

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

B280546695

FACILITY: DTE Electric Company - Hancock Peaking Facility		SRN / ID: B2805
LOCATION: 1781 HAGGERTY, COMMERCE TWP		DISTRICT: Southeast Michigan
CITY: COMMERCE TWP		COUNTY: OAKLAND
CONTACT: Stefanie Zanke , Associate Environmental Engineer - Main Contact		ACTIVITY DATE: 10/18/2018
STAFF: Lauren Magirl	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: On-site Inspection		
RESOLVED COMPLAINTS:		

On October 18, 2018, I, Lauren Magirl, Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) inspector, conducted a scheduled inspection at DTE – Electric Company Hancock Peaker Station (Hancock Peaker Station) located at 1781 Haggerty, Commerce Township, Michigan. The purpose of this inspection was to determine the compliance of the facility with the Federal Clean Air Act: Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended; and Michigan Department of Environmental Quality, Air Quality Division rules and MI-ROP-B2805-2017.

**Pre-Inspection Meeting/Facility Overview**

I arrived at the facility around 9 am and met with DTE staff Ms. Stefanie Zanke, Associate Environmental Engineer, Mr. Mike Wilder, Hancock Peaker Operator and Mr. Spenser Loiselle, Combustion Turbine Specialist. Ms. Zanke provided the following documents during the inspection.

- The facility’s monthly operating hours report
- The facility’s gas consumption records per month for the last twelve months
- The facility’s 12 month rolling air emissions report
- The facility’s maintenance records for the last six months

Hancock Peaker Station consists of four natural gas fired combustion turbine generators (EGCTG 11-1, 11-2, 11-3, and 11-4) and two natural gas jet engine turbine generators (EGJTG 12-1 and 12-2). Each jet engine turbines have two engines whereas the combustion turbine only has one engine. The turbine engines are rated from 18.5 megawatts to 41.27 megawatts. The turbines are grandfathered from Michigan permit to install requirements, Rule 201.

The facility was not operating during my inspection. Mr. Loiselle stated they are only operational during “peak” demand which is typically during warm temperatures in the summer and low temperatures in the winter.

Ms. Zanke, Mr. Wilder, and Mr. Loiselle all accompanied me for an inspection around the facility. We toured all 6 turbines and I recorded the hour meters on each of them. The hours on CTG 11 are lower due to DTE upgrading their controls a couple of years ago.

Emission Unit	Hours 10/18/18	Past Inspection 6/14/2017
EGCTG 11-1	183.7	52
EGCTG 11-2	96.2	22
EGCTG 11-3	153.8	81
EGCTG 11-4	237.3	95
EGJTG 12-1A	19143.7	18931
EGJTC 12-1B	19358.2	19143
EGJTG 12-2A	20209.1	20110
EGJTC 12-2B	20424.6	20328

ROP No. MI-B2805-2017  
FGPEAKING

Consumers Energy provides sweet natural gas to the Hancock Peaking Station. Consumers Energy upgraded the incoming natural gas pipes on May 9, 2018. The source-wide natural gas consumption read 797,541,000 cubic feet on the morning of the inspection. Hancock Peaking Station has submitted their semi-annual and annual reports since the last inspection.

Mr. Loiselle stated the only upgrade Hancock Peaking Station has made since the last inspection was on the controls on CTG 12s. The project did not change any emissions or cause an increase in production.

I reviewed the records that were provided after the inspection. CGT 11s had the highest production in September 2017 with 219.3 hours. CGT 12s has the highest production in September 2017 with 158.5 hours. These correspond with the highest facility wide natural-gas consumption of 91,158,000 cubic feet. The greatest NO<sub>x</sub> 12 month rolling average for CGT 11s occurred during 8/1/17 to 7/30/18 at a combined total of 122.5 tons and CTG 12s occurred during 7/1/17 to 6/29/18 at a combined total of 38.6 tons. The records are attached.

#### Conclusion

Based on the inspection, DTE Electric Company – Hancock Peaking Station appears to be in compliance with applicable air quality regulations.

NAME LM

DATE 10/24/18

SUPERVISOR SK