

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

P000837130

|  |                               |                           |
|--|-------------------------------|---------------------------|
| FACILITY: Newberry Water & Light Board                         |                               | SRN / ID: P0008           |
| LOCATION: 307 E. McMillan Avenue, NEWBERRY                     |                               | DISTRICT: Upper Peninsula |
| CITY: NEWBERRY   |                               | COUNTY: LUCE              |
| CONTACT: Ken Uhlbeck , Generator Operator/Mechanic             |                               | ACTIVITY DATE: 10/11/2016 |
| STAFF: Ed Lancaster  | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT  |
| SUBJECT: Self-initiated inspection and stack test observation. |                               |                           |
| RESOLVED COMPLAINTS:   |                               |                           |

**Directions:** Newberry Water and Light Board is located at 307 East McMillian Avenue, in the Village of Newberry, Luce County. My contact for the inspection was Mr. Ken Uhlbeck, Generator Operator/Mechanic.

**Facility:** The Village owns three generators: a 3,000 KW Fairbanks-Morris (Generator #1), a 720 KW Worthington (Generator #3) and a 2,140 KW Worthington (Generator #4), used for emergency back-up power and peak shaving. The generator units are covered under General PTI No. 272-09.

**Inspection:** During the inspection only Generator #1 was operating. According to Mr. Uhlbeck, Generator #4 is for emergency use and is rarely operated. Unit #3 has not operated in many years.

The Village hired BTEC Inc. to conduct a carbon monoxide (CO) destruction efficiency emissions test to show compliance with 40 CFR 63, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, Subpart ZZZZ, the RICE MACT. When I arrived at the BTEC trailer, Mr. Todd Wessel, Senior Project Manager stated he was almost finished with the first run of the test.

To date the AQD has not requested the Village to conduct stack tests to determine compliance with the NOx limits of Special Condition (SC) Nos. 1.1 and 1.7.

The Village only purchases diesel fuel with sulfur content less than 0.05 percent by weight (SC Nos.1.2 and 1.3). Purchase records and fuel analysis sheets were provided to show the Village is purchasing #2 ultra-low sulfur fuel, with 15 ppm (0.0015%) sulfur (SC No. 1.10).

Mr. Uhlbeck provided fuel usage and hours of operation log for 2015 and 2016, records were up to date through the date of the inspection. The log showed the following records:

| Month/2015 | Hours of operation | Gallons of fuel used |
|------------|--------------------|----------------------|
| January    | 20.8               | 2,967                |
| February   | 26.1               | 3,815                |
| March      | 11.8               | 1,431                |
| April      | 0                  | 0                    |

|           |      |       |
|-----------|------|-------|
| May       | 0    | 0     |
| June      | 7.1  | 1,039 |
| July      | 18.2 | 2,495 |
| August    | 0.6  | 0     |
| September | 5.3  | 663   |
| October   | 0    | 0     |
| November  | 4.6  | 780   |
| December  | 10.2 | 1,406 |

For 2015 the Village used 14,596 gallons of diesel fuel. For 2016, up to the date of the inspection 2,358 gallons of diesel fuel was consumed, both years well below the limit of 136,000 gallons per 12-month rolling time period in SC Nos. 1.4 and 1.11.

Generator Unit #1 appeared to be well maintained and operated, SC No. 1.5. A maintenance log is kept for all work done on the generators (SC No. 1.9). As mentioned above the largest generator has a capacity of 3,000 KW, under the SC No. 1.6 limit of 5 MW.

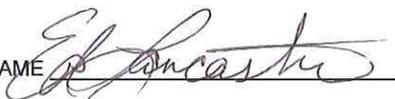
The Village has a tank monitor in the DPW office the employees use to monitor and record the diesel fuel use on a daily basis (SC No. 1.8).

The stacks for the generators rise vertically through the roof of the buildings and did not appear to be obstructed in any way at the time of the inspection (SC No. 1.12).

The Village is also in compliance with SC No. 1.13 in that no generator has been replaced or modified without notifying the AQD UP District.

On November 3, 2016, AQD received a copy of the Carbon Monoxide Destruction Efficiency Emissions Test Report for Unit #1. The average CO destruction efficiency for the three runs was 90.8%, well above the emission limitation of 70%.

Based on my inspection and the test results, the Village of Newberry Board of Water & Light is operating in compliance.

NAME 

DATE 11/22/16

SUPERVISOR 