

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

N311151362

FACILITY: TENNECO AUTOMOTIVE- MARSHALL		SRN / ID: N3111
LOCATION: 904 INDUSTRIAL RD, MARSHALL		DISTRICT: Kalamazoo
CITY: MARSHALL		COUNTY: CALHOUN
CONTACT: Harrold Black , EHS Manager		ACTIVITY DATE: 11/13/2019
STAFF: Amanda Chapel	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

On November 13, 2019, Air Quality Division’s (AQD) Amanda Chapel arrived at Tenneco (facility) located at 904 Industrial Road, Marshall Michigan at 1:30 pm to conduct an unannounced air quality inspection. Staff signed in and phoned Mr. Harrold Black, EHS Manager and let him know that I was there to complete an unannounced air quality inspection. He came and got me from the lobby and brought me up to his office area where we had a pre-inspection meeting and completed the records review.

Tenneco is a synthetic minor source for HAPS and PM10/2.5 as established in Permit to Install (PTI) 93-17 which contains only an FG-FACILITY limit. Tenneco consists of four buildings: 905 Industrial Rd which is a warehouse, 820 Industrial road which is Plant 2 and it does piecemeal parts, 904 Industrial Rd which is Plant 1 and they assemble the final product, and 824 Industrial Rd which is half warehouse and half maintenance and service center. 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 steel 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.

AQD staff explained that this was a routine inspection that would be completed about every 5 years since they are a synthetic minor source. The facility has one permit, PTI 93-17 and the following exempt equipment at the facility: milling and machining operations which vent in plant (Rule 285(2)(l)(vi)(B)), welding equipment which vents in plant through internal baghouses (Rule 285(2)(i)), natural gas-fired air makeup units (Rule 282(2)(b)(i)), and parts washers (Rule 281(2)(h)). Plant 1 has 169 mig welders and 23 spot welders. Plant 2 has 55 mig welders and 16 spot welders. There are two pipe mills at the facility. The facility has 44 natural gas fired heaters throughout the four buildings and 13 parts washers. An SDS for Mirachem 500 Cleaner used in the parts washers was received via email. Using the SDS it was confirmed they are parts washers as Mirachem has a VOC compound content less than 5%, by weight, and at a temperature below its boiling point. The parts washers are exempt under Rule 281(2)(k). In 2018, there were discussions about installing an emergency generator, but this was not completed. The facility also has no boilers on site.

The facility is required to track individual and aggregate HAPs, particulate matter (PM10 and PM2.5), and the usage rate of any welding wire and rods used at the facility. The limit for individual HAPs is 8.9 tons per year (tpy) and aggregate HAPs is 22.4 tpy. Actual emissions show the highest tons per year emissions are 17 lbs of Manganese (Mn), 38 lbs of Nickel (Ni), and 368 lbs of Chromium (Cr) and aggregate HAPs is 418 lbs. This is well below the permitted limits. The PM10/2.5 limits are 89 tpy. The facility tracks PM10 and PM2.5 as PM and records show the emissions are 2,516 lbs per year which is well below the permitted limit. Finally, the limit for welding wire and rod is 2,500 tpy and the facility has used 383 tpy in 2019 and used 498.26 tpy in 2018. The facility appears to be in compliance with the emission limits.

The facility keeps records based on pounds of wire used. They track the pounds by type of wire and use 5 different types at the facility. They track usage of the wire monthly and have a spreadsheet which contains the weight percentage of each metal in the different types of wire. This number is taken from the SDS. There is a condition in the permit which requires the facility to obtain written permission from the district supervisor to use manufacturer’s data. I informed Mr. Black they should write a letter asking for permission to use this data and we would approve it since it is unlikely that the wire can be tested using Method 311 as is required by the permit. Mr. Black provided the SDS for two wires used on site as well as the calculations for the HAPs and PM emissions, as was requested.

Mr. Black then took me on a tour of the facility. The facility has between 900 and 1,000 people employed and they operate 24/7. Required PPE are steel toed boots, safety vest, eye protection, hearing protection, and cut resistant sleeves which were provided by the facility. There have been no major changes since the last inspection. Some equipment has been moved between buildings to make room for their newest contract and they are in the process of changing over the baghouse configurations for the welding machines. The original welders had a dedicated baghouse for each welder, but the facility is updating it so 5-6 welders are connected, via ductwork, to one larger baghouse.

First, we toured Plant 1. This plant is where the individual pieces are assembled into the final product using a combination of crimping and welding. The main product of Plant 1 is mufflers for various models of cars. In Plant 1, workers take parts made in Plant 2 or purchased from vendors and either put them in machines to weld together or hand weld the pieces together. Since the large, mechanical welders can't do a 360 weld, the pieces are then spot-checked, and hand welded by workers in booths. We overserved a large baghouse in Plant 1. The baghouse was a RoboVent model. The gauge was reading 1.24 kpm. Mr. Black said the baghouse filters are changed about once per month or when the gauge reads 2.5 kpm.

I also observed parts washers located in the maintenance area in Plant 2. The parts washers were different models. One had a lid which was closed at the time of inspection. One did not have a lid, but the wash solution was underneath the basin and not exposed to the open air. Neither were in use during the inspection. Mr. Black said they are maintained weekly by Crystal Clean. An SDS was provided via email.

Mr. Black and I walked across the street to Plant 1 where they mainly make catalytic converters. There are some welders located in Plant 2 along with pipe mills, laser cutting tools, and other various machinery. The pieces that are made in Plant 2 are either sent over to Plant 1 for assembly or sent to other Tenneco locations for assembly. All welding equipment is routed to an indoor baghouse.

Mr. Black and I walked back to Plant 1, outside. There were no visible emissions or odors detected outside the facility. I told Mr. Black that I had no concerns with the recordkeeping or the tour of the facility. Tenneco appears to be in compliance with their permit and all air quality rules and regulations.

NAME Amanda Crayell

DATE 11/19/19

SUPERVISOR RIL 11/2/19