

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

N603343523

FACILITY: DAFTER SANITARY LANDFILL INC		SRN / ID: N6033
LOCATION: 3962 W 12 MILE ROAD, DAFTER		DISTRICT: Upper Peninsula
CITY: DAFTER		COUNTY: CHIPPEWA
CONTACT: TIM HARROW , SITE MANAGER		ACTIVITY DATE: 02/02/2018
STAFF: Shamim Ahammod	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Conducted a scheduled inspection		
RESOLVED COMPLAINTS:		

**Facility:** Dafter Landfill Inc (MI-ROP-N6033-2015)  
**Inspection Date:** February 2, 2018  
**MDEQ-AQD Staff:** Shamim Ahammod, Environmental Engineer  
**Facility Representative:** Timothy Harrow, Site Manager

**LOCATION:**

Dafter Sanitary Landfill (DSL) is located near the village of Dafter in Chippewa County on 12 Mile Road near Mackinac Trail. The surrounding area is rural.

**SOURCE DESCRIPTION:**

The facility contains five landfill cells: A, B, C, D, and E. Cell A is partially closed, and the entire facility has 27 passive vents. On February 12, 2004, the Department of Environmental Quality (DEQ) Waste and Hazardous Materials Division issued a Construction Permit to the DSL that increased the total permitted waste capacity from 1,322,000 cubic yards to 5,312,000 cubic yards. The Landfill became subject to 40 CFR Part 60, Subpart WWW New Source Performance Standards (NSPS) for Municipal Solid Waste Landfills which requires that any municipal solid waste landfill that has a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters obtain a Part 70, Renewal Operating Permit (ROP).

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 2016 submittal.

**TOTAL STATIONARY SOURCE EMISSIONS:**

Pollutant	Tons per Year (tpy)
Carbon Monoxide(CO)	1.186
Non-Methane Organic Compounds (NMOC)	0.215
Particulate Matter (PM)	0.168
Volatile Organic Compounds (VOCs)	0.116

Individual Hazardous Air Pollutants (HAPs)**	Pounds per year	Individual Hazardous Air Pollutants (HAPs)**	Pounds per year
ACRYLONITRIL	203.00	METH ETH KET	309.00
BENZENE	90.00	METH ISOBUT	113.00
CARBON DISUL	27.00	METHYL CHLOR	37.00
CARBON TETRA	0.40	METHYLENE CL	735.00
CARBONYL SUL	18.00	PERC	374.00
CHLOROBENZ	17.00	PRPLENE DICH	12.00
CHLOROETHANE	49.00	TCE,111	39.00
CHLOROFORM	2.00	TETCLET,1122	113.00
DICHLORETH12	25.00	TOLUENE	2190.00
DICLETH,11-	141.00	TRICHLORETHY	224.00
ETHYLBENZENE	296.00	VINLIDENE CL	12.00
HEXANE	342.00	VINYL CHLOR	277.00
MERCURY	0.04	XYLENES ISO	777.00

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

#### INSPECTION:

On February 2, 2018, I (Shamim Ahammod) conducted a scheduled inspection of the Dafter Sanitary Landfill Inc. I arrived at the facility in the morning and met with Timothy Harrow-Site Manager. I explained to him, the purpose of the inspection was to conduct a scheduled inspection of the facility, and to determine the company's compliance with their issued ROP No: MI-ROP-N6033-2015. At the beginning of our meeting, we discussed issued permit conditions, and then we went on a brief walk through the plant to get an idea of the overall operations at the plant. I have visited the entire Landfill and have seen Cell A, B, C, D and E. Exempt sources were also inspected.

#### 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
- V. Testing/Sampling requirement:

Per SC V.2, the facility requires performing tier 2 testing at least once five years. Tier 2 testing was conducted on September 2014. A report was received.

**VI. 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 reviewed during the inspection. The maximum design capacity of the landfill is 1,010,800 m<sup>3</sup> with the refuse acceptance rate of 118,000 cubic gate yds/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 46,442.52 tons in 2017. The total NMOC emission rate from the landfill was 0.37 Mg in 2017. Projected annual NMOC emission rate was calculated as 0.38 Mg/year for the year 2020 and a projected peak emission rate of 0.43 Mg/year for the year 2049. Due to an NMOC emission rate of less than 50 Mg/year, DSL is not required to install a landfill gas collection and control system specified in IX.1 (40 CFR 60.752(b)(2)).

**VII. 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 0.37 Mg (0.40 ton) in 2017. During the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations were observed.

**VIII. Stack/Vent Restriction(s)-NA****IX. Others 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 0.39 Mg/year, which is well below the emission rate threshold of 50 MG/year as specified in SC IX.1. DSL submitted a Tier 2 landfill Gas Sampling and Analysis Report in December 2014. The site-specific NMOC concentration was determined to be 8.3 parts per million by volume (ppmv) as hexane with an emission rate of 0.36 Mg/year. No emission units at the stationery source are currently subject to the Prevention of Significant Deterioration (PSD) regulations of part 18, Prevention of Significant Deterioration of Air Quality of Act 451.

**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. Asbestos-containing material is logged in, surveyed for latitude, longitude, elevation and buried properly.****IV. Design/equipment parameter(s) - This facility is currently not required to install gas collection systems because the landfill NMOC emission rate is 0.39 MG/year, which is well below the landfill emission rate threshold of 50 MG/year.****V. Testing/sampling-NA****VI. Monitoring/recordkeeping-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. Drafter landfill 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	6	7.56
	Asbestos -Nonfriable	Ton	5	11.81
2017	Asbestos Friable	Ton	11	23.18
	Asbestos non-friable	Ton	9	20.29

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

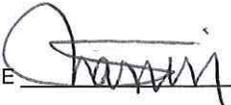
IX. Others requirement-NA

#### EXEMPT SOURCES:

At the time of inspection, exempt sources were inspected. The following table lists processes that were included in the ROP application as exempt devices under Rule 212 (4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

Exempt emission unit ID	Description of Exempt Emission Unit	ROP Exemption	PTI Permit Exemption
EUGEN001	16 horsepower Gasoline internal combustion engine: Generator	R 336.1212(4)	R 336.1285(g)
EUGEN002	16 horsepower Gasoline internal combustion engine: Generator	R 336.1212(4)	R 336.1285(g)
EUPUMP001	16 horsepower Gasoline internal combustion engine: Pump	R 336.1212(4)	R 336.1285(g)
EUPRSSWSHR001	16 horsepower Gasoline internal combustion engine: Pressure Washer	R 336.1212(4)	R 336.1285(g)
EUPRSSWSHR002	<1MMMBTU/HR Diesel internal combustion engine: Pressure Washer	R 336.1212(4)	R 336.1285(g)
EUPRSSWSHR003	<1MMMBTU/HR Diesel internal combustion engine: Pressure Washer	R 336.1212(4)	R 336.1285(g)
EUACOMPP001	38 horsepower Gasoline internal combustion engine: Compressor	R 336.1212(4)	R 336.1285(g)
EUPROHTER001	80,000MMBTU/HR Propane heater	R 336.1212(4)	R 336.1282(b)(i)
EUPROHTER002	105,000MMBTU/HR Propane heater	R 336.1212(4)	R 336.1282(b)(i)
EUPROHTER003	105,000MMBTU/HR Propane heater	R 336.1212(4)	R 336.1282(b)(i)

Via onsite inspection, review of records, and discussion with staff, the facility appeared to be in compliance with the conditions of issued ROP No. # MI-ROP-N6033-2015.

NAME 

DATE 3/6/2018

SUPERVISOR 