

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

P043742377

FACILITY: Granger Energy of Pinconning, LLC		SRN / ID: P0437
LOCATION: 2403 E. Whitefeather Road, PINCONNING		DISTRICT: Saginaw Bay
CITY: PINCONNING		COUNTY: BAY
CONTACT: Dan Zimmerman , Compliance Manager		ACTIVITY DATE: 10/31/2017
STAFF: Gina McCann	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Inspection of facility to determine compliance with MI-ROP-P0437-2013		
RESOLVED COMPLAINTS:		

I (glm) conducted a scheduled inspection with Granger Energy of Pinconning, LLC, (P0437) on October 31, 2017. Granger Energy of Pinconning, LLC is a gas-to-energy facility. I was accompanied by Meg Sheehan, AQD The stationary source takes raw landfill gas from Whitefeather Landfill (N5985) and treats the gas for use as fuel in two reciprocating internal combustion engines (Caterpillar G3520C).

The landfill gas is collected at the Whitefeather facility, which is a Type II, active municipal solid waste landfill (MSW). An active gas collection system, operated by Whitefeather, removes landfill gas (LFG) by vacuum applied to the well from a blower. The LFG is then routed to the Granger facility for generation of electricity. The excess LFG or when the Granger facility is down, the gas is routed to the open and enclosed flares owned and operated by Whitefeather Landfill.

The two companies have a contractual agreement in which Whitefeather Landfill sells landfill gas to Granger Energy of Pinconning and Granger is dependent upon Whitefeather Landfill to provide landfill gas which is combusted in its two internal combustion engines. The contractual and spatial relationship of the two facilities establishes Whitefeather Landfill and Granger Energy as a single stationary source based on the definition in Michigan's Rule 336.1119(r). However, based on an agreement between the AQD and management of Whitefeather and Granger, the two facilities were issued separate State Registration Numbers and ROPs (MI-ROP-P0437-2013) in 2013. Both facilities are up for ROP renewal in 2018 and will be recombined into one ROP at that time.

Granger Energy was obtained by Energy Development within the last few months. The facility still needs to submit the appropriate paperwork to file for a name change with AQD.

We met with Mike Schaper, Operations Support Specialist. We reviewed records and viewed the engines and process data in real time. At the time of my inspection all required information was available and no violations were found during the inspection. NSPS JJJJ stack testing was performed on March 16, 2016 and at that time the facility was in compliance with the applicable emission standards in their ROP.

FGICENGINES

Two CAT G3520C internal combustion engines are operated at the facility. The engines were installed on May 8, 2009. The plate IDs for Engine 1 and Engine 2 are GZJ00396 and GZJ0394 respectively. As of March 15, 2016 engines hours were 57,880 and 54,047 for Engine1 and Engine2 respectively.

Performance testing verification as required per 40 CFR Part 60 Subpart JJJJ was conducted on March 25, 2105. Emission Limits and test results are presented in the table below. At the time of my inspection the engines were operating such that it meets the emission limits. Total gas flow to the plant was 876 scfm with a methane concentration of 53.0%.

Material limits are compared to a 12-month rolling time period as determined at the end of each calendar month. Landfill gas usage for the engines is recorded on a monthly and 12-month rolling time period basis as determined at the end of each calendar month. Attached is a copy of the spreadsheet with 12-month rolling data for 2015. December 2015 had the highest 12-month rolling MMscf at 390.30 MMscf which is below the ROP limit of 565.88 MMscf.

Test Results from March 25, 2015

EUICEENGINE1

CO
Test Result 2.78 g/bhp-hr
Limit 3.3 g/bhp-hr

CO
Test Result 13.11 pph
Limit 16.23 pph

NOx
Test Result 0.42 g/bhp-hr
Limit 1.0 g/bhp-hr

NOx
Test Result 2.00 pph
Limit 4.92 pph

VOC
Test Result 0.17 g/bhp-hr
Limit 1.0g/bhp-hr

EUICEENGINE2

CO
Test Result 2.72 g/bhp-hr
Limit 3.3 g/bhp-hr

CO
Test Result 12.88 pph
Limit 16.23 pph

NOx
Test Result 0.44 g/bhp-hr
Limit 1.0 g/bhp-hr

NOx
Test Result 2.09 pph
Limit 4.92 pph

VOC
Test Result 0.18 g/bhp-hr
Limit 1.0g/bhp-hr

Special condition (S.C.) II.1 limits the use of landfill gas to 565.88 MMscf per year based on a 12-month rolling time period as determined at the end of each calendar month. According to records received November 17, 2017 via email from Mr. Dan Zimmerman, the facility processed a total of 408.26 MMscf for the 12-month rolling time period ending October 2017.

Special condition (S.C) III.2 requires the facility to implement and maintain a malfunction abatement plan (MAP). The most recent MAP on file for the facility was from 2010. It appeared malfunctions are still addressed according to the MAP.

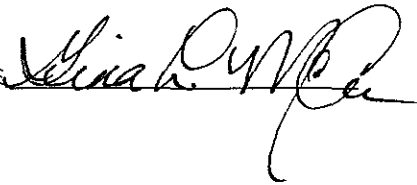
S.C VI. 1-8 requires monitoring and recordkeeping of landfill gas usage (monthly and 12-month rolling), kilowatt output (daily unless weekend or holiday), hours of operation (monthly and 12-month rolling), all maintenance activities per the MAP, and 40 CFR Part 60 Subpart JJJJ notifications and documentation supporting documentation. At the time of the inspection the facility was in compliance with this condition. Supporting documentation is attached.

FGRICEMACT

The facility submitted an annual report per 40 CFR 63.6500 (g) containing the following information. Fuel flow rate and heating values, operating limits provided in ROP and any deviations from these limits, as well as any problems or errors suspected from the fuel flow rate meters.

At the time of my inspection the facility was in compliance with MI-ROP-P0437-2013.

cc: Meg Sheehan, MDEQ-email

NAME 

DATE 11/17/17

SUPERVISOR 