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

A864845204

FACILITY: FORD MOTOR CO ROUGE COMPLEX		**SRN / ID:** A8648
LOCATION: 3001 MILLER RD, DEARBORN		**DISTRICT:** Detroit
CITY: DEARBORN		**COUNTY:** WAYNE
CONTACT: Tamberlyn Shell , Environmental Representative - Corporate		**ACTIVITY DATE:** 09/11/2018
STAFF: Robert Byrnes	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MEGASITE
SUBJECT: 2018 Scheduled Inspection, Section 2, DDMP.		
RESOLVED COMPLAINTS:		

On September 11, 2018 at 11:30 am I conducted a site inspection at the Ford Dearborn facility (SRN A8648). The purpose of this inspection was to verify compliance with the applicable requirements of MI-ROP-A8648-2010 for section 2 and to respond to an anonymous complaint received from EPA regarding smoke coming from the heat treat furnace(s). I met with Tamberlyn Shell and Kim Cole of the Ford environmental corporate office. They took me to the Diversified Manufacturing where we met with Andre Harris, Diversified Manufacturing Plant Environmental Engineer. Andre provided a tour of the facility and the operations there. The Dearborn Diversified Manufacturing facility is a separate factory within the Rouge Complex and is covered by Section 2 of the Ford Dearborn Assembly ROP.

HISTORY:
This manufacturing plant used to produce frames for the Grand Marquis and Crown Victoria vehicles. Stamping presses, welding equipment and the aqueous washers have mostly been removed or disabled at the facility. The phosphate tanks and e-coat dip tanks/oven (EU-ECOATFRAME) has been drained of all chemicals. The process equipment remains on site but has not been used since August 31, 2011. Eventually the e-coat line might be stripped out and sent for recycling.

Currently:
This facility is currently producing several aluminum sub-assemblies for the new F-150. They currently have several different lines which bend aluminum, 5 hydro-form presses, and several laser cutting operations to make the aluminum parts (exempt Rule 285(l)(i) and 285(l)(vi). All processes vent internally and only the laser cutters had a particulate control device which again vented internally. The facility collected the aluminum dust and sent it to an out building where the dust was formed into aluminum pucks. It was not clear how the process generated aluminum pucks from aluminum dust. After the hydro formed aluminum parts had been made they then proceeded to the chemical-treat dryer (soapy water parts washer) and then on to one of four aluminum heat treat furnaces in operation (EU-HEATTREAT 1, 2, 3 & 4). EU-Heatreat #4 was from PTI 94-16. A construction wavier was issued on 7/22/16 and the process was up and running. However, no ROP modification has been received for this process under Rule 215(3). A follow up email will be sent to see if this has been sent or not. The PTI should be included in the ROP at renewal.

Previous copies of the Initial Tune-up require by Boiler MACT were obtained. The reports previously showed they meet the obligations as required by 40 CFR 63.7540(a)(10)(i) through (a)(10)(vi). No follow up on the tune up requirements was conducted during this inspection.

There is one FG-Rule290 source which is for sealer application between various aluminum body parts between the seams. No review of the Rule 290 records was conducted during this inspection.

There is one FG-Rule287(c) source at the facility which is for the various ink marking machines. The machines make part numbers, date of mfg., or other similar markings with an ink jet which is put on the part. The facility assumes worst case peak volumes, and VOC contents and use about 2 gallons per week. No review of the Rule 287 records were conducted at part of this inspection.
The facility continues to operate several sub assembly lines to build part assemblies for the F-150 truck. These lines are operated as exempt and include: Tire and Wheel assembly, Fox shock, and coil over shock assembly line, disc brake assembly line and the rear axle assembly line which includes brakes, axle and leaf springs. The only potential air emission would be from tire assembly lubricant. Previous review of the MSDS for this material shows no VOC materials and further viewing of product environmental sheets also showed this material was 98% water and no known VOC or HAP listed as ingredients.

The facility previously had 3 cold cleaners, of which 2 are solvent cleaners and one is aqueous based. No review of the Rule 281(h) cold cleaner records was conducted during this inspection.

The facility has 1 emergency generator. The production date for the engine is 10/16/2013 and it is a 5.4 Liter, 82 HP natural gas fired engine capable of generating 45 kw. It is used for emergency lighting for the diversified manufacturing building. No review of the operating hours was conducted during this inspection. Previuous records showed the engine operated a toral of 18.2 hours from May 21, 2015 through August 27, 2015 for commissioning and weekly checks. Engine installations of this type are commonly operated as exempt under Rule 285(g).

The main purpose of the inspection was to follow up on an anonymous complaint received by Lynn Rademacher of the criminal investigations unit of the US EPA. The original complaint from Lynn was received on May 30, 2018 via phone conversation. The written portion of the complaint was forwarded to me via e-mail on June 29, 2018 for the discharging of smoke due to a lot of oil on parts within the aluminum heat treat furnaces. A copy of the e-mail is attached to this report. Observation of Heat Treat furnaces 1, 2 & 3 in operation (unit 4 did not appear in operation) did not show any outward signs of smoke from the entry point and exit points of the heat treat furnaces. Observation of the stacks from the roof level only showed 1 stack of the group from a couple furnace units that even had a black covering on the rain cap. Other stacks showed no signs of previous smoke emissions. Ford originally had issues with smoke within during the start-up of furnace units 1 & 2. The installed duct work prior to the furnace to remove heat so the oil coated parts waiting entry into the furnace did not prematurely heat up and create smoke. All Heat treat furnaces now have an entry point heat removal system that exhausts to atmosphere. The issue of concern with the heat treat furnaces is the stack configurations. The ROP shows units 1 & 2 with 5 stacks each, however it seemed there may have been 6 stacks each. Unit 3 in the ROP only shows 1 stack and unit 4 in PTI 94-16 has 2 stacks which I recall each unit likely has more stacks. The other issued mentioned to Tamberlyn and Kim while on the roof was several of the stacks have rain caps while the ROP mentions they shall be discharged unobstructed vertically to the atmosphere. I mentioned this is a deviation from the ROP requirements and should be reported and actions should be taken to address the differences. At the time of the inspection and writing of this report there are no known compliance issues for the diversified manufacturing plant except for the deviations from the exhaust stack requirements. Further complaints or additional information will be required for further investigation into the smoke from the heat treat furnaces.

NAME Robert Byrnes/wm DATE 9/18/18 SUPERVISOR W M