

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

N319532864

FACILITY: BAY CITY ELECTRIC LIGHT & POWER		SRN / ID: N3195
LOCATION: 619 S HENRY ST, BAY CITY		DISTRICT: Saginaw Bay
CITY: BAY CITY		COUNTY: BAY
CONTACT: Leland Technil, Generation plant Supervisor		ACTIVITY DATE: 01/07/2016
STAFF: Gina McCann	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Inspection of SM-Opt Out 823-91B.		
RESOLVED COMPLAINTS:		

I (glm) conducted a scheduled inspection of Bay City Electric Light & Power at the Water Street facility. I met with Leland (Lee) Techlin, Generation and Maintenance Supervisor. The engines were not operating at the Henry Street facility and observations will be done on a supplemental visit. The purpose of this inspection was to view records and determine compliance with PTI 823-91B and the area source RICE MACT.

Facility Description

BCE has been a customer owned utility since 1868. The Henry Street Facility is one of two generating plants owned and operated by BCE. The referenced station houses two dual-fired, reciprocating internal combustion engines (RICE). The units identified as No.s 3 & 4, are operated as peaking units. The RICE initially fire up on diesel fuel with the transition to a 95% natural gas and 5% diesel mix occurring over 20-30 minutes. The units are compression ignition, both 10,800 HP.

Regulatory Discussion

The facility was registered as a 208a source. Since the rescinding of this rule, the source applied for a new permit, which was issued in September 2015. The facility is considered a synthetic minor opt out source with restrictions taken on NOx to limit the facility to below major threshold. The facility is subject to RICE MACT requirements for an area source.

RICE MACT requirements

The RICE are over 300 bhp, existing, dual fired, non-emergency, compression ignition engines at an area source.

Initial compliance required the facility to put on catalysts for CO reduction and install a continuous parameter monitor system (CPMS) and record the catalyst pressure drop and catalyst inlet temperature during the initial performance test. This was completed and the CO reduction met during testing November 19, 2013. Testing for these engines are required every 3 years or 8,760 hours, whichever comes first.

Operating limitations include recording the catalyst pressure drop and the inlet temperature, using ultra low sulfur diesel (ULSD) and crankcase emission controls.

A semi-annual report is required to be sent in for the reporting periods of January 1st through June 30th and July 1st through December 31st with the delivery date no later than July 31st and January 31st, respectively. The reports must include deviations from any emission limitations or operating limitations that apply or a statement that there were no deviations from the emission limitations during the reporting period. Also, the report shall include the company name, address, statement by the responsible official, official's name, title, and signature, certifying the accuracy of the content of the report, date of report and beginning and ending dates of the reporting period. If there was a malfunction then briefly describe with what caused it and date it happened.

The facility has not been reporting semi-annually, they were unaware of the requirements. They have been made aware and will either start sending in reports.

PTI 823-91B

Engines 3 & 4 were not operating at the time of the inspection. Sulfur content of delivered fuel is 15 ppm and ultra low sulfur diesel. No port is available to grab a sample of the fuel for verification lab sampling. Records for diesel delivered in 2013, 2014 and 2015 were obtained and are attached.

S.C. I.1 limits total NOx limits to 99.9 tpy on a 12-month rolling time period. Attached are 2014 and 2015 emission data to verify compliance with this limit. NOx emissions reported for the facility were just over 7 TPY


for 2014 and less than 3 TPY for 2015.

S.C. I.2 and 3. limit NOx emission to 2.03 lb/MMBTU when burning dual fuel and to 5.49 lb/MMBTU when burning diesel. Attached are 2014 and 2015 emission data and verify compliance with these limits.

Recordkeeping and reporting requires written logs of hours of operation, and monthly emission calculations use be maintained. In compliance with the requirement, written daily logs are recorded by onsite staff, and maintained in a three ring binder. Annually the records are moved to a folder in the onsite files. Records to date went as far back as 2007.

S.C. II.1 limits total natural gas usage, on a 12-month rolling time period, to 74,600,000 dscf/yr. The facility recorded 1,464,000 dscf in 2014 and 1,488,000 dscf in 2015. S.C.II.2 limits total diesel usage, on a 12-month rolling time period, to 64,500 gal/yr. The facility recorded 3,403 gallons in 2014 and 2,700 gallons in 2015.

The facility was not operating at the time of the inspection. VE and stack testing observations will be conducted at a later date.

NAME 

DATE 1/14/2016

SUPERVISOR 