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

B183333637

FACILITY: MARQUETTE BOARD OF LIGHT & POWER		**SRN / ID:** B1833
LOCATION: 400 E HAMPTON, MARQUETTE		**DISTRICT:** Upper Peninsula
CITY: MARQUETTE		**COUNTY:** MARQUETTE
CONTACT: THOMAS J SKEWIS , ENVIRONMENTAL TECHNICIAN		**ACTIVITY DATE:** 03/09/2016
STAFF: Ed Lancaster	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Conducted a scheduled compliance inspection with Joe Scanlan.		
RESOLVED COMPLAINTS:		

Joe Scanlan and I arrived at the Marquette Board of Light and Power (MBLP)-Shiras Plant and met with Mr. Tom Skewis for a scheduled compliance inspection.

In a letter dated February 16, 2016, MBLP submitted stack test protocols for EUBOILER#3 to show compliance with particulate emission rate and Mercury LEE Test in accordance with the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units (40 CFR 63 Subpart UUUUU), Mercury and Air Toxics Standard (MATS). The tests are planned for the week of April 4, 2016.

The AQD recently reopened MBLP's Renewable Operating Permit (ROP) No. MI-ROP-B1833-2013 in order to incorporate applicable requirements associated with the Transport Rule (a.k.a. Cross State Air Pollution Rule CASPR)) and removing the Clean Air Interstate Rule (CAIR) requirements. The 30-day public comment period began on March 7, 2016.

EUBOILER#2

The Riley-Union spreader stoker, coal and natural gas-fired utility boiler was not operating on the day of the inspection. The coal is fed to the boiler by means of six (6) paddle wheels that "throw" the coal to the back of the grates. As the grate advances the coal burns and the ash falls through. Mr. Skewis stated it takes about twelve hours for the grate to advance from the back to the front of the boiler.

The last NOx emission test was conducted October 4 and 5, 2011, with the average result of 0.377 pounds of NOx per million Btu, compliant with Special Condition (SC) Nos. I.1 and V.3.b.

MBLP has tentatively scheduled to conduct PM emissions testing June 30, 2016 (SC Nos. I.2 and V.1).

Boiler #2 is fired with Eastern Kentucky Stoker Coal. The sulfur, ash and BTU content of the bituminous coal averaged 1.15% S, 7.91% ash, and an average BTU value of 13,039 (SC Nos. III.1. and VI.7). The plant received 118 truck deliveries of this coal in 2015.

Opacity data is monitored and recorded by the plant using a Stack Vision Program (SC Nos. VI. 1-6 and VII). Opacity is typically recorded at less than 1%. The company has been timely with their required quarterly, semi-annul and annual reports (SC No. VIII). On October 17, 2015, AQD received the company's 2015 summary ozone report (SC No. VIII.2). Boiler #2 operated for 150 hours during the ozone season (May 1 through September 30).

On January 9, 2013, the company was granted an extension, by Mr. Vince Helwig, AQD Chief, to comply with the National Emission Standards for Hazardous Air Pollutants for Major Sources: Commercial, and Institutional Boilers and Process Heaters (The Boiler MACT). The new compliance date is January 31, 2017 (SC No. X).

EUBOILER#3

The Combustion Engineering pulverized coal-fired utility boiler was operating on the day of the inspection. This unit is fueled by a western coal. Mr. Skewis said the unit is scheduled for a spring maintenance shutdown beginning Friday night, March 11.

The boiler has four coal bunkers identified as A, B C and D. On the day of the inspection Bunker D was not in use, Mr. Skewis said this bunker is seldom used. Since midnight of the morning of the inspection, the following amounts of coal was added to each bunker: A = 124,726 pounds, B = 220,000 pounds and C = 222,460 pounds.

I recorded the following operating parameters during the inspection:

Heat input of the boiler was 523 MMBtu/hour, producing 41 Megawatts of electricity;

Stack temperature 200 degrees Fahrenheit, pressure 29.29 inches of water column;

Scrubber vacuum = 5.8 inches water column;

Baghouse inlet and outlet pressure readings were 8.0 and -12.3 inches of water respectively; and

Opacity was at 1.3% (SC No. VI.3).

The instantaneous NOx emissions at the time of my inspection was 0.185 pounds per million Btu (SC Nos. I.1 and VI.1).

The company has scheduled particulate emission and the Utility MACT compliance tests for the first week of April 2016 (SC Nos.1.2, V.1 and XI).

Sulfur Dioxide emissions average 0.133 pounds per MMBtu and had a greater than 70% SO2 reduction. On the day of the inspection the hourly reduction averaged 77.8% and the 30-day removal averaged 73.3% (SC Nos. I.3 and 4 and VI.1 and 2).

In 2015, the company received one coal shipment of "Spring Creek Coal", a western coal with an average sulfur content of 0.300% per 9,362 btu/pound, this equates to a 0.256% sulfur content as required by SC Nos. II.1 and VI.4. The company received eight shipments of Spring Creek/Antelope Mix Coal averaging 0.302% sulfur per 9,194 BTU that equates to 0.263% sulfur.

The company submitted their CAM Report on March 16, 2016 (SC No. VII.1-7) and has been compliance with their quarterly, semi and annual reporting requirements in SC Nos. VIII. 1-9.

As mentioned above for Boiler #2, on January 9, 2013, the company was granted an extension, by Mr. Vince Helwig, AQD Chief, to comply with the National Emission Standards for Hazardous Air Pollutants for Major Sources: Commercial, and Institutional Boilers and Process Heaters (The Boiler MACT). The new compliance date is January 31, 2017 (SC No. X).

The company's ROP was reopened by AQD to remove the Clean Air Interstate Rule (CAIR) requirements and replace them with the Cross State Air Pollution Rule (CASPR). Those changes are currently in the 30-day public comment period until April 6, 2016.

EUCOAL

During the inspection there were no visible emissions observed from any of the coal handling or storage operations (SC Nos. I. 1 and 2). MBLP has several water cannons to keep the western coal wet to prevent fugitive emissions and the eastern coal is kept covered with a tarp to prevent excess moisture and fugitives (SC No. III.1).

EULIME and EUASH

There were no issues with the lime and ash handling systems during the inspection.

The AQD has not received any complaints regarding the facility and at the time of the inspection

appeared to be in compliance with their ROP and applicable Federal standards.

NAME Ed Lancaster DATE 4/1/16 SUPERVISOR Dan W. Mali