

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

N258630760

FACILITY: Holland BPW, 48th Street Peaking Station		SRN / ID: N2586
LOCATION: 491 E 48th St, HOLLAND		DISTRICT: Kalamazoo
CITY: HOLLAND		COUNTY: ALLEGAN
CONTACT: Judy Visscher, Environmental Regulatory Specialist		ACTIVITY DATE: 08/19/2015
STAFF: Dale Turton	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

This is a peaking plant that has historically only been utilized when there is a high electricity demand. There oftentimes are no personnel stationed at this site due to its low running hours. The plant is an ROP source due to the high potential emissions, though actual emissions are low. The permit is MI-ROP-N2586-2015.

In order to inspect the equipment it was necessary to arrange for Judy to drive out from downtown to this location to open up the gate and conduct the tour.

Both Units #7 & #8 are being used more this summer than in the past due to the relatively low cost for natural gas.

After looking at the equipment, we proceeded to the DeYoung plant to look at records.

Turbine #7 (EU-TURBINE7)

Turbines #7 was the only unit operating during the inspection. It was being fired on natural gas.

This is a 40 MW rated gas/oil unit. Oil has not been used this year.

A new control panel has been installed on the turbine, replacing the original equipment.

The Horiba NOx and Oxygen CEMS were in place and operating. An automatic calibration is done every morning. The calibration gases, the CEMS data logger, and the analyzers are checked every 3 days. The NOx was reading 16.42 ppm and the Oxygen was reading 10%. They plan to perform a RATA on this unit during the summer of 2016.

The fuel usage records, operating hours, and CEMS data are all being kept as required in the ROP. NOx Emission calculations are being recorded. There were no SO2 emissions due to oil burning in the last year.

Records are also being kept as required in the CAIR NOx Budget & Sulfur Dioxide Permits. These were not reviewed during the inspection. The ROP will eventually be updated to reflect the new CSPAR regulations.

There were no visible emissions observed from the stack.

Turbine #8 (EU-TURBINE8)

This is a 40 MW rated gas/oil unit. Oil has not been used this year.

A new control panel has been installed on the turbine, replacing the original equipment.

The Horiba NOx and Oxygen CEMS were in place and ready. The calibration gases, the CEMS data logger, and the analyzers are checked every 3 days. They plan to perform a RATA on this unit during the summer of 2016.

The fuel usage records, operating hours, and CEMS data are all being kept as required in the ROP. NOx Emission calculations are being recorded. There were no SO2 emissions due to oil burning in the last year.

Records are also being kept as required in the CAIR NOx Budget & Sulfur Dioxide Permits. These were not reviewed during the inspection. The ROP will eventually be updated to reflect the new CSPAR regulations.

Turbine #9 (EUTURBINE9)

This is an 80 MW rated gas unit. It has dry low NOx controls installed.

Turbine #9 uses an electric motor for starting.

The Horiba NOx and Oxygen CEMS were in a state of readiness for when needed. The calibration gases, the CEMS data logger, and the analyzers are checked every 3 days. They will plan to perform a RATA and also the CO compliance testing on this unit during the summer of 2016.

They are complying with the permit condition that requires them to track the hours run at differing loads. The CO emissions are being calculated according to the formula in the ROP.

The fuel usage records, operating hours, and CEMS data are all being kept as required in the ROP. Emission calculations are being recorded.

Records are also being kept as required in the CAIR NOx Budget & Sulfur Dioxide Permits. These were not reviewed during the inspection. The ROP will eventually be updated to reflect the new CSPAR regulations.

FGCI-ENGINES

Both of the smaller turbines (#7 & #8) are equipped with black start engines to get the turbines up to operating speed at startup.

The ROP, and the MACT (63 Subpart ZZZZ) require that the oil be changed every 500 hours of operation, the hoses and belts be inspected every 500 hours of operation, and the air cleaner be inspected every 1000 hours of operation. Alternately, these actions must be performed annually if the hours are not reached. These units both have non-resettable run time meters installed. Since they are only used for black start, they do not accumulate many hours and the actions will be taken annually. This was last done in January 2015.

There are many of the conditions in the ROP that don't apply to the black start engines since they are only operating for a short time and then shut down after the turbine is started. They are not stand alone generators, emergency generators, nor are they "contractually obligated" as in condition III(4)(c & d).

Ultra Low Sulfur oil is being delivered directly into the fuel tanks located at each engine. Records of the deliveries and the sulfur content are being kept.

Tanks (EUOILTANKS)

There are two 300,000 gallon oil tanks located at the site. They are NSPS subject. No new oil has been received since prior to 2011. A sample was last taken in 2011, so a new sample has not been necessary since then. The limit is 0.3% Sulfur by weight. The oil storage tank is essentially empty at this time.

NAME Dale Twiston

DATE 8/24/15 SUPERVISOR MA 8/26/2015