

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

B160828970

FACILITY: General Motors LLC Flint Metal Center		SRN / ID: B1608
LOCATION: G-2238 Bristol Rd, FLINT		DISTRICT: Lansing
CITY: FLINT		COUNTY: GENESEE
CONTACT: Angella Sigler, Senior Environmental Engineer		ACTIVITY DATE: 03/24/2015
STAFF: Brad Myott	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection		
RESOLVED COMPLAINTS:		

Emission Unit / FLEXIBLE GROUP ID	Description	Limit	status
EUSEALERS; FGRULE290	Sealer application operations that are exempt per Rule 290	VOC<1,000 lbs/month	C
EUIINKMARKING;FGRULE287(C)	Ink marking operation	200 gal/month	C
EUCOLDCLEANERS	Cold cleaners exempt from 201 per rule 281(h) or 285(r)(iv)	NA	C
EUPAINTSHOP; FGRULE287(c)	Maintenance paint shop booth with filter	200 gal/month	C

On 3/24/2015, Air Quality Division (AQD) staff conducted an inspection of General Motors (GM) Flint Metal Center. This inspection was a Partial Compliance Evaluation (PCE), conducted as part of a Full Compliance Evaluation (FCE).

**Environmental contacts:**

Angella Sigler, Environmental Engineer: [angella.sigler@gm.com](mailto:angella.sigler@gm.com)

**Facility description:**

This is a metal stamping facility, which produces hoods, fenders, and body sides out of steel and also, increasingly, out of aluminum. The parts are not primed or painted at this facility.

**Regulatory overview:**

This facility has an extremely small amount of yearly emissions. However, it is contiguous and adjacent to the GM Flint Truck & Bus Assembly Plant (SRN B1606), which is a major source of Hazardous Air Pollutants (HAPs). The Flint Metal Center is therefore also considered to be a major source, based on the definition from Section 112 of the Clean Air Act. Because the metal center does not support the primary activity of the assembly plant, it is thus treated as a separate stationary source, and has its own Renewable Operating Permit (ROP).

The facility has a current ROP, No. MI-ROP-B1608-2010. Amy Farmer, Plant Manager is the responsible official. The ROP consists of exempt emission units, which are exempt under Rule 287(c), Rule 290, and the cold cleaner exemptions, Rule 281(h) and or 285(r)(iv). These are listed in the emission unit table at the start of this activity report. There are also numerous metal stamping machines, exempt under Rule 285(l)(i), and two DDDD-subject boilers. A renewal ROP application will be submitted this spring as the current ROP expires in December, 2015.

**Location:**

The facility is bordered on the north by GM Flint Truck & Bus Assembly, on the east by GM Flint Engine Operations (SRN B1607), and on the west by US-23. This has been a heavy industrial area for decades. To the south are commercial and/or industrial properties. It is well over 1,000 feet to any residential areas. There are no complaints associated with this facility in AQD files as far back as 1991,

and possibly even earlier.

**Fee category:**

Because the Flint Metal Center is classified as a major source of HAPs, it is considered a Category II source, and pays an annual Category II facility fee, and pays per ton of pollutants discharged. It annually reports estimated air emissions via the Michigan Air Emissions Reporting System (MAERS). A 3/16/2015 audit of the facility's MAERS report for the 2014 calendar year found the facility's emissions of Volatile Organic Compounds (VOCs), at less than 1.1 tons, to be well within the allowed limits for emissions set by the ROP and Rule 290. Facility coatings throughput in 2014 and 2015 was well under the 200 gallon per month limit set by Rule 287(c). Please see "Review of records and operational logs," later in this report.

**Inspection:**

I arrived at 9:00 AM. There were no odors or visible emissions detected outside the plant. Weather conditions were 35 degrees F and overcast. The purpose of this site visit was to conduct a scheduled compliance inspection. Upon arrival, Ms. Sigler was provided with a copy of the DEQ brochure "Environmental Inspections: Rights and Responsibilities."

Ms. Sigler provided an overview of the plant and its operations. Stamping is done in the east side of the plant and parts are then brought to the center cell area for assembly. They produce parts here for several GM vehicles including the Volt, Camero, Impala and Silverado. She explained that every chemical that comes onto the site is carefully reviewed, before being allowed. We discussed the ROP renewal and recent changes at the facility. Several small emission units will be added to the ROP including emergency generators and boilers due to the promulgation of MACT regulations for these source categories. Business here has been fairly consistent, in recent years. The worst year for them was 2009, shortly after the start of the economic recession.

There are five main types of presses at the plant, for stamping metal:

C presses, accompanied by some assembly

Prog presses, which are slightly larger, and typically have 6 steps which are performed

B presses, are the next largest conventional presses, and typically involve 4 steps

A presses; which are the next largest, and are completely enclosed.

AA presses are the largest, and can create an entire vehicle body side.

One large die here undergoes 15-20 different steps, each time it is used.

The main changes at the Flint Metal Center since the previous inspection is the reduction in welding cells and an increase in sealer usage. Aluminum is increasingly being used instead of steel for the hoods of some vehicles, to reduce weight and improve fuel economy. Aluminum is generally used on the east side of the plant, and steel on the west side. Aluminum cannot be welded the way steel can, for their purposes, so they use adhesive to bond aluminum parts. Gluing is done in cells similar to weld cells. Most of the weld cells at the center of the plant are being replaced by adhesive operations.

I did not notice any visible emissions inside the plant.

EUPAINTSHOP, EUSEALERS, and EUINKMARKING are not considered to be subject to 40 CFR Part 63, Subpart M, the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for Surface Coating of Miscellaneous Metal parts and Products.

Angella showed me their paint shop, which has a large booth equipped with mat or panel filters. It is not

a production booth, and is operated as needed, like when equipment has been repaired, and needs to be touched up. It was not in use, at the moment. There is a pressure drop gauge for the booth.

They have 8 cold cleaners onsite, exempt under Rule 281(h) and/or Rule 285(r)(iv). Most of these are small units that use aqueous cleaners. Only one is solvent based, and it uses a Safety Kleen solution. None of their cold cleaners are considered subject to 40 CFR Part 63, Subpart T, the National Emissions Standards for Halogenated Solvent Cleaners. Material usage records are not required for these units. Minimal emissions are reported from this flexible group in MAERS. These units are serviced by outside companies and appeared to be in compliance with the exemption requirements.

They have two natural gas-fired boilers which are subject to 40 CFR Part 63, Subpart DDDDD. They serve the plant's Administration Building. One operates, while the other is available as backup. They have complied with the notification requirement, as they have informed AQD of these boilers, and their status as subject. They have also done a required annual boiler inspection.

#### Review of facility recordkeeping:

I previously reviewed the facility recordkeeping during the audit of the 2014 MAERS submittal. Attached is a copy of their spreadsheets, from their submittal and records for January 2015. This review of recordkeeping was a PCE activity, conducted as part of a FCE, and is summarized below:

For EUPAINTSHOP, the January 2015 throughput of paints was 4.8 gallons. This is far below the Rule 287(c) allowed throughput of 200 gallons of coatings per month.

For EUSEALERS, the January 2015 emissions of VOCs were 72.9 lbs. This is far below the Rule 290 allowed 1,000 lbs per month of uncontrolled emissions. They use approx. 10 different sealers with a VOC content between 0.01 lbs/gal, or 0.07% by weight, and 0.04 lbs/gal, 0.38% by weight.

For EUINKMARKING, the January 2015 throughput of inks was 1.14 gallons per year. This is far below the Rule 287(c) allowed throughput of 200 gallons of coatings per month.

The facility was clean and neat, Ms. Sigler was very knowledgeable and professional. The facility appears to be in compliance with its ROP, and the Air Pollution Control Rules. I could not identify any areas of noncompliance, nor any areas of concern where I felt improvement was needed.

NAME *D. M. Sigler* DATE *3/30/15* SUPERVISOR *B. M.*

