation Plan (SIP) regulating particulate emissions (PE). In accordance with OAC rule 3745-17-11(C)(3), the permittee shall comply with the PE limitations established as best available technology requirements in PTI #06-4949.
- e. For the purpose of this usage limitation, VOC usage is equivalent to VOC emissions.

c) Operational Restrictions

- (1) The permittee shall employ exhaust filters for the control of particulate emissions when this emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI #06-4949]



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each day for this emissions unit to demonstrate compliance with OAC rule 3745-21-09(U):
  - a. the name and identification number of each coating material employed;
  - b. the volume, in gallons, of each coating material employed; and
  - c. the total volume, in gallons, of all coating materials employed.

The coating usage records shall be maintained for a minimum of 3 years.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B)(3)(d) and PTI 06-4949]

- (2) The permittee shall collect and record the following information each month for emissions units K001, K007, K017, K018 and K019, combined:
  - a. the number of gallons of each coating and cleanup material (solvent-based gun cleaner, water-based gun cleaner, and wipe solvent) employed;
  - b. the total VOC emissions from all coatings and cleanup materials employed in these emissions units, in lbs or tons, [d)(2)a. x VOC content data from Section B.3]; and
  - c. the rolling, 12-month summation of the total VOC emissions from these emissions units, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #06-4949]

- (3) The permittee shall maintain daily records that document any time periods when the exhaust filter system was not in service when the emissions unit was in operation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #06-4949]

e) Reporting Requirements

- (1) The permittee shall notify the Ohio EPA Southeast District Office in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B) and PTI# 06-4949]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following information:



- a. an identification of each month during which the VOC emissions from coatings and cleanup materials employed in emissions units K001, K007, K017, K018 and K019, combined, exceed 335.0 tpy, as a rolling, 12-month summation; and
- b. all days when this emissions unit was in operation and the filter exhaust system was not in service.

The quarterly deviation reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #06-4949]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

This emissions unit shall not employ more than 10.0 gallons of coating on metal parts in any given day.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section d)(1).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #06-4949]

- b. Emissions Limitations:

VOC emissions shall not exceed 50.0 lbs/hr and 20.0 tpy, from all coatings and cleanup materials (solvent-based gun cleaner)

Applicable Compliance Method:

The hourly VOC emissions limit was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation. If required, compliance shall also be demonstrated based upon emission tests performed in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

Compliance with the 12-month rolling VOC emission limitation shall be demonstrated based upon the record keeping requirements specified in Term d)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #06-4949]



c. Emission Limitations:

0.551 lb PE/hr and 2.41 ton PE/yr

Applicable Compliance Method:

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

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

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

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

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

CE = Control efficiency of the control equipment

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #06-4949]

d. Emission Limitation:

335.0 tpy of VOC, based upon a rolling, 12-month summation of the VOC usage for all coatings and cleanup materials for emissions units K001, K007, K017, K018 and K019, combined.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in Term d)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #06-4949]

- (2) Formulation data shall be used to determine the VOC contents of the cleanup materials.

USEPA Method 24 shall be used to determine the VOC contents for coatings. If any such coating has not been analyzed using Method 24 since January 1, 1991, the permittee shall either conduct a Method 24 analysis of the coating or obtain a Method 24 analysis of the coating from the coating supplier within one year of the issuance of the Permit to Operate. If the permittee determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA



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provides alternative analytical procedures or alternative precision statements for Method 24.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.