D000070504

DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: On-site Inspection

D369972564		
FACILITY: MCLAREN FLINT		SRN / ID: D3699
LOCATION: 401 S. BALLENGER	HWY, FLINT	DISTRICT: Lansing
CITY: FLINT		COUNTY: GENESEE
CONTACT: Timothy Lipka, Director of Facilities Maintenance		ACTIVITY DATE: 07/10/2024
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced inspection	on and investigation of a 7/8/2024 complaint, as we	I as review of records, conducted as a Partial
Compliance Evaluation activity, pa	rt of a Full Compliance Evaluation activity.	
RESOLVED COMPLAINTS:		

On July 10, 2024, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) conducted an unannounced inspection and complaint investigation of McLaren Flint. The AQD subsequently reviewed facility records. These activities were Partial Compliance Evaluation (PCE) activities, conducted as part of a Full Compliance Evaluation (FCE) activity.

The complaint, received on July 5, 2024, was as follows:

C-24-01361: The complainant reported an odor and a visible haze in the air at 10:00 AM on July 4, 2024. They did not know of a possible source, but neighbors told them it was a medical waste incinerator at McLaren Flint.

Facility environmental contact:

- Timothy Lipka, Director of Facilities Maintenance; 810-342-2552; Timothy.Lipka@mclaren.org
- Robert Conlen, Supervisor of Facilities; 810-342-2196; <u>Robert.Conlen@mclaren.org</u>

EGLE, AQD contact: Dan McGeen, Inspector; 517-648-7547; McGeenD@michigan.gov

Facility description:

McLaren Flint is a teaching hospital that operates three dual-fired boilers (natural gas and diesel), four diesel-fired emergency generators, and several pieces of natural gas-fired miscellaneous equipment for space and water heating.

Emission units:

Emission Unit* ID	Emission Unit Description	Permit to Install (PTI) No., or Michigan Air Pollution Control (MAPC) Rule, and Federal Requirements	Compliance Status
EUBOILER01	Cleaver-Brooks Springfield, model D52, natural gas and fuel oil fired boiler rated at 52 MM BTU/hr heat input. 2428 ft ² , installed 5-13-69.	Installed in 1969 as exempt under MAPC Rule 336.33(f)	Compliance/ not operating

EUBOILER02	Cleaver-Brooks Springfield, model 200D52B, natural gas and fuel oil fired boiler rated at 52 MM BTU/hr heat input. 2428 ft ² , installed 8-26-69.	Installed in 1969 as exempt under MAPC Rule 336.33(f)	Compliance/ not operating
EUBOILER3	Cleaver-Brooks Springfield, model D-34, natural gas and fuel oil fired boiler rated at 25.4 MM BTU/hr heat input.	PTI 55-17; 40 CFR Part 60, Subparts A and Dc	Compliance, operating
EUEMGEN01	Diesel-fired emergency generator rated at 400 kW power output.	MAPC Rule 285(2)(g)	Compliance/not operating
EUEMGEN02	Diesel-fired emergency generator rated at 275 kW power output.	MAPC Rule 285(2)(g)	Compliance/not operating
EUEMGEN03	Diesel-fired emergency generator rated at 600 kW power output.	MAPC Rule 285(2)(g)	Compliance/not operating
EUEMGEN04	Diesel-fired emergency generator rated at 511 kW power output.	MAPC Rule 285(2)(g)	Compliance/ operating
EUDTANK01	10,000-gallon diesel fuel storage tank for all 3 boilers and the first 3 emergency generators.	MAPC Rule 284(2)(d)	Compliance/not operating
EUDTANK02	3,000-gallon diesel fuel tank for EUEMGEN04.	MAPC Rule 284(2)(d)	Compliance/not operating

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

Flexible groups:

Flexible Group ID	Flexible Group Description	Compliance status

https://intranet.egle.state.mi.us/maces/WebPages/ViewActivityReport.aspx?ActivityID=24... 9/30/2024

FGFACILITYAll process equipment source-wide including
equipment covered by other permits, grand-fathered
equipment and exempt equipment.Compliance

**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:

McLaren Flint has an opt-out PTI, which restricts the emissions of nitrogen oxides (NOx) and carbon monoxide (CO) to levels below the major source threshold of 100 tons per year (TPY) for any criteria pollutant.

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 area source for Hazardous Air Pollutants (HAPs), because it was not considered to have a PTE of 10 TPY or more for a single HAP, nor to have PTE of 25 TPY or more for combined HAPs.

EUBOILER03 is the only process specifically permitted by PTI 55-17. It was installed in 1992. EUBOILER01 and EUBOILER02 were installed as exempt in 1969 under MAPC Rule 336.33(f).

EU-BOILER3 Is subject to the Federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc- Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This is due to paragraph 60.40c(a) stating the regulation applies to "each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989. EU-BOILER3 was installed in 1992.

EU-BOILER1 and EU-BOILER2 are not subject to 40 CFR Part 60 Subparts A and Dc. This is due to paragraph 60.40c(a) stating the regulation applies to "each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989. EU-BOILER1 and EU-BOILER2 were both installed in 1969.

EU-BOILER1, EU-BOILER2, and EU-BOILER3 are not subject to the 40 CFR 63 Subpart JJJJJJ-NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources. This is due to paragraph 63.11195(e) as "gas fired" boilers which is defined in 63.11237. "Gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year."

EU-EMGEN1, EU-EMGEN2, EU-EMGEN3, and EU-EMGEN4 are not subject to 40 CFR 63 Subpart ZZZ-NESHAP due to paragraph 63.6585(f)(3) which excludes classification of "institutional emergency stationary RICE located at an area source of HAP emissions"

EU-EMGEN4 is subject to 40 CFR Part 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines due to being a 2007 model year emergency CI ICE <30I/cyl, constructed after July 11, 2006, and manufactured after April 1, 2006.

McLaren Flint has never had a PTI for a medical waste incinerator, and no medical waste incinerator has ever been found during an AQD inspection at the facility.

Fee status:

The facility is a Category E fee source, because it has an opt-out permit.

The facility reports annual emissions from EUBOILER03 to MiEnviro.

Location:

- Address: 402 S. Ballenger Highway, Flint, 48532, Genesee County.
- Description: The facility has medical offices and commercial businesses to the west as well as south. To the immediate east is a dense residential neighborhood. To the north is Mott Park Recreation Area, through which runs the Flint River.

Odor evaluation:

Prior to arrival at the site, an odor evaluation was conducted.

- Time of odor evaluation: 1:49 PM.
- Weather conditions: Light rain and 64 degrees F, with wind out of NNE at 15 miles per hour (mph).
- Route taken: Ballenger Hwy. and Beecher Rd. southwest of facility, and through residential areas east of facility.
- Odors detected: None.

Arrival:

AQD was represented by inspector Dan McGeen. This was an unannounced inspection.

- Time of arrival: 2:3 PM.
- Weather conditions: Light rain and 64 degrees F, with wind out of NNE at 15 miles per hour (mph).
- Odors detected: None.
- Visible emissions observed: 0% opacity from boiler exhaust stack.

D. McGeen checked in at the front desk, and provided his credentials, per the AQD procedures. He was introduced to Timothy Lipka, Director of Facilities Maintenance. He explained the reason for the visit, to conduct an inspection and to investigate a complaint reporting smoke and odors from an alleged medical waste incinerator.

T. Lipka explained that this hospital has never had a medical waste incinerator, which is consistent with the AQD never finding an incinerator at this site and never receiving a permit to install application for one. T. Lipka noted that on 7/4/2024, the day of the alleged haze and odors, the hospital was not operating any of its emergency generators.

He accompanied D. McGeen for part of the inspection, while James, an HVACR technician, accompanied D. McGeen to the room where the boilers and generators are located.

Inspection:

In the warm months, a single boiler is operated, while two boilers are operated during the winter, the AQD was informed. Boiler 3, or EUBOILER03, was the one boiler in use this day. It was firing natural gas, per the attached photo 001 taken through a sight glass. A natural gas line ran to the boiler, and a valve was in the open position, per the attached photos 002 and 003.

None of the 4 emergency generators were running at this time. Each one is said to operate:

- 1/2 hour per month for operational readiness.
- 4 hours once per year for a load test.

Inspection of the boiler and generator room found no evidence of any medical waste incinerator, past or present.

A compliance check with PTI 55-17 special conditions is below:

EUBOILER03 DESCRIPTION: Cleaver-Brooks Springfield, model D-34, natural gas and fuel oil fired boiler rated at 25.4 MM BTU/hr heat input.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: NA

Compliance check with special conditions (SC) of PTI 55-17, EUBOILER03

PTI 55-17 SC	Requirement	Comments	Complies?
EUBOILER03, SC I.1	NOx emissions limited to 9.92 TPY based on a 12- month rolling time period, as determined at the end of each calendar month.	The facility met this requirement. For 2023, NOx emissions were 6.1 tons, and are tracked on a 12- month rolling basis.	Yes
EUBOILER03, SC II.1	The natural gas usage for EUBOILER03 shall not exceed 180,000,000 standard cubic feet per 12-month rolling time period as determined at the end of each calendar month.	The facility met this requirement. For 2023, EUBOILER3 used 46,418.4 cubic feet of gas.	Yes
EUBOILER03, SC II.2	The permittee shall burn only diesel fuel in	The facility met this requirement.	Yes

EUBOILER03 with the maximum sulfur content of 15 ppm (0.0015 percent).	Please see attached fuel supplier certification for No. 2 Ultra Low Sulfur Diesel (ULSD) fuel (15 ppm Sulfur max.).	
The permittee shall burn only natural gas or diesel fuel (No. 2 fuel oil) in EUBOILER03.	The facility met this requirement.	Yes
The permittee shall burn fuel oil only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year for EUBOILER03.	The facility met this requirement, as described to the AQD, by using diesel fuel about 2 hours in EUBOILER03, during 2023.	Yes
The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage in EUBOILER03 in standard cubic feet.	The facility met this requirement with a monitoring device that reads natural gas usage for all 3 boilers. The AQD asked on 9/24/2024 how they calculate gas used by EUBOILER03.	Yes
NA	NA	NA
Records shall be maintained on file for a period of five years.	The facility met this requirement.	Yes
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EUBOILER03, SC VI.1	The permittee shall complete all required calculations per Appendix A or in an alternative format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition	The facility met this requirement, using EPA WebFire and State/Local/Tribal government emission factors for reporting to MiEnviro.	Yes
EUBOILER03, SC VI.2	The permittee shall keep, in a satisfactory manner, monthly and 12 month rolling time period, NOx emission calculation records for EUBOILER03, as required by SC I.1. The permittee shall keep all records on file at a location approved by the AQD district supervisor and make them available to the Department upon request	The facility stated that logs are kept and calculations can be made from log data.	Yes
EUBOILER03, SC VI.3	The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period, natural gas fuel usage records for EUBOILER03, as required by SC II.1. The permittee shall keep all records on file at a location approved by the AQD district supervisor and make them available to the Department upon request.	The facility met this requirement, stating that records are kept with a 12-month rolling format.	Yes
EUBOILER03, SC VI.4	The permittee shall keep, in a satisfactory manner, fuel supplier certification	The facility met this requirement. Please see	Yes

	records or fuel sample test data, for each delivery of diesel fuel oil used in EUBOILER03, demonstrating that the fuel meets the requirements of 40 CFR 60.42c(d). The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil.	attached fuel supplier certification for No. 2 ULSD fuel (15 ppm Sulfur max.).	
EUBOILER03, SC VI.5	The permittee shall maintain a record indicating all fuels that have been used in EUBOILER03 in the past five years. The permittee shall keep all records on file and make them available to the Department upon request	The facility met this requirement, as described to the AQD.	Yes
EUBOILER03, SC VI.6	If diesel fuel is used in EUBOILER03 during a natural gas shortage or curtailment, the permittee shall keep records from the natural gas utility to document the shortage or curtailment. The permittee shall keep all records on file and make them available to the Department upon request.	This is currently NA, as there has been no natural gas shortage or curtailment.	Yes
EUBOILER03, SC VI.7	The permittee shall keep records of any time period when solid or liquid fuels, as defined in 40 CFR 63.11195, are combusted in EUBOILER03. This record shall indicate the type of	The facility met this requirement, confirming that records are kept and there is a PM schedule for running the boilers on diesel fuel.	Yes

	fuel used, reason for use, time of use, and the duration in hours. The permittee shall keep all records on file and make them available to the Department upon request.		
EUBOILER03, SC VI.8	The permittee shall keep, in a satisfactory manner, calendar year records of the total number of hours that EUBOILER03 operated burning liquid fuel for purposes of periodic testing, maintenance, or operator training. The permittee shall keep all records on file at a location approved by the AQD district supervisor and make them available to the Department upon request.	The facility met this requirement, stating that records are kept and EUBOILER03 burned liquid fuel about 2 hours in 2023.	Yes
EUBOILER03, SC VII.	NA	NA	NA
EUBOILER03, SC VIII.	NA	NA	NA
EUBOILER03, SC IX.1	The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to EUBOILER03.	The facility met this requirement by complying with both of the following: 40 CFR 60.42c(d), which states in part, "no owner or operator of an affected facility that combusts oil shall combust oil	Yes

	in the affected facility that contains greater than 0.5 weight percent sulfur."	
	40 CFR 1090.305, which lists ULSD standards.	

FGFACILITY

POLLUTION CONTROL EQUIPMENT: NA

Compliance check with special conditions (SC) of PTI 55-17, FGFACILITY

PTI 55-17 SC	Requirement	Comments	Complies?
FGFACILITY, SC I.1	CO emissions limited to 65 TPY** based on a 12- month rolling time period, as determined at the end of each month.	The facility met this limit, with facility- wide CO emissions calculated at 5.07 tons.	Yes
FGFACILITY, SC I.2	NOx emissions limited to 86 TPY** based on a 12- month rolling time period, as determined at the end of each month.	The facility met this limit, with facility- wide NOx emissions calculated at 16.9 tons.	Yes
FGFACILITY, SC II.	NA	NA	NA
			Yes

FGFACILITY, SC III.1	The permittee shall not burn diesel fuel (No. 2 fuel oil) for more than 500 hours per 12-month rolling time period in any of the boilers as determined at the end of each calendar month.	The facility appeared to meet this requirement. On 9/30/2024, they stated that each of the 3 boilers burned diesel fuel for about 2 hours in 2023.	
FGFACILITY, SC IV.	NA	NA	NA
FGFACILITY, SC V.	NA	NA	NA
FGFACILITY, SC VI.	Records shall be maintained on file for a period of five years	Please see below.	See below
FGFACILITY, SC VI.1	The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period, CO and NOx emission calculation records for FGFACILITY, as required by SC I.1 and SC I.2. The permittee shall complete the calculations per Appendix A or in an alternative format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month. The permittee shall keep all records on file at a location approved by the	The facility had not previously calculated CO and NOx emissions for FGFACILITY, but has come into compliance.	Yes

	AQD district supervisor and make them available to the Department upon request.		
FGFACILITY, SC VI.2	The permittee shall keep records of the total number of hours that each boiler at the facility is operated using diesel fuel for each month and 12- month rolling time period. These records shall include the justification for operating using diesel fuel. The permittee shall keep records on file at a location approved by the AQD district supervisor for at least five years and make them available to the Department upon request.	The facility met this requirement, stating that records are kept as part of their PM schedule.	Yes
FGFACILITY, SC VII	NA	NA	NA
FGFACILITY, SC VIII.	NA	NA	NA
FGFACILITY, SC IX.	NA	NA	NA

**To establish the source-wide potential to emit of FGFACILITY for PTI 55-17, emissions from all equipment in FGFACILITY were included in the calculations. The potential emissions from boilers at the facility were calculated using fuel restrictions in EUBOILER03, the equipment capacity and diesel fuel restriction in FGFACILITY, and emissions from emergency engines were calculated at 500 hrs/yr. For all other

exempt equipment, the potential emissions of CO and NOx were calculated based on each piece of equipment operating at its maximum capacity for all hours of the year.

APPENDIX A

Emissions Calculations

The permittee shall demonstrate compliance with emission limits by performing emissions calculations using the format below or an alternative acceptable to the AQD District Supervisor:

Boiler Emissions

Annual emissions from natural gas (tons) = (Annual natural gas usage, MM scf) * (Emission factor, lbs/MM scf) *

(ton/2,000 lbs)

Annual emissions from diesel (tons) = (Annual diesel fuel usage, hrs) * (Emission factor, lbs/MM Btu) *

(0.138 MM Btu/gal diesel) * (Diesel consumption rate, gal/hr) * (ton/2,000 lbs) Emergency Generator

Emissions

Annual emissions from diesel (tons) = (Annual diesel fuel usage, hrs) * (Emission factor, lbs/MM Btu) * (Diesel

consumption rate, gal/hr) * (ton/2,000 lbs)

Miscellaneous Natural Gas-Fired Equipment

Annual emissions from natural gas (tons) = (Annual natural gas usage, MM scf) * (Emission factor, lbs/MM scf) *

(ton/2,000 lbs)

The permittee shall use emission factors contained in the most recent AP-42 (Compilation of Air Pollutant Emission Factors) or the most recent FIRE (Factor Information Retrieval) database if vendor or stack testing data is not available. If emission factors from other sources are used, the permittee shall obtain the approval of the AQD District Supervisor before using the emission factors to calculate emissions.

(End of compliance check.)

Post-inspection follow up:

- 7/11/2024: T. Lipka emailed to D. McGeen the SDS for the Ultra Low Sulfur Diesel (ULSD).
- 9/24/2024: The AQD called McLaren Flint's Director of facilities Robert Conlen with questions on boiler requirements in PTI 55-17 and emailed a list of the questions.
- 9/25/2024: The AQD emailed to R. Conlen and T. Lipka emission factors for calculating CO and NOx emissions for FGFACILITY.
- 9/30/2024: R. Conlen provided FGFACILITY CO and NOx emission calculations, resolving that compliance concern.

Compliance concerns:

• The facility had not been keeping records of CO and NOx emissions for FGFACILITY, as of the 7/10/2024 inspection. This did not comply with PTI 55-17, FGFACILITY SC VI.1, but McLaren Flint has since come into compliance. A Violation Notice (VN) will not be sent.

Conclusion:

The only compliance concern was a lack of CO and NOx calculations for FGFACILITY as required by PTI 55-17. However, the facility has come into compliance as of the writing of this report and a VN will not be sent. There was no evidence to support the complaint alleging the existence of a medical waste incinerator at McLaren Flint.



Image 1(001) : Natural gas combustion viewed through sight glass.



Image 2(002) : Natural gas valve on gas line to boiler in open position.



Image 3(003) : Two natural gas valves on gas line to boiler in open position.

NAME Dandt Gen

DATE 9/30/2024 SUPERVISOR RB