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

FACILITY: Consumers-Ludington Pump Storage Facility		SRN / ID: P0068
LOCATION: 3525 South Lakeshore Dr, LUDINGTON		DISTRICT: Cadillac
CITY: LUDINGTON		COUNTY: MASON
CONTACT: Dave Battige, Environmental Manager		ACTIVITY DATE: 11/03/2016
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspecti	on of this opt out source.	····
RESOLVED COMPLAINTS:		

Inspected this facility pursuant to Permit to Install 118-14. This facility produces electricity by pumping water from Lake Michigan in to a storage lagoon in the evening when electricity prices are lower and then releasing the water back in to the lake through generating turbines and selling the electricity when it is at a higher rate.

Emissions concerns at the facility include a diesel fired fire pump and a diesel fired emergency generator. The fire pump is quite small (175 hp) six cylinder diesel engine Model 2201 with no emissions controls. It resides underground venting to the surface. The emergency generator is a marine engine similar to one used in submarines and is capable of two megawatts. This equipment runs on a very intermittent basis, primarily for testing and emergencies. The facility is an area source for HAPS per 40 CFR 63, Subpart ZZZZ. Following are the findings of the inspection by permit condition.

EUEMERGENCYGEN - Diesel-fired reciprocating internal combustion engine installed in 1979 driving an emergency generator. Fairbanks Morse Model 38TD1/8. This equipment is uncontrolled.

- I. EMISSION LIMITS NA
- **II. MATERIAL LIMITS NA**
- **III. PROCESS/OPERATIONAL RESTRICTIONS**
- 1. The permittee shall not operate EUEMERGENCYGEN for more than 1600 hours per year on a 12month rolling time period basis as determined at the end of each calendar month. Records indicate as of October 2016 the generator operated 11.7 hours per year based on a 12 month rolling time period.
- **IV. DESIGN/EQUIPMENT PARAMETERS**
- 1. The permittee shall equip and maintain EUEMERGENCYGEN with a non-resettable hours meter. The generator is so equipped. The reading as of 11/3/16 was 516.28 hours total operation for the engine.
- V. TESTING/SAMPLING NA
- VI. MONITORING/RECORDKEEPING
- 1. The permittee shall use a non-resettable hours meter to monitor the hours of operation of EUEMERGENCYGEN during emergencies and non-emergencies. Hours of operation are taken from the non-resettable hour meter.
- 2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the hours of operation of EUEMERGENCYGEN. Records indicate as of October 2016 the generator operated 11.7 hours per year based on a 12 month rolling time period.
- VII. REPORTING NA
- **VIII. STACK/VENT RESTRICTIONS NA**
- **IX. OTHER REQUIREMENTS NA**

FGFACILITY

POLLUTION CONTROL EQUIPMENT: NA

- I. EMISSION LIMITS
- 1. NOx emissions from the facility are limited to 89.9 tons per year based on a 12-month rolling time period. Records indicate as of October 2016 NOx emissions were 0.0824 tons per year based on a 12-month rolling time period.
- 2. SO2 emissions from the facility are limited to 22 tons per year based on a 12-month rolling time period. Records indicate as of October 2016 SO2 emissions were 0.0254 tons per year based on a 12-month rolling time period.
- II. MATERIAL LIMITS NA
- **III. PROCESS/OPERATIONAL RESTRICTIONS NA**
- **IV. DESIGN/EQUIPMENT PARAMETERS NA**
- V. TESTING/SAMPLING NA
- VI. MONITORING/RECORDKEEPING
- The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NO_x emission calculation records. Records indicate as of October 2016 NOx emissions were 0.0824 tons per year based on a 12-month rolling time period. These records were immediately available.
- 2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period SO2 emission calculation records. Records indicate as of October 2016 SO2 emissions were 0.0254 tons per year based on a 12-month rolling time period. These records were immediately available.

VII. REPORTING - NA

VIII. STACK/VENT RESTRICTIONS - NA

IX. OTHER REQUIREMENTS - NA

At the time of the inspection, this facility was in compliance with their permit to install.

DATE 1/3/16

SUPERVISOR