

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

M444538992

FACILITY: DETROIT MACOMB HOSPITAL		SRN / ID: M4445
LOCATION: 7733 E. JEFFERSON, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Rick DeBolt , Facility Manager		ACTIVITY DATE: 03/22/2017
STAFF: Katherine Koster	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Targeted 2017 Inspection		
RESOLVED COMPLAINTS:		

**REASON FOR INSPECTION:** Targeted Inspection  
**INSPECTED BY:** Katie Koster, AQD  
**PERSONNEL PRESENT:** Rick DeBolt, Facility Manager  
**FACILITY PHONE NUMBER:** 313-432-1410

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**FACILITY BACKGROUND**

Riverview Health and Rehab Center is located at 7733 E. Jefferson. It was formerly the site of St. John Riverview Hospital which closed in 2011. Riverview acquired the building the same year. Prior to that, it was known as Detroit Macomb Hospital. Riverview Health & Rehab Center Jefferson offers short-term rehabilitation and long-term skilled nursing care with many private or semi-private rooms for residents of all ages.

**COMPLAINT/COMPLIANCE HISTORY**

No complaints have been received against the facility.

**OUTSTANDING CONSENT ORDERS**

None

**OUTSTANDING LOVs**

None prior to this inspection.

**INSPECTION NARRATIVE**

AQD inspector, Katie Koster, arrived at Riverview Health and Rehab Center on 3/22/17 around 10:00 a.m. I was met by Mr. Rick DeBolt, facility manager. He explained that Riverview occupied the whole property except for the address at 7633 which is at the back of the building and belongs to Landmark. Landmark is not affiliated with Riverview Health.

We went to the basement of the facility. All equipment was already installed when Riverview purchased the property. Three Clayton steam generators were originally installed by the prior owners and Mr. DeBolt did not know the installation date. Riverview took #3 steam generator out of service about four years ago. Steam generator #1 and #2 heat hot water. There are heat exchangers in each patient room. Steam generators do not operate in the summer. Scheduled maintenance occurs yearly in October. The

two operating Clayton Steam Generators are each 250 HP and 9,085,213 BTU heat input.

The prior owners had also installed two emergency generators. One has since been removed by Riverview. The other generator was installed in 1984. There are two 10,000 gallon diesel tanks that serve the generator. Each are about 7,000 gallons full. Facility has not received any diesel fuel since purchasing the facility. Quarterly maintenance is performed by PM technologies. Based on the nameplate, the rating is 965 kW. It is an emergency generator, Cummins KTA-50-G. According to Mr. DeBolt, PM technologies runs a full load test monthly for a half hour. The last recorded reading of the non-resettable hour meter read 566.5 on 2/28/17.

There were boilers on site but they have been removed. He showed me where they had been located and the stack that had been in use.

Mr. DeBolt emailed the spec sheet for the generator to me (attached). The maximum fuel consumption rate (87.3 gallons per hour at 1800 rpm and 100% load), in conjunction with the heating value for diesel (140,000 BTU per gallon [AP-42, Appendix A]) were used to calculate a maximum heat input. The calculated heat input is 12.2 MMBtu/hr, which is greater than the PTI exemption value of 10 MMBtu/hr heat input. Therefore, the emergency generator is in violation of Rule 201 and requires a PTI. Rule 201 requires that a permit be obtained prior to installation, construction, operation, reconstruction, relocation, or alteration of any process or process equipment which may be a source of an air contaminant.

NOx PTE of all the fuel burning equipment:

Diesel equipment:  $12.2 \text{ MMBTU/hr input} * 4.41 \text{ lb/MMBTU input (AP 42 Table 3.3-1)} * 500 \text{ hours} = 26901 \text{ lbs} = 13.45 \text{ tons}$

Natural gas equipment:  $9.09 \text{ MMBTU/hr input} + 9.09 \text{ MMBTU/hr input} = 18.2 \text{ MMBTU/hr} * 100 \text{ lb NOX/1 MM cf /1020 SCF} = 1.78 \text{ lb/hr} * 8760 = 15630 \text{ lbs} = 7.82 \text{ tons}$

Total NOX PTE = 21.27 tons

#### APPLICABLE RULES/PERMIT CONDITIONS

At this time, I could not locate any existing permits for this SRN.

The two steam generators appear to be exempt per Rule 282(2)(b)(i) as they are each below 10 MMBTU/hr heat input and burn natural gas.

The two 10,000 gallon diesel tanks appear to be exempt per Rule 284(2)(d).

#### NSPS/MACTS/NESHAP

The emergency generator appears to be subject to the RICE MACT but since AQD has not accepted delegation of this MACT, conditions have not been evaluated in this report.

Regardless of the installation date, the steam generators do not meet the criteria for being subject to NSPS Dc as it applies to equipment with a minimum size of 10 MMBTU/hr.

#### APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS

N/A; the area around this facility appears to be paved roads and parking lots.

**MAERS REPORT REVIEW**

N/A; this appear to be a true minor source and not subject to MAERS reporting. At this time, AQD is not requiring MAERS or a Cat III fee for sources that are only subject to the RICE MACT.

**FINAL COMPLIANCE DETERMINATION**

Facility is not in compliance with Rule 201 as it appears that the generator needs a permit to install. A violation notice was issued.

NAME Kate Kosi

DATE 6/9/17

SUPERVISOR W.M.