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manila
Genesee

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

B161039449

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|--|-------------------------------|---------------------------|
| FACILITY: GM Grand Blanc | | SRN / ID: B1610 |
| LOCATION: 10800 S Saginaw St., GRAND BLANC | | DISTRICT: Lansing |
| CITY: GRAND BLANC | | COUNTY: GENESEE |
| CONTACT: Lee Ann Slosar, GM Environmental | | ACTIVITY DATE: 04/18/2017 |
| STAFF: Daniel McGeen | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MINOR |
| SUBJECT: Scheduled inspection of facility which was last inspected by AQD in 2010. | | |
| RESOLVED COMPLAINTS: | | |

On 4.18/2017, the Michigan Department of Environmental Quality (DEQ), Air Quality Division (AQD) conducted an announced, scheduled inspection of GM Grand Blanc. The purpose was to check compliance with the Michigan Air Pollution Control Rules, and any applicable federal regulations.

Environmental contact:

Lee Ann Slosar, GM Environmental; lee.slosar@gm.com

Facility description:

This facility is a former automotive metal stamping plant that is currently used by General Motors (GM) as a warehouse for storing engineering assets.

Emission units:

| Emission unit* | Exemption rule | Federal regulation, if applicable | Compliance status |
|---|----------------|--|---------------------------------------|
| 1.) Cleaver Brooks natural gas-fired boiler | 282(2)(b)(i) | Exempt from 40 CFR Part 63, Subpart JJJJJJ | Compliance |
| 2.) Ajax boiler Inc. natural gas-fired boiler | 282(2)(b)(i) | Exempt from 40 CFR Part 63, Subpart JJJJJJ | Decommissioned and abandoned in place |
| 3.) Fire pump, diesel-fueled | 285(2)(g) | 40 CFR Part 60, Subpart IIII | Compliance |
| 4.) Emergency generator, natural gas-fired | 285(2)(g) | 40 CFR Part 63, Subpart ZZZZ | Compliance |
| 5.) Paint booth | 287(2)(c) | NA | Removed from plant |
| 6.) Wash booth | 290 | NA | Removed from plant |
| 7.) Natural gas dock heaters | 282(2)(b)(i) | NA | Compliance |

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

Regulatory overview:

This facility was once considered a major source of air emissions, but is now considered a true minor source. A *major source* has the potential to emit (PTE) of 100 tons per year (TPY) or more, of one of the criteria pollutants. *Criteria pollutants* are those for which a National Ambient Air Quality Standard exists, and include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns, and particulate matter smaller than 2.5 microns. It is also considered a minor, or *area source*, for Hazardous Air Pollutants (HAPs), because it is not known to have a PTE of 10 TPY or more for a single HAP, nor to have a PTE of 25 TPY or more for combined HAPs.

A facility that is a major source for criteria pollutants or HAPs is required to obtain a Renewable Operating Permit (ROP). GM Grand Blanc had a ROP which was voided on 10/18/2010, because it had become a true minor source with all emission units exempt from New Source Review.

The various emission units at this facility are considered exempt from the requirement of Michigan Air Pollution Rule 201 to obtain a permit to install, under exemption rules which are identified in the above emission unit table.

Regarding the two natural gas-fired boilers, a natural gas-fired boiler at an area source of HAPs would not be subject to 40 CFR Part 63, Subpart JJJJJJ, under Section 63.11195(e). JJJJJJ is the *National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*. Any hot water heaters, such as those used for a restroom or cafeteria, at an area source would not be subject, under Section 63.11195(f). To meet the definition of a hot water heater in this area source Generally Achievable Control Technology (GACT) standard, the unit must be no more than 120 gallons in capacity. AQD has not been delegated authority to enforce Subpart JJJJJJ.

The natural gas-fired emergency generator is subject to 40 CFR Part 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, also known as the RICE MACT (Maximum Achievable Control Technology). However, it is not subject to 40 CFR Part 60, Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*, because it was installed pre-2006.

The site's diesel-fueled fire pump is subject to 40 CFR Part 60 Subpart IIII; *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

Fee status:

This facility is not a Category I fee subject source, because it is not a major source for criteria pollutants. It is not a Category II fee-subject source because it is not a major source for Hazardous Air Pollutants (HAPs), nor is it subject to federal New Source Performance Standards. Additionally, it is not Category III fee-subject, because it is not subject to federal Maximum Achievable Control Technology standards. The facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS).

Location:

The GM Grand Blanc site is surrounded to the west, north, and east by commercial properties. To the south there is a railroad yard, with apartment buildings beyond that. The closest residences are apartment buildings about 800 feet to the south of the plant, and residences about 800 feet to the east of the plant.

History:

It is my understanding, from discussions with Ms. Lee Ann Slosar, GM Environmental, that this facility was built and owned by the federal government during the early years of World War 2, and was operated by GM, to produce tanks for the military. After the end of the war, it is my understanding that GM purchased the facility, and used it as a metal stamping plant for auto parts. Decades later, when the stamping processes were removed, it was operated as the GM Grand Blanc Weld Tool Center. By 2010, however, all adhesive lines, a paint booth, the boiler house, and three coal-fired boilers had been removed from the site. The site was then said to be vacant for some time, until GM began to utilize it as a warehouse for storing and shipping engineering assets. The main structure is reported to be over 1 million square feet in size.

Arrival:

No odors were detected offsite, upon nearing the facility. Neither odors nor visible emissions could be detected from the facility parking lot. Weather conditions were sunny, clear, and 55 degrees F, with winds out of the southeast at 10-15 miles per hour.

Accompanying me on this inspection were Ms. Pratyusha Paidikondala and Mr. Jacob Archer, Student Interns with the DEQ's Office of Environmental Assistance, for educational purposes. This was not an unannounced inspection, as AQD guidance for bringing interns in the field is to plan the inspection in advance. This assures that appropriate staff are available at the facility to safely escort DEQ staff through the industrial site. Additionally, the company's environmental contact is not always stationed at this site, so it was necessary to make advance arrangements to meet her there.

We met with the environmental contact, Ms. Lee Ann Slosar, of GM Environmental. It is my understanding that she is responsible for environmental matters at almost a dozen GM sites. We also met with Mr. Ron Prevett, Maintenance Supervisor. I provided my identification/credentials, per AQD procedure. Prior to beginning the inspection, we watched a required safety orientation video. We also obtained a roof access permit, which would allow us to go onto the roof of the plant.

Inspection:

We walked through the interior of the plant, where engineering assets are received, stored, and shipped out to GM locations across the country. These assets include but are not limited to office furniture, such as wall panels.

1. Cleaver Brooks natural gas-fired boiler; Rule 282(2)(b)(i):

We were shown a Cleaver Brooks packaged boiler, and we were advised that it burns only natural gas, with no provisions for alternative fuels. Because it has a maximum rated heat input capacity of 6 million Btu/hour, it is below the maximum allowed 10,000,000 Btu/hour that is the maximum allowed by the Rule 282(2)(b)(i) exemption. The boiler plate or name plate identified it as Model CBI.700-150 LE. It was not running, at the moment, and we were told that it only runs on as needed basis. Otherwise, they use small, natural gas-fired dock heaters, which are discussed later in this inspection report.

The last inspection of this boiler was listed as 9/1/2016, with the next upcoming inspection to be due by 9/1/2018. We were shown recordkeeping for the 2014 boiler inspection and maintenance. D. J. Conley was identified as the contractor.

2. Ajax Boiler Inc. natural gas-fired boiler; Rule 282(2)(b)(i); decommissioned:

We were informed and shown that the Ajax Boiler Inc. natural gas-fired boiler is decommissioned, and has been abandoned in place.

In its place they are using a 76 gallon hot water heater for a cafeteria, we were told. This unit can be classified as a hot water heater under the definition utilized in 40 CFR Part 63, Subpart JJJJJJ, *National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*. To meet the definition of a hot water heater in this area source Generally Achievable Control Technology (GACT) standard, the unit must be no more than 120 gallons in capacity. Hot water heaters at an area source are not ~~be~~ subject to JJJJJJ, under Section 63.11195(f).

We were also advised that they have very small, "under the cabinet" electric hot water heaters for the building restrooms. They also have two decommissioned hot water heaters at the site, we were told. We saw one of the decommissioned units, which was for the former administration building, but could be reactivated, if there is ever a need for it.

3. Fire pump, diesel-fueled; Rule 285(2)(g); 40 CFR Part 60, Subpart IIII:

We walked from the main building to a small pump house, which contains the fire pump. It was not being operated, at this time. We were advised that it was installed in 2015, along with a water tank. We were informed that it is rated at 422 horsepower (hp), and that 1,000 hp is roughly around 10,000,000 Btu/hr. Therefore, it has less than the 10,000,000 Btu/hour maximum rated heat input capacity allowed under the Rule 285(2)(g) exemption for internal combustion engines. The fire pump is diesel fueled, and we were shown the diesel fuel tank, which is equipped with containment, in the event of a spill.

The fire pump is subject to 40 CFR Part 60 Subpart IIII; *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*. We were shown recordkeeping done to comply with IIII. They operate the unit weekly, as shown on the records which we reviewed. They also have a form for a visual check, we were told. In 2015, the unit was reported to have run about 4 hours, and in 2016 to have run about 27 hours. On average, this unit runs about 2-3 hours per month, we were informed, and over the course of a year it is well below the 100 hours of operation per year maximum allowed by Subpart IIII. We were informed that 50 out of the 100 hours per year are allowed for non-

emergency operation.

4. Emergency generator, natural gas-fueled ; Rule 285(2)(g): 40 CFR Part 63, Subpart ZZZZ:

We were advised that the generator is only operated one time per year, and is disconnected the rest of the year. It is natural gas-fueled, and was manufactured by Detroit Diesel. It was not running, at the time of the inspection. We were told that at 515 horsepower, it is below 10,000,000 Btu/hour maximum rated heat input capacity. Therefore, it satisfies the exemption criteria for Rule 285(2)(g).

We were told that it is subject to 40 CFR Part 63, Subpart ZZZZ; *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, also known as the RICE MACT. However, we were informed that it is not subject to 40 CFR Part 60, Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*, because it was installed pre-2006. We were shown a spreadsheet for generator recordkeeping.

5. Paint booth; Rule 287(2)(c):

The paint booth has been removed. We saw the shell of the freestanding room which once housed it, out on the plant floor.

6. Wash booth; Rule 290:

The plumbing for the maintenance wash booth which existed still in 2010 has been removed.

7. Natural gas dock heaters; Rule 282(2)(b)(i):

There are a number of natural gas dock heaters at the plant, we were shown. These would be far below the maximum allowed 50,000,000 Btu/hour maximum rated heat input which is the exemption threshold for Rule 282(2)(B)(i).

Miscellaneous:

It was explained that in a walled off area of the plant, an outside company does work for GM, for kitting parts.

While outside the main building, we walked to the plant's cooling towers, which were abandoned in place. We then went up onto the plant roof. Numerous stacks and air handling equipment were still in place, from the plant's prior use as a manufacturing facility. Neither odors nor visible emissions were detected. We were advised that the only operating equipment on the roof is a chiller.

Conclusion:

No instances of noncompliance were found, nor were there any areas of concern.

NAME



DATE

9/30/2017

SUPERVISOR

