DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N311171506

FACILITY: TENNECO AUTOMOTIVE- MARSHALL		**SRN / ID:** N3111
LOCATION: 904 INDUSTRIAL RD, MARSHALL		**DISTRICT:** Kalamazoo
CITY: MARSHALL		**COUNTY:** CALHOUN
CONTACT: Mark Wallace ,		**ACTIVITY DATE:** 03/07/2024
STAFF: Jared Edgerton	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Unannounced Air Quality Inspection		
RESOLVED COMPLAINTS:		

On March 7, 2024, Air Quality Division (AQD) staff (Jared Edgerton and Cody Yazzie) arrived at 904 Industrial Road, Marshall Michigan at 10:20 am to conduct an unannounced air quality inspection at Tenneco Automotive – Marshall. Staff met with Mark Wallace, EHS Manager. He is listed as the onsite contact for this facility, and he answered all operation questions.

This facility is operated by 600-700 staff members, on 3 shifts Monday through Friday. The facility produces various car parts for the three big domestic car manufacturers. Currently, the main parts being made are Ford F-150 muffler assemblies, and catalytic converters for Jeep Wranglers.

Tenneco is a synthetic minor source for HAPs and PM10/2.5 as established in Permit to Install (PTI) 93-17 which contains only FG-FACILTY limits. The Facility is made up of three buildings, 905 Industrial Rd which is a warehouse, 820 Industrial is Plant 2 which mainly produces the catalytic converters, and 904 Industrial Rd which is Plant 1 where Ford parts are made. Based on a previous inspection and the current PTI, it is likely the facility is subject to 40 CFR Part 63, Subpart XXXXXX for Nine Metal Fabrication and Finishing Source Categories since the process welds stainless and aluminized stainless steel which, based on the current permit, contains the hazardous air pollutants (HAPs) manganese, chromium, and nickel. Compliance for 40 CFR Part 63, Subpart XXXXXX was not evaluated since the AQD has not taken delegation authority from USEPA for this area source MACT standard.

This facility has one permit, PTI 93-17, and various exempt equipment. Milling and machining operations that vent in-plant can be considered exempt under Rule 285(2)(l)(vi)(B), parts washers under Rule 281(2)(h), and welding equipment that also only vents within the facility under Rule 285(2)(i). The welding equipment also goes through internal baghouses before venting inside the building.

The facility is required to keep records of individual and aggregate HAPs, particulate matter (PM10 and PM2.5), and the usage rate of any welding wire and rods used in operation. Tenneco tracks these materials by the pound and primarily uses 1 rod and 4 different wires. Records appear to be kept monthly for FG-FACILITY.

AQD staff asked if there was any other exempt equipment on site, and Mr. Wallace stated there was one emergency generator for computer servers used for customer-related activities. Staff also saw one cold cleaner on the production floor, and a material safety data sheet was requested for the material used in that unit. The SDS is attached to this report. The cold cleaner lid was closed, with an operation sticker on it. The summary of the inspection tour is listed below.

Inspection:

The inspection started in the middle of Plant 1 which is where primarily mufflers are assembled. Mr. Wallace stated that this plant was responsible for all the mufflers used on the F-150 truck. Plant 1 is a large open space with multiple welding and metal fabrication stations scattered throughout. Four or five welding stations are vented together to one internal baghouse, and the air is then released into the in-plant atmosphere after being treated. There were three large Dynamo brand baghouses in the two plant buildings. Smaller machines vented to various Robovent baghouses and are maintained monthly. TIG (Tungsten Insert Gas) welding is 99% of welding being performed on the metals, but MIG (metal inert gas) is used for small custom projects. Staff were led to one of the larger Dynamo baghouses, which is used to treat some of the HAPs from the larger welding machines. This baghouse is also used to filter PM2.5 and PM10. The baghouse pressure drop high setpoint was 6.0 inches w.c. (water column) and low of 5.0 inches w.c. At the time of this inspection the pressure drop reading on the baghouse was reading 4.47 inches w.c., which is below the specified acceptable minimum of 5.0 inches. Staff informed Mr. Wallace that it may be time to check filters and do some basic maintenance to get the pressure drop reading back into the acceptable range. The inspection continued, passing multiple welding stations for different car parts. All stations were confirmed to be vented internally. Staff eventually reached the other side of the building where an identical Dynamo baghouse was located. Set points were 6.0 inches w.c. for the high setpoint, and 3.75 inches w.c. for the low. The filter drop pressure was 7.0 inches w.c. Staff asked Mr. Wallace why the low set points were different between the two Dynamo machines. It was believed that these were points the manufacturers put in at the time of install. Both machines appeared to be working as intended, however, AQD staff recommended that maintenance activities be performed on both baghouses since their pressure drop readings during the inspection seemed to be slightly out of the acceptable range. Before leaving Plant 1, staff located a cold cleaner and asked for the safety data sheet (SDS) for the solvent used. The SDS was provided by the facility during the records review and attached to this report. It appears that the cleaner has not been used often but was closed with a proper operation sticker on it.

Staff left the building to proceed to Plant 2 where the catalytic converters are built. These converters are used in Jeeps as well as other Stellantis brand vehicles. Upon arrival in Plant 2, staff observed many different automated lines welding the converters together. All process emissions vented within the building. Within Plant 2 a third Dynamo baghouse was located with set points of 5.50 inches w.c. for the high setpoint and 2.40 inches w.c. for the low. During the inspection, the baghouse pressure drop reading was 2.56 inches w.c., which is within the set point range for this specific unit. The inspection continued through the building with staff observing car parts at various stages of completion. After leaving the building, Mr. Wallace told staff that the building across the street is their warehouse for finished products waiting to be shipped. Before concluding the inspection, an emergency generator was observed on the outside of Plant 1. Staff was informed that this was the generator used to keep servers up during a power outage. The servers are for customer-related activities like purchasing and communication with Tenneco. Staff ended the inspection by informing Mr. Wallace that there will be a records review portion of the inspection. A records request was sent to the facility by email and was received by staff within the time given. A summary of the records review is listed below.

<u>Conclusion of Inspection / Records Request Determination:</u>

At the time of the inspection, based on what was observed during the walk-through, all equipment used within the facility operates under exemption. All welding stations are vented to a baghouse before being released into the plant atmosphere. No emissions are released to the outside environment, and the exemption used for the welding operations is Rule 285(2)(i). Metal milling and machining operations are vented like the welding stations, and can be considered exempt under Rule 285(2)(l)(vi)(b). The part washers at the facility use aqueous-based materials, and are exempt under Rule 281(2)(k). Natural gas-fired air makeup units were described to be on location at the facility in a previous inspection report. However, AQD staff could not locate any such equipment, and Mr. Wallace also had no knowledge of such units.

There are recordkeeping requirements in PTI No. 93-17 under FG-FACILITY. Tenneco is required to limit emissions for individual and aggregate HAPs, PM2.5 and PM10. The facility also has a material limit on the amount of welding wire and rod used. The records requested and compliance determination is listed below.

The permittee shall keep the following information on a monthly basis for FG-FACILITY:

1. Pounds of each HAP containing material used.

- Appears compliant? – Yes. Permit limit is 2,500 tpy (5,000,000 lbs) – Facility reports usage below one million pounds for both 2022 and 2023.

2. The usage rate of each HAP containing material.

- Appear compliant? – Yes. Facility is keeping usage of each HAP containing material by the pound each month.

3. HAP content, in weight percent, of each HAP containing material used.

- Appears compliant? – Yes. Each HAP content is being kept in a weight percent used.

4. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons.

- Appears compliant? – Yes. Individual and aggregate HAPs is calculated by the ton, and well below the limits set in the permit.

5. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period.

- Appears compliant? – Yes. HAPs are also calculated as an annual emission rate, and well below the limits set in the permit.

6. PM2.5 and PM10 emission calculations determining the monthly emission rate of each in tons.

- Appears compliant? – Yes. PM emissions are kept in a satisfactory manner, and the rate is well below the permit limit of 89.0 tpy.

7. PM2.5 and PM10 emission calculations determining the annual emission rate of each in tons per 12-month rolling time period.

- Appears compliant? – Yes. PM emissions calculations are kept on a 12-month rolling basis and are satisfactory. Total emissions are well below permit limits.

8. Pounds of each HAP containing material used in FG-Facility, including consumable welding wire and rod.

- Appears compliant? – Yes. Amount of wire and rod used is being kept by the pound, monthly. Usage is well below the limit of 2,500 tpy.

9. The usage rate of each HAP containing material used in FG-Facility per calendar month, including the amount of consumable welding wire and rod used without particulate control.

- Appears compliant? – Yes. Wire and rod use is being recorded, and all particulate is being controlled by baghouses before being released within the in-plant atmosphere.

10. SDS for Cold Cleaner Solvent

- Appears compliant? – Yes. Solution is provided by ChemFree Corporation. The solution is SW-4 OzzyJuice Heavy Duty Degreasing Solution. Chemicals within the solvent is sodium citrate, surfactant blend, and water. It is not classified as hazardous.

After reviewing what was observed during the on-site inspection and determining that the records were satisfactory to the permit requirements, it appears that the facility is currently in compliance with PTI No. 93-17. Staff concluded the inspection at 11:45 AM. -JLE

NAME J Edgerton DATE 04/29/2024 SUPERVISOR Monica Brothers