



State of Ohio Environmental Protection Agency

Street Address:

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

**RE: FINAL PERMIT TO INSTALL
ALLEN COUNTY
Application No: 03-13541**

CERTIFIED MAIL

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

DATE: 6/5/2001

Ford Motor Company Lima Engine Plant
Kevin Bruin
1155 Bible Rd
Lima, OH 45801

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

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

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

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

Very truly yours,

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

CC: USEPA

NWDO



FINAL PERMIT TO INSTALL 03-13541

Application Number: 03-13541
APS Premise Number: 0302020143
Permit Fee: **\$200**
Name of Facility: Ford Motor Company Lima Engine Plant
Person to Contact: Kevin Bruin
Address: 1155 Bible Rd
Lima, OH 45801

Location of proposed air contaminant source(s) [emissions unit(s)]:
1155 Bible Rd
Lima, Ohio

Description of proposed emissions unit(s):
administrative modification of PTI 03-2029 to reflect use of enclosed flare and updated emissions calculations for 3 liter v6 engine hot test stands.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related 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, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. 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. See B.10 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. 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 shall be submitted pursuant to OAC rule 3745-15-06.

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and 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. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit from 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.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

- ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

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

1. Compliance Requirements

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

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 of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and 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. Permit Transfers

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

4. 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.

5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be

extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

7. Public Disclosure

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

8. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

9. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

10. 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.

C. Permit To Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>	<u>Increase Due to Modification (Tons per Year)</u>
CO	52.7	36.9
OC	7.5	4.9
NO _x	5.0	0.6

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

None

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

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P026 - 3.0 liter V6 engine hot test/repair stands, and fuel rail blow down (previously permitted under PTI #03-02029 issued 03-06-85). Modification to increase allowable emission limitations.	OAC rule 3745-31-05 (A) (3)	emission limits for engine exhaust 28.4 lbs carbon monoxide (CO)/hr 3.1 lbs organic compounds (OC)/hr & 5.5 tons OC/yr 2.6 lbs nitrogen oxides (NOx/hr) & 4.6 tons NOx/yr emission limits for fuel rail blow down: 1.1 lbs CO/hr, 2.0 tons CO/yr 1.1 lbs OC/hr , 2.0 tons OC/yr 0.2 lbs NOx/hr, 0.4 ton NOx/yr Use of enclosed flare (see A.I.2.c) See A.I.2.f.
	OAC rule 3745-31-05(D)	emission limits for engine exhaust stack: 50.7 tons CO/rolling 12-month period (see A.I.2.e)
	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)

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. Table I of OAC rule 3745-17-11 does not apply to the exhaust stack because the process weight, as defined in OAC rule 3745-17-01(B)(14) does not include gaseous fuels used solely as fuels. In addition, Table I of OAC rule 3745-17-11 does not apply to the fuel rail blow down vent because the process weight rate cannot be ascertained as described in OAC 3745-17-11(A)(2)(b)(i).

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

2.c "Best Available Technology" (BAT) for this emissions unit has been determined to be the use of an enclosed flare for OC control of fuel rail blow down exhaust emissions. The enclosed flare shall be designed and operated to achieve a 95% destruction efficiency of a closed system.

The BAT determination was made in accordance with U.S. EPA's "Guidance on the Appropriate Injunctive Relief for Violations of Major New Source Review Requirements (Memorandum)" dated 11-17-98. Emissions unit P026 was installed in 12-96 under PTI #03-02029 with potential emissions below applicable major source thresholds. Revised emission calculations indicate that potential emissions exceeded major source threshold. Actual source emissions never exceeded major source thresholds, thus requiring the application of BACT equivalent control which has been determined to be the use on an enclosed flare.

2.d For purposes of federal enforceability, emission limitations on OC effectively restrict VOC emissions.

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

2.f The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05 (D)

II. Operational Restrictions

1. The permittee shall not exceed a maximum throughput of 750,000 engines tested per rolling 12-month period for this emissions unit.

This emissions unit has been in operation for over 12 months and for purposes of demonstrating compliance with the first 12 months of the rolling restriction, the permittee shall use existing records.

2. A pilot flame shall be maintained at all times in the flare's pilot light burner when the emissions unit is in operation.
3. The flare shall be designed for and operated with no visible emissions as determined by "Method 22, 40 CFR, Part 60, Appendix A", except for periods not to exceed a total of five minutes during any 120 consecutive minutes.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, 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 installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall collect and record the following information:
 - a. All periods during which there was no pilot flame when the emissions unit was in operation.
 - b. All periods of time during which the monitoring equipment was not operational.
3. The permittee shall maintain records of all repairs made to the flare and monitoring equipment.
4. The permittee shall collect and record the following information each month for this emissions unit:
 - a. The number of engines tested.
 - b. The rolling 12-month summation of the number of engines tested.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify the following:
 - a. All periods during which the pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period.
 - b. All exceedances of the rolling 12-month engine throughput restriction .

These deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation

28.4 lbs CO/hr, 50.7 tons CO per rolling 12-month period from engine exhaust stack

Applicable Compliance Method

The permittee shall demonstrate compliance with this hourly emission limitation by using a company supplied emission factor of 1.80 lb CO/engine-hr times the maximum hourly engine production rate of 210 engines/hr times 4.5 minutes per engine test divided by 60 min/hr. If required, compliance with the CO emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 10.

The tons/yr limitation was developed in accordance with the following equation:

$$\text{Tons CO/per rolling 12-month period} = (\text{MET})/(\text{EPR}) * (\text{HEL}) * (1 \text{ ton}/2000)$$

Where:

MET = Maximum Engines Tested per rolling 12-month period

EPR = Engine Production Rate in Engines per hour

HEL = Hourly Emission Limitation (lbs/hr)

$$= (750,000)/(210) * (28.4) (1 \text{ ton}/2000 \text{ lbs}) = 50.7 \text{ tons per rolling 12-month period}$$

Compliance shall be demonstrated by the monitoring and recordkeeping of the rolling 12-month engine throughput contained in A.III.4.

- b. Emission Limitation

3.1 lbs OC/hr, 5.5 tons OC/yr from engine exhaust stack

Applicable Compliance Method

The permittee shall demonstrate compliance with this hourly emission limitation by using a company supplied emission factor of 0.196 lb OC/engine-hr times the maximum hourly engine production rate of 210 engines/hr times 4.5 minutes per engine test divided by 60 min/hr. If required, compliance with the OC emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 18, Method 25, or Method 25A.

The tons/yr limitation was developed in accordance with the following equation:

$$\text{Tons OC/yr} = (\text{MET})/(\text{EPR}) * (\text{HEL}) * (1 \text{ ton}/2000)$$

Where:

MET = Maximum Engines Tested per Year

EPR = Engine Production Rate in Engines per hour

HEL = Hourly Emission Limitation (lbs/hr)

$$= (750,000)/(210) * (3.1) (1 \text{ ton}/2000 \text{ lbs}) = 5.5 \text{ TPY}$$

Compliance shall be demonstrated by the monitoring and recordkeeping of the rolling 12-month engine throughput contained in A.III.4.

- c. Emission Limitation
2.6 lbs NO_x/hr, 4.6 tons NO_x/yr from engine exhaust stack

Applicable Compliance Method

The permittee shall demonstrate compliance with this hourly emission limitation by using a company supplied emission factor of 0.164 lb NO_x /engine-hr times the maximum hourly engine production rate of 210 engines/hr times 4.5 minutes per engine test divided by 60 min/hr. If required, compliance with the NO_x emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 7.

The tons/yr limitation was developed in accordance with the following equation:

$$\text{Tons NO}_x\text{/yr} = (\text{MET})/(\text{EPR}) * (\text{HEL}) * (1 \text{ ton}/2000)$$

Where:

MET = Maximum Engines Tested per Year

EPR = Engine Production Rate in Engines per hour

HEL = Hourly Emission Limitation (lbs/hr)

$$= (750,000)/(210) * (2.6) (1 \text{ ton}/2000 \text{ lbs}) = 4.6 \text{ TPY}$$

Compliance shall be demonstrated by the monitoring and recordkeeping of the rolling 12-month engine throughput contained in A.III.4.

- d. Emission Limitation

1.1 lbs CO/hr, 2.0 tons CO/yr from fuel rail blow down

Applicable Compliance Method

The permittee shall demonstrate compliance with this hourly emission limitation by using a company supplied emission factor of 0.005 lb CO/engine tested times the maximum hourly engine production rate of 210 engines/hr. If required, compliance with the CO emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 10.

The tons/yr limitation was developed by multiplying a company supplied emission factor of 0.005 lb CO/engine by a maximum annual throughput of 750,000 engines tested and dividing by 2000 lbs/ton. Compliance shall be demonstrated by the monitoring and recordkeeping of the rolling 12-month engine throughput contained in A.III.4.

e. Emission Limitation

1.1 lbs OC/hr, 2.0 tons OC/yr from fuel rail blow down

Applicable Compliance Method

The permittee shall demonstrate compliance with the hourly OC emission limitation through the emission testing requirements contained in A.V.2.

The tons/yr limitation was developed in accordance with the following equation:

$$\text{Tons OC/yr} = (\text{MET})/(\text{EPR}) * (\text{HEL}) * (1 \text{ ton}/2000)$$

Where:

MET = Maximum Engines Tested per Year

EPR = Engine Production Rate in Engines per hour

HEL = Hourly Emission Limitation (lbs/hr)

$$= (750,000)/(210) * (1.1) (1 \text{ ton}/2000 \text{ lbs}) = 2.0 \text{ TPY}$$

Compliance shall be demonstrated by the monitoring and recordkeeping of the rolling 12-month engine throughput contained in A.III.4.

f. Emission Limitation

0.2 lbs NOx/hr, 0.4 ton NOx/yr from fuel rail blow down

Applicable Compliance Method

The permittee shall demonstrate compliance with this hourly emission limitation by using a company supplied emission factor of 0.001 lb NOx/engine tested times the maximum hourly engine production rate of 210 engines/hr. If required, compliance with the NOx

emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 7.

The tons/yr limitation was developed by multiplying a company supplied emission factor of 0.001 lb CO/engine by a maximum annual throughput of 750,000 engines tested and dividing by 2000 lbs/ton. Compliance shall be demonstrated by the monitoring and recordkeeping of the rolling 12-month engine throughput contained in A.III.4.

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 180 days after issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly mass emission rate of OC from the enclosed flare, and OC control device efficiency requirements;
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emissions rate(s): for organic compounds, Method 25 or 25a of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the control efficiency limitations for organic compounds are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - 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 emission 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

1. None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P026 - 3.0 liter V6 engine hot test/repair stands, and fuel rail blow down (previously permitted under PTI #03-02029 issued 03-06-85). Modification to increase allowable emission limitations.	None	None

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 03-13541

Facility ID: 0302020143

FACILITY NAME Ford Motor Company Lima Engine Plant

FACILITY DESCRIPTION administrative modification of PTI #03-2029 to reflect use of enclosed flare and updated emissions calculations for 3 liter v6 engine hot test stands

CITY/TWP Lima

SIC CODE 3714 SCC CODE none available EMISSIONS UNIT ID P026

EMISSIONS UNIT DESCRIPTION 3 liter V6 engine hot test and repair stands with enclosed flare

DATE INSTALLED November 1984

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Organic Compounds for engine exhaust	Attainment	3.1 lbs/hr	5.5 tons per rolling 12-month period	3.1 lbs/hr	5.5 tons per rolling 12-month period
Nitrogen Oxides for engine exhaust	Attainment	2.6 lbs/hr	4.6	2.6 lbs/hr	4.6
Carbon Monoxide for engine exhaust	Attainment	28.4 lbs/hr	50.7 tons per rolling 12-month period	28.4 lbs/hr	50.7 tons per rolling 12-month period
Organic Compounds for fuel rail blow down	Attainment	1.1 lbs/hr	2.0	1.1 lbs/hr	2.0
Nitrogen Oxides for fuel rail blow down.	Attainment	0.2 lb/hr	0.4	0.2 lb/hr	0.4
Carbon Monoxide for fuel rail blow down	Attainment	1.1 lbs/hr	2.0	1.1 lbs/hr	2.0
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? N

NESHAP? N

PSD? N

OFFSET POLICY? N

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

use of enclosed flare to control OC emissions from fuel rail blow down and compliance with the terms and conditions of this permit

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?

No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

\$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

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#03-2029 to reflect use of enclosed flare
and updated emissions calculations for 3
liter v6 engine hot test stands

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: N/A
