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

N157827753

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|---|---|---|
| FACILITY: General Motors LLC, Flint Tool & Die (Plant 38) | | SRN / ID: N1578 |
| LOCATION: 425 S Stevenson St, FLINT | | DISTRICT: Lansing |
| CITY: FLINT | | COUNTY: GENESEE |
| CONTACT: Lee Ann Slosar , Environmental Engineer | | ACTIVITY DATE: 11/12/2014 |
| STAFF: Daniel McGeen | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MINOR |
| SUBJECT: Scheduled inspection of Flint Tool & Die, also known as Plant 38, one of two structures remaining at the site of the former GM "Chevy in the Hole" facility. | | |
| RESOLVED COMPLAINTS: | | |

**On 11/12/2014, the Department of Environmental Quality (DEQ), Air Quality Division (AQD) conducted a scheduled inspection of General Motors LLC (GM) Flint Tool & Die, also known as Plant 38.**

**Facility environmental contact:**

**Lee Ann Slosar, Environmental Engineer; 810-234-4090; lee.slosar@gm.com**

**Emission units:**

| Emission unit | Emission unit description | Exemption rule; federal regulations, if any | Operating status at time of inspection |
|---|---|---|---|
| Maintenance paint booth | Maintenance paint booth with particulate filters, and exhaust to outside air | 287(c) | Compliance |
| Welding | Welding booths | 285(i) | Compliance |
| Welding-propane torch | Propane torch/portable cutting torch | 285(j) | Compliance |
| Welding "grill" | Natural gas-fired grill for heating metal | 282(a)(i) | Compliance/not operating |
| Metal stamping processes | A number of metal stamping processes, exhausting to in-plant environment | 285(l)(i) | Compliance |
| Metal milling processing | A number of metal milling processes, exhausting to in-plant environment | 285(l)(vi)(B) | Compliance |
| "Steam booth" | Power wash booth, using water-based cleaning solution | 281(c) | Compliance/not operating |
| Denatured alcohol wipes | Denatured alcohol wipes used for die cleaning, emissions released only into the general in-plant environment | 285(r)(iv) | Compliance |
| Dock heaters | Space heaters fueled by sweet natural gas, with a rated heat input capacity of not more than 50 million btu/hr each | 282(b)(i) | Compliance |
| Water heaters | Water heaters fueled by sweet natural gas, with a rated heat input capacity of not more than 50 million btu/hr each | 282(b)(i); 40 CFR 60, Subpart Dc | Compliance |
| Electric heat treat | Electrically heated furnace for heat treating of metals which does not involve molten materials, oil-coated parts, or oil quenching | 282(a)(i) | Compliance |
| Tool room activities | Metal working activities which exhaust only into the general in-plant environment | 285(l)(vi)(B) | Compliance |
| Pattern shop | Styrofoam, wood, and composite material machining operations, which exhaust into the general in-plant environment | 285(l)(vi)(B) | Compliance |
| Fire pump | Internal combustion engine, with less than 10 million Btu/hr heat input | 285(g); 40 CFR 63, Subpart ZZZZ | Compliance/not operating |
| Diesel tank | Diesel fuel tank | 284(d) | Compliance |
| 4 cooling towers | 4 water cooling towers | 280(d) | Compliance |
| 3 boilers | 3 natural gas-fired boilers, each at 10.205 million Btu/hr | 282(b)(i) | |
| Aerosol paint cans | Surface coating process that uses only hand held aerosol paint cans | 287(b) | Compliance |
| Water-based part cleaners | Safety Kleen water-based part cleaners which have an air/vapor interface of not more than 10 square feet | 281(h) | Compliance |

**Facility description:**

This facility manufactures dies, for use at other GM plants. They also create weld tools.

Regulatory overview:

This facility is classified in the Michigan Air Compliance and Enforcement System (MACES) database as a minor source, although previous AQD staff have not identified the source as minor for specific individual pollutants. For Hazardous Air Pollutants (HAPs), GM considers Flint Tool & Die to be an area source, rather than a major HAP source. They have not conducted Potential to Emit (PTE) calculations for either criteria pollutants or HAPs, because of how low they expect facility emissions to be. I concur that this facility does not likely have the PTE to be a major source, and further review is not needed. There are no air permits currently associated with this facility, as their emission units are considered exempt. The relevant exemptions are identified in the table on page 1 of this report.

In an 11/13/2014 e-mail (please see plant file) Ms. Lee Ann Slosar, Environmental Engineer, indicated that Flint Tool & Die is not subject 40 CFR Part 63 Subpart DDDD, because the plant is not a major source of HAPs. GM considers 40 CFR Part 63, Subpart JJJJJJ, the area source boiler MACT, to not be applicable to the boilers at the site, because they are gas-fired boilers. She referred me to Section 63.11237 for the definition of "gas-fired boiler." However, the three boilers are subject to 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The fire pump onsite is subject to 40 CFR Part 63 Subpart ZZZZ, the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines. However, the AQD has not been delegated authority to enforce this area source Maximum Achievable Control Technology (MACT) standard.

Fee status:

This facility is not considered fee-subject, because it is not a major source for criteria pollutants, nor for HAPs. However, it has boilers subject to a New Source Performance Standard (NSPS), 40 CFR Part 60, Subpart Dc, and a fire pump which is subject to the RICE MACT. After review of how AQD has treated other facilities located in Michigan, it is my determination that these factors by themselves do not warrant paying fees, nor do they warrant the facility being required to submit an annual report to the Michigan Air Emissions Reporting System (MAERS). I would not expect criteria pollutant emissions from this facility to exceed the thresholds in AQD's Operational Memorandum No. 13, which would indicate a need to be included in MAERS.

Recent history:

Flint Tool & Die is one of two structures remaining at the site of what was once known as GM's "Chevy in the Hole" plant, named for its location in a low lying area along the Flint River, in between downtown Flint and Kettering University. The other surviving structure at the site was donated to Kettering University. The rest of the buildings at this large GM complex were demolished, prior to the end of 2005. Flint Tool & Die is also known as Plant 38, a name which dates back to the operational days of the Chevy in the Hole complex. There are no known air complaints associated with Flint Tool & Die, as far back as 2007.

Location:

This facility is located in an industrial area of Flint, near Kettering University. The surrounding site, where the Chevy in the Hole complex once stood, is currently considered a brownfield. The closest residences appear to be just off of the southwest and southeast property lines.

Arrival:

I arrived in the parking lot at 9:57 AM. I could not see any signs of visible emissions from the plant roofline, nor detect any odors. Weather conditions were cloudy and 35 degrees F, with winds out of the west or northwest, at 10-15 miles per hour. Upon arrival in the plant lobby, I viewed the GM introductory video to the site. I then met with Ms. Lee Ann Slosar, Environmental Engineer. I provided her with a copy of the DEQ brochure: *Environmental Inspections: Rights and Responsibilities*, per AQD procedure.

The time and date for this inspection were arranged in advance, as Ms. Slosar is assigned to three different GM facilities, and is frequently at those other sites.

Inspection:

Ms. Slosar explained that they make dies here, which are sent to other GM facilities. They also make weld tools.

Maintenance paint booth, Rule 287(c):

Parts were not being painted in the maintenance paint booth, at the time we observed it. The booth exhausts to the outside air, and there were no visible emissions from the exhaust stack. The particulate filters used to catch paint spray appeared to be in good conditions. We observed paint booth records posted next to the booth, and they appeared to be up to date. Ms. Slosar e-mailed me a copy of the paint records, after the inspection (please see attached). She indicated that they use less than 100 gallons of coatings per month, and their records concur with this assessment. In June 2014, which appeared to be a busy month for the paint booth, they used a total of 60.5 gallons of coatings, well below 200 gallons per month.

Welding; Rule 285(i):

They do some welding on dies. They also do welding of tube steel, primarily for rails and fencing, for in-plant safety purposes. Their primary weld booth exhausts to the outside air, and their two smaller weld booths exhaust to the inside air.

Metal stamping processes; Rule 285(l)(l):

They have a number of metal stamping processes, which appear to meet the exemption criteria. They test dies that are manufactured here, Ms. Slosar informed me, before sending the finished dies to receiving GM plants.

Metal milling machines; Rule 285(l)(vi)(B):

They have a number of metal milling processes, used in the manufacture of dies. The processes exhaust into the general in-plant environment. They do not really create any fumes, Ms. Slosar explained, just metal chips. The collected metal chips appeared to be large, coarse metal particulates.

Steam booth; Rule 281(c):

This is a power wash booth, which may be utilized at various times during the manufacture of a die. It was not running, at the moment. It uses a waterborne cleaner, Ms. Slosar explained.

Tool room activities; Rule 285(l)(vi)(B):

They have a number of metal working processes, Ms. Slosar explained, which exhaust into the general, in-plant atmosphere. It could be seen that two of the processes were enclosed, and I was informed that those were wet operations.

Pattern shop with milling activities; Rule 285(l)(vi)(B):

Ms. Slosar showed me the pattern shop, where large styrofoam sheets are milled, to create patterns for the dies themselves. These Styrofoam milling processes exhaust to a collector, which exhausts indoors. I saw that the collected particulates are compressed into a block form, to be sent offsite for recycling.

Fire pump; Rule 285(g):

**We observed the fire pump, which is powered by a 170 horsepower (hp) diesel engine. It was not in use, at the time of the inspection. They are keeping monthly records of the hour meter, pursuant to the requirements of 40 CFR Part 63, Subpart ZZZZ, the NESHAP for Stationary Reciprocating Internal Combustion Engines, also known as the RICE MACT.**

**The fire pump heat input capacity was calculated by Ms. Slosar in her 11/13/2014 e-mail (see plant file) as:**

**170 hp X 7,000 Btu/hr = 1.19 million Btu/hr**

**1.19 million Btu/hr is well under the 10 million Btu/hr upper threshold allowed by Rule 285(g).**

**Three natural gas-fired boilers; Rule 282(b), 40 CFR 60, Subpart Dc:**

**They have three natural gas-fired boilers. The boilers each have a rated heat input capacity of 10.205 mmBtu/hr. One boiler was running, on the day of my visit The run from 1 to 3 boilers, depending on the weather, Ms. Slosar indicated. She explained that they keep records of the boilers and their daily fuel usage, to comply with the New Source Performance Standards (NSPS), Subpart Dc. The recordkeeping requirement appears to be Section 60.48c(g)(1).**

**Conclusion:**

**I could not find any instances of noncompliance. The facility appeared to be clean and orderly. Ms. Slosar and other facility staff were very knowledgeable and professional. I left the site at 11:35 AM.**

NAME _____ DATE 12/12/2014 SUPERVISOR _____