

B1607
manila
Genevieve

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

B160742576

FACILITY: GM LLC FLINT ENGINE OPERATIONS		SRN / ID: B1607
LOCATION: 2100 W. BRISTOL RD., FLINT		DISTRICT: Lansing
CITY: FLINT		COUNTY: GENESEE
CONTACT: Madeline Mahnick, Environmental Engineer		ACTIVITY DATE: 12/06/2017
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Partial Compliance Evaluation (PCE) activities, conducted as part of a Full Compliance Evaluation (FCE): 1.) scheduled inspection, and 2.) review of facility recordkeeping.		
RESOLVED COMPLAINTS:		

On 12/6/2017, the Department of Environmental Quality (DEQ), Air Quality Division (AQD) conducted a scheduled inspection of General Motors (GM) LLC Flint Engine Operations, as a Partial Compliance Evaluation (PCE) activity, part of a Full Compliance Evaluation (FCE). Another PCE activity, review of facility recordkeeping, is also documented in this activity report.

Purpose:

The purpose of this FCE was to determine compliance with the facility's Renewable Operating Permit, and applicable state and federal air pollution regulations.

Environmental contacts:

Madeline Mahnick, Environmental Engineer; 810-236-4638; madeline.mahnick@gm.com

Karen Carlson, Senior Environmental Engineer, 517-204-9011; karen.j.carlson@gm.com

Facility description:

This facility is principally involved with engine assembly operations for GM.

Emission units in the ROP:

Emission unit ID	Emission unit description	Installation/modification date	Flexible group ID	Compliance status
EU-COLDCLNRS	Plant wide cold cleaners.	01/01/2006	FG-COLDCLEANERS	Compliance
EU-MARKING-PENS	Miscellaneous marking pen usage.	01/2010	FG-RULE287(2)(C)	Compliance
EU-SGE-CLEANING	Miscellaneous maintenance cleaning operation for SGE.	10/2015	FG-RULE290	Compliance
EU-SGE-SEALERS	Other sealer application to SGE engine assembly process.	03/2015	FG-RULE287(2)(C)	Compliance
EU-SGE-RTV	Room temperature vulcanizing (RTV) process to robotically apply silicone sealer between small gasoline engine mating surfaces.	10/2015	NA	Compliance
EU-DIESELGEN#1	A 380 HP-diesel emergency generator located north of F Dock, intended to support the Computer Room in the event of a power outage.	01/2006	FG-EMERGENCY-ENGINES	Compliance
EU-DIESELGEN#2	A 80 HP-diesel emergency generator located north of F dock, intended to support the emergency lights in the event of a power outage.	01/2002	FG-EMERGENCY-ENGINES	Compliance
EU-FIREPUMPENG#1	A 265 HP-diesel fire pump engine located in the Fire Pump House.	01/1999	FG-EMERGENCY-ENGINES	Compliance
EU-FIREPUMPENG#2	A 265 HP-diesel fire pump engine located in the Fire Pump House.	01/2004	FG-EMERGENCY-ENGINES	Compliance

Emission units not required to be in the ROP:

Emission unit ID	Emission unit description	ROP exemption rule	PTI exemption rule	Compliance status
EU-HEATERS	Natural gas-fired space heaters	212(4)(c)	282(2)(b)(i)	Compliance
EU-SGE-INDUCHARD	SGE Induction hardening process	212(4)(c)	282(a)(i)	Compliance
EU-HFV6BOILER	PVI, hot water heater, stack 0.5 MMBtu/hr, natural gas-fired	212(4)(d)	282(2)(b)(i)	Removed 06/2017
EU-FAM0BOILER	Lochnivar, hot water heater, stack; 0.27 MMBtu/hr, natural gas-fired	212(4)(d)	282(2)(b)(i)	Compliance
L-6 Locker Room	Hot water heater which replaced EU-HFV6BOILER	212(4)(d)	282(2)(b)(i)	Compliance
EU-MACHINING	Wet and dry production machining	212(4)(e)	285(l)(v)(C)	Compliance
EU-PARTSWASHERS	Aqueous production parts washers, from listing in MAERS	212(4)(d)	285(2)(l)(iii)	Compliance

Regulatory overview:

Flint Engine operations has a very small amount of air emissions, on an annual basis. However, it is contiguous and adjacent to the GM Flint Assembly Plant, State Registration Number (SRN) B1606, which is a major source of Hazardous Air Pollutants (HAPs). Therefore, Flint Engine Operations is also considered to be a major source, based on the definition from Section 112 of the Clean Air Act. Because it does not support the primary activity of the assembly plant, Flint Engine Operations is thus treated as a separate stationary source, and has its own Renewable Operating Permit (ROP).

The facility has a recently renewed ROP, MI-ROP-B1607-2017, issued on 10/20/2017. The ROP consists of exempt emission units, which are exempt under Rules 287(c), 290, and 281(h) and/or 285(r)(iv). These are detailed in the emission unit table at the start of this activity report. Additionally, there are exempt emission units which were not required to be included in the ROP, and these are detailed in the ROP-exempt emission unit table.

Permit to Install (PTI) No. 231-08C was issued for a room temperature vulcanizing sealer material process, on 12/27/2016. It was subsequently rolled into the 2017 renewal of the ROP. The PTI itself was then voided, as the requirements are now contained within the ROP.

The facility is currently installing a new production line which they currently refer to as "the New Process." A December 2016 exemption demonstration letter was sent to AQD by GM, explaining which exemptions they believed were applicable for the proposed equipment. AQD did not contest the company's determinations. It should be noted that AQD does not actually approve or grant exemptions.

This facility is not considered subject to 40 CFR Part 63, Subpart M, the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Metal Parts & Coatings, per exemption 40 CFR 63.3881(b), because it uses less than 250 gallons per year of coatings containing HAPs.

The parts cleaners at this facility are not considered subject to 40 CFR Part 63, Subpart T, National Emissions Standards for Halogenated Solvent Cleaners, because they use aqueous solutions rather than halogenated solvents.

There are five hot water heaters reported to be onsite. Two of these were inaccurately referred to as boilers in the 8/20/2014 and 12/10/2015 inspection reports by AQD. They are not subject to 40 CFR Part 63, Subpart DDDDD, the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. However, they were believed to be subject, at the time of the 2014 inspection. The change in status for these units was described by GM staff as the result of litigation by industry regarding the regulation, and subsequent guidance by EPA, which exempted units such as these.

The facility is not subject to 40 CFR Part 63, Subpart HHHHHH, the NESHAP for Paint Stripping and Miscellaneous Coating Operations at Area Sources, AQD Permit Engineer Julie Brunner determined, during the New Source Review process for an earlier PTI, No. 231-08A, which was voided in 2014. She

noted that the facility does not do hand-held spray application of coatings, nor does it appear to use any of the HAPs identified in the NESHAP (chromium, cadmium, lead, manganese, and nickel).

Location:

Flint Engine Operations is bordered on the north by a new paint shop, built for the adjacent GM Flint Assembly, (SRN B1606). It is bordered on the west by the GM Flint Metal Center (SRN B1608), and on the east by Van Slyke Road, and some commercial and undeveloped properties, followed by residences. This has been a heavy industrial area for decades. To the south are commercial and/or industrial properties. The nearest residence is approximately 600 feet to the east of the facility.

Fee category:

Because Flint Engine Operations 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). Please see section on MAERS reporting, later in this report.

Recent history:

On 7/10/2017, an odor complaint from a residence east of the facility was received. The odor was initially attributed by the complainant to painting operations at GM Flint Assembly, though the complaint was inadvertently entered by DEQ staff under the SRN of Flint Engine Operations. GM staff were advised of the complaint that same day, and found no unusual occurrences taking place at this facility. AQD Environmental Engineer Robert Byrnes investigated the complaint on 7/11. A subsequent odor complaint on 8/15/2017 named Flint Assembly as the suspected source. The complainant later attributed the odors they reported on both occasions to a nearby residence, rather than to GM facilities. These complaints are considered resolved, with no instances of noncompliance on the part of GM LLC.

Site safety apparel required:

At the time of this inspection, safety glasses, closed toe shoes, and high visibility safety vests are required. Finger jewelry (rings) are not allowed. Hearing protection is not required. New visitors to the site must watch a required safety video.

Odor evaluation before arrival:

No odors from Flint Engine Operations could be detected downwind, at 9:19 AM, along Van Slyke Road. Weather conditions were 34 degrees F and partly sunny, with winds 15-20 miles per hour out of the west southwest.

Arrival:

The purpose of this site visit was to conduct a scheduled compliance inspection, and to review required recordkeeping, as Partial Compliance Evaluation (PCE) activities, part of a Full Compliance Evaluation (FCE). The U.S. Environmental Protection Agency Compliance Monitoring Strategy for Fiscal Year 2015 is that 50% of Title V major sources undergo a FCE this year. The time and date for this inspection had been arranged in advance, to accommodate schedules of the parties who needed to be present, including two DEQ Student Interns, Ms. Alexandria Seeger, and Ms. Bharani Rajasekaran.

Upon arrival at 9:31 AM, it could be seen that there were no visible emissions from Flint Engine Operations, other than steam from two exhaust stacks on the roof. There was no sign of tailoff of particulate emissions, after the steam plumes disappeared. Weather conditions were 34 degrees F and partly sunny, with winds 15-20 miles per hour out of the west southwest.

At the front desk, I presented my credentials/identification, per AQD procedure. We then viewed a required safety video for visitors. We met with Ms. Madeline Mahnick, Environmental Engineer, Ms.

Karen Carlson, Senior Environmental Engineer, and Mr. Brent Cousino, Environmental Engineer. Ms. Mahnick is the new environmental contact for this facility. She and Ms. Carlson accompanied us through the plant, and reviewed required recordkeeping with us.

Emission units for the FAM0 or Family 0 engine line have been removed from the plant, we were informed, with the exception to this appearing to be the hot water heater designated EU-FAM0BOILER. The small gasoline engine or SGE line remains at the plant, and is still active. The High feature (HF) engine line has been removed from the plant, including the EU-HFV6BOILER, which has been replaced with the L6 hot water heater. Please see the discussion on removed engine lines at the end of this report for a review of recordkeeping.

The HF engine line is being replaced by a new production line which GM currently refers to as "the New Process", because there are proprietary concerns about the nature of the new product. This project is described in a December 2016 exemption demonstration letter from the company to AQD. The individual emission units which comprise the New Process are in general similar to exempt processes installed for the SGE line, here. None of those individual emission units appear to require a permit to install, as described in the exemption demonstration letter.

Inspection and review of recordkeeping:

We observed the area where the New Process is being installed. We did not enter this area, due to the presence of heavy equipment and associated safety risks. The New Process is not expected to become operational until autumn of 2018.

We observed the SGE manufacturing and assembly processes. No visible emissions could be seen inside the facility, and the only odor which I could detect inside was intermittent, and faint. We were informed that Ms. Mahnick and Mr. Cousino conduct monthly rooftop inspections at the plant, to check for any issues.

EMISSION UNITS FROM THE ROP:

Emission units from the ROP are discussed in the order in which they appear in the emission unit table at the start of this inspection activity report.

1. EU-COLDCLNRS; FG-COLDCLEANERS:

Cold cleaners may be described as cleaners using a solvent which are either unheated, or are heated to a temperature which is below the boiling point of the solvent. The two cold cleaners in this plant are classified as new units, having been placed into operation on or after 7/1/1979. The actual installation date is listed in the ROP as 1/1/2006. It is my understanding that these two units meet the definition of aqueous cleaners, and that GM is choosing to manage them as cold cleaners. Essentially, they are voluntarily being subjected to more stringent requirements.

FGCOLDCLEANERS Special Condition (SC) No. II. 1 requires that cleaning solvents shall not be used containing more than 5% of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. I was informed that the two cold cleaners use no halogenated compounds.

We did not examine the cold cleaners during this inspection, but it is my understanding that the air/vapor interface on each cold cleaner is less than ten square feet. This is one of the two design requirement options under SC No. IV. 1.

It is my understanding that the cold cleaners are equipped with covers, which are kept closed when parts were not being handled, as required by SC No. IV. 3. I was advised that written instructions to keep the lids closed are posted nearby, and keeping the lids closed is part of their standard work practice.

2. EU-MARKING-PEN; FG -RULE287(2)(C):

This emission unit is limited by the Rule 287(2)(c) exemption threshold to 200 gallons per month of coatings (minus water), maximum. The pens are used to apply small dots of various paint colors to engine parts, to verify that they have undergone necessary quality assurance checks.

Ms. Mahnick provided copies of recordkeeping, for 2017, year-to-date (YTD). The records for EU-MARKING-PEN track the number of pens used, and the gallons of coatings used. They showed that from 1/1/2017 through the end of October 2017, total usage of paint was 1.42 gallons. The month in 2017 with the highest usage so far was May, with 0.32 gallons. This is far below the 200 gallon per month limit contained within Rule 287(2)(c). Total VOC emissions for EU-MARKING-PEN for 2017 YTD were 14.2 lbs. The exemption does not limit VOC emissions, but these are documented, and reported in MAERS.

3. EU-SGE-CLEANING; FG-RULE290:

This emission unit was added to the recently renewed ROP, and is for miscellaneous cleaning associated with the SGE line. The applicable regulatory limit is the uncontrolled emission threshold of 1,000 pounds per month contained in the Rule 290 exemption.

Facility recordkeeping for EU-SGE-CLEANING shows the quantity of cleaning solution used in 2017 YTD was 1,053 gallons, and that total VOC emissions YTD were 28.1 lbs. The month so far this year with the highest VOC emissions was October, with 5.99 lbs of non-carcinogenic VOCs. This is far below the 1,000 lbs/month threshold of Rule 290 for uncontrolled emissions.

4. EU-SGE-SEALERS; FG-RULE287(2)(C):

The SGE engines receive a sealer in the assembly process, which provides a seal between mating surfaces. We were informed that the material used is primarily Loctite Sealer 150460. There are also very minor amounts of other sealers used. The monthly usage is tracked under Rule 287(2)(c). We observed the robotic application of this material. There were no visible emissions from the application process.

A review of recordkeeping for EU-SGE-SEALERS shows that for 2017, YTD, 47.6 gallons total of sealers were used. Of this total 47.6 gallons were Loctite 150460, and 0.034 gallons were Loctite 242. The month with the highest throughput of coatings was January 2017, with 15.9 gallons total used. This monthly throughput is far below the maximum allowed coating use of 200 gallons/month under Rule 287(2)(c). For 2017 YTD, 50.9 lbs of VOC were emitted. Rule 287(2)(c) does not contain a VOC limit, but the tracked emissions are reported to MAERS by the facility.

5. EU-SGE-RTV; no flexible group:

A room temperature vulcanizing (RTV) sealer is used for the SGE engines. It is exhausted to the exterior environment, and is not exempt, due to the presence of a carcinogen. The PTI for this process, No. 231-08C, was rolled into the ROP when the ROP was renewed. Because those regulatory requirements are now part of the ROP, the PTI itself was voided.

We observed plasma treating of metal parts, and the subsequent application of the RTV sealer. There were no visible emissions from the process. It is my understanding that the material is of a putty-like consistency.

There is a VOC limit of 1.2 TPY for this process in the ROP. Recordkeeping for EU-SGE-RTV was provided. The recordkeeping shows that for 2017, YTD, total VOCs from this process were 670 lbs. For the 10-month period of January through October, the total VOCs were 670 lbs. This is 0.34 tons, considerably below the yearly limit of 1.2 TPY.

Records were also provided (attached) showing a 12-month rolling average from November 2016 through October 2017. The month with the highest 12-month rolling tons was January 2017, with 0.7

tons. This is below the 1.2 ton limit.

6. EU-DIESELGEN#1; FG-EMERGENCY-ENGINES:

EU-DIESELGEN#1 was installed in January, 2006. It is one of four internal combustion engines (ICEs) in the flexible group FG-EMERGENCY-ENGINES. We observed this unit, which is a Cummins Power 380 horsepower (HP) generator. It was not operating at this time. The hours of operation, as indicated on the non-resettable hour meter, were 143.3 since the unit first began operating. We were told that the weekly operating test of this generator was to be done today, and likely already took place.

Ms. Mahnick provided print outs of the hours of operation (please see attached), which are tracked per requirements for emergency generators. Such units must be below 100 hours of operation per year, she explained. Calendar year 2017 YTD hours of operation for emergency use were 0, while hours for non-emergency use were 16.4.

Keeping of maintenance records is also required, and we were given copies of these (please see attached). The records contained a detailed checklist showing each maintenance item performed. Those items which were required to be done by 40 CFR Part 63, Subpart ZZZZ, the RICE MACT, were highlighted by Ms. Mahnick.

7. EU-DIESELGEN#2; FG-EMERGENCY-ENGINES:

EU-DIESELGEN#2 was installed in January, 2002. It is the second of four internal combustion engines (ICEs) in the flexible group FG-EMERGENCY-ENGINES. We observed this unit, which is a Generac 2000 series 80 HP unit. It was not operating at this time, and is adjacent to EU-DIESELGEN#1. The hours of operation for this unit, as indicated on the non-resettable hour meter, were 225 hours. We were told that the weekly operating test of this generator was to be done today, and likely already took place.

Ms. Mahnick provided print outs of the hours of operation (please see attached), which are tracked per requirements for emergency generators. Such units must be below 100 hours of operation per year. Calendar year 2017 YTD hours of operation for emergency use were 0, while hours for non-emergency use were 24.5.

Keeping of maintenance records is also required, and we were given copies of these (please see attached). The records contained a detailed checklist showing each maintenance item performed. Those items which were required to be done by 40 CFR Part 63, Subpart ZZZZ were highlighted by Ms. Mahnick.

8. EU-FIREPUMPENG#1; FG-EMERGENCY-ENGINES:

EU-FIREPUMPENG#1 was installed in January, 1999. It is the third of four internal combustion engines (ICEs) in the flexible group FG-EMERGENCY-ENGINES. We did not observe this unit during this inspection.

Ms. Mahnick provided print outs of the hours of operation (please see attached), which are tracked per requirements for emergency generators. Such units must be below 100 hours of operation per year. Calendar year 2017 YTD hours of operation for emergency use were 0, while hours for non-emergency use were 28.7.

Ms. Mahnick also provided copies of maintenance records (please see attached). The records show that a rotating assembly was overhauled and reinstalled. Testing was reported to have shown that the fire pump was meeting the factory-rated design curve at all points "flowed." A relay switch in the fire pump control panel was reported to have been replaced. The records contained a detailed checklist showing each maintenance item performed. Those items which were required to be done by 40 CFR Part 63, Subpart ZZZZ were highlighted by Ms. Mahnick.

9. EU-FIREPUMPENG#2; FG-EMERGENCY-ENGINES:

EU-FIREPUMPENG#2 was installed in January, 2004. It is the fourth of four internal combustion engines (ICEs) in the flexible group FG-EMERGENCY-ENGINES. We did not observe this unit, during this inspection.

Ms. Mahnick provided print outs of the hours of operation (please see attached), which are tracked per requirements for emergency generators. Such units must be below 100 hours of operation per year. Calendar year 2017 YTD hours of operation for emergency use were 0, while hours for non-emergency use were 26.6.

She also provided copies of maintenance records (please see attached). The unit was reported to have been within NFPA requirements for meeting the factory rated design curve. No deficiencies were reported. The records contained a detailed checklist showing each maintenance item performed. Those items which were required to be done by 40 CFR Part 63, Subpart ZZZZ were highlighted by Ms. Mahnick.

EMISSION UNITS NOT REQUIRED TO BE IN THE ROP:

Emission units not required to be in the ROP are discussed in the order in which they appear in the ROP-exempt emission unit table earlier in this report. Keeping of maintenance records is also required (please see attached).

10. EU-HEATERS; Rule 282(2)(b)(i):

We did not examine these natural gas-fired space heaters during the inspection. They are exempted from inclusion in the ROP.

11. EU-SGE-INDUCHARD; Rule 282(2)(a)(i):

We observed two induction hardening process units (used for crankshafts for the SGE engine line). Neither unit was operating, at this particular time. Parts are heated by electric power, and then quenched with a chemical product. They exhaust to a central control device, we were informed. The induction hardening process is considered exempt because it is heated electrically.

12 and 13; EU-HFV6BOILER and EU-FAM0BOILER; Rule 282(2)(b)(i):

These two hot water heaters were erroneously referred to as boilers in the 2014 and 2015 AQD inspection reports. EU-HFV6BOILER was removed from the plant in June of 2017, I have been informed, and replaced with another hot water heater in the same location. The new hot water heater is called L-6 Locker Room. I have been informed that, like its predecessor, it also meets the exemption requirements of Rule 282.

The original EU-HFV6BOILER provided and the EU-FAM0BOILER still provides hot water for restrooms and showers. As previously discussed in this report, they were not subject to 40 CFR Part 63, Subpart DDDDD, but had initially been considered subject. GM LLC had submitted initial notification for these units under DDDDD, in May 2013. However, they each had rated heat input capacities of less than 1.6 million Btu/hour and were therefore not subject to DDDD. There is a difference between the definitions of a boiler and a hot water heater, under the MACT. It was explained by GM LLC, during the 2015 inspection, that following litigation by industry over the boiler MACT, EPA provided clarification that hot water heaters over 120 gallons in capacity, but below 1.6 million Btu/hr, are not subject. These each had tank capacity of 250 gallons but were below 1.6 million Btu/hr.

14; L-6 Locker Room; Rule 282(2)(b)(i):

As explained above, the hot water heater designated L-6 Locker Room replaced EU-HFV6BOILER, and was installed in the same location. It is said to meet the Rule 282 exemption criteria.

15. EU-MACHINING; Rule 285(l)(vi)(C):

This emission unit includes machining and coolant galleries for the SGE engine line. Numerous emission units for machining metal were observed operating for the SGE engine line. These were enclosed in cabinets, and emissions were ducted to control devices. There were no fugitive emissions that could be seen from these units. Coolant galleries along the east wall of the plant feed water-based coolant into the machining systems. This liquid also serves as a lubricant. A washing solution is used to remove lubricants, chips, oils, and sealer.

For wet machining processes, it is my understanding that mists and any metal particulates go to mist collectors. These are the larger air filtration units in the plant,. These exhaust to the outside air. It is my understanding that these control devices use spinning spiral partitions, followed by filters. No fugitive emissions could be seen from the mist collectors. Collected metal chips are recycled. There is an onsite wastewater treatment plant, which separates oils from the wastewater.

We observed a cartridge filter dust collector which serves a process(es) for dry machining of crankshafts. This control device exhausted to the in-plant atmosphere. There were no visible emissions from the exhaust outlet.

Various emission units for machining metal were observed in the process of installation for the New Process line. These were not operating, and are not expected to be ready to operate until late 2018. These were described in a December 2016 exemption demonstration letter sent by the company to AQD.

16. EU-PARTSWASHERS; Rule 285(2)(I)(iii):

There are a number of production-related parts washers in the plant which use a cleaning solution of water mixed with a surfactant. They are for cleaning metal parts as they are manufactured. Mist collectors are used for particulate control of emissions.

Ms. Mahnick provided a copy of recordkeeping for EU-PARTSWASHERS for 2017 YTD, please see attached. The total material usage YTD was 3,759 gallons of cleaning solutions, and the total VOC emissions YTD were 1,177 lbs. The Rule 285(2)(I)(iii) exemption does not specify any limits for throughput nor emissions. This exemption applies to:

- (I) The following equipment and any exhaust system or collector exclusively serving the equipment:
- (iii) Equipment for surface preparation of metals by use of aqueous solutions, except for acid solutions.

EQUIPMENT WHICH HAS BEEN REMOVED FROM THE PLANT:

HF engine line:

The HF engine line has been removed. We were provided with copies of recordkeeping for HF emission units to demonstrate there was neither any throughput nor any emissions, please see attached. Review of the records showed:

- *EU-HF-Cleaning VOC Report* indicates no usage of material (cleaners), and no VOC emissions for 2017, YTD.
- *EU-HF-SEALERS VOC Report* indicates no usage of material (sealers), and no VOC emissions for 2017, YTD.
- *EU-HFV6-RTV VOC Emission Report* indicates no usage of material (RTV sealer) and no VOC emissions for 2017, YTD.

FAM0 engine line:

The FAM0 engine line has been removed, with the only apparent exception being the hot water heater designated EU-FAM0BOILER. We were provided with copies of recordkeeping for FAM0 emission units to demonstrate there was neither any throughput nor any emissions, please see attached. Review of

the records showed:

- EU-FAM0-CLEANING: the Rule 290 recordkeeping form for October 2017 (the first month of operations under the renewed ROP) indicates that there were no emissions for 2017, YTD.
- EU-FAM0_RTV: the Rule 290 recordkeeping form for October 2017 indicates that there were no emissions for 2017, YTD.

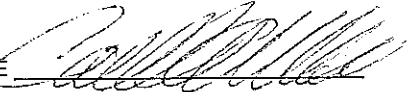
MAERS reporting:

This facility is required to report air emissions to MAERS, annually. The MAERS report submitted to document the emissions during operating year 2016 was audited on 5/24/2017, and passed successfully. Reported emissions and throughputs complied with Rules 287(2)(c) and 290, with the ROP that existed as of that date (MI-ROP-B1607-2012), and with the PTI which existed at that time, No. 231-08C.

Conclusion:

No instances of noncompliance could be determined. We left the site at 12:35 PM.

Note: This inspection activity report was originally completed on 1/19/2018, the date on which the FCE itself was completed. However, upon their review of the completed report, GM LLC staff provided comments where several corrections were needed, on 2/5/2018. On 2/6/2018, AQD staff made these corrections. On 2/8/2018, GM LLC staff identified two additional items needing correction, which was done the following day. All of the above corrections were of a minor nature, and did not affect compliance status.

NAME DATE 2/9/2018 SUPERVISOR 