# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

## ACTIVITY REPORT: Scheduled Inspection

N603745602

140007 40002					
FACILITY: MICHIGAN ENVIRONS IN	SRN / ID: N6037				
LOCATION: 6111 W ELMWOOD RD,	DISTRICT: Upper Peninsula				
CITY: MENOMINEE		COUNTY: MENOMINEE			
CONTACT: ROBERT J PLISKA , REGIONAL ENGINEER		ACTIVITY DATE: 07/31/2018			
STAFF: Shamim Ahammod	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR			
SUBJECT: Conducted a scheduled inspection of Michigan Environs Inc.					
RESOLVED COMPLAINTS:					

**Facility:** 

Michigan Environs Inc (MI-ROP-N6037-2016)

**Inspection Date:** 

July 31, 2018

**MDEQ-AQD Staff:** 

Shamim Ahammod, Environmental Engineer

**Facility Representative:** 

Bob Pliska, Regional Engineer

#### LOCATION:

Michigan Environs is located in Menominee County, approximately 4.5 miles north of the city of Menominee. The surrounding area is largely rural, however there are several residences within 0.25 miles north of the closed and active portions of the landfill. The active portion of the landfill is north of Elmwood Road, while the closed portion of the landfill is on the south side of Elmwood Road. There are single-family homes in between the two along Elmwood Road.

#### **SOURCE DESCRIPTION:**

The active portion of the landfill is north of Elmwood Road. It is called Phase III landfill operating under ROP No. MI-ROP-N6033-2015. There are 14 cells under the Phase III landfill and cell number 10 is currently operating. The facility accepts sludge, asbestos containing waste, fly ash, industrial waste, and miscellaneous solids, along with municipal household waste. The facility is owned and operated by Waste Management (WM). Natural biological processes occurring in landfills transform the waste's constituents producing leachate and landfill gas. Initially, decomposition is aerobic until the oxygen supply is exhausted. Anaerobic decomposition of buried refuse creates most of the landfill gas. Landfill gas consists mainly of methane, carbon dioxide, and nonmethane organic compounds (NMOC). NMOC is the primarily regulated air pollutant associated with landfill gas generation, which was promulgated as a regulated air pollutant under 40 CFR Part 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills. The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) in the 2017 submittal.

### **TOTAL STATIONARY SOURCE EMISSIONS:**

Pollutant	Tons per Year (tpy)	
Carbon Monoxide(C0)	2.7	
Non-Methane Organic Compounds (NMOC)	0.4345	
Particulate Matter (PM)	0.40	
Volatile Organic Compounds (VOCs0	0.1775	

Individual Hazardous Air Pollutants (HAPs)	Tons per Year (tpy)	Individual Hazardous Air	Tons per Year (tpy)
**		Pollutants (HAPs)**	
ACRYLONITRIL	0.23	METH ETH KET	0.35
BENZENE	0.102	METH ISOBUT	0.128
CARBON DISUL	0.03	METHYL CHLOR	0.042
CARBON TETRA	Negligible	METHYLENE CL	0.8315
CARBONYL SUL	0.02	PERC	0.4235
CHLOROBENZ	0.0195	PRPLENE DICH	0.014
CHLOROETHANE	0.055	TCE,111	0.044
CHLOROFORM		TETCLET,1122	0.1275
DICHLORETH12	0.028	TOLUENE	2.479
DICLETH,11-	0.159	TRICHLORETHY	0.25
ETHYLBENZENE	0.33	VINLIDENE CL	0.0135
HEXANE	0.387	VINYL CHLOR	0.314
MERCURY		XYLENES ISO	0.8795
METH ETH KET	0.35		

<sup>\*\*</sup>As listed pursuant to section 112(b) of the federal Clean Air Act

#### **INSPECTION:**

- On July 31, 2018, I (Shamim Ahammod) conducted a scheduled inspection of Michigan Environs Inc. My contact was Gary Faul, Operator. I told him the purpose of the inspection was to determine company compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and the conditions of ROP No. MI-ROP-N6037-2016.
- At the beginning of our meeting, we discussed the issued permit and provided environmental inspections: rights and responsibilities' brochure. After the brief discussion, we toured the plant to get an idea of the overall operations at the facility.

#### **REGULATORY ANALYSIS:**

#### EULANDFILL<50

This emission unit is of a landfill with a design capacity greater than 2.5 million megagrams and 2.5 million cubic meters, but actual emissions based upon an established Tier 2 value in the landfill calculation, is less than 50 megagrams.

I. Emission Limit(s): NA

II. Material limit(s): NA

III. Process/operational restriction(s): NA

IV. Design/Equipment Parameter(s): NA

# Monitoring and Recordkeeping:

- Per SC VI.1, the permittee is required to keep the record of the design capacity report of the facility which was received via email. The maximum design capacity of the landfill is 4.9 million cubic meters with the refuse acceptance rate of 96,000 ton/yr.
- The facility is also required to monitor and keep records of the current amount of solid waste in-place and the year-by-year waste acceptance rate as mentioned in SC VI. 2. The total amount of accepted waste material in the landfill was 110692 tons in 2017. The total NMOC emission rate from the landfill was 0.41 Mg in 2017. Due to an NMOC emission rate of less than 50 Mg/year, the facility is not required to install a landfill gas collection and control system specified in (40 CFR 60.752(b)(2).

## V. Reporting:

As required in SC VII.4, the permittee has submitted the annual NMOC emission rate report to the district office. Based on their report, the total NMOC emission rate from the landfill was 0.41 Mg in 2017. During the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations were observed.

- VI. Stack/Vent Restriction(s)-NA
- VII. Other requirement(s):

The permittee is currently not required to install a collection and control system in the landfill because this facility's NMOC emission rate is about 0.77 Mg/year, which is well below the emission rate threshold of 50 MG/year as specified in SC IX.1.

# **EUASBESTOS:**

This landfill is actively accepting asbestos waste materials.

- I. Emission limit(s)-NA
- II. Material Limit(s)-NA
- III. Process/operational restriction(s): The entire facility was adequately fenced and properly signed to deter the public. No visible emissions were observed during the inspection.
- IV. Design/equipment parameter(s): This facility is currently not required to install gas collection systems because the landfill NMOC emission rate is 0.41MG/year, which is well below the landfill emission rate threshold of 50 MG/year.
- V. Testing/sampling: NA
- VI. Monitoring/recordkeeping:

As I requested, Bob Pliska, regional Engineer sent all required information via email. The permittee has kept records for the waste generator, waste transporter and the quantity of the asbestos-containing waste material as specified in SC VI.1.

The facility has received the following amounts of asbestos-containing waste material in the last two years:

Year	Material Description	Rate Unit	Loads	Tons
2016	Asbestos Friable	Ton	15	100.71
2017	Asbestos Friable	Ton		0

- VII. Reporting Semi-annual and annual reporting is being performed in a timely manner. There are no records of requests to disturb placed waste and no indications of the need to do so.
- VIII. Stack restriction-NA
- IX. Others requirement-NA

Via onsite inspection, review of records, and discussion with staff, the facility appeared to be in compliance with the conditions of issued MI-ROP-N6037-2016.

DATE 8-14-2018