

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

N598531969

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: 10/28/2015
STAFF: Gina McCann	COMPLIANCE STATUS: Compliance	
SUBJECT: Compliance inspection covering MI-ROP-N5985-2013.		SOURCE CLASS: MAJOR
RESOLVED COMPLAINTS:		

I (glm) conducted a scheduled site inspection at the Whitefeather Landfill. 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 (PO437). Prior to the inspection I performed an odor survey. No odors were noticed. The survey is attached to this report. I met with Republic Services of Michigan representatives Mr. Robb Moore, Environmental Manager and Mr. Jeff Tucker, General 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.

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 2014 submittal:

Whitefeather Landfill (N5985)

Pollutant	Amount (lbs)	(tons)
CO	540	(0.27)
NMOC	4,540	(2.27)
NO _x	100	(0.05)
PM10, filterable	3,080	(1.54)
PM10, primary	20.0	(0.01)
PM2.5, primary	20.0	(0.01)
SO ₂	20.0	(0.01)
VOC	4.00	(0.002)

Granger Electric (P0437)

Pollutant	Amount (lbs)	(tons)
CO	256,650.75	(128.33)
NMOC	0	(0)

NO _x	51,269.94	(25.63)
PM10, filterable	9,258.15	(4.63)
SO ₂	3,871.59	(1.94)
VOC	14,129.19	(7.06)

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 October 28, 2015 was 4,493,049 yd³. The facility has accepted 150,287 tons of waste from January 1, 2015 thru October 28, 2015, of that approximately 80,000 tons was MSW.

The facility is permitted to recirculate leachate though it rarely does. Per Mr. Tucker the site has not recirculate leachate in 2015.

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 O₂ and N₂ 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. On September 11, 2014 DEQ received a PEAS call regarding an odor nuisance from the facility. OWMRP staff responded to the complaint, see email from B. Burke in general file.

EUOPENFLARE: Compliant

The facility has one open flare rated at approximately 800 scfm and one enclosed flare rated at approximately 400 scfm, for a combined capacity of 1,200 scfm. 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 site typically does not operate the enclosed flare as the site flow at approximately 750-800 scfm can be handled by the open flare. 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 contact Mr. Tucker so that he may verify flare operation.

At the time of the inspection the flare was in operation. At the GTE Engine #2 was down due to electric issues/maintenance. Flow to Engine #1 was ~380 scfm and ~150 scfm to the flare.

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.

The 2014 MAERS reported the flare did not operate in 2014.

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. The facility had sent an asbestos notification for disturbance of asbestos containing area in a landfill on March 26 and May 8, 2014 and March 16, 2015.

The last 10 asbestos loads accepted 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.

Source Name: White Feather Landfill		Inspector: G. McChane		
Source Address: 2401 E. White Feather Rd, Pinconning		Date: 10/28/2015		
Sky Conditions: overcast / drizzle rain		Temperature: 53°F		
Wind Speed: 10-15 mph		Wind Direction: E		Source of Meteorological Data: on site
Location (if applicable, if available)	Time	Odor Scale (See below)	Characteristic (See below)	Comments (Observations that will aid in the determination of the source & properties of the odor)
1	8:39	0	—	—
2	8:43	0	—	—
3	8:46	0	—	—
4	8:48	0	—	—
5	8:49	0	—	—
6	8:54	0	—	—
7	8:56	0	—	—
8	9:00	0	—	—
Odor Scale 0 - Non-Detect 1 - Just barely detectable 2 - Distinct and definite odor 3 - Distinct and definite objectionable odor 4 - Odor strong enough to cause a person to attempt to avoid it completely 5 - Odor so strong as to be overwhelming and intolerable for any length of time				Odor characteristics examples: Paint-like Musty, moldy Burnt, smoky Tar-like, asphalt Cut grass Citrus fruit

Image 1(Odor Survey Page 1) : Odor Survey

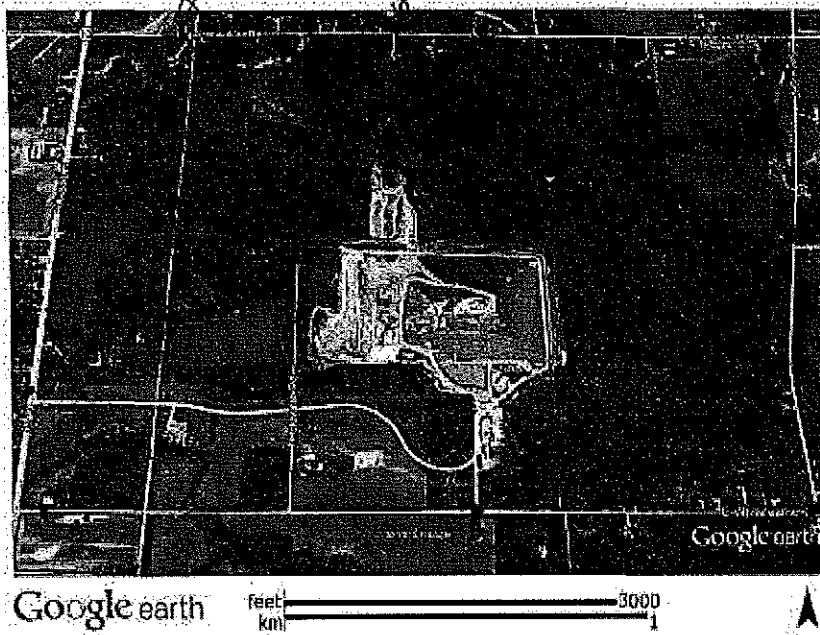


Image 2(Odor Survey Page 2) : Odor Survey Map

NAME *[Handwritten Signature]*

DATE 10/28/2015 SUPERVISOR _____