

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

N535266271

FACILITY: City of Portland Light and Power		SRN / ID: N5352
LOCATION: 723 East Grand River Avenue, PORTLAND		DISTRICT: Grand Rapids
CITY: PORTLAND		COUNTY: IONIA
CONTACT: Todd Davlin , Superintendent Electric Department		ACTIVITY DATE: 01/10/2023
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: The purpose of this inspection was to determine compliance with Permit to Install Number (PTI) 353-94A and other applicable Air Quality Rules and Regulations.		
RESOLVED COMPLAINTS:		

On Tuesday January 10, 2023, Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff Kaitlyn DeVries (KD) conducted an unannounced, scheduled inspection of the City of Portland Board of Light and Power. The purpose of this inspection was to determine compliance with Permit to Install Number (PTI) 353-94A and other applicable Air Quality Rules and Regulations.

KD arrived on site around 10:00 am and met with Todd Davlin, Superintendent Electric Department, who accompanied KD on the walk through of the facility.

Facility Description:

The City of Portland Board of Light and Power (Portland BLP) is an electric generating facility comprised of three (3) engines (EUENGINE3, EUENGINE4, and EUENGINE5). Two (2) of the engines are dual fuel (EUENGINE3 and EUENGINE5) and one (1) is diesel fuel only (EUENGINE4). The facility is a peaking station but does not regularly run. None of the engines were operating at the time of the inspection.

Mr. Davlin indicated that the engines had most recently ran on December 23, 2022, where all three (3) engines were called upon. Mr. Davlin went on to state that Portland BLP is moving towards running the engines every other month, or quarterly at a minimum to ensure the engines can startup and run properly when called upon.

Regulatory Analysis

The facility is a Synthetic Minor source of Nitrogen Oxides and is currently operating under Opt-Out PTI No. 353-94A. The engines are also subject to the provision of the area source requirements for the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart ZZZZ for Reciprocating Internal Combustion Engines.

Compliance Evaluation

As mentioned in the Regulatory analysis section, above, PTI No. 353-94A is for three (3) engines. These engines are: EUENGINE3 – a 1000 kW dual fuel engine, EUENGINE4 – a 820 kW diesel engine, and EUENGINE5 – a 2000 kW dual fuel engine. All three (3) engines are permitted under FGENGINE5.

The nitrogen oxides (NOx) emissions from FGENGINES is limited to 80 tons per year (tpy) based upon a 12-month rolling time period. Per records, as of December 2022, the 12-month rolling NOx emissions were 1.79 tons. The engines were tested on June 29, 2018, to demonstrate compliance with the NOx emission limits, establishing emission factors which are utilized for EUENGINE4 and EUENGINE5, as per the footnote for PTI No. 353-94A FGENGINES Special Condition 1.1a. Testing was conducted to demonstrate compliance with requirements of 40 CFR Part 63 Subpart ZZZZ. The results indicated a CO reduction ranging from 82.91%-95.52%; Portland has also successfully been submitting the Subpart ZZZZ Compliance reports. Since these engines are limited use engines under 40 CFR Part 63 Subpart ZZZZ, they are required to be tested at least once every five (5) years. Mr. Davlin indicated they are looking to get testing scheduled in Spring 2023. Units 3 and 4 are equipped with a catalyst, for which Portland BLP monitors the temperature and pressure across the catalyst.

Mr. Davlin provided records (reviewed on site) for the sulfur content of the diesel fuel used, and the records indicated it is ultra-low sulfur diesel (ULSD), which has a sulfur content of below the allowed 0.5 percent by weight. Diesel fuel usage is limited to 159,390 gallons per 12-month rolling time period. Records indicate a total of 5,114 gallons used during calendar year 2022. Records also indicate natural gas usage of 0.6 MMcf, which is below the allowed 47.085 MMCSF, per 12-month rolling time period.

Stack dimensions were not explicitly measured during this inspection.

Mr. Davlin indicated that Portland BLP had installed three (3) 1,000 gallon storage tanks for the diesel fuel. These tanks are exempt from Rule 201 permitting under Rule 284(2)(d).

There are also two (2) identical small boilers used for heating. These boilers are exempt from Rule 201 permitting under Rule 282(2)(b)(i).

Compliance Determination

Based on the observations made during the inspection and a subsequent review of the records it appears as if the City of Portland Board of Light and Power is in compliance with PTI No. 353-94A.

NAME Kaitlyn Dineen

DATE 1/26/2023

SUPERVISOR [Signature]