



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

05/30/03

**CERTIFIED MAIL**

**RE: Final Title V Chapter 3745-77 permit**

01-80-00-0156  
Honda R & D North America Inc.  
Gulley Harry  
21001 St. Rt. 739  
Raymond, OH 43067

Dear Gulley Harry:

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

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

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

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

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

Very truly yours,

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

cc: Central District Office  
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: <b>05/30/03</b>	Effective Date: <b>06/20/03</b>	Expiration Date: <b>06/20/08</b>
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This document constitutes issuance of a Title V permit for Facility ID: 01-80-00-0156 to:  
Honda R & D North America Inc.  
21001 St. Rt. 739  
Raymond, OH 43067

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

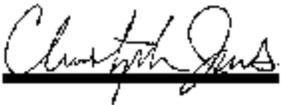
B001 (10.4 MMBtu/hr Natural Gas Boiler) 10.4 MMBtu/hr boiler for heating hot water throughout all of Building #7.	B016 (Transmission Dynamometer Bldg 5 (Rm. 107)) Engine testing.	#2 F001 (Paved Roadways and Parking Lots) Movement of vehicles on roadways and parking areas.
B005 (12.5 MMBtu/hr Natural Gas Boiler) 12.5 MMBtu/hr boiler for heating hot water for all buildings except Building #7.	B017 (Emissions Dynamometer, Building #5) Engine emission testing for the EPA (use of complete cars).	G001 (Gasoline Tanks/Dispensing Facility) Gasoline received from tank trucks, stored, and dispensed to motor vehicles.
B006 (12.5 MMBtu/hr Natural Gas Boiler) 12.5 MMBtu/hr boiler for heating hot water for all buildings except Building #7.	B018 (EAC #1 Dynamometer ) Engine emissions testing.	K001 (Prep. Booth & Air Makeup Heater) Surface coating of miscellaneous metal and non-metal parts.
B007 (1,232 hp Emergency Generator) 1,232 hp emergency generator used to provide emergency power to all buildings.	B019 (Power-Train Simulator Dynamometer (PTS)) Engine testing.	K002 (Paint/Surface Coat Booth & Air Makeup Heater) Surface coating of miscellaneous metal and non-metal parts.
B011 (12.5 MMBtu/hr Natural Gas Boiler) 12.5 MMBtu/hr boiler for heating hot water for all buildings except Building #7.	B021 (Hot/Cold Chamber (HCC) Dynamometer in building #7) Vehicle emissions testing.	K004 (Paint Booth) Painting of miscellaneous metal and plastic parts.
B012 (High Temp. Dynamometer) Vehicle emissions testing.	B022 (4WD Dynamometer Bldg 7) Vehicle emissions testing.	P005 (Prep. Oven) Baking of miscellaneous auto body parts in a 1.65 MMBtu/hr natural gas fired oven.
B013 (Performance Dynamometer Bldg 5 (Rm. 101)) Engine testing.	B023 (EM Dynamometer) Engine emissions testing for the EPA (use of complete vehicles.)	P006 (Paint/Surface Coat Oven) Baking of miscellaneous auto body parts in a 1.65 MMBtu/hr natural gas fired oven.
B014 (Performance Dynamometer Bldg 5 (Rm. 103)) Engine testing.	B024 (T/S Chassis Dynamometer) Vehicle emissions testing.	
B015 (Durability Dynamometer Bldg 5 (Rm. 105)) Engine testing.	B025 (Dark Room Dynamometer) Vehicle emissions testing.	
	B026 (ATV/Motorcycle Dynamometer) ATV/Motorcycle dynamometer in HSO building	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

Central District Office  
3232 Alum Creek Drive  
PO Box 1049  
Columbus, OH 43216-1049  
(614) 728-3778

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in black ink, appearing to read "Christopher Jones", is written over a solid black horizontal line.

Christopher Jones  
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. *State and Federally Enforceable Section*

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

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*
- c. The permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*
  - ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**
    - (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six

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

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

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

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

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

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

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

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

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

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the

report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."  
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

**2. Scheduled Maintenance/Malfunction Reporting**

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

**3. Risk Management Plans**

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

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

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

**4. Title IV Provisions**

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

**5. Severability Clause**

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

**6. General Requirements**

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

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

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

**7. Fees**

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

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

**8. Marketable Permit Programs**

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

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

**9. Reasonably Anticipated Operating Scenarios**

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

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

**10. Reopening for Cause**

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement.

No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

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

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

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

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

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

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

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

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

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

### **13. Permit Shield**

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

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

### **14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification

under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

## **15. Emergencies**

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

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

## **16. Off-Permit Changes**

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

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

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

(I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

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

**17. Compliance Method Requirements**

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

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

**18. Insignificant Activities**

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

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

**19. Permit to Install Requirement**

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

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

**20. Air Pollution Nuisance**

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

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

**B. State Only Enforceable Section**

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

The permittee shall submit required reports in the following manner:

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

**2. Records Retention Requirements**

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

**3. Inspections and Information Requests**

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

**4. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with

paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**5. Permit Transfers**

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

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

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

## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforcable Section

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
2. The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Engine Test Cells/Stands, 40 CFR Part 63, Subpart P. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.
3. If the final NESHAP standard is not promulgated by the deadline specified by U.S. EPA, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted within 60 days after the deadline to promulgate the respective standard or by May 15, 2003, whichever is later. It must contain the following information, unless otherwise specified by future U.S. EPA regulations:
  - a. for a new affected source, the anticipated date of startup of operation;
  - b. the hazardous air pollutants (HAPs) emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
  - c. any existing federal, State, or local limitations or requirements applicable to the affected source;
  - d. for each affected emission point or group of affected emission points, an identification of control technology in place;
  - e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
  - f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.

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

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

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

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

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

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

**B. State Only Enforceable Section**

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

B008 emergency fire pump generator, 121 horsepower;  
B010 work area heater;  
T001 Tank 1 (T-1) located at tank farm #5A;  
T002 Tank 2 (T-2) located at tank farm #5A;  
T003 Tank 3 (T-3) located at tank farm #5A;  
Z007 car idling emissions (tail-pipe exhaust);  
Z010 miscellaneous welding activities;  
Z011 laboratory hoods;  
Z012 test paint spray booth and oven;  
Z013 paint mix room;  
Z014 miscellaneous material use;  
Z015 sandblaster;  
Z016 small parts oven;  
Z021 cold cleaner in Building #4A;  
Z022 cold cleaner in Building #4A;  
Z023 cold cleaner in Building #5;  
Z024 cold cleaner in Building #5;  
Z025 cold cleaner in Building #5;  
Z026 cold cleaner in Building #4; and  
Z027 cold cleaner in Building #4A.

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

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

**Emissions Unit ID:** 10.4 MMBtu/hr Natural Gas Boiler (B001)

**Activity Description:** 10.4 MMBtu/hr boiler for heating hot water throughout all of Building #7.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
10.4 mmBtu/hr natural gas-fired boiler	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	40 CFR Part 60, Subpart Dc	See A.III.1 below.
	OAC rule 3745-21-08(B)	See A.I.2.b below.
	OAC rule 3745-23-06(B)	See A.I.2.c below.
	OAC rule 3745-31-05(A)(3) (PTI 01-2716)	Compliance with this rule also includes compliance with OAC rules 3745-17-07(A), 3745-17-10(B)(1), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 60, Subpart Dc.

##### 2. Additional Terms and Conditions

- 2.a OAC Chapter 18 does not specify a sulfur dioxide emission limitation that is applicable to this emissions unit.
- 2.b The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

## 2. Additional Terms and Conditions (continued)

- 2.c The design of the emissions unit and the technology associated with the current operating practices will satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06.

## II. Operational Restrictions

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

## III. Monitoring and/or Record Keeping Requirements

1. Pursuant to 40 CFR Part 60, Subpart Dc, the permittee shall record and maintain records of the amount of natural gas combusted during each day.
2. 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 each day during which records are not maintained on the amount of natural gas burned in this emissions unit. The quarterly reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.
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.

## V. Testing Requirements

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

Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (10,400 ft<sup>3</sup>/hr) by the emission factor from USEPA reference document AP-42, Fifth Edition, "Compilation of Air Pollutant Emission Factors", Section 1.4, Table 1.4-2 (7/98) for natural gas (1.9 lbs particulate/mmft<sup>3</sup>), and dividing by the maximum hourly heat input capacity of the emissions unit (10.4 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

## VI. Miscellaneous Requirements

None

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 12.5 MMBtu/hr Natural Gas Boiler (B005)

**Activity Description:** 12.5 MMBtu/hr boiler for heating hot water for all buildings except Building #7.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
12.5 mmBtu/hr natural gas-fired boiler	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	40 CFR Part 60, Subpart Dc	See A.III.1 below.
	OAC rule 3745-21-08(B)	See A.I.2.b below.
	OAC rule 3745-23-06(B)	See A.I.2.c below.
	OAC rule 3745-31-05(A)(3) (PTI 01-3914)	Compliance with this rule also includes compliance with OAC rules 3745-17-07(A), 3745-17-10(B)(1), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 60, Subpart Dc.

##### 2. Additional Terms and Conditions

- 2.a OAC Chapter 18 does not specify a sulfur dioxide emission limitation that is applicable to this emissions unit.
- 2.b The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

## 2. Additional Terms and Conditions (continued)

- 2.c The design of the emissions unit and the technology associated with the current operating practices will satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06.

## II. Operational Restrictions

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

## III. Monitoring and/or Record Keeping Requirements

1. Pursuant to 40 CFR Part 60, Subpart Dc, the permittee shall record and maintain records of the amount of natural gas combusted during each day.
2. 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 each day during which records are not maintained on the amount of natural gas burned in this emissions unit. The quarterly reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.
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.

## V. Testing Requirements

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

Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (12,500 ft<sup>3</sup>/hr) by the emission factor from USEPA reference document AP-42, Fifth Edition, "Compilation of Air Pollutant Emission Factors", Section 1.4, Table 1.4-2 (7/98) for natural gas (1.9 lbs particulate/mmft<sup>3</sup>), and dividing by the maximum hourly heat input capacity of the emissions unit (12.5 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

## VI. Miscellaneous Requirements

None

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 12.5 MMBtu/hr Natural Gas Boiler (B006)

**Activity Description:** 12.5 MMBtu/hr boiler for heating hot water for all buildings except Building #7.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
12.5 mmBtu/hr natural gas-fired boiler	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	40 CFR Part 60, Subpart Dc	See A.III.1 below.
	OAC rule 3745-21-08(B)	See A.I.2.b below.
	OAC rule 3745-23-06(B)	See A.I.2.c below.
	OAC rule 3745-31-05(A)(3) (PTI 01-3914)	Compliance with this rule also includes compliance with OAC rules 3745-17-07(A), 3745-17-10(B)(1), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 60, Subpart Dc.

##### 2. Additional Terms and Conditions

- 2.a** OAC Chapter 18 does not specify a sulfur dioxide emission limitation that is applicable to this emissions unit.
- 2.b** The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

## 2. Additional Terms and Conditions (continued)

- 2.c The design of the emissions unit and the technology associated with the current operating practices will satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06.

## II. Operational Restrictions

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

## III. Monitoring and/or Record Keeping Requirements

1. Pursuant to 40 CFR Part 60, Subpart Dc, the permittee shall record and maintain records of the amount of natural gas combusted during each day.
2. 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 each day during which records are not maintained on the amount of natural gas burned in this emissions unit. The quarterly reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.
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.

## V. Testing Requirements

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

Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (12,500 ft<sup>3</sup>/hr) by the emission factor from USEPA reference document AP-42, Fifth Edition, "Compilation of Air Pollutant Emission Factors", Section 1.4, Table 1.4-2 (7/98) for natural gas (1.9 lbs particulate/mmft<sup>3</sup>), and dividing by the maximum hourly heat input capacity of the emissions unit (12.5 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

## VI. Miscellaneous Requirements

None

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 1,232 hp Emergency Generator (B007)

**Activity Description:** 1,232 hp emergency generator used to provide emergency power to all buildings.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
1,232 horsepower (8.62 mmBtu/hour) diesel fuel-fired emergency generator and emergency fire pump	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions shall not exceed 0.062 lb/mmBtu of actual heat input.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-18-06(G)	Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu of actual heat input.
	OAC rule 3745-31-05(A)(3) (PTI 01-4470)	See A.II.3 through A.II.5 below.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(5)(b), 3745-17-07(A), 3745-18-06(G), 3745-23-06(B) and 3745-21-08(B).
	OAC rule 3745-21-08(B)	See A.I.2.a below.
OAC rule 3745-23-06(B)	See A.I.2.b below.	

##### 2. Additional Terms and Conditions

- 2.a The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

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

- 2.b** The design of the emissions unit and the technology associated with the current operating practices will satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06.

## **II. Operational Restrictions**

1. The permittee shall burn only diesel fuel in this emissions unit.
2. The quality of the diesel fuel burned in this emissions unit, shall have a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation (0.5 lb/mmBtu actual heat input), on an "as received" basis.
3. The heat content of the diesel fuel burned in this emissions unit shall be greater than 130,000 Btu/gallon.
4. Maximum diesel fuel usage shall not exceed 12,000 gallons per rolling, 12-month period for this emissions unit and its associated emergency fire pump.
5. The sulfur content of the diesel fuel shall not exceed 0.5% sulfur, by weight.

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

1. For each shipment of diesel fuel received for burning in this emissions unit, the permittee shall maintain records of the total quantity of diesel fuel received, the oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate in lb/mmBtu.
2. The permittee shall require the oil supplier to submit a representative analyses for each shipment of diesel fuel that is received for burning in this emissions unit. The permittee shall require the supplier to submit the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Ohio EPA, Central District Office.
3. For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
4. The permittee shall maintain monthly records of the following:
  - a. the amount of diesel fuel burned in this emissions unit; and
  - b. the rolling, 12-month summation of the amount of diesel fuel burned in this emissions unit and its associated emergency fire pump.

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

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. any record showing an exceedance of the sulfur dioxide emission limitation (0.5 lb/mmBtu of actual heat input);
  - b. any monthly record showing an exceedance of the rolling, 12-month diesel fuel usage limitation (12,000 gallons per rolling, 12-month period);
  - c. any record showing an exceedance of the diesel fuel sulfur content restriction (0.5% sulfur, by weight); and
  - d. any record showing that the diesel fuel heat content restriction (greater than 130,00 Btu/gallon) was not satisfied.

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

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

#### **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of this permit shall be determined in accordance with the following methods:
2. Emission Limitation:  
Particulate emissions shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated based upon the emission factor from USEPA reference document AP-42, Fifth Edition, "Compilation of Air Pollutant Emission Factors", Section 3.4, Table 3.4-2 (10/96) for diesel fuel (0.062 lb of particulates/mmBtu).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

3. Emission Limitation:  
Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

## V. Testing Requirements (continued)

4. Emission Limitation:  
Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be based upon the records required pursuant to Section A.III.2. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)(2) as follows:

$ER = (1 \times 10E6) / H \times D \times S \times 1.974$ , where:

ER = emission rate in pounds of sulfur dioxide per mm Btu;

H = the heat content of the fuel in Btu per gallon;

D = the density of the fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the fuel.

If required, compliance with this emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 12.5 MMBtu/hr Natural Gas Boiler (B011)

**Activity Description:** 12.5 MMBtu/hr boiler for heating hot water for all buildings except Building #7.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
12.5 mmBtu/hr natural gas-fired boiler	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	40 CFR Part 60, Subpart Dc	See A.III.1 below.
	OAC rule 3745-21-08(B)	See A.I.2.b below.
	OAC rule 3745-23-06(B)	See A.I.2.c below.
	OAC rule 3745-31-05(A)(3) (PTI 01-3914)	Compliance with this rule also includes compliance with OAC rules 3745-17-07(A), 3745-17-10(B)(1), 3745-21-08(B), 3745-23-06(B), and 40 CFR Part 60, Subpart Dc.

##### 2. Additional Terms and Conditions

- 2.a OAC Chapter 18 does not specify a sulfur dioxide emission limitation that is applicable to this emissions unit.
- 2.b The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

## 2. Additional Terms and Conditions (continued)

- 2.c The design of the emissions unit and the technology associated with the current operating practices will satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06.

## II. Operational Restrictions

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

## III. Monitoring and/or Record Keeping Requirements

1. Pursuant to 40 CFR Part 60, Subpart Dc, the permittee shall record and maintain records of the amount of natural gas combusted during each day.
2. 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 each day during which records are not maintained on the amount of natural gas burned in this emissions unit. The quarterly reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.
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.

## V. Testing Requirements

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

Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation:

Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (12,500 ft<sup>3</sup>/hr) by the emission factor from USEPA reference document AP-42, Fifth Edition, "Compilation of Air Pollutant Emission Factors", Section 1.4, Table 1.4-2 (7/98) for natural gas (1.9 lbs particulate/mmft<sup>3</sup>), and dividing by the maximum hourly heat input capacity of the emissions unit (12.5 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

## VI. Miscellaneous Requirements

None

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** High Temp. Dynamometer (B012)

**Activity Description:** Vehicle emissions testing.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
high temperature dynamometer in Building #7	OAC rule 3745-17-07(A)	None, see A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	None, see A.I.2.a below.
	OAC rule 3745-21-08(B)	None, see A.I.2.c below.
	OAC rule 3745-23-06(B)	None, see A.I.2.d below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).
	OAC rule 3745-31-05(A)(3) (PTI 01-08447)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.  Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.  Nitrogen oxides emissions shall not exceed 1.02 lbs/hr and 4.46 tons/yr.  Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.  Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.  Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

## 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c 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 Permit to Install 01-08447.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08447.
- 2.e The hourly and annual emission limitations specified in Section A.I.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from all the stacks serving the uncontrolled dynamometers which are in operation at the time of the weekly checks. At a minimum, the visible particulate emissions from each uncontrolled dynamometer stack shall be checked on a quarterly basis unless the dynamometer does not operate during the calendar quarter. The facility shall maintain records showing the operation time(s) of each dynamometer during each calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

The visible emissions check is not required to be performed by individuals certified to conduct USEPA Reference Method 9 observations.

No earlier than 6 months from the issuance of this permit, the permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the frequencies of the visible particulate emissions checks if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible particulate emissions check frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from any of the stacks serving the uncontrolled dynamometers and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations:  
Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 0.372 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor  $[(0.372 \text{ lb of carbon monoxide/gal} \times 22 \text{ gal/hr}) + (20\% \times 0.372 \text{ lb of carbon monoxide/gal} \times 22 \text{ gal/hr})]$ . The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (9.82 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

## V. Testing Requirements (continued)

3. Emission Limitations:  
Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.

Applicable Compliance Methods:

The hourly organic compound emission limitation was established by multiplying an emission factor of 0.0825 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0825 lb of organic compounds/gal x 22 gal/hr) + (20% x 0.0825 lb of organic compounds/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (2.18 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

4. Emission Limitations:  
Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.

Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0025 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0025 lb of particulates/gal x 22 gal/hr) + (20% x 0.0025 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.07 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

## V. Testing Requirements (continued)

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 1.02 lbs/hr and 4.46 tons/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 102 lbs of nitrogen oxides/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.003 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (1.02 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0001 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.053 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Performance Dynamometer Bldg 5 (Rm. 101) (B013)  
**Activity Description:** Engine testing.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
performance dynamometer in Building #5 (room 101) controlled with a thermal incinerator	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	See A.I.2.a below.
	OAC rule 3745-23-06(B)	See A.I.2.b below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) (PTI 01-08447)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.124 lb/hr and 0.543 ton/yr.  Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.  Nitrogen oxides emissions shall not exceed 1.32 lbs/hr and 5.78 tons/yr.  Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.  Carbon monoxide emissions shall not exceed 0.79 lb/hr and 3.45 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-23-06(B), and 3745-21-08(B).

## 2. Additional Terms and Conditions

- 2.a** 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 Permit to Install 01-08447.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08447.
- 2.c** The particulate, nitrogen oxides, sulfur dioxide, and organic compound emission limitations specified in Section A.1.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.
- 2.d** The internal combustion engines used in association with this emissions unit have a rated power of less than or equal to 600 horsepower and are not used to, or intended to, propel any vehicle.

## II. Operational Restrictions

- 1.** The emissions generated by this emissions unit shall be vented to a thermal incinerator which shall reduce carbon monoxide emissions to not more than 0.79 lb/hr.

## **II. Operational Restrictions (continued)**

2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

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

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day for the control equipment:
  - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation; and
  - b. all 3-hour blocks of time during which the average combustion temperatures within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified above. The reports shall be submitted in accordance with General Term and Condition A.1.c.ii.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

### 2. Emission Limitations:

Carbon monoxide emissions shall not exceed 0.79 lb/hr and 3.45 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 3,940 lbs of carbon monoxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr) by the thermal incinerator's control efficiency for this pollutant (1-.98). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0047 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (0.79 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

### 3. Emission Limitations:

Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.

#### Applicable Compliance Methods:

The hourly organic compound emission limitation was established by multiplying an emission factor of 148 lbs of organic compounds/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0002 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (1.48 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

## V. Testing Requirements (continued)

4. Emission Limitations:  
Particulate emissions shall not exceed 0.124 lb/hr and 0.543 ton/yr.

Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0047 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0047 lb of particulates/gal x 22 gal/hr) + (20% x 0.0047 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.124 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 1.32 lbs/hr and 5.78 tons/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 0.05 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.05 lb of nitrogen oxides/gal x 22 gal/hr) + (20% x 0.05 lb of nitrogen oxides/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (1.32 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0012 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.053 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

**V. Testing Requirements (continued)**

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Performance Dynamometer Bldg 5 (Rm. 103) (B014)

**Activity Description:** Engine testing.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
performance dynamometer in Building #5 (room 103) controlled with a thermal incinerator	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	See A.I.2.a below.
	OAC rule 3745-23-06(B)	See A.I.2.b below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) (PTI 01-08447)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.124 lb/hr and 0.543 ton/yr.  Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.  Nitrogen oxides emissions shall not exceed 1.32 lbs/hr and 5.78 tons/yr.  Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.  Carbon monoxide emissions shall not exceed 0.79 lb/hr and 3.45 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-23-06(B), and 3745-21-08(B).

## 2. Additional Terms and Conditions

- 2.a** 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 Permit to Install 01-08447.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08447.
- 2.c** The particulate, nitrogen oxides, sulfur dioxide, and organic compound emission limitations specified in Section A.1.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.
- 2.d** The internal combustion engines used in association with this emissions unit have a rated power of less than or equal to 600 horsepower and are not used to, or intended to, propel any vehicle.

## II. Operational Restrictions

- 1.** The emissions generated by this emissions unit shall be vented to a thermal incinerator which shall reduce carbon monoxide emissions to not more than 0.79 lb/hr.

## **II. Operational Restrictions (continued)**

2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

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

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day for the control equipment:
  - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation; and
  - b. all 3-hour blocks of time during which the average combustion temperatures within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified above. The reports shall be submitted in accordance with General Term and Condition A.1.c.ii.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

### 2. Emission Limitations:

Carbon monoxide emissions shall not exceed 0.79 lb/hr and 3.45 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 3,940 lbs of carbon monoxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr) by the thermal incinerator's control efficiency for this pollutant (1-.98). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0047 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (0.79 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

### 3. Emission Limitations:

Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.

#### Applicable Compliance Methods:

The hourly organic compound emission limitation was established by multiplying an emission factor of 148 lbs of organic compounds/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0002 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (1.48 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

## V. Testing Requirements (continued)

4. Emission Limitations:  
Particulate emissions shall not exceed 0.124 lb/hr and 0.543 ton/yr.

Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0047 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0047 lb of particulates/gal x 22 gal/hr) + (20% x 0.0047 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.124 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 1.32 lbs/hr and 5.78 tons/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 0.05 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.05 lb of nitrogen oxides/gal x 22 gal/hr) + (20% x 0.05 lb of nitrogen oxides/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (1.32 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0012 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.053 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

**V. Testing Requirements (continued)**

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Durability Dynamometer Bldg 5 (Rm. 105) (B015)

**Activity Description:** Engine testing.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
performance dynamometer in Building #5 (room 105) controlled with a thermal incinerator	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	See A.I.2.a below.
	OAC rule 3745-23-06(B)	See A.I.2.b below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) (PTI 01-08447)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.124 lb/hr and 0.543 ton/yr.  Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.  Nitrogen oxides emissions shall not exceed 1.32 lbs/hr and 5.78 tons/yr.  Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.  Carbon monoxide emissions shall not exceed 0.79 lb/hr and 3.45 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-23-06(B), and 3745-21-08(B).

## 2. Additional Terms and Conditions

- 2.a** 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 Permit to Install 01-08447.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08447.
- 2.c** The particulate, nitrogen oxides, sulfur dioxide, and organic compound emission limitations specified in Section A.1.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.
- 2.d** The internal combustion engines used in association with this emissions unit have a rated power of less than or equal to 600 horsepower and are not used to, or intended to, propel any vehicle.

## II. Operational Restrictions

- 1.** The emissions generated by this emissions unit shall be vented to a thermal incinerator which shall reduce carbon monoxide emissions to not more than 0.79 lb/hr.

## **II. Operational Restrictions (continued)**

2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

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

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day for the control equipment:
  - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation; and
  - b. all 3-hour blocks of time during which the average combustion temperatures within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified above. The reports shall be submitted in accordance with General Term and Condition A.1.c.ii.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

### 2. Emission Limitations:

Carbon monoxide emissions shall not exceed 0.79 lb/hr and 3.45 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 3,940 lbs of carbon monoxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr) by the thermal incinerator's control efficiency for this pollutant (1-.98). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0047 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (0.79 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

### 3. Emission Limitations:

Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.

#### Applicable Compliance Methods:

The hourly organic compound emission limitation was established by multiplying an emission factor of 148 lbs of organic compounds/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0002 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (1.48 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

## V. Testing Requirements (continued)

4. Emission Limitations:  
Particulate emissions shall not exceed 0.124 lb/hr and 0.543 ton/yr.

Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0047 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0047 lb of particulates/gal x 22 gal/hr) + (20% x 0.0047 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.124 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 1.32 lbs/hr and 5.78 tons/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 0.05 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.05 lb of nitrogen oxides/gal x 22 gal/hr) + (20% x 0.05 lb of nitrogen oxides/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (1.32 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0012 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.053 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

**V. Testing Requirements (continued)**

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Transmission Dynamometer Bldg 5 (Rm. 107) (B016)  
**Activity Description:** Engine testing.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
performance dynamometer in Building #5 (room 107) controlled with a thermal incinerator	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	See A.I.2.a below.
	OAC rule 3745-23-06(B)	See A.I.2.b below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) (PTI 01-08447)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.124 lb/hr and 0.543 ton/yr.  Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.  Nitrogen oxides emissions shall not exceed 1.32 lbs/hr and 5.78 tons/yr.  Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.  Carbon monoxide emissions shall not exceed 0.79 lb/hr and 3.45 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-23-06(B), and 3745-21-08(B).

## 2. Additional Terms and Conditions

- 2.a** 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 Permit to Install 01-08447.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08447.
- 2.c** The particulate, nitrogen oxides, sulfur dioxide, and organic compound emission limitations specified in Section A.1.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.
- 2.d** The internal combustion engines used in association with this emissions unit have a rated power of less than or equal to 600 horsepower and are not used to, or intended to, propel any vehicle.

## II. Operational Restrictions

- 1.** The emissions generated by this emissions unit shall be vented to a thermal incinerator which shall reduce carbon monoxide emissions to not more than 0.79 lb/hr.

## **II. Operational Restrictions (continued)**

2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

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

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day for the control equipment:
  - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation; and
  - b. all 3-hour blocks of time during which the average combustion temperatures within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified above. The reports shall be submitted in accordance with General Term and Condition A.1.c.ii.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

### 2. Emission Limitations:

Carbon monoxide emissions shall not exceed 0.79 lb/hr and 3.45 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 3,940 lbs of carbon monoxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr) by the thermal incinerator's control efficiency for this pollutant (1-.98). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0047 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (0.79 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

### 3. Emission Limitations:

Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.

#### Applicable Compliance Methods:

The hourly organic compound emission limitation was established by multiplying an emission factor of 148 lbs of organic compounds/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0002 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (1.48 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

## V. Testing Requirements (continued)

4. Emission Limitations:  
Particulate emissions shall not exceed 0.124 lb/hr and 0.543 ton/yr.

Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0047 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0047 lb of particulates/gal x 22 gal/hr) + (20% x 0.0047 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.124 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 1.32 lbs/hr and 5.78 tons/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 0.05 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.05 lb of nitrogen oxides/gal x 22 gal/hr) + (20% x 0.05 lb of nitrogen oxides/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (1.32 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0012 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.053 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

**V. Testing Requirements (continued)**

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Emissions Dynamometer, Building #5 (B017)  
**Activity Description:** Engine emission testing for the EPA (use of complete cars).

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
emissions dynamometer in Building #5	OAC rule 3745-17-07(A)	None, see A.1.2.b below.
	OAC rule 3745-17-11(B)(1)	None, see A.1.2.a below.
	OAC rule 3745-21-08(B)	None, see A.1.2.c below.
	OAC rule 3745-23-06(B)	None, see A.1.2.d below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).
	OAC rule 3745-31-05(A)(3) (PTI 01-6771)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.0647 lb/hr and 0.283 ton/yr.  Sulfur dioxide emissions shall not exceed 0.0531 lb/hr and 0.232 ton/yr.  Nitrogen oxides emissions shall not exceed 1.02 lbs/hr and 4.46 tons/yr.  Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.  Carbon monoxide emissions shall not exceed 2.0 lbs/hr and 8.76 tons/yr.  Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

## 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c 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 Permit to Install 01-6771.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-6771.
- 2.e The hourly and annual emission limitations specified in Section A.I.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.

## II. Operational Restrictions

- 1. This emissions unit shall not test any vehicle with an engine larger than a V6, in order to restrict fuel usage to 10 gallons of gasoline per hour, and alleviate daily record keeping requirements.

## III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from all the stacks serving the uncontrolled dynamometers which are in operation at the time of the weekly checks. At a minimum, the visible particulate emissions from each uncontrolled dynamometer stack shall be checked on a quarterly basis unless the dynamometer does not operate during the calendar quarter. The facility shall maintain records showing the operation time(s) of each dynamometer during each calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

The visible emissions check is not required to be performed by individuals certified to conduct USEPA Reference Method 9 observations.

No earlier than 6 months from the issuance of this permit, the permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the frequencies of the visible particulate emissions checks if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible particulate emissions check frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

2. The permittee shall maintain a record of any period of time when a vehicle with an engine larger than a V6 is tested in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from any of the stacks serving the uncontrolled dynamometers and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
3. The permittee shall submit deviation (excursion) reports that identify any period of time when a vehicle with an engine larger than a V6 was tested in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations:  
Carbon monoxide emissions shall not exceed 2.0 lbs/hr and 8.76 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 0.2 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's restricted gasoline usage rate (10 gallons/hr). The emission factor was established using emission test data from a similar emissions unit (emissions unit B018) tested on 8/20/97.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (2.0 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

## V. Testing Requirements (continued)

**3. Emission Limitations:**

Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.

**Applicable Compliance Methods:**

The hourly organic compound emission limitation was established by multiplying an emission factor of 148 lbs of organic compounds/1000 gallons of gasoline burned by the emissions unit's restricted gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (1.48 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

**4. Emission Limitations:**

Particulate emissions shall not exceed 0.0647 lb/hr and 0.283 ton/yr.

**Applicable Compliance Methods:**

The hourly particulate emission limitation was established by multiplying an emission factor of 6.47 lbs of particulates/1000 gallons of gasoline burned by the emissions unit's restricted gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.0647 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

**5. Emission Limitations:**

Nitrogen oxides emissions shall not exceed 1.02 lbs/hr and 4.46 tons/yr.

**Applicable Compliance Methods:**

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 148 lbs of nitrogen oxides/1000 gallons of gasoline burned by the emissions unit's restricted gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (1.48 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.0531 lb/hr and 0.232 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's restricted gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.0531 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** EAC #1 Dynamometer (B018)

**Activity Description:** Engine emissions testing.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
gasoline engine testing dynamometer - EAC #1 dynamometer in Building #7	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	See A.I.2.a below.
	OAC rule 3745-23-06(B)	See A.I.2.b below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) (PTI 01-08447)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.  Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.  Nitrogen oxides emissions shall not exceed 1.02 lbs/hr and 4.46 tons/yr.  Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.  Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-23-06(B), and 3745-21-08(B).

## 2. Additional Terms and Conditions

- 2.a** 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 Permit to Install 01-08447.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08447.
- 2.c** The hourly and annual emission limitations specified in Section A.I.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.
- 2.d** The internal combustion engines used in association with this emissions unit have a rated power of less than or equal to 600 horsepower and are not used to, or intended to, propel any vehicle.

## II. Operational Restrictions

None

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

1. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from all the stacks serving the uncontrolled dynamometers which are in operation at the time of the weekly checks. At a minimum, the visible particulate emissions from each uncontrolled dynamometer stack shall be checked on a quarterly basis unless the dynamometer does not operate during the calendar quarter. The facility shall maintain records showing the operation time(s) of each dynamometer during each calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The visible emissions check is not required to be performed by individuals certified to conduct USEPA Reference Method 9 observations.

No earlier than 6 months from the issuance of this permit, the permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the frequencies of the visible particulate emissions checks if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible particulate emissions check frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from any of the stacks serving the uncontrolled dynamometers and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports which specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

**2. Emission Limitations:**

Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.

**Applicable Compliance Methods:**

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 0.372 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.372 lb of carbon monoxide/gal x 22 gal/hr) + (20% x 0.372 lb of carbon monoxide/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (9.82 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

**3. Emission Limitations:**

Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.

**Applicable Compliance Methods:**

The hourly organic compound emission limitation was established by multiplying an emission factor of 0.0825 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0825 lb of organic compounds/gal x 22 gal/hr) + (20% x 0.0825 lb of organic compounds/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (2.18 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

**4. Emission Limitations:**

Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.

**Applicable Compliance Methods:**

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0025 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0025 lb of particulates/gal x 22 gal/hr) + (20% x 0.0025 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.07 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

## V. Testing Requirements (continued)

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 1.02 lbs/hr and 4.46 tons/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 102 lbs of nitrogen oxides/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.003 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (1.02 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0001 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.053 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

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

## VI. Miscellaneous Requirements

None

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Power-Train Simulator Dynamometer (PTS) (B019)

**Activity Description:** Engine testing.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
power-train simulator (PTS) dynamometer in Building #5 controlled with a thermal incinerator	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	See A.I.2.a below.
	OAC rule 3745-23-06(B)	See A.I.2.b below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) (PTI 01-08447)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.124 lb/hr and 0.543 ton/yr.  Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.  Nitrogen oxides emissions shall not exceed 1.32 lbs/hr and 5.78 tons/yr.  Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.  Carbon monoxide emissions shall not exceed 0.79 lb/hr and 3.45 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-23-06(B), and 3745-21-08(B).

## 2. Additional Terms and Conditions

- 2.a** 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 Permit to Install 01-08447.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08447.
- 2.c** The particulate, nitrogen oxides, sulfur dioxide, and organic compound emission limitations specified in Section A.1.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.
- 2.d** The internal combustion engines used in association with this emissions unit have a rated power of less than or equal to 600 horsepower and are not used to, or intended to, propel any vehicle.

## II. Operational Restrictions

- 1.** The emissions generated by this emissions unit shall be vented to a thermal incinerator which shall reduce carbon monoxide emissions to not more than 0.79 lb/hr.

## **II. Operational Restrictions (continued)**

2. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

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

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day for the control equipment:
  - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation; and
  - b. all 3-hour blocks of time during which the average combustion temperatures within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified above. The reports shall be submitted in accordance with General Term and Condition A.1.c.ii.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

### 2. Emission Limitations:

Carbon monoxide emissions shall not exceed 0.79 lb/hr and 3.45 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 3,940 lbs of carbon monoxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr) by the thermal incinerator's control efficiency for this pollutant (1-.98). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0047 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (0.79 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

### 3. Emission Limitations:

Organic compound emissions shall not exceed 1.48 lbs/hr and 6.48 tons/yr.

#### Applicable Compliance Methods:

The hourly organic compound emission limitation was established by multiplying an emission factor of 148 lbs of organic compounds/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0002 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (1.48 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

## V. Testing Requirements (continued)

4. Emission Limitations:  
Particulate emissions shall not exceed 0.124 lb/hr and 0.543 ton/yr.

Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0047 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0047 lb of particulates/gal x 22 gal/hr) + (20% x 0.0047 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.124 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 1.32 lbs/hr and 5.78 tons/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 0.05 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.05 lb of nitrogen oxides/gal x 22 gal/hr) + (20% x 0.05 lb of nitrogen oxides/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (1.32 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0012 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/2/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.053 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

**V. Testing Requirements (continued)**

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Hot/Cold Chamber (HCC) Dynamometer in building #7 (B021)

**Activity Description:** Vehicle emissions testing.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
hot/cold chamber (HCC) dynamometer in Building #7	OAC rule 3745-17-07(A)	None, see A.1.2.b below.
	OAC rule 3745-17-11(B)(1)	None, see A.1.2.a below.
	OAC rule 3745-21-08(B)	None, see A.1.2.c below.
	OAC rule 3745-23-06(B)	None, see A.1.2.d below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).
	OAC rule 3745-31-05(A)(3) (PTI 01-08447)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.  Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.  Nitrogen oxides emissions shall not exceed 1.02 lbs/hr and 4.46 tons/yr.  Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.  Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.  Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

## 2. Additional Terms and Conditions

- 2.a** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c** 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 Permit to Install 01-08447.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.d** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08447.
- 2.e** The hourly and annual emission limitations specified in Section A.I.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from all the stacks serving the uncontrolled dynamometers which are in operation at the time of the weekly checks. At a minimum, the visible particulate emissions from each uncontrolled dynamometer stack shall be checked on a quarterly basis unless the dynamometer does not operate during the calendar quarter. The facility shall maintain records showing the operation time(s) of each dynamometer during each calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the color of the emissions;
  - whether the emissions are representative of normal operations;
  - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - the total duration of any visible emission incident; and
  - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

The visible emissions check is not required to be performed by individuals certified to conduct USEPA Reference Method 9 observations.

No earlier than 6 months from the issuance of this permit, the permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the frequencies of the visible particulate emissions checks if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible particulate emissions check frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from any of the stacks serving the uncontrolled dynamometers and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations:  
Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 0.372 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor  $[(0.372 \text{ lb of carbon monoxide/gal} \times 22 \text{ gal/hr}) + (20\% \times 0.372 \text{ lb of carbon monoxide/gal} \times 22 \text{ gal/hr})]$ . The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (9.82 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

## V. Testing Requirements (continued)

3. Emission Limitations:  
Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.

Applicable Compliance Methods:

The hourly organic compound emission limitation was established by multiplying an emission factor of 0.0825 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0825 lb of organic compounds/gal x 22 gal/hr) + (20% x 0.0825 lb of organic compounds/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (2.18 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

4. Emission Limitations:  
Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.

Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0025 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0025 lb of particulates/gal x 22 gal/hr) + (20% x 0.0025 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.07 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

## V. Testing Requirements (continued)

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 1.02 lbs/hr and 4.46 tons/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 102 lbs of nitrogen oxides/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.003 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (1.02 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0001 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.053 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 4WD Dynamometer Bldg 7 (B022)

**Activity Description:** Vehicle emissions testing.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
4-wheel drive (4WD) dynamometer in Building #7	OAC rule 3745-17-07(A)	None, see A.1.2.b below.
	OAC rule 3745-17-11(B)(1)	None, see A.1.2.a below.
	OAC rule 3745-21-08(B)	None, see A.1.2.c below.
	OAC rule 3745-23-06(B)	None, see A.1.2.d below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).
	OAC rule 3745-31-05(A)(3) (PTI 01-08447)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.  Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.  Nitrogen oxides emissions shall not exceed 1.02 lbs/hr and 4.46 tons/yr.  Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.  Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.  Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

## 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c 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 Permit to Install 01-08447.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08447.
- 2.e The hourly and annual emission limitations specified in Section A.I.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from all the stacks serving the uncontrolled dynamometers which are in operation at the time of the weekly checks. At a minimum, the visible particulate emissions from each uncontrolled dynamometer stack shall be checked on a quarterly basis unless the dynamometer does not operate during the calendar quarter. The facility shall maintain records showing the operation time(s) of each dynamometer during each calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

The visible emissions check is not required to be performed by individuals certified to conduct USEPA Reference Method 9 observations.

No earlier than 6 months from the issuance of this permit, the permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the frequencies of the visible particulate emissions checks if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible particulate emissions check frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from any of the stacks serving the uncontrolled dynamometers and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations:  
Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 0.372 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor  $[(0.372 \text{ lb of carbon monoxide/gal} \times 22 \text{ gal/hr}) + (20\% \times 0.372 \text{ lb of carbon monoxide/gal} \times 22 \text{ gal/hr})]$ . The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (9.82 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

## V. Testing Requirements (continued)

3. Emission Limitations:  
Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.

Applicable Compliance Methods:

The hourly organic compound emission limitation was established by multiplying an emission factor of 0.0825 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0825 lb of organic compounds/gal x 22 gal/hr) + (20% x 0.0825 lb of organic compounds/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (2.18 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

4. Emission Limitations:  
Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.

Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0025 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0025 lb of particulates/gal x 22 gal/hr) + (20% x 0.0025 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.07 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

## V. Testing Requirements (continued)

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 1.02 lbs/hr and 4.46 tons/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 102 lbs of nitrogen oxides/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.003 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (1.02 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.053 lb/hr and 0.232 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's original gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.01) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

Compliance with the hourly emission limitation may be demonstrated by multiplying an emission factor of 0.0001 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr). The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.053 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** EM Dynamometer (B023)

**Activity Description:** Engine emissions testing for the EPA (use of complete vehicles.)

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
emissions dynamometer in Building #5	OAC rule 3745-17-07(A)	None, see A.1.2.b below.
	OAC rule 3745-17-11(B)(1)	None, see A.1.2.a below.
	OAC rule 3745-21-08(B)	None, see A.1.2.c below.
	OAC rule 3745-23-06(B)	None, see A.1.2.d below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).
	OAC rule 3745-31-05(A)(3) (PTI 01-08305)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.04 lb/hr and 0.18 ton/yr.  Sulfur dioxide emissions shall not exceed 0.05 lb/hr and 0.23 ton/yr.  Nitrogen oxides emissions shall not exceed 0.25 lb/hr and 1.11 tons/yr.  Organic compound emissions shall not exceed 0.13 lb/hr and 0.57 ton/yr.  Carbon monoxide emissions shall not exceed 2.00 lbs/hr and 8.76 tons/yr.  Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

## 2. Additional Terms and Conditions

- 2.a** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c** 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 Permit to Install 01-08305.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.d** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08305.
- 2.e** The hourly and annual emission limitations specified in Section A.I.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from all the stacks serving the uncontrolled dynamometers which are in operation at the time of the weekly checks. At a minimum, the visible particulate emissions from each uncontrolled dynamometer stack shall be checked on a quarterly basis unless the dynamometer does not operate during the calendar quarter. The facility shall maintain records showing the operation time(s) of each dynamometer during each calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the color of the emissions;
  - whether the emissions are representative of normal operations;
  - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - the total duration of any visible emission incident; and
  - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

The visible emissions check is not required to be performed by individuals certified to conduct USEPA Reference Method 9 observations.

No earlier than 6 months from the issuance of this permit, the permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the frequencies of the visible particulate emissions checks if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible particulate emissions check frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from any of the stacks serving the uncontrolled dynamometers and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations:  
Carbon monoxide emissions shall not exceed 2.0 lbs/hr and 8.76 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 0.2 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (10 gallons/hr). The emission factor was established using emission test data from a similar emissions unit (emissions unit B018) tested on 8/20/97.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (2.0 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

## V. Testing Requirements (continued)

**3. Emission Limitations:**

Organic compound emissions shall not exceed 0.13 lb/hr and 0.57 ton/yr.

**Applicable Compliance Methods:**

The hourly organic compound emission limitation was established by multiplying an emission factor of 0.31 gram of organic compounds/mile by an average vehicle fuel economy of 19.1 miles/gallon by the emissions unit's restricted gasoline usage rate (10 gallons/hr) and dividing by a conversion factor of 454 grams/lb. The emission factor is specified in 40 CFR Part 86.096-8, Table A96-2.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (0.13 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

**4. Emission Limitations:**

Particulate emissions shall not exceed 0.04 lb/hr and 0.18 ton/yr.

**Applicable Compliance Methods:**

The hourly particulate emission limitation was established by multiplying an emission factor of 0.10 gram of particulates/mile by an average vehicle fuel economy of 19.1 miles/gallon by the emissions unit's restricted gasoline usage rate (10 gallons/hr) and dividing by a conversion factor of 454 grams/lb. The emission factor is specified in 40 CFR Part 86.096-8, Table A96-2.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.04 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

**5. Emission Limitations:**

Nitrogen oxides emissions shall not exceed 0.25 lb/hr and 1.11 tons/yr.

**Applicable Compliance Methods:**

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 0.60 gram of nitrogen oxides/mile by an average vehicle fuel economy of 19.1 miles/gallon by the emissions unit's restricted gasoline usage rate (10 gallons/hr) and dividing by a conversion factor of 454 grams/lb. The emission factor is specified in 40 CFR Part 86.096-8, Table A96-2.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (0.25 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

## V. Testing Requirements (continued)

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.05 lb/hr and 0.23 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emissions unit's maximum gasoline usage rate (10 gallons/hr). The emission factor is specified in USEPA's Factor Information Retrieval Data System (FIRE 6.23) for criteria air pollutants (using SCC number 20400401 for reciprocation gasoline engines).

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.0531 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** T/S Chassis Dynamometer (B024)

**Activity Description:** Vehicle emissions testing.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
T/S Chassis dynamometer - 400 horsepower	OAC rule 3745-17-07(A)	None, see A.1.2.b below.
	OAC rule 3745-17-11(B)(1)	None, see A.1.2.a below.
	OAC rule 3745-21-08(B)	None, see A.1.2.c below.
	OAC rule 3745-23-06(B)	None, see A.1.2.d below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).
	OAC rule 3745-31-05(A)(3) (PTI 01-08441)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.  Sulfur dioxide emissions shall not exceed 0.003 lb/hr and 0.01 ton/yr.  Nitrogen oxides emissions shall not exceed 0.08 lb/hr and 0.35 ton/yr.  Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.  Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.  Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

## 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c 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 Permit to Install 01-08441.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08441.
- 2.e The hourly and annual emission limitations specified in Section A.I.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from all the stacks serving the uncontrolled dynamometers which are in operation at the time of the weekly checks. At a minimum, the visible particulate emissions from each uncontrolled dynamometer stack shall be checked on a quarterly basis unless the dynamometer does not operate during the calendar quarter. The facility shall maintain records showing the operation time(s) of each dynamometer during each calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

The visible emissions check is not required to be performed by individuals certified to conduct USEPA Reference Method 9 observations.

No earlier than 6 months from the issuance of this permit, the permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the frequencies of the visible particulate emissions checks if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible particulate emissions check frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from any of the stacks serving the uncontrolled dynamometers and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations:  
Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 0.372 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor  $[(0.372 \text{ lb of carbon monoxide/gal} \times 22 \text{ gal/hr}) + (20\% \times 0.372 \text{ lb of carbon monoxide/gal} \times 22 \text{ gal/hr})]$ . The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (9.82 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

## V. Testing Requirements (continued)

3. Emission Limitations:  
Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.

Applicable Compliance Methods:

The hourly organic compound emission limitation was established by multiplying an emission factor of 0.0825 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0825 lb of organic compounds/gal x 22 gal/hr) + (20% x 0.0825 lb of organic compounds/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (2.18 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

4. Emission Limitations:  
Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.

Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0025 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0025 lb of particulates/gal x 22 gal/hr) + (20% x 0.0025 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.07 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 0.08 lb/hr and 0.35 ton/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 0.003 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a safety factor of 20% [(0.003 lb of nitrogen oxides/gal x 22 gal/hr) + (20% x 0.003 lb of nitrogen oxides/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (0.003 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.003 lb/hr and 0.01 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 0.0001 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a safety factor of 20% [(0.0001 lb of sulfur dioxide/gal x 22 gal/hr) + (20% x 0.0001 lb of sulfur dioxide/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.0001 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Dark Room Dynamometer (B025)

**Activity Description:** Vehicle emissions testing.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
dark room dynamometer - 300 horsepower	OAC rule 3745-17-07(A)	None, see A.1.2.b below.
	OAC rule 3745-17-11(B)(1)	None, see A.1.2.a below.
	OAC rule 3745-21-08(B)	None, see A.1.2.c below.
	OAC rule 3745-23-06(B)	None, see A.1.2.d below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).
	OAC rule 3745-31-05(A)(3) (PTI 01-08441)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.  Sulfur dioxide emissions shall not exceed 0.003 lb/hr and 0.01 ton/yr.  Nitrogen oxides emissions shall not exceed 0.08 lb/hr and 0.35 ton/yr.  Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.  Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.  Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

## 2. Additional Terms and Conditions

- 2.a** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c** 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 Permit to Install 01-08441.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.d** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-08441.
- 2.e** The hourly and annual emission limitations specified in Section A.I.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from all the stacks serving the uncontrolled dynamometers which are in operation at the time of the weekly checks. At a minimum, the visible particulate emissions from each uncontrolled dynamometer stack shall be checked on a quarterly basis unless the dynamometer does not operate during the calendar quarter. The facility shall maintain records showing the operation time(s) of each dynamometer during each calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the color of the emissions;
  - whether the emissions are representative of normal operations;
  - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - the total duration of any visible emission incident; and
  - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

The visible emissions check is not required to be performed by individuals certified to conduct USEPA Reference Method 9 observations.

No earlier than 6 months from the issuance of this permit, the permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the frequencies of the visible particulate emissions checks if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible particulate emissions check frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from any of the stacks serving the uncontrolled dynamometers and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

### V. Testing Requirements

1. Compliance with the emission limitations specified in Section A.I.1 of this permit shall be determined in accordance with the following methods:
2. Emission Limitations:  
Carbon monoxide emissions shall not exceed 9.82 lbs/hr and 43.0 tons/yr.

#### Applicable Compliance Methods:

The hourly carbon monoxide emission limitation was established by multiplying an emission factor of 0.372 lb of carbon monoxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor  $[(0.372 \text{ lb of carbon monoxide/gal} \times 22 \text{ gal/hr}) + (20\% \times 0.372 \text{ lb of carbon monoxide/gal} \times 22 \text{ gal/hr})]$ . The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (9.82 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

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

## V. Testing Requirements (continued)

3. Emission Limitations:  
Organic compound emissions shall not exceed 2.18 lbs/hr and 9.55 tons/yr.

Applicable Compliance Methods:

The hourly organic compound emission limitation was established by multiplying an emission factor of 0.0825 lb of organic compounds/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0825 lb of organic compounds/gal x 22 gal/hr) + (20% x 0.0825 lb of organic compounds/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual organic compound emission limitation was established by multiplying the hourly emission limitation (2.18 lbs/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly organic compound emission limitation.

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

4. Emission Limitations:  
Particulate emissions shall not exceed 0.07 lb/hr and 0.30 ton/yr.

Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 0.0025 lb of particulates/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a 20% safety factor [(0.0025 lb of particulates/gal x 22 gal/hr) + (20% x 0.0025 lb of particulates/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.07 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 0.08 lb/hr and 0.35 ton/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 0.003 lb of nitrogen oxides/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a safety factor of 20% [(0.003 lb of nitrogen oxides/gal x 22 gal/hr) + (20% x 0.003 lb of nitrogen oxides/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (0.003 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

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

6. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.003 lb/hr and 0.01 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 0.0001 lb of sulfur dioxide/gallon of gasoline burned by the emissions unit's maximum gasoline usage rate (22 gallons/hr) and adding a safety factor of 20% [(0.0001 lb of sulfur dioxide/gal x 22 gal/hr) + (20% x 0.0001 lb of sulfur dioxide/gal x 22 gal/hr)]. The emission factor was established using emission test data from a similar emissions unit tested on 6/4/01.

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.0001 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

7. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** ATV/Motorcycle Dynamometer (B026)  
**Activity Description:** ATV/Motorcycle dynamometer in HSO building #2

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Motorcycle and ATV engine testing dynamometer fired by gasoline in HSO building #2	OAC rule 3745-31-05(A)(3) PTI 01-8635	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations:  Particulate emissions shall not exceed 0.03 lb/hr and 0.1 ton/yr.  Sulfur dioxide emissions shall not exceed 0.02 lb/hr and 0.1 ton/yr.  Nitrogen oxides emissions shall not exceed 0.41 lb/hr and 1.8 tons/yr.  Volatile organic compound emissions shall not exceed 0.59 lb/hr and 2.6 tons/yr.  Carbon monoxide emissions shall not exceed 15.76 lbs/hr and 69.0 tons/yr.  Visible particulate emissions from the stack shall not exceed 20% opacity as a 6-minute average.
	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.b below.
	OAC rule 3745-21-08(B)	See A.I.2.c below.
	OAC rule 3745-23-06(B)	See A.I.2.d below.
	OAC rule 3745-18-06	None, exempt pursuant to OAC rule 3745-18-06(B).

## 2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate emissions specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.c 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 Permit to Install 01-8635.

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). Therefore, until 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" still exists as part of the federally-approved SIP for Ohio.

- 2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-8635.
- 2.e The hourly and annual emission limitations specified in Section A.I.1 reflect the emissions unit's potential to emit for these pollutants; therefore, no additional monitoring, record keeping or reporting requirements are necessary to ensure compliance with these emission limitations.

## II. Operational Restrictions

- 1. All vehicle exhaust emissions shall be captured and vented to the stack serving this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from all the stacks serving the uncontrolled dynamometers which are in operation at the time of the weekly checks. At a minimum, the visible particulate emissions from each uncontrolled dynamometer stack shall be checked on a quarterly basis unless the dynamometer does not operate during the calendar quarter. The facility shall maintain records showing the operation time(s) of each dynamometer during each calendar quarter. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

The visible emissions check is not required to be performed by individuals certified to conduct U.S. EPA Reference Method 9 observations.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

No earlier than 6 months from issuance of this permit, the permittee may, upon receipt of written approval from the Ohio EPA Central District Office, modify the frequencies of the visible particulate emissions checks if operating experience indicates that less frequent checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible particulate emissions check frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

2. The permittee shall measure and record the number of gallons of gasoline employed as fuel in this emissions unit on a monthly basis, for the purpose of determining annual emissions.

### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports that specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

### V. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
2. Emission Limitations:  
Particulate emissions shall not exceed 0.03 lb/hr and 0.1 ton/yr.

#### Applicable Compliance Methods:

The hourly particulate emission limitation was established by multiplying an emission factor of 6.470 lbs of particulates/1000 gallons of gasoline burned by the emissions unit's maximum gasoline usage rate (4 gallons/hr). The emission factor is specified in US EPA's Factor Information Retrieval Data System (FIRE 6.23) for criteria pollutants (using SCC number 20400401 for reciprocation gasoline engines).

The annual particulate emission limitation was established by multiplying the hourly emission limitation (0.03 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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

## V. Testing Requirements (continued)

3. Emission Limitations:  
Sulfur dioxide emissions shall not exceed 0.02 lb/hr and 0.1 ton/yr.

Applicable Compliance Methods:

The hourly sulfur dioxide emission limitation was established by multiplying an emission factor of 5.31 lbs of sulfur dioxide/1000 gallons of gasoline burned by the emission unit's maximum gasoline usage rate (4 gallons/hr). The emission factor is specified in US EPA's Factor Information Retrieval Data System (FIRE 6.23) for criteria air pollutants (using SCC number 20400401 for reciprocating gasoline engines).

The annual sulfur dioxide emission limitation was established by multiplying the hourly emission limitation (0.02 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly sulfur dioxide emission limitation.

If required, the permittee shall demonstrate compliance with the hourly sulfur dioxide emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

4. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 0.41 lb/hr and 1.8 tons/yr.

Applicable Compliance Methods:

The hourly nitrogen oxides emission limitation was established by multiplying an emission factor of 102.0 lbs of nitrogen oxides/1000 gallons of gasoline burned by the emission unit's maximum gasoline usage rate (4 gallons/hr). The emission factor is specified in US EPA's Factor Information Retrieval Data System (FIRE 6.23) for criteria air pollutants (using SCC number 20400401 for reciprocating gasoline engines).

The annual nitrogen oxides emission limitation was established by multiplying the hourly emission limitation (0.41 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly nitrogen oxides emission limitation.

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

5. Emission Limitations:  
Volatile organic compound emissions shall not exceed 0.59 lb/hr and 2.6 tons/yr.

Applicable Compliance Methods:

The hourly volatile organic compound emission limitation was established by multiplying an emission factor of 148.0 lbs of volatile organic compounds/1000 gallons of gasoline burned by the emission unit's maximum gasoline usage rate (4 gallons/hr). The emission factor is specified in US EPA's Factor Information Retrieval Data System (FIRE 6.23) for criteria air pollutants (using SCC number 20400401 for reciprocating gasoline engines).

The annual volatile organic compound emission limitation was established by multiplying the hourly emission limitation (0.59 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly volatile organic compound emission limitation.

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

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

6. Emission Limitations:  
Carbon monoxide emissions shall not exceed 15.76 lbs/hr and 69.0 tons/yr.

Applicable Compliance Methods:

Compliance with the hourly carbon monoxide emission limitation was established by multiplying an emission factor of 3,940 lbs of carbon monoxide/1000 gallons of gasoline burned by the emission unit's maximum gasoline usage rate (4 gallons/hr). The emission factor is specified in US EPA's Factor Information Retrieval Data System (FIRE 6.23) for criteria air pollutants (using SCC number 20400401 for reciprocating gasoline engines).

Compliance with the annual carbon monoxide emission limitation was established by multiplying the hourly emission limitation (15.76 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly carbon monoxide emission limitation.

Emission testing was conducted for this emissions unit on March 14, 2003 which demonstrated compliance with the hourly carbon monoxide emission limitation.

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

7. Emission Limitation:  
Visible particulate emissions from the stack shall not exceed 20 % opacity, as a 6-minute average.

Applicable Compliance Method:

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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Paved Roadways and Parking Lots (F001)  
**Activity Description:** Movement of vehicles on roadways and parking areas.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Paved roadways and parking areas: HRA1 through HRA 10 and HRA 12 through HRA16; (see Section A.2.a)	OAC rule 3745-31-05(A)(3) (PTI 01-08462)	Particulate emissions shall not exceed 7.37 tons per year.  No visible particulate emissions except for one minute during any 60-minute period.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c, and A.2.e through A.2.i)
Unpaved parking areas: HRA11, HRA 17, and HRA 18		Particulate emissions shall not exceed 9.27 tons per year.  No visible particulate emissions except for 3 minutes during any 60-minute period.  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.d through A.2.i).

## 2. Additional Terms and Conditions

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

paved roadways:

HRA 1 - Main Access  
HRA 4 - Facility Loop and Access Road  
HRA 8 - TRC Access  
HRA 12 - Short West Road Access  
HRA 13 - Rec Center  
HRA 14 - Building 9 Loop  
HRA 15 - Test Track

paved parking areas:

HRA 2 - East Lot Drive and Parking  
HRA 3 - West Lot Drive and Parking  
HRA 5 - Facilities Access and Parking  
HRA 6 - Gasoline Station  
HRA 7 - Building 6 Lot  
HRA 9 - Building 7 Lot  
HRA 10 - Short West Road Access  
HRA 16 - Building 9 Parking

- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways:

HRA 17 - Building 9 Unpaved  
HRA 18 - Construction Road

unpaved parking areas:

HRA 11 - Unpaved Contractor Lot

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee will treat the paved roadways and parking areas by sweeping or water flushing at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee will treat the unpaved roadways and parking areas with watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

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

- 2.f** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.g** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.h** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.i** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

**II. Operational Restrictions**

**None**

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

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

paved roadways and parking areas      minimum inspection frequency

HRA 1 - Main Access	Weekly
HRA 2 - East Lot Drive and Parking	Monthly
HRA 3 - West Lot Drive and Parking	Monthly
HRA 5 - Facilities Access and Parking	Monthly
HRA 6 - Gasoline Station	Monthly
HRA 7 - Building 6 Lot	Monthly
HRA 8 - TRC Access	Monthly
HRA 9 - Building 7 Lot	Monthly
HRA 10 - Short West Road Access (Parking)	Monthly
HRA 12 - Short West Road Access	Monthly
HRA 13 - Rec Center	Monthly
HRA 14 - Building 9 Loop	Monthly
HRA 15 - Test Track	Monthly

HRA 4 - Facility Loop and Access Road      Daily during deposition from onsite construction areas

unpaved roadways and parking areas      minimum inspection frequency

HRA 17 - Building 9 Unpaved	Weekly*
HRA 18 - Construction Road	Weekly*
HRA 11 - Unpaved Contractor Lot	Monthly

\* In the event that HRA17 or HRA18 are paved, the minimum inspection frequency requirement will change to monthly.

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

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
  - a. the dates of any inspection when deposition from onsite construction onto roadway segment HRA 4 was observed;
  - b. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - c. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - d. the dates the control measures were implemented; and
  - e. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.
5. Reconfiguration of the roadways and parkways areas specified in this permit may or may not be determined to be a modification under OAC rule 3745-31-01. Each change to the roadways and parking areas specified in this permit shall be evaluated to determine if the constitutes a modification under OAC rule 3745-31-01. If the change is determined to be a modification, then the permittee must apply for and obtain a permit prior to the installation of the change.

### **IV. Reporting Requirements**

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

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of General Term and Condition A.1.c.ii of this permit.
2. The permittee shall submit annual reports that specify the total emissions of particulates from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## V. Testing Requirements

1. Compliance with the visible particulate emission limitations for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.
2. Compliance with the particulate emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
  - 2.a Emission Limitation:  
Particulate emissions from paved roadways and parking areas shall not exceed 7.37 tons per year.

### Applicable Compliance Method:

Compliance may be determined by summing each of the paved roadway and parking segments using the following procedure for each segment: multiply the emission factor, E, by the total annual vehicle miles traveled and the assumed control efficiency for sweeping and watering of 80% (1-0.8) for paved surfaces from Table 2.1.1-3 of RACM (Reasonably Available Control Measures for Fugitive Dust Sources - 8/83). The emission factor, E, shall be determined by the following equation found in AP-42 section 13.2.1.3 (equation 1) for Paved Roads (October 2002).

$$E = k(sL/2)^{0.65} (W/3)^{1.5} (1-P/4N)$$

where,

E = particulate emission factor (pounds/VMT)

k = constant - 0.082 (particle size multiplier for pounds/VMT)

sL = road surface silt loading (g/m<sup>2</sup>)

W = mean vehicle weight in tons

P = number of days with at least 0.01 inches of precipitation per year (130 days for central Ohio, Figure 13.2.1-2, AP-42, section 13.2.1)

N = number of days in the averaging period = 365 days/year

## V. Testing Requirements (continued)

- 2.b** Emission Limitation:  
Particulate emissions from unpaved roadways and parking areas shall not exceed 9.27 tons per year.

Applicable Compliance Method:

Compliance may be determined by summing each of the unpaved roadway and parking segments using the following procedure for each segment: multiply the emission factor, E, by the total annual vehicle miles traveled and the assumed control efficiency for sweeping and watering of 50% (1-0.5) for unpaved surfaces from Table 2.1.1-3 of RACM (Reasonably Available Control Measures for Fugitive Dust Sources - 8/83). The emission factor, E, shall be determined by the following equation found in AP-42 section 13.2.2. (equation 1) for Unpaved Roads (September 1998).

$$E = [k(s/12)^a(W/3)^b]/[(M/0.2)^c] \times [(365 - p)/365]$$

where,

E = size-specific particulate emission factor (lb/VMT)

k = constant = 10 pounds/VMT (Table 13.2.2-2 for PM-30, AP-42 section 13.2.2)

s = surface material silt content

W = mean vehicle weight in tons

M = surface material moisture content (%)

a = constant = 0.8 (Table 13.2.2-2 for PM-30, AP-42 section 13.2.2)

b = constant = 0.5 (Table 13.2.2-2, for PM-30, AP-42 section 13.2.2)

c = constant = 0.4 (Table 13.2.2-2 for PM-30, AP-42 section 13.2.2)

p = number of days with at least 0.01 inches of precipitation per year (130 days for central Ohio, Figure 13.2.2-1, AP-42, section 13.2.2)

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Gasoline Tanks/Dispensing Facility (G001)

**Activity Description:** Gasoline received from tank trucks, stored, and dispensed to motor vehicles.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Gasoline Dispensing Facility:  one 10,000-gallon gasoline storage tank one 4,000-gallon gasoline storage tank two 1,000-gallon gasoline storage tanks two 600-gallon gasoline storage tanks	OAC rule 3745-21-09(R)	Stage I vapor control - 90% control efficiency for volatile organic compounds (VOCs); submerged fill
	OAC rule 3745-31-05(A)(3) (PTI 01-6701)	Organic compound emissions shall not exceed 8.01 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(R).

**2. Additional Terms and Conditions**

**None**

## II. Operational Restrictions

1. The permittee shall comply with the following operational restrictions for the Stage I vapor control system:
  - a. the vapor balance system shall be kept in good working order and shall be used at all times during the transfer of gasoline;
  - b. there shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers;
  - c. there shall be no leaks in the vapor lines or liquid lines during the transfer of gasoline;
  - d. the transfer of gasoline from a delivery vessel to a stationary storage tank shall be conducted by use of submerged fill into the storage tank (the submerged fill pipe(s) are to be installed so they are within six (6) inches of the bottom of the storage tank);
  - e. all fill caps shall be "in place" and clamped during normal storage conditions; and
  - f. the permittee shall repair within 15 days any leak from the vapor balance system or vapor control system which is employed to meet the requirements of paragraph (R)(1) of OAC rule 3745-21-09 when such leak is equal to or greater than 100 percent of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10.
2. The permittee shall restrict the annual fuel throughput for the tanks associated with this emissions unit to amounts that will show compliance with the emission limitation of 5.01 tons/yr, calculated as required in Section A.V.1 below.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the results of any leak checks, including, at a minimum, the following information:
  - a. date of inspection;
  - b. findings (may indicate no leaks discovered or location, nature, and severity of each leak);
  - c. leak determination method;
  - d. corrective action (date each leak repaired and reasons for any repair interval in excess of 15 calendar days); and
  - e. inspector's name and signature.
2. The permittee shall maintain monthly records of the total gasoline throughput for this emissions unit.

## IV. Reporting Requirements

1. Any leak from the vapor balance system or vapor control system that is not repaired within 15 days after identification of the leak shall be reported to the Ohio EPA, Central District Office within 30 days after the repair is completed.
2. The permittee shall submit annual reports that specify the total organic compound emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **V. Testing Requirements**

1. Emission Limitation:  
Organic compound emissions shall not exceed 5.01 tons/yr.

### Applicable Compliance Method:

Compliance with the annual organic compound emission limitation shall be calculated as the sum of the organic compound emissions from all gasoline storage tank filling and dispensing operations associated with this emissions unit. This calculation shall be based upon the annual gasoline throughput for this emissions unit and the gasoline storage tank filling and dispensing operations emission factor from USEPA reference document AP-42, Fifth Edition, "Compilation of Air Pollutant Emission Factors", Section 5.2, Table 5.2-7 (13.0 lbs of OC/1000 gallons of gasoline throughput - for gasoline dispensing facilities having submerged tank filling with Stage I vapor control).

The emission factor applies for VOC as well as total organic compound emissions because the methane and ethane contents of gasoline are negligible.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Prep. Booth & Air Makeup Heater (K001)  
**Activity Description:** Surface coating of miscellaneous metal and non-metal parts.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
preparation coating test booth for miscellaneous metal and non-metal parts	OAC rule 3745-21-07(G)(2)	When coating non-metal parts, organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day.
	OAC rule 3745-21-09(U)(2)(e)(iii)	When coating metal parts, coating usage shall not exceed 10 gallons/day.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 0.551 lb/hr.
	OAC rule 3745-31-05(A)(3) (PTI 01-4055)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-21-07(G)(2), 3745-21-09(U)(2)(e)(iii), 3745-17-07(A), and 3745-17-11(B).

##### 2. Additional Terms and Conditions

- 2.a For purposes of calculating the organic compound emission rates from this emissions unit and the associated oven (P005), when coating non-metal parts, the permittee shall utilize a value of 73% as the maximum percentage of the organic compounds employed in this emissions unit that are emitted uncontrolled from the emissions unit. The remaining 27% of the organic compounds employed in this emissions unit shall be considered to be the uncontrolled emissions for the associated oven. This "split" of organic compound emissions between this emissions unit and the associated oven is based upon the facility's best engineering estimates.

##### II. Operational Restrictions

1. The permittee shall operate the water curtain whenever this emissions unit is in operation.

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

1. On any day when coating metal parts (including the coating of metal with powder coatings), the permittee shall collect and record the following information each day for this emissions unit:
  - a. the name and identification number of each coating employed;
  - b. the volume, in gallons, of each coating employed; and
  - c. the total volume, in gallons, of all coatings employed.
2. On any day when coating non-metal parts (including the coating of non-metal parts with powder coatings), the permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each coating and cleanup material employed;
  - b. the number of gallons of each coating and cleanup material employed;
  - c. the organic compound content of each coating and cleanup material, in pounds per gallon;
  - d. the total organic compound emission rate for all cleanup materials, in pounds per day;
  - e. the total potential (prior to applying the booth/oven "split") daily organic compound emission rate for all coatings, in pounds per day;
  - f. the total potential (prior to applying the booth/oven "split") daily organic compound emission rate for all coatings multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.a of this permit), in pounds per day.
  - g. the total organic compound emission rate for all coatings and cleanup materials, in pounds per day (i.e., the sum of the figures from items (d) and (f));
  - h. the total number of hours the emissions unit was in operation; and
  - i. the average hourly organic compound emission rate for the coatings and cleanup materials, i.e., (g)/(h), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]
3. The permittee shall maintain daily records that document any time periods when the water curtain was not in service when the emissions unit was in operation.
4. For the purpose of quantifying organic compound emissions from powder coatings, it shall be assumed that the organic compound content is equal to 5%, by weight, of the coatings, unless otherwise approved by the Ohio EPA.

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

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. for any day when coating non-metal parts, an identification of each day during which the average hourly organic compound emissions from the coatings and cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
  - b. for any day when coating non-metal parts, an identification of each day during which the organic compound emissions from the coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These quarterly deviation (excursion) reports shall be submitted in accordance with section A.1.c.ii of the General Terms and Conditions.

2. The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any daily record showing that this emissions unit employed more than the applicable maximum daily coating usage limitation (10 gallons per day) when metal parts were coated. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Central District Office) within 45 days after the exceedance occurs.
3. The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any daily record showing that the water curtain was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Central District Office) within 30 days after the event occurs.

#### **V. Testing Requirements**

1. Emission Limitations:  
When coating non-metal parts, organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Methods:

Compliance with the hourly and daily emission limitations may be based upon the records required pursuant to Section A.III.2.

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 25.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials.

2. Usage Limitation:  
When coating metal parts, coating usage shall not exceed 10 gallons/day.

Applicable Compliance Method:

Compliance with this daily coating usage limitation shall be determined through the records required pursuant to Section A.III.1.

3. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

## V. Testing Requirements (continued)

4. Emission Limitation:  
Particulate emissions shall not exceed 0.551 pound per hour.

Applicable Compliance Method:

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

$$E = (M) * (1-TE) * (1-CE)$$

where:

E = particulate matter emission rate (lbs/hr),

M = maximum coating solids usage rate (lbs/hr),

TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.35 for air spray guns),

CE = control efficiency of the control equipment (31.6% for the double frame filters; 98% for the water wash). If more than one piece of control equipment is used in series, the equation should be multiplied by additional (1-CE) terms for each additional piece of equipment.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	None	None

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Paint/Surface Coat Booth & Air Makeup Heater (K002)

**Activity Description:** Surface coating of miscellaneous metal and non-metal parts.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paint/surface coat booth for miscellaneous metal and non-metal parts	OAC rule 3745-21-07(G)(2)	When coating non-metal parts, organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day.
	OAC rule 3745-21-09(U)(2)(e)(iii)	When coating metal parts, coating usage shall not exceed 10 gallons/day.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 0.551 lb/hr.
	OAC rule 3745-31-05(A)(3) (PTI 01-4055)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-21-07(G)(2), 3745-21-09(U)(2)(e)(iii), 3745-17-07(A), and 3745-17-11(B).

##### 2. Additional Terms and Conditions

- 2.a For purposes of calculating the organic compound emission rates from this emissions unit and the associated oven (P006), when coating non-metal parts, the permittee shall utilize a value of 73% as the maximum percentage of the organic compounds employed in this emissions unit that are emitted uncontrolled from the emissions unit. The remaining 27% of the organic compounds employed in this emissions unit shall be considered to be the uncontrolled emissions for the associated oven. This "split" of organic compound emissions between this emissions unit and the associated oven is based upon the facility's best engineering estimates.

##### II. Operational Restrictions

1. The permittee shall operate the water curtain whenever this emissions unit is in operation.

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

1. On any day when coating metal parts (including the coating of metal with powder coatings), the permittee shall collect and record the following information each day for this emissions unit:
  - a. the name and identification number of each coating employed;
  - b. the volume, in gallons, of each coating employed; and
  - c. the total volume, in gallons, of all coatings employed.
2. On any day when coating non-metal parts (including the coating of non-metal parts with powder coatings), the permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each coating and cleanup material employed;
  - b. the number of gallons of each coating and cleanup material employed;
  - c. the organic compound content of each coating and cleanup material, in pounds per gallon;
  - d. the total organic compound emission rate for all cleanup materials, in pounds per day;
  - e. the total potential (prior to applying the booth/oven "split") daily organic compound emission rate for all coatings, in pounds per day;
  - f. the total potential (prior to applying the booth/oven "split") daily organic compound emission rate for all coatings multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.a of this permit), in pounds per day.
  - g. the total organic compound emission rate for all coatings and cleanup materials, in pounds per day (i.e., the sum of the figures from items (d) and (f));
  - h. the total number of hours the emissions unit was in operation; and
  - i. the average hourly organic compound emission rate for the coatings and cleanup materials, i.e., (g)/(h), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]
3. The permittee shall maintain daily records that document any time periods when the water curtain was not in service when the emissions unit was in operation.
4. For the purpose of quantifying organic compound emissions from powder coatings, it shall be assumed that the organic compound content is equal to 5%, by weight, of the coatings, unless otherwise approved by the Ohio EPA.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. for any day when coating non-metal parts, an identification of each day during which the average hourly organic compound emissions from the coatings and cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
  - b. for any day when coating non-metal parts, an identification of each day during which the organic compound emissions from the coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

These quarterly deviation (excursion) reports shall be submitted in accordance with section A.1.c.ii of the General Terms and Conditions.

2. The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any daily record showing that this emissions unit employed more than the applicable maximum daily coating usage limitation (10 gallons per day) when metal parts were coated. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Central District Office) within 45 days after the exceedance occurs.
3. The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any daily record showing that the water curtain was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Central District Office) within 30 days after the event occurs.

#### V. Testing Requirements

1. Emission Limitations:  
When coating non-metal parts, organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Methods:

Compliance with the hourly and daily emission limitations may be based upon the records required pursuant to Section A.III.2.

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 25.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials.

2. Usage Limitation:  
When coating metal parts, coating usage shall not exceed 10 gallons/day.

Applicable Compliance Method:

Compliance with this daily coating usage limitation shall be determined through the records required pursuant to Section A.III.1.

3. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

## V. Testing Requirements (continued)

4. Emission Limitation:  
Particulate emissions shall not exceed 0.551 pound per hour.

Applicable Compliance Method:

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

$$E = (M) * (1-TE) * (1-CE)$$

where:

E = particulate matter emission rate (lbs/hr),

M = maximum coating solids usage rate (lbs/hr),

TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.35 for air spray guns),

CE = control efficiency of the control equipment (31.6% for the double frame filters; 98% for the water wash). If more than one piece of control equipment is used in series, the equation should be multiplied by additional (1-CE) terms for each additional piece of equipment.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	None	None

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Paint Booth (K004)

**Activity Description:** Painting of miscellaneous metal and plastic parts.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
test paint spray booth for the coating of metal and non-metal parts with oven	OAC rule 3745-21-07(G)(2)	When coating non-metal parts, organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day from the spray booth.
	OAC rule 3745-21-09(U)(2)(e)(iii)	When coating metal parts, coating usage shall not exceed 10 gallons/day.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from overspray shall not exceed 0.551 lb/hr.
	OAC rule 3745-21-07(G)(1)	When coating non-metal parts, organic compound emissions shall not exceed 3 lbs/hr and 15 lbs/day from the oven.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) (PTI 01-08305)	Organic compound emissions from coatings and cleanup materials shall not exceed 7.26 tons/yr.  Particulate emissions from overspray shall not exceed 2.41 tons/yr.  Emissions from natural gas usage in the oven associated with this emissions unit shall not exceed the following limitations:  Nitrogen oxides emissions shall not exceed 0.12 lb/hr and 0.53 ton/yr.  Carbon monoxide emissions shall not exceed 0.10 lb/hr and 0.44 ton/yr.  Particulate emissions shall not exceed 0.002 lb/hr and 0.01 ton/yr.  Volatile organic compound emissions shall not exceed 0.007 lb/hr and 0.03 ton/yr.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-07(G)(1), 3745-21-07(G)(2), 3745-21-09(U)(2)(e)(iii), 3745-17-07(A), and 3745-17-11(B)(1).

## 2. Additional Terms and Conditions

- 2.a** For purposes of calculating the organic compound emission rates from the spray booth and the associated oven, when coating non-metal parts, the permittee shall utilize a value of 73% as the maximum percentage of the organic compounds employed in the spray booth that are emitted uncontrolled from the spray booth. The remaining 27% of the organic compounds employed in the spray booth shall be considered to be the uncontrolled emissions for the associated oven. This "split" of organic compound emissions between the spray booth and the associated oven is based upon the facility's best engineering estimates.

## II. Operational Restrictions

1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

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

1. On any day when coating metal parts (including the coating of metal with powder coatings), the permittee shall collect and record the following information each day for this emissions unit:
  - a. the name and identification number of each coating employed;
  - b. the volume, in gallons, of each coating employed; and
  - c. the total volume, in gallons, of all coatings employed.
2. On any day when coating non-metal parts (including the coating of non-metal parts with powder coatings), the permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each coating and cleanup material employed;
  - b. the number of gallons of each coating and cleanup material employed;
  - c. the organic compound content of each coating and cleanup material, in pounds per gallon;
  - d. the total organic compound emission rate for all cleanup materials, in pounds per day;
  - e. the total potential (prior to applying the booth/oven "split") daily organic compound emission rate for all coatings, in pounds per day;
  - f. the total potential (prior to applying the booth/oven "split") daily organic compound emission rate for all coatings multiplied by the maximum percentage of the emissions associated with the spray booth (73%, as defined in condition A.I.2.a of this permit), in pounds per day.
  - g. the total organic compound emission rate for all coatings and cleanup materials, in pounds per day (i.e., the sum of the figures from items (d) and (f));
  - h. the total number of hours the emissions unit was in operation; and
  - i. the average hourly organic compound emission rate for the coatings and cleanup materials, i.e., (g)/(h), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]
3. For the purpose of quantifying organic compound emissions from powder coatings, it shall be assumed that the organic compound content is equal to 5%, by weight, of the coatings, unless otherwise approved by the Ohio EPA.
4. The permittee shall collect and record the following information for each day for the oven when non-metal parts are coated:
  - a. the total potential (prior to applying the booth/oven "split") uncontrolled daily organic compound emission rate for all coatings employed to non-metal parts, in the spray booth, multiplied by the maximum percentage of the emissions associated with the oven (27%, as defined in condition A.I.2.a of this permit), in pounds per day;
  - b. the total number of hours the oven was in operation, (This number should be similar to the number of hours the spray booth was in operation.); and
  - c. the average hourly organic compound emission rate, i.e., (a)/(b), in pounds per hour (average).
5. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

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

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. for any day when coating non-metal parts, an identification of each day during which the average hourly organic compound emissions from the coatings and cleanup materials employed in the spray booth exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day;
  - b. for any day when coating non-metal parts, an identification of each day during which the organic compound emissions from the coatings and cleanup materials employed in the spray booth exceeded 40 pounds per day, and the actual organic compound emissions for each such day;
  - c. for any day coating non-metal parts, an identification of each day during which the average hourly organic compound emissions from the oven exceeded 3 lbs/hr, and the actual average hourly organic compound emissions for each such day; and
  - d. for any day coating non-metal parts, an identification of each day during which the organic compound emissions from the oven exceeded 15 lbs/day, and the actual organic compound emissions for each such day.

These quarterly deviation (excursion) reports shall be submitted in accordance with section A.1.c.ii of the General Terms and Conditions.

2. The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any daily record showing that this emissions unit employed more than the applicable maximum daily coating usage limitation (10 gallons per day) when metal parts were coated. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Central District Office) within 45 days after the exceedance occurs.
3. The permittee shall submit annual reports that specify the total organic compound emissions (all coatings and cleanup materials) from this emissions unit for the previous calendar year. The annual reports shall also specify the total particulate emissions from the spray booth and the total nitrogen oxides, carbon monoxide, particulate, and volatile organic compound emissions from the combustion of natural gas in the oven. The reports shall be submitted by January 31 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit (including emission rates less than one ton) in the annual Fee Emission Report.
4. The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Central District Office) within 30 days after the event occurs.

#### **V. Testing Requirements**

1. Emission Limitations:  
When coating non-metal parts, organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Methods:

Compliance with the hourly and daily emission limitations may be based upon the records required pursuant to Section A.III.2.

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 25.

Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the coatings and cleanup materials.

**V. Testing Requirements (continued)**

2. Usage Limitation:  
When coating metal parts, coating usage shall not exceed 10 gallons/day.

Applicable Compliance Method:

Compliance with this daily coating usage limitation shall be determined through the records required pursuant to Section A.III.1.

3. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

4. Emission Limitation:  
Organic compound emissions from coatings and cleanup materials shall not exceed 7.26 tons/yr.

Applicable Compliance Method:

Compliance with the annual organic compound emission limitation shall be based upon the records required pursuant to Section A.III.

5. Emission Limitations:  
Particulate emissions from overspray shall not exceed 0.551 lb/hr and 2.41 tons/yr.

Applicable Compliance Methods:

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

$$E = (M) * (1-TE) * (1-CE)$$

where:

E = particulate matter emission rate (lbs/hr),

M = maximum coating solids usage rate (lbs/hr),

TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.35 for air spray guns),

CE = control efficiency of the control equipment (31.6% for the double frame filters; 98% for the water wash). If more than one piece of control equipment is used in series, the equation should be multiplied by additional (1-CE) terms for each additional piece of equipment.

The annual particulate emission limitation was established by multiplying the hourly particulate emission limitation (0.551 lb/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly particulate emission limitation.

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 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

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

### **6. Emission Limitations:**

Emissions from natural gas usage in the oven associated with this emissions unit shall not exceed the following limitations:

Nitrogen oxides emissions shall not exceed 0.12 lb/hr and 0.53 ton/yr.

Carbon monoxide emissions shall not exceed 0.10 lb/hr and 0.44 ton/yr.

Particulate emissions shall not exceed 0.002 lb/hr and 0.01 ton/yr.

Volatile organic compound emissions shall not exceed 0.007 lb/hr and 0.03 ton/yr.

#### **Applicable Compliance Method:**

The hourly emission limitations were established by multiplying the maximum natural gas usage from the oven (1,200 ft<sup>3</sup>/hr) by the emission factors for each pollutant (lbs of pollutant/MM ft<sup>3</sup>) found in USEPA reference document AP-42, Fifth Edition, "Compilation of Air Pollutant Emission Factors", the 7/98 edition, Section 1.4, Tables 1.4-1, and 1.4-2. The annual emission limitations were established by multiplying the hourly emission limitations by 8760 hours per year and dividing by 2000 pounds per ton.

If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission tests performed in accordance with the appropriate methods specified in 40 CFR Part 60, Appendix A.

Compliance with the annual emission limitations may be assumed provided that the permittee complies with the hourly emission limitations.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
test paint spray booth, coating metal and plastic	None	None

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

1. The permit to install for this emissions unit was evaluated based on the actual materials applied 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. 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" pollutants:

Pollutant: Xylene

TLV: 434 mg/m<sup>3</sup>

Maximum Hourly Emission Rate: 11.06 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 2142 ug/m<sup>3</sup>

MAGIC: 10333 ug/m<sup>3</sup>

Pollutant: Styrene

TLV: 85 mg/m<sup>3</sup>

Maximum Hourly Emission Rate: 5.30 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 1027 ug/m<sup>3</sup>

MAGIC: 2024 ug/m<sup>3</sup>

Pollutant: Formaldehyde

TLV: 0.368 mg/m<sup>3</sup>

Maximum Hourly Emission Rate: 0.026 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration: 4.92 ug/m<sup>3</sup>

MAGIC: 8.76 ug/m<sup>3</sup>

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

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

3. 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

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

**Emissions Unit ID:** Prep. Oven (P005)

**Activity Description:** Baking of miscellaneous auto body parts in a 1.65 MMBtu/hr natural gas fired oven.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
preparation oven	OAC rule 3745-21-07(G)(1)	Organic compound emissions shall not exceed 3 lbs/hr and 15 lbs/day.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-31-05(A)(3) (PTI 01-6700)	Organic compound emissions shall not exceed 2.80 tons/yr.
	OAC rule 3745-23-06(B)	Nitrogen oxides emissions shall not exceed 0.165 lb/hr and 0.723 ton/yr.  See A.I.2.b below.  The requirements of this rule also include compliance with the of OAC rules 3745-21-07(G)(1), 3745-17-07(A) and 3745-17-10(B).  See A.I.2.c below.

##### 2. Additional Terms and Conditions

- 2.a For purposes of calculating the organic compound emission rates for this emissions unit and the associated spray booth (K001), when coating non-metal parts, the permittee shall utilize a value of 73% as the maximum percentage of the organic compounds employed in the spray booth that are emitted uncontrolled from the spray booth. The remaining 27% of the organic compounds employed in the spray booth shall be considered to be the uncontrolled emissions for this emissions unit. This "split" of organic compound emissions between this emissions unit and the associated spray booth is based upon the facility's best engineering estimates.

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

- 2.b** The nitrogen oxides emission limitations reflect 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.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-6700.

## **II. Operational Restrictions**

**None**

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

- 1.** The permittee shall collect and record the following information for each day for the oven when non-metal parts are coated:
- a. the total potential (prior to applying the booth/oven "split") uncontrolled daily organic compound emission rate for all coatings employed to non-metal parts, in the coating operation associated with this emissions unit, multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.a of this permit), in pounds per day;
  - b. the total number of hours this emissions unit was in operation; and
  - c. the average hourly organic compound emission rate, i.e., (a)/(b), in pounds per hour (average).

## **IV. Reporting Requirements**

- 1.** The permittee shall submit deviation (excursion) reports that include the following information:
- a. an identification of each day during which the average hourly organic compound emissions exceeded 3 lbs/hr, and the actual average hourly organic compound emissions for each such day; and
  - b. an identification of each day during which the organic compound emissions exceeded 15 lbs/day, and the actual organic compound emissions for each such day.
- 2.** The permittee shall submit annual reports that specify the total organic compound emissions from this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **V. Testing Requirements**

- 1.** Emission Limitations:  
Organic compound emissions shall not exceed 3.0 lbs/hr and 15.0 lbs/day.

Applicable Compliance Method:

Compliance with the hourly and daily organic compound emission limitations may be based upon the records required pursuant to Section A.III.1. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the materials.

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 25.

## V. Testing Requirements (continued)

2. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

3. Emission Limitation:  
Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (1,650 ft<sup>3</sup>/hr) by the AP-42 emission factor from "Compilation of Air Pollutant Emission Factors", Section 1.4, Table 1.4-2 (7/98) for natural gas (1.9 lbs particulate/mmft<sup>3</sup>), and dividing by the maximum hourly heat input capacity of the emissions unit (1.65 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

4. Emission Limitation:  
Organic compound emissions shall not exceed 2.80 tons/yr.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to Section A.III.

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 0.165 lb/hr and 0.723 ton/yr.

Applicable Compliance Method:

These emission limitations reflect the emissions unit's potential to emit for this pollutant. The emission limitations were established by multiplying the maximum hourly (1,650 ft<sup>3</sup>/hour) and annual (14.454 mmft<sup>3</sup>/yr) natural gas usage rates by the AP-42 emission factor for nitrogen oxides (100 lbs of NO<sub>x</sub>/mmft<sup>3</sup>) from "Compilation of Air Pollutant Emission Factors", Section 1.4, Table 1.4-1 (2/98).

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.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Paint/Surface Coat Oven (P006)

**Activity Description:** Baking of miscellaneous auto body parts in a 1.65 MMBtu/hr natural gas fired oven.

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
preparation oven	OAC rule 3745-21-07(G)(1)	Organic compound emissions shall not exceed 3 lbs/hr and 15 lbs/day.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-31-05(A)(3) (PTI 01-6700)	Organic compound emissions shall not exceed 2.80 tons/yr.
	OAC rule 3745-23-06(B)	Nitrogen oxides emissions shall not exceed 0.165 lb/hr and 0.723 ton/yr.  See A.I.2.b below.  The requirements of this rule also include compliance with the of OAC rules 3745-21-07(G)(1), 3745-17-07(A) and 3745-17-10(B).  See A.I.2.c below.

**2. Additional Terms and Conditions**

- 2.a For purposes of calculating the organic compound emission rates for this emissions unit and the associated spray booth (K002), when coating non-metal parts, the permittee shall utilize a value of 73% as the maximum percentage of the organic compounds employed in the spray booth that are emitted uncontrolled from the spray booth. The remaining 27% of the organic compounds employed in the spray booth shall be considered to be the uncontrolled emissions for this emissions unit. This "split" of organic compound emissions between this emissions unit and the associated spray booth is based upon the facility's best engineering estimates.

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

- 2.b** The nitrogen oxides emission limitations reflect 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.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 01-6700.

## **II. Operational Restrictions**

**None**

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

- 1.** The permittee shall collect and record the following information for each day for the oven when non-metal parts are coated:
- a. the total potential (prior to applying the booth/oven "split") uncontrolled daily organic compound emission rate for all coatings employed to non-metal parts, in the coating operation associated with this emissions unit, multiplied by the maximum percentage of the emissions associated with this emissions unit (as defined in condition A.I.2.a of this permit), in pounds per day;
  - b. the total number of hours this emissions unit was in operation; and
  - c. the average hourly organic compound emission rate, i.e., (a)/(b), in pounds per hour (average).

## **IV. Reporting Requirements**

- 1.** The permittee shall submit deviation (excursion) reports that include the following information:
- a. an identification of each day during which the average hourly organic compound emissions exceeded 3 lbs/hr, and the actual average hourly organic compound emissions for each such day; and
  - b. an identification of each day during which the organic compound emissions exceeded 15 lbs/day, and the actual organic compound emissions for each such day.
- 2.** The permittee shall submit annual reports that specify the total organic compound emissions from this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **V. Testing Requirements**

- 1.** Emission Limitations:  
Organic compound emissions shall not exceed 3.0 lbs/hr and 15.0 lbs/day.

Applicable Compliance Method:

Compliance with the hourly and daily organic compound emission limitations may be based upon the records required pursuant to Section A.III.1. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the materials.

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 25.

## V. Testing Requirements (continued)

2. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

3. Emission Limitation:  
Particulate emissions shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (1,650 ft<sup>3</sup>/hr) by the AP-42 emission factor from "Compilation of Air Pollutant Emission Factors", Section 1.4, Table 1.4-2 (7/98) for natural gas (1.9 lbs particulate/mmft<sup>3</sup>), and dividing by the maximum hourly heat input capacity of the emissions unit (1.65 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

4. Emission Limitation:  
Organic compound emissions shall not exceed 2.80 tons/yr.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to Section A.III.

5. Emission Limitations:  
Nitrogen oxides emissions shall not exceed 0.165 lb/hr and 0.723 ton/yr.

Applicable Compliance Method:

These emission limitations reflect the emissions unit's potential to emit for this pollutant. The emission limitations were established by multiplying the maximum hourly (1,650 ft<sup>3</sup>/hour) and annual (14.454 mmft<sup>3</sup>/yr) natural gas usage rates by the AP-42 emission factor for nitrogen oxides (100 lbs of NO<sub>x</sub>/mmft<sup>3</sup>) from "Compilation of Air Pollutant Emission Factors", Section 1.4, Table 1.4-1 (2/98).

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.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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