



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
CUYAHOGA COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 13-04657

Fac ID: 1318120180

DATE: 11/14/2006

Ford Motor Company - Cleveland Casting
Bob Niemi
One American Road Environmental Quality Office
Dearborn, MI 48126

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

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

CC: USEPA

CLAA



**Permit To Install
Terms and Conditions**

**Issue Date: 11/14/2006
Effective Date: 11/14/2006**

FINAL PERMIT TO INSTALL 13-04657

Application Number: 13-04657
Facility ID: 1318120180
Permit Fee: **\$2000**
Name of Facility: Ford Motor Company - Cleveland Casting
Person to Contact: Bob Niemi
Address: One American Road Environmental Quality Office
Dearborn, MI 48126

Location of proposed air contaminant source(s) [emissions unit(s)]:
**5600 Henry Ford Boulevard
Brook Park, Ohio**

Description of proposed emissions unit(s):
**General Permit application for conversion of Boiler No. 3 and Boiler No. 4 to natural gas --
B022 and B023.**

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

PTI Application: 13-04657

Issued Final 11/14/2006

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 (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. Scheduled Maintenance/Malfunction Reporting

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

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

3. Risk Management Plans

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

PTI Application: 13-04657

Issued Final 11/14/2006

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

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

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

PTI Application: 13-04657

Issued Final 11/14/2006

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

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

12. Air Pollution Nuisance

Ford Motor Company - Cleveland Casting

Facility ID: 1318120180

PTI Application: 13-04657

Issued Final 11/14/2006

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.

PTI Application: 13-04657

Issued Final 11/14/2006

13. Permit-To-Install

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

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

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or 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 (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

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

Ford Motor Company - Cleveland Casting
PTI Application: 13-04657
Issued Final 11/14/2006
of any transfer of this permit.

Facility ID: 1318120180

PTI Application: 13-04657

Issued Final 11/14/2006

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

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

6. Public Disclosure

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

7. Applicability

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

8. Construction Compliance Certification

PTI Application: 13-04657**Issued Final 11/14/2006**

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

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

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

C. Permit-To-Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE/PM ₁₀	8.12
NO _x	106.9
SO ₂	0.64
CO	89.77

* Note: The permittee has proposed that the amount of emissions increase, which is the difference between the future projected actual emissions and current actual emissions, as a result of this modification will be less than 40 tons NO_x/year. In accordance with OAC rule 3745-31-10(C)(3), the permittee will have to maintain records for the next 5 years that demonstrate that the amount of actual emissions increase stays below these major modification thresholds since the potential to emit

Ford Motor Company - Cleveland Casting

Facility ID: 1318120180

PTI Application: 13-04657

Issued Final 11/14/2006

NOx for this emissions unit has not increased as a result of this modification.

Ford Motor Company - Cleveland Casting

Facility ID: 1318120180

PTI Application: 13-04657

Issued Final 11/14/2006

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

PTI A

Issue

Emissions Unit ID: B022

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

- 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>	
B022 -122 mmBtu/hr, 100,000 lb steam/hr, converted natural gas- fired boiler # 3 with a stack shared by boilers # 1 through # 5	OAC rule 3745-31-05(A)(3)	OAC rule 3745-18-06(A)
MODIFIED	OAC rule 3745-31-05(C)	OAC rule 3745-18-24(Z) OAC rule 3745-21-08(B) OAC rule 3745-23-06(B) OAC rule 3745-31-10(C)(1) "Future Projected Actual" emissions
This boiler was initially installed in 1950 and was never modified. No PTI was ever issued.	OAC rule 3745-31-05(A)(3)	40 CFR Part 63, Subpart DDDDD
OAC rule 3745-17-10(B)(1)	OAC rule 3745-17-10(B)(1)	ORC 3704.03(T)(4)

Ford I

PTI A

Issued Final 11/14/2006

**Applicable Emissions
Limitations/Control
Measures**

12.2 pounds NOx/hour;
53.44 tons NOx/year

10.25 pounds CO/hour,
44.89 tons CO/year

See Section A.I.2.a
below.

The requirements of this
rule also include
compliance with the
requirements of OAC
rules 3745-17-07(A)(1)
and 3745-17-10(B)(1)
and 40 CFR Part 63,
Subpart DDDDD.

4.06 TPY PE; and
0.32 TPY SO₂

See Section A.I.2.b
below.

Visible particulate
emissions (PE) from any
stack serving this
emissions unit shall not
exceed 20 % opacity, as
a six-minute average,
except as specified by
rule.

0.020 lb PE/MMBtu.

Exempt pursuant to OAC
rule 3745-18-06(A) when

burning only natural gas.

4.2 lbs SO₂/MMBtu.

See Section A.I.2.c below.

See Section A.I.2.d below.

See Section A.I.2.e below.

See Section A.I.2.f below.

See Section A.I.2.g below.

Emissions Unit ID: B022

2. Additional Terms and Conditions

- 2.a** This emissions unit is required to be equipped with Low-NOx burners.

The pound/hour and ton/year emission limitations are based on the emissions unit's potentials to emit while burning natural gas. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.

- 2.b** The potential to emit based on the allowable limits from OAC rules 3745-17-10(C)(1) and 3745-18-24(Z) is each greater than 10 tons/year. In order to ensure that the potential to emit for this emissions unit remains below 10 tons/year of particulate emissions (PE) and sulfur dioxide (SO₂) emissions, the permittee has requested a voluntary emission limit at the uncontrolled potential to emit.

- 2.c** The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.d** The permittee shall satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On February 15, 2005, OAC rule 3745-23-06 was rescinded; therefore, this rule is no longer part of the State regulations. This rule revision was submitted to the

PTI A

Issue

Emissions Unit ID: B022

U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.e** The permittee has proposed that the amount of emissions increase, which is the difference between the future projected actual emissions and current actual emissions, as a result of this modification will be less than 40 tons NOx/year. In accordance with OAC rule 3745-31-10(C)(3), the permittee will have to maintain records for the next 5 years that demonstrate that the amount of actual emissions increase stays below these major modification thresholds since the potential to emit NOx for this emissions unit has not increased as a result of this modification.
- 2.f** There are no emission limits or work practice standards applicable to this existing large gas-fired boiler pursuant to 40 CFR Part 63, Subpart DDDDD.
- 2.g** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, SO₂, and VOC emissions from this emissions unit since the uncontrolled potential to emit for these pollutants is each less than ten tons per year.

II. Operational Restrictions

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

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. In accordance with OAC rule 3745-31-10(C)(3), the permittee shall maintain annual records for five years after the issuance of this permit of the following:
 - a. the amount, in million cubic feet, of natural gas consumed; and
 - b. the total annual NOx emissions for this emissions unit, calculated by multiplying the NOx emission factor determined from the most recent stack test or alternative factor identified in Section A.V.1.a by the monthly value from A.III.2.a, and then divide by 2000 lbs/ton to determine tons NOx/year.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. In accordance with OAC rule 3745-31-10(C)(5), the permittee shall submit a deviation report to the Cleveland DAQ if the actual annual emissions, in tons/year, exceed the baseline actual emissions by a significant amount for NO_x and CO as noted in Section A.I.2.c above and if such emissions differ from the preconstruction projection as documented and maintained pursuant to OAC rule 3745-31-10(C)(1)(c). Such report shall be submitted within 60 days after the end of such year. This condition will remain in effect for five years after the issuance date of this permit.

V. Testing Requirements

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

- a. Emission Limitation:
NO_x emissions from the combustion of natural gas shall not exceed 12.2 pounds/ hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the emissions unit's maximum hourly natural gas usage (0.122 MMcf/hour) by the emission factor for NO_x determined from the most recent stack test. Alternatively use the emission factor provided by the Low-NO_x manufacturer's guarantee (0.10 lb NO_x/MMBtu x 1000 Btu/cf = 100 lbs NO_x/MMcf), or use an emission factor from the most recent edition of USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Table 1.4-2 (7/98) for natural gas (pounds NO_x/MMcf).

If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing conducted in accordance with the USEPA test methods 1 through 4 and 7 found in 40 CFR Part 60, Appendix A.

- b. Emission Limitation:
NO_x emissions from the combustion of natural gas shall not exceed 53.44 tons /year.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the maximum hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour emission limitation.

- c. **Emission Limitation:**
CO emissions from the combustion of natural gas shall not exceed 10.25 pounds CO/hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the emissions unit's maximum hourly natural gas usage (0.122 MMcf/hour) by the emission factor for CO from the most recent stack test, or use the emission factor from USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Table 1.4-2 (7/98) for natural gas (84 lbs CO/MMcf).

If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing conducted in accordance with USEPA test methods 1 through 4 and 10 found in 40 CFR Part 60, Appendix A.

- d. **Emission Limitation:**
CO emissions from the combustion of natural gas shall not exceed 44.89 tons CO/year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the maximum hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour emission limitation.

- e. **Emission Limitation:**
PE emissions from the combustion of natural gas shall not exceed 4.06 tons PE/year

Applicable Compliance Method:

The annual emission limitation was established based on the potential to emit using the emission factor from USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Table 1.4 -2 (7/98) for natural gas (0.0076 lbs

Ford I

PTI A

Issued Final 11/14/2006

Emissions Unit ID: B022

PE/MMcf) in accordance with the following calculation:

$$122 \text{ MMBtu/hr} \times 0.0076 \text{ lb PE/MMBtu} \times 8760 \text{ hrs/yr} \times \text{ton}/2000 \text{ lbs} = 4.06 \text{ TPY PE}$$

- f. Emission Limitation:
SO₂ emissions from the combustion of natural gas shall not exceed
0.32 ton SO₂/year

Applicable Compliance Method:

The annual emission limitation was established based on the potential to emit using the emission factor from USEPA's Compilation of Air Pollutant Emission Factors,

AP-42, Fifth Edition, Table 1.4 -2 (7/98) for natural gas (0.0006 lbs SO₂/MMcf) in accordance with the following calculation:

$$122 \text{ MMBtu/hr} \times 0.0006 \text{ lb SO}_2/\text{MMBtu} \times 8760 \text{ hrs/yr} \times \text{ton}/2000 \text{ lbs} = 0.32 \text{ TPY}$$

- g. Emission Limitation:
PE emissions from the combustion of natural gas shall not exceed 0.020 lb PE/MMBtu
- Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing conducted in accordance with USEPA test methods 1 through 5 found in 40 CFR Part 60, Appendix A.
- h. Emission Limitation:
SO₂ emissions from the combustion of natural gas shall not exceed 4.2 lbs SO₂/MMBtu
- Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing conducted in accordance with USEPA test methods 1 through 4 and 6 found in 40 CFR Part 60, Appendix A.
- i. Emission Limitation:
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
- Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
2. 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 in accordance with the permittee's current effective Title V permit, except that testing shall be performed for NO_x and CO instead of particulate emissions..
- b. The emission testing shall be conducted to demonstrate compliance with the

Ford Motor Company - Cleveland Casting

Facility ID: 1318120180

PTI A | Permit ID: 10 01057

Issue

Emissions Unit ID: B022

allowable hourly mass rate of emissions for nitrogen oxide and carbon monoxide.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

NO_x Method 7 40 CFR Part 60, Appendix A; and
CO Method 10 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.
- e. 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).
- f. 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.
- g. 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 60 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. The potential to emit for VOC was determined using the emission factor from USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Table 1.4 -2 (7/98) for natural gas (0.0055 lbs VOC/MMcf) as follows:

$$122 \text{ MMBtu/hr} \times 0.0055 \text{ lb VOC/MMBtu} \times 8760 \text{ hrs/yr} / 2000 \text{ lbs/ton} = 2.94 \text{ TPY VOC}$$

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>
B022	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

Ford I
PTI A
Issued Final 11/14/2006

Emissions Unit ID: B022

None

VI. Miscellaneous Requirements

None

Ford I

PTI A

Emissions Unit ID: B023

Issued Final 11/14/2006

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>	
B023 -122 mmBtu/hr, 100,000 lb steam/hr, converted natural gas-fired boiler # 4 with a stack shared by boilers # 1 through # 5.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-10(B)(1)
MODIFIED		OAC rule 3745-18-06(A)
This boiler was initially installed in 1950 and was never modified. No PTI was ever issued.		OAC rule 3745-18-24(Z)
		OAC rule 3745-21-08(B)
		OAC rule 3745-23-06(B)
		OAC rule 3745-31-10(C)(1) "Future Projected Actual" emissions
	OAC rule 3745-31-05(C)	40 CFR Part 63, Subpart DDDDD
		ORC 3704.03(T)(4)
	OAC rule 3745-17-07(A)(1)	

Issue

Emissions Unit ID: B023

**Applicable Emissions
Limitations/Control
Measures**

12.2 pounds NO_x/hour;
53.44 tons NO_x/year

10.25 pounds CO/hour,
44.89 tons CO/year

See Section A.1.2.a
below.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-10(B)(1) and 40 CFR Part 63, Subpart DDDDD.

4.06 TPY PE; and
0.32 TPY SO₂

See Section A.1.2.b
below.

Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

0.020 lb PE/MMBtu.

Exempt pursuant to OAC rule 3745-18-06(A) when burning only natural gas.

Ford I

PTI A

Issued Final 11/14/2006

4.2 lbs SO₂/MMBtu.

Emissions Unit ID: B023

See Section A.1.2.c
below.

See Section A.1.2.d
below.

See Section A.1.2.e
below.

See Section A.1.2.f below.

See Section A.1.2.g
below.

2. Additional Terms and Conditions

2.a This emissions unit is required to be equipped with Low-NOx burners.

The pound/hour and ton/year emission limitations are based on the emissions unit's potentials to emit while burning natural gas. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.

2.b The potential to emit based on the allowable limits from OAC rules 3745-17-10(C)(1) and 3745-18-24(Z) is each greater than 10 tons/year. In order to ensure that the potential to emit for this emissions unit remains below 10 tons/year of particulate emissions (PE) and sulfur dioxide (SO₂) emissions, the permittee has requested a voluntary emission limit at the uncontrolled potential to emit.

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.d** The permittee shall satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On February 15, 2005, OAC rule 3745-23-06 was rescinded; therefore, this rule is no longer part of the State regulations. This rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.e** The permittee has proposed that the amount of emissions increase, which is the difference between the future projected actual emissions and current actual emissions, as a result of this modification will be less than 40 tons NO_x/year. In accordance with OAC rule 3745-31-10(C)(3), the permittee will have to maintain records for the next 5 years that demonstrate that the amount of actual emissions increase stays below these major modification thresholds since the potential to emit NO_x for this emissions unit has not increased as a result of this modification.
- 2.f** There are no emission limits or work practice standards applicable to this existing large gas-fired boiler pursuant to 40 CFR Part 63, Subpart DDDDD.
- 2.g** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, SO₂, and VOC emissions from this emissions unit since the uncontrolled potential to emit for these pollutants is each less than ten tons per year.

II. Operational Restrictions

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

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. In accordance with OAC rule 3745-31-10(C)(3), the permittee shall maintain annual records for five years after the issuance of this permit of the following:
 - a. the amount, in million cubic feet, of natural gas consumed; and
 - b. the total annual NO_x emissions for this emissions unit, calculated by multiplying the NO_x emission factor determined from the most recent stack test or alternative factor identified in Section A.V.1.a by the monthly value from A.III.2.a, and then divide by 2000 lbs/ton to determine tons NO_x/year.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. In accordance with OAC rule 3745-31-10(C)(5), the permittee shall submit a deviation report to the Cleveland DAQ if the actual annual emissions, in tons/year, exceed the baseline actual emissions by a significant amount for NO_x and CO as noted in Section A.I.2.c above and if such emissions differ from the preconstruction projection as documented and maintained pursuant to OAC rule 3745-31-10(C)(1)(c). Such report shall be submitted within 60 days after the end of such year. This condition will remain in effect for five years after the issuance date of this permit.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation:
NO_x emissions from the combustion of natural gas shall not exceed 12.2 pounds/ hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the emissions unit's maximum hourly natural gas usage (0.122 MMcf/hour) by the emission factor for NO_x determined from the most recent stack test. Alternatively use the emission factor provided by the Low-NO_x manufacturer's guarantee (0.10 lb NO_x/MMBtu x 1000 Btu/cf = 100 lbs NO_x/MMcf), or use an emission factor from the most recent edition of USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Table 1.4-2 (7/98) for natural gas (pounds NO_x/MMcf).

If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing conducted in accordance with the USEPA test methods 1 through 4 and 7 found in 40 CFR Part 60, Appendix A.

- b. Emission Limitation:
NO_x emissions from the combustion of natural gas shall not exceed 53.44 tons /year.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the maximum hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the pounds per hour emission limitation.

- c. Emission Limitation:
CO emissions from the combustion of natural gas shall not exceed 10.25 pounds CO/hour.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying the emissions unit's maximum hourly natural gas usage (0.122 MMcf/hour) by the emission factor for CO from the most recent stack test, or use the emission factor from USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Table 1.4-2 (7/98) for natural gas (84 lbs CO/MMcf).

If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing conducted in accordance with USEPA test methods 1 through 4 and 10 found in 40 CFR Part 60, Appendix A.

AP-42, Fifth Edition, Table 1.4 -2 (7/98) for natural gas (0.0006 lbs SO₂/MMcf) in accordance with the following calculation:

$$122 \text{ MMBtu/hr} \times 0.0006 \text{ lb SO}_2/\text{MMBtu} \times 8760 \text{ hrs/yr} \times \text{ton}/2000 \text{ lbs} = 0.32 \text{ TPY}$$

- g. Emission Limitation:
PE emissions from the combustion of natural gas shall not exceed 0.020 lb PE/MMBtu
- Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing conducted in accordance with USEPA test methods 1 through 5 found in 40 CFR Part 60, Appendix A.
- h. Emission Limitation:
SO₂ emissions from the combustion of natural gas shall not exceed 4.2 lbs SO₂/MMBtu
- Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing conducted in accordance with USEPA test methods 1 through 4 and 6 found in 40 CFR Part 60, Appendix A.
- i. Emission Limitation:
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
- Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
2. 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 in accordance with the permittee's current effective Title V permit, except that testing shall be performed for NO_x and CO instead of particulate emissions..
- b. The emission testing shall be conducted to demonstrate compliance with the

Ford I

PTI A

Issued Final 11/14/2006

Emissions Unit ID: B023

allowable hourly mass rate of emissions for nitrogen oxide and carbon monoxide.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

NO_x Method 7 40 CFR Part 60, Appendix A; and
CO Method 10 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.
- e. 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).
- f. 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.
- g. 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 60 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. The potential to emit for VOC was determined using the emission factor from USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Table 1.4 -2 (7/98) for natural gas (0.0055 lbs VOC/MMcf) as follows:

$$122 \text{ MMBtu/hr} \times 0.0055 \text{ lb VOC/MMBtu} \times 8760 \text{ hrs/yr} / 2000 \text{ lbs/ton} = 2.94 \text{ TPY VOC}$$

Ford Motor Company - Cleveland Casting

PTI A

Issue

Facility ID: 1318120180

Emissions Unit ID: B023

Ford I

PTI A

Emissions Unit ID: B023

Issued Final 11/14/2006

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>
B023	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None