



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

**RE: FINAL PERMIT TO INSTALL  
ROSS COUNTY  
Application No: 06-07879  
Fac ID: 0671010121**

**CERTIFIED MAIL**

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
Y	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE:** 12/6/2005

Kenworth Truck Co.  
Kenneth Legner  
65 Kenworth Dr.  
Chillicothe, OH 45601

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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

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

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

SEDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 12/6/2005  
Effective Date: 12/6/2005**

**FINAL PERMIT TO INSTALL 06-07879**

Application Number: 06-07879  
Facility ID: 0671010121  
Permit Fee: **\$200**  
Name of Facility: Kenworth Truck Co.  
Person to Contact: Kenneth Legner  
Address: 65 Kenworth Dr.  
Chillicothe, OH 45601

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**65 Kenworth Dr.  
Chillicothe, Ohio**

Description of proposed emissions unit(s):  
**Robotic Cab Booths Line 1.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described 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

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

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

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- 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:
  - i. Reports of any required monitoring and/or record keeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping 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 appropriate Ohio EPA District Office or local air agency. 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 B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency 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.
  - iv. If this permit is for an emissions unit located at a Title V facility, then 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.

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports 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).

## **3. Risk Management Plans**

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

**4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

**5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

**6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and 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.

**7. Fees**

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

**8. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any 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. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

**9. Compliance Requirements**

- a. 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:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

#### **10. Permit-To-Operate Application**

- a. If 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 the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

#### **11. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

#### **12. 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.

#### **13. Permit-To-Install**

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

**B. State Only Enforceable Permit-To-Install General Terms and Conditions**

**1. Compliance Requirements**

The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

**2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) 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.)

**3. Permit Transfers**

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

**4. Authorization To Install or Modify**

If applicable, authorization to install or modify any new or existing 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 modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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 party shows good cause for any such extension.

**5. Construction of New Sources(s)**

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.

**6. 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.

**7. 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).

**8. Construction Compliance Certification**

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**C. Permit-To-Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)**  
**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	0.70
PM10	0.36
VOC	107.91
NOx	2.58
CO	2.16

**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K026 - New Robotic Cab Booths Line No.1 consisting of robotic base coat (B/C) booth and robotic clear coat (C/C) booth, controlled by down draft water wash and filters, and a 6.0 MMBtu natural gas-fired drying oven.	<p>OAC rule 3745-21-09(U)(1)(c)</p> <p>OAC rule 3745-17-07(A)(1)                      OAC rule 3745-17-11(B)(1)</p> <p>OAC rule 3745-21-07(G)(2)</p>	<p>The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(A)(3).</p> <p>The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>See section A.I.2.c below.</p>
Base Coat (B/C) and Clear Coat (C/C) Booths, controlled by a down draft water wash and a dry filtration system	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) shall not exceed 0.16 lb/hr and 0.70 TPY.</p> <p>PM<sub>10</sub> emissions shall not exceed 0.083 lb/hr and 0.36 TPY.</p> <p>Visible PE shall not exceed 5% opacity from the BC and CC exhaust stack as a 6-minute average.</p> <p>See section A.I.2.b below.</p> <p>Volatile Organic Compound (VOC) emissions shall not exceed 37.55 lbs/hr, from all coatings and cleanup materials (solvent-based gun cleaner).</p>

6.0 MMBtu/hr cab drying oven

OAC rule 3745-31-05(C)

OAC rule 3745-31-05(A)(3)

VOC emissions shall not exceed 3.5 pounds per gallon of coating, excluding water & exempt solvents, as a daily volume-weighted average.

VOC emissions shall not exceed 107.91 tons per rolling, 12-month period, from all coatings and cleanup materials (solvent-based gun cleaner).

See section A.II.4 and 5 below.

See section A.I.2.a below.

The emissions from the combustion of natural gas in this emissions unit shall not exceed the following:

Nitrogen oxides (NO<sub>x</sub>) emissions shall not exceed 0.59 lb/hr and 2.58 TPY.

Carbon monoxide (CO) emissions shall not exceed 0.49 lb/hr and 2.16 TPY.

PE, SO<sub>2</sub>, and VOC from natural gas combustion have potential to emit of less than one ton so these pollutants are not limited in this permit.

See section A.I.2.d below.

No visible PE shall be exhausted from the stack(s) serving the cab drying oven.

The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

See section A.I.2.e below.

OAC rule 3745-17-07(A)(1)  
OAC rule 3745-17-11(B)(1)  
OAC rule 3745-18-06(E)(2)

OAC rule 3745-21-07(B)  
OAC rule 3745-21-08(B)  
OAC rule 3745-23-06(B)

## 2. Additional Terms and Conditions

- 2.a** As part of the Best Available Technology (BAT) determination for this permit, the permittee has requested voluntary restrictions on the amount of VOC's employed in this emissions unit.
- 2.b** The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C).
- 2.c** The permittee shall not employ any photochemically reactive materials in this emissions unit. Pursuant to OAC rule 3745-21-07(G)(9)(f), this emissions unit is exempt from the emission limitations and control requirements specified in OAC rule 3745-21-07(G)(2).
- 2.d** The hourly and annual emission limitations from natural gas combustion are based on the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.
- 2.e** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). When the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" will no longer exist as part of the federally-approved SIP for Ohio, and this term and condition will no longer be applicable to this emissions unit.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-23-06(B) and 3745-21-07(B) by committing to comply with the best available technology requirements established in this Permit to Install.

**Kenworth Truck Co.**  
**PTI Application: 06-07879**  
**Issued: 12/6/2005**

**Facility ID: 0671010121**  
**Emissions Unit ID: K026**

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

## II. Operational Restrictions

1. The permittee shall operate the down draft water wash systems and dry filters for control of PE from the B/C and C/C booths at all times the emissions unit is in operation.
2. The pressure drop across the down draft water wash systems controlling the B/C and C/C booths shall be maintained within the range of 4.5 to 5.5 inches of water column while the emissions unit is in operation.
3. The pressure drop across the dry filters controlling the B/C and C/C booths shall be maintained within the range of 0.25 to 1.5 inches of water column while the emissions unit is in operation.
4. The annual VOC in raw material (coatings and solvent-based gun cleaner) usage shall not exceed 107.91 tons of VOC employed per rolling 12-month period..
5. To ensure enforceability with the annual VOC in raw material (coatings and solvent-based gun cleaner) usage restriction during the first 12 calendar months of operation following the startup of K026, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative VOC usage (Tons employed) in K026</u>
1	10.0
1 - 2	20.0
1 - 3	30.0
1 - 4	40.0
1 - 5	50.0
1 - 6	60.0
1 - 7	70.0
1 - 8	80.0
1 - 9	90.0

**Kenworth Truck Co.**  
**PTI Application: 06-07879**  
**Issued: 12/6/2005**

**Facility ID: 0671010121**  
**Emissions Unit ID: K026**

<u>Month(s)</u>	<u>Maximum Allowable Cumulative VOC usage (Tons employed) in K026</u>
1 - 10	100.0
1 - 11	105.0
1 - 12	107.91

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual usage restrictions shall be based upon a rolling, 12-month summation of the monthly usage figures for both coatings and cleanup materials (solvent-based gun cleaner).

6. Installation and operation of emissions unit K026 is contingent upon the permanent shutdown of Cab Booth #1 (K005) and Cab Booth #4 (K016). The net change in emissions as a result of this equipment shutdown and installation is as follows:

Project Emissions (TPY)	PM	PM10	VOC	NOx	CO	SO2
Project Increases K026 Z005 (DeMinimus)	0.70 0.05	0.36 0.05	107.91 0.04	2.58 0.52	2.16 0.54	0.015 0.004
K005/K016 Shutdown	0.11	0.11	68.53	1.43	1.20	0.008
Net Change	0.64	0.30	39.42	1.67	1.51	0.011

As a result of the net change in emissions, the proposed installation of K026 is not a major modification and the permittee has "netted" out of Federal Prevention of Significant Deterioration requirements.

7. The permittee shall burn only natural gas in this emission unit.

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

- The permittee shall install, operate, and maintain equipment to continuously monitor the pressure drops across the down draft water wash systems and dry filters serving the B/C and C/C booths when the booths are in operation. 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 modifications deemed necessary by the permittee.
- The permittee shall collect and record the following information for each day for the coating line and control equipment:

- a. The pressure drop across the down draft water wash systems serving the B/C and C/C booths, in inches of water;
  - b. The pressure drop across the dry filters serving the B/C and C/C booths, in inches of water;
  - c. All time periods when the emissions unit was in operation and the down draft water wash systems serving the B/C and C/C booths were not in service, and
  - d. All time periods when the emissions unit was in operation and the dry filters serving the B/C and C/C booths were not in service.
- 3.** The permittee shall collect and record the following information each day for this emissions unit:
- a. The name and identification number of each coating and cleanup material employed;
  - b. The VOC content of each coating (excluding water and exempt solvents), and cleanup material, in pounds per gallon;
  - c. The number of gallons of each coating, and cleanup material employed;
  - d. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2.
  - e. The hours of operation; and
  - f. The average hourly VOC emissions from all coatings and cleanup materials employed  $[(3.b \times 3.c) / 3. e]$ , in lbs/hr.
- 4.** The permittee shall collect and record the following information each month for the line:
- a. The name and identification number of each coating, and cleanup material employed;
  - b. Whether or not each coating and cleanup material employed is a photochemically reactive material;
  - c. The VOC content of each coating (excluding water and exempt solvents), as applied, in pounds per gallon;
  - d. The volume of each coating employed, in gallons;

- e. The total VOC usage rate for all coatings employed, in pounds or tons (i.e. the sum of values from (c) multiplied by (d));
  - f. The VOC content of each cleanup material employed, in pounds per gallon;
  - g. The volume of each cleanup material employed, in gallons;
  - h. The total VOC usage rate for all cleanup material (solvent-based gun cleaner) employed, in pounds or tons (i.e., the sum of values from (f) multiplied by (g));
  - i. The total calculated, VOC usage rate for all coatings and cleanup materials (solvent-based gun cleaner) employed, in pounds or tons (the summation of values from (e) and (h) above);
  - j. During the first 12 months after the startup of emissions unit K026, the total cumulative VOC usage from raw material input, from all coatings and cleanup materials (solvent-based gun cleaner) employed, in tons; and
  - k. After the first 12 months of operation following the issuance of this permit, the rolling, 12-month summation of the VOC usage from raw material input, from all coatings and cleanup materials (solvent-based gun cleaner) employed, in tons.
5. 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.

#### **IV. Reporting Requirements**

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify the following :
  - a. All periods of time when the emissions unit was in operation and the down draft water wash systems and dry filters controlling the B/C and C/C booths were not in service;
  - b. All periods of time when the pressure drop across the down draft water wash systems controlling the B/C and C/C booths were outside of the allowable ranges specified above;
  - c. All periods of time when the pressure drop across the dry filters controlling the B/C and C/C booths were outside of the allowable ranges specified above;
  - d. All days during which photochemically reactive materials were employed in this emissions unit (Each report shall identify the cause for the use of the photochemically reactive material(s), and the estimated total quantity of material(s) emitted during each such day, in pounds.);

- e. Any daily record showing that the average hourly VOC emission rate from all coatings and cleanup materials (solvent-based gun cleaner) employed in the B/C and C/C booths exceeded the applicable emission limitation;
- f. During the first 12 months after the startup of emissions unit K026, any exceedances of the total cumulative VOC usage limitations from all coatings and cleanup materials (solvent-based gun cleaner) employed; and
- g. After the first 12 months of operation following the issuance of this permit, any exceedances of the rolling, 12-month VOC usage limitation from all coatings and cleanup materials (solvent-based gun cleaner) employed in emissions unit K026.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii.

- 2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- 3. The permittee shall notify the director of any daily record showing that the daily volume-weighted average VOC content exceeds the applicable emission limitation. Each report shall be submitted within 45 days after the deviation occurs.

## **V. Testing Requirements**

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

- a. Emission Limitation:

PE shall not exceed 0.16 lb/hr and 0.70 TPY.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation through emission testing performed in accordance with Method 5 of 40 CFR Part 60, Appendix A, or other U.S. EPA approved test method, with prior approval from Ohio EPA.

The tons per year emission limitation was developed by multiplying the hourly allowable PE limitation (0.16 lb/hour) by the maximum annual hours of operation (8,760 hour/year), and then dividing by 2,000 lb/ton. Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

- b. Emission Limitation:

PM10 emissions shall not exceed 0.083 lb/hr and 0.36 TPY.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the pounds per hour emission limitation through emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M, or other U.S. EPA approved test method, with prior approval from Ohio EPA.

The tons per year emission limitation was developed by multiplying the hourly allowable PM<sub>10</sub> limitation (0.083 lb/hour) by the maximum annual hours of operation (8,760 hour/year), and then dividing by 2,000 lb/ton. Therefore, if compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

Visible PE shall not exceed 5% opacity from the BC and CC exhaust stack as a 6-minute average.

Applicable Compliance Method:

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

d. Emission Limitation:

VOC emissions shall not exceed 37.55 lbs/hr, from all coatings and cleanup materials (solvent-based gun cleaner).

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through the record keeping requirements contained in section A.III.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and the appropriate method(s) specified in OAC rule 3745-21-10(C) or other U.S. EPA-approved test methods, with prior approval from Ohio EPA.

e. Emission Limitation:

VOC emissions shall not exceed 107.91 tons per rolling, 12-month period from all coatings and cleanup materials (solvent-based gun cleaner).

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through the record keeping requirements contained in section A.III.

f. Emission Limitation:

VOC emissions shall not exceed 3.5 pounds per gallon of coating, excluding water & exempt solvents, as a daily volume-weighted average.

Applicable Compliance Method:

Compliance with this emission limitation shall be based upon the record keeping requirements specified in section A.III. Method 24 of 40 CFR Part 60, Appendix A or formulation data shall be used to determine the VOC content of the coatings.

g. Emission Limitation:

NOx emissions shall not exceed 0.59 lb/hr and 2.58 TPY.

Applicable Compliance Method:

Compliance with the NOx emission limitations may be demonstrated by use of the AP-42 (7/98), emission factor (table 1.4-1., for natural gas combustion) and the calculations shown below:

$$(6.0 \text{ MMBTU/hr}) / (1020 \text{ MMBTU/MMcf}) (100 \text{ lbs NOx/MMcf}) = 0.588 \text{ lb/hr}$$
$$(0.59 \text{ lb/hr}) (8760 \text{ hr/yr}) (0.0005 \text{ ton/lb}) = 2.58 \text{ TPY}$$

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

h. Emission Limitation:

CO emissions shall not exceed 0.49 lb/hr and 2.16 TPY.

Applicable Compliance Method:

Compliance with the CO emission limitations may be demonstrated by use of the AP-42 (7/98), emission factor (table 1.4-1., for natural gas combustion) and the calculations shown below:

**Kenworth Truck Co.**

**PTI Application: 06-07879**

**Issued: 12/6/2005**

**Facility ID: 0671010121**

**Emissions Unit ID: K026**

$$(6.0 \text{ MMBTU/hr}) / (1020 \text{ MMBTU/MMcf}) (84 \text{ lbs CO/MMcf}) = 0.494 \text{ lb/hr}$$
$$(0.494 \text{ lb/hr}) (8760 \text{ hr/yr}) (0.0005 \text{ ton/lb}) = 2.16 \text{ TPY}$$

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

i. Emission Limitation:

No visible PE shall be exhausted from the stack(s) serving the cab drying oven.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K026 - New Robotic Cab BoothsLine No.1 consisting of robotic base coat (B/C) booth and robotic clear coat (C/C) booth controlled by down draft water wash and filters, and a natural gas-fired drying oven.	None	None

2. **Additional Terms and Conditions**

- 2.a None.

**II. Operational Restrictions**

1. The permit to install for this emissions unit (K026) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Quinacridone Pigment  
 TLV-TWA (mg/m<sup>3</sup>): 10  
 Maximum Hourly Emission Rate (lbs/hr): 1.28  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 95.2

MAGLC (ug/m<sup>3</sup>): 238.1

Pollutant: Titanium Dioxide

TLV-TWA (mg/m<sup>3</sup>): 10

Maximum Hourly Emission Rate (lbs/hr): 1.28

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 95.2

MAGLC (ug/m<sup>3</sup>): 238.1

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

- a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

2. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
  - a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None