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

B542126720

FACILITY: Vandyke Generating Plant		SRN / ID: B5421
LOCATION: 3150 143rd Avenue, DORR		DISTRICT: Kalamazoo
CITY: DORR		COUNTY: ALLEGAN
CONTACT: Randy Boyles ,		ACTIVITY DATE: 08/26/2014
STAFF: Dale Turton	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

An unannounced inspection was conducted on this electrical generating power plant used historically as a peaking station. Randy Boyles was not available during the inspection. Russ Fein was on site and was able to conduct a tour of the facility and produce the necessary records.

The turbines were not being operated during the inspection nor have they been operated very much this calendar year. The plant is permitted under ROP–MI-ROP-B5421-2014.

EUTURBINE01

Turbine #6 (EUTURBINE01) is a 231 MM Btu/hr, 23 MW rated unit. It has operated very few days so far in 2014. Wolverine is keeping records of the natural gas usage in as required by the permit. The highest usage month has been July with 2.1 MMCF. They are using pipeline quality gas with less than 0.005% sulfur content. There have been no changes in the equipment since the last inspection. This grandfathered turbine has no emission limits and no testing requirements. This unit uses an electrical motor as a starter.

EUTURBINE02

Turbine #8 (EUTURBINE02) is a 316 MM Btu/hr, 24.8 MW rated unit. This is subject to Subpart GG, the NSPS for Stationary Gas Turbines. It has operated very few days so far in 2014. Wolverine is keeping records of the natural gas usage in as required by the permit. The highest usage month has been January with 4.4 MMCF. They are using pipeline quality gas with less than 0.005% sulfur content. There have been no changes in the equipment since the last inspection. A diesel fired starter engine is used (EUSTARTERENGINE).

The proper records are also being kept. The natural gas usage and the NOx emissions are being recorded and calculated. They are also keeping the SSM log as required by the permit.

Condition V(1) requires testing for NOx once during the term of the ROP. The testing was last conducted in 2012. The next testing required by the ROP is not yet scheduled but will likely be in 2017.

EUSTARTER ENGINE / FG-RICEMACT-BLACKSTART

The diesel fired starter engine is operated during the startup of EUTURBINE02. This is sometimes started and briefly run regardless of whether or not the turbine is started. It must be kept in a ready condition.

The certificate of analysis on a sample of the oil showed that the sulfur content is 8.2 ppm. The spec for the oil purchased is for the sulfur to be less than 15 ppm, which is less that the permit requirement of 0.05% by weight.

The starter engine is subject to CFR 60 Subpart ZZZZ, which is the RICE MACT. The conditions for this regulation are contained in the FG-RICEMACT-BLACKSTART flexible group.

Condition III(3)a requires that the oil be changed annually or after 500 hours of operation. Condition III(3)b requires that the air cleaner be inspected annually or after 1000 hours of operation. Condition III(3)c requires that

the hoses and belts be inspected annually or every 500 hours of operation. Records show that they are doing all three annually since they did not run that many hours in the past year.

In order to keep track of the hours of run time for the engine, they have installed an hours meter. It read 0.6 hours during the inspection.

DATE Sept 3, 2014 SUPERVISOR MB 914 2014