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

M181259477

FACILITY: ASCENSION ST. JOHN HOSPITAL		**SRN / ID:** M1812
LOCATION: 22101 MOROSS RD, DETROIT		**DISTRICT:** Detroit
CITY: DETROIT		**COUNTY:** WAYNE
CONTACT: Salvatore Asaro , Director of Facilities Services		**ACTIVITY DATE:** 08/24/2021
STAFF: Jorge Acevedo	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: On site inspection		
RESOLVED COMPLAINTS:		

COMPANY NAME **:Ascension St. John Hospital**

FACILITY ADDRESS **:22101 Moross, Detroit, MI 48236**

STATE REGISTRAT. NUMBER **: M1812**

SIC CODE **: 8062**

EPA SOURCE CLASS **: B**

EPA POLLUTANT CLASS **: O**

LEVEL OF INSPECTION **: PCE**

DATE OF INSPECTION **: 8/24/21**

TIME OF INSPECTION **: 10:00 AM**

DATE OF REPORT **: 9/1/21**

REASON FOR INSPECTION **: Scheduled**

INSPECTED BY **: Jorge Acevedo**

PERSONNEL PRESENT **: Sal Asaro, Nicole Harrison, and Bahi Habib**

FACILITY PHONE NUMBER **:313-343-3881**

FACILITY FAX NUMBER **:313-343-7656**

FACILITY BACKGROUND

Ascension St. John Hospital is a general hospital providing medical and emergency care. The facility houses boilers and emergency generators, which are of an interest to the Air Quality Division.

INSPECTION NARRATIVE:

On August 24, 2021 , I conducted a scheduled inspection of Ascension St. John Hospital. I arrived at the hospital at 10:AM. This was a follow up inspection due to the fact that St. John Hospital received a Violation Notice last year. I met with Sal Asaro, Director of Facilities Services, Nicole Harrison (313-550-5633), Supervisor of Facilities, and Bahi Habib(313-882-0199), Facility Consultant. Mike Pruss, Supervisor Maintenance, Engineering and Maintenance, retired since the last inspection. The purpose of my visit was to conduct an inspection of the facility to determine the facility's compliance with the Clean Air Act, the Natural Resources and Environmental Protection Act (NREPA), Act 451, Part 55, and Permit to Install 313-06. St. John Hospital operates boilers and generators, which are permitted by the State of Michigan.

We sat down in a conference room and the representatives from Ascension St. John Hospital provided me with the records that are required by the Permit to Install. The records, I said, would be reviewed more closely, but appeared to be accurate. I suggested to the staff that they keep a log of how many boilers are operating every day as there is a condition in the permit that limits the amount of boilers operating at any one time. I asked about the sulfur content of the fuel oil they received, and Ms. Harrison explained that they would be getting a new shipment in the near future and the past record received was the most recent shipment and the information in that shipment would be the most accurate. The facility uses ultra low sulfur diesel for the fuel oil so that would easily meet the requirement in their permit.

After our conversation, Ms. Harrison and Mr. Habib accompanied on the inspection. We proceeded to the room where the boilers were housed. There were four Clayton Model EOG-604 boilers. Each one had a maximum heat input capacity of 25 million BTU/hr. They were installed on July 7, 1998. The boilers are run on natural gas, however, they have the ability to burn # 2 fuel oil. 99% of the time, the boilers are run on natural gas. They typically run the boilers a couple hours a year on # 2 fuel oil. In the past it was explained that they only need to run two out of the four boilers to provide enough steam and hot water to the hospital. The typical load required for the boilers is 7000 lbs steam/hour in the summer and 35000 lbs steam/hour in the winter. At the time of my inspection, one boilers was in operation. The boilers are maintained two times a year and are run on fuel oil once a year to make sure they maintain the ability to fire on fuel oil.

After inspecting the boilers, Ms. Harrison showed me the area where the Hospital installed a portable generator for a temporary construction project. She provided information on the portable generator but did not anticipate it being there much longer. The generator is considered temporary and portable, but AQD staff will follow up to determine the date it is removed. We went into another area where generators were housed. There were no new additions to the generators that were on site the last time I was on site. St. John Hospital applied in 2006 for an opt-out permit because it planned on installing two new emergency generators to add to the existing eight. One was installed and is known as engine #9. The other generator in PTI 313-06(identified as engine #10) was never installed. I asked for hours that were on the meters. I did receive an email later that day from Ms. Harrison with the generator hours.

#8	**1098**
#West	**1552**
#East	**1572**
North Pav	**356.1**
PB1	**1575**
North	**2113**
#7	**1130**

Comparing the hours to the last inspection, the engines were run in a minimal fashion and operating in a emergency generator capacity. PB1 was decommissioned and has not operated since 1999. Many of the generators were installed in the 1970s and 1980s. The newest one was installed in 2007.

The facility at one point in time did operate ethylene oxide sterilizers. Several years back, the hospital replaced the units with units that use hydrogen peroxide to sterilize medical equipment. After the inspection, I sat down with the Hospital staff and said I would review the records and get back with them if I had any additional questions. I left the facility at 11:15AM.

COMPLAINT/COMPLIANCE HISTORY:

There has not been any citizen complaints registered against St. John Hospital & Medical Center.

OUTSTANDING CONSENT ORDERS:

None

OUTSTANDING LOVs

A Violation Notice was issued on August 31, 2020. The violation has since been resolved.

OPERATING SCHEDULE/PRODUCTION RATE:

This facility operates 24 hours a day, 365 days a year.

PROCESS DESCRIPTION

St. John Hospital & Medical Center has four boilers on its premises which provide space heating and process steam. The boilers were installed in 1999. The boilers have the ability to burn both natural gas and #2 fuel oil. Natural gas is mainly used. The hospital also has eight diesel emergency generators throughout the hospital campus.

APPLICABLE RULES/PERMIT CONDITIONS:

40 CFR Part 60 Subpart Dc, NSPS for Small-Industrial-Commercial-Institutional Steam Generating Units

The fact that St. John Hospital uses natural gas as its primary fuel limits their requirements under this subpart. The main requirement is to keep track of fuel usage and if the source uses fuel oil, they will comply with the requirement by having the fuel certified by the supplier. I got natural gas usage records and copies of fuel oil shipments.

40 CFR 60, Subpart III- Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines.

Only one emergency generator(#9) was installed after 2006. EPA Certification was received on April 12, 2016 . Based on records kept on the generator, it qualifies under the definition of emergency generator.

Permit 313-06.

Issued November 30, 2006.

Compliance for FGENGINES is evaluated below.

SC 1.1- NOx emissions for the engines shall not exceed 21.8 TPY on a 12 month rolling time period as determined at the end of each calendar month.

SC 1.2 The sulfur content of the fuel oil shall not exceed 0.03 percent by weight.

Compliance- Fuel Shipment records show that fuel oil is less than 0.03 percent by weight Sulfur.

SC 1.3 Engines shall shall not operate for more than 500 hours per engine per 12-month rolling time period as determined at the end of each calendar month.

Compliance- Records were provided to show that hours have not exceeded 500 hours per engine.

SC 1.4 Facility shall monitor in a satisfactory manner the hours of operation for FGENGINES on a monthly basis.

Compliance- This issue was resolved since the last inspection. Records are kept and maintained on a monthly basis.

SC 1.5 Facility shall keep, in a satisfactory manner, monthly and previous 12-month NOx emission calculation records for the engines

Compliance- This issue was resolved since the last inspection. Monthly and 12 month NOx emission records are kept.

SC 1.6 Facility shall keep records of the sulfur content, in percent by weight, for each fuel shipment. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.

Compliance- Records of fuel shipments are kept.

SC 1.7 Facility shall keep, in a satisfactory manner, a written log of the monthly hours of operation of engines.

Compliance- This issue was resolved since the last inspection. Records are kept of hours.

Stack/Vent Restrictions- Compliance- Stack height and diameter were not measured, but but appeared to be correct. Engine 10 was not installed.

Compliance for the Boilers are evaluated below:

SC 2.1 NOx emissions for the boilers shall not exceed 43.3 tons per year on a 12 month rolling time period as determined at the end of each calendar month.

Compliance- This issue was resolved since the last inspection. Emission calculations are maintained on a monthly or 12 month rolling time period.

SC 2.2 Facility shall not operate more than three out of the four boilers at any one time.

Compliance- The facility operates no more than two boilers at a time. I suggested to the facility that a log be kept as stated by the permit. AQD will revisit this condition in the future.

SC 2.3 The facility shall fire only natural gas and No. 2 fuel oil in the boilers. Oil firing shall be limited to maximum 500 hours per boiler per year. Monthly records of natural gas and No. 2 fuel oil consumption per boiler shall be kept on file for a period of at least two years and made available to the Air Quality Division upon request.

Compliance- Fuel Oil and Natural gas are only fuels used. Fuel Oil has not been used since 2013.

SC 2.4 The facility 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 the boilers

Compliance- Records of natural gas usage are kept.

Stack/Vent Restrictions- Compliance- Stack height was not measured but appeared appropriate height.

Compliance for FGFACILITY is evaluated below:

SC 3.1 NOx emissions for the facility shall not exceed 89.5 tons per year on 12-month rolling time period as determined at the end of each calendar month.

Compliance- This issue has been resolved since the last inspection. Monthly and 12 month NOx emission calculations are being maintained.

SC 3.2 Facility shall keep, in a satisfactory manner, monthly and previous 12-month NOx emission records,

Compliance- This issue has been resolved since the last inspection. Records are being kept on monthly and 12 month rolling basis.

SC 3.3 Facility shall keep monthly and previous 12-month natural gas and fuel oil usage records in a format acceptable to the AQD District Supervisor, indicating the total amount of natural gas used, in cubic feet, and fuel oil used, in gallons, on a 12-month rolling time period basis.

Compliance- Records are kept of natural gas and fuel oil usage on a monthly and 12 month rolling basis.

SC 3.4 Facility shall keep, in a satisfactory manner, a written log of the monthly hours of operation of each emergency generator at the facility.

Compliance- This issue has been resolved since the last inspection. Records are kept of hours of operation.

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

N/A

MAERS REPORT REVIEW:

Pollutant	2020 Emissions(TPY)
CO	3.98
NOx	5.23

FINAL COMPLIANCE DETERMINATION:

At the time of the inspection the facility appears to be in compliance with their permit and applicable regulations.

NAME _____ DATE 9-1-2021 SUPERVISOR Dr. April L. Wendling