A8645
MAW12

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

A864542170

| | | |
|---|---|---|
| **FACILITY:** FORD MOTOR CO/ LIVONIA TRANSMISSION | | **SRN / ID:** A8645 |
| **LOCATION:** 36200 PLYMOUTH RD, LIVONIA | | **DISTRICT:** Detroit |
| **CITY:** LIVONIA | | **COUNTY:** WAYNE |
| **CONTACT:** Carly Gardiner , Environmental Engineer | | **ACTIVITY DATE:** 10/25/2017 |
| **STAFF:** Todd Zynda | **COMPLIANCE STATUS:** Compliance | **SOURCE CLASS:** MAJOR |
| **SUBJECT:** Scheduled Inspection - October 25, 2017 | | |
| **RESOLVED COMPLAINTS:** | | |

REASON FOR INSPECTION: Scheduled Inspection
INSPECTED BY: Todd Zynda, AQD
PERSONNEL PRESENT: Carly Gardiner, Environmental Engineer, Steve Myers, Ford Environmental Quality, Julia Guernsey, Environmental Engineer
FACILITY PHONE NUMBER: 734-523-4526
FACILITY FAX NUMBER: 734-266-1199

## FACILITY BACKGROUND

Ford Livonia Transmission Plant (LTP) manufactures transmissions and transmission components for Ford vehicles. LTP has been in operation at the location since 1952, is 3.3 million square feet in area, and employs more than 1,000 people. The facility operates three shifts, but may be adjusted depending on output demand.

LTP manufactures front wheel and rear wheel drive transmissions for Ford vehicles. The plant receives prefabricated steel, aluminum, and iron parts from various parts suppliers, machines the parts in drill machines, grinders, lathes, boring machines, and CNC machines, and assembles the machined parts into the final product. The facility refers to the parts, as received, as "Greenstock" parts. Machining predominantly occurs on the housing, gears, shafts, and valve bodies of automatic transmissions. The machined parts are assembled into Ford vehicle transmissions.

## SOURCE CLASSIFICATION

Ford LTP is considered a major Title V Part 70 source due to the potential to emit of carbon monoxide and nitrogen oxides, each exceeding 100 tons per year. The facility is also considered a major source regarding Prevention of Significant Deterioration (PSD) (Michigan Administrative Code, Air Quality Division: Part 18) regulations due to the potential to emit of nitrogen oxides in excess of 250 tons per year. In the 2007 renewable operating permit (ROP) renewal, the facility chose to incorporate hazardous air pollutant (HAP) opt-out limits to avoid potential applicability of major source Maximum Achievable Control Technology (MACT) standards. The opt-out was obtained prior to the first compliance date for the Industrial Boilers and Process Heaters (40 CFR 63 Subpart DDDDD), Surface Coating of Miscellaneous Metal Parts (40 CFR 63 Subpart MMMM), and Engine Test Cells (40 CFR 63 Subpart PPPP) standards. Note, HAP emissions from Ford Automatic Transmission New Product Center (ATNPC) and LTP are aggregated per the major source definition in the NESHAP regulations. The current ROP (MI-ROP-A8645-2012) was issued on May 23, 2012.

EU-GASDISPENSING and EU-GASUST at the stationary source are subject to the area source MACT Standards for gasoline dispensing facilities promulgated in 40 CFR, Part 63, Subparts A and CCCCCC. Four emergency fire pumps and five emergency generators are subject to the area source MACT Standards for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ. Two emergency generators are subject to 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

## OUTSTANDING CONSENT ORDERS

None

## OUTSTANDING VNs

None

**INSPECTION NARRATIVE**

On October 25, 2017 AQD staff, Todd Zynda conducted an inspection at Ford LTP located at 36200 Plymouth Road in Livonia, Michigan. The purpose of the inspection was to determine compliance with Federal and State air quality regulations and the conditions of Renewable Operating Permit (ROP) MI-ROP-A8645-2012, effective since May 23, 2012.

During the inspection, Ms. Carly Gardiner, Environmental Engineer, Mr. Steve Myers, Ford Environmental Quality, and Ms. Julia Guernsey, Environmental Engineer, provided information and a tour of facility operations.

During the opening meeting, the current status of ROP subject equipment and record keeping requirements were discussed. Records were provided via email on November 3, 2017.

The below list identifies equipment, both removed and operating, at the facility.

- Boiler #1(EU-BOILER#1) – Wickes 144 MMBTU/hr, natural gas fired, installed in 1966. Fuel oil has not been fired for years. The facility does not have fuel tanks or lines installed for the combustion of fuel oil. Use of the boiler was discontinued on December 31, 2016. Natural gas lines feeding the boiler have been cut and are capped.
- Boiler #2 - Wickes 96 million BTU/hour coal-fired boiler installed in 1952. No modifications to boiler have occurred. No longer in use as all coal handling equipment has been removed.
- Boiler #3 (EU-BOILER#3)– Wickes 97.5 MMBTU/hr heat input, originally coal fired, installed in 1952. Modified in 1995 to allow for the ability to fire No 2 fuel oil and natural gas. Low NOx burners were installed at that time. Fuel oil has not been fired for years. The facility does not have fuel tanks or lines installed for the combustion of fuel oil. Use of the boiler was discontinued on December 31, 2016. Natural gas lines feeding the boiler have been cut and are capped.
- Boiler #4 (EU-BOILER#4)– Wickes 97.5 MMBTU/hr heat input, originally coal fired, installed in 1954. Modified in 1995 to allow for the ability to fire No 2 fuel oil and natural gas. The facility does not have fuel tanks or lines installed for the combustion of fuel oil. Use of the boiler was discontinued on December 31, 2016. Natural gas lines feeding the boiler have been cut and are capped.
- Coal handling equipment – Removed
- Heat treat furnaces (FG-HEATTREAT) – Removed
- Tank farm – Fourteen 20,000 to 25,000 gallon capacity above ground storage tanks (automatic transmission fluid) and one 2,000 gallon diesel tank
- Wastewater treatment plant (EU-WWTP) - consisting of a 300,000 gallon equalization tank, one 10,000 gallon capacity tank, one 13,000 gallon capacity tank, three 25,000 gallon tanks and a wet packed bed scrubber. Also includes raw material storage tanks for the polymer, caustic, and acid.
- WWTP Boiler (natural gas) – 2.009 MMBtu/hr
- One anodizing line (EU-ANODIZING) for cleaning and rust proofing – Removed
- Cold cleaners (FG-COLDCLEANERS) - Located throughout the facility
- Inking Stations (EU-INKINGSTATIONS) - Removed
- Paint spray booth
- Transmission machining and assembly equipment
- Four Diesel Engine Fire Pumps (FG-EMERGENCY RICE <500 HP)
- Seven natural gas fired emergency generators

- Groundwater remediation system

According to Ms. Guernsey, Ford LTP plans to submit a true minor PTI application. Ford asserts that following the permanent discontinued use of the boilers, that the facility will no longer be subject to Title V requirements. Ford was provided with a hard copy of the email from Ms. Rebecca Loftus, AQD regarding the HAP opt-out permits for LTP (A8645) and ANTPC (SRN M4734). A copy of the email is attached to this report.

Following discussion of facility operations and records request, a tour of the facility was conducted. The tour began with observation of the wastewater treatment plant.

EU-WWTP is a wastewater treatment plant the facility uses to treat waste generated at the site and at the Ford ATNPC. The waste consists predominantly of lubricating oils used by the facility's metal working machinery. The wastewater treatment plant separates water from waste oil. The resulting water is discharged into the city sewer system and the oil is sold to and recycled by a third party. In the wastewater treatment process, wastewater is collected by underground piping and pumped to a 300,000 gallon equalization tank where the pH is adjusted. Next, the waste is transferred to an oil separation tank where the oil is skimmed off of the top. Finally, the skimmed oil is sent to one of the "cook" tanks where it is heated to 180 to 200 °F using steam and treated with sulfuric acid. There are three 25,000 gallon cook tanks and one 10,000 gallon cook tank. Raw material storage tanks are present for acid, polymer, and caustic (sodium hydroxide) materials. The recovered oil is stored in a 13,000 gallon tank and sold to a third party for further processing. Cook tanks and oil storage tanks are covered and vented to the scrubber. At the time of inspection, the scrubber was not in operation as a "cook" was not taking place. According to the scrubber log observed at the time of inspection, the scrubber last operated at 8:00 AM that morning with a pH of the scrubbing solution of 11.96. According to permit files, these tanks have potential to create odors due to generation of $H_2S$ and other odors associated with bacterial growth in waste.

In addition, a natural gas fired boiler (2.511 MMBtu/hr) was observed in the WWTP area. The boiler was installed following the shutdown of the powerhouse.

Following observation of the WWTP, an example of the "Federal Broach" machine used for heat treatment was observed in the 10R (10 speed, rear) transmission area. The heat treat systems are electrically heated units that includes an electrically heated afterburner. According to Ford, the heat treat systems do not combust any fuel to generate heat in the carburizing process and they do not treat oil coated parts or use oil quenching. During the inspection, it was observed that the units are enclosed, with any potential emissions released to the general in-plant environment.

Following observation of a heat treat system, an example of a solvent based cold cleaner was observed in the 10R area. During the inspection, the cold cleaner was observed with the lid closed and instructions posted. The cold cleaner was equipped with an agitation function and mechanically assisted lid.

Following observation of the cold cleaner, emergency generator H was observed at rooftop level. The engine was equipped with a non-resettable hour meter which read 16.2 hours.

Following observation of emergency generator H, an example of the bluing station was observed. The bluing station is used to check for leaks in assembly transmissions. The blue ink is sprayed on portions of the transmission before assembly. The transmission is assembled and run through a series of tests, and the disassembled to look for blue ink locations following the test. Any potential emissions are released to the general in-plant environment.

Following observation of the bluing station, emergency generator J was observed at rooftop level. The engine was equipped with a non-resettable hour meter which read 21 hours.

Following observation of emergency generator J, the powerhouse was observed. The power house contains Boilers #1 through #4. Boilers #1 through #4 have been permanently shut down, but remain in place. During the inspection it was observed that the natural gas fuel lines have been cut and capped for Boilers #1, #3 and #4 (see attached photo for example). Boiler #2 was permanently shut down when use of coal was discontinued.

The former inking station that was used to label finished transmissions has been replaced with a laser etching line that cuts an identifier into each transmission. Emissions from metal cutting, grinding, etc. is either released to the general in plant environment or is controlled by various oil-mist collectors. If oil mist collectors vent to the outside ambient air, emissions are controlled by a fabric filter per Rule 285(2)(l)(vi)(C).

The tour concluded with observation of the facility paint booth. The paint booth was not in operation at the time of inspection. Filters were in place. Records of paint usage demonstrating compliance with Rule 287(c) were provided via email on November 3, 2017.

Following the inspection of Ford ANTPC, the ground water remediation system location was observed (inner ring of test track located between Ford LTP and ANTPC). The remediation system is used to treat trichloroethylene (TCE), dichloroethene (DCE), and vinyl chloride (VC). According to information provided by Ford, the vapor of the air stripper is routed to a catalytic oxidizer equipped with a catalyst selected for halogenated constituents. The facility is claiming Rule 290 for the ground water remediation system.

**APPLICABLE RULES/PERMIT CONDITIONS**

**ROP MI-ROP-A8645-2012**

Permit conditions have been paraphrased for brevity. Please see ROP for conditions in their entirety.

**Source Wide Conditions**

The definitions of major source are different between Title V/Part 70 and the NESHAP definition. Based on the NESHAP definition, Part 63, Ford ATNPC and LTP would be considered a single stationary source. As such, the HAP emissions must be aggregated to demonstrate that the facility can opt out of MACT.

SC I.1 and 2, SC VI. 1.c. **COMPLIANCE.** Emissions of each HAP less than 9 tons and aggregate HAPs less than 22.5 tons per year. Individual and aggregate HAP records to be maintained. Highest 12 month rolling aggregate HAP emissions from May 2016 through September 2017 occurred during June 2017 at 5.67 tons for both facilities combined. This indicates compliance with both aggregate and individual HAP limits. Records are maintained.

SC II. 1, SC VI. 1.a. **COMPLIANCE**. Natural gas usage not to exceed 3,060,000 MMBTUs on a 12-month rolling basis. The highest 12-month rolling natural gas usage from May 2016 through September 2017 occurred during May 2016 at 198,559 MMBTUs.

SC II. 2. SC VI. 1.b. **COMPLIANCE**. Unleaded gasoline usage not to exceed 9,999 gallons per calendar month. According to the records provided, gasoline has not been used at Ford LTP since the last inspection.

SC IX. 1. **COMPLIANCE**. Shall abide by the Odor Management Plan. The facility conducts quarterly inspections of the central coolant system. Quarterly inspection records were provided for 4$^{th}$ Quarter 2015 through 3$^{rd}$ Quarter 2017. There have been no odor complaints since September 20, 2014. Prior to that date the most recent odor complaint was December 1, 2010.

**EU-BOILER#1**

None of the conditions under this emission unit were evaluated as fuel oil has not been fired for several years. According to Ford, fuel oil is not combusted in any boiler, as there are no tanks or associated piping for fuel oil onsite. According to For, Boiler 1 was shut down in December 2016. During the inspection it was observed that the natural gas fuel line has been cut and capped for Boiler #1.

**FG-BOILERS #3 & #4**

According to Ford, Boilers 3 and 4 were shutdown December 2016. During the inspection it was observed that the natural gas fuel lines have been cut and capped for Boiler #3 and #4.

SC I.1.a through d., SC I. 3. a through c, SC I. 5. a through c, SC II. 1, SC III. 3 and 4, SC V. 1.a and b, SC V. 3.a and b, SC VI. 1.a and g, SC IX. 1. **NOT EVALUATED**. All conditions relating to combustion of fuel oil were not evaluated as fuel oil has not been fired for several years. According Ford, fuel oil is not combusted in any boiler, as there are no tanks or associated piping for fuel oil onsite.

SC I. 2. a through c, SC V. 1.c, SC V. 2. SC V. 3.c, SC VI. 1. d through f. **COMPLIANCE**. NOx emissions shall not exceed 0.17 lb per MMBTU, 16.6 lb per hour, and 72.7 tons per year on a 12-month rolling basis. During the most recent stack test on February 14, 2012, NOx emissions from Boiler #3 were 0.065 lb/MMBTU and 5.31

lb/hr. NOx emissions from Boiler #4 were 0.045 lb/MMBTU and 3.7 lb/hr. Please see facility file for stack testing report. The facility maintains records of NOx emissions on a tons per year basis. The highest 12-month rolling from May 2016 through September 2017 occurred in September 2016 (1.49 tons) for Boiler #3 and in December 2016 (1.32 tons) for Boiler #4.

SC I. 4. a through c, SC V. 1.d, SC V. 2, SC V. 3.d, SC VI. 1. d through f. **COMPLIANCE**. CO emissions shall not exceed 0.15 lb per MMBTU, 14.6 lb per hour, and 64.1 tons per year. During the most recent stack test on February 14, 2012, CO emissions from both Boiler #3 and Boiler #4 were 0 lb/MMBTU and 0 lb/hr. Please see facility file for stack testing report. The facility maintains records of CO emissions on a tons per year basis. Reported CO emission on a 12-month rolling from May 2016 through September 2017 are 0.00 tons per year for all reporting months.

SC II. 2 and 3. SC VI. b and c. **COMPLIANCE**. Steam output from Boiler #3 and #4 shall not exceed 80,000 lbs per hour. Heat input into Boiler #3 and #4 shall not exceed 97.5 MMBTU per hour. According to Ford, Boilers 3 and 4 were shutdown December 2016. During the inspection it was observed that the natural gas fuel lines have been cut and capped for Boiler #3 and #4. The previous inspection in May 2016 demonstrated compliance with this condition.

SC III. 1 and 2. **COMPLIANCE**. Shall only burn natural gas or No. 2 fuel oil. Low NOx burners are installed on both boilers. The facility previously had the capacity to only burns natural gas in boilers. Stack testing indicates that NOx emissions are significantly below permitted limits. Fuel oil is not combusted.

SC VIII. **COMPLIANCE**. Stack shall have a maximum diameter of 135 inches, and minimum height of 139 feet above ground. During the inspection the stack appeared to meet these requirements. Measurements were not collected.

**FG-HEATTREAT**

All conditions under this flexible group are not applicable as the equipment has been removed. The facility replaced the heat treatment equipment with electric heat treat carburizing furnaces.

**FG-WWTP**

SC II. 1. SC VI. 4. **COMPLIANCE**. Waste oil processed shall not exceed 4.0 million gallons per year on a 12-month rolling basis. The highest 12-month rolling waste oil processed from May 2016 through September 2017 occurred in August 2017 at 222,510 gallons.

SC III. 1. **COMPLIANCE**. Heat process tanks and the oil storage tanks shall be closed and exhausted through the wet scrubber control system. During the inspection, heat process tanks and oil storage tanks appeared to meet this requirement.

SC III. 2. SC V. 1. **COMPLIANCE**. Scrubber shall be equipped with a system that automatically maintains a pH of 11 to 13 through the addition of sodium hydroxide. If the pH system malfunctions, sodium hydroxide shall be manually added. The facility provided scrubber inspection logs for October 1 through 26, 2017. Based on the records provided, the system is usually on "auto" mode and has maintained a pH between 11 and 13.

SC VI. 1. 2. 3, SC XI. 2. **COMPLIANCE**. Shall conduct regular inspections to determine operational condition of the scrubber. Scrubber shall only process waste oil and is installed and operating properly. According to Ms. Gardiner and Ms. Guernsey, the scrubber only accepts waste from Ford LTP. Inspections and preventative maintenance are regularly performed to maintain good operation. Scrubber inspection records were provided.

SC VIII. **COMPLIANCE**. The exhaust of the scrubber shall have a minimum height of 30 feet above ground. During the inspection the stack appeared to meet this requirement. Measurements were not collected.

SC XI. 1. **COMPLIANCE**. Shall not accept waste oil for treatment from an offsite source. The WWTP does not accept waste oil from an offsite source.

**FG-GASOLINE DISPENSING <10,000 GALLONS/MONTH**

EU-GASUST and EU-GASDISPENSING appear to be subject to the area source MACT Subpart CCCCCC. Equipment subject to this area source MACT were not evaluated during the inspection as the AQD has not accepted delegation for this area source standard.

**FG-EMERGENCY RICE <500 HP**

EU-EMERGRICEFP1 through EU-EMERGRICEFP4 are listed in ROP MI-ROP-A8645-2012 as subject to Subpart ZZZZ. It also appears that 5 of the natural gas emergency generators (generator A, B, C, D, and E) are subject to Subpart ZZZZ as existing RICEs (see previous inspection report - CA_A864534500). Equipment subject to this area source MACT were not evaluated during the inspection as the AQD has not accepted delegation for this area source standard. During the renewal of the ROP, equipment subject to Subpart ZZZZ should be updated.

**FG-COLD CLEANERS**

SC II. 1. **COMPLIANCE**. Based on a review of safety data sheets (SDS) submitted, solvents do not contain prohibited chemicals listed in this condition above 5 percent.

SC III. 1, 2. SC IV. 1, 2, 3, 4, 5. **COMPLIANCE**. (1) Each cold cleaner must either have an air/vapor interface of 10 square feet or less or the cold cleaner must vent to the in-plant environment; (2) be equipped with a device for draining cleaned parts; (3) be equipped with a cover and cover is closed when not in use; (4) the cover mechanically assisted if the solvent's Reid vapor pressure exceeds 0.3 pounds per square inch absolute (psia) or the solvent is heated or the solvent is agitated; (5) for new cold cleaners; special conditions that apply to Reid vapor pressure greater than 0.6 psia.

According to records provided, the facility operates 8 solvent based cold cleaners that are not heated. The largest air/vapor interface area is 8.44 square feet.

Observation of the cold cleaner in the 10R area indicates that the cold cleaner vents to the in-plant environment and is equipped with a cover. The cover was closed at the time of the inspection. Parts are left in the tanks to drain. The solvent is neither heated nor agitated during cleaning. The SDS provided indicates the vapor pressure is 0.2 mmHg (0.0039 psia) at 68 °F.

SC VI. 1, 2, 3, and 4. **COMPLIANCE**. (1) if solvent is heated, solvent temperature shall be monitored; (2) Recordkeeping on the make/model, size, description, date of installation, air/vapor surface area, type of solvent for each cold cleaner; (3) written procedures posted; (4) waste solvent stored in closed containers unless a safety hazard. Information provided indicates the solvent based cold cleaners are not heated. Records provided indicate that the facility is maintaining the required information.

**FG-RULE 287(c)**

Previously the inking stations and paint booth record keeping requirement were required under this flexible group. The inking stations have been removed. Conditions apply to the paint booth as listed below.

SC II. 1, SC VI. 1. **COMPLIANCE**. Coatings shall not exceed 200 gallons per month, minus water. Records provided indicate that the paint booth is used on a limited basis. The highest paint usage from May 2016 through September 2017 occurred during August 2017 at 5.88 gallons.

SC VI. 1. **COMPLIANCE**. Exhaust system shall be equipped with a properly installed and operating particulate control system. At the time of inspection filters were in place.

**FG-RULE290**

Previously the anodizing line emissions were reported under this flexible group. The anodizing line (EU-ANODIZING) has been removed. The facility now claims the groundwater remediation system as Rule 290 equipment. As part of the Rule 290 submittal for the groundwater remediation system, Ford provided supporting documentation. According to the documentation, the system is uses a stainless-steel air stripper. Vapor from the air stripper is routed to a catalytic oxidizer equipped with a catalyst selected for halogenated constituents. The oxidizer operates at 300 cubic feet per minute at 950 °F (catalyst bed temperature) for destruction of chlorinated volatile organic compounds (CVOCs). The estimated destruction rate of CVOCs is 95%. According to the

documentation, the inlet catalyst bed and outlet catalyst temperature is continuously monitored via temperature display, meeting the requirements of R336.1290(2)(b)(i)(A). This was not verified during the inspection.

The facility tracks emissions from the groundwater remediation system on a monthly basis. Emissions are less than the 10 pounds per month threshold.

**NEW SOURCE PERFORMANCE STANDARDS (NSPS)**

**40 CFR Part 60, Subpart Db – Standard of Performance for Industrial, Commercial, Institutional Steam Generating Units**

Boiler #1 was evaluated for Subpart Db due to its size of above 100 MMBTU/hr. However, as described above, Boiler #1 has not been modified (as defined in §60.2) since its original installation date of 1967. As the regulation only applies to boilers constructed, modified, or reconstructed after June 19, 1984, this boiler is exempt from the regulation.

**40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units**

Boilers #3 and #4 are were evaluated for Subpart Dc due to their size individually between 10 and 100 MMBTU/hr. Boilers #3 and #4 were originally installed as coal fired boilers in 1952 and 1954. They were "altered" in 1995 to allow for the combustion of natural gas and #2 fuel oil. However, the burning of these fuels would result in a decrease in emissions of all pollutants previously emitted except for VOCs. The change to low NOx burners does not constitute a "modification" as defined in §60.2. Therefore, Subpart Dc is not applicable.

**40 CFR Part 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984**

During the previous inspection on May 25, 2016, the facility provided an inventory of tanks (size, material, and location). Tanks at the facility do not appear to be subject to Subpart Kb either based on tank capacity or installation date. The largest tanks (20,000 gallons or 25,000 gallons) at the facility store automatic transmission fluid (ATF). During the previous inspection, Ms. Claudya Arana stated that the ATF tanks were constructed in 1970. Ford maintains original drawings of these tanks on file. Tanks at the ATF tank farm were installed prior to July 23, 1984 (§60.110b(a)) and are therefore not subject to Subpart Kb.

The remaining tanks at the facility are less than 75 cubic meters (19,812.9 gallons) and are used to store oil, gasoline, and other materials. These smaller tanks are not subject to Subpart Kb as their size is less than 75 cubic meters or 19,812.9 gallons, per §60.110b(a).

According to the facility during the inspection on October 25, 2017, there have been no modifications to the tanks and that the inventory previously provided is accurate.

**40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

The diesel fired emergency generators for fire pumps #1 through #4 are not subject to Subpart IIII as they were installed (constructed) prior to July 11, 2005 (§60.4200(a)(2)). The latest installation date for the diesel fire pumps is 1995 (Fire Pump #4).

**40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**

Natural gas fired emergency generators A, B, C, D, and E are not subject to Subpart JJJJ as they were installed (constructed) prior to June 12, 2006 (§60.4230(a)(4)).

According to facility records, emergency generator H and J are identical models, operate using natural gas, are rated at 194 HP, have a model year of May 20, 2014 with a purchase date of September 1, 2015. Both emergency generator H and J appear to be subject to Subpart JJJJ. During the inspection, emergency generators H and J were observed.

40 CFR 60.4233(e) and 40 CFR Part 60, Subpart JJJJ, Table 1 – **COMPLIANCE** - Emissions shall not exceed the following: NOx - 2.0 grams per horsepower-hour (g/HP-hr), CO – 4.0 g/HP-hr, VOC – 1.0 g/HP-hr. The facility provided exhaust emission data that was provided by the manufacturer. Emission data indicates the following: NOx = 0.07 g/HP-hr, CO = 0.06 g/HP-hr, and VOCs = 0.294 g/HP-hr. The facility also provided pictures of the emission control information for both emergency engine H and J.

40 CFR 60.4234 and 60.4243(a)(2)(ii) – **COMPLIANCE** – The facility appears to maintain engines and maintains appropriate records indicating as such.

40 CFR 60.4243(d) and 60.4243(e) – **COMPLIANCE** – emergency engine hour restrictions (please see the 40 CFR Part 60, Subpart JJJJ regarding language). The facility tracks engine hours as provided in "Livonia_Complex_Air_Calcs.xls" tab "LTP Nat Gas Engines". Since October 2015 Generator H has operated 16.2 hours and Generator J has operated 21 hours. The hours were verified on the non-resettable hour meters during the inspection on October 25, 2017

40 CFR 60.4237(b) – **COMPLIANCE** – Shall be equipped with a non-resettable hour meter. This was not verified during the inspection. However, records provided indicate the facility tracks hours of operation for each generator.

40 CFR 60.4243(a)(2)(ii) and 60.4245(a) – **COMPLIANCE** – Shall keep maintenance plan and records of maintenance conducted, emissions data, etc. The facility appears to be maintaining the required information.

**NESHAP/MACT**

**40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

EU-EMERGRICEFP1 through EU-EMERGRICEFP4 are listed in ROP MI-ROP-A8645-2012 as subject to Subpart ZZZZ. It also appears that 5 of the natural gas emergency generators (generators A, B, C, D, and E) are subject to Subpart ZZZZ as existing RICEs. Equipment subject to this area source MACT were not evaluated during the inspection as the AQD has not accepted delegation for this area source standard. During the renewal of the ROP, equipment subject to Subpart ZZZZ should be updated.

**40 CFR Part 63, Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities**

EU-GASUST and EU-GASDISPENSING appear to be subject to the area source MACT Subpart CCCCCC. Equipment subject to this area source MACT were not evaluated during the inspection as the AQD has not accepted delegation for this area source standard.

**40 CFR Part 63, Subpart T – National Emission Standards for Halogenated Solvent Cleaning**

According to 40 CFR 63.460(a), this standard applies to units that use solvents with concentrations of 5% or more by weight of halogenated compounds. In the current ROP (FG-COLDCLEANERS), there is a condition limiting the halogenated compound concentrations to 5% or less by weight. Therefore, this standard does not apply.

**40 CFR Part 63, Subpart XXXXXX – National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories**

The facility is not one of the "Nine Metal Fabrication and Finishing Sources Categories" identified in 40 CFR 63.11514 of Subpart XXXXXX as listed in Table 1 of the preamble (see Federal Register, Vol. 73, No. 142, July 23, 2008, p. 42979).

**40 CFR Part 63, Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boiler Area Sources**

Subpart JJJJJ applies to boilers not classified at "gas-fired boilers" at area sources. The boilers at the facility are permitted as natural gas boilers with fuel oil backup. Fuel oil backup does not reclassify the boilers from "gas-fired boilers" and, therefore, Subpart JJJJJ is not applicable. Should fuel oil usage in the boilers exceed Subpart JJJJJ thresholds, Subpart JJJJJ would be applicable.

**40 CFR Part 63, Subpart HHHHHH – National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources**

The paint booth at the facility does not appear to be subject to Subpart HHHHHH, as no paint stripping is performed using methylene chloride and no production coatings are spray-applied manually. The facility primarily uses aerosol spray cans which are excluded by definition per 40 CFR 63.1180. Additionally, spray coating application defined as facility maintenance painting is excluded per 40 CFR 11170(a)(2).

**EXEMPT EQUIPMENT**

Transmission Manufacturing Equipment

Transmission manufacturing equipment are exempt from PTI requirements per R336.1285(2)(l)(vi)(B) or (C). Emissions are either released to the general in-plant environment, or if released to outside ambient air are controlled by an appropriately designed fabric filter.

WWTP Boiler

The natural gas fired WWTP boiler (2,009,000 Btu/hour) appears to be exempt from PTI requirements per R336.1282(2)(b)(ii).

Bluing Stations

The bluing stations appear to be exempt from PTI requirements per R336.1283(2)(d).

Heat Treat/Carburizing Systems

The heat treat systems appear to be exempt from PTI requirements per R336.1282(2)(a)(i).

**APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS**

Not applicable. All lots are paved.

**MAERS REPORT REVIEW**

Reporting year 2016 MAERS was submitted in a timely manner and was reviewed by AQD staff. See facility file.

**FINAL COMPLIANCE DETERMINATION**

At this time, Ford LTP appears to be in compliance with applicable permit conditions as well as state and federal rules. The facility plans to submit a PTI application, that will include HAP opt-out limits. It is anticipated that following issuance of the PTI, that the ROP can be voided.

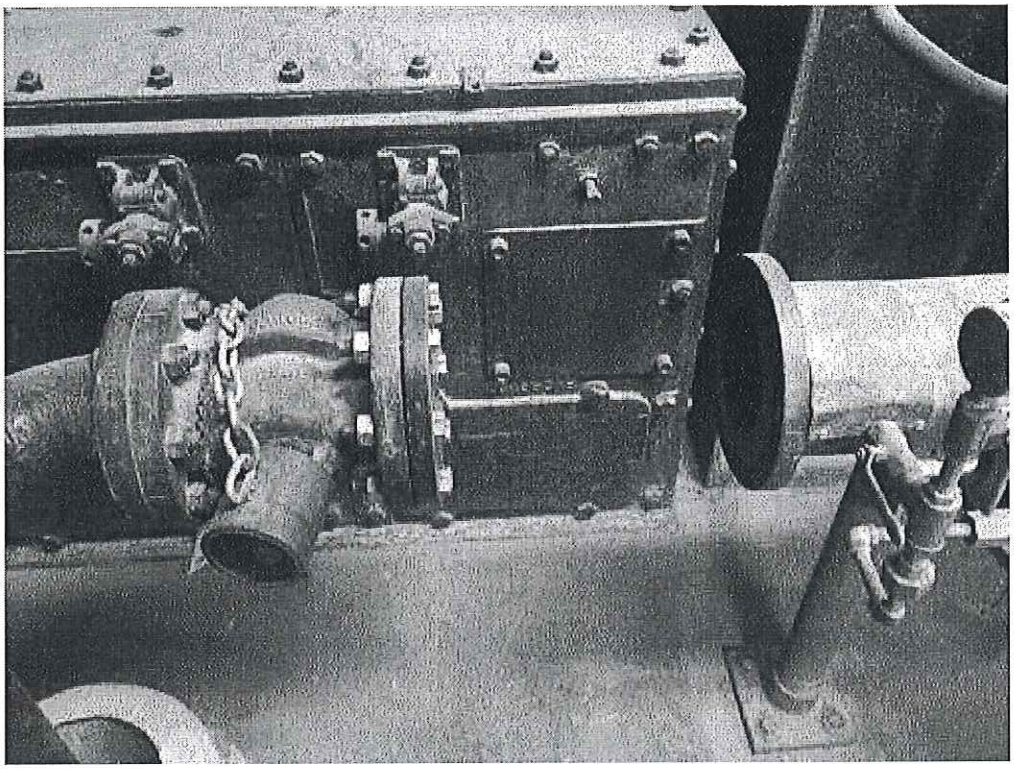

**Image 1(Powerhouse Gas Line) :** Example of powerhouse natural gas line cut and cap.

NAME _____ DATE 12/11/17 SUPERVISOR JK