

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

N598542382

FACILITY: Whitefeather Landfill		SRN / ID: N5985
LOCATION: 2401 E. Whitefeather Road, PINCONNING		DISTRICT: Saginaw Bay
CITY: PINCONNING		COUNTY: BAY
CONTACT: Robb Moore , Environmental Manager (Sec 1)		ACTIVITY DATE: 10/31/2017
STAFF: Gina McCann	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Inspection to determine compliance with MI-ROP-N5985-2013		
RESOLVED COMPLAINTS:		

I (glm) conducted a scheduled site inspection at the Whitefeather Landfill. Ms. Meg Sheehan, AQD, accompanied me. Whitefeather Landfill is an existing Type II solid waste disposal facility owned and operated by Republic Services of Michigan with a gas to energy plant owned and operated by Granger Energy Services (P0437). I met with Republic Services of Michigan representative Mr. Robb Moore, Environmental Manager for the site. We toured the landfill and reviewed on site records required by MI-ROP-N5985-2013. I reviewed on site records for asbestos receiving and placement records, waste acceptance records and odor survey records. All required information was available and no violations were found during the inspection.

The landfill gas is collected at the Whitefeather (N5985) facility, which is a Type II, active municipal solid waste landfill (MSW). An active gas collection system removes landfill gas (LFG) by vacuum applied to the wells from a blower. The LFG is then routed to the gas to energy (GTE), Granger facility, for generation of electricity. Any 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. Whitefeather Landfill periodically modifies the gas well collection system and/or collection piping as needed when sections of the landfill begin to produce significant gas quantities.

Whitefeather Landfill (N5985) and Granger Electric of Pinconning (P0437) have a contractual agreement in which Whitefeather Landfill sells LFG to Granger Electric of Pinconning and Granger is dependent upon Whitefeather Landfill to provide LFG which is combusted in its two internal combustion engines. The contractual and spatial relationship of the two facilities establishes Whitefeather Landfill and Granger Electric 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 (SRNs) and ROPs in 2013. The ROP is up for renewal in 2018 and the two facilities will be combined into one ROP at that time.

Whitefeather was issued an ROP in November 2013. The source is subject to New Source Performance Standard (NSPS) for Municipal Solid Waste (MSW) Landfills, 40 CFR Part 60, Subpart WWW.

The following emissions were reported to the Michigan Air Emissions Reporting System in the 2016 submittal:

**Whitefeather Landfill (N5985)**

Pollutant	Amount (lbs)	(tons)
CO	282	(0.14)
NMOC	6,237	(3.12)
NO <sub>x</sub>	52	(0.03)
PM10, filterable	6,221	(3.11)
PM10, primary	27.0	(0.01)
PM2.5, primary	27.0	(0.01)
SO <sub>2</sub>	13.0	(0.01)
VOC	2.00	(0.001)

**Granger Electric (P0437)**

Pollutant	Amount (lbs)	(tons)
CO	216,999.8	(108.50)
NMOC	0	(0)
NO <sub>x</sub>	39,812.67	(19.91)
PM10, filterable	51,408.49	(25.70)

SO <sub>2</sub>	11,847.17	(5.92)
VOC	7,333.98	(3.67)
Formaldehyde	29,617.9	(14.81)

**EULANDFILL <50: Compliant**

The landfill began operation in 1991 and currently accepts municipal solid waste, non-hazardous special waste, regulated asbestos containing materials, and construction and demolition debris. The facility continues to expand and upgrade the site's GCCS. On July 28, 2015 Republic was granted an operating license that included a construction expansion permit. The site now has 17.36 acres in final closure, 19.73 acres in interim closure, and 27.52 acres for current and future waste acceptance.

The Maximum Design Capacity is 4, 561,753 megagrams per their March 2009 modified design capacity report. There were no LFG odors during the tour of the landfill except at the immediate working face. All the LFG collection equipment appeared to be properly maintained and operating. Mr. Moore said that it is Republic's internal policy to operate all GCCS as if they were subject to the NSPS WWW. The facility does perform monthly GCCS monitoring and tuning to optimize gas collection to the GTE.

Each truck is weighed, material type recorded, and the information is entered in the facility's "TRUCK" database. The database provides the value for the annual volume of waste accepted which is used to calculate annual emissions that are reported to the AQD. The total in-place waste as of March 22, 2017 was 4,729,881 yd<sup>3</sup>. The facility accepted 117,082 tons of waste from January 1, 2016 thru December 21, 2016.

The facility is permitted to recirculate leachate though it rarely does.

**TIER II Testing: Compliant**

The facility is required to conduct an NMOC emission test a minimum of once every five years. The last NMOC test was conducted on August 21, 2015. The NMOC concentration was found to be 256 ppm NMOC as hexane or 20.62 Mg/yr, which is below the 50 Mg/yr. required in the NSPS WWW that requires the facility to install and maintain a GCCS. Tons accepted in the Tier II report was 90, 662 short tons from 2014 which was less than the accepted tons reported in MAERS 2014 at 113, 585.12 tons. Mr. Moore said they report all waste accepted to MAERS and used only MSW accepted to calculate gas generation for the Tier II report.

I reviewed the report and verified that O<sub>2</sub> and N<sub>2</sub> concentrations were below 5% and 20% respectively.

**MAP/Odor Abatement: Compliant**

On site Republic staff conducts routine weekly surveys. No off site odors were verified during their investigations for the current month of October. If an odor is detected staff works to determine the source to alleviate the odor. A copy of the day's odor evaluation is attached to this report.

**EUOPENFLARE: Compliant**

The facility has one open flare rated at approximately 800 scfm. They have an enclosed flare rated at approximately 400 scfm onsite, however it is disconnected from the GCCS and cannot be operated. The site maintains the open flare in a ready state. The flare is only used when engine maintenance is performed or during an unexpected shutdown. The GCCS has alarms if the engines are not available and auto start for the flares. The alarm is sent to a Granger employee who would investigate any alarm and then the landfill manager so that they may verify flare operation.

EUOPENFLARE is not in the ROP, because control is not required on a landfill with NMOC concentration less than or equal to 50 NMOC Mg/yr. Whitefeather Landfill performs Tier II testing every 5 years to verify that their emissions are less than 50 NMOC Mg/yr.

**EUASBESTOS: Compliant**

I reviewed asbestos records and asbestos placement tracking. The facility maintains an asbestos placement log with generator and delivery information for asbestos containing waste accepted. The site uses a database program "TRUCKS" to record information as each load enters the landfill. A form is completed by on hill staff with the latitude, longitude, and depth of asbestos containing waste recorded. The asbestos placement form is kept with the manifest for the load. Copies of two completed "RACM Load Inspection Form" are attached. Asbestos notifications for possible disturbance are sent appropriately to the district office.

An example of the asbestos loads, logging and mapping are attached to this report.

**EUCOLDCLEANER: Compliant**

The facility has required instructions posted. Safety Kleen owns and manages the solvents and waste stream. Based on site records and annual certification report the cold cleaner is in compliance.

At the time of the inspection the facility was found to be in compliance with the ROP (MI-ROP-N5985-2013) and the applicable air quality regulations.

NAME *Sean R. McLean* DATE *11/17/17* SUPERVISOR *C. Kue*