



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

05/27/03

**RE: Proposed Title V Chapter 3745-77 Permit
13-18-12-0179
Ford Motor Company, Cleveland Engine Plants**

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

Dear Ms. Damico:

The proposed issuance of the Title V permit for Ford Motor Company, Cleveland Engine Plants, has been created in Ohio EPA's State Air Resources System (STARS) on 05/27/03, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit +C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact me at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

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

cc: Cleveland Division of Air Pollution Control
File, DAPC PMU



State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 05/27/03

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 13-18-12-0179 to:
Ford Motor Company, Cleveland Engine Plants
18300 Five Points Road
Brook Park, OH 44142-1415

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

| | | |
|---|---|---|
| P245 (CEP 2 Dynamometer Engine Test Facility) CEP 2 Dynamometer Engine Test Facility | P264 (CEP 2 Hot Test Carousel) CEP 2 Hot Test Carousel | (5) Five Engine Hot Test Stands (4 Test Stands & 1 Diagnostic Stand) with Flare |
| | P281 (CEP 2 Engine Hot Test Stands) | |

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:

Cleveland Division of Air Pollution Control
1925 St. Clair
Cleveland, OH 44114
(216) 664-2324

OHIO ENVIRONMENTAL PROTECTION AGENCY

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. All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR Part 61 and OAC Chapter 3745-20.
2. 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.
3. The permittee shall comply with all applicable provisions specified in 40 CFR Part 82, Subparts B and F as related to the operations at this facility.
4. 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.
5. 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.
6. The Part II application for a MACT determination may, but is not required to, contain the following information:
 - a. recommended emission limitations for the affected source and support information (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
 - b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied; and
 - c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.
7. If the NESHAP is promulgated before the Part II application is due for the relevant source category, the permittee may be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. If subject, the permittee shall submit the following notifications:
 - a. Unless otherwise specified in the relevant Subpart, within 120 days after promulgation of a 40 CFR Part 63 Subpart to which the source is subject, the permittee shall submit an Initial Notification Report that contains the following information, in accordance with 40 CFR Part 63.9(b)(2):
 - i. the name and mailing address of the permittee;
 - ii. the physical location of the source if it is different from the mailing address;
 - iii. identification of the relevant MACT standard and the source's compliance date;
 - iv. a brief description of the nature, design, size, and method of operation of the source, and an identification of the types of emission points within the affected source subject to the relevant standard and the types of HAPs emitted; and
 - v. a statement confirming the facility is a major source for HAPs.

A. State and Federally Enforcable Section (continued)

- b. 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:

G002 - CEP 1 gasoline dispensing facility (GDF) with a 20,000-gallon underground unleaded gasoline storage tank with single point vapor recovery (VB-1) & two dispensers;
G202 - CEP 2 gasoline dispensing facility (GDF) with a 10,000-gallon underground unleaded gasoline storage tank #21 (T207) with single point vapor recovery (VB-1) & one dispenser;
B201 - CEP 2 Cardinal indirect NG-fired heater #32 (2.7 MMBtu/hr);
B202 - CEP 2 Cardinal indirect NG-fired heater #34 (2.7 MMBtu/hr);
B203 - CEP 2 Cardinal indirect NG-fired heater #37 (2.7 MMBtu/hr);
B204 - CEP 2 Cardinal indirect NG-fired heater #39 (2.7 MMBtu/hr);
B205 - CEP 2 Cardinal indirect NG-fired heater #40 (2.7 MMBtu/hr);
B206 - CEP 2 Mammoth indirect NG-fired heater #45 (2.7 MMBtu/hr);
B207 - CEP 2 Cardinal indirect NG-fired heater #49 (1.5 MMBtu/hr);
B208 - CEP 2 Cardinal indirect NG-fired heater #50 (2.7 MMBtu/hr);
B209 - CEP 2 Cardinal indirect NG-fired heater #53 (2.7 MMBtu/hr);
B210 - CEP 2 Cardinal indirect NG-fired heater #57 (2.7 MMBtu/hr);
B211 - CEP 2 Cardinal indirect NG-fired heater #59 (2.7 MMBtu/hr);
B212 - CEP 2 Cardinal indirect NG-fired heater #58 (2.7 MMBtu/hr);
B213 - CEP 2 Cardinal indirect NG-fired heater #63 (2.7 MMBtu/hr);
B214 - CEP 2 Cardinal indirect NG-fired heater #64 (2.7 MMBtu/hr);
B215 - CEP 2 Cardinal indirect NG-fired heater #62 (2.7 MMBtu/hr);
B216 - CEP 2 Cardinal indirect NG-fired heater #64 (2.7 MMBtu/hr);
B217 - CEP 2 Cardinal indirect NG-fired heater #71 (2.7 MMBtu/hr);
B218 - CEP 2 Cardinal indirect NG-fired heater #70 (2.7 MMBtu/hr);
B219 - CEP 2 Cardinal indirect NG-fired heater #31 (2.7 MMBtu/hr);
B226 - CEP 2 2.53 MMBtu/hr direct-fired air heater cooler AHU-201;
B227 - CEP 2 2.53 MMBtu/hr direct-fired air heater cooler AHU-202;
B228 - CEP 2 3.16 MMBtu/hr direct-fired air heater cooler AHU-203;

B. State Only Enforceable Section (continued)

B229 - CEP 2 3.16 MMBtu/hr direct-fired air heater cooler AHU-204;
B230 - CEP 2 3.16 MMBtu/hr direct-fired air heater cooler AHU-205;
B231 - CEP 2 2.74 MMBtu/hr direct-fired air heater cooler AHU-206;
B232 - CEP 2 3.16 MMBtu/hr direct-fired air heater cooler AHU-207;
B233 - CEP 2 2.74 MMBtu/hr direct-fired air heater cooler AHU-214;
B234 - CEP 2 3.16 MMBtu/hr direct-fired air heater cooler AHU-209;
B235 - CEP 2 2.74 MMBtu/hr direct-fired air heater cooler AHU-210;
B236 - CEP 2 2.74 MMBtu/hr direct-fired air heater cooler AHU-211;
B237 - CEP 2 2.74 MMBtu/hr direct-fired air heater cooler AHU-212;
B238 - CEP 2 2.53 MMBtu/hr direct-fired air heater cooler AHU-213;
B239 - CEP 2 2.74 MMBtu/hr direct-fired air heater cooler AHU-215;
B240 - CEP 2 2.74 MMBtu/hr direct-fired air heater cooler AHU-216;
B241 - CEP 2 2.53 MMBtu/hr direct-fired air heater cooler AHU-217;
B242 - CEP 2 4.54 MMBtu/hr direct-fired air heater cooler AHU-219;
B243 - CEP 2 3.17 MMBtu/hr direct-fired air heater cooler AHU-222;
B244 - CEP 2 3.18 MMBtu/hr direct-fired air heater cooler AHU-223;
B245 - CEP 2 4.54 MMBtu/hr direct-fired air heater cooler AHU-224;
B246 - CEP 2 4.54 MMBtu/hr direct-fired air heater cooler AHU-225;
B247 - CEP 2 4.54 MMBtu/hr direct-fired air heater cooler AHU-226;
B248 - CEP 2 4.54 MMBtu/hr direct-fired air heater cooler AHU-227;
B249 - CEP 2 4.54 MMBtu/hr direct-fired air heater cooler AHU-228;
B250 - CEP 2 4.54 MMBtu/hr direct-fired air heater cooler AHU-229;

B251 - CEP 2 1.0 MMBtu/hr gas-fired hot water heater GWH-101;
B252 - CEP 2 1.0 MMBtu/hr gas-fired hot water heater GWH-102;
B253 - CEP 2 5.0 MMBtu/hr gas-fired hot water boiler HWB-101;
B254 - CEP 2 5.0 MMBtu/hr gas-fired hot water boiler HWB-102;
B255 - CEP 2 3.5 MMBtu/hr gas-fired hot water boiler HWB-302;

K004 - CEP 1 maintenance paint spray booth;
K203 - CEP 2 maintenance paint spray booth;
P014 - CEP 1 maintenance cutter grind facility;
P241 - CEP 2 piston pin grinders, OM-322 & OM-323 (OM=oil mist collector);
P244 - CEP 2 maintenance crib activities;
P246 - CEP 2 emergency 39 kw generator;
P247 - CEP 2 emergency 39 kw generator;
P248 - CEP 2 emergency 39 kw generator;
P249 - CEP 2 emergency 39 kw generator;
P250 - CEP 2 emergency 39 kw generator;
P251 - CEP 2 emergency 39 kw generator;
P252 - CEP 2 crankshaft heat treat furnace #1;
P253 - CEP 2 crankshaft heat treat furnace #2;
P254 - CEP 2 cylinder block machining operations & OM-302;
P255 - CEP 2 cylinder block machining operations & OM-303;
P256 - CEP 2 cylinder block machining operations, OM-301 & OM-324;
P257 - CEP 2 cylinder block machining operations & OM-304;
P258 - CEP 2 cylinder block machining operations & OM-305;
P259 - CEP 2 crankshaft machining operation & OM-306;
P260 - CEP 2 crankshaft machining operation & OM-307;
P261 - CEP 2 crankshaft machining operations & OM-308;
P262 - CEP 2 crankshaft machining operations & OM-309;
P263 - CEP 2 crankshaft machining operations & OM-310;
P265 - CEP 2 crankshaft machining operations, DC-301 & DC-305;
P266 - CEP 2 crankshaft electric induction hardener and quench operations 66-100-01;
P267 - CEP 2 crankshaft electric induction hardener and quench operations 66-100-01;
P268 - CEP 2 cylinder head machining operations & OM-313;
P269 - CEP 2 cylinder head machining operations & OM-315;
P270 - CEP 2 cylinder head machining operations & OM-314;

B. State Only Enforceable Section (continued)

- P271 - CEP 2 camshaft machining operation & OM-317;
- P272 - CEP 2 camshaft machining operation & OM-318;
- P273 - CEP 2 camshaft machining operation & OM-319;
- P274 - CEP 2 camshaft machining operation & OM-316;
- P275 - CEP 2 camshaft machining operation & OM-320;
- P276 - CEP 2 connecting rod machining operations & OM-312;
- P277 - CEP 2 connecting rod machining operations & OM-311;
- P278 - CEP 2 connecting rod machining operations & DC-302;
- P279 - CEP 2 maintenance cutter grind facility & OM-321;
- P280 - CEP 2 V6 engine aluminum heads machining, OM-326, OM-327, & OM-328;
- P284 - CEP 2 aluminum cylinder block machining & OM-329;
- T002 - CEP 1 gasoline underground storage tank;
- T004 - CEP 1 engine oil above ground tank 1;
- T005 - CEP 1 engine oil above ground tank 2;
- T006 - CEP 1 honing oil above ground tank;
- T007 - CEP 1 lubricating oil above ground tank;
- T008 - CEP 1 virgin hydraulic oil above ground tank;
- T009 - CEP 1 reclaimed hydraulic oil above ground tank;
- T010 - CEP 1 virgin soluble oil above ground tank;
- T011 - CEP 1 reclaimed soluble oil above ground tank;
- T203 - CEP 2 oil storage tank;
- T204 - CEP 2 oil storage tank;
- T205 - CEP 2 oil storage tank;
- T206 - CEP 2 oil storage tank;
- T207 - CEP 2 gasoline underground storage tank #21;
- T208 - CEP 2 10,000-gallon premium gasoline underground storage tank #22;

- Z001 - CEP 1 and 2 emergency fire pumps and generators;
- Z002 - CEP 1 and 2 controlled grinding/machining operations vented inside plant;
- Z003 - CEP 1 and 2 uncontrolled grinding/machining operations vented inside plant;
- Z004 - CEP 1 and 2 miscellaneous tanks (e.g., day tanks);
- Z005 - CEP 1 and 2 service package oilers;
- Z007 - CEP 1 and 2 maintenance parts cleaners;
- Z008 - CEP 1 and 2 detergent washers;
- Z020 - CEP 1 and 2 ink jet part marking operations vented inside plant; and
- Z203 - CEP 2 crankshaft oiler.

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: CEP 2 Dynamometer Engine Test Facility (P245)

Activity Description: CEP 2 Dynamometer Engine Test Facility

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> |
|--|---|--|
| P245: CEP 2 dynamometer internal combustion unleaded gasoline engine test facility with 3 new engine test laboratory cells, a B & A Body and Assembly Cell (2 hours/week, for testing returned engines), an afterburner and an interlock | OAC rule 3745-31-05(A)(3) (PTI #13-03495) | Organic compound (OC) emissions shall not exceed 0.4 lb/hr, 9.6 lbs/day, and 1.8 tons/year. |
| | | Carbon monoxide (CO) emissions shall not exceed 8.1 lbs/hr, 194.4 lbs/day, and 35.5 tons/year. |
| | | See Sections A.I.2.a, A.II.1, and A.II.2 below. |
| | | Compliance with this rule also includes compliance with OAC rule 3745-31-05(D). |
| | OAC rule 3745-31-05(D) (PTI #13-03495) | Nitrogen oxides (NOx) emissions shall not exceed 15.0 lbs/hr, 360.0 lbs/day, and 30.7 tons per rolling, 12-month period. |
| | OAC rule 3745-17-07(A) | None, see Section A.I.2.c below. |
| | OAC rule 3745-17-11(B)(1) | None, see Section A.I.2.b below. |
| | OAC rule 3745-18-06 | None, exempt pursuant to OAC rule 3745-18-06(B). |
| | OAC rule 3745-21-08(B) | None, see Section A.I.2.d below. |
| | OAC rule 3745-23-06(B) | None, see Section A.I.2.e below. |

2. Additional Terms and Conditions

- 2.a** Engine exhaust CO and OC emissions from this emissions unit shall be incinerated at not less than 1400 degrees Fahrenheit for 0.3 (by design) second or longer in a natural gas-fired direct-flame afterburner that achieves a minimum 95%, by weight, control (destruction) efficiency of the CO and OC emissions when operated at maximum production conditions. The afterburner shall be equipped with a continuous temperature monitor with visual readout at the operators work station, recorder, controller, and an interlocking device.

In order to ensure that all engine exhaust CO and OC emissions from this emissions unit are incinerated at not less than 1400 degrees Fahrenheit, the permittee shall utilize an interlock system associated with the afterburner's combustion temperature. If the afterburner's combustion temperature drops below 1400 degrees Fahrenheit, then the emissions unit shall be shutdown until the afterburner's combustion temperature is above 1400 degrees Fahrenheit.

- 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, as defined in OAC rule 3745-17-01(B)(14), is equal to zero*.

* The only material introduced into the process is unleaded gasoline which is solely used as fuel for the purpose of combustion.

- 2.c** 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.d** 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 13-03495.

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.e** 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 13-03495.

II. Operational Restrictions

1. The maximum annual unleaded gasoline consumption for this emissions unit shall not exceed 192,000 gallons per rolling, 12-month period.
2. The permittee shall operate and maintain an interlocking device that does not allow this emissions unit to start-up or operate unless the afterburner temperature is greater than 1400 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall maintain daily records of the afterburner combustion temperature, in degrees Fahrenheit, when the emissions unit was in operation. (It shall not be considered a deviation of this monitoring requirement if the ink does not mark on the chart paper and the interlock is functioning properly.)
3. The permittee shall maintain a log of the activation of the interlock system when the emissions unit is not shutdown. This log shall include the date, time and duration of each such period.
4. The permittee shall, on a quarterly basis, test the interlock system to ensure that the emissions unit does shutdown when the afterburner's combustion temperature drops below 1400 degrees Fahrenheit.

The permittee shall maintain records of the quarterly tests of the interlock system.

5. The permittee shall maintain monthly records of the following:
 - a. the gallons of unleaded gasoline consumed;
 - b. the rolling, 12-month summation of the gallons of unleaded gasoline consumed;
 - c. the total NOx emissions for this emissions unit (calculated by multiplying the NOx emission factor established during the most recent emission test that demonstrated that the emissions unit was in compliance by the monthly value from A.III.5.a), in tons; and
 - d. the rolling, 12-month summation of the NOx emissions for this emissions unit, in tons.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time when the interlock system was activated and the emissions unit was not shutdown.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all exceedances of the rolling, 12-month unleaded gasoline consumption restriction; and
 - b. all exceedances of the rolling, 12-month NOx emission limitation.
3. The permittee shall submit the quarterly deviation reports in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that specify the total emissions of OC and CO 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.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

- 2.** Emission Limitation:
OC emissions shall not exceed 0.4 lb OC/hr.

Applicable Compliance Method:

The hourly OC emission limitation was developed using worst case uncontrolled emission test data obtained from testing three prototype engines at 7000 revolutions per minute that established an emission rate of 7 lbs of uncontrolled OC/hr. Applying an afterburner control efficiency of 95% gave an emission rate of 0.35 lb of OC/hr. This emission rate was rounded to 0.4 lb of OC/hr.

The permittee shall demonstrate compliance with this emission limitation through emission testing. See Section A.V.6.

- 2.a** Emission Limitation:
OC emissions shall not exceed 9.6 lbs/day.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly OC emission limitation by 24 hours/day to give an emission rate of 9.6 lbs of OC/day. Compliance with the daily emission limitation is assumed provided compliance is maintained with the hourly emission limitation. An explanation of the hourly emission limitation can be found in Section A.V.2.

- 2.b** Emission Limitation:
OC emissions shall not exceed 1.8 tons/year.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly OC emission limitation by 8760 hours/year and multiplying the product by 1 ton/2000 pounds to give 1.8 tons of OC/year (after rounding off.) Compliance with the annual emission limitation is assumed provided compliance is maintained with the hourly emission limitation.

- 3.** Emission Limitation:
NOx emissions shall not exceed 15.0 lbs/hr.

Applicable Compliance Method:

The maximum allowable emission rate of 15.0 lbs of NOx/hr was derived by multiplying an emission factor of 0.32 lb of NOx/gallon of unleaded gasoline consumed (the maximum emission rate from emission tests on this emissions unit (P245)), by the maximum fuel consumption rate of 46 gallons/hour (for 3 cells), and rounding off the product to 15.0 lbs of NOx/hour.

The permittee shall demonstrate compliance with this emission limitation through emission testing. See Section A.V.6.

- 3.a** Emission Limitation:
NOx emissions shall not exceed 360 lbs/day.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly NOx emission limitation by 24 hours/day to give an emission rate of 360.0 lbs of NOx/day. Compliance with the daily emission limitation is assumed provided compliance is maintained with the hourly emission limitation. An explanation of the hourly emission limitation can be found in Section A.V.3.

V. Testing Requirements (continued)

- 3.b** Emission Limitation:
NOx emissions shall not exceed 30.7 tons per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established by multiplying the test-derived emission factor of 0.32 lb of NOx/gallon of unleaded gasoline consumed, by the self-restricted unleaded gasoline consumption rate of 192,000 gallons/year, and multiplying the product by 1 ton/2000 pounds to give an emission rate of 30.7 tons of NOx/year. Compliance with the annual emission limitation is assumed provided compliance is maintained with the rolling, 12-month unleaded gasoline usage limitation.

- 4.** Emission Limitation:
CO emissions shall not exceed 8.1 lbs/hr.

Applicable Compliance Method:

The hourly CO emission limitation was developed using worst case discharge uncontrolled emission test data obtained from testing three prototype engines at 7000 revolutions per minute that established an emission rate of 162 lbs of uncontrolled CO/hr. Applying an afterburner control efficiency of 95% gave an emission rate of 8.1 lbs of CO/hr.

The permittee shall demonstrate compliance with this emission limitation through emission testing. See Section A.V.6.

- 4.a** Emission Limitation:
CO emissions shall not exceed 194.4 lbs/day.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly CO emission limitation by 24 hours/day to give an emission rate of 194.4 lbs of CO/day. Compliance with the daily emission limitation is assumed provided compliance is maintained with the hourly emission limitation. An explanation of the hourly emission limitation can be found in Section A.V.4.

- 4.b** Emission Limitation:
CO emissions shall not exceed 35.5 tons/year.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly CO emission limitation by 8760 hours/year and multiplying the product by 1 ton/2000 pounds to give an emission rate of 35.5 tons of CO/year. Compliance with the annual emission limitation is assumed provided compliance is maintained with the hourly emission limitation.

- 5.** Emission Limitation:
Minimum 95% control (destruction) efficiency of the OC and CO emissions in the afterburner.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the control (destruction) efficiency requirement in accordance with the methods and procedures outlined in Section A.V.6 of this permit.

- 6.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

V. Testing Requirements (continued)

- 6.a** The emission testing shall be conducted within 6 months after issuance of this permit and within 6 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the hourly allowable mass emission limitations for NO_x, OC, and CO and to demonstrate compliance with the required afterburner control (destruction) efficiencies for OC and CO. The emission testing shall also be used to validate or reestablish the NO_x emission factor.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates and control (destruction) efficiencies:

NO_x: Methods 1 through 4 and 7, of 40 CFR Part 60, Appendix A;

CO: Methods 1 through 4 and 10, of 40 CFR Part 60, Appendix A;

OC: Methods 1 through 4 and 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The afterburner OC control (destruction) efficiency shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) and shall measure the percent reduction in mass emissions of organic compounds or organic materials between the inlet and outlet of the afterburner.

The OC test method selected shall be based on a consideration of the diversity of organic species present and their total concentrations, and on a consideration of the potential presence of interfering gases.

The afterburner CO control (destruction) efficiency shall be determined in accordance with Methods 1 through 4 and 10, of 40 CFR Part 60, Appendix A and shall measure the percent reduction in mass emissions of CO between the inlet and outlet of the afterburner.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

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> |
|---|---|--|
|---|---|--|

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: CEP 2 Hot Test Carousel (P264)

Activity Description: CEP 2 Hot Test Carousel

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> |
|--|--|---|
| P264: CEP 2 internal combustion engine hot test carousel with 34 stations, enclosed flare, pilot flame presence sensor and interlock | OAC rule 3745-31-05(A)(3) (PTI #13-03198) | Organic compound (OC) emissions shall not exceed 5.5 lbs/hr and 24.1 tons/year. |
| | | Carbon monoxide (CO) emissions shall not exceed 5.6 lbs/hr and 24.5 tons/year. |
| | | Nitrogen oxides (NOx) emissions shall not exceed 0.4 lb/hr and 1.7 tons/year. |
| | | Visible particulate emissions from this emissions unit shall not exceed 0% opacity as a 6-minute average. |
| | | See Sections A.I.2.b, A.II.1, and A.II.2 below. |
| | OAC rule 3745-17-11(B)(1) | None, see Section A.I.2.a below. |
| | OAC rule 3745-17-07(A) | None, see Section A.I.2.c below. |
| OAC rule 3745-21-08(B) | None, see Section A.I.2.d below. | |
| OAC rule 3745-23-06(B) | None, see Section A.I.2.e below. | |
| OAC rule 3745-18-06 | None, exempt pursuant to OAC rule 3745-18-06(B). | |

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*.

* The only material introduced into the process is unleaded gasoline fuel which is solely used as fuel for the purpose of combustion.

- 2.b** OC emissions from the fuel rail blowdown of this emissions unit shall be combusted using a natural gas-fired enclosed flare that achieves a minimum control (destruction) efficiency of 95%, by weight, when operated at maximum production conditions. For purposes of federal enforceability, all OCs are considered to be VOCs.

In order to ensure that all OC emissions from the fuel rail blowdown of this emissions unit are combusted, the permittee shall utilize an interlock system associated with the flare's pilot light burner. The flare's interlocking/monitoring device shall automatically prevent the initiation of a new hot test cycle at any station associated with this emissions unit in the event a pilot flame is not detected. Engine test cycles in progress may run to completion.

- 2.c** This emissions unit is exempt from the visible particulate emissions 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.d** 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 13-03198.

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.e** 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 13-03198.

II. Operational Restrictions

1. A pilot flame shall be maintained at all times in the flare's pilot light burner while this emissions unit is in operation.
2. The permittee shall operate an interlocking/monitoring device that automatically prevents the initiation of a new hot test cycle at any station associated with this emissions unit, in the event a pilot flame is not detected. Engine test cycles in progress may run to completion.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain a device to continuously monitor the flare's pilot flame when the emissions unit is in operation. (The flare's pilot flame monitoring system does not include an associated recording device.) The monitoring device shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, with any modifications deemed necessary by the permittee.
2. The permittee shall maintain a log of the activation of the pilot flame sensor's interlock when the emissions unit is not shutdown. This log shall include the date, time and duration of each such period.

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

3. The permittee shall, on a quarterly basis, test the interlock system to ensure that the interlock prevents the initiation of a new hot test cycle at any station associated with this emissions unit when the pilot flame is not detected.

The permittee shall maintain records of the quarterly tests of the interlock system.

4. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from the flare stack serving this emissions unit while it is in operation. At a minimum, the visible particulate emissions from the flare stack shall be checked on a quarterly basis unless this emissions unit does not operate during the calendar quarter. The permittee shall maintain records showing the operation time(s) of this emissions unit 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. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

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

No earlier than 6 months after issuance of this permit, the permittee may, upon receipt of written approval from the Cleveland Division of Air Quality (Cleveland DAQ), 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods when the flare's pilot flame interlocking/monitoring device allowed the initiation of a new hot test cycle when the enclosed flare's pilot flame was not detected.
2. The permittee shall submit the quarterly deviation (excursion) reports in accordance with Section A.1.c.ii of the General Terms and Conditions.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the flare stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Cleveland DAQ by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit annual reports that specify the total emissions of OC, CO and NO_x 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.I.1 of these terms and conditions shall be determined in accordance with the following methods:
2. Emission Limitation:
Visible particulate emissions from this emissions unit shall not exceed 0% opacity as a 6-minute average.

Applicable Compliance Method:

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

V. Testing Requirements (continued)

- 3.** Emission Limitation:
OC emissions shall not exceed 5.5 lbs/hr.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing conducted simultaneously at both the engine combustion exhaust stack and the fuel rail blowdown stack. See Section A.V.7.

The hourly OC emission limitation was developed using an emission rate of 4.6 lbs of OC/hr provided by the permittee based on testing similar equipment with an enclosed flare on the fuel rail blowdown. The emission limitation of 5.5 lbs of OC/hr was determined by applying a 20% adjustment factor to the emission rate of 4.6 lbs of OC/hr.

- 3.a** Emission Limitation:
OC emissions shall not exceed 24.1 tons/year.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly OC emission limitation by 8760 hours/year and multiplying the product by 1 ton/2000 pounds to give an emission rate of 24.1 tons of OC/year after rounding off. Compliance with the annual emission limitation is assumed provided compliance is maintained with the hourly emission limitation.

- 4.** Emission Limitation:
CO emissions shall not exceed 5.6 lbs/hr.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing conducted simultaneously at both the engine combustion exhaust stack and the fuel rail blowdown stack. See Section A.V.7.

The hourly CO emission limitation was developed using an emission rate of 5.0 lbs of CO/hr provided by the permittee based on testing similar equipment with an enclosed flare on the fuel rail blowdown. The emission limitation of 5.6 lbs of CO/hr was determined by applying a 12% adjustment factor to the emission rate of 5.0 lbs of CO/hr.

- 4.a** Emission Limitation:
CO emissions shall not exceed 24.5 tons/year.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly CO emission limitation by 8760 hours/year and multiplying the product by 1 ton/2000 pounds to give an emission rate of 24.5 tons of CO/year. Compliance with the annual emission limitation is assumed provided compliance is maintained with the hourly emission limitation.

- 5.** Emission Limitation:
NOx emissions shall not exceed 0.4 lb/hr.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing conducted simultaneously at both the engine combustion exhaust stack and the fuel rail blowdown stack. See Section A.V.7.

The hourly NOx emission limitation was developed using an emission rate of 0.3 lb of NOx/hr provided by the permittee based on testing similar equipment with an enclosed flare on the fuel rail blowdown. The emission limitation of 0.4 lb of NOx was determined by applying a 20% adjustment factor to the emission rate of 0.3 lb of NOx/hr and rounding off.

V. Testing Requirements (continued)

- 5.a** Emission Limitation:
NOx emissions shall not exceed 1.7 tons/year.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly NOx emission limitation by 8760 hours/year and multiplying the product by 1 ton/2000 pounds to give an emission rate of 1.7 tons of NOx/year. Compliance with the annual emission limitation is assumed provided compliance is maintained with the hourly emission limitation.

- 6.** Emission Limitation:
Minimum 95% control (destruction) efficiency of the OC emissions from the fuel rail blowdown in the enclosed flare.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the control (destruction) efficiency requirement in accordance with the methods and procedures outlined in Section A.V.7 of this permit.

- 7.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within 6 months after issuance of this permit and within 6 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the hourly allowable mass emission limitations for NOx, OC and CO. The emission testing shall also be conducted to demonstrate compliance with the required minimum enclosed flare OC control.

The emission testing shall be conducted simultaneously at both the engine combustion exhaust stack and the fuel rail blowdown stack. The tested NOx, OC and CO emission rates from the engine combustion exhaust stack and the fuel rail blowdown stack shall be summed and the results used to demonstrate compliance with the emission limitations for NOx, OC and CO.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and control (destruction) efficiency requirement:

NOx: Methods 1 through 4 and 7, of 40 CFR Part 60, Appendix A;
CO: Methods 1 through 4 and 10, of 40 CFR Part 60, Appendix A;
OC: Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The enclosed flare control (destruction) efficiency shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) and shall measure the percent reduction in mass emissions of organic compounds or organic materials between the inlet and outlet of the enclosed flare.

The OC test method selected shall be based on a consideration of the diversity of organic species present and their total concentrations, and on a consideration of the potential presence of interfering gases.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

V. Testing Requirements (continued)

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

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

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

VI. Miscellaneous Requirements

- 1.** The permittee's emission limitations for OC, CO and NO_x were based on emission factors extrapolated from dynamometer testing of a similar engine configuration, the only data available to the permittee at the time of the PTI application. The permittee relied on this research testing data to estimate emission limitations that were accepted by Ohio EPA during the permit review process. The permittee has voluntarily conducted testing of the exhaust stack serving this emissions unit and has obtained more reliable emissions data than available at the time the PTI application was submitted. The permittee has informed Ohio EPA that the stack test results exceed the allowable emission limitations for CO and OC. Without admission of any liability, the permittee will implement the following plan to control the CO and OC emissions generated from the engine exhaust from the engines operating on the hot test carousel:
- 1.a** By not later than August 31, 2003, the permittee shall install and utilize a thermal oxidizer to control CO and OC emissions from this emissions unit. (NO_x emissions are not abated using the oxidizer and any NO_x emissions generated from the oxidizer will not be included in the compliance demonstration for the NO_x limitation.)
- 1.b** By not later than September 30, 2003, the permittee shall perform emission testing to demonstrate compliance with the allowable emission limitations for CO, OC and NO_x.

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

- 1.c** If necessary, by not later than December 1, 2003, the permittee shall submit a PTI modification application to the Cleveland DAQ which addresses any increase in NO_x emissions resulting from the use of the thermal oxidizer. Within 30 days after receipt of a modified PTI the permittee shall submit a request for modification of this Title V permit which shall include proposed monitoring, record keeping, and reporting for the new thermal oxidizer.

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> |
|---|---|--|
|---|---|--|

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: CEP 2 Engine Hot Test Stands (P281)

Activity Description: (5) Five Engine Hot Test Stands (4 Test Stands & 1 Diagnostic Stand) with Flare

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> |
|---|--|---|
| P281: CEP 2's five (5) internal combustion engine hot test stands (4 test stands and 1 diagnostic stand) with enclosed flare, pilot flame presence sensor and interlock | OAC rule 3745-31-05(A)(3) (PTI #13-03185) | Organic compound (OC) emissions shall not exceed 1.1 lbs/hr, 26.4 lbs/day, and 4.8 tons/year. |
| | | Carbon monoxide (CO) emissions shall not exceed 3.4 lbs/hr, 81.6 lbs/day, and 14.9 tons/year. |
| | | Nitrogen oxides (NOx) emissions shall not exceed 0.9 lb/hr, 21.6 lbs/day, and 3.9 tons/year. |
| | | Visible particulate emissions from this emissions unit shall not exceed 0% opacity as a 6-minute average. |
| | | See Sections A.I.2.b, A.II.1, and A.II.2 below. |
| | OAC rule 3745-17-11(B)(1) | None, see Section A.I.2.a below. |
| | OAC rule 3745-17-07(A) | None, see Section A.I.2.c below. |
| OAC rule 3745-21-08(B) | None, see Section A.I.2.d below. | |
| OAC rule 3745-23-06(B) | None, see Section A.I.2.e below. | |
| OAC rule 3745-18-06 | None, exempt pursuant to OAC rule 3745-18-06(B). | |

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*.

* The only material introduced into the process is unleaded gasoline fuel which is solely used as fuel for the purpose of combustion.

- 2.b** OC emissions from the fuel rail blowdown of this emissions unit shall be combusted using a natural gas-fired enclosed flare that achieves a minimum control (destruction) efficiency of 95%, by weight, when operated at maximum production conditions. For purposes of federal enforceability, all OCs are considered to be VOCs.

In order to ensure that all OC emissions from the fuel rail blowdown of this emissions unit are combusted, the permittee shall utilize an interlock system associated with the flare's pilot light burner. The flare's interlocking/monitoring device shall automatically prevent the initiation of a new hot test cycle at any station associated with this emissions unit in the event a pilot flame is not detected. Engine test cycles in progress may run to completion.

- 2.c** This emissions unit is exempt from the visible particulate emissions 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.d** 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 13-03185.

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.e** 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 13-03185.

II. Operational Restrictions

1. A pilot flame shall be maintained at all times in the flare's pilot light burner while this emissions unit is in operation.
2. The permittee shall operate an interlocking/monitoring device that automatically prevents the initiation of a new hot test cycle at any station associated with this emissions unit, in the event a pilot flame is not detected. Engine test cycles in progress may run to completion.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain a device to continuously monitor the flare's pilot flame when the emissions unit is in operation. (The flare's pilot flame monitoring system does not include an associated recording device.) The monitoring device shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, with any modifications deemed necessary by the permittee.
2. The permittee shall maintain a log of the activation of the pilot flame sensor's interlock when the emissions unit is not shutdown. This log shall include the date, time and duration of each such period.

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

3. The permittee shall, on a quarterly basis, test the interlock system to ensure that the interlock prevents the initiation of a new hot test cycle at any station associated with this emissions unit when the pilot flame is not detected.

The permittee shall maintain records of the quarterly tests of the interlock system.

4. The permittee shall perform weekly checks, when the weather conditions allow, for any visible particulate emissions from the flare stack serving this emissions unit while it is in operation. At a minimum, the visible particulate emissions from the flare stack shall be checked on a quarterly basis unless this emissions unit does not operate during the calendar quarter. The permittee shall maintain records showing the operation time(s) of this emissions unit 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. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

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

No earlier than 6 months after issuance of this permit, the permittee may, upon receipt of written approval from the Cleveland Division of Air Quality (Cleveland DAQ), 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.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods when the flare's pilot flame interlocking/monitoring device allowed the initiation of a new hot test cycle when the enclosed flare's pilot flame was not detected.
2. The permittee shall submit the quarterly deviation (excursion) reports in accordance with Section A.1.c.ii of the General Terms and Conditions.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the flare stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Cleveland DAQ by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit annual reports that specify the total emissions of OC, CO and NO_x 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.I.1 of these terms and conditions shall be determined in accordance with the following methods:
2. Emission Limitation:
Visible particulate emissions from this emissions unit shall not exceed 0% opacity as a 6-minute average.

Applicable Compliance Method:

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

V. Testing Requirements (continued)

- 3.** Emission Limitation:
OC emissions shall not exceed 1.1 lbs/hr.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing conducted simultaneously at both the engine combustion exhaust stack and the fuel rail blowdown stack. See Section A.V.7.

The hourly OC emission limitation was developed by multiplying an emission factor of 0.022 lb of OC/engine (provided by the permittee based on testing similar equipment with an enclosed flare on the fuel rail blowdown) by the maximum engine testing rate of 50 engines/hr to give an emission rate of 1.1 lbs/hr.

- 3.a** Emission Limitation:
OC emissions shall not exceed 26.4 lbs/day.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly OC emission limitation by 24 hours/day to give an emission rate of 26.4 lbs of OC/day. Compliance with the daily emission limitation is assumed provided compliance is maintained with the hourly emission limitation. An explanation of the hourly emission limitation can be found in Section A.V.3.

- 3.b** Emission Limitation:
OC emissions shall not exceed 4.8 tons/year.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly OC emission limitation by 8760 hours/year and multiplying the product by 1 ton/2000 pounds to give an emission rate of 4.8 tons OC/year. Compliance with the annual emission limitation is assumed provided compliance is maintained with the hourly emission limitation.

- 4.** Emission Limitation:
CO emissions shall not exceed 3.4 lbs/hr.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing conducted simultaneously at both the engine combustion exhaust stack and the fuel rail blowdown stack. See Section A.V.7.

The hourly CO emission limitation was developed by multiplying an emission factor of 0.068 lb of CO/engine-hr (provided by the permittee based on testing similar equipment with an enclosed flare on the fuel rail blowdown) by the maximum engine testing rate of 50 engines/hr to give an emission rate of 3.4 lbs/hr.

- 4.a** Emission Limitation:
CO emissions shall not exceed 81.6 lbs/day.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly CO emission limitation by 24 hours/day to give an emission rate of 81.6 lbs of CO/day. Compliance with the daily emission limitation is assumed provided compliance is maintained with the hourly emission limitation. An explanation of the hourly emission limitation can be found in Section A.V.4.

V. Testing Requirements (continued)

- 4.b** Emission Limitation:
CO emissions shall not exceed 14.9 tons/year.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly CO emission limitation by 8760 hours/year and multiplying the product by 1 ton/2000 pounds to give an emission rate of 14.9 tons of CO/year. Compliance with the annual emission limitation is assumed provided compliance is maintained with the hourly emission limitation.

- 5.** Emission Limitation:
NOx emissions shall not exceed 0.9 lb/hr.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing conducted simultaneously at both the engine combustion exhaust stack and the fuel rail blowdown stack. See Section A.V.7.

The hourly NOx emission limitation was developed by multiplying an emission factor of 0.018 lb of NOx/engine-hr (provided by the permittee based on testing similar equipment with an enclosed flare on the fuel rail blowdown) by the maximum engine testing rate of 50 engines/hr to give an emission rate of 0.9 lb/hr.

- 5.a** Emission Limitation:
NOx emissions shall not exceed 21.6 lbs/day.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly NOx emission limitation by 24 hours/day to give an emission rate of 21.6 lbs of NOx/day. Compliance with the daily emission limitation is assumed provided compliance is maintained with the hourly emission limitation. An explanation of the hourly emission limitation can be found in Section A.V.5.

- 5.b** Emission Limitation:
NOx emissions shall not exceed 3.9 tons/year.

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly NOx emission limitation by 8760 hours/year and multiplying the product by 1 ton/2000 pounds to give an emission rate of 3.9 tons of NOx/year. Compliance with the annual emission limitation is assumed provided compliance is maintained with the hourly emission limitation.

- 6.** Emission Limitation:
Minimum 95% control (destruction) efficiency of the OC emissions from the fuel rail blowdown in the enclosed flare.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the control (destruction) efficiency requirement in accordance with the methods and procedures outlined in Section A.V.7 of this permit.

- 7.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within 6 months after issuance of this permit and within 6 months prior to permit expiration.

V. Testing Requirements (continued)

The emission testing shall be conducted to demonstrate compliance with the hourly allowable mass emission limitations for NO_x, OC and CO. The emission testing shall also be conducted to demonstrate compliance with the required minimum enclosed flare OC control.

The emission testing shall be conducted simultaneously at both the engine combustion exhaust stack and the fuel rail blowdown stack. The tested NO_x, OC and CO emission rates from the engine combustion exhaust stack and the fuel rail blowdown stack shall be summed and the results used to demonstrate compliance with the emission limitations for NO_x, OC and CO.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and control (destruction) efficiency requirement:

NO_x: Methods 1 through 4 and 7, of 40 CFR Part 60, Appendix A;

CO: Methods 1 through 4 and 10, of 40 CFR Part 60, Appendix A;

OC: Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The enclosed flare control (destruction) efficiency shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) and shall measure the percent reduction in mass emissions of organic compounds or organic materials between the inlet and outlet of the enclosed flare.

The OC test method selected shall be based on a consideration of the diversity of organic species present and their total concentrations, and on a consideration of the potential presence of interfering gases.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

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> |
|---|---|--|
|---|---|--|

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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