

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

B753654694

FACILITY: HILLSDALE CITY OF PUBLIC UTILITIES		SRN / ID: B7536
LOCATION: 201 WATERWORKS AVE, HILLSDALE		DISTRICT: Jackson
CITY: HILLSDALE		COUNTY: HILLSDALE
CONTACT: Chris McArthur , Director		ACTIVITY DATE: 08/26/2020
STAFF: Brian Carley	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled announced inspection		
RESOLVED COMPLAINTS:		

**Contact: Chris McArthur, Director of Utilities**  
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Phone: 517-437-6418

**Contact: Matt Burk, Michigan Public Power Agency**  
Email: mburk@mpower.org  
Phone: 517-323-8919

**PURPOSE**

I arrived at the facility for a scheduled inspection and met with Chris McArthur from the Hillsdale Board of Public Utilities and Matt Burk from the Michigan Public Power Agency. The purpose of this inspection is to determine compliance with ROP Number MI-ROP-B7536-2019. This facility is also an area source for the Reciprocating Internal Combustion Engine (RICE) MACT Standard (40 CFR Part 63, Subpart ZZZZ). Prior to my inspection, I reviewed their MAERS submittal of their 2019 emissions and determined that they were in compliance with their Section I emission limits in FG-ENG-56.

**BACKGROUND**

The City of Hillsdale, Board of Public Utilities has an electrical peaking unit with two diesel engines located at 201 Waterworks Avenue. The plant is used during peak energy use to supply energy for the power grid and has been in operation since 1948. The electrical power is generated from two dual-fired engines that have an output of 5,613 KW (EU-ENG-5) and 6,000 KW (EU-ENG-6). They use No. 2 fuel oil and natural gas to run these engines. They are located near the northeast end of Baw Beese Lake and they use cooling tower to cool the engines. They also have an exempt natural gas-fired 2,049 MMBtu boiler that they use to heat the facility during the winter but is not subject to 40 CFR Part 63 Subpart JJJJJ (Boiler MACT for area sources) because it only fires natural gas. Units 2, 3, and 4 have been disconnected and probably will never run again due to the engines being so old and spare parts are hard to come by.

**COMPLIANCE INSPECTION**

At the time of the inspection, none of the engines were operating. Chris told me that they were scheduled to operate later that day from 2pm to 7pm. Matt gave me the fuel specifications for their latest fuel shipment (SC VI.2), which stated that the sulfur content of the fuel was 15 ppm (0.0015%). This is well below their limit of 1.0% sulfur content per SC II.1 (see attachment 1). Matt emailed me the catalyst temperature and pressure drop for each time the engines ran during the period of August 2019 through July 2020 (SC VI.3). Unit 5 ran 9 times (see attachment 2) and Unit 6 ran 9 times (see attachment 3) during that time period. The averages for each time each engine ran showed that the pressure drop for each catalyst were within the 2 inches of water measured during the most recent test and that the catalyst inlet temperature was between 450 degrees F and 1350 degrees F (SC IV.2). The most recent test occurred on August 14, 2019 for Unit 5 and on August 15, 2019 for Unit 6, which both units passed (see attachment 4- Executive Summary of Results). They gave me the monthly fuel usage rates for each engine (see attachments 5-16) as required by SC VI.1. They used their semi-annual ROP compliance report to also report the required RICE MACT report (SC VII.5), but since it was not clear that this was the case I asked them to add a couple of sentences to their cover letter stating that.

**COMPLIANCE DETERMINATION**

Based on the information provided during the inspection and the required reports that have been submitted, I have determined that they are complying with all the requirements in their ROP. I thanked them for time and left.

