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

B294240692

FACILITY: Consumers Energy Gaylord Combustion Turbine Plant		**SRN / ID:** B2942
LOCATION: 201 Murner Rd., GAYLORD		**DISTRICT:** Cadillac
CITY: GAYLORD		**COUNTY:** OTSEGO
CONTACT: Tim Fuller , CT Plant Supervisor - Contact #2		**ACTIVITY DATE:** 07/11/2017
STAFF: Rob Dickman	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled inspection of this ROP source.		
RESOLVED COMPLAINTS:		

The Gaylord Combustion Turbine Plant is an electric power plant located on Murner Road, north of State Highway M-32 just west of Gaylord, Michigan. Its construction was completed in July, 1967. It is a peaking plant, which means that it operates mainly for short periods when demand for electricity is very high.

The facility consists of three natural gas-fired combustion turbine engines, each one driving an electrical generator. There are also support and maintenance facilities for the turbines and generators.

Two of the turbines are started by stationary diesel engines. These engines are called "black start" engines, which is defined in Federal regulations as an engine used to start a turbine and for no other purpose. A black start is a startup during a blackout; turbines equipped with black start engines can be started even if there is no electricity available on site. The other turbine is started by compressed air, which is provided by an electric compressor. Once the turbines are running the diesel black start engines are shut down and the turbines continue operating burning only natural gas fuel.

As originally built, the combustion turbine engines could also burn diesel fuel. The large diesel fuel tank on site has been decommissioned and the fuel lines from it have been removed, so burning diesel fuel in the turbines is no longer possible.

This facility was inspected per Renewable Operating Permit (ROP) number MI-ROP-B2942-2013. At the time of the inspection, the facility was not in operation. I met with Tim Fuller, Superintendent for the facility. There is one other turbine on site that is not included in the ROP and has not run in over a decade. There is also a large AST on site that once was used to hold fuel oil. It also was completely decommissioned several years ago and is not included in the ROP. This facility only runs on pipeline natural gas.

FGCOMBTURBS - Four 268 Million BTU/hour simple cycle General Electric natural gas-fired combustion turbines used to power electric generators, operated as "peaking units" to generate electricity for short periods of time when demand for electricity is high. Emission units in this flexible group are: EUCOMBTURB1, EUCOMBTURB2, EUCOMBTURB3, EUCOMBTURB4. At the time of the inspection, EUCOMBTURB4 has been retired and has not operated in the last 12 months.

1. **EMISSION LIMIT(S) - There are no emission limits associated with this flexible group; therefore, this section is not applicable.**

2. **MATERIAL LIMIT(S) - There is no material limits associated with this flexible group; therefore, this section is not applicable.**

3. **PROCESS/OPERATIONAL RESTRICTION(S) – The facility is required to only burn natural gas in the turbines. The turbines are configured to only burn natural gas.**

4. **DESIGN/EQUIPMENT PARAMETER(S) - There is no design or equipment parameters associated with this flexible group; therefore, this section is not applicable.**

5. **TESTING/SAMPLING - There is no testing or sampling requirements associated with this flexible group; therefore, this section is not applicable.**

6. **MONITORING/RECORDKEEPING – The facility is required to record the amount and type of fuel burned there. The facility only burns natural gas in the turbines. The quantity of fuel is being**

recorded. Records regarding this have been reviewed by AQD staff. A sample of these is attached.

7. **REPORTING - All semi-annual and annual deviation reporting has been completed in a timely manner. This reporting has been received and reviewed by AQD staff.**

8. **STACK/VENT RESTRICTION(S) - There is no stack or vent restrictions associated with this flexible group; therefore, this section is not applicable.**

9. **OTHER REQUIREMENT(S) – There are no other requirements associated with this flexible group; therefore, this section is not applicable.**

FG CI RICE MACT: Two Cummins 350 horsepower naturally-aspirated diesel fuel-fired compression ignition black start engines used to start EUCOMBTURB1 and EUCOMBTURB2. The conditions in this table go into effect on May 13, 2013, the initial compliance date specified in the Maximum Achievable Control Technology Standards for Reciprocating Internal Combustion Engines, 40 CFR, Part 63, Subpart ZZZZ. This flexible group consists of EUUNIT1SENG, EUUNIT2SENG

FG CI RICE MACT at the stationary source is subject to the National Emissions Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engine Area Sources promulgated in 40 CFR Part 63, Subparts A and ZZZZ (RICE Area Source MACT). The ROP contains special conditions provided by Consumers Energy Company in their application for applicable requirements from 40 CFR Part 63, Subparts A and ZZZZ. The AQD is not delegated the regulatory authority for this area source MACT. Therefore, the provisions associated with this flexible group were not reviewed.

FGCOLDCLEANERS - The facility currently does not have a cold cleaner on site and there has not been one on site in the last 12 months. Mr. Fuller indicated there has not been one on site for several years, but, facility management wished to keep the flexibility to bring one in if needed.

At the time of the inspection, this facility was in compliance with their ROP and State of Michigan rules. The facility is currently going through ROP renewal and in their application EUCOMBTURB4 and FGCOLDCLEANERS have been requested to be removed.

NAME _____ DATE 7/14/17 SUPERVISOR _____