DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: On-site Inspection

N295272984			
FACILITY: Hastings Landfill		SRN / ID: N2952	
LOCATION: 1899 N M-43 HWY, HASTINGS		DISTRICT: Grand Rapids	
CITY: HASTINGS		COUNTY: BARRY	
CONTACT: Robert Pliska , District Engineer (SEC 1)		ACTIVITY DATE: 07/17/2024	
STAFF: Chris Robinson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR	
SUBJECT: FY '24 inspection to dete	rmine facility's compliance status with respect to a	pplicable air quality rules and regulations including	
Renewable Operating Permit MI-ROI	P-N2952-2022.		
RESOLVED COMPLAINTS:			

Staff Chris Robinson (CR) from Michigan's Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) conducted an onsite inspection at SC Holdings - Hastings Landfill (SRN N2952) on July 17, 2024. Prior to entry CR surveyed the perimeter of the facility along Highway M-43 for odors and visible emissions, none were observed. Weather conditions were approximately 75°F, fair sky conditions with westerly winds at approximately 7 mph (www.weatherunderground.com).

CR met Bob Pliska, District Engineer, and Don Johnson, Landfill Operations Manager. The purpose of the inspection was relayed, which was to determine this facility's compliance status with respect to applicable state and federal air quality rules and regulations including Renewable Operating Permit (ROP) No. MI-ROP-N2952-2022. Identification was also provided.

A) FACILITY DESCRIPTION

The SC Holdings Inc - Hastings Landfill is a Waste Management facility with a permitted design capacity of 4.384 million cubic yards (~4.10 million cubic meters) and accepts approximately 250 tons of waste per day. The landfill consists of a closed disposal cell, various active disposal cells, an active gas collection system, and an enclosed flare. The landfill and associated flare are exempt from new source review permitting under Rule 285(2)(aa)

B) Regulatory Requirements

The landfill is subject to the following federal standards:

1. New Source Performance Standard (NSPS) for existing Municipal Solid Waste (MSW) Landfills promulgated under 40 CFR Part 60, Subparts A and WWW. Hastings Landfill was subject to this subpart since it is an MSW landfill that commenced construction, reconstruction, or modification on or before July 17, 2014, and had accepted waste at any time since November 8, 1987, and its design capacity is greater than 2.5 million Megagrams (MG) and 2.5 million cubic meters but has a Non-Methane Organic Compound (NMOC) emissions rate of less than 34 Mg per year. Per §60.750 an affected MSW landfill must continue to comply with 40 CFR Part 60 Subpart WWW until it either becomes subject to the more stringent requirements in an approved and effective state or federal plan that implements subpart Cf of this part, or modifications or reconstructions have occurred after July 17, 2014. However, the Federal Plan promulgated under 40 CFR Part 62 Subpart OOO became effective May 21, 2021. Therefore, the facility is now subject to this subpart instead of 40 CFR Part 60 Subpart WWW. This Federal Plan will apply until a State Plan is approved or delegation of the Federal Plan is approved for Michigan, or the facility becomes subject to 40 CFR Part 60 Subpart XXX.

2. The National Emission Standard for Hazardous Air Pollutants (NESHAP) for MSW Landfills promulgated under 40 CFR Part 63 Subpart AAAA. Hastings Landfill is subject to the subpart since they are an MSW landfill that has accepted waste since November 8, 1987. Federal standards 40 CFR Part 62 Subpart OOO and 40 CFR Part 63 Subpart AAAA have almost identical requirements with the difference being that the NMOC emission rate threshold is 34 MG/yr. for Part 62 and 50 MG/yr. for Part 63. Also, the maximum well temperature for sites required to have a gas collection and control system (GCCS) is less than 131 degrees Fahrenheit for Part 62 and less than 145 for Part 63. Since the facility is following the requirements of Part 62 and is not required to have a GCCS, they would be complying with Part 63 as well. Therefore, the facility's ROP does not need to be reopened at this time but should be updated during the next renewal to include requirements for 40 CFR Part 63 Subpart AAAA.

3. The NESHAP for Asbestos promulgated in 40 CFR Part 61, Subparts A and M. Hastings Landfill is subject to this subpart since they accept asbestos waste.

<u>c) COMPLIANCE EVALUATION</u> 1) MI-ROP-N2952-2022

EULANDFILL<34:

The most recent Tier 2 testing was conducted in February 2021. Based on those results the NMOC emissions are expected to be less than 10.27 MG/year through 2025 which is well below the 34 MG/year NMOC threshold which would trigger the Part 62 Subpart OOO GCCS requirements. The landfill is required to recalculate the NMOC emission rate annually or every 5 years until the NMOC emission rate exceeds 34 MG/year under Subpart OOO.

Records pertaining to maximum design capacity, year-by-year acceptance rate, and amount of waste in place are maintained. As of July 17, 2024, the calculated waste in place was approximately 2.728 million cubic yards with a permitted capacity of 4.384 million cubic yards.

EUASBESTOS:

The landfill began accepting asbestos containing waste in December 2003. According to company records, asbestos waste is placed in a consolidated area within the landfill and is covered over immediately. The facility is maintaining all required records including the waste shipment information and records of the location, depth, area, and quantity of asbestos-containing waste material within the disposal site. From January 1, 2023, through April 17, 2024, the facility had accepted one (1) 10-yard delivery of asbestos containing waste. Records are maintained in accordance with the ROP.

Because of the size of the property around the fill area, there is a sufficient natural barrier to prevent general access to the fill areas with asbestos containing waste. In addition, signs are used to warn employees, haulers and visitors if asbestos waste is being deposited.

EUGWTS:

The facility also has a venturi air stripper (EUGWTS) which is used to remediate groundwater contaminated with VOCs. The air stripper has been operational since 1993. The facility monitors and records the VOC concentration of the influent and effluent on a quarterly basis through a grab

sample. Records reviewed onsite show that for 2023 and 2024, no VOCs have been detected in the influent samples. The maximum detection limit for VOCs is 5 micrograms per/liter (ug/L). In addition, the facility conducts and records daily inspection and maintenance on the treatment system. The system was down for routine maintenance during the inspection.

2) Miscellaneous:

a) Active Landfill Gas Collection System:

Although the facility is not currently required to operate a GCCS, the facility installed and operates an active GCCS in order to prevent off-site migration of landfill gas as well as to control odor. At the time of the inspection, approximately 405 standard cubic feet of landfill gas per minute (scfm) was being captured by the collection system. This is an increase from the last AQD inspection.

Once a month, the facility monitors the vacuum pressure of the collection header, as well as the oxygen concentration and temperature at each wellhead. The facility records the information obtained during monitoring and submits it to the corporate landfill gas management computer system.

It is noted that the facility is not required to conduct surface monitoring over the landfill or wellhead monitoring of the GCCS until NMOC emissions exceed 34 MG/year per 40 CFR Part 62, Subpart OOO.

b) Enclosed Flare:

Gas collected from the collection system is routed to an enclosed flare. Temperature of the flare and the gas flow to it are recorded on a continuous basis. The enclosed flare was operating at the time of this inspection with a flow rate around 405 scfm and a temperature of 1,503°F. Although temperature and gas flow are monitored, the facility is not required to monitor the flare until NMOC emissions exceed 34 Mg/year per the ROP and 40 CFR Part 62, Subpart OOO. No visible emissions were observed from the flare. A performance test of the enclosed flare was last conducted on May 31, 2001.

c) Other:

This facility has a 220,000-gallon leachate storage tank which is exempt under Rule 285(2)(aa). This tank is enclosed in a building to ensure conditions are adequate for biological breakdown of the leachate during the winter. The building is heated with three separate furnaces that burn untreated landfill gas. These heaters can be considered exempt under Rule 282(2)(g) and the sulfur content of the landfill gas would not result in sulfur dioxide emissions above 1 pound per hour; all other pollutants are also below significance levels. The heaters were not operating on the day of the inspection.

3) Annual Emissions Inventory

Pollutant	Amount (tons)
CO	9.98
NOX	3.39
PM10-PRI	0.89
PM10-FIL	0.12
PM25-PRI	0.77
SO2	0.81
VOC	0.70

D) Compliance Determination

Based on observations, discussions, and a records review, Hastings Landfill appears to be operating in compliance with all applicable air quality rules and regulations.

NAME

DATE 8/21/2024 SUPERVISOR