



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

05/23/01

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

03-02-02-0143
Ford Motor Co.-Lima
Kevin P. Bruin Mr.
1155 Bible Road
Lima, OH 45801

Dear Kevin P. Bruin:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Northwest District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions or comments concerning this draft Title V permit, please contact Northwest District Office.

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA (electronically submitted)
Michael Ahern, DAPC PMU
Northwest District Office
Indiana



State of Ohio Environmental Protection Agency
DRAFT TITLE V PERMIT

Issue Date:	Effective Date:	Expiration Date:
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This document constitutes issuance of a Title V permit for Facility ID: 03-02-02-0143 to:

Ford Motor Co.-Lima
 1155 Bible Road
 Lima, OH 45801

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

<p>P011 (4 Cyl. OHC Engine Block Machining Line) 4 Cyl. OHC Engine Block Machining Line</p> <p>P012 (4 Cyl. OHC Engine Cylinder Head Machining Line) 4 Cyl. OHC Engine Cylinder Head Machining Line. Exempt per ORC 3704.036. (PTE - Potential to emit-Less than 5 tons/year)</p> <p>P013 (4 Cyl. OHC Engine Main Bearing Cap Machining Line) 4 Cyl. OHC Engine Main Bearing Cap Machining Line. Exempt per ORC 3704.036.(PTE - Potential to emit-Less than 5 tons/year)</p> <p>P014 (4 Cyl. OHC Engine Hot Test Stands) 4 Cyl. OHC Engine Hot Test Stands; Hot Test Flair PTI has been submitted to OEPA</p> <p>P023 (V6 Engine Block Machining Line) V6 Engine Block Machining Line;</p> <p>P024 (V6 Engine Head Machining Line) V6 Engine Head Machining Line. Exempt per ORC 3704.036. (PTE - Potential to emit-Less than 5 tons/year)</p> <p>P025 (V6 Engine Main Bearing Cap Machining Line) V6 Engine Main Bearing Cap Machining Line. Exempt per ORC 3704.036.(PTE - Potential to emit-Less than 5 tons/year)</p>	<p>P026 (V6 Engine Hot Test Stands) V6 Engine Hot Test Stands; Hot Test Flair has been submitted to OEPA</p> <p>P028 (4 Cyl. OHC Engine Crankshaft Machining Line) 4 Cyl. OHC Engine Crankshaft Machining Line. Exempt per ORC 3704.036.(PTE - Potential to emit-Less than 5 tons/year)</p> <p>P029 (V6 Engine Camshaft Machining Line) V6 Engine Camshaft Machining Line</p> <p>P031 (V6 Engine Piston Machining Line) V6 Engine Piston Machining Line. Exempt per ORC 3704.036.(PTE - Potential to emit-Less than 5 tons/year)</p> <p>P032 (V6 Engine Connecting Rod Machining Line) V6 Engine Connecting Rod Machining Line.</p> <p>P033 (Dynamometer Test Cells (EAST SIDE)) EAST - Dynamometer Test Cells Note: (4 test cells in operation on the East side P033 & 3 test cells in operation on the West side P050)</p> <p>P034 (3.9L V-8 Connecting Rod Machining Line (DEW)) 3.9L V-8 Connecting Rod Machining Line. Exempt per ORC 3704.036. (PTE - Potential to emit-Less than 5 tons/year)</p> <p>P037 (3.9L V-8 Block Machining Line (DEW)) 3.9L V-8 Block Machining Line.</p>	<p>P038 (V6 Engine Intake Manifold Machining Line) V6 Engine Intake Manifold Machining Line.</p> <p>P041 (3.9L V-8 Head Machining Line (DEW)) 3.9L V-8 Head Machining Line.</p> <p>P042 (3.9L V-8 Engine Hot Test (DEW)) 3.9L V-8 Engine Hot Test.</p> <p>P048 (V6 Engine Crankshaft Machining Line) V6 Engine Crankshaft Machining Line.</p> <p>P049 (V6 (Duratec) Crankshaft Machining Line) Duratec V6 Crankshaft Machining Line (Has not started operation yet)</p> <p>P050 (Dynamometer Test Cells (WEST SIDE)) WEST - Dynamometer Test Cells... Note: (4 cells in operation on the East side P033 & 3 cells in operation on the West side P050)</p> <p>R004 (Garage Paint Booth) Industrial Garage Paint/Steam Booth.</p> <p>R005 (Maintenance Paint Booth) Maintenance Paint Spray Booth.</p>
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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 3745-77-04(A) 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:
 Northwest District Office
 347 North Dunbridge Road
 Bowling Green, OH 43402
 (419) 352-8461

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
 Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (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. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, 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. 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, recordkeeping, 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.

- 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 are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the

Act, and is grounds for enforcement action or for permit revocation, revocation and 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. 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.

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.

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.

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.

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 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.

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.

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 appropriate Ohio EPA District Office or local air agency 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.

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.

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).

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.

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, 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; and
- 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 further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

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.

18. Insignificant Activity

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

B. State Only Enforceable Section

1. 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.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. 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.

4. 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.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction 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).

6. 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.

7. 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.

8. 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

None

B. State Only Enforceable Section

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

B004 - gas space heaters
B005 - B028: 9.9 mmBtu/hr, natural gas fired-heating units
B029 - B039: 5.4 mmBtu/hr, natural gas fired-heating units
B040, B041 - 4.32 mmBtu/hr, natural gas fired-heating units
B042 - 2.7 mmBtu/hr, natural gas fired-heating unit
B043 -B046: 9.65 mmBtu/hr, natural gas fired-heating units
K004 - V-6 rust inhibitor spray booth
K006 - 4-cylinder rust inhibitor spray booth
P027 - 4 cyl OHC engine camshaft machining line
P035 - 3.9 L V-8 engine crankshaft machining line
P036 - 3.9 L V-8 engine camshaft machining line
P039 - 4 cyl OHC engine connecting rod machining line
P040 - 4 cyl OHC small parts machining line
P043 - 4.6 L head line
T001, T002, T004 - gasoline storage and supply systems
T003, T006, T007, T009 - engine oil storage tanks
T005 - soluble oil storage tank
T008 - lube oil storage tank
T010 - mineral seal oil storage tank
T011 - hydraulic oil storage tanks
Z001- machining lines
Z002 - diesel fire pumps
Z003 - heat treat furnaces
Z009 - propane storage tanks
Z021 - WWTP storage and treatment tanks
Z023 - diesel storage and fueling operations
Z033 - maintenance solvent cold cleaners
Z034 - ink-jet printer stations
Z038 - detergent washers
Z039 - coolant storage and recirculation system
Z040 - natural gas heaters
Z041 - cutter grind -west, center and east
Z042 - tool room

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 PTI for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 4 Cyl. OHC Engine Block Machining Line (P011)
Activity Description: 4 Cyl. OHC Engine Block Machining Line

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>
engine block machining equipment, with 5 air washers, and 1 mist collector (for 4-cylinder OHC engine)	OAC rule 3745-17-11(B)(1)	9.55 lbs of particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-21-07(G)	none (See A.1.2.a.)

2. Additional Terms and Conditions

- This facility is not located in a "Priority I" county (it is located in Allen County) as indicated in paragraph (A) of OAC rule 3745-21-06, and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

II. Operational Restrictions

- The pressure drop across each air washer shall be maintained within the range of 0.25 to 15 inches of water while the emissions unit is in operation.
- The pressure drop across the mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across each of the air washers and the mist collector while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each air washer and the mist collector on a daily basis.

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

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the air washers or the mist collector did not comply with the allowable ranges specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
9.55 lbs of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by mist collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 4 Cyl. OHC Engine Cylinder Head Machining Line (P012)

Activity Description: 4 Cyl. OHC Engine Cylinder Head Machining Line.
 Exempt per ORC 3704.036. (PTE - Potential to emit-
 Less than 5 tons/year)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
4-cylinder OHC engine cylinder head machining line, with 1 air washer and 3 mist collectors	OAC rule 3745-17-11(B)(1)	10.03 lbs of particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-21-07(G)	none (See A.II.3.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the air washer shall be maintained within the range of 0.25 to 15 inches of water while the emissions unit is in operation.
- The pressure drop across each mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the air washer and each mist collector while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the air washer and each mist collector on a daily basis.
- The permittee shall record each month the following information for this emissions unit:
 - the company identification of each liquid organic material employed; and
 - whether or not each liquid organic material employed is a photochemically reactive material.

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the air washer or any of the mist collectors did not comply with the allowable ranges specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I. of this permit shall be determined in accordance with the following methods(s):

- 1.a Emission Limitation:
10.03 lbs of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by mist collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 4 Cyl. OHC Engine Main Bearing Cap Machining Line (P013)

Activity Description: 4 Cyl. OHC Engine Main Bearing Cap Machining Line.
 Exempt per ORC 3704.036.(PTE - Potential to emit-
 Less than 5 tons/year)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
4-cylinder engine main bearing cap machining equipment, with air washer	OAC rule 3745-17-11(B)(1)	3.82 lbs of particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-21-07(G)	none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The pressure drop across the air washer shall be maintained within the range of 0.25 to 15 inches of water while the emissions unit is in operation.
2. The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the air washer while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the air washer on a daily basis.
2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the air washer did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I. of this permit shall be determined in accordance with the following methods(s):

- 1.a Emission Limitation:
3.82 lbs of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by wet collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 4 Cyl. OHC Engine Hot Test Stands (P014)
Activity Description: 4 Cyl. OHC Engine Hot Test Stands; Hot Test Flair
 PTI has been submitted to OEPA

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
4-cylinder hot engine test stands	OAC rule 3745-21-07(G)	none (See A.I.2.a.)
	OAC rule 3745-17-11(B)(1)	none (See A.I.2.b.)
	OAC rule 3745-17-07(A)	none (See A.I.2.c.)

2. Additional Terms and Conditions

- 2.a This facility is not located in a "Priority I" county (it is located in Allen County) as indicated in paragraph (A) of OAC rule 3745-21-06, and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).
- 2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(i), Figure II of OAC rule 3745-17-11 does not apply. Also, Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.*

 * The only materials introduced into this process are gaseous fuels and liquid fuels that are used solely as fuels for the purpose of combustion.
- 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 3745-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

Facility Name: **Ford Lima Engine Plant**
Facility ID: **03-02-02-0143**
Emissions Unit: **4 Cyl. OHC Engine Hot Test Stands (P014)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V6 Engine Block Machining Line (P023)
Activity Description: V6 Engine Block Machining Line;

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>
V6 engine block machining line, with 6 air washers	OAC rule 3745-17-11(B)(1)	2.80 lbs of particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-21-07(G)	none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across each air washer shall be maintained within the range of 0.25 to 15 inches of water while the emissions units is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across each of the air washers while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each of the air washers on a daily basis.
- The permittee shall record each month the following information for this emissions unit:
 - the company identification of each liquid organic material employed; and
 - whether or not each liquid organic material employed is a photochemically reactive material.

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the air washers did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I. of this permit shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:
2.80 lbs of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by wet collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V6 Engine Head Machining Line (P024)
Activity Description: V6 Engine Head Machining Line. Exempt per ORC 3704.036.
 (PTE - Potential to emit-Less than 5 tons/year)

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>
V6 engine head machining line, with air washer	OAC rule 3745-17-11(B)(1)	0.40 lb of particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-21-07(G)	none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the air washer shall be maintained within the range of 0.25 to 15 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the air washer while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the air washer on a daily basis.
- The permittee shall record each month the following information for this emissions unit:
 - the company identification of each liquid organic material employed; and
 - whether or not each liquid organic material employed is a photochemically reactive material.

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the air washer did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I. of this permit shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:
0.40 lb of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by wet collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V6 Engine Main Bearing Cap Machining Line (P025)

Activity Description: V6 Engine Main Bearing Cap Machining Line.
 Exempt per ORC 3704.036.(PTE - Potential to emit-
 Less than 5 tons/year)

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>
V6 engine main bearing cap machining line, with air washer	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05 (PTI #03-2009)	0.23 lb of particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the air washer shall be maintained within the range of 0.25 to 15 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the air washer while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the air washer on a daily basis.

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

2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the air washer did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:
0.23 lb of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by wet collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

Facility Name: **Ford Lima Engine Plant**

Facility ID: **03-02-02-0143**

Emissions Unit: **V6 Engine Main Bearing Cap Machining Line (P025)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V6 Engine Hot Test Stands (P026)

Activity Description: V6 Engine Hot Test Stands; Hot Test Flair has been submitted to OEPA

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>
3.0-liter, V6 engine hot test/repair stands, and fuel rail blow down, with enclosed flare	OAC rule 3745-17-11(B)(1)	none (See A.I.2.a.)
	OAC rule 3745-17-07(A)	none (See A.I.2.b.)
	OAC rule 3745-31-05(A)(3) (PTI #03-13541)	for the engine exhaust stack: 3.1 lbs of organic compounds (OC)/hr and 5.5 tons of OC/yr 28.4 lbs of carbon monoxide (CO)/hr 2.6 lbs of nitrogen oxides (NOx)/hr and 4.6 tons of NOx/yr for the fuel rail blow down: 1.1 lbs of OC/hr and 2.0 tons of OC/yr 1.1 lbs of CO/hr and 2.0 tons of CO/yr 0.2 lb of NOx/hr and 0.4 ton of NOx/yr See A.II.2. and A.I.2.c.
	OAC rule 3745-31-05(D) (PTI #03-13541)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D). for the engine exhaust stack, 50.7 tons of CO/rolling, 12-month period (See A.I.2.d.)

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-07(G)(2)	40 lbs OC/day [the hourly emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)].

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(i), Figure II of OAC rule 3745-17-11 does not apply. Also, Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.*

* The only materials introduced into this process are gaseous fuels and liquid fuels that are used solely as fuels for the purpose of combustion.

2.b This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

2.c The flare shall be designed and operated such that no visible emissions, as determined by "Method 22, 40 CFR, Part 60, Appendix A" are observed, except for periods not to exceed a total of five minutes during any 120 consecutive minutes.

2.d The permittee has requested a federally enforceable limitation of 50.7 tons of CO per rolling, 12-month period for the engine exhaust stack based on the throughput restriction established in Section A.II.1 of this permit. The federally enforceable limitation will allow the permittee to avoid "Prevention of Significant Deterioration" (PSD) requirements for CO.

2.e For purposes of federal enforceability, all OCs are considered to be VOCs.

II. Operational Restrictions

1. A pilot flame shall be maintained at all times in the flare's pilot light burner when the emissions unit is in operation.
2. Process vent streams from the engine fuel rail blow down system shall be combusted with an enclosed flare capable of achieving a minimum destruction efficiency of 95%, by weight, for OC.
3. The permittee shall not exceed a maximum throughput of 750,000 engines tested per rolling, 12-month period for this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

- a. A log of all periods during which there was no pilot flame.
 - b. A log of the downtime for the flare and monitoring equipment when the associated emissions unit was in operation.
2. The permittee shall inspect all fittings (valves, flanges, etc.) associated with the fuel delivery system on a monthly basis and shall maintain records of the results of the inspections. Any component found to be leaking or in need of repair shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected. For the purposes of this monitoring program, a leak is detected by visual, audible or olfactory methods.

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

3. The permittee shall maintain records of all repairs made to process equipment components.
 4. The permittee shall collect and record the following information each day for this emissions unit:
 - a. The number of engines tested.
 - b. The total OC emissions, in lbs, calculated as follows:

$$\text{OC emissions (lbs/day)} = (0.196 \text{ lb of OC/engine-hr}^* \times \text{the engine production rate [(\# of engines tested/day), from Section 4.a above,} \times 4.5^{**}] / (60)^{***}$$
 - c. The total CO emissions, in lbs, calculated as follows:

$$\text{CO emissions (lbs/day)} = (1.8 \text{ lbs of CO/engine-hr}^* \times \text{the engine production rate [(\# of engines tested/day), from Section 4.a above,} \times 4.5^{**}] / (60)^{***}$$

* emission factor supplied by the permittee

** a factor to account for the fact that testing of each engine lasts 4.5 minutes

*** a unit conversion factor
5. The permittee shall collect and record the following information each month for this emissions unit:
 - a. The total CO emissions, in tons, calculated by summing the daily CO emission rates (from Section 4.c above) for the calendar month, and then dividing by 2000.
 - b. The number of engines tested, calculated by summing the number of daily engines tested, from Section 4.a above, for the calendar month.
 - c. The rolling, 12-month summation of the monthly numbers of engines tested.
 - d. The rolling, 12-month summation of the monthly CO emission rates, in tons.
6. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the flare serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly summaries that include the following:
 - a. a log of the downtime for the flare and monitoring equipment when the associated emissions unit was in operation; and
 - b. all periods of time during which there was no pilot flame.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all exceedances of the rolling, 12-month restriction on the number of engines tested of 750,000 engines;
 - b. all exceedances of the rolling, 12-month CO emission limitation of 50.7 tons; and
 - c. all exceedances of the daily OC emission limitation of 40 pounds.

The deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the flare serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitations:
3.1 lbs of OC/hr and 5.5 tons of OC/yr, from the engine exhaust stack

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable OC emission limitation based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

The permittee may determine compliance with the hourly allowable OC emission limitation by multiplying an emission factor of 0.196 lb of OC/engine-hr* by the maximum hourly engine production rate (210 engines/hr) and by 4.5**, and then dividing by 60.

* emission factor supplied by the permittee

** a factor to account for the fact that testing of each engine lasts 4.5 minutes

The annual allowable emission limitation was developed in accordance with the following equation:

tons of OC/yr = [(MET)/(EPR)] x (HEL) x (1/2000), where:

MET = the maximum annual # of engines tested (750,000)

EPR = the maximum hourly # of engines tested (210 engines per hour)

HEL = the hourly allowable OC emission limitation (3.1 lbs of OC/hr)

Therefore, compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation and the annual restriction on the number of engines tested is maintained.

V. Testing Requirements (continued)

1.b Emission Limitations:
28.4 lbs of CO/hr, from the engine exhaust stack

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 10.

The permittee may also determine compliance with the hourly allowable CO emission limitation by multiplying an emission factor of 1.80 lbs of CO/engine-hr* by the maximum hourly engine production rate (210 engines/hr) and by 4.5** , and then dividing by 60.

* emission factor supplied by the permittee

** a factor to account for the fact that testing of each engine lasts 4.5 minutes

1.c Emission Limitations:
2.6 lbs of NOx/hr and 4.6 tons of NOx/yr, from the engine exhaust stack

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NOx emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

The permittee may also determine compliance with the hourly allowable NOx emission limitation by multiplying an emission factor of 0.164 lb of NOx/engine-hr* by the maximum hourly engine production rate (210 engines/hr) and by 4.5** , and then dividing by 60.

* emission factor supplied by the permittee

** a factor to account for the fact that testing of each engine lasts 4.5 minutes

The annual allowable emission limitation was developed in accordance with the following equation:

tons of NOx/yr = [(MET)/(EPR)] x (HEL) x (1/2000), where:

MET = the maximum annual # of engines tested (750,000)

EPR = the maximum hourly # of engines tested (210 engines per hour)

HEL = the hourly allowable NOx emission limitation (2.6 lbs of NOx/hr)

Therefore, compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation and the annual restriction on the number of engines tested is maintained.

V. Testing Requirements (continued)

- 1.d** Emission Limitations:
1.1 lbs of OC/hr and 2.0 tons of OC/yr, from the fuel rail blow down

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable OC emission limitation based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

The annual allowable emission limitation was developed in accordance with the following equation:

tons of OC/yr = [(MET)/(EPR)] x (HEL) x (1/2000), where:

MET = the maximum annual # of engines tested (750,000)

EPR = the maximum hourly # of engines tested (210 engines per hour)

HEL = the hourly allowable OC emission limitation (1.1 lbs of OC/hr)

Therefore, compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation and the annual restriction on the number of engines tested is maintained.

- 1.e** Emission Limitations:
1.1 lbs of CO/hr and 2.0 tons of CO/yr, from the fuel rail blow down

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 10.

The permittee may determine compliance with the hourly allowable CO emission limitation by multiplying an emission factor of 0.005 lb of CO/engine tested* by the maximum hourly number of engines tested (210 engines/hr).

* emission factor supplied by the permittee

The annual allowable emission limitation was developed in accordance with the following equation:

tons of CO/yr = [(MET)/(EPR)] x (HEL) x (1/2000), where:

MET = the maximum annual # of engines tested (750,000)

EPR = the maximum hourly # of engines tested (210 engines per hour)

HEL = the hourly allowable CO emission limitation (1.1 lbs of CO/hr)

Therefore, compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation and the annual restriction on the number of engines tested is maintained.

V. Testing Requirements (continued)

- 1.f** Emission Limitations:
0.2 lb of NOx/hr and 0.4 ton of NOx/yr, from the fuel rail blow down

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NOx emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

The permittee may also determine compliance with the hourly allowable NOx emission limitation by multiplying an emission factor of 0.001 lb of NOx/engine tested* by the maximum hourly number of engines tested (210 engines/hr).

* emission factor supplied by the permittee

The annual allowable emission limitation was developed in accordance with the following equation:

tons of NOx/yr = [(MET)/(EPR)] x (HEL) x (1/2000), where:

MET = the maximum annual # of engines tested (750,000)

EPR = the maximum hourly # of engines tested (210 engines per hour)

HEL = the hourly allowable NOx emission limitation (0.2 lb of NOx/hr)

Therefore, compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation and the annual restriction on the number of engines tested is maintained.

- 1.g** Emission Limitation:
50.7 tons of CO/rolling, 12-month period

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.4 and 5 of this permit.

- 1.h** Emission Limitation:
95% control efficiency for OC

Applicable Compliance Method:

The permittee shall demonstrate compliance with the overall control efficiency requirement in accordance with the methods and procedures outlined in Section V.2 of this permit.

- 1.i** Emission Limitation:
40 lbs/day OC

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.4 of this permit.

- 1.j** Engine Testing Restriction:
750,000 engines tested/rolling, 12-month period

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Sections A.III.4 and 5 of this permit.

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

- 2.a** The emission testing shall be conducted within 3 months of permit issuance and within 6 months prior to permit expiration.

V. Testing Requirements (continued)

- 2.b** The emission testing shall be conducted to demonstrate compliance with the allowable hourly mass emission rates for CO, OC and NO_x (from the enclosed flare and from the engine exhaust), and the control efficiency of the flare of 95% for OC.
- 2.c** The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
- i. for CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A;
 - ii. for OC, Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A; and
 - iii. for NO_x, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

The test method(s) which must be employed to demonstrate compliance with the control efficiency limitation for OC are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- 2.d** 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 appropriate Ohio EPA District Office or local air agency.
- 2.e** The control efficiency (i.e. the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in the approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 4 Cyl. OHC Engine Crankshaft Machining Line (P028)

Activity Description: 4 Cyl. OHC Engine Crankshaft Machining Line.
 Exempt per ORC 3704.036.(PTE - Potential to emit-
 Less than 5 tons/year)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
4-cylinder OHC engine crankshaft machining line, with 1 mist collector and 1 dust collector	OAC rule 3745-17-11(B)(1)	1.66 lbs of particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-21-07(G)	none (See A.II.3.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
- The pressure drop across the dust collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the mist collector and the dust collector while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the mist collector and the dust collector on a daily basis.
- The permittee shall record each month the following information for this emissions unit:
 - the company identification of each liquid organic material employed; and
 - whether or not each liquid organic material employed is a photochemically reactive material.

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the mist collector or the dust collector did not comply with the allowable ranges specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
1.66 lbs of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by mist collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V6 Engine Camshaft Machining Line (P029)
Activity Description: V6 Engine Camshaft Machining Line

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>
V6 engine camshaft machining line, with mist collector	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05 (PTI #03-5561)	0.77 lb of particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the mist collector while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the mist collector on a daily basis.

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

2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the mist collector did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
0.77 lb of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by mist collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

Facility Name: **Ford Lima Engine Plant**
Facility ID: **03-02-02-0143**
Emissions Unit: **V6 Engine Camshaft Machining Line (P029)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V6 Engine Piston Machining Line (P031)
Activity Description: V6 Engine Piston Machining Line.
 Exempt per ORC 3704.036.(PTE - Potential to emit-
 Less than 5 tons/year)

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>
V6 engine piston machining line, with 2 mist collectors	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05 (PTI #03-6330)	0.55 lb of particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across each mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across each mist collector while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each mist collector on a daily basis.

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

2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the mist collectors did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
0.55 lb of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by mist collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

Facility Name: **Ford Lima Engine Plant**
Facility ID: **03-02-02-0143**
Emissions Unit: **V6 Engine Piston Machining Line (P031)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V6 Engine Connecting Rod Machining Line (P032)
Activity Description: V6 Engine Connecting Rod Machining Line.

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>
V6 engine connecting rod machining line, with 2 mist collectors	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05 (PTI #03-2009)	2.50 lbs of particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across each mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across each mist collector while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each mist collector on a daily basis.

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

2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the mist collectors did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
2.50 lbs PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by wet collectors

- 1.b Emission Limitation:
20% opacity, as a six-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the VE limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

Facility Name: **Ford Lima Engine Plant**

Facility ID: **03-02-02-0143**

Emissions Unit: **V6 Engine Connecting Rod Machining Line (P032)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dynamometer Test Cells (EAST SIDE) (P033)

Activity Description: EAST - Dynamometer Test Cells Note: (4 test cells in operation on the East side P033 & 3 test cells in operation on the West side P050)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
4 cells, engine testing dynamometer facility (east block), with thermal incinerator	OAC rule 3745-31-05(A) (PTI #03-7762)(modification)	See A.I.2.b. 3.20 lbs of nitrogen oxides (NOx)/hr and 14.0 tons of NOx/yr
	OAC rule 3745-31-05(D) (PTI #03-7762)(modification)	0.16 lb of organic compounds (OC)/hr and 0.7 ton of OC/yr 10.16 lbs of carbon monoxide (CO)/hr and 44.5 tons of CO/yr (See A.I.2.a.)
	OAC rule 3745-21-07(G)(2)	The emission limitations/control requirements specified by this rule are less stringent than the emission limitations/control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11(B)(1)	none (See A.I.2.c.)
	OAC rule 3745-17-07(A)	none (See A.I.2.d.)

2. Additional Terms and Conditions

- 2.a The permittee has requested federally enforceable restrictions of 10.16 lbs of CO/hr and 44.5 tons of CO/yr for purposes of avoiding PSD.
- 2.b This emissions unit shall be equipped with a thermal incinerator capable of achieving a minimum overall control efficiency of 95 percent, by weight, for OC (100 percent capture and 95 percent destruction efficiencies for OC).
- 2.c The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(i), Figure II of OAC rule 3745-17-11 does not apply. Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.*

* The only materials introduced into this process are gaseous fuels and liquid fuels that are used solely as fuels for the purpose of combustion.

2. Additional Terms and Conditions (continued)

- 2.d** This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. The coating line shall be equipped with a permanent total enclosure (PTE)* which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:
 - a. any "Natural Draft Opening" (NDO)* shall be at least 4 equivalent diameters from each OC emission point;
 - b. the total area of all NDOs shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling;
 - c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inch of water, and the direction of air through all NDOs shall be into the enclosure;
 - d. all access doors and windows whose areas are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and
 - e. all OC emissions must be captured and vented to the OC control devices.

By satisfying the above criteria for a permanent total enclosure, the OC capture efficiency shall be assumed to be 100%.

* Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

3. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, as a 3-hour average, whenever the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

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

The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

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

2. The permittee shall maintain and operate monitoring devices and a recorder that simultaneously and continuously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified above; and
 - b. all 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly summaries that include a log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

V. Testing Requirements

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

- 1.a Emission Limitations:
3.20 lbs of NO_x/hr and 14.0 tons of NO_x/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable NO_x emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

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

- 1.b Emission Limitations:
10.16 lbs of CO/hr and 44.5 tons of CO/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable CO emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 10.

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

V. Testing Requirements (continued)

- 1.c** Emission Limitations:
0.16 lb of OC/hr and 0.7 ton of OC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable OC emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 18, 25 or 25A, as appropriate.

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

- 1.d** Emission Limitation:
95% overall control efficiency for OC

Applicable Compliance Method:

The permittee shall demonstrate compliance with the overall control efficiency requirement in accordance with the methods and procedures outlined in Section V.2 of this permit.

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- 2.a** The emission testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit expiration.
- 2.b** The emission testing shall be conducted to demonstrate compliance with the hourly allowable mass emission rates for NO_x, OC and CO. The emission testing shall also be conducted to demonstrate compliance with the overall control system efficiency for OCs, and shall include determinations of the capture efficiency and the thermal incinerator destruction efficiency.
- 2.c** The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

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

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

OC: Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A

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

The capture efficiency shall be determined using the test methods specified in 40 CFR Part 51, Appendix M, Method 204 through 204F, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency as specified in the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

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

The 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.

- 2.d** 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 appropriate Ohio EPA District Office or local air agency.

V. Testing Requirements (continued)

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 3.9L V-8 Connecting Rod Machining Line (DEW) (P034)
Activity Description: 3.9L V-8 Connecting Rod Machining Line. Exempt per ORC 3704.036.
 (PTE - Potential to emit-Less than 5 tons/year)

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>
3.9-liter, V-8 connecting rod machining line, with 2 mist collectors	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05 (PTI #03-9697)	0.11 lb of particulate emissions (PE)/hr
		0.68 lb of organic compounds (OC)/hr
	OAC rule 3745-21-07(G)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across each mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across each of the mist collectors while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each of the mist collectors on a daily basis.

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

2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the mist collectors did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
0.11 lb of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by mist collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.c Emission Limitation:
0.68 lb of OC/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable OC emission limitation by multiplying an emission factor of 0.0044 grain of OC/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

* based on the results of emission testing conducted for a similar emissions unit

VI. Miscellaneous Requirements

None

B. State 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>
3.9-liter, V-8 connecting rod machining line, with 2 mist collectors	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

Pollutant: petroleum distillates

TLV (mg/m3): 5.0

Maximum Hourly Emission Rate (lbs/hr): 0.68

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 85.65

MAGLC (ug/m3): 119.0

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

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

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

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 3.9L V-8 Block Machining Line (DEW) (P037)
Activity Description: 3.9L V-8 Block Machining Line.

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>
3.9-liter, V-8 block machining line, with 2 mist collectors	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05 (PTI #03-9697)	0.27 lb of particulate emissions (PE)/hr
		1.63 lbs of organic compounds (OC)/hr
	OAC rule 3745-21-07(G)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
		none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across each mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across each of the mist collectors while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each of the mist collectors on a daily basis.

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

2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the mist collectors did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
0.27 lb of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by mist collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.c Emission Limitation:
1.63 lbs of OC/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable OC emission limitation by multiplying an emission factor of 0.0044 grain of OC/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

* based on the results of emission testing conducted for a similar emissions unit

VI. Miscellaneous Requirements

None

B. State 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>
3.9-liter, V-8 block machining line, with 2 mist collectors	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

Pollutant: petroleum distillates

TLV (mg/m3): 5.0

Maximum Hourly Emission Rate (lbs/hr): 1.6

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 77.62

MAGLC (ug/m3): 119.0

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

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

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

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V6 Engine Intake Manifold Machining Line (P038)
Activity Description: V6 Engine Intake Manifold Machining Line.

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>
V-6 block intake manifold machining, with mist collector	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05 (PTI #03-9748)	0.21 lb of particulate emissions (PE)/hr 1.32 lbs of organic compounds (OC)/hr
	OAC rule 3745-21-07(G)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the mist collector while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the mist collector on a daily basis.

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

2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the mist collector did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
0.21 lb of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by mist collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.c Emission Limitation:
1.32 lbs of OC/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable OC emission limitation by multiplying an emission factor of 0.0044 grain of OC/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

* based on the results of emission testing conducted for a similar emissions unit

VI. Miscellaneous Requirements

None

B. State 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>
V-6 block intake manifold machining, with 1 mist collector	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

Pollutant: petroleum distillates

TLV (mg/m3): 5.0

Maximum Hourly Emission Rate (lbs/hr): 1.32

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.09

MAGLC (ug/m3): 119.0

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

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

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

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 3.9L V-8 Head Machining Line (DEW) (P041)
Activity Description: 3.9L V-8 Head Machining Line.

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>
3.9-liter, V-8 head machining line, with 2 mist collectors	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05 (PTI #03-9697)	0.34 lb of particulate emissions (PE)/hr 1.99 lbs of organic compounds (OC)/hr
	OAC rule 3745-21-07(G)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). none (See A.II.2.)

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across each mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
- The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across each of the mist collectors while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each of the mist collectors on a daily basis.

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

2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the mist collectors did not comply with the allowable range specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
0.34 lb of PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable PE limitation by multiplying an emission factor of 0.0007 grain of PE/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with the methods specified in OAC 3745-17-03(B)(10).

* based on the results of emission testing conducted for a similar emissions unit controlled by mist collectors

- 1.b Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.c Emission Limitation:
1.99 lbs of OC/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable OC emission limitation by multiplying an emission factor of 0.0044 grain of OC/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

* based on the results of emission testing conducted for a similar emissions unit

VI. Miscellaneous Requirements

None

B. State 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>
3.9-liter, V-8 head machining line, with 2 mist collectors	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

Pollutant: petroleum distillates

TLV (mg/m3): 5.0

Maximum Hourly Emission Rate (lbs/hr): 1.99

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 77.62

MAGLC (ug/m3): 119.0

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

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

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

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 3.9L V-8 Engine Hot Test (DEW) (P042)
Activity Description: 3.9L V-8 Engine Hot Test.

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>
3.9-liter, V-8 engine hot test/repair stands, and fuel rail blow down, with enclosed flare	OAC rule 3745-17-11(B)(1)	none (See A.I.2.a.)
	OAC rule 3745-17-07(A)	none (See A.I.2.b.)
	OAC rule 3745-31-05(A)(3) (PTI #03-13490)	for the engine exhaust stack: 1.52 lbs of organic compounds (OC)/hr and 6.66 tons of OC/yr 14.36 lbs of carbon monoxide (CO)/hr and 62.91 tons of CO/yr 5.92 lbs of nitrogen oxides (NOx)/hr and 25.93 tons of NOx/yr
		for the fuel rail blow down: 0.6 lb of OC/hr and 2.63 tons of OC/yr 1.0 lb of CO/hr and 4.38 tons of CO/yr 0.16 lb of NOx/hr and 0.70 ton of NOx/yr
	OAC rule 3745-21-07(G)(2)	See A.II.2. and A.I.2.c. The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(i), Figure II of OAC rule 3745-17-11 does not apply. Also, Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.*

* The only materials introduced into this process are gaseous fuels and liquid fuels that are used solely as fuels for the purpose of combustion.

2.b This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

2.c The flare shall be designed and operated such that no visible emissions, as determined by "Method 22, 40 CFR, Part 60, Appendix A" are observed, except for periods not to exceed a total of five minutes during any 120 consecutive minutes.

2.d For purposes of federal enforceability, all OCs are considered to be VOCs.

II. Operational Restrictions

1. A pilot flame shall be maintained at all times in the flare's pilot light burner when the emissions unit is in operation.
2. Process vent streams from the engine fuel rail blow down system shall be combusted with an enclosed flare capable of achieving a minimum destruction efficiency of 95%, by weight, for OC.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:
 - a. all periods during which there was no pilot flame; and
 - b. a log of the downtime for the flare and monitoring equipment when the associated emissions unit was in operation.
2. The permittee shall inspect all fittings (valves, flanges, etc.) associated with the fuel delivery system on a monthly basis and shall maintain records of the results of the inspections. Any component found to be leaking or in need of repair shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected. For the purposes of this monitoring program, a leak is detected by visual, audible or olfactory methods.
3. The permittee shall maintain records of all repairs made to process equipment components.
4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the flare serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly summaries that include the following:
 - a. a log of the downtime for the flare and monitoring equipment when the associated emissions unit was in operation; and
 - b. all periods of time during which there was no pilot flame.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the flare serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitations:
1.52 lbs of OC/hr and 6.66 tons of OC/yr, from the engine exhaust stack

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable OC emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 18, Method 25, or Method 25A, as appropriate.

The permittee may also determine compliance with the hourly allowable OC emission limitation by multiplying an emission factor of 0.38 lb of OC/engine-hr* by the maximum hourly engine production rate (40 engines/hr) and by 6**, and then dividing by 60.

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

* emission factor supplied by the permittee

** a factor to account for the fact that testing of each engine lasts 6 minutes

- 1.b Emission Limitations:
14.36 lbs of CO/hr and 62.91 tons of CO/yr, from the engine exhaust stack

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable CO emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 10.

The permittee may also determine compliance with the hourly allowable CO emission limitation by multiplying an emission factor of 3.59 lbs of CO/engine-hr* by the maximum hourly engine production rate (40 engines/hr) and by 6**, and then dividing by 60.

* emission factor supplied by the permittee

** a factor to account for the fact that testing of each engine lasts 6 minutes

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

V. Testing Requirements (continued)

- 1.c** Emission Limitations:
5.92 lbs of NOx/hr and 25.93 tons of NOx/yr, from the engine exhaust stack

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable NOx emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

The permittee may also determine compliance with the hourly allowable NOx emission limitation by multiplying an emission factor of 1.48 lbs of NOx/engine-hr* by the maximum hourly engine production rate (40 engines/hr) and by 6**, and then dividing by 60.

* emission factor supplied by the permittee

** a factor to account for the fact that testing of each engine lasts 6 minutes

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

- 1.d** Emission Limitations:
0.6 lb of OC/hr and 2.63 tons of OC/yr, from the fuel rail blow down

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable OC emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 18, Method 25, or Method 25A, as appropriate.

The permittee may also determine compliance with the hourly allowable OC emission limitation by multiplying an emission factor of 0.30 lb of OC/engine* by the maximum hourly engine production rate (40 engines/hr), and then multiplying by a control factor of (1-0.95).**

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

* emission factor supplied by the permittee

** The overall control efficiency of the flare is assumed to be 95%, by weight.

- 1.e** Emission Limitations:
1.0 lbs of CO/hr and 4.38 tons of CO/yr, from the fuel rail blow down

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable CO emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 10.

The permittee may also determine compliance with the hourly allowable CO emission limitation by multiplying an emission factor of 0.025 lb of CO/engine tested* by the maximum hourly number of engines tested (40 engines/hr).

* emission factor supplied by the permittee

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

V. Testing Requirements (continued)

- 1.f** Emission Limitations:
0.16 lb of NOx/hr and 0.70 ton of NOx/yr, from the fuel rail blow down

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable NOx emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

The permittee may also determine compliance with the hourly allowable NOx emission limitation by multiplying an emission factor of 0.004 lb of NOx/engine tested* by the maximum hourly number of engines tested (40 engines/hr).

* emission factor supplied by the permittee

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

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 3 months of permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly mass emission rates for CO, OC and NOx (from the enclosed flare and from the engine exhaust).
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
 - i. for CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A;
 - ii. for OC, Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A; and
 - iii. for NOx, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

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

- d. 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 appropriate Ohio EPA District Office or local air agency.
- 3.** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

Facility Name: **Ford Lima Engine Plant**
Facility ID: **03-02-02-0143**
Emissions Unit: **3.9L V-8 Engine Hot Test (DEW) (P042)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V6 Engine Crankshaft Machining Line (P048)
Activity Description: V6 Engine Crankshaft Machining Line.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
3.0-liter, V-6 crankshaft machining line, with 1 mist collector and 3 dust collectors	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05(A)(3) (PTI #03-13152)	0.14 lb of particulate emissions (PE)/hr and 0.61 ton of PE/yr (See A.I.2.a.)
		0.23 lb of organic compounds (OC)/hr and 1.0 ton of OC/yr
	OAC rule 3745-21-07(G)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). none (See A.II.3.)

2. Additional Terms and Conditions

- 2.a There are 4 egress points associated with this emissions unit; 1 mist collector (MC-33) and 3 dust collectors (DC-6, DC-7 and DC-8). The mist collector vents directly to the atmosphere and the 3 dust collectors vent inside the building. The dust collector emissions are ultimately exhausted to the atmosphere through the building ventilation system. The emission limitation of 0.14 lb of PE/hr applies to all 4 egress points, combined.
- 2.b All the PE are assumed to be PM10.

II. Operational Restrictions

1. The pressure drop across the mist collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
2. The pressure drop across each of the dust collectors shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.

II. Operational Restrictions (continued)

3. The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the mist collector and each of the dust collectors while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the mist collector and each of the dust collectors on a daily basis.
2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the mist collector or any of the dust collectors did not comply with the allowable ranges specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

- 1.b** Emission Limitations:
0.14 lb of PE/hr and 0.61 ton of PE/yr

Applicable Compliance Method:

The hourly allowable emission limitation was developed by using the outlet grain loading emission factor, maximum volumetric air flow rates and the control efficiency factor for the building enclosure as follows:

$$\text{lb of PE/hr} = (\text{MC-33}) + [((\text{DC-6}) + (\text{DC-7}) + (\text{DC-8})) \times (1 - \text{CE})]$$

where:

$$\text{MC-33 (PE from mist collector MC-33, in lbs/hr)} = 0.0007 \text{ gr/dscf} \times 5,640 \text{ dscfm} \times 60 \text{ min/hr} \times \text{lb}/7000 \text{ gr} = 0.034 \text{ lb of PE/hr}$$

$$\text{DC-6 (PE from dust collector DC-6, in lbs/hr)} = 0.0007 \text{ gr/dscf} \times 5,000 \text{ dscfm} \times 60 \text{ min/hr} \times \text{lb}/7000 \text{ gr} = 0.09 \text{ lb of PE/hr}$$

$$\text{DC-7 (PE from dust collector DC-7, in lbs/hr)} = 0.0007 \text{ gr/dscf} \times 5,000 \text{ dscfm} \times 60 \text{ min/hr} \times \text{lb}/7000 \text{ gr} = 0.09 \text{ lb of PE/hr}$$

$$\text{DC-8 (PE from dust collector DC-8, in lbs/hr)} = 0.0007 \text{ gr/dscf} \times 10,200 \text{ dscfm} \times 60 \text{ min/hr} \times \text{lb}/7000 \text{ gr} = 0.175 \text{ lb of PE/hr}$$

CE = control efficiency (assumed to be 70% for PE contained in an ambient exhaust stream vented inside a building)

$$0.14 \text{ lb of PE/hr} = (0.034 \text{ lb of PE/hr}) + [((0.09 + 0.09 + 0.175) \text{ lb of PE/hr})(1 - 0.7)]$$

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with Methods 1 - 5, 40 CFR, Part 60, Appendix A.

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

- 1.c** Emission Limitations:
0.23 lb of OC/hr and 1.0 ton of OC/yr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable OC emission limitation by multiplying an emission factor of 0.0042 grain of OC/dscf* by the maximum exhaust gas flow rate (dscf/minute) and by 60, and then dividing by 7000.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

* based on the results of emission testing conducted for a similar emissions unit

VI. Miscellaneous Requirements

None

B. State 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>
3.0-liter, V-6 crankshaft machining line, with 1 mist collector and 3 dust collectors	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

Pollutant: petroleum distillates

TLV (mg/m3): 890

Maximum Hourly Emission Rate (lbs/hr): 0.23

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 71

MAGLC (ug/m3): 21,190

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

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

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

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V6 (Duratec) Crankshaft Machining Line (P049)
Activity Description: Duratec V6 Crankshaft Machining Line (Has not started operation yet)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
V-6 crankshaft machining line (Duratec), with 3 mist collectors and 1 dust collector	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05(A)(3) (PTI #03-13570)	0.30 lb of particulate emissions (PE)/hr and 1.31 tons of PE/yr (see A.I.2.a)
		2.92 lbs of organic compounds (OC)/hr and 12.79 tons of OC/yr
	OAC rule 3745-21-07(G)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). none (See A.II.3.)

2. Additional Terms and Conditions

- 2.a There are 4 egress points associated with this emissions unit; 3 mist collectors (MC-35, MC-36 and MC-37) and 1 dust collector (DC-14). These egress points vent directly to the atmosphere. The emission limitation of 0.30 lb of PE/hr applies to all 4 egress points, combined. The emission limitation of 2.92 lbs of OC/hr applies to all 3 mist collectors, combined.
- 2.b All the PE are assumed to be PM10.

II. Operational Restrictions

1. The pressure drop across each of the mist collectors shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.
2. The pressure drop across the dust collector shall be maintained within the range of 0.25 to 13 inches of water while the emissions unit is in operation.

II. Operational Restrictions (continued)

3. The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each of the mist collectors and the dust collector while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each of the mist collectors and the dust collector on a daily basis.
2. The permittee shall record each month the following information for this emissions unit:
 - a. the company identification of each liquid organic material employed; and
 - b. whether or not each liquid organic material employed is a photochemically reactive material.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. 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 location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the mist collectors or the dust collector did not comply with the allowable ranges specified above. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of any photochemically reactive material in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the event occurs.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitations:
0.30 lb of PE/hr and 1.31 tons of PE/yr

Applicable Compliance Method:

The hourly allowable emission limitation was developed by using the outlet grain loading emission factor and the maximum volumetric air flow rates as follows:

$$\text{lb of PE/hr} = (\text{MC-35}) + (\text{MC-36}) + (\text{MC-37}) + (\text{DC-14})$$

where:

$$\text{MC-35 (PE from mist collector MC-35, in lbs/hr)} = 0.0007 \text{ gr/dscf} \times 9,400 \text{ dscfm} \times 60 \text{ min/hr} \times \text{lb}/7000 \text{ gr} = 0.06 \text{ lb of PE/hr}$$

$$\text{MC-36 (PE from mist collector MC-36, in lbs/hr)} = 0.0007 \text{ gr/dscf} \times 11,280 \text{ dscfm} \times 60 \text{ min/hr} \times \text{lbs}/7000 \text{ gr} = 0.07 \text{ lb of PE/hr}$$

$$\text{MC-37 (PE from mist collector MC-37, in lbs/hr)} = 0.0007 \text{ gr/dscf} \times 11,280 \text{ dscfm} \times 60 \text{ min/hr} \times \text{lb}/7000 \text{ gr} = 0.07 \text{ lb of PE/hr}$$

$$\text{DC-14 (PE from dust collector DC-14, in lbs/hr)} = 0.002 \text{ gr/dscf} \times 6,000 \text{ dscfm} \times 60 \text{ min/hr} \times \text{lb}/7000 \text{ gr} = 0.10 \text{ lb of PE/hr}$$

$$0.30 \text{ lb of PE/hr} = (0.06 + 0.07 + 0.07 + 0.10) \text{ lb of PE/hr}$$

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above in accordance with Methods 1 - 5, 40 CFR, Part 60, Appendix A.

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

V. Testing Requirements (continued)

- 1.c** Emission Limitations:
2.92 lbs of OC/hr and 12.79 tons of OC/yr

Applicable Compliance Method:

The hourly allowable emission limitation was developed by using the outlet grain loading emission factor and the maximum volumetric air flow rates as follows:

$$\text{lbs of OC/hr} = (\text{MC-35}) + (\text{MC-36}) + (\text{MC-37})$$

where:

$$\text{MC-35 (OC from mist collector MC-35, in lbs/hr)} = 0.01 \text{ gr/wscf} \times 10,000 \text{ wscfm} \times 60 \text{ min/hr} \times \text{lb}/7000 \text{ gr} = 0.86 \text{ lb of OC/hr}$$

$$\text{MC-36 (OC from mist collector MC-36, in lbs/hr)} = 0.01 \text{ gr/wscf} \times 12,000 \text{ wscfm} \times 60 \text{ min/hr} \times \text{lb}/7000 \text{ gr} = 1.03 \text{ lbs of OC/hr}$$

$$\text{MC-37 (OC from mist collector MC-37, in lbs/hr)} = 0.01 \text{ gr/wscf} \times 12,000 \text{ wscfm} \times 60 \text{ min/hr} \times \text{lb}/7000 \text{ gr} = 1.03 \text{ lbs of OC/hr}$$

$$2.92 \text{ lbs of OC/hr} = (0.86 + 1.03 + 1.03) \text{ lbs of OC/hr}$$

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

VI. Miscellaneous Requirements

None

B. State 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>
V-6 crankshaft machining line (Duratec), with 3 mist collectors and 1 dust collector	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

Pollutant: petroleum distillates

TLV (mg/m3): 890

Maximum Hourly Emission Rate (lbs/hr): 2.92

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 289.5

MAGLC (ug/m3): 21,190

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

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

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

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

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dynamometer Test Cells (WEST SIDE) (P050)

Activity Description: WEST - Dynamometer Test Cells... Note: (4 cells in operation on the East side P033 & 3 cells in operation on the West side P050)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
4 cells, engine testing dynamometer facility (west block), with thermal incinerator	OAC rule 3745-31-05(A) (PTI #03-7762)(modification)	See A.I.2.b. 3.20 lbs of nitrogen oxides (NOx)/hr and 14.0 tons of NOx/yr
	OAC rule 3745-31-05(D) (PTI #03-7762)(modification)	0.16 lb of organic compounds (OC)/hr and 0.7 ton of OC/yr 10.16 lbs of carbon monoxide (CO)/hr and 44.5 tons of CO/yr (See A.I.2.a.)
	OAC rule 3745-21-07(G)(2)	The emission limitations/control requirements specified by this rule are less stringent than the emission limitations/control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11(B)(1)	none (See A.I.2.c.)
	OAC rule 3745-17-07(A)	none (See A.I.2.d.)

2. Additional Terms and Conditions

- 2.a The permittee has requested federally enforceable restrictions of 10.16 lbs of CO/hr and 44.5 tons of CO/yr for purposes of avoiding PSD.
- 2.b This emissions unit shall be equipped with a thermal incinerator capable of achieving a minimum overall control efficiency of 95 percent, by weight, for OC (100 percent capture and 95 percent destruction efficiencies for OC).
- 2.c The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(i), Figure II of OAC rule 3745-17-11 does not apply. Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.*

* The only materials introduced into this process are gaseous fuels and liquid fuels that are used solely as fuels for the purpose of combustion.

2. Additional Terms and Conditions (continued)

- 2.d** This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. The coating line shall be equipped with a permanent total enclosure (PTE)* which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:
 - a. any "Natural Draft Opening" (NDO)* shall be at least 4 equivalent diameters from each OC emission point;
 - b. the total area of all NDOs shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling;
 - c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inch of water, and the direction of air through all NDOs shall be into the enclosure;
 - d. all access doors and windows whose areas are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and
 - e. all OC emissions must be captured and vented to the OC control devices.

By satisfying the above criteria for a permanent total enclosure, the OC capture efficiency shall be assumed to be 100%.

* Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

3. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, as a 3-hour average, whenever the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

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

The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

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

2. The permittee shall maintain and operate monitoring devices and a recorder that simultaneously and continuously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified above; and
 - b. all 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly summaries that include a log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation.

V. Testing Requirements

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

- 1.a Emission Limitations:
3.20 lbs of NO_x/hr and 14.0 tons of NO_x/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable NO_x emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

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

- 1.b Emission Limitations:
10.16 lbs of CO/hr and 44.5 tons of CO/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable CO emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 10.

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

V. Testing Requirements (continued)

- 1.c** Emission Limitations:
0.16 lb of OC/hr and 0.7 ton of OC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly allowable OC emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 18, 25 or 25A, as appropriate.

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

- 1.d** Emission Limitation:
95% overall control efficiency for OC

Applicable Compliance Method:

The permittee shall demonstrate compliance with the overall control efficiency requirement in accordance with the methods and procedures outlined in Section V.2 of this permit.

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- 2.a** The emission testing shall be conducted within 3 months after issuance of this permit and within 6 months prior to permit expiration.
- 2.b** The emission testing shall be conducted to demonstrate compliance with the hourly allowable mass emission rates for NO_x, OC and CO. The emission testing shall also be conducted to demonstrate compliance with the overall control system efficiency for OCs, and shall include determinations of the capture efficiency and the thermal incinerator destruction efficiency.
- 2.c** The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

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

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

OC: Methods 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A

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

The capture efficiency shall be determined using the test methods specified in 40 CFR Part 51, Appendix M, Method 204 through 204F, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency as specified in the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

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

The 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.

- 2.d** 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 appropriate Ohio EPA District Office or local air agency.

V. Testing Requirements (continued)

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Garage Paint Booth (R004)
Activity Description: Industrial Garage Paint/Steam Booth.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
maintenance cleaning and painting booth	OAC rule 3745-21-09(U)(2)(e)	coatings usage shall not exceed 10 gallons per day
	OAC rule 3745-17-11(B)(1)	0.551 lb of particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	20% opacity, as a 6-minute average, except as provided by rule
	OAC rule 3745-31-05 (PTI #03-4515)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-11(B)(1), 3745-17-07(A) and 3745-21-09(U)(2).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the coating line:
 - a. The name and identification number of each coating employed.
 - b. The volume, in gallons, of each coating employed.
 - c. The total volume, in gallons, of all the coatings employed.
2. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the coating line employed more than the applicable maximum daily coatings usage restriction of 10 gallons. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.

V. Testing Requirements

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

- 1.a Emission Limitation:
coatings usage shall not exceed 10 gallons per day

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1. of this permit.

- 1.b Emission Limitation:
0.551 lb of PE/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable PE limitation by utilizing the following equation:

$$E = (\text{maximum coating solids usage rate, in lbs/hr}) \times (1 - TE) \times (1 - CE)$$

where:

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

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (assumed to be 60%, considering 40 CFR 60.453)

CE = control efficiency of the control equipment (assumed to be 90%)

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above pursuant to OAC rule 3745-17-03(B)(10).

- 1.c Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Maintenance Paint Booth (R005)
Activity Description: Maintenance Paint Spray Booth.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
maintenance paint booth	OAC rule 3745-21-09(U)(2)(e) OAC rule 3745-17-11(B)(1) OAC rule 3745-17-07(A) OAC rule 3745-31-05 (PTI #03-4515)	coatings usage shall not exceed 10 gallons per day 0.551 lb of particulate emissions (PE)/hr 20% opacity, as a 6-minute average, except as provided by rule The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-11(B)(1), 3745-17-07(A) and 3745-21-09(U)(2).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the coating line:
 - a. The name and identification number of each coating employed.
 - b. The volume, in gallons, of each coating employed.
 - c. The total volume, in gallons, of all the coatings employed.
2. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the coating line employed more than the applicable maximum daily coatings usage restriction of 10 gallons. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
2. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.

V. Testing Requirements

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

- 1.a Emission Limitation:
coatings usage shall not exceed 10 gallons per day

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1. of this permit.

- 1.b Emission Limitation:
0.551 lb of PE/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable PE limitation by utilizing the following equation:

$$E = (\text{maximum coating solids usage rate, in lbs/hr}) \times (1 - TE) \times (1 - CE)$$

where:

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

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (assumed to be 60%, considering 40 CFR 60.453)

CE = control efficiency of the control equipment (assumed to be 90%)

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above pursuant to OAC rule 3745-17-03(B)(10).

- 1.c Emission Limitation:
20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible emissions limitation above in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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