

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

B160854648

FACILITY: General Motors LLC Flint Metal Center		SRN / ID: B1608
LOCATION: G-2238 Bristol Rd, FLINT		DISTRICT: Lansing
CITY: FLINT		COUNTY: GENESEE
CONTACT: Monica Walker , Environmental Engineer		ACTIVITY DATE: 08/19/2020
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection and review of facility recordkeeping, which are both partial compliance evaluation (PCE) activities, conducted as part of a full compliance evaluation (FCE).		
RESOLVED COMPLAINTS:		

On 8/19/2020, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) conducted a scheduled inspection of General Motors (GM) LLC Flint Metal Center (FMC), and subsequently reviewed facility recordkeeping. These are Partial Compliance Evaluation (PCE) activities, done as part of a Full Compliance Evaluation (FCE).

Environmental contacts:

- Karen Carlson, Senior Environmental Engineer; 517-204-9011; karen.j.carlson@gm.com
- Monica Walker, Environmental Engineer; 586-922-3587; monica.1.walker@gm.com
- Julie Lenz, Staff Environmental Engineer; 810-234-4906; julie.lenz@gm.com

Facility description:

This facility is a metal stamping plant, which produces hoods, fenders, and body sides out of either steel or aluminum. Neither priming nor painting of vehicle parts are done at this facility.

Emission units in ROP:

Emission unit* ID	Description	Flexible group** ID	Installation date/modification date	Status
EUPAINTSHOP	Maintenance paint booth with dry fabric filters	FGRULE287(c)	01/01/1997	Compliance
EUSEALERS	Sealer application operations and associated solvent wipe cleaning have been removed except for one cell, which is in the process of being decommissioned.	NA; FGRULE290 and FG-MACT LIGHT DUTY are being removed from the ROP, as it is renewed	01/01/2006	Being removed
EUINKMARKING	Ink marking operation.	FGRULE287(c)	09/01/2009	Compliance
EUCOLDCLEANERS	A cold cleaner exempt from Rule 201 per Rules 281(h) or 285(r)(iv).	FGCOLDCLEANERS	01/01/2008	Compliance
EU B-1 BOILER	A 2.2 MMBtu/hr natural gas-fired boiler that serves the Administration Building.	FGBOILER-MACT	05/01/2005	Compliance
EU B-2 BOILER	A 2.2 MMBtu/hr natural gas-fired boiler that serves the Administrative Building.	FGBOILER-MACT	05/01/2005	Compliance
EU-GENERATOR#1	An 80.4 HP natural gas-fired emergency spark ignition (SI) generator located on the roof of the Administration Building.	FGEXT-EMERGENCY	01/01/2005	Compliance
EU-GENERATOR#2	A 225 HP natural gas-fired emergency spark ignition (SI) generator located on platform indoors.	FGNEW-EMERGENCY	04/01/2008	Compliance
EU-GENERATOR#3	A 225 HP natural gas-fired emergency spark ignition (SI) generator located in the basement at L-19.	FGNEW-EMERGENCY	08/01/2008	Compliance
EU-FIREPUMP	A 420 HP diesel fuel-fired fire pump compression ignition (CI) engine located east of the main plant.	FGEXT-EMERGENCY	05/01/2000	Compliance

*An *emission unit* is any part of a stationary source that emits or has the potential to emit an air contaminant.

**A *flexible group* is used in a permit to install (PTI) or Renewable Operating Permit (ROP) to combine two or more emission units that have common or identical requirements.

Regulatory overview:

The FMC, by itself, has an extremely small amount of yearly emissions. 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). A major source of HAPs has the potential to emit (PTE) of 10 tons per year (TPY) or more of a single HAP, or the PTE of 25 TPY or more of all HAPs combined. By being contiguous and adjacent to a major HAPs source, the FMC is therefore also considered to be a major HAPs source, based on the definition from Section 112 of the Clean Air Act.

In past years, because the FMC did not support the primary activity of the assembly plant, however, it was treated as a separate stationary source, and so has had its own Renewable Operating Permit (ROP). The current one is ROP No. MI-ROP-B1608-2016. However, GM now considers Flint Assembly, the FMC, and GM Flint Engine Operations (FEO), SRN B1607, to be a single stationary source, as all 3 are under common control, and located at contiguous or adjacent property. Unlike Flint Assembly and FEO, the FMC does not share the same first 2 digits of its Standard Industrial Classification (SIC) code, which is one of the potential qualifiers to be a single stationary source. However, 90% of stamping production at FMC now goes to Flint Assembly, GM staff have indicated. This is over the minimum 50% support facility level as described in AQD Policy Memo AQD-011, under step 3. b) of determining what constitutes a stationary source. These 3 facilities may all be considered a single stationary source.

When GM submitted a ROP renewal application in 2018 for Flint Assembly, B1606, they proposed to include the FMC, B1608, and FEO, B1607, as Sections 2 and 3, respectively, of that ROP, No. MI-ROP-B1606-20XX. Section 2 will include the requirements for the FMC, while Section 3 will include the requirements for FEO. It is expected that upon issuance of the ROP for B1606, all 3 facilities will use that SRN, and the SRNs B1608 and B1607 will no longer be used. Draft ROP MI-B1606-20XX has undergone public comment, and is now a proposed ROP, undergoing 45-day review by the U.S. Environmental Protection Agency (EPA).

The current ROP for the FMC, No. MI-ROP-B1608-2016, is still in effect, meanwhile. It consists of exempt emission units, which are exempt under Rules 287(c), 290, 281(h) and 285(r)(iv). There are also numerous metal stamping machines, exempt under Rule 285(l)(i), and two boilers subject to 40 CFR Part 63, Subpart DDDDD, *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*.

EUPAINTSHOP, EUSEALERS, and EUINKMARKING are not considered to be subject to 40 CFR Part 63, Subpart MMMM, the *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*.

EUSEALERS has in the past been subject to 40 CFR Part 63, Subpart IIII, *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Automobiles and Light Duty Trucks*. Now, however, EUSEALERS has almost completely been removed from FMC, except for one remaining cell which was in the process of being decommissioned., as of the date of this inspection. The Auto Light Duty MACT is therefore no longer applicable, and its flexible group has been removed from the proposed ROP, MI-ROP-B1606-20XX. The emission unit EUSEALERS has been removed from the proposed Section 2, as has been the flexible group FGRULE290.

Exempt emission units listed in the ROP application which are not required to be in the ROP:

Exempt emission unit ID	Description of exempt emission unit	Rule 212(4) exemption from ROP	Rule 201 exemption
EU-SPACEHEATERS	Natural gas-fired space heaters/air make-up units	Rule 212(4)(b)	Rule 282(2)(b)(i)
EU-1K-GASTANK	One 1000-gal above ground gasoline storage tank	Rule 212(4)(c)	Rule 284(2)(g)(i)
EU-D1-GRINDING	Non-production grinding at D-1	Rule 212(4)(d)	Rule 285(2)(l)(vi)

			(A)
EU-ALSCRAP	Aluminum scrap transfer system	Rule 212(4)(i)	Rule 291

The above processes are not subject to any process-specific emission limits or standards in any applicable requirement.

Exempt emission units neither required to be in the ROP nor in the ROP application:

Exempt emission unit ID	Description of exempt emission unit	Rule 212(4) exemption from ROP	Rule 201 exemption
EU-MACHINING	Various non-production machining	Rule 212(3)(f)	Rule 285(2)(l)(vi)
EU-POWERWASH	Industrial cleaning pad, located by barrel house	Rule 212(2)(e)	Not subject to Rule 201
EU-WESTWASHBOOTH	West die room wash booth, no longer used as a steam booth	Rule 212(3)(f)	Rules 281(2)(e), 285(2)(l)(iii), and/or 285(2)(r)(iv)
Former EU-EASTSTEAMBOOTH (removed)	This process has been removed	NA: removed	NA; removed
2 additional wash booths	2 wash booths, no longer used as steam booths	Rule 212(3)(f)	Rules 281(2)(e), 285(2)(l)(iii), and/or 285(2)(r)(iv)
EU-STORAGE1	Bulk storage container	Rule 212(4)(c)	Rule 284
EU-STORAGE2	Bulk storage container	Rule 212(4)(c)	Rule 284
Welders	Welding units/assembly cells	Rule 212(3)(f)	Rule 285(2)(i)
Presses	Stamping presses	Rule 212(3)(f)	Rule 285(2)(l)(i)

The above processes are not subject to any process-specific emission limits or standards in any applicable requirement.

Location:

The facility is bordered on the north by GM Flint Assembly Operations (SRN B1606), 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 FMC is considered a major source under Title I of the federal Clean Air Act Amendments (CAAA), i.e. it has the potential to be a major source of HAPs when combined with the contiguous, adjacent source, it has been considered a Category C source under AQD's revised fee category system. When it becomes part of the same ROP as Flint Assembly, SRN B1606, and FEO, SRN B1607, it will share the SRN B1606, and become a Category B fee source,. This is because the combined source will be major under Title III, i.e. it will have a PTE of over 100 TPY for one or more criteria pollutants. The SRNs , B1608 and B1607 will no longer be used.

FMC currently reports to the Michigan Air Emission Reporting System (MAERS), under the SRN B1608. When FMC and FEO merge with Flint Assembly under the SRN B1606, they will report emissions from that point forward under the shared SRN.

Recent history:

This facility was most recently inspected on 12/4/2018. On 3/17/2016, the ROP was renewed. That ROP, MI-ROP-B1606-2016, is still in effect.

Required safety apparel:

Required for this site are: closed toe shoes with sides of leather construction (not fabric), safety glasses with side shields, hearing protection, safety vests, and Kevlar sleeves. GM is able to provide safety glasses and hearing protection for visitors who do not have this. Additionally, GM will provide safety vests of an appropriate color, as the AQD safety vests are of a color which, to GM personnel, signifies crane operators. GM will also provide Kevlar sleeves for plant visitors to wear. Finger jewelry must be removed prior to entering the plant.

Note: During the COVID-19 pandemic, visitors are required to discard their existing face mask upon entering this plant, and to sanitize their hands, prior to putting on a GM-provided paper face mask. As an additional measure of protection for myself and those around me, I opted to wear a clear plastic face shield which attached to my hard hat, and was worn in addition to the GM-provided mask.

Arrival:

During the current COVID-19 pandemic, EGLE guidance to inspectors on conducting inspections is as follows:

- pre-arrange inspections with facilities, to facilitate a plan to conduct the inspection while adhering to facility guidelines for safety,
- wear a mask, where social distancing of at least 6 feet is not possible, and
- ask if there have been any recent confirmed cases of COVID-19 at regulated facilities, upon arrival.

Therefore, the time and date for this inspection had been pre-arranged with the GM environmental contacts. The third bulleted item is a recently added step, and I neglected to ask about recent instances of COVID-19, if any, onsite.

Immediately prior to today's inspection of FMC, I had inspected the GM Flint Engine Operations plant, this morning, with GM's Ms. Karen Carlson, Senior Environmental Engineer, and Ms. Julie Lenz, Staff Environmental Engineer. We departed the FEO facility, and drove separately to the adjacent FMC. EGLE guidance on COVID-19 includes a requirement for State of Michigan employees to travel alone in vehicles, to reduce the risk of spreading COVID-19. I arrived at FMC at 12:04 PM.

Weather conditions were 75 degrees F, and mostly sunny with low humidity. Winds were 5-10 miles per hour out of the northwest. There were no visible emissions detectable from the facility roofline. I noticed a barely detectable odor, smelling like a water-based coolant, but I was unable to detect this odor inside the plant.

I reconvened with Ms. Carlson and Ms. Lenz at the entrance. As we entered the plant, we underwent a temperature check,. We then disposed of the face masks we were wearing, sanitized our hands, and replaced the mask with GM-provided paper masks . We were joined by Ms. Monica Walker, Environmental Engineer for FMC and FEO, and conducted a socially distanced pre-inspection meeting.

Pre-inspection meeting:

We met in a GM room which had been set up for social distancing, including a clear plexiglass barrier . We discussed the purpose of the inspection, to determine compliance with the ROP, and with state and federal air pollution regulations. Major sources are required to under go a FCE once every 2 years, under the US Environmental Protection Agency's Compliance Monitoring Strategy.

I was informed that since the AQD 12/04/2018 inspection, the main change has been that all sealer operations have been removed from here to go to Flint Assembly. There is only a single sealer cell left here, I was told, and it is in the process of being decommissioned. Additionally, a couple blanker systems for cutting aluminum are not running, at the moment, and one has just been sold, I was told. It was explained that this is because they buy their aluminum pre-cut now. Lastly, I was told that of the four steam booths, the east one has been removed, and the remaining ones are just operating as wash booths, without the use of steam.

Inspection:

During the inspection, I did not observe any visible emissions on the interior of the plant.

1.) EUPAINTSHOP; FGRULE287(c):

Their paint shop 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 this moment. There are exhaust fans, and a pressure drop gauge. The dry paint filters were in good shape. There is a sliding curtain which closes off the entrance doorway to the booth, when it is in use. Dry waste materials were kept in a sealed drum.

I noticed the form available in the booth for employees to record coating usage. No coatings had been used in August, so far.

Prior to the inspection, Ms. Walker emailed plant recordkeeping for the ROP from January through July 2020. This included EUPAINTSHOP records. Usage of coatings was documented, and the usage each month was far below the 200 gallons per month minus water of coatings allowed under the Rule 287(2) (c) exemption. Please see reported values below.

1. January 2020: 1.88 gallons
2. February 2020: 3.21 gallons
3. March 2020: 1.33 gallons
4. April 2020: 0.00 gallons
5. May 2020: 0.00 gallons
6. June 2020: 2.00 gallons
7. July 2020: 1.08 gallons

2.) EUSEALERS; FGRULE290 and FG-MACT LIGHT DUTY:

All sealer operations have been moved over to Flint Assembly, I was told during the pre-inspection meeting. Therefore, EUSEALERS and the associated flexible groups FGRULE290 and FG-MACT LIGHT DUTY will not be included in the renewed FMC ROP, which will actually be Section 2 of the Flint Assembly (B1606) ROP, MI-ROP-B1606-20XX.

I was shown the last remaining parts of a sealer cell in FMC, which appeared to be a bare metal framework. I was advised that it is in the process of being decommissioned. The area where the sealer cells have operated is now being used as a warehouse area, I was shown.

Recordkeeping for EUSEALERS showed that in January 2020, 27.21 lbs of non-carcinogenic VOCs were emitted. This was well below the 1,000 lbs per month of uncontrolled VOC emissions allowed under Rule 290. That was the only month with any emissions reported from sealing operations. As discussed above, all sealing operations have been relocated to Flint Assembly, and FMC will no longer have any emissions from sealers.

The ROP's FG-MACT LIGHT DUTY flexible group requires semi-annual reports of monitoring and deviations. On 9/11/2020, AQD received the MACT - HAP Report - General Sealers document, for the period January through June of 2020. It indicated that there were no deviations from emission limits or work practices. From now on, all Auto MACT requirements will be in Section 1 of the B1606 Flint Assembly ROP, MI-ROP-B1606-20XX.

3.) EUINKMARKING; FGRULE287(c):

It is my understanding that ink marking of parts is done for quality checking purposes on a daily basis, with hand held markers, also known as "daubers." I was given a verbal overview of how the checking is

done. It is my understanding that they keep records of the amount of materials purchased, to track usage. I detected no odors in the areas where ink marking is done.

Prior to the inspection, Ms. Walker emailed plant recordkeeping to me, including records for EUINKMARKING. Usage of ink was documented, and the usage each month was far below the 200 gallons per month minus water of coatings allowed under the Rule 287(2)(c) exemption. Please see reported values below.

1. January 2020: 1.19 gallons
2. February 2020: 0.43 gallons
3. March 2020: 0.00 gallons
4. April 2020: 0.00 gallons
5. May 2020: 0.00 gallons
6. June 2020: 0.43 gallons
7. July 2020: 0.76 gallons

4.) EUCOLDCLEANERS; FGCOLDCLEANERS:

There is only one solvent-based cleaner in the plant, I was told, as all other solvent-based parts cleaners here had been converted to an aqueous solution. This was the only solvent-based cleaner at the plant during the 2018 inspection, as well. It is located inside the maintenance paint booth, EUPAINTSHOP, from earlier in this report.

Organic solvent-based cleaners where the solvent is not heated to the solvent's boiling point are classified as *cold cleaners* under the Michigan Air Pollution Control Rules. During the inspection, we examined the remaining cold cleaner, which was small in size. The lid was closed, with a sticker on it stating to keep the lid closed. Instructions were posted nearby for operating it, in an area where they would not get covered with paint spray. From a previous inspection here, it is my understanding that the cold cleaner is unheated, and has an exhaust fan, for ducting emissions through the paint booth particulate filter and exhaust stack.

This cold cleaner is classified as a new unit under the Michigan Air Pollution Control Part 7 Rules, having been placed into operation on or after 7/1/1979. The actual installation date is listed in the ROP as 1/1/2008. The other cleaners in the plant all utilize water-based cleaning solutions. Because those do not use organic solvent, they do not fall under the Michigan definition of cold cleaners.

Special Condition (SC) FGCOLDCLEANERS 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 ,l-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. In 2018, it was my understanding that the solvent did not utilize any halogenated compounds. I was told today that the cold cleaner is still using the same solvent as it did during the previous inspection. It is a Safety Kleen heavy duty lacquer thinner, I was advised.

The air/vapor interface on the cold cleaner appeared to be less than ten square feet, which is one of the two design requirement options under SC FGCOLDCLEANERS No. IV. 1. The cold cleaner was equipped with a cover, which was closed when parts were not being handled, as required by SC FGCOLDCLEANERS No. IV. 3. SC COLDCLEANERS No. VI. 3 requires posting of written operating procedures in an accessible, conspicuous location. As previously noted, the instructions for operation were posted nearby.

5. and 6.) EU B-1 BOILER and EU B-2 BOILER; FGBOILER-MACT:

EU B-1 BOILER and EU B-2 BOILER are each natural gas-fired boilers; Weil-McLain Model 788 Series 1, Model # WCRZ-G-15HTD, and each is rated at 2.2 MMBtu/hr. The boilers are subject to 40 CFR Part 63, Subpart DDDDD, *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*. It is my understanding that they

serve the plants' Administration building, with one operating during the cold months of the year, while the other serves as backup. Neither was running during today's inspection.

On 5/30/2013, AQD received an Initial Notification for Applicability for the two boilers, from the company. An earlier Initial Notification form had been received on 3/15/2012. The more recent document was an update to address the Finalized Major Source Boiler MACT Rule, published on 1/31/2013.

SC FGBOILER-MACT No. III. 1 and Subpart DDDDD require an initial tune up of the boilers no later than 1/31/2016, and a tune-up every five years thereafter. On 3/15/2016, AQD received a Notification of Compliance Status (NOCS) Report for the boilers. This report indicated that the required initial tune-up had been done, and that continuous compliance would be determined by conducting tune-ups according to procedures in Section 63.9(h)(2)(i)(C). SC FGBOILER-MACT No. III. 2 requires a one-time energy assessment. The NOCS report stated that the energy assessment was performed. The NOCS Report further indicated that Boilers B-1 and B-2 have neither Boiler MACT emission limitations nor operating parameter limitations.

On 3/24/2020, GM FMC staff electronically submitted a letter to AQD, requesting an extension past 5/20/2020, to conduct the Boiler MACT-required 5 year tune-up. This was because of the GM shutdown during the COVID-19 pandemic, and the great degree of uncertainty as to whether GM staff and/or contractors would be able to re-enter the plant in time for the 5-year tune up, due no later than 5/20/2020. AQD replied to this on 3/30 and 3/31/2020, indicating that the 3/24 letter is acceptable as the advance notification needed to make such a request. The GM extension request was logged into in EGLE's enforcement discretion database. This documents situations where EGLE has been asked to use enforcement discretion, where the pandemic potentially interfered with meeting compliance dates.

Ultimately, however, FMC was able to conduct the boiler tune-ups on 4/29/2020, ahead of the 5/20/2020 deadline, and enforcement discretion was not actually needed. Therefore, FMC was not required to submit this as a deviation on their semi-annual deviation report for the time period 1/1 through 6/30/2020, nor will they need to submit this on their annual deviation report for the 2020 calendar year.

7.) EU-GENERATOR#1; FGEXT-EMERGENCY; 40 CFR Part 63, Subpart ZZZZ:

Per the ROP renewal application for FMC, EU-GENERATOR#1 is actually a 115 horsepower (hp) unit. It had previously been identified as an 80.4 hp unit, but a recent look at the associated engine resulted in this correction. The generator is a CAT Olympian, Model Number MG60FSm, Serial Number S0LY0000HNFC9592, while the internal combustion engine is a Ford, Model Number WSG1068, Serial Number 042520879. This unit is one of two emission units in the Flexible Group FGEXT-EMERGENCY. This unit was on the rooftop of the administration building, so we did not check it, during the inspection. It is my understanding that it was not running, at this time. It is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ, aka the RICE MACT.

The flexible group FGEXT-EMERGENCY contains SC FG-EXTEMERGENCY No. III. 5, limiting each engine in the flexible group to no more than 100 hours of operation per calendar year for maintenance checks and readiness testing and emergency demand response. SC No. VI. 3 requires records to demonstrate continuous compliance with operating limitations.

By email prior to the inspection, Ms. Walker provided with a copy of their log sheet for hours of operation, please see attached. Hours of operation in 2020 are summarized as follows:

- January 2020 non-resettable hour meter start: 473.08 hours
- As of the end of July, 2020, non-resettable hour meter reading: 489.54 hours.
- 489.54 - 473.08 hours = 16.46 hours operated in 2020, year to date (YTD).
- All run hours YTD were for maintenance and testing.

SC No. IV. 1 requires a non-resettable hour meter on each engine in the flexible group. It is my understanding that EU-GENERATOR#1 has a non-resettable hour meter. SC No. VI. 5 requires records of hours of operation through the non-resettable hours meter. The monthly hour meter readings were provided for the start and end of each month in 2020 YTD, for EU-GENERATOR#1, as discussed above.

The ROP requires the unit to be installed, maintained, and operated in a satisfactory manner. A copy, attached, was provided of a 6/22/2020 Generator Inspection Checklist for EU-GENERATOR#1, which can be identified by its location, the rooftop. The checklist showed the unit had been checked over completely. The form noted that the system was checked over completely, and that oil and filter were changed. No issues were identified.

8. and 9.) EU-GENERATOR#2 and EU-GENERATOR#3; FGNEW-EMERGENCY; 40 CFR Part 63, Subpart ZZZZ:

EU-GENERATOR#2 and EU-GENERATOR#3 are classified as new generators, having been installed in April and August of 2008, respectively. They are both Onan model number GGLB-6255884, and have consecutive serial numbers, A080151639 and A080151638. The engine for #2 is a GM Model Number 8.1L, Serial Number 8P1L6874. The engine for #3 is a GM Model Number GM8.1L, Serial Number SP1L16982. They are subject to the requirements of the RICE MACT, but are not subject to the requirements of the New Source Performance Standards (NSPS), I was told. This was a reference to 40 CFR Part 60, Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*. I was informed they keep records of hours of operation to demonstrate they are not subject. It is my understanding that they are voluntarily doing maintenance activities identified in the NSPS, even though they are not actually required to do this.

We observed EU-GENERATOR#2, within the plant. It is located on platform F12, and is reached by a short flight of stairs. It is natural gas-fired. The unit appeared to be in good physical condition. It was not running, at the time of the inspection.

The requirements are spelled out in the flexible group FGNEW-EMERGENCY in the ROP. SC FGNEW-EMERGENCY No. III. 1 prohibits each engine in the group from running more than 100 hours per calendar year for maintenance checks and readiness testing and emergency demand response.

Prior to the inspection, Ms. Walker emailed a copy of their log sheet for hours of operation for EU-GENERATOR#2, please see attached. Its hours of operation in 2020 are summarized as follows:

- January 2020 non-resettable hour meter start: 481.7 hours
- As of the end of July, 2020, hour meter reading: 503.5 hours.
- $503.5 - 481.7$ hours = 21.8 hours operated in 2018, over the 7-month period 1/1-7/31/2020.
- Run hours so far were all for maintenance and testing.

SC FGNEW-EMERGENCY No. IV. 1 requires a non-resettable hour meter for each engine. I observed the non-resettable hour meter on EU_GENERATOR#2, which currently read 505.4 hours.

SC No. VI. 1 requires recordkeeping of hours of operation recorded through this non-resettable hour meter. The monthly hour meter readings for EU-GENERATOR#2 were provided for the start and end of each month, as discussed above.

The ROP requires EU-GENERATOR#2 to be installed, maintained, and operated in a satisfactory manner. As noted previously, the unit appeared to be in good physical condition.

I received a copy of the Generator Inspection Checklist for EU-GENERATOR#2. This indicated that the system was checked over completely, and that the oil and filter were changed. No issues were identified.

EU-GENERATOR#3 is located in the basement of the stamping plant. We did not examine it, during the inspection. It is my understanding that it was not running, at the time of the inspection. By email prior to the inspection, Ms. Walker provided a copy of their log sheet for hours of operation, please see attached. Hours of operation in 2020 are summarized as follows:

- January 2020 non-resettable hour meter start: 119.5 hours
- As of the end of July, 2020, hour meter reading: 127.3 hours.
- $127.3 - 119.5$ hours = 7.8 hours operated in 2020, year to date (YTD).

- Run hours YTD were for maintenance and testing. In March and April 2020, however, during the GM shutdown following the start of the COVID-19 pandemic, the generator was reported to have not operated at all. The reason given is that no one was available to do the monthly test.

The ROP requires EU-GENERATOR#3 to be installed, maintained, and operated in a satisfactory manner. AQD received a copy, attached, of the Generator Inspection Checklist for EU-GENERATOR#3, from 6/23/2020. This indicated that the unit was checked over completely, and the oil and filter were changed. The only issue noted was that the battery was over 3 years old and it was recommended that it should be replaced.

10.) EU-FIREPUMP; FGEXT-EMERGENCY; 40 CFR Part 63, Subpart ZZZZ:

This existing engine is the remaining of the two units in the Flexible Group FGEXT-EMERGENCY. It is a 420 HP diesel fuel-fired pump compression ignition (CI) engine. I was shown the unit, which was not running, at the time of the inspection.

SC FGEXT-EMERGENCY No. III. 5, limits each engine in the flexible group to no more than 100 hours of operation per calendar year for maintenance checks and readiness testing and emergency demand response. SC FGEXT-EMERGENCY No. VI. 3 requires records to demonstrate continuous compliance with operating limitations.

By email prior to the inspection, Ms. Walker provided with a copy of their log sheet for hours of operation for EU-FIREPUMP, please see attached. Hours of operation in 2020, through the end of July, were summarized as follows:

- January 2020 non-resettable hour meter start: 1,142.2 hours
- As of July 2020, non-resettable hour meter reading: 1,180 hours.
- 1,180 - 1,142.2 hours = 37.8 hours operated in 2020, over the 7-month time period of 1/1-7/31/2020.
- All run hours so far were for "security testing."
- SC FGEXT-EMERGENCY No. IV. 1 requires a non-resettable hour meter on each engine in the flexible group. It was currently at 1,162.3 hours, when we observed it., today SC No. VI. 5 requires records of hours of operation through the non-resettable hours meter. The monthly hour meter readings for EU-FIREPUMP were provided for the start and end of each month, as discussed above. This demonstrates compliance with SC FGEXT-EMERGENCY No. IV. 1 and VI. 5.

The ROP requires the unit to be installed, maintained, and operated in a satisfactory manner. Following the inspection, I received a copy of a Fire Pump Test form, dated 11/27/2019, please see attached. This contains a checklist of items, and all items are marked as having been done. The service was performed by a contractor, Midwest Peerless, and no issues were noted.

11.) New aluminum scrap handling system and cyclone, Rule 291:

I requested to see the aluminum scrap handling system and cyclone. Ms. Walker verified that it was running today. I was reminded that the cyclone is used here for material separation purposes, rather than air pollution control purposes.

FMC had sent an exemption demonstration to AQD on 5/12/2017, for the aluminum scrap handling system and cyclone. The exemption demonstration letter indicated that potential emissions of particulate matter (PM), PM-10, and PM2.5 would be under the Rule 291 maximum allowed thresholds of 10 TPY PM, 5 TPY PM-10, and 3 TPY PM2.5. AQD subsequently was able to see the equipment in operation, to consider in 2019, and did not have any concerns about the use of the Rule 291 exemption.

As stamping presses operate, scrap metal drops onto conveyors below, it was explained. Aluminum stamping scrap is separated from steel stamping scrap by means of a diverter, so the scrap metal streams consist of pure, uncontaminated metals. I inquired about the ratio of aluminum to steel. Ms. Walker indicated she would inquire on this, and she subsequently emailed the following information on their scrap output in 2020:

YTD Aluminum Scrap Metal: 1,576,540 lbs

YTD Steel Scrap Metal: 53,082,510 lbs

Thus, roughly 3% of the total scrap generated is aluminum (by weight).

The loadout building, or scrap house, is a short distance north of the FMC main building. It has two truck bays, which I have been informed are kept shut when the system is operating. No visible emissions could be seen from the roofline of the scrap house. There were no fugitive emissions from the structure, and no sign of fallout on the pavement around it. Aluminum scrap was audible traveling through at least one of the ducts leading to the scrap house.

Once inside the building, I could see that housekeeping appeared good. The area around the truck bays appeared clean. We ascended a number of flights of stairs. Two scrap lines enter the building, with one duct designated for the B12 line, and one for the C12 line. The ducts connect to a massive cyclone. When the air stream enters the cyclone, pieces of aluminum drop out and are routed by a "Y" diverter to either of the two truck bays. As we climbed the stairs, the flow of scrap metal ceased. Below us, we could see a scrap metal trailer in each of the 2 bays, Bay 1 and Bay 2. It was pointed out to me what the typical size was of the aluminum scraps in one of the trailers; the largest pieces appeared to be a few inches across.

The cyclone does not have a pressure drop gauge, but in 2019 I was advised that they monitor electric current to the fans to ensure that each duct in the system has air flow. The airflow inside the ductwork moves at 70 miles per hour, I was told. It is my understanding that a study was conducted which determined that the aluminum dust here was not fine enough to be considered hazardous for risk of an explosion.

After we had left the scrap house, the flow of air and aluminum scrap resumed, judging by the sound coming from one of the ducts above. There were no signs of visible emissions from the ductwork or the scrap house. Rule 301, limiting opacity emissions to a 6-minute average of 20%, except for one 6-minute average not to exceed 27% was being met.

12.) Metal machining; Rule 285(l)(vi):

I noted various metal working processes in scattered locations throughout the plant. These appeared to operate on a non-production basis, and they also exhausted indoors. These processes therefore appeared to meet the exemption criteria of both Rule 285(l)(vi)(A) and (B).

13. through 16.) EU-WESTSTEAMBOOTH, EU-EASTSTEAMBOOTH (now removed), and 2 additional steam booths; Rule 285:

In the past, there have been four steam booths in the plant. I was told that the east one, EU-EASTSTEAMBOOTH, has been removed, since my previous inspection. Also, I was advised that the remaining booths no longer use steam, and function as wash booths. I was able to see one in use, where a wand was used to spray water or a mixture of water and a cleaning agent. I did not note any compliance concerns. I was advised that the wash water goes to the industrial wastewater treatment plant onsite.

17.) Stamping presses; Rule 285(l)(i):

Stamping is done on both the east and west sides of the plant. As previously mentioned in this inspection report, 90% of the output from the FMC goes to the adjacent Flint Assembly.

In the past, rolls of aluminum were received onsite, and fed into blankers, to undergo cold stamping. I was informed earlier in this inspection that they now buy all their aluminum pre-cut, so it no longer needs to undergo blanking. Thus, one blanker has recently been sold, while the other was idle. I was advised that they still buy rolls of steel for the plant. These do not undergo blanking, Ms. Walker explained, but are fed directly into the progressive presses.

I was informed that there are currently 4 types of presses at the plant, as described below. It is my understanding that an additional type, B presses, have all been removed.

1. C presses: These are the smallest ones. They are idled in place now, with no production, I was told.
2. Progressive or "prog" presses: These are slightly larger, and typically have 6 steps which are performed.
3. A presses: These are the next largest, and are completely enclosed.
4. AA presses: This is the largest category. One AA press can create an entire vehicle body side. 100% of the output from them goes to Flint Assembly, I was advised.

It is my understanding that the Progressives, A presses, and AA presses are active at FMC. I could not see visible emissions from any of them.

MAERS reporting:

A MAERS report is submitted yearly for this facility. A 5/8/2020 audit of the facility's MAERS report for the 2019 operating year found the following:

- For EUSEALERS, the yearly emissions of VOCs were 549.99 lbs in 2019. Even if these emissions had all been emitted in one month, they would still be below the Rule 290 allowed 1,000 lbs per month of uncontrolled emissions. A spreadsheet attached to the MAERS submittal showed the monthly emission rates. Please see electronic MAERS records.
- For EUINKMARKING, the 2019 throughput of inks was 5.4 gallons per year. Even if this throughput had been in a single month, it would have been far below the Rule 287(2)(c) allowed throughput of 200 gallons of coatings per month. A spreadsheet attached to the electronic submittal showed actual monthly throughput. Please see electronic MAERS records. VOC emissions from the inks were reported as 35.86 lbs for 2019.
- For EUCOLDCLEANERS, the 2019 VOC emissions were reported to be 0.00 lbs. The facility calculated value was 17.5 lbs VOC, according to a spreadsheet of supporting data, but annual emissions below 20 lbs are allowed, in MAERS, to be reported as zero. There is no process-specific emission limit in the ROP for the cold cleaner.

Departure:

Upon leaving the plant at 1:57 PM, no odors or visible emissions were detected from the FMC. Weather conditions were mostly sunny and 75 degrees F, with low humidity, and winds out of the northwest at 0-5 mph.

Conclusion:

No instances of noncompliance were identified. Housekeeping practices were excellent at FMC.

NAME *Daniel W. Maer*

DATE 9/23/2020

SUPERVISOR *B.M.*