

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

N601054632

<b>FACILITY:</b> Northern Oaks Recycling and Disposal Facility		<b>SRN / ID:</b> N6010
<b>LOCATION:</b> 513 N. County Farm Road, HARRISON		<b>DISTRICT:</b> Saginaw Bay
<b>CITY:</b> HARRISON		<b>COUNTY:</b> CLARE
<b>CONTACT:</b> Debora Johnston , Environmental Engineer		<b>ACTIVITY DATE:</b> 08/12/2020
<b>STAFF:</b> Gina McCann	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MAJOR
<b>SUBJECT:</b> Inspection of MI-ROP-N6010-2018. Facility was in compliance.		
<b>RESOLVED COMPLAINTS:</b>		

An inspection at the Northern Oaks Recycling and Disposal facility was conducted by Gina McCann. Mr. Nathanael Gentle, EGLE/AQD accompanied. We arrived at the facility on 8/12/2020 at 9AM and departed at 11:18 AM.

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 reissued Renewable Operating Permit (ROP) number MI-ROP-N6010-2018 on August 6, 2018. We met with Debbie Johnston, Site Engineer, Terry Nicholas, District Manager, Rich Kunze, WMRE Operations Manager, and Kenny Keller, WMRE Plant Manager. We toured the landfill including the flare, leachate evaporator, & gas to energy plant. Prior to visiting the facility, records were requested. Debbie Johnston emailed the requested records on 8/7/2020. Before entering the facility, an offsite odor survey was conducted. No odors were detected. Upon entering it was observed the facility was in the process of wetting unpaved roads to minimize dust.

#### **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 was completed on August 30, 2016. Results measured 314.5 ppm NMOC as hexane. MAERS reported NMOC emissions were 3.89 tons for the year 2019. Northern Oaks currently has 5,170,00 cubic yards of solid waste in place. During the year 2018, 144,490 tons were accepted. For the year 2019, 127,808 tons were accepted. During inspection, the flare was operating within normal parameters. The following measurements were observed, flare temperature 1137°F, blower inlet pressure -35.8 in W.C., blower outlet pressure 7.5 in W.C., and flow to flare was 270 scfm. MAERS reported total volume through the flare for 2019 was 54.654 MMCF. The flare is monitored and recorded using a computer-based system. In the event of improper operating conditions, an alarm is triggered, and an automated phone call is placed to an assigned employee. On the day of the inspection, the facility was operating their leachate evaporator. Observed flow rate to the evaporator was 400 scfm. Emissions from the unit had a metallic odor and a noticeable opacity at ground level. A haze was observed starting at the entrance of Northern Oaks and extended to the evaporator. Site personal said the haze was a result of weather conditions on the day of the inspection. The leachate evaporator is scheduled for upcoming maintenance and inspection to be performed by an external company. The unit has the capacity to operate at 600 scfm landfill gas with a flow of 30,000 gpd leachate. MAERS reported total volume through the evaporator for 2019 was 122.371 MMCF. The facility has an approved MAP, approved on September 8, 2010.

#### **FGCOLDCLEANERS: N/A**

The facility no longer owns and operates a cold cleaner. During the inspection it was verified the cold cleaner is no longer on site. The cold cleaner was removed on August 6, 2020 and returned to Safety Kleen.

#### **EUASBESTOS: Compliant**

Asbestos records and placement tracking were reviewed. A site map is maintained displaying the location of each asbestos deposit. Loads are given a designated code which is displayed on the map and corresponding information is recorded in an asbestos receipt grid placement log. Records are maintained for facility generator and delivery information of each asbestos shipment. Prior to excavation, asbestos records are reviewed to ensure no buried asbestos is disturbed. The company owns a large amount of the land surrounding the landfill which serves as a natural barrier.

**EUIENGINE1: Compliant**

The Department received a replacement, a.k.a. engine swap out, notice on July 14, 2016 in accordance with the Division's landfill engine policy. The new engine replaced a CAT 3520 engine that was installed on November 11, 2010. Per the engine plate ID, the new serial number is GZJ00666 and the engine had 1,051 hours of operation at installation. The engine was swapped out for an overhaul maintenance to be conducted at an offsite location. The engine was down for maintenance during the day of inspection. The facility was waiting on the arrival of a replacement clutch. Engine serial number was verified to be GZJ00666. Landfill gas is sent first to power the leachate evaporator, second to the LFG generator and any remaining gas is sent to the flare. On the day of the inspection, landfill gas was being used to power the leachate evaporator, while the flare was burning the remaining 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 October 16, 2019 and shown to be in compliance with emission limits. A copy of the stack test observation report is on file. The next stack test is scheduled for the week of October 5<sup>th</sup>, 2020. Maintenance records are maintained and stored electronically. Engine fuel usage for the year 2019 was 156,347.7 MCF. The engine operated 6741.3 hours over the course of 2019.



NAME \_\_\_\_\_

DATE 8/26/2020SUPERVISOR  \_\_\_\_\_