

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

M343125249

FACILITY: ST JOSEPH MERCY HOSPITAL		SRN / ID: M3431
LOCATION: 5301 E HURON RIVER DR, ANN ARBOR		DISTRICT: Jackson
CITY: ANN ARBOR		COUNTY: WASHTENAW
CONTACT:		ACTIVITY DATE: 05/15/2014
STAFF: Glen Erickson	COMPLIANCE STATUS: Compliance	
SUBJECT: Scheduled inspection of Title V synthetic minor opt-out.		SOURCE CLASS: SM OPT OUT
RESOLVED COMPLAINTS:		

Met with Pierre Gonyon, Service and Delivery Leader, Facility and Safety, and Bernie Hobrecht, Mechanical Systems Coordinator for St. Joseph Merch Health System-Ann Arbor to conduct a scheduled inspection, and to discuss their recent complaints of foul sewage odors periodically impacting their facility, allegedly coming from the nearby Ann Arbor Wastewater Treatment Plant(A2WWTP) .

We first went to the heating plant to inspect the 4 large diesel emergency generators, installed under PTI No. 318-74C ,which is a modification to their Title V synthetic minor opt-out permit, including their 3 natural gas/fuel oil-fired boilers. All 4 of the RICE are Cummins units of 2000 KW output capacity, and 2922 hp, with a maximum permitted fuel consumption of 136,000 gal/12-month rolling time period. Each RICE is limited in the permit to 876 hrs./12-mo. rolling period. ✓

2013 hrs. of operation for all 4 RICE = 163 hrs. / 12-month rolling time period. Total fuel consumption through the combined 4 RICE for 2013 was 5,440 gal.

Generator H1 = 259 hrs. since installation on 1-1-7. Number of starts since installation = 440. Total diesel fuel consumption since installation = 9075 gals.

Generator H2 = 234 hrs. since installation on 1-1-7. Number of total starts = 433. Total fuel consumption = 8446 gal.

Generator H3 = 249 hrs. since installation on 10-1-6. Number of total starts = 503. Total fuel consumption = 8774 gal.

Generator H4 = 249 hrs. since installation on 10-1-6. Number of total starts = 519. Total fuel consumption = 8724 gal.

Boiler No. 1 was operating at 16.5 Kph steam, while firing at 19%. Economizer inlet T = 324 deg. F. No VEs.

Boiler No. 2 was on hot stand-by.

Boiler No. 3 was down for maintenance.

All fuel oil consumed at this facility meets the 15 ppm maximum in fuel S content required for the Part 60, Subpart IIII NSPS that applies to the 4 diesel emergency generators.

Back at the engineering office conference room we discussed their record keeping for the permit and the recent area source of HAP Boiler NESHAP standard, 40 CFR, Part 63, Subpart JJJJJ(6J). Gonyon had been communicating with Christine Grossman, DEQ, Environmental Assistance Division and understands that St. Joe's boilers, which have the capability to fire natural gas or No. 2 fuel oil, are not subject to the provisions of 6J as long as:

"any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year."

All recordkeeping for facility appears complete and accurate, demonstrating compliance with their permit conditions.

Briefly discussed their recent experiences concerning sewage odor complaints, of March 21, 2014 and April 11, 2014, when sewage-type odors were observed both inside and outside the St. Joseph hospital and campus in the early morning hours, both at approximately 6-8:00 am. During both episodes the foul, sewage-type odor was observed in the parking areas outside the buildings, and then inside the hospital complex by staff, patients, and families of patients. Foul odors within the building were observed for about 30 minutes before dissipating.

Hobrecht had to leave the meeting around 10:00am for another meeting.

Around 10:30 am, both Gonyon and myself suddenly observed a strong, foul, sewage-type odor within the windowless conference room we were meeting in.

Paul Dobry, Energy Manager for St. Joe's came to the conference room to say that the hospital was being inundated with the wastewater plant sewage odor at this very moment. We proceeded to follow him out into the engineering office hallways. The odor was stronger in the hallways, and was intense enough, and foul enough for one to want to leave the area immediately. Quickly the engineering offices began receiving odor complaints from staff throughout the complex.

We went out the door from the engineering office hallway on the NE side of the building across the parking lot from the heating plant. The foul odor was slightly fainter outside than what I had observed within the conference room and hallway. The wind was low in speed, less than 5 mph, with a slightly westerly component, it appeared. It was slightly raining, also, with temperatures of about 60 deg. F.

I asked Dobry and Gonyon if we could go to the roof of the engineering building to observe where the air intakes were for that building. We made our way to the engineering building roof. The sewage-type odor was still observable on the roof near the west-facing air intakes, though again not as strong as inside the building, and also, slightly less intense as was the odor observed 10 minutes prior at ground level, outside the engineering building. Dobry and Gonyon indicated that this foul, sewage-type odor was the same odor that they had registered complaints with AQD about the A2WWTP on 3-21-14 and 4-11-14, most recently. They said that it comes on quickly, gets pulled into the air make-up units of the hospital complex, causing the same type of complaints from staff and patients/families, and then gradually dissipates over about 30 minutes.

The foul, sewage-type odor appeared to be of a nature of a combination of the odor of natural gas odorant and of dead fish. Based upon the recent frequency of this odor impacting the hospital complex, the unique, foul nature of this sewage-type odor, and the intensity of the odor that I observed today, which I would rate as a 4 on the Odor Scale: "Odor strong enough to cause a person to attempt to avoid it completely." ; I find this incident to represent a violation of Rule 901, which reads:

Rule 901 Air contaminant or water vapor, when prohibited.

Rule 901. Notwithstanding the provisions of any other department rule, a person shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, along or in reaction with other air contaminants, either of the following:

(a) Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.

(b) Unreasonable interference with the comfortable enjoyment of life and property.

I told them that they should follow their standard procedure and make a phone call to the on-shift foreman at the A2WWTP to alert them to the current foul, sewage-type odor impact at St. Joe's.

I told Dobry and Gonyon that I would go directly to the A2WWTP to investigate the source of this foul odor at St. Joe's, and if I could determine that it was associated with the operation of the A2WWTP, and/or its odor control equipment for the Residuals Handling Building, and covered by an air use permit to install under Rule 201, then I would begin enforcement actions to appropriately mitigate this unacceptable odor impact.

NAME GLEN ERICKSON

DATE 5-28-14

SUPERVISOR 