

P0270
Mawit

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

P027031247

FACILITY: CANTON RENEWABLES LLC		SRN / ID: P0270
LOCATION: 4345 S LILLEY ROAD, CANTON TWP		DISTRICT: Detroit
CITY: CANTON TWP		COUNTY: WAYNE
CONTACT: Stephen Smith , Vice President		ACTIVITY DATE: 08/27/2015
STAFF: Jill Zimmerman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Target Inspeyton		
RESOLVED COMPLAINTS:		

DATE OF INSPECTION : August 27, 2015
 TIME OF INSPECTION : 9:00 am
 LEVEL OF INSPECTION : II
 NAICS CODE : 221210
 EPA POLLUTANT CLASS : VOC
 INSPECTED BY : Jill Zimmerman
 PERSONNEL PRESENT : Stephen Smith
 FACILITY PHONE NUMBER : 949-437-2579
 EMAIL CONTACT : ssmith@cleanenergyfuels.com

FACILITY BACKGROUND

Canton Renewables operates a process where landfill gas is collected and the methane is cleaned so that it can be sold to Detroit Edison to be added to the pipeline. This facility has been operating at this location since 2012. The facility operates twenty-four hours a day, seven days a week, and can be controlled both onsite or remotely. The facility is considered a major source because the facility is located on the same property as the Sauk Trails Landfill, which is also considered a major source.

COMPLAINT/COMPLIANCE HISTORY

No complaints have been received regarding this facility. No violation notices (VN) have been issued regarding this facility.

PROCESS EQUIPMENT AND CONTROLS

The landfill gas is collected and piped to Canton Renewables, which is located on the same property as Sauk Trails Landfill. The gas is compressed. Next it is cooled using ammonia. Then the methane is separated out of the gas stream. The methane then passes through a platinum catalyst where the oxygen is removed to a level of less than 5 parts per million. The methane passes through a gas chronometer which monitors the purity among other things. Finally, the pure gas is piped to a Detroit Edison substation located just off of the property. Detroit Edison monitors the purity of the methane. If they accept the methane, it is piped along Haggerty Road to a location where it can be added into the pipeline for distribution. The tail gas, which is the gas remaining after the methane removal, passes through a regenerative thermal oxidizer (RTO). The RTO usually operates at a temperature in the range of 1575 F – 1625 F. When the plant is shutdown, or at times when the methane is not accepted by Detroit Edison, the methane is vented to the west flare.

INSPECTION NARRATIVE

I arrived at the facility at 9:00 am and met with Mr. Stephen Smith. Together we discussed the process of the facility. During the inspection, the flare was operating because the plant had

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been shut down for maintenance for previous day, and the operators were in the process of bringing the plant back up to the proper operating temperature necessary to create the pure methane. The operator stated that the process of bringing the plant back online usually takes about five or six hours. After explaining the process, we walked through the plant.

APPLICABLE RULES/PERMIT CONDITIONS

The facility is considered a major source because it is on the same property as Sauk Trails Landfill. The facility is operating under Title V permit MI-ROP-P0270-2012.

EULFGPLANT controlled by a 3,200 scfm regenerative thermal oxidizer and 4,200 scfm open flare.

- I. Emission Limits – NA
- II. Material Limits – NA
- III. Process/Operational Restriction
 1. Compliance – The MAP has been reviewed. No changes to this plan have been made since the last inspection.
 2. Compliance – Based on the records submitted with the 2014 MAERS report, the flare operated for 852 hours, which is less than the permitted limit of 1,248 hours per year.
 3. Compliance – The facility only burns processed landfill gas in the flare.
 4. Compliance – the open flare operates with a continuous pilot so that all gas piped to the flare can be flared.
 5. Compliance – during the onsite inspection, I did not observe any visible emissions from the flare.
- IV. Design/Equipment Parameters
 1. Compliance – During the onsite inspection, the RTO was operating properly. The RTO usually operates in a temperature range between 1575 F and 1625 F.
 2. Compliance – A temperature monitoring device is installed on the RTO. The temperature is recorded electronically.
 3. Compliance – The gas collection system was built in accordance with 40 CFR Part 60 Subpart WWW and is acceptable to the Department.
 4. Compliance – The flare operates a continuous flare that is monitored with a thermocouple.
- V. Testing/Sampling
 1. Compliance – An initial stack test was performed when the gas processing plant began operation on April 30, 2013 and May 1, 2013. No visible emissions have been observed from the flare.
 2. Compliance – No visible emissions were reported during the test. The report for the visible emission test was sent to our office on June 11, 2013.
- VI. Monitoring/Recordkeeping
 1. Compliance – The temperature for the RTO is collected electronically on a continuous basis. The temperature can be reviewed in as small as two second increments.
 2. Compliance – The facility maintains an electronic file of the temperature of the RTO, and can be reviewed in any time frame as low as every 15 seconds.
 3. Compliance – The facility maintains an electronic file of the hours the flare operates, as well as any down time for the facility.

- VII. Reporting – Compliance – The facility has submitted timely annual and semiannual reports for the past year. No deviations have been reported on these reports.
- VIII. Stack/Vent Restriction – Compliance – The facility installed all stacks to the permitted requirements. No changes have been made to these stacks.
- IX. Other Requirements – Compliance – The facility operates on the same property as Sauk Trail Landfill. This facility accepts the landfill gas, purifies the gas and sells the gas. Any aspects of landfill maintenance associated with this process are being followed by the facility.

MAERS REPORT REVIEW

The facility electronically submitted MAERS on February 24, 2015. The MAERS was reviewed on May 29, 2015 and appears to have been reported accurately.

FINAL COMPLIANCE DETERMINATION

Canton Renewable appears to be operating in compliance with all state and federal regulations as well as all ROP conditions.

NAME Jill Zimmerman

DATE 9/21/15

SUPERVISOR JK