

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

P052764100

FACILITY: City of Hart Wastewater Treatment Plant		SRN / ID: P0527
LOCATION: 3 Water Street, HART		DISTRICT: Grand Rapids
CITY: HART		COUNTY: OCEANA
CONTACT: Rob Splane , City Manager		ACTIVITY DATE: 07/28/2022
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: The purpose of the inspection was to determine compliance with PTI No. 96-14.		
RESOLVED COMPLAINTS:		

On Thursday July 28, 2022, Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff Kaitlyn DeVries (KD) and Scott Evans (SE) conducted an unannounced, scheduled inspection of the City of Hart’s Diesel Plant located at 3 Water Street, Hart, Michigan. The purpose of the inspection was to determine compliance with PTI No. 96-14.

Facility Description

The City of Hart’s Diesel plant consists of three (3) compression ignition engines used to produce electricity for the city of Hart in the event of a regional utility power grid disruption. Power generated would go to vital city services and not be pushed to the grid. The engines are dual fuel and are started with diesel fuel but then switch over to natural gas.

The facility itself is not always manned, thus staff went to the city of Hart’s main office located at 407 S. State St., Hart, Michigan to make contact. Staff met with Mr. Rob Splane, City Manager, who contacted appropriate staff to meet AQD staff at the facility.

Regulatory Analysis

The City of Hart is a minor source of criteria pollutants and currently holds one (1) permit to install, PTI No. 96-14 which covers two (2) of the engines. The third engine is grandfathered, as it was installed prior to 1963 and has had no modifications.

These engines are emergency engines, and meet the definition specified in 40 CFR Part 63 Subpart ZZZZ the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (Part 63.6675), which excludes existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in 40 CFR 63.6640(f)(4)(ii). Thus, these engines are not subject to the provisions of 40 CFR Part 63 Subpart ZZZZ. These engines are also not subject to the New Source Performance Standards promulgated in 40 CFR Part 60 Subparts JJJJ and IIII for Stationary Spark Ignition Internal Combustion Engines and Stationary Compression Ignition Internal Combustion Engines. respectively.

Mr. Splane mentioned to KD that the City of Hart is considering making these engines more available in the event of additional energy demands. KD informed Mr. Splane that this may require a permit action since these engines are emergency only. KD recommended that if the City of Hart wishes to make any changes, that a pre-application would be advised with AQD’s permit section, and KD reminded Mr. Splane that she is available for questions as well.

Compliance Evaluation

There are three (3) engines located at the facility; two (2) of the engines are permitted under PTI No. 96-14. The other engine is grandfathered. The two (2) permitted engines (ENGINES) are 1,630-kilowatt (kW) dual-fueled emergency engines manufactured in 1949 and 1953, respectively. The engines were installed in 1973.

NOx emissions from the engines are limited to 604 lb/1,000 gallons, when operating with diesel fuel oil, and 2840 lb/MWcf when operating with natural gas fuel. Both are based upon test protocol. Testing is not being requested at this time.

These engines are started up on diesel fuel and then switch to natural gas. The natural gas is pipeline quality natural gas and per records, the diesel fuel complies with the maximum sulfur content of 15 ppm (0.0015 percent by weight), as required.

Since these are emergency engines, they are limited to 500 hours per year, based upon a 12-month rolling time period. EUGENERATOR1, most recently ran on June 15, 2022, running for 1.1 hours. This was the only time in the previous 12-month time period that either engine has run. Both engines are equipped with an hour meter for tracking hours of operation.

Also, on site are two (2) 15,000-gallon storage tanks for the diesel fuel. These tanks are exempt from Rule 201 permitting via rule 284(2)(d).

Compliance Determination

Based upon the observations made during the inspection and a subsequent review of the records it appears that the City of Hart's Diesel Plant is in compliance with PTI No. 96-14 and all other applicable air quality rules and regulations.

NAME

8/18/2022
DATE

SUPERVISOR