DEPARTMENT OF ENVIRONMENTAL QUALITY

ARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection FY 2015 Sched. Tusf.

B280831010

| FACILITY: DTE - Electric Company NORTHEAST STATION | | SRN / ID: B2808 | |
|--|--|------------------------------|--|
| LOCATION: 6401 E EIGHT MILE RD, WARREN | | DISTRICT: Southeast Michigan | |
| CITY: WARREN | | COUNTY: MACOMB | |
| CONTACT: Joe Neruda , Environmental Specialist | | ACTIVITY DATE: 09/02/2015 | |
| STAFF: Iranna Konanahalli | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MAJOR | |
| SUBJECT: FY 2015 a level 2 sch | eduled inspection of DTE - Electric Company NORT | THEAST STATION | |
| RESOLVED COMPLAINTS: | <u> </u> | | |

B 2808 _ SAR 2015 0902

DTE - Electric Company NORTHEAST STATION (B2808) 6401 E. 8 Mile Road Warren, Michigan 48091-2960

MI-ROP-B2808-2012 Expires on January 7, 2017

On September 02, 2015, I conducted a level 2 scheduled inspection of DTE - Electric Company NORTHEAST STATION ("DTE NES"), a Peaker Station, located at 6401 E. 8 Mile Road, Warren, Michigan 48091-2960. The inspection was conducted to determine compliance with the requirements of federal Clean Air Act; Article II, Air Pollution Control, Part 55 of Act 451 of 1994; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules; and MI-ROP-B2808-2012.

During the inspection, Mr. Joe Neruda (Phone: 810- 326-6356; Cell: 313-212-3949; E-mail: nerudaj@dteenergy.com), Environmental Specialist, and Mr. David James (Cell: 313-283-2451), Substation Operator, assisted.

At this DTE's northeast station, peakers are turned on to produce electricity during any peak time; especially hot summer time. The emission units are as follows:

| | | | + |
|------------|--------------------------|--------------|-------------------|
| Emission | Emission Unit | Installation | Flexible Group ID |
| Unit ID | Description | Date/ | } |
| | (including Process | Modification | ļ |
| | Equipment & Control | Date | |
| | Device(s)) | Date | |
| EU CTG12-1 | No. 2 oil or natural gas | 6-26-1971 | NA NA |
| LU CIGIZ-I | | 0-20-1371 | NA |
| | fired combustion | | |
| | turbine generator with a | | |
| | 24 MW capacity at a | | i |
| | temperature of 20°F | | |
| EU CTG11-1 | Natural gas fired | 9-9-1967 | FGNATGASPKRS |
|] | combustion turbine | | · |
| | generator with a 20 MW | | l E |
| | capacity at a | | |
| | , , | | 1 |
| | temperature of 20°F | | |
| EU CTG11-2 | Natural gas fired | 6-17-1966 | FGNATGASPKRS |
| | combustion turbine | | |
| İ | generator with a 20 MW | 1 | 1 |
| | capacity at a | | |
| | _ - | | 1 |
| <u> </u> | temperature of 20°F | | |
| EU CTG11-3 | Natural gas fired | 5-31-1966 | FGNATGASPKRS |
| | combustion turbine | | |
| | | | <u> </u> |

| 17.75 | generator with a 20 MW capacity at a temperature of 20°F | | |
|------------|---|-----------------------------|----------------|
| EU CTG11-4 | Natural gas fired combustion turbine generator with a 20 MW capacity at a temperature of 20°F | 5-31-1966 | FGNATGASPKRS |
| EU CTG13-1 | No. 2 oil fired jet turbine generator with a 23 MW capacity at a temperature of 20°F | 5-15-1971 | FGOILFIREDPKRS |
| EU CTG13-2 | No. 2 oil fired jet turbine generator with a 23 MW capacity at a temperature of 20°F | 5-15-1971 FGOILFIREDPKRS | |

The following is gas turbine operational information:

- 1. FGNATGASPKRS (20 MW at 20 °F): Four natural gas only peakers. These units burnt 15.67 MM BTU per year in CY 2014.
- FGOILFIREDPKRS (23 MW at 20 °F) Two fuel oil only peakers. These units burnt 40,998 gallons per year in CY 2014.
- 4. EU CTG12-1 (24 MW at 20 °F): One duel fuel (natural gas and fuel oil) peaker. Cold start RICE engine only for this unit is present. This unit did NOT run at all in CY 2014. It appears that the unit needs substantial repairs.

All liquid fuel burned is off-road 15 ppm ULSD Diesel (FGOILFIREDPKRS. I.1 & VI). All gaseous fuel burnt is pipeline quality natural gas (FG-NATGASPKRS, III.1).

One 100,000-gallon above-ground fuel oil tank is present. One oil meter for amount of oil in the tank is present; current (September 02, 2015) reading is 76.26 kilo-gallons. While yellow pipes are used to identify NG, red pipes represent fuel oil.

2005 Fire Vs Rule 336.1201

To AQD, Mr. Joe Neruda will submit description of the 2005 fir incident, repairs and costs of such repairs to determine applicability of Rule 201.

Conclusion

Only off-road, 15 ppm ULSD and pipeline quality natural gas is used in the gas turbines.

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ONLY

SUPERVISOR