

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

B623022975

FACILITY: FORD MOTOR CO RESEARCH & DEV CTR		SRN / ID: B6230
LOCATION: 1701 Village Road, DEARBORN		DISTRICT: Detroit
CITY: DEARBORN		COUNTY: WAYNE
CONTACT:		ACTIVITY DATE: 09/20/2013
STAFF: Jorge Acevedo	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: F&G Wing and RIC		
RESOLVED COMPLAINTS:		

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
INSPECTION REPORT

COMPANY NAME : Ford R&E Center
FACILITY ADDRESS : 21500 Oakwood Blvd, Dearborn 48124
STATE REGISTRAT. NUMBER : B6230
NAICS CODE : 541712
EPA SOURCE CLASS : A
EPA POLLUTANT CLASS : C,N,V
LEVEL OF INSPECTION : PCE
DATE OF INSPECTION : 9/20/13
TIME OF INSPECTION : 1:00 PM
DATE OF REPORT : 09/30/13
REASON FOR INSPECTION : Annual Compliance Inspection
INSPECTED BY : Jorge Acevedo
PERSONNEL PRESENT : David Russell, Danielle Fenbert, Mark Oleszkowicz
FACILITY PHONE NUMBER : (313) 248-1334
FACILITY FAX NUMBER : (313) 323-0559

FACILITY BACKGROUND:

The R&E Center is a 40 building research and development complex engaged in testing various automobile engines and components. Approximately 25000 are employed at the complex including all shift workers and salaried personnel. Wayne County was redesignated to attainment for PM 2.5 on August 29, 2013. Wayne County was redesignated to attainment for Ozone on June 29, 2009.

The R & E Center is a major source under the following programs:

Renewable Operating Permit (ROP) program and Prevention of Significant Deterioration program.

INSPECTION NARRATIVE:

On September 20, 2013, I conducted an annual compliance inspection of the Ford Motor – Research and Engineering Center (R&E Center). I arrived in the vicinity of the facility a little before 1:00 PM. Winds were out of the South and skies were overcast. I did not detect any odors from the F&G wings or observe any opacity from the thermal oxidizer stacks. I met with David Russell and Mark Oleszkowicz at the F & G wings of the Dynamometer Building. We went into the offices at the F&G Wing and talked about a couple of items before heading into the F&G Wings. I talked to them about the Renewable Operating Permit for the Ford R&E facility and updated them about its progress. The ROP was currently in the 30 day public comment period with the end of the period coming October 9, 2013. I gave them a quick summary of the inspection process and the updates from the Air Quality Division in terms of the new inspection process. I asked them if there had been changes in the R&E Center since my last inspection. They indicated that there had not been major changes but indicated that the digital temperature monitor for the oxidizers was in place. Previously, a strip chart recorder was used for temperature monitoring. Also, they have made tweaks in the thermal oxidizers to minimize makeup air, reducing swings in natural gas usage. They've optimized the thermal oxidizers so that they can use two of them during less busy times such as the weekends, which have saved the facility money in natural gas usage.

Mr. Russell talked about the RICE MACT and how the facility is showing compliance with the regulation. Mr. Russell provided records for the RICE MACT and inventory list of subject emission units.

I began the inspection by asking to see some of the RICE MACT subject emission units in the F& G Laboratory. Messrs. Russell and Oleszkowicz showed me one of fire pumps in the G Wing of the Dynamometer Laboratory. It was a diesel fired 166 hp emergency fire pump. Mr. Russell provided records of usage and maintenance for the fire pump.

After observing the fire pump, we met with Kevin Spano, Controls Engineer, who explained the new monitoring system for the thermal oxidizer operations. With the new system, the operations of the oxidizers have been fine tuned to the point that the facility is saving money in natural gas usage. I asked Mr. Spano to provide me a printout of the current operations. He did so and I observed the operations at 2:13PM. All four of the oxidizers were currently operating at above 1400°F.

Next, we went to observe the thermal oxidizers. I observed the computer system monitoring the oxidizer operations. I then walked to the roof to observe the oxidizers. I did not observe any opacity. I again took note of the oxidizers' temperature at 2:25PM:

Oxidizer #1 1436 °F

Oxidizer #2 1444 °F

Oxidizer #3 1447 °F

Oxidizer #4 1425 °F

After observing the oxidizers, we took a walk down the G wing. We went into room 12G. Mr. Oleszkowicz explained to me the testing that they were currently doing. After that, we went into the "A" wing of the Dynamometer Laboratory. The "A" wing is part of the grandfathered part of the facility. In the "A" wing, catalyst aging is performed. The emissions from the testing is exhausted through the floor and through a water system before exhausting out of the building.

After observing the "A" wing, Mr. Russell showed me two cold cleaners and both were mechanically assisted. Both were not in use and their lids were closed.

We then went to the Research and Innovation Center. We were met by Scott Larkin and Danielle Fenbert of Ford. Mr. Russell showed me a Fire Pump, which was a diesel fired engine, a Natural Gas Generator, and another emergency engine, that had the gas supply line disconnected. Mr. Russell provided me maintenance and hours of operation for each emergency engine.

I then observed the 10 dynamometer cells in the Research and Innovation Center. There is no control on the emissions from the cells. Emissions are exhausted through the floor and directed out of the building.

After observing the dynamometer cells, I requested records that the facility was responsible for and received the records. I left the facility at 4:08PM.

COMPLAINT/COMPLIANCE HISTORY:

There have not been any citizen complaints registered against Ford. Ford R&E Center is under Consent Order AQD 14-2010.

OUTSTANDING CONSENT ORDERS:

None

OUTSTANDING LOVs

None

OPERATING SCHEDULE/PRODUCTION RATE:

The Dynamometer Building is a 24-hour per day, 7days per week, 8760 hours per year operation. The SRL is an 8-hour per day, 5 days per week, 2080 hours per year operation.

PROCESS DESCRIPTION:

In the Dynamometer Building, Ford has six wings (A, C, D, E, F, G) and tests internal combustion engines in dynamometer cells. The dynamometers are electrical diagnostics devices measuring mechanical performance of the engines. All dynamometers are interfaced with personal computers that continuously monitor engine feedback parameters. Emissions result from the combustion of gasoline by the engines. The typical engine tests are as follows:

- **Engine Durability** – The durability test evaluates the effect of running the engine under harsh conditions for extended period of time. This is accomplished by operating the engine for extended period while varying engine speeds.
- **Engine Performance**- The performance test takes the engine to a particular speed, stops the engine for several minutes, takes the engine to the next speed, stops for several minutes, etc;
- **Engine Break-in**- During the engine break-in test, speed and load points are varied to “break-in” the engine;
- **Transient Emissions**- The transient emissions test operates the engine for a period, then stops and allows the engine to return to ambient temperature;
- **Transient Performance Test**- This test takes the engine from zero revolutions per minute (RPM) to maximum horsepower in few seconds. The engine is then stopped and the test is immediately repeated;
- **Engine component Testing**- Some of the test cells evaluate the performance of specific engine components (oil pump, throttle body, etc.), often times without actually running the engine under its own power and;
- **Engine Mapping test**- Consists of running engine at various speed, load, spark and fuel set points where data is taken to determine engine performance, fuel economy, exhaust emission, etc. according to engine program

In the SRL, Ford tests internal combustion engines in 10 dynamometer cells. The focus in the SRL is not that much different than in the Dynamometer Building. Rather than focusing on endurance as in the Dynamometer Building, the focus in the SRL is on how the engines and their components react with different fuels. Also, the focus is on projects that are in the development stages and 3-10 years from production.

EQUIPMENT AND PROCESS CONTROLS

12 test cells are located in the “A Wing”. 3 are currently inactive. The test cells in the “A Wing” are grandfathered. The wing has two stacks and does not have any add on controls.

14 test cells are located in the “C Wing”. 7 are currently inactive. The test cells in the “C Wing” are grandfathered. The wing has two stacks and does not have any add on controls.

12 test cells are located in the “D Wing”. 4 are currently inactive. The test cells in the “D Wing” are grandfathered. The wing has two stacks and does not have any add on controls.

19 test cells are located in the "E Wing". None are currently inactive. The test cells in the "E Wing" are grandfathered. The wing has two stacks and does not have any add on controls.

13 test cells are located in the "F Wing" and 17 are located in the "G Wing." The test cells are controlled by four thermal oxidizers. The exhaust loading supplied by the cells under test automatically activates the oxidizer's variable fan speed. Each oxidizer is equipped with tube heat exchangers for some recuperative potential. Each oxidizer maintains a minimum temperature of 1400° F with a minimum retention time of .5 seconds. The test cells' ability to run is dependent on the temperature. If the oxidizer temperature falls below 1400°, the test cells will not be able to run. Average volumetric air flow rate is 16000 acfm. There are four stacks, one for each oxidizer. Each oxidizer stack is 2.2' internal diameter and 57' high.

10 test cells are located in the SRL and are uncontrolled. The amount of time they are used does not justify the cost for controls.

APPLICABLE RULES/PERMIT CONDITIONS:

ROP MI-ROP-B6230-2009 was finalized on January 16, 2009. PTI 174-09 was issued on August 25, 2009. Draft ROP MI-ROP-B6230-201X is currently in the 30 day public comment period.

Permit conditions are evaluated in Appendix A. (Appendix A)

The following conditions apply Source-Wide to: FGOTHERDYNO-S1

DESCRIPTION

This flexible group represents the 30 Dynamometer Test Cells located in the Dynamometer Laboratory (F&G Wings). The dynamometers are controlled with four oxidizers.

Emission Units: EUTHERDYNO1-S1 through EUTHERDYNO30-S1

POLLUTION CONTROL EQUIPMENT

Four Thermal Oxidizers

I. EMISSION LIMIT(S)

Pollutant	Limit	Compliance Status	Comments
1. Carbon Monoxide	1416 pounds/day ²	Compliance	Records are provided monthly as a result of Consent Order. The highest emissions of CO did not exceed 1416 pounds.
2. Carbon Monoxide	44.3 Tons/year ²	Compliance	Records are provided monthly as a result of Consent Order.
3. Nitrogen Oxides	1200 pounds/day ²	Compliance	Records are provided monthly as a result of Consent Order
4. Nitrogen Oxides	37.5 Tons/year ²	Compliance	Records are provided monthly as a result of Consent Order
5. 1,3-Butadiene	32.6 Pounds/day ¹	Compliance	Records are provided monthly as a result of Consent Order

II. MATERIAL LIMIT(S)

Material	Limit	Compliance Status	Comments
1. Fuel	75,000 MMBTU/year ²	Compliance	Records are provided monthly as a result of Consent Order
2. Fuel	1200 MMBTU/day ²	Compliance	Records are provided monthly as a result of Consent Order
3. Lead	7 kilograms of lead in the engine test cells/week ²	Compliance	Leaded fuel is no longer used as indicated by Mr. Russell. Records are provided monthly as a result of Consent Order.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate FGOTHERDYNO-S1 unless the group of four thermal oxidizers are installed, maintained and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes maintaining a minimum combustion chamber temperature above the most recent acceptable performance test value less 50 degrees Fahrenheit and a minimum design retention time of .5 seconds.² (R 336.1205, R 336.1225, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d), 40 CFR 64.6(c)(1)(i and ii))

Compliance- Oxidizers appeared to be working correctly. Inspection of the temperature indicated that it was above 1400 degrees.

IV. DESIGN/EQUIPMENT PARAMETER(S)

N/A

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. Within 60 days after issuance of this permit, the permittee shall verify the CO and VOC reduction efficiency rates of each thermal oxidizer portion of FGOTHERDYNO-S1, by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.1205, R 336.1910, R 336.2804, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21 (d))

COMPLIANCE- Stack testing was conducted in September 2009.

2. Within 60 days after issuance of this permit, the permittee shall verify the NO_x, CO, and 1,3-Butadiene emission factors from FGOTHERDYNO-S1 prior to control by its thermal oxidizer, by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.1205, R 336.1225, R 336.1910, R 336.2803, R 336.2804, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))

COMPLIANCE - Stack testing was conducted in September 2009. 1, 3 Butadiene was not tested. The ROP has a five year timeframe to conduct the test. In 2010 Ford indicated that they were looking into submitting a request to modify the stack testing provision for 1,3 Butadiene because it has been the experience that emissions of 1,3 Butadiene have been negligible or nonexistent in previous stack testing. Ford Submitted a request to change the frequency of stack testing of 1,3 Butadiene on May 7, 2012. AQD reviewed the request and approved the frequency to "Upon Request" due to negligible amounts of 1,3 Butadiene detected during previous stack tests.

3. Whenever leaded fuel is used, the permittee shall verify the lead usage emission rate from FGOTHERDYNO-S1, in accordance with Appendix 7-S1. (R 336.1225, R 336.1901)

COMPLIANCE- Records are kept regarding leaded fuel usage. According to Mr. Russell, no leaded fuel is being used.

4. Whenever leaded fuel is used, the permittee shall verify the lead content of the fuel used in FGOTHERDYNO-S1, in accordance with Method 2. (R 336.1225, R 336.1901, 40 CFR Part 80, Appendix B)

COMPLIANCE- According to Mr. Russell, no leaded fuel is being used. Records are kept regarding leaded fuel usage.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the thermal oxidizers for FGOTHERDYNO-S1 to monitor and record the combustion temperature on a continuous basis during operation. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. (R 336.1225, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d), 40 CFR 64.6(c)(1)(I and ii))

COMPLIANCE-The temperature of the combustion chamber is monitored continuously.

2. The permittee shall properly maintain the monitoring system including keeping ready access parts for routine repair of the monitoring equipment. (R 336.1225, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d), 40 CFR 64.7(b))

COMPLIANCE- Monitoring system appeared to be working correctly. Dynos are interlocked with the thermal oxidizers, therefore, dynos are shut down if temperature goes below 1400.

3. The permittee shall calculate the daily heat input rate in million BTU based upon monthly recordkeeping prorated to a daily rate. Should the prorated daily rate exceed 90 percent of the daily limit, the permittee shall commence daily recordkeeping for a minimum of two months until the daily rate falls below 90 percent of the daily limit. (See Appendix 7-S1) (R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

Compliance- Records are provided monthly as a result of Consent Order

4. The permittee shall keep a record of the heat input rate in million BTU per calendar month, and the annual heat input usage rate in million BTU per 12-month rolling time period as determined at the end of each calendar month. (R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

COMPLIANCE- Records are provided monthly as a result of Consent Order

5. The permittee shall keep the following information on a monthly basis for FGOTHERDYNO-S1:

- a) A record of the days of operation.
- b) The amount and type of each fuel used, per calendar day, per month and per 12-month rolling time period.
- c) NO_x emission calculations determining the daily emission rate in pounds per calendar day.
- d) NO_x emission calculations determining the monthly emission rate in tons per calendar month.
- e) NO_x emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
- f) CO emission calculations determining the daily emission rate in pounds per calendar day.
- g) CO emission calculations determining the monthly emission rate in tons per calendar month.
- h) CO emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
- i) 1,3-Butadiene emission calculations determining the daily emission rate in pounds per calendar day.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. (R 336.1205, R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

COMPLIANCE- Records are provided monthly as a result of Consent Order

6. The permittee shall calculate and maintain a record of the weekly lead emissions. (R 336.1225, R 336.1901)

COMPLIANCE- Records are provided monthly as a result of Consent Order

VII. REPORTING

1. The permittee shall submit monthly reports of the records required by Special Condition V.5 to the AQD District Supervisor in a format acceptable to the AQD District Supervisor. Reports shall be submitted by the 21st day of the calendar month, for the previous calendar month. (R 336.1205, R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

COMPLIANCE- Records are provided monthly as a result of Consent Order

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.SVDYNO-OXIDIZER	34 ²	65 ²	R 336.1225 R 336.1901 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
2.SVDYNO-OXIDIZER2	34 ²	65 ²	R 336.1225 R 336.1901 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
3.SVDYNO-OXIDIZER3	34 ²	65 ²	R 336.1225 R 336.1901 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
4.SVDYNO-OXIDIZER4	34 ²	65 ²	R 336.1225 R 336.1901 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)

COMPLIANCE- Stack heights appeared correct. Measurements were not taken.

IX. OTHER REQUIREMENT(S)

1. For the purposes of Compliance Assurance Monitoring (CAM), excursions will be defined as follows:

(40 CFR 64.6(c)(2))

a) A temperature excursion is defined as a confirmed three-hour period during which the average fails to meet the specified temperature requirements in Special Condition III.1.

b) A monitoring excursion is defined as a failure to properly monitor as required in Special Condition VI.1.

(40 CFR 64.3(b)(4))

2. The permittee shall perform quality assurance measures annually on the monitoring equipment to ensure maximum performance. (40 CFR 64.6(c)(1)(iii))

3. The permittee shall comply with all applicable requirements of 40 CFR Part 64. (40 CFR Part 64)

COMPLIANCE- Quality assurance is conducted on monitoring equipment. Temperature monitoring is done continuously and appeared to be working correctly and in the right range. The dynos are interlocked and if there is a drop in temperature- the dynos are automatically shut down.

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGC10759-S2

FLEXIBLE GROUP CONDITIONS

DESCRIPTION

10 Dynamometer Test Cells located in the Scientific Research Laboratory.

EMISSION UNITS: EUC10759D1-S2 THROUGH EUC10759D10-S2

NA

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

Pollutant	Limit	Compliance Status & Date	Comments
1. Carbon Monoxide*	28.62 lbs/mmBTU of heat input ² .	COMPLIANCE	Records provided indicate that emission limit was not exceeded. Stack Testing was conducted in March 2010.
2. Volatile Organic Compounds (VOC) **	1.69 lbs/mmBTU of heat input ²	COMPLIANCE	Records provided indicate that emission limit was not exceeded. Stack Testing was conducted in March 2010.
3. 1,3 butadiene (corrected to 70°F and 29.92 inches Hg) ¹	11.9 milligrams per cubic meter of exhaust air ¹	COMPLIANCE-	AQD may request testing

* This is equivalent to a carbon monoxide emission rate of 149 pounds per hour and 63.29 tons per year, based on a maximum gasoline usage of 39 gallons per hour.

** This is equivalent to a VOC emission rate of 10 pounds per hour and 3.76 tons per year, based on a maximum gasoline usage of 39 gallons per hour

II. MATERIAL LIMIT(S)

Material	Limit	Compliance Status & Date	Comments
1. fuel	121.68 million BTUs/day ²	COMPLIANCE-	Records provided show that daily fuel usage did not exceed permit limit. Highest usage over past year was 7.87 mmBTU/day.

Material	Limit	Compliance Status & Date	Comments
2. fuel	4.42 billion BTUs/year ²	COMPLIANCE-	Records provided show that 12 month rolling fuel usage did not exceed permit limit. Highest amount over past year was 2.5 billion BTU/year
3. lead	4.0 kilograms/week ²	COMPLIANCE	Records were provided. No unleaded fuel was consumed.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall develop a test protocol to ensure that representative uncontrolled and controlled emissions can be determined. This protocol must be submitted to the AQD at least 60 days prior to the proposed test date and approved by AQD. Emissions information gathered testing FGOTHERDYNO-S1 can be used to show compliance for FGC10759-S2 (R336.1201(3))

Compliance- Facility conducted testing on March 2010.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1.NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. Every five years, the permittee shall verify the Carbon Monoxide emission rates from FGC10759-S2, by testing at owner's expense, in accordance with EPA Federal Reference Test Method 10. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R336.2004(1)(m), R336.1213(3))

Compliance- Facility conducted testing on March 2010.

2. Every five years, the permittee shall verify the Volatile Organic Compound emission rates from FGC10759-S2, by testing at owner's expense, in accordance with EPA Federal Reference Test Method 25A. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R336.2004(1)(t), R336.1213(3))

Compliance- Facility conducted testing on March 2010.

3. Upon MDEQ request, the permittee shall verify the 1,3 Butadiene concentration from FGC10759-S2, by testing at owner's expense, in accordance with EPA Federal Reference Test Method 18. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.2004(1)(o), R 336.1213(3))

Compliance- Facility will test if requested by AQD.

4. Whenever leaded fuel is used, the permittee shall verify the lead usage emission rate from FGC10759-S2, in accordance with Appendix 7-S1. (R336.1213(3))

UNDETERMINED- Leaded fuel does not appear to be used.

5. Whenever leaded fuel is used, the permittee shall verify the lead content of the fuel used in FGC10759-S2, in accordance with Method 2. (40 CFR Part 80, Appendix B, R336.1213(3))

UNDETERMINED- Leaded fuel does not appear to be used.

See Appendix 5-S2

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall calculate the daily heat input rate in million BTU based upon monthly recordkeeping prorated to a daily rate. Should the prorated daily rate exceed 90 percent of the daily limit, the permittee shall commence daily recordkeeping for a minimum of two months until the daily rate falls below 90 percent of the daily limit. (See Appendix 7-S2) (R336.1201(3))

COMPLIANCE- Records are kept.

2. The permittee shall keep a record of the heat input rate in million BTU per calendar month, and the annual heat input usage rate in million BTU per 12-month rolling time period as determined at the end of each calendar month.

COMPLIANCE- Records are kept. (R336.1201(3))

3. Weekly lead usage rates shall be determined from the lead content and the amount of each fuel used in the test cells². (See Appendix 7-S2) R336.1201(3)

COMPLIANCE- It appears that leaded fuel is not used.

See Appendix 7-S2

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.

(R 336.1213(4)(c))

See Appendix 8-S2

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SVDYNO-01	16 ²	59 ²	(R336.1201(3))
SVDYNO-02	16 ²	59 ²	(R336.1201(3))

COMPLIANCE- It appears that stack heights are correct. Measurements were not taken.

IX. OTHER REQUIREMENT(S)

1.NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGRULE 287(c)-S1

FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c).

Emission Unit: EUPAINTBOOTH-S1

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Compliance Status
1. Coatings	200 gallons	Per month, as applied, minus water, per emission unit	Compliance- Records were received and indicated that less than 200 gallons a month were used for all spray booths at the facility.

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Any exhaust system that serves only coating spray equipment shall be equipped with a properly installed and operating particulate control system. (R 336.1287(c)(ii))

NA- No exhaust system

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 287(c), Permit to Install Exemption Record form (EQP 3562) or an alternative format that is approved by the AQD District Supervisor. (R 336.1213(3))

a. Volume of coating used, as applied, minus water, in gallons. (R 336.1287(c)(iii))

b. Documentation of any filter replacements for exhaust systems serving coating spray equipment. (R 336.1213(3))

COMPLIANCE- Records are maintained.

See Appendix 4

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

N/A

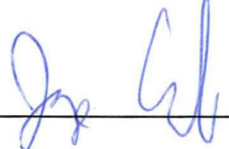
MAERS REPORT REVIEW

(These figures include the 70 grandfathered test cells.)

Pollutant	2012 Emissions(TPY)
CO	1286
NOx	95.97
PM	6.57
Sox	5.98
VOC	55.5

FINAL COMPLIANCE DETERMINATION:

It appears that the facility is operating in compliance with MI-ROP-B6230-2009. Ford's renewal ROP application is currently being processed by AQD.

NAME 

DATE 10-30-13

SUPERVISOR 