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

M003770704

FACILITY: MERCY HEALTH		**SRN / ID:** M0037
LOCATION: 1500 E SHERMAN BLVD, MUSKEGON		**DISTRICT:** Grand Rapids
CITY: MUSKEGON		**COUNTY:** MUSKEGON
CONTACT:		**ACTIVITY DATE:** 01/11/2024
STAFF: Scott Evans	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: On-site inspection to assess compliance with air quality rules and regulations.		
RESOLVED COMPLAINTS:		

Introduction

On January 11, 2024, State of Michigan Department of Environment, Great Lakes, and Energy Air Quality Division staff member Scott Evans (SE) conducted an on-site inspection of the Mercy Health facility located at 1500 E Sherman Blvd. in Muskegon, Michigan, to assess compliance with the requirements of Permit to Install (PTI) No. 20-06 and all other applicable air quality rules and regulations. Mercy Health is a hospital that operates multiple boilers for operations within the facility. These boilers are permitted for the use of fuel oil as a backup fuel source for use in emergency situations to ensure continued function of all hospital operations. This facility also has emergency generators and steam flash sterilizers on site.

Upon arrival at the facility, SE conducted an inspection of the facility exterior. There were no observed odors or visible emissions around the facility perimeter. Upon entering the facility, SE was greeted by Mark Keiser and Gerald Booth. After discussing the purpose of the visit, an inspection of the facility was conducted.

PTI No. 20-06

This permit was first approved on April 5, 2006. It outlines the following Emission Units (EUs) and Flexible Groups (FGs):

- EU-PRIMARYBOILER
- EU-STANDBYBOILER
- FG-BOILERS

FG-BOILERS

This flexible group includes both boilers. EU-PRIMARYBOILER consists of one 32.378 mmBtu/hr natural gas-fired boiler. EU-STANDBYBOILER consists of one 26.8 mmBtu/hr natural gas-fired boiler.

This FG has one emission limit which states that visible emissions (VEs) from EU-PRIMARYBOILER cannot exceed 20% while firing fuel oil. During the inspection it was discussed and no incidents of opacity during fuel oil use.

This FG has one material limit which states that the sulfur content of all fuel oil used cannot exceed 0.2% by weight. This was discussed and records of fuel oil used are maintained and can be provided upon request. These records are used for annual emissions reporting.

This FG has one testing requirement which requires that VE observations be taken within 60 days of full capacity operation when using fuel oil. During the inspection it was discussed that there have been no incidents of full capacity operation. The boilers have only been run for short periods on

fuel oil to ensure proper functionality and this is not done to a capacity that matches full hospital operations.

This FG has two monitoring requirements that state that a monitoring device that records natural gas and fuel oil usage must be installed in either EU. During the inspection the electronic monitors were observed and were functioning properly.

This FG has four recordkeeping requirements. The first states that the AQD must be notified of completed construction, installation, and startup of the permitted boilers. This was done by the facility in 2018 to address missing startup notifications. At this time, the facility is compliant.

The other recordkeeping requirements state that the facility must maintain fuel usage records for both permitted boilers as well as fuel supplier certification for all fuel oil. The facility was able to demonstrate this information properly. Additionally, these records are utilized during annual reporting.

This FG is required to have two stacks: one for each of the permitted boilers. While the stacks were observed, they were not measured for safety purposes. Both stacks appeared to be unaltered from previous inspections and appeared to meet the requirements of the permit.

NSPS

One boiler at this facility is subject to the New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart Dc. The requirements of this NSPS include notification of the AQD of startup of the boiler identified as EU-PRIMARYBOILER. Though this startup notification was initially not provided, notification was provided in 2018, bringing the unit into compliance with the requirements. This standard also has recordkeeping requirements, sulfur dioxide limit, and a requirement to conduct an opacity performance test. These requirements are encompassed within above requirements of PTI No. 20-06 and so compliance is demonstrated through compliance with permit requirements.

Exempt Equipment

This facility has gas-fired boilers, each with a heat capacity of 6 mmBtu that serve as small-scale water heaters. These units do not operate on fuel oil and are exempt from permitting requirements under Rule 282(2)(b)(i). These boilers are not subject to NSPS 40 CFR Part 60 Subpart Dc as they are less than 10 mmBtu in size.

This facility has four small emergency generators on site. As they are less than 10 mmBtu they are exempt from air permitting requirements under Rule 285(2)(g). These units are subject to NSPS 40 CFR Part 60 Subpart IIII. This requires that the engines meet Nitrous Oxides, Nonmethane Hydrocarbons, Carbon monoxide, and particulate matter requirements either through testing or EPA certification. The facility has previously demonstrated documentation of EPA certification for these units. The facility was also able to provide documentation from the fuel supplier that demonstrated that the used diesel fuel has a maximum sulfur content of 15 ppm, which is compliant with the NSPS. The units are also subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart ZZZZ, which requires that the engines adhere to the required NSPS, as was demonstrated.

This facility also operates many sterilizers on site. These sterilizers are all electric steam sterilizers. As such, all sterilizers at the facility are exempt from air permitting requirements under Rule 281(2)(i).

Conclusion

At the conclusion of this inspection the facility appeared to be compliant with all permitted requirements as well as all other applicable air qualities rules and regulations.

NAME Scott Evans DATE 1/31/2024 SUPERVISOR HH