



1/14/2014

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
 Facility ID: 0671010121
 Permit Number: P0116010
 Permit Type: Administrative Modification
 County: Ross

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very 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 PTI 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

How to give us feedback on your permitting experience

Please complete a survey at 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 by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)3858501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA
Ohio EPA-SEDO; Kentucky



FINAL

Division of Air Pollution Control
Permit-to-Install
for
Kenworth Truck Company

Facility ID:	0671010121
Permit Number:	P0116010
Permit Type:	Administrative Modification
Issued:	1/14/2014
Effective:	1/14/2014



Division of Air Pollution Control
Permit-to-Install
for
Kenworth Truck Company

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Final Permit-to-Install
Kenworth Truck Company
Permit Number: P0116010
Facility ID: 0671010121
Effective Date: 1/14/2014

Authorization

Facility ID: 0671010121
Facility Description: Assembly of class 8 trucks
Application Number(s): M0002527
Permit Number: P0116010
Permit Description: DAPC-initiated administrative modification of PTI# 06-08317 issued 01/29/2008 to add BAT sunrise/sunset language for Senate Bill 265.
Permit Type: Administrative Modification
Permit Fee: \$0.00
Issue Date: 1/14/2014
Effective Date: 1/14/2014

This document constitutes issuance to:

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

of a Permit-to-Install for the emissions unit(s) identified on the following page.

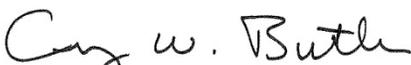
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Interim Director



Authorization (continued)

Permit Number: P0116010
 Permit Description: DAPC-initiated administrative modification of PTI# 06-08317 issued 01/29/2008 to add BAT sunrise/sunset language for Senate Bill 265.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

- | | |
|-----------------------------------|--|
| Emissions Unit ID: | K026 |
| Company Equipment ID: | Robotic Cab Paint Booths Line #1 |
| Superseded Permit Number: | 06-08317 |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | K027 |
| Company Equipment ID: | Manual Spot Prime Booth Lines #1 & #2 |
| Superseded Permit Number: | 06-08317 |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | K028 |
| Company Equipment ID: | Robotic Cab Paint Booths Line #2 |
| Superseded Permit Number: | 06-08317 |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | P002 |
| Company Equipment ID: | Cab Drying Ovens and Flash Tunnels (Lines #1 & #2) |
| Superseded Permit Number: | 06-08317 |
| General Permit Category and Type: | Not Applicable |



Final Permit-to-Install
Kenworth Truck Company
Permit Number: P0116010
Facility ID: 0671010121
Effective Date: 1/14/2014

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.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) 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.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. 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 re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying 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.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (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.
- 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, 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.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.



- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Southeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Southeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) 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 appropriate Ohio EPA District Office or contracted



local air agency, 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 electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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 ORC section 3704.08.
 - (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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.



8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the 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 (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southeast District Office. 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.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a Permit-to-Install.

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the



Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit 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) by submitting a certification from the authorized 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 authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.



13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

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

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.

16. 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. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

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

19. 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.



Final Permit-to-Install
Kenworth Truck Company
Permit Number: P0116010
Facility ID: 0671010121
Effective Date: 1/14/2014

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. 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.
 - b) Pursuant to OAC rule 3745-31-05(D), the total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units K001, K007, K017, K018, K019, K026, K027, K028, and P002 including 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 of all HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

The permittee shall comply with the rolling, 12-month limitation based on past records of monthly HAP emissions.
3. 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., 3.a)(2) x 3.a)(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.
 - b) The permittee shall collect and record the following information each month for all materials containing any hazardous air pollutant (HAP)¹ 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, the sum of (1) 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).



¹ 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.

4. 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.2.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 requirements specified in Part A - Standard Terms and Conditions of this permit.

5. 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 Term 3.a). above.

b) Emissions Limitation:

Pursuant to OAC rule 3745-31-05(D), the total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units K001, K007, K017, K018, K019, K021, K026, K027, K028, and P002 including 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 of all HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitation shall be demonstrated based upon the record keeping requirements specified in Term 3.b). above.



Final Permit-to-Install
Kenworth Truck Company
Permit Number: P0116010
Facility ID: 0671010121
Effective Date: 1/14/2014

C. Emissions Unit Terms and Conditions



1. 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 VenturiWaterwash, 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	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	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. See b)(2)f.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)b.
g.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(10), d)(11), and d)(12).

(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 PM₁₀, SO₂, NO_x, 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 negligible and will not be included in this permit.
- f. The permittee has chosen to comply with OAC rule 3745-17-09(B)(6) in lieu of OAC rule 3745-21-09(U)(1)(c).

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.
- (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.
- (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.
- (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.
- (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).

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.

- (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.
- (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.
- (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.

- (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.
- (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.



- (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.

- (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.
- (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.
- (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/m³): 10.00
Maximum Hourly Emission Rate (lbs/hr): 1.243
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 5.764
MAGLC (ug/m³): 238.1

- (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.).
- (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.

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. 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;
 - c. 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;
 - d. 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;
 - e. 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
 - f. 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.

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).

b. Emissions Limitation:

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 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 in Term d)(9).

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.

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

a. The emission testing shall be conducted within 90 days after reaching full production, but not later than 180 days after initial startup following installation of the emissions units [This permit is an administrative modification of PTI 06-08317 issued 1/29/2008], 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 the 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;
 - 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 emissions 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.
- g. 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.

g) Miscellaneous Requirements

- (1) None.



2. 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	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	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	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 (PM₁₀) from this air contaminant source since the uncontrolled potential to emit is less than ten tons per year.

- c. The PM₁₀ 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.
- (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.

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.
- (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.
- (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.
- (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.
- (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.



- (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.

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.

- (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.

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:

3.36 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 recordkeeping requirements contained in Term d)(1).



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 recordkeeping 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.

g) Miscellaneous Requirements

(1) None.



3. 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 VenturiWaterwash, 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	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	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	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).

(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 PM₁₀, SO₂, NO_x, 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 OAC rule 3745-17-09(B)(6) in lieu of OAC rule 3745-21-09(U)(1)(c).

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.
- (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.
- (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.
- (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.
- (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).

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.

- (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.
- (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.
- (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.

- (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.
- (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.



- (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.

- (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.
- (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.
- (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/m³): 10.00
Maximum Hourly Emission Rate (lbs/hr): 1.243
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 5.764
MAGLC (ug/m³): 238.1

[Authority for term: PTI #06-08317]

- (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.).
- (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.

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. 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;
 - c. 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;
 - d. 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;
 - e. 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
 - f. 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.



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).

b. Emissions Limitation:

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).

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.



- (2) The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
- a. The emission testing shall be conducted within 90 days after reaching full production, but not later than 180 days after initial startup following installation of the emissions units [This permit is an administrative modification of PTI 06-08317 issued 1/29/2008], 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 the 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;
 - 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 emissions 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.

- g) Miscellaneous Requirements
 - (1) None



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

Operations, Property and/or Equipment Description:

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.

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	<p>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).</p> <p>Particulate emissions shall not exceed 0.551 lb/hr and 2.41 tpy.</p> <p>See b)(2)a. and b)(2)d.</p>
b.	OAC rule 3745-31-10 thru 20	<p>VOC emissions from this emissions unit shall not exceed:</p> <p>9.63 lbs/hr when operating emissions units K026 & K028;</p> <p>3.21 lbs/hr when operating emissions unit K026 only;</p> <p>6.42 lbs/hr when operating emissions unit K028 only; and</p> <p>42.18 tons/yr of VOC based upon a rolling, 12-month summation.</p> <p>See b)(2)c.</p>
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
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 PM₁₀, SO₂, NO_x, 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 PM₁₀, SO₂, NO_x, 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.
- 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.
 - (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 controlled 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.
 - (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/m³): 10.00
Maximum Hourly Emission Rate (lbs/hr): 1.243
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 5.764
MAGLC (ug/m³): 238.1

[Authority for term: PTI #06-08317]

- (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.).
- (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.

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.

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:
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 these emission limitations through the recordkeeping requirements contained in Term d)(2).

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

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



Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through the recordkeeping requirements contained in Term d)(2).

c. Emission Limitation:

0.551 lb/hr of PE

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission 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.

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 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.

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 this emission limitation through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

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.

- (2) The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
- a. The emission testing shall be conducted within 90 days after reaching full production, but not later than 180 days after initial startup following installation of the emissions units [This permit is an administrative modification of PTI 06-08317 issued 1/29/2008], 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(s) and the overall reduction of VOC for the coating line including K026 and/or K028.
 - c. The following test methods shall be employed to demonstrate compliance with the emission limitations:
 - 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.
 - 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. These demonstration should be performed using parameters such as coating VOC concentration, transfer efficiency, cab design, etc.
- d. The tests shall be conducted while emissions units K026 and/or K028 are operating at or near the units' maximum capacity, unless otherwise specified or approved by the Ohio EPA, SEDO or CO. Kenworth intends to construct emissions unit K028 with initially only two robots per booth (two robots in B/C booth and two robots in C/C booth), which is the same configuration as emissions unit K026. However, it is anticipated that within 30 months Kenworth intends to install two additional robots in each booth in emissions unit K028 for a total of four robots per booth, increasing its productivity and potential emissions by a factor of two (K026 will remain two robots per booth). The limits in this PTI are for K028 at the higher emission rate with four robots per booth. Therefore, if



stack testing is performed during operation of K028, it shall be performed at or near the maximum capacity of the emissions unit, which is based on how K028 has been constructed at the time of the testing. 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. However, the VOC emissions limits in this PTI for K026, K028, and P002 do not account for K027's carry-over VOC emissions. Therefore, emission testing for K026, K028, and P002 shall be conducted while K027 is not operating or with Ohio EPA approval mass balancing may be used to account for the portion of the stack test emissions that occur due to K027.

- e. All monitoring systems and equipment shall be installed, operational, and calibrated prior to the emission tests.
- f. 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.
- g. 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.

g) Miscellaneous Requirements

- (1) None.