

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

A865143197

<b>FACILITY:</b> FORD MOTOR COMPANY, WOODHAVEN STAMPING PLANT		<b>SRN / ID:</b> A8651
<b>LOCATION:</b> 20900 WEST RD, WOODHAVEN		<b>DISTRICT:</b> Detroit
<b>CITY:</b> WOODHAVEN		<b>COUNTY:</b> WAYNE
<b>CONTACT:</b> Cynthia Reinhart , Environmental Engineer		<b>ACTIVITY DATE:</b> 01/11/2018
<b>STAFF:</b> Todd Zynda	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Scheduled Inspection		
<b>RESOLVED COMPLAINTS:</b>		

**REASON FOR INSPECTION:** Scheduled Inspection  
**INSPECTED BY:** Todd Zynda, AQD  
**PERSONNEL PRESENT:** Cindy Reinhart, Environmental Engineer  
**FACILITY PHONE NUMBER:** 734-671-7473

### **FACILITY BACKGROUND**

Ford Woodhaven Stamping Plant (WSP) is a steel and aluminum stamping plant for Ford automobile parts (door panels, floor pans, hoods, quarter panels, roofs, tailgates, truck body sides). WSP has been in operation at the location since 1964, is 2,673,000 square feet in area, and employs more than 400 people. The facility operates two shifts, but may be adjusted depending on output demand.

Because WSP had the potential to emit (PTE) oxides of nitrogen (NOx) greater than major source thresholds, due to the presence of numerous space heating units and grand fathered boilers, the facility applied for and was issued a synthetic minor source permit to install (PTI) No. 77-05 on May 20, 2005.

### **OUTSTANDING VNs**

None

### **INSPECTION NARRATIVE**

On January 11, 2018 AQD staff, Todd Zynda conducted an inspection at Ford WSP located at 20900 West Road in Woodhaven, Michigan. The purpose of the inspection was to determine compliance with Federal and State air quality regulations, the conditions of PTI 77-05, and the conditions of the fugitive dust plan dated June 7, 2005.

During the inspection, Ms. Cindy Reinhart, Environmental Engineer, provided information and a tour of facility operations. During the opening meeting, PTI 77-05, permit exempt equipment, and record keeping requirements were discussed. Records were provided onsite during the inspection and via email on January 30, 2018.

According to Ms. Reinhart, Ford WSP is planning to install three new hot stamp lines over the next three years. Ford will be stamping a different steel that contains boron. The new steel cannot be pressure stamped, and will require heating of the metal. The lines will include a natural gas oven, ceramic roller, and natural gas emergency generator. The lines will also include plasma cutting units. Ms. Reinhart provided Ford's exemption analysis for hot stamping and cutting operations. At this time, the exemption analysis appears to properly demonstrate PTI exemptions for the proposed installation. Further review will be conducted following the installation during the next inspection.

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

- Two 25,160,000 Btu/hr natural gas fired boilers - Installed July 28, 1965.
- Cold cleaners - Aqueous and solvent based, located throughout the facility.
- One 300 hp emergency diesel fire pump – manufactured May 24, 2006.
- Approximately 135 natural gas fired unit space heaters – ranging from 2.8 MMBtu/hr to 5.8 MMBtu/hr.

- Various assembly welding
- Aluminum shredder with cyclone control

Following discussion of facility operations and records request, a tour of the facility was conducted.

Approximately 50 percent of the facility is used for storage. The remaining portion of the facility houses the stamp and press lines. The tour began with observation of the tool and die repair area and try out press area. Any potential emissions are released to the general in-plant environment. Following observation of the repair area and press tryout area, several stamping/press lines were observed. Any potential emissions are released to the general in-plant environment.

Following observation of the press/stamping equipment, the cyclone for controlling aluminum shredding was observed. The actual shredder (located inside the main building) was not observed. During the inspection there were no visible emissions from the cyclone control. According to Ms. Reinhart, the shredded aluminum is crunched into bails for offsite shipment.

Following observation of the cyclone, the power house cold cleaner and emergency diesel fire pump were observed. During the inspection the cold cleaner lid was closed, and instructions were posted in a visible location. The emergency fire pump hour meter read 260.1 hour.

The tour concluded with observation of the facility natural gas boilers (2) located on the second floor of the main building. Both boilers are rated at approximately 25.106 MMBtu and only fire natural gas. Each boiler vents individually at roof level.

During the inspection the welding operations were not observed.

## **APPLICABLE RULES/PERMIT CONDITIONS**

### **PTI 77-05**

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

### **FGFACILITY**

All process and non-process natural gas combustion equipment at the stationary source including equipment covered by other permits, grandfathered equipment and exempt equipment.

SC 1.1, 1.4, and 1.5. **COMPLIANCE.** NOx emissions shall be less than 75.0 tons per year on a 12-month rolling basis. Records to be maintained in a satisfactory manner. The facility provided 12-month rolling NOx emissions for 2016 and 2017. The highest 12-month rolling NOx emissions occurred at the end of November 2016 at 8.15 tons. Acceptable records are maintained.

SC 1.2, 1.3, 1.4, and 1.6. **COMPLIANCE.** Natural gas usage not to exceed 1,500 million cubic feet on a 12-month rolling basis. Natural gas usage shall be monitored monthly in a satisfactory manner. Records to be maintained in a satisfactory manner. The facility provided 12-month rolling natural gas usage for 2016 and 2017. The highest 12-month rolling natural gas usage occurred at the end of November 2016 at 163.02 MMCF. The facility maintains monthly records. Acceptable records are maintained.

## **NEW SOURCE PERFORMANCE STANDARDS (NSPS)**

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

The facility boilers were evaluated for Subpart Dc due to their size individually between 10 and 100 MMBTU/hr. The facility boilers were installed July 28, 1965. Per §60.40c(a) Subpart Dc is not applicable.

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

The diesel fired emergency fire pump is not subject to Subpart IIII as it was manufactured on May 24, 2006 prior to July 1, 2006 (§60.4200(a)(2)(ii)).

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

The diesel fire pump appears to be subject to Subpart ZZZZ. 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. The SDSs provided for the cold cleaners indicate that no halogenated compounds are used. Therefore, this standard does not apply.

**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 as "gas-fired boilers" at area sources. The boilers at the facility only operate using natural gas and, therefore, Subpart JJJJJ is not applicable.

**GRANDFATHERED EQUIPMENT**

The facility natural gas fired boilers are considered grandfathered equipment as they were installed prior to August 15, 1967 (the implementation date of the Air Pollution Control Act, Act 348)

**EXEMPT EQUIPMENT****Natural gas fired space heaters**

The natural gas fired space heaters appear to be exempt from PTI requirements per R336.1282(2)(b)(i).

**Stamping/press Equipment**

Stamping equipment is exempt from PTI requirements per R336.1285(2)(l)(i).

**Assembly Welding**

Assembly welding at the facility appears to be exempt from PTI requirements per R336.1285(2)(i).

**Emergency Diesel Fire Pump**

The fire pump appears to be exempt from PTI requirements per R336.1282(2)(b)(ii).

**Cold Cleaners**

The facility cold cleaners appear to be exempt from PTI requirements per R336.1281(2)(h) or (k).

The solvent based cold cleaners are subject to R336.1707 for new cold cleaners. The vapor pressure of Safety-Kleen Premium Solvent is 0.2 mm Hg (0.0039 psi).

R336.1707(3)(a) – **COMPLIANCE** - a cover shall be installed and closed whenever parts are not being handled in the cleaner. During the inspection the cold cleaner lids were closed.

R336.1707(4) – **COMPLIANCE** – Written operational procedures shall be posted in an accessible, conspicuous location near the cold cleaner. The facility appears to meet this requirement. A copy of the instructions was provided as part of the records submittal.

**Aluminum Shredder with Cyclone**

The aluminum shredder with cyclone control appears to be exempt from PTI requirements per R336.1290(a)(i). The facility provided monthly PM and PM-10 emissions for the cyclone for 2017. The highest reported PM and PM-10 emissions occurred at the end of October 2017 at 129.825 pounds.

**APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS**

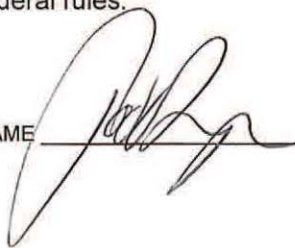
The fugitive dust control plan dated June 7, 2005 includes record keeping requirements for sweeping activities and dust suppressant application. The facility provided records that appear to meet fugitive dust plan requirements. During the inspection fugitive dust was not observed on the property.

**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 WSP appears to be in compliance with applicable permit conditions as well as state and federal rules.

NAME  \_\_\_\_\_

DATE 2/1/18 SUPERVISOR JK \_\_\_\_\_