

M4803

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

M480373842

FACILITY: GSA - Federal Building & Parking Garage		SRN / ID: M4803
LOCATION: 985 MICHIGAN AVE, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT:		ACTIVITY DATE: 09/25/2024
STAFF: Jill Zimmerman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY 2024 Inspection		
RESOLVED COMPLAINTS:		

SCHEDULED INVESTIGATION REPORT
(PCE for an FCE source)

Date of Investigation: September 25, 2024

Date of Report: September 25, 2024

Source: GSA – Federal Building & Parking Garage

SRN: M4803

Address: 985 Michigan Ave., Detroit, Michigan 48226

Subject: Fiscal Year 2024 Inspection (Off-Site)

Author: Jill Zimmerman and Jeff Korniski, Air Quality Division, Detroit District Office

Facility Background:

The General Services Administration – Federal Building & Parking Garage (GSA) at 985 Michigan Ave. in Detroit is a U.S. government building housing various federal agencies. GSA operates four 19.3 million Btu per hour (MMBtu/hr) emergency diesel generators, one 2.24 MMBtu/hr diesel fire pump, four 5 MMBtu/hr natural gas boilers, and one 1,200 Btu per hour natural gas boiler. The four emergency generators operate under Permit to Install (PTI) No. 216-98A, issued 7/15/2021, while the remaining equipment operate under exemptions from the PTI program.

GAS formerly operated four 29.3 MMBtu/hr natural gas fired boilers, with fuel oil backup, at this location. The four emergency generators and four boilers were issued PTI No. 216-98 on 2/15/2000 to provide a synthetic minor NOx limit for purposes of the Title V program. GSA applied for the amended PTI because these larger boilers have been removed and replaced by the smaller, natural gas only, boilers.

Summary of Off-Site Inspection and Compliance Status:

As an existing synthetic minor Title V opt-out source, GSA is scheduled for a full compliance evaluation (FCE) within the 2024 fiscal year; the last FCE was conducted in 2019. Diminished resources owing to temporary staff vacancies resulted in this being assigned as an off-site inspection for this fiscal year. GSA was considered an appropriate candidate for an off-site inspection because, although an opt-out, emissions have historically been well below 50% of the major source thresholds.

At the time of the 2019 inspection, GSA was operating under the Title V opt-out PTI 216-98. Since then, the four 29.3 MMBtu/hr natural gas fired boilers, with fuel oil backup, have been removed and PTI 216-98A issued to only cover the four 19.3 MMBtu/hr emergency diesel generators. The 2.24 MMBtu/hr diesel fire pump is exempt under Rule 285(2)(g) because the heat input capacity is less than 10 MMBtu/hr. Each of the four 5 MMBtu/hr natural gas fired boilers and the 1,200 Btu per hour natural gas boiler are exempt under Rule 282(2)(b)(i) because each heat input capacity is less than 50 MMBtu/hr.

PTI 216-98A limits NOx emissions from each emergency generator to 120.1 pounds per hour (SC I.2). Collective annual NOx emissions from all four generators are limited to 43.5 tons (SC I.1) by restricting collective annual No. 2 fuel oil usage to 100,000 gallons (SC II.2). The NOx emissions special conditions are based on a NOx emissions factor of 0.87 pounds per gallon and a No. 2 fuel oil heating value of 140,000 Btu per gallon.

Although Rule 205 is not identified in the permit as an underlying applicable requirement for SCs I.1 and II.2, the presence of the conditions act as a synthetic minor limitation with respect to the Title V program for the equipment currently installed. Absent these conditions, the potential to emit (PTE) NOx from each emergency generator calculates

to 120.1 pounds per hour, equivalent to over 500 tons per year, which exceeds the 100 ton per year Title V major source threshold.

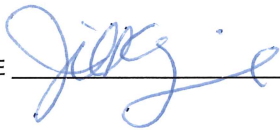
The AQD typically receives an annual emissions report from GSA. In 2022, the facility reported a total of 3,970 gallons of No. 2 fuel oil combusted in the four emergency generators during the year, resulting in 0.90 tons of NOx and with lower emissions reported for each of the other criteria pollutants. Reported emissions and fuel usage from the emergency generators have been consistent throughout the years and are representative of the periodic readiness testing conducted on each emergency generator within each year. NOx emissions and fuel usage are in compliance with the limits in SCs I.1 and II.2.

The AQD did not receive this facility's annual air emissions report for calendar year 2023 and suspects the lack of a submission is due to the transition from the former MACES emissions reporting system to the new SLEIS emissions reporting system. The AQD will contact GSA through an on-site inspection in the next fiscal year to resolve the issue.

Conclusion:

At the time of the investigation the General Services Administration – Federal Building & Parking Garage (GSA) appears to be in compliance with applicable federal and State air regulatory requirements. The annual emissions report was not received from GSA for 2023 and appears to be a transition cost of moving to new annual emissions database. The AQD will attempt to resolve this issue in the next fiscal year.

NAME



DATE

10/24/24

SUPERVISOR

JK