

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

N601035442

FACILITY: Northern Oaks Recycling and Disposal Facility		SRN / ID: N6010
LOCATION: 513 N. County Farm Road, HARRISON		DISTRICT: Saginaw Bay
CITY: HARRISON		COUNTY: CLARE
CONTACT: Debora Johnston, Environmental Engineer		ACTIVITY DATE: 07/07/2016
STAFF: Gina McCann	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Inspection to determine compliance with MI-ROP-N6010-2013. glm		
RESOLVED COMPLAINTS:		

I (glm) conducted an unannounced inspection at the Northern Oaks Recycling and Disposal facility. Northern Oaks is a Type II municipal solid waste landfill which is owned and operated by Waste Management of Michigan, Inc. The landfill accepts municipal and solid waste, construction debris, foundry sand, ash and contaminated soils.

Northern Oaks was issued Renewable Operating Permit (ROP) number MI-ROP-N6010-2013 on August 12, 2013.

I met with Debbie Johnston, Site Engineer, and Keith Hayes, Gas Plant Operator, Robin Huber, Site Manager, and Joni Jones, Office Manager. I toured the landfill including the flare, leachate evaporator, & gas to energy plant. I reviewed on site records of the monitoring results for landfill gas collection and control system components, asbestos receiving and placement, waste acceptance records, odor complaint, and, odor survey records. All required information was available and no violations were found during the inspection.

EULANDFILL<50: Compliant

The landfill began accepting waste in December of 1992. The Maximum Design Capacity is 8.9 million cubic meters. The landfill is subject to NSPS WWW requirements applicable to a landfill with NMOC emission rate of less than 50 megagrams per year and a maximum design capacity of 2.5 million

Mg. The last Tier II test for NMOC emission rate occurred on September 22, 2011. The site has Tier II testing scheduled for August 30, 2016. The site-specific NMOC concentration was 88 ppm NMOC as hexane. The calculated NMOC emissions for 2011 were 8.1 M/yr. The 2015 MAERS reported NMOC emissions were 2,138 pounds based on the amount of waste received and calculated using the EPA Landfill model. A site total of 40,911 pounds of VOC emissions were reported from the engine, landfill & flare.

MDEQ received 12 complaints in 2014, 11 of those were from Ray Elliott. In 2015 MDEQ received 11 complaints, 10 of those were from Ray Elliott. No Rule 901 violations were confirmed. The landfill maintains an odor log for complaints received. Their records show 48 complaints received between May 8, 2013 and January 10, 2016 and 45 of those complaints were from Ray Elliott with the remaining 3 complaints from Joel Catrell. Odor evaluations are performed seven days a week in an effort to abate odors if necessary. Upon my review of the logs off-site odors have not been observed by WM staff. Attached is a copy of the odor complaint tracking chart kept on site along with an odor complaint form that accompanies each complaint. The odor complaint form records complainant's name, address, time, weather and comments regarding the call.

See attached.

The facility holds community information meetings regularly to address citizen concerns and provide regulatory updates as well as general information on the solid waste program, initiatives, and overall solid waste news at state and local levels.

In an effort to reduce the potential for emissions associated with temporary exposure of buried waste during new cell construction and initial filling, the site did add inert fill. Adjustments were also made to wells in the GCCS to further minimize the opportunity for odors to migrate off-site.

Currently the facility is performing sideslope recovery of the landfill. This is part of normal operating procedures. This process will recover valuable airspace on the sideslopes of the landfill. An email notice for potential odors was sent on June 23, 2106. The AQD performed an odor survey prior to the inspection and no landfill gas odors were detected, *see attached.*

I reviewed the waste acceptance records. Each load is entered into a corporate maintained database. The person at the weigh station records load weight, category, generator, and transporter. The information in the database is used to generate yearly reports for the amount of waste received and number of trucks traveling on site. The facility uses the waste acceptance rates and truck numbers to calculate emissions. The records appeared adequate to make required emission estimates. A copy of certification of calibration from Cech Corporation on June 24, 2016 are attached.

At the time of the inspection the flare was at 1097F and gas flow to it was 69 scfm and the total monthly flow was 183 Mmscf. The flare operating information is monitored and recorded via a computer based tracking, record keeping, and alarm system. The system monitors flare temperatures and flows. An alarm is triggered for flame absence. The alarm will call an assigned employee. Records of flare operation and LFG to the evaporator for the months of February 2015, July 2015 and June 2016 are attached.

The leachate evaporator had a flow of 338 scfm being fed to it at the time of the inspection. The leachate evaporator has the capacity to operate at 600 scfm landfill gas with a flow of 30,000 gpd leachate. The site recirculates up leachate per their agreement with OWMRP. The site does not reintroduce leachate during periods when the landfill is generating relatively high leachate volumes. For 2016 the leachate evaporator has processed 29, 950 gallons of leachate. Records of leachate production and evaporation for the month of February 2015, July 2015 and June 2016 are attached.

The facility's MAP/Odor Abatement plan was approved on August 2010. I reviewed the daily observation odor log completed by on site staff, complaint log, and complaint investigation records. The records indicate compliance with the MAP.

FGCOLDCLEANERS: Compliant

We viewed the on-site maintenance garage where a cold cleaner is located. The lid was closed and the cold cleaner was empty. The cold cleaner is only used a few times each year. The facility contracts

Safety Kleen for disposal of solvents. The facility received a new cold cleaner from Safety Kleen on June 2016. Appropriate records were in place, *see attached*. The 2015 MAERS reported solvent throughput was 30 gallons.

EUASBESTOS: Compliant

I reviewed asbestos records and asbestos placement tracking. The facility maintains a site map w/codes that correspond to an asbestos grid placement log. Ms. Jones has asbestos records organized well and was able to walk me through the logging of material, coding and placing on map. The facility also keeps generator and delivery information for asbestos containing waste accepted. Prior to excavating in an area of the landfill, electronics records of asbestos disposal locations are compared to any drilling proposal. The drilling locations are adjusted to avoid areas where asbestos was buried.

EUICENGINE1: Compliant

We viewed the gas to energy plant. The landfill gas is sent to the LFG generator first, the leachate evaporator second, and the flare receives any remaining collected gas. The internal combustion reciprocating engine is capable of combusting 600 cfm. The engine is subject to NSPS Subpart JJJJ and the NESHAP ZZZZ (RICE). The engine was tested on September 9, 2015 and shown to be in compliance with emission limits. A copy of the stack test observation report is in the file.

A printout of the daily and monthly gas flow, operating hours, Kilowatts, & temperature record for the month of February 2015, July 2015 and June 2016 engine operations are attached. A MAP for the engine was submitted on September 8, 2010 and approved. At the time of the inspection the facility was in compliance with the approved MAP.

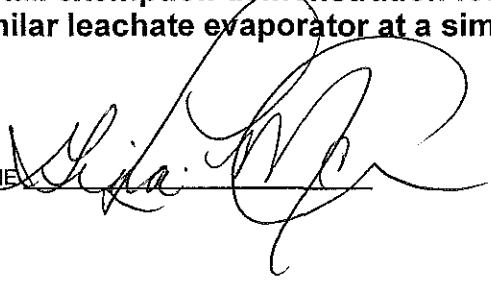
Miscellaneous:

On February 18, 2016 the OWMRP received a letter from Mr. Elliott's doctor stating, "He has had frequent symptoms and exacerbations of medical conditions. This has led to my concerns about his constant exposures to toxic chemical substances as he live near a waste disposal site." The OWMRP requested AQD to take grab samples in and around the facility to determine if a public health concern exists. Samples were taken on May 31, 2016, June 1, 2016, June 13, 2016 and July 7, 2016. Toxics Unit will complete a review of the analysis once they are complete.

In 2012 the EPA performed a sample campaign with their GMAP unit. The analysis from 11/06/2012 to 11/08/2012 showed low levels of methane and hydrogen sulfide. The H2S concentration was within the noise of the instrumentation and they were not confident with the data. They gathered limited data at this time due to some hiccups with the equipment. The AQD has requested the EPA return to perform another campaign and they will be returning in August 2016.

AQD staff is investigating the alleged public health concern from Mr. Elliott. Once the investigation is complete staff will prepare a report including the grab sample

information along with the toxicologists report, surface scan data, a revised permit to install exemption demonstration for the leachate evaporator and test data from a similar leachate evaporator at a similar landfill.

NAME  DATE 7/11/2016 SUPERVISOR 