

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

K127634985

FACILITY: DMC Sinai Grace Hospital		SRN / ID: K1276
LOCATION: 6071 West Outer Drive, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT:		ACTIVITY DATE: 06/09/2016
STAFF: Jorge Acevedo	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: Major
SUBJECT:		
RESOLVED COMPLAINTS:		

MICHIGAN DEPARTMENT OF
 ENVIRONMENTAL QUALITY
 AIR QUALITY DIVISION
 INSPECTION REPORT

COMPANY NAME :Detroit Medical Center- Sinai Grace Hospital
 FACILITY ADDRESS :
 STATE REGISTRAT. NUMBER :K1276
 SIC CODE :
 EPA SOURCE CLASS :
 EPA POLLUTANT CLASS :
 LEVEL OF INSPECTION :PCE
 DATE OF INSPECTION :06/09/16
 TIME OF INSPECTION :10:00 AM
 DATE OF REPORT :9/13/16
 REASON FOR INSPECTION :Scheduled Inspection.
 INSPECTED BY :Jorge Acevedo
 PERSONNEL PRESENT :
 FACILITY PHONE NUMBER :
 FACILITY FAX NUMBER :

INSPECTION NARRATIVE:

On June 9, 2016, I conducted a scheduled inspection of Sinai Grace Hospital. I arrived at 10:00 AM and met with Dennis Pletzke, Senior Project Manager, of Roncelli. Mr. Pletzke explained that he was a contractor working with the Hospital. I explained the purpose of the inspection and we sat in the lobby of the Hospital. I asked for a history of the site and Mr. Pletzke explained that Grace Hospital closed and that the current site was previously owned and operated at Mount Carmel Hospital. I explained that there had been no previous air quality inspections at the current site. I explained that generally, hospitals have boilers, generators, and sterilizers at the hospital. The sterilizers are usually ethylene oxide or peroxide or steam. I explained that during my records review of the facility, I found two permits for equipment at the hospital. One was a cogeneration engine and the other was a general permit for the ethylene oxide sterilizers. Mr. Pletzke explained that the cogeneration engine was removed years earlier and that he did not have access to the sterilizers to allow me to inspect them. He said he would forward me contact information for staff at the hospital so that I could schedule a future date to inspect the sterilizers. I asked for an inventory of the currently operating equipment. Mr. Pletzke explained that there were two boilers installed and two smaller ones would be installed in the near future. He said that they had already received state permits for the boilers

and city permits as well. I asked if they had applied for air permits and he said that their consultants were working on that and that they would know. He said that there were two generators installed as well which replaced two mobile generators. After our discussion, Mr. Pletzke accompanied me to the power house. I observed two Burnham Commercial Boilers rated at 700 HP. They were both operating at the time. They operate on natural gas and fuel oil. I observed the area where the 300 HP boilers will be installed. Mr. Pletzke showed me the area where the cogeneration engine once operated and I observed a concrete footing with a drainage grate. Mr. Pletzke showed me where the two generators were located. They run periodically throughout the year and are required to run a couple of hours a month per other hospital association rules. I then observed a 25000 gallon fuel oil tank. After observing the equipment, Mr. Pletzke said he would follow up with contact information for hospital staff to arrange an inspection of the sterilizers. Due to the reflection during the inspection, I was unable to get serial numbers for the boilers. Mr. Pletzke said he would follow up with me to get me the information for the boilers. The generators were locked so I was unable to enter and get nameplate information. Mr. Pletzke said he would follow up and get the information for me.

I completed my inspection and left the facility at 11:17 AM. On June 13 and July 7, 2016, I requested information regarding the installed boilers and generators and information regarding the boilers that were to be installed later in the year. I received partial information regarding the boilers and generators.

The 700 HP boilers heat input, based on information from the manufacturer's website, is 29.3 mmBTU/hr for natural gas and 28.4 mmBTU/hr for fuel oil. The 300 HP boilers heat input, based on information from the manufacturer's website, is 12.5 mmBTU/hr for natural gas and 12.2 mmBTU/hr for fuel oil. I received a copy of a certificate of conformity for the generator. The certificate was issued by the US Environmental Protection Agency (EPA) and this was issued for engines > 560 kw. Based on potential to emit calculations, the four boilers have SO₂ emissions over 100 Tons per Year. Also, the two 700 HP boilers have the ability to combust fuel. Therefore, they exceed the threshold provided by Rule 282, which is 20 million BTU/hr heat input when combusting fuel oil, and cannot be permit exempt. Rule 278 provides the criteria by which facilities must pass in order to claim an exemption under Rules 280 through 290. The installation of the four boilers and two generators constitute an activity and the air emissions should have been calculated prior to installing the equipment. Rule 210 provides that a facility shall apply for a Renewable Operating Permit within 12 months of becoming a major source. Sinai Grace Hospital installed the last of the four boilers in July 2016. Therefore, the Hospital has the option of applying for a Renewable Operating Permit by July 2017 or applying for a Permit to Install with enforceable limits to restrict to emissions less than the major source threshold.

Sinai Grace Hospital was issued a Violation Notice on September 1, 2016.

FACILITY BACKGROUND

Sinai Grace Hospital is a general hospital providing medical and emergency care. The facilities houses boilers, emergency generators and ethylene oxide sterilizers, which are of an interest to the Air Quality Division.

COMPLAINT/COMPLIANCE HISTORY

There has not been any citizen complaints registered nor violations issued against Sinai Grace Hospital.

OUTSTANDING CONSENT ORDERS

None

OUTSTANDING LOVs

None

OPERATING SCHEDULE/PRODUCTION RATE

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

PROCESS DESCRIPTION

Sinai Grace hospital has four boilers on its premises which provide space heating and process steam. The boilers were installed in 2015 and 2016. The boilers have the ability to burn both natural gas and #2 fuel oil. Natural gas is mainly used. The hospital also has two diesel emergency generators.

APPLICABLE RULES/PERMIT CONDITIONS:

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

All four boilers are above 10 mmBTU/hr heat input and were installed after June 1989.

40 CFR Part 60 Subpart IIII- NSPS for Stationary Compression Ignition (CI) Internal Combustion Engines

The two generators were installed after 2006.

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

N/A

MAERS REPORT REVIEW:

The facility will be fee subject in the future. The facility is subject to the NSPS for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Dc. As prescribed by Act 451, a facility subject to a New Source Performance Standard, is defined as fee subject.

FINAL COMPLIANCE DETERMINATION:

Sinai Grace Hospital installed equipment without applying for a Permit to Install. A Violation Notice was issued on September 1, 2016.

NAME 

DATE 9-13-16

SUPERVISOR W.M.