

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

M343134001

<b>FACILITY:</b> ST JOSEPH MERCY HOSPITAL		<b>SRN / ID:</b> M3431
<b>LOCATION:</b> 5301 E HURON RIVER DR, ANN ARBOR		<b>DISTRICT:</b> Jackson
<b>CITY:</b> ANN ARBOR		<b>COUNTY:</b> WASHTENAW
<b>CONTACT:</b> Pierre Gonyon , Service Delivery Leader/Environmental		<b>ACTIVITY DATE:</b> 03/30/2016
<b>STAFF:</b> Zachary Durham	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Scheduled, announced inspection of PTI 318-74C.		
<b>RESOLVED COMPLAINTS:</b>		

**Contact**

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**Purpose**

This was a scheduled, announced inspection of the facilities and equipment located at St. Joseph Mercy Hospital in Ann Arbor, MI. The facility holds active Permit to Install (PTI) 318-74C for boilers and emergency generators. All of the equipment was housed in a single building used to supply power and heat to the hospital. I arrived at about 1:00pm on 3/30/16 and met with Pierre Gonyon and Miles Selfridge.

**Background**

St. Joseph Mercy Hospital (St. Joe's) has been located at this location since 1977 and was previously located in Ann Arbor on N. Ingalls Street. Active PTIs 47-72I and 18-74I for medical waste incinerators were never located at the current hospital campus and were removed from the Ingalls site years ago. These PTIs should be voided.

This is a synthetic minor opt-out source for NO<sub>x</sub>, SO<sub>2</sub> and HAPs as described in the source-wide flexible group that limits these emissions to less than 90% of the major source threshold per Rule 205(3). It is minor for all other air pollutants.

The boilers at this facility meet the definition of natural gas fired boilers, and thus are not subject to 40 CFR 63 Subpart JJJJJ (6J) as long as they continue to meet this definition.

The emergency engines are subject to 40 CFR 60 Subpart IIII, which specifies fuel combusted must be 15ppm or below for Sulfur content.

This facility was last inspected by Glen Erickson on 5/15/2014 and was found in compliance.

**Compliance Evaluation****FGBOILERS**

This is the flexible group for three natural gas fired boilers with fuel oil backup. They facility only burns liquid fuel for testing or during periods of gas curtailment per 40 CFR 63 Subpart 6J. No boiler was tested on fuel oil for more than 48 hours during the past 12-month rolling time period. Attached is the most recent fuel drop bill, which includes the sale of 11,005 gallons of #2 ultralow sulfur diesel at a maximum sulfur content of 15ppm.

**FGENGINES**

This is the flexible group for four emergency backup rotating internal combustion engines (RICE) rated at 2000kW. These engines are meeting the requirements of 40 CFR 60 Subpart IIII by maintaining the engines

according to the manufacturer and only using fuel with a maximum sulfur content of 15ppm. During the past 12-month rolling time period the total amount of diesel burned in the engines was 3,403.7 gallons. Since the last inspection, no engine has run for more than 100 hours as observed on the non-resettable hour meters. The following are the updated generator hours and starts since installation on 1/1/07:

- Generator H1: 337.7 hours; 514 starts.
- Generator H2: 312 hours; 507 starts.
- Generator H3: 322.2 hours; 584 starts.
- Generator H4: 321.5 hours; 592 starts.

#### FGFACILITY

This is the flexible group that applies source-wide and identifies the emission limits for NO<sub>x</sub>, SO<sub>2</sub> and HAPs. It also contains a material limit for fuel units, which is the combined use of natural gas and fuel oil. Attached are the records for the last 12-month rolling time period with totals on a monthly and 12-month rolling time period. Emissions for the last 12 months are as follows:

- SO<sub>2</sub> = 0.09 tons vs. limit of 89.9 tpy
- NO<sub>x</sub> = 10.99 tons vs. limit of 89.9 tpy
- Total HAPs = 0.219 tons vs. limit of 22.4 tpy
- Total fuel units = 315,809.19 units vs. limit of 2,535,211 units

Also included in the attached record are fuel use from the boilers and engines, engine operating time, and each, individual HAP. Because aggregate HAPs are below the limit for an individual HAP, this indicates compliance for individual HAPs.

#### Summary

After arriving at the facility, Pierre, Miles and I conducted a pre-tour meeting in one of their conference rooms. I gave each of them a copy of the Environmental Inspections brochure and boiler MACT informational card. We discussed the three active permits the facility holds and Pierre indicated that the medical waste incinerators identified in PTIs 47-72I and 18-74I were never located at this site. I confirmed with him that these should be void. Then we began discussing PTI 318-74C.

Having identified the areas of the facility I would need to see, we headed into the facility to observe the equipment. Boiler 1 was down for inspection and repair. Boiler 2 was on standby. Boiler 3 was running at 16% capacity and producing about 18 KPPH steam with an economizer inlet temperature of 373°F.

The engines were separated in pairs. None of the engines were operating during the time of inspection, though they appeared to be in good condition. I observed the control panel on each engine and recorded their hours of operation and number of starts.

We then headed back to the conference room to wrap up the inspection. Pierre provided me with a copy of their emission spreadsheet and the most recent fuel purchase. The fuel was supplied by Marathon Petroleum Company.

#### Compliance Determination and Recommendations

I have determined that St. Joe's is in compliance with all federal and state regulations and conditions contained in PTI 318-74C.

I recommend that PTIs 47-72I and 18-74I be voided because the equipment has never been located at this facility and they do not operate an incinerator. ✓

NAME Fack Dunham

DATE 3/31/16

SUPERVISOR 