

**Permit Review Narrative
PTI 14-4486**

Ford Motor Co. - Sharonville
3000 Sharon Rd.
Cincinnati, Ohio 45241
PN 1431140861

Ford Motor Co. is a major manufacturer of automotive transmissions. This permit to install is for the installation of 2- 34.5 MMBTU/ Hour No.2 Oil and Natural Gas fired boilers utilizing Low NO_x burners when operating on natural gas. Emission limitations are based upon both boilers operating at maximum capacity and using No.2 Oil.

Applicable rules: 40 CFR Part 60 Subpart Dc
 OAC 3745-17-07
 OAC 3745-17-10
 OAC 3745-18-37
 OAC 3745-31-05

These two boilers will be replacing B001, which is a 97.5 MMBtu/Hr.coal fired boiler. The facility is a major for SO₂ and NO_x . As a result, the facility is netting out of PSD and the offset policy with the emissions from the shutdown of B001 as follows:

	SO ₂	NO _x
Average (94-95) [Existing emissions (TPY)]:	140.6	69.4
PTI 14-4486 (2-Boilers) (B023-B024)	99.8*	42.4
Increase/Decrease	-40.8	-27.0

* Based upon 0.3 % sulfur content

Best Available Technology (BAT) is the installation of Low NO_x burners when firing with natural gas along with the emission limitations as outlined in this permit.

The permit fee is:	B023	\$200.00
	B024	<u>\$200.00</u>
	Total	\$400.00

Frank Stoy
November 12, 1997

NETTING DETERMINATION

Netting Determination
Ford Motor Co.- Sharonville
PTI 14-4486

A. Emissions Unit Description:

This Permit to Install (14-4486) covers the installation of two 34.5 MMBTU/Hour No.2 Oil and Natural Gas fired boilers (B023 and B024). The netting will only involve SO₂ and NO_x.

B. Facility Emissions and Attainment Status:

Ford Motor Co. is a major facility for SO₂ and NO_x and is located in Hamilton County which is attainment for SO₂ and NO_x but non-attainment for Ozone.

C. Existing Source Credit:

These two boilers will be replacing B001, which is a 97.5 MMBTU/Hr. Coal Fired Boiler. The actual emissions for the existing boiler (B001) are based on fuel usage and analysis reports for 1994 and 1995. The actual emissions credit for the existing boiler are the following:

	SO ₂	NO _x
Average Existing Emissions for 1994-1995	140.6	69.4

D. Contemporaneous Emissions Increases and Decreases:

There have been no contemporaneous emission increases of SO₂ or NO_x at this facility during the past five years. The following is a summary of the net emission changes:

	SO ₂	NO _x
Average (94-95) [Existing emissions (TPY)]:	140.6	69.4
PTI 14-4486 (2-Boilers) (B023-B024)	99.8	42.4
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Increase/Decrease	-40.8	-27.0

E. Conclusion:

The installation of the two new natural gas/ #2 fuel fired boilers along with the shutdown of the existing coal fired boiler will result in a net decrease in NO_x and SO₂ emissions which is less than the significant level of 40 tons per year. The new source has, therefore, netted out of the Prevention of Significant deterioration Policy.

Prepared by: Frank Stoy
Date Prepared: November 12,1997

Ford Motor Co.- Sharonville
PTI 14-4486

5-Year contemporaneous increases

Year	PTI Number	Year Installed	PM/PM10	VOC
1992	14-2665	05/20/92	0.12 TPY	
	14-2759	09/02/92		28.6 TPY
	14-2815	11/25/92	0.3 TPY	
1993	14-3224	10/14/93		0.032 TPY
1996	14-3969	01/12/96		0.08 TPY

In 1997 Ford Motor Co. withdrew 16 emissions units that had a total of actual PM/PM10 emissions of 3.5 TPY.

Prepared by: Frank Stoy
Date Prepared: November 24,1997

ADDITIONAL TERMS AND CONDITIONS

A. Applicable Emission Limitations and/or Control Requirements:

1. The LB/MMBTU and Ton per Year limitations for emissions unit B023 and B024 are listed in the air emission summary page.
2. Visible particulate emissions shall not exceed 20% opacity(6-minute average), except for one 6-minute period per hour of not more than 27% opacity.

B. Operational Restrictions:

1. The permittee shall install and maintain a Low-NO_x burner at all times when operating emissions units B023 and B024 on natural gas.
2. Start up of emissions units B023 and B024, shall be concurrent with the complete and permanent shutdown of Ohio EPA emissions unit B001.
3. The quality of the oil burned in emissions unit B023 and B024 shall meet the following specifications on an "as received" basis:
 - a. A sulfur content not to exceed 0.3% or which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.33 pounds sulfur dioxide/MMBtu actual heat input.

Compliance with the above-mentioned specifications shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

C. Monitoring and/or Record Keeping Requirements:

1. The permittee shall maintain daily records of the quantity of oil (in gallons) and natural gas (MMft³) used.
2. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the name of the oil supplier, the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.

D. Reporting Requirements:

1. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and
 - c. the weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

2. The permittee shall also submit annual reports which specify the total NO_x, SO₂ and CO emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall submit required reports in the following manner:
 - a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

The reports shall be submitted quarterly, i.e. by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

E. Testing Requirements:

1. Compliance with visible particulate emission limitation shall be demonstrated by the methods outlined in USEPA Reference Method 9.
2. Compliance with the sulfur limitations shall be determined by the fuel oil analyses.
3. Compliance with the emission limitations outlined in this permit shall be demonstrated by the emission factors, control efficiencies(if applicable)and the operational parameters as submitted in PTI 14-4486 submitted 10/30/97.

F. Miscellaneous Requirements:

1. Upon start up of emissions units B023 and B024, the permittee shall shut down permanently emissions unit B001, which is a 97.5 MMBTU/hr coal fired boiler. With the installation of emissions units B023 and B024 and the permanent shut down of emissions unit B001, the permittee shall at no time violate the netting calculation that was performed to avoid federal Prevention Significant Deterioration regulations.