

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

B148666364

<b>FACILITY:</b> BAY CITY WASTEWATER TREATMENT PLANT		<b>SRN / ID:</b> B1486
<b>LOCATION:</b> 2905 N WATER ST, BAY CITY		<b>DISTRICT:</b> Bay City
<b>CITY:</b> BAY CITY		<b>COUNTY:</b> BAY
<b>CONTACT:</b> Smith Phil , Operations Manager		<b>ACTIVITY DATE:</b> 01/27/2023
<b>STAFF:</b> Kathy Brewer	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Virtual inspection due to health symptoms. No longer providing back up energy for BC Electric. PTI needed for new engine ordered but not yet installed		
<b>RESOLVED COMPLAINTS:</b>		

I conducted a scheduled inspection at the City of Bay City WWTP. The WWTP has one active air permit # 424-88A for a dual fuel 3,000 kW/4200 HP backup power generator. The site is no longer used as a peaking plant to supplement the Bay City electric power supply.

PTI 424-88A was issued on October 27, 2004 and is a Title V Opt-Out permit to limit NOx emissions. The facility is also subject to the area source RICE MACT

On January 27, 2023, Philip Smith and Brandon Vondra of the Bay City WWTP participated in a TEAMS virtual meeting.

During the meeting Bay City staff explained that the current engine is schedule to be replaced with a new engine in the Spring 2023. A subsequent meeting was held on February 1, 2023 with Bay City WWTP staff and consultants from Hubbel, Roth & Clark and also Tetrattech to discuss air permitting requirements for the new engine.

At the time of my inspection BC WWTP was in compliance with the requirements in the opt-out permit and air quality regulations.

#### Attachments

Generator nameplate photo

Fuel supplier certification <15 ppm sulfur

Diesel fuel SDS

Main Diesel storage tank level indicator

Wall fuel tank meter

Generator hours March 25, 2021, Feb 2-2022,

#### Compliance Determination

##### PTI 424-88A-EUGENERATOR and FGFACILITY

The generator is required to burn low sulfur diesel fuel (0.5% sulfur content). The diesel oil supplier certifies maximum sulfur content of 15 ppm. The diesel fuel supplier certification for the

last diesel delivery received on 6/29/2016 was provided. The generator is used infrequently for cases of emergency and the site has not ordered diesel fuel for several years.

MAERS information reported the following hours of operation:

YEAR	Quarter	Hours	Quarter	Hours	Quarter	Hours	Quarter	Hours
2020	1st	18.9	2nd	0	3rd	13.3	4th	67.8
2021	1st	100	2nd	0	3rd	0	4th	0

Logs of the operating hours and diesel fuel use were provided. The facility has a fuel oil day tank that is filled as needed from a large outside fuel oil storage tank. The diesel fuel meter is located on the day tank. The meters are the source of readings taken for required reporting parameters.

The daily operating information is tracked by spreadsheet which performs required calculations for a 12-month rolling time frame. The calculations are based on the formula in PTI #424-88a Appendix .

The site has not used natural gas fuel for over 5 years. Between November 2019 and November 2022, it has only run the generator a total of 27.4 hours.

Date	Engine operating hours	Distillate oil usage gallons.	NOx Monthly emission (lbs)	FGFACILITY 12 month rolling average NOx lbs/year (limit = 90 Ton/yr)
March 2021	4.0	137	6..87	16.05
July 2022	1.15	23	10.49	0.87
August 2022	1.10	20	9.32	1.65

A copy of the spreadsheet with the monthly operating hours, diesel usage and 12-month rolling NOx emissions for January 1, 2003 through November 2022, is attached.

NAME

*Kathy Brewer*

DATE

2/17/2023

SUPERVISOR

*Chris Stone*