BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

Ford Motor Company
Cleveland Engine Plant No. 2
18300 Five Points Road
Brook Park, OH 44142-1415

PREAMBLE

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to the Ford Motor Company ("Respondent") pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under Ohio Revised Code ("ORC") §§3704.03 and 3745.01.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and successors in interest liable under Ohio law. No change in ownership of the Respondent shall in any way alter Respondent's obligations under these Orders.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in ORC Chapter 3704 and the rules promulgated thereunder.

IV. FINDINGS

All of the findings necessary for the issuance of these Orders pursuant to ORC §§3704.03 and 3745.01 have been made and are outlined below. Nothing in the findings shall be considered to be an admission by Respondent of any matter of law or fact. The Director of Ohio EPA has determined the following findings:

1. Ford is a corporation duly organized under the laws of the State of Delaware, which owns and operates the Cleveland Engine Plant No. 2 ("Ford CEP2") at 18300 Five Points Road, Brook Park, Ohio. At Ford CEP2, Ford manufactures internal combustion engines for use in motor vehicles. Engine parts from
other plants are shipped to this facility and combined into a complete engine that is then tested and shipped to vehicle assembly plants.

**Emissions Unit P264**

2. On October 4, 2002, Final Director's Findings and Orders were issued to Respondent for violations associated with volatile organic compound ("VOC") emissions from emissions unit P264 since its installation in 1994. See attachment 1.

3. On April 16, 2003, Respondent obtained a report for voluntary performance testing conducted on emissions unit P264 for carbon monoxide ("CO"), total hydrocarbons ("THC") and oxides of nitrogen ("NOx") on the uncontrolled carousel engine exhaust stack. Additional testing was performed on September 29, 2003 after the oxidizer was installed to control CO and THC or organic compound (OC) emissions from the combustion exhaust stack. The test results showed uncontrolled CO and THC emission rates from emissions unit P264 that were higher than expected according to emission factors that the Director relied upon to develop the permit limitations. In particular, the tested CO emissions, without control, exceeded the pound per hour emissions limitation which had been based on emission factors. Based on the averages of the results from these tests, the uncontrolled engine exhaust emission rates for CO and THC were 32.3 and 4.38 pounds per hour vs. the allowable emission rates of 5.6 and 5.5 pounds per hour, respectively, as established in the 1997 modified permit to install ("PTI")(#13-3198) and the Final Title V permit issued on May 30, 2003. Failure to comply with the allowable pound per hour emissions limitation for CO constitutes violations of OAC rule 3745-31-05 and ORC §3704.05(C) and (G).  

4. The tons per year allowable emissions established in the PTI and Title V permit for emissions unit P264 are 1.7 tons per year for NOx and 24.5 tons per year for CO. The Fee Emission Reports submitted by Respondent for calendar years 1999, 2000, 2001 and 2002 indicate the following:

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1 The averages of the uncontrolled emission rates for engine exhaust THC (considered equivalent to VOC or OC, Reference Method 25/25A) and CO (Reference Method 10) emissions for the tests performed in April and September yielded 32.3 lbs CO per hour, 4.38 lbs THC per hour and 0.23 lbs NOx per hour. Testing performed September 29, 2003 after the thermal oxidizer was installed shows that the controlled emission rates yielded 3.01 lbs CO per hour, 0.64 lb THC per hour and 9.75 lb NOx per hour.
The reports, if used to measure compliance, indicate exceedances of the annual allowable emission limitations for NOx and CO during calendar years 1999, 2000, and 2001. However, the 2003 stack test results, if used, would yield lesser exceedances of the annual allowable CO emission limit. The CO exceedences constitute violations of PTI 13-03198, Respondent's Title V permit and OAC Rule 3745-31-05 and ORC § 3704.05 (C ) and (G).

5. On June 19, 2003, the City of Cleveland, Division Air Quality (Cleveland) conducted an inspection of the Ford CEP2 facility. Review of the records indicates that based on the hours of operation during 2002 and the results of the emissions tests referenced in Finding (3), the Fee Emission Report submitted for 2002 cannot be accurate for annual CO emissions. Also, based on these emission tests, the actual annual CO and NOx emissions are significantly below those reported in the fee reports for 1999 to 2001.3

6. On May 19, 2003 Respondent conducted a telephone conference call with Cleveland in which they reported the results of the April 16, 2003 emission tests on emissions unit P264 and discussed their possible response. After reviewing Respondent's letter, Cleveland issued a Notice of Violation ("NOV") to Respondent on July 2, 2003.

7. On July 21, 2003, Respondent sent a response to the NOV indicating that a thermal oxidizer would be installed to control CO (and to a lesser extent, THC, VOC, or OC) emissions.

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2 The emission fee reports, prepared by Ford's consultant for 1999 through 2001, were based on the Ohio EPA STARShip default emission factors/US EPA AP-42 emission factors for NOx, CO and VOC/OC and are higher than either the permit-based factors or the April/September test data factors would yield.

3 Based on the averages of the results from the April and September emission testing, 1999 through 2002 annual CO emissions (0.256 lb CO/engine test) are calculated to be 48.3, 55.4, 60.8, and 66.0 TPY, and annual NOx emissions (0.002 lb NOx/engine test) are calculated to be 0.33, 0.38, 0.41, and 0.45 TPY, respectively, based on actual production volumes. Also see Footnote 2.
8. The thermal oxidizer was installed to control CO from the uncontrolled combustion stack for emissions unit P264 and was completely operational by August 30, 2003. Testing performed on September 29, 2003 indicated emission rates of 3.01 pounds CO per hour, 0.64 pounds THC per hour and 9.75 pounds NOx per hour. On November 24, 2003, Respondent sent a PTI application to incorporate the thermal oxidizer installed to control the uncontrolled combustion exhaust of emissions unit P264 to the City of Cleveland.

Emissions Unit K203 (a.k.a.K003)

9. Emissions unit K203 (originally permitted as K003) was issued a PTI (#13-2830) on July 7, 1994. K203 is a utility maintenance paint spray booth. Commercial coatings (typically Sherwin-Williams or a similar supplier) are used in the booth to paint tools and miscellaneous metal and non-metal parts or objects for maintenance purposes. Sherwin-Williams manufactures coatings using two different VOC contents under the same product name. The PTI requires respondent to use coatings that have a maximum VOC content of 3.76 pounds per gallon of coating used. The PTI also requires Respondent to maintain records of the coatings employed in the booth and to submit quarterly reports of monthly usage that exceeded 10 gallons per day. Emissions unit K203 also is subject to OAC rule 3745-21-09(U)(2)(e)(ii) (effective June 15, 1999), which exempts sources from the pounds per gallon VOC content requirement of the rule unless the source uses more than 3 gallons per day. Prior to the 1999 effective date of OAC rule 3745-21-09(U)(2)(e)(ii), the exemption applied unless a source used more than 10 gallons per day. During the inspection referenced in Finding (5), it was discovered that Respondent may have used some commercial coatings with VOC contents greater than 3.76 pounds per gallon for maintenance purposes on 228 days during the period from March 3, 1995 through December 21, 2001. On six different days, Respondent exceeded the 3 gallons per day usage exemption. This constitutes violations of OAC rules 3745-21-09(U)(2)(e)(ii), 3745-31-05 and ORC §3704.05(A) and (C).  

4 At issue is which regulation governs the maintenance paint booth. The original PTI-established record keeping and reporting specifies a restriction of 10 gallons per day, which has never been exceeded. Once the 3-gallon per day exemption was adopted, then under the PTI rules, no permit is required for sources that maintained such usage, nor is any VOC content limit applicable. Given the variable nature and small scale of the maintenance painting operation in the booth, during the 8-year period preceding the June inspection, less that 3000 pounds of VOC were potentially released from this booth, and of that, some was collected and disposed of as spent cleaning solvent. On average, less than a gallon per day is used in the booth. Coating use records indicate that there were only 6 days since March 1995 when the booth used more than 3 gallons, and only 3 days when more than 3 ½ gallons were used. Of note, the highest usage days were June 7 and 8, and the usage information was provided to the City of Cleveland during the June 19, 2003 inspection. Also, had CEP2 been aware of the applicability change from a 10-gallon to a 3-gallon restriction, the ducts for the new P264 thermal oxidizer painted on those days to prevent them from rusting and failing, would have been painted under an alternative arrangement where they would not have been subject to K203 limitations. CEP2 has adopted new
10. On July 2, 2003, a NOV was sent to Respondent.

11. On July 21, 2003, Respondent indicated in their response to the NOV referenced in Finding (9) that it was unaware that the rule change in 1999, limiting emissions unit K203 to 3 gallons per day, versus the 10 gallons per day limitation delineated in the original PTI, despite being on the mailing list of “Interested Parties.” Respondent acknowledged that it had likely used coatings with VOC contents above 3.76 upon its retroactive investigation because its supplier used two different formulas to make the same coatings. Internal purchasing and identification of coatings used in the booth have been changed to prevent the use of the higher VOC coatings in the future. Respondent indicated that actual emissions of VOC from the booth are less than 0.25 ton per year from 1995 through present.

12. The Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with the following Orders and their benefits to the people of the State to be derived from such compliance.

V. ORDERS

The Director hereby issues the following Orders:

1. Respondent shall utilize a thermal oxidizer to serve emissions unit P264 for the control of CO engine exhaust emissions.

2. Respondent shall review the Title V Fee Emission Reports for calendar years 1999 through 2002 based on the April 16, 2003 test and September 29, 2003 test results and other site-specific testing conducted prior to October 4, 2002 for emission source P264. By no later than January 31, 2004, Respondent shall electronically submit revised Fee Emission Reports for 1999 through 2002 to reflect the test data generated by these reports. The written receipt shall also be sent to the Ohio EPA representatives in accordance with Section X.5

3. Beginning with the fourth calendar quarter of 2003, Respondent shall submit deviation reports, in accordance with OAC Rule 3745-21-09(B), to the City of Cleveland for any day that Respondent uses more than 3 gallons in emissions unit K203.

procedures to ensure it will not exceed the 3-gallon usage exemption level and will request that the PTI be modified to avoid further confusion as to applicable requirements.

5 According to the test data, NOx emission rates will adjust down for 1999 through 2002, CO emission rates will adjust down for 1999 through 2001 and up for 2002. The 2003 report will account for the before (and after) oxidizer control based on the testing results.
4. Pursuant to ORC §3704.06, Respondent is assessed a civil penalty in the amount of ninety seven thousand two hundred and sixty-six dollars ($97,266) in settlement of Ohio EPA's claim for civil penalties. By January 31, 2004 or within fourteen (14) days after the effective date of these Orders, whichever is later, Respondent shall pay to Ohio EPA the amount of ninety seven thousand two hundred and sixty-six dollars ($97,266). Payment shall be made by an official check made payable to "Treasurer, State of Ohio" and sent to Brenda Case, Fiscal Specialist, or her successor at the following address:

Brenda Case  
Fiscal Administration  
Ohio Environmental Protection Agency  
P.O. Box 1049  
Columbus, OH 43216-1049

A copy of the check shall be sent to Jim Orlemann at the following address:

Division of Air Pollution Control  
Ohio Environmental Protection Agency  
P.O. Box 1049  
Columbus, OH 43216-1049

VI. TERMINATION

Respondent's obligations under these Orders shall terminate when Respondent certifies in writing and demonstrates to the satisfaction of Ohio EPA that Respondent has performed all other obligations under these Orders and the Chief of Ohio EPA's Division of Air Pollution Control acknowledges, in writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then Ohio EPA will notify Respondent of the obligations that have not been performed, in which case Respondent shall have an opportunity to address any such deficiencies and seek termination as described above.

The certification shall contain the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete."

The certification shall be submitted by Respondent to Ohio EPA and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is a corporate officer or a duly authorized representative who is in charge of a principal business function of Respondent.
VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to, the operation of Respondent's emissions units.

VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these orders shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondent.

IX. MODIFICATIONS

These Orders may be modified by agreement of the parties. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

X. NOTICE

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

Michael Krzywicki
City of Cleveland
Department of Public Health
Division of Air Quality
1925 St. Clair Avenue
Cleveland, Ohio 44114-2080

and to:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Air Pollution Control
P.O. Box 1049
Columbus, Ohio 43216-1049
Attn: Tammy VanWalsen
XI. RESERVATION OF RIGHTS

Ohio EPA and Respondent each reserve all rights, privileges and causes of action, except as specifically waived in Section XII of these Orders.

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, and in lieu of further enforcement action by Ohio EPA for only the violation specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for Respondent's liability for the violations specifically cited herein.

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders, and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated or modified.

XIII. EFFECTIVE DATE

The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

XIV. SIGNATORY AUTHORITY

Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.
IT IS SO ORDERED AND AGREED:

Ohio Environmental Protection Agency

Christopher Jones
Director

Date 12-27-03

IT IS AGREED:

Ford Motor Company
Cleveland Engine Plant No. 2

Signature Thomas J. DeZure
Date 12-9-03

Assistant Secretary

Printed or Typed Name

Title