

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

N602854178

FACILITY: Elk Run Landfill		SRN / ID: N6028
LOCATION: 20667 5 MILE HWY, ONAWAY		DISTRICT: Cadillac
CITY: ONAWAY		COUNTY: PRESQUE ISLE
CONTACT: Chris Gee , General Manager		ACTIVITY DATE: 07/07/2020
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Schedule inspection of this major source.		
RESOLVED COMPLAINTS:		

GFL North Michigan Landfill is a Type II Sanitary Landfill, with a design capacity of 2.7 million cubic meters. It is located approximately five miles south of the town of Onaway in Presque Isle County. Land around the facility is mostly rolling hills. Land use within a mile of the facility is a mix of agricultural and forest lands and is sparsely populated with some residential homes. The nearest resident is approximately 200 yards due west of the entrance to the facility.

The facility accepts municipal solid waste (MSW), inert wastes, and a minimal amount of asbestos containing waste. The MSW is transported to the facility to an area (cell) where it is deposited on the working surface. The deposited waste is covered with soil daily. When a cell reaches its design capacity, a liner is installed to cover the waste. Over time, the waste decomposes producing landfill gas (LFG). The LFG is comprised of methane, carbon dioxide, carbon monoxide, and volatile organic compounds (VOCs). MSW initially undergoes aerobic microbial activity producing predominately nitrogen gas and carbon dioxide. As oxygen levels decline, gas composition changes to a mixture of methane and carbon dioxide. LFG typically contains a small percentage of non-methane organic compounds (NMOC). The NMOC fraction consists of various organic hazardous air pollutants (HAPs), greenhouse gases, and volatile organic compounds (VOCs).

The facility received a Solid Waste Disposal Area Construction Permit to increase the landfill's design capacity on June 18, 2001. LFG is currently not being collected. Because the landfill was modified after May 30, 1991 and the design capacity is now above 2.5 million megagrams due to a recent increase in waste density, the GFL North Michigan Landfill is subject to 40 CFR Part 60, Subpart WWW.

The landfill is required to calculate the non-methane organic compound (NMOC) emission rate and submit non-methane organic compound (NMOC) emission rate reports until the NMOC emission rate exceeds 50 megagrams (Mg) per year. Once the NMOC estimated emission rate exceeds 50 Mg per year, the Landfill will have 12 months to submit a landfill gas collection and control system design plan. In July of 2018 GFL North Michigan Landfill provided NMOC estimates which demonstrated that NMOC emissions would not exceed 8.5 Mg/year in the next five years, which is below the 50 Mg per year threshold. Therefore, no landfill gas collection and control system is required under 40 CFR Part 60, Subpart WWW requirements. However, the facility is voluntarily operating several solar powered passive flares for odor control purposes.

I travelled to this facility to perform an inspection per their Renewable Operating Permit MI-ROP-N6028-2018. Required records for this facility were previously reviewed and documented in May of 2020 with some exceptions in the EUASBESTOS section. These are included in this report.

EULANDFILL<50 - This emission unit is the landfill. This landfill has a design capacity greater than 2.5 million megagrams and 2.5 million cubic meters. Additionally, the landfill has received a volume expansion (increased the design capacity) permit from the Department of Environmental Quality, since May 30, 1991. These two parameters make it subject to NSPS 40 CFR 60, Subpart WWW. Collected landfill gas is controlled by a sulfur removal system and flare.

Emissions Limits

There are no air emission limits associated with the landfill.

Material Limits

There are no material limits associated with the landfill.

Process or Operational Restrictions

There are no process or operational restrictions associated with the landfill.

Design or Equipment Parameters

There are no design or equipment parameters associated with the landfill.

Testing or Sampling

The facility has performed Tier 2 testing to determine annual NMOC emissions. Tier 2 testing was performed in May of 2018. NMOC emissions at that time were 3.67 Mg per year and were modelled to be 4.17 Mg per year in 2020. A review of this testing has been previously performed and documented by AQD staff.

Monitoring and Recordkeeping

A review of required records for this emission unit has been previously performed and documented by AQD staff.

Reporting

All semi-annual and annual deviation reporting has been reported, reviewed, and documented by AQD staff.

A report regarding annual NMOC emissions is required to be submitted to the District. This report can be either annually or a 5-year estimate. The facility provided a report estimating NMOC emissions from the date of Tier testing, 2018, through 2023. NMOC emissions in 2023 are projected to be 5.65 Megagrams based on LandGem Modelling.

The facility is required to notify the Department of any testing being performed at the facility per department guidelines. The only testing performed at the facility was completed in May of 2018. All required notifications were submitted in a timely manner.

Stack and Vent Restrictions

There are no stack restrictions associated with the landfill.

Other Requirements

If the NMOC emission rate is calculated to be equal to or greater than 50 megagrams per year, the facility is required to install a collection and control system. As of the May of 2018 Tier 2 testing, the facility NMOC emissions were below this threshold and modelling indicates they continue to be.

The facility is required to comply with all applicable provisions of 40 CFR Part 60 Subpart A and WWW, "Standard of Performance for Municipal Solid Waste Landfills", as they apply to the flare. This facility is in compliance with the Subpart.

EUASBESTOS - This emission unit represents any active or inactive area within the landfill which has accepted asbestos waste. This unit is subject to 40 CFR Part 61, Subparts A and M.

Emissions Limits

There are no air emission limits associated with this emission unit.

Material Limits

There are no material limits associated with this emission unit.

Process or Operational Restrictions

The facility must deter the general public from accessing an asbestos disposal site either through a natural or installed barrier. This facility is in a very rural location at the end of a dead-end road. Surrounding the facility is a six-foot fence with triple barbed wire on top. The rugged terrain, entry security, and relative remote location serve as adequate barriers to the public.

There are procedural options in Subpart M regarding how a facility handles asbestos waste, all of which are meant to minimize the possibility of human exposure. Following is the procedure this facility employs:

- A manifest for the material is supplied to the facility no earlier than 24 hours prior to arrival of the material.
- A designated, surveyed area away from the active working face is prepared for this waste. During disposal, the active working face is shut down.
- The waste is inspected at the gate to ensure it was represented accurately on the manifest for it. Upon acceptance, the waste is placed in the prepared area.
- It is covered with acceptable material as soon as practical, typically immediately upon placement.
- This location, which has been surveyed for latitude, longitude, and depth, is recorded on a map of the landfill such that it will not be accidentally disturbed during placement of gas collection and ventilation equipment.

This procedure is compliant with the Subpart.

Design or Equipment Parameters

The facility must ensure the no gas collection equipment placement disturbs and placed asbestos waste. As state in this procedure above, placement of this waste is surveyed and mapped such that this possibility can be avoided.

Testing or Sampling

There are no testing or sampling procedures associated with this emission unit.

Monitoring and Recordkeeping

Manifests received at the facility are required to contain certain information including basic information on the generator, hauler, the type of waste it is, and how it is contained. The rate this facility receives asbestos containing material is infrequent. The most recent manifest to review was dated December of 2019 and appeared complete. Also reviewed in this file was a Special Waste Inspection Report which also appeared complete and associated mapping of this waste. Mapping for all asbestos waste is performed using GPS. The coordinates are logged on to the map, including depth. Also included were photos of each load of waste prior to disposal.

The facility is required to keep records of essentially any times they deviate from their procedures for handling asbestos waste including undocumented or unsecure waste, or disturbances of placed waste. There were no records indicating any time in the last 12 months where there was a deviation in their handling procedures.

Reporting

The facility is required to report any time they deviate from their procedures for handling asbestos waste. As indicated above, there were no records indicating any time in the last 12 months where there was a deviation in their handling procedures. Therefore, no reporting has been received.

Stack and Vent Restrictions

There are no stack or vent restrictions associated with this emission unit.

Other Requirements

The facility is required to comply with 40 CFR 61, Subparts A and M. By complying with the conditions listed in the EUASBESTOS section of the ROP, the facility is demonstrating compliance with the Subparts.

At the time of the inspection, this facility was in compliance with their applicable air permitting.

NAME 

DATE 7-9-20

SUPERVISOR 