## DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Scheduled Inspection** 

B426126809		
FACILITY: WISCONSIN ELECTRIC POWER COMPANY		SRN / ID: B4261
LOCATION: 2701 N LAKESHORE BOULEVARD, MARQUETTE		DISTRICT: Upper Peninsula
CITY: MARQUETTE		COUNTY: MARQUETTE
CONTACT: SHARON CAMELI, SENIOR ENGINEER		ACTIVITY DATE: 09/09/2014
STAFF: Ed Lancaster	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Conducted scheduled F	" 14 compliance inspection.	
RESOLVED COMPLAINTS:		

Joe Scanlan and I arrived at We Energies' Presque Isle Power Plant to conduct a scheduled, compliance inspection. After checking in at the guard shack we were greeted by Ms. Sharon Cameli and Mr. Frank Paris, who accompanied us to a conference room where we met with the following staff: Les Kowalski, Claire Twohey, Environmental Coordinator, Rob Robinson, Maintenance Manager, Chris Eagling, Material Handling, Carl Daavettila, Operations Manager, and Tom Asmus.

We were informed Unit 7 was idle on the day of the inspection. Mr. Kowalski explained the plant is still under a coal conservation operation agreement with MiSO to operate at minimum generational level. Units 5 and 6 were converted to burn Powder River Basin coal which is a western, sub-bituminous, low sulfur, low BTU coal. An eastern bituminous coal from Appalachia is used to supplement the PRB coal. The eastern coal is higher in sulfur and BTU content. The company is having difficulty in receiving the PRB coal as the railroad companies are using their railcars for shipping tar-sands to the gulf coast and the coal companies are having to compete.

PIPP is operating under a consent decree with EPA, Civil Action No. 03-C-0371, and ROP No. MI-ROP-B4261-2013.

As this plant keeps a large amount of data for its five boilers, and the boilers have nearly identical conditions, I decided to concentrate my inspection on EUBOILER8 and the ash and material handling operations.

EUBOILER8: We began the inspection with Mr. Paris and Mr. Asmus explaining that every morning the CEMS are calibrated and system reports are generated by the environmental techs (SC Nos. VI.9, 10, 11, 12 and 15).

In the Units 7-9 Boiler Operator Room I recorded the following information from the "Stack Vision" Unit 9 monitor (gas from Units 7-9 are comingled inside the Toxecon Baghouse):

The boiler was operating at 63.6 Mega Watts, %O2 was 2.2. The NOx emission rate was 0.31 lbs/MMBtu, PM was 0.0015 lbs/MMBtu, SO2 was 0.5 lbs/MMBtu, and opacity was at 0.9%. All values well below the emission limits established in Special Condition (SC) Nos. I.1-4. The permittee has not reburned bottom ash from Units 5 and 6 since the middle of 2010 (SC No. II.1).

The coal shipment report from the James R. Barker freighter show a % sulfur content per 12,000 BTU/lb of 0.298 (SC Nos. II.2 and VI.19). The ash content was 6.68%, BTU-dry weight of 12006 BTU/lb and total moisture of 25.97%.

The ESP consists of 2 sections with 3 divisions per section. At the time of the inspection it was operating at 253 amps, 409 volts and 1,707 mA (SC Nos. III.1 and 4). All five boilers at the facility have low-NOx burners, Units 7-9 use flame stabilization rings, called "pumpkin teeth" by the industry, and Units 5 and 6 use "Glow NOx burners" (SC No. III.3). The Toxecon baghouse had a differential pressure of 1.3 inches of W.C. at the time of the inspection (SC Nos. III.4 and VI.1). As mentioned above, the company prints and reviews the previous days pressure drop and opacity readings and bypass monitoring and alarm condition reports every morning (SC Nos. VI.1-4).

PIPP conducted a PM stack test in May of 2013 to satisfy SC No. V.1. To comply with SC No. V.2 the company has selected option (b) which requires a PM CEMS be installed on the common duct of the TOXECON and perform biennial testing instead of annual testing. RATA tests were conducted in May 2014.

In CEM Shelter #2, which houses the CEMS and COMS for Units 7-9, the following were recorded from Flue 8 monitors: NOx = 1.688 ppm, SO2 = 1.991 ppm, CO2 = 1219 ppm, average Opacity = 0.7%, and D =0.003. "D" is a measure of the amount of dust on the monitor windows (SC Nos. VI.15, 16 and 19). The company is prompt on submitting their quarterly EE and Quality Assurance Procedure reports (SC Nos. VI.13, 17 and 18). Mr. Paris informed us the CEMS probes are at the 200 foot level in the stack.

The company has conducted all required monitoring per the CAM Plan and has experienced no excursions nor exceedances (SC Nos. 5-8) as reported in their quarterly reports (SC No. VII). The company appears to be in compliance with their CAM Plan (SC No. IX.1).

At the end of the inspection we returned to a conference room, where Ms. Cameli explained the Acid Rain and CAIR programs to us and how the company tracks their emissions to stay in compliance with the specific pollutant allowances assigned by the EPA.

For the ash and material handling part of the inspection Mr. Eagling joined us to explain the operations.

EUASHHANDLING: Mr. Eagling informed us that 100% of the flyash is sold to the cement market. Bottom ash goes to a landfill as its only use is as sand and there is no market, as native sand is so cheap and plentiful. The ash silo has a small baghouse. The silo is constructed with a pneumatic shifter to remove the chunks from the ash, the chunks are also sold. Haul trucks pull under the silo and are filled with ash by a snorkel which minimizes fugitive emissions (SC Nos. III.1and IX.1 and 2). Mr. Eagling said daily observations are made for visible emissions and appropriate actions are taken if there is an issue (SC No. VI.1).

EUMATERIALHANDLING: The coal is received from the ships in the 3"-minus size, after the crusher the size is reduced to 1"-minus. The smaller size is then sent to the mill which reduces the coal to a talc-like consistency to feed to the boilers. The coal dust collectors are on level 8 (SC No.III.1). Below the collectors are the bulk storage bins. From the coal yard operations office the operator has a good view of the yard and can observe any fugitive dust problems (SC Nos. VI.1 and IX.1). There are several water cannons located around the coal yard and a water truck which is able to apply large amounts of water in a few minutes to the plant's roadways (SC No. IX.2). Mr. Eagling pointed out an orange and white placard on one of the buildings which the operators use to keep the height of the coal piles below 60 feet (SC No.IX.4). We then walked through the Ship Unloading Facility and observed the conveyors and water spray equipment associated with this operation. I did not observe any VEs while inspection this aspect of the facility.

FGICDIESELS: To comply with the RICE MACT for the company's emergency generators they have opted to comply by changing the oil and filter annually (or 500 hours of operation) and inspect the air cleaner and hoses and belts. The diesel units are tested monthly and run for about a half hour during the test. Each engine is equipped with a non-resettable hour meter and hours of operation records are kept for each unit.

At the time of the inspection the plant appeared to be in compliance with the requirements of their permits, CO and applicable federal standards.