

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

N601042240

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: 10/19/2017
STAFF: Gina McCann	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT:		
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. Mr. Matthew Karl, MDEQ/AQD accompanied me. Northern Oaks was issued Renewable Operating Permit (ROP) number MI-ROP-N6010-2013 on August 12, 2013. We met with Debbie Johnston, Site Engineer, and Keith Hayes, Site Manager, and Justin Wittig, Gas Plant Operator. 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 and waste acceptance records. A violation notice was sent for missing loads received on the asbestos map. The site corrected this by the end of the day.

**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 August 30, 2016. The site-specific NMOC concentration was 314.5 ppm NMOC as hexane. The calculated NMOC emissions for 2016 were 28.05 M/yr. The 2016 MAERS reported NMOC emissions were 7,640 pounds based on the amount of waste received and calculated using the EPA Landfill model. A site total of 2,787 pounds of VOC emissions were reported from the engine, landfill & flare.

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. The facility accepted 142,585 tons of MSW in 2016 and as of July 1, 2017 there was 4,800,000 cubic yards in place.

At the time of the inspection the leachate evaporator was down for maintenance. Earlier in the week a valve had failed and cause the leachate to backup and overflow onto the cement pad outside the structure. The facility had notified Waste Management and Radiological Division and, at the time of the inspection, a third party was performing verification soil samples.

At the time of the inspection the flare was at 1180F and gas flow to it was 300 scfm. 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. The leachate evaporator was down the day of inspection, however it 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. The total volume evaporated through September 2017 was 7,557,106 gallons. 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 receives a new cold cleaner when the current one in use has

filled the 55 gallon storage drum with spent solvent. The 2016 MAERS reported solvent throughput was 30 gallons.

**EUASBESTOS: Non-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. 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. A violation notice was sent for missing loads received on the asbestos map. The site corrected this by the end of the day.

**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 6, 2017 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 Q1, Q2 and Q3 for 2017 engine operations are attached. The site averaged less than 2.100 operating hours a quarter. The facility had swapped the engine out in July 2016 and sent the appropriate exemption demonstration information at that time. 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.

NAME

Yenia L. McCann

DATE

11/3/17

SUPERVISOR

C. Hare