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

N603574910

FACILITY: DELTA SOLID WASTE MANAGEMENT AUTHORITY		**SRN / ID:** N6035
LOCATION: 5701 19TH AVENUE N, ESCANABA		**DISTRICT:** Marquette
CITY: ESCANABA		**COUNTY:** DELTA
CONTACT: David Lundquist , Operations Manager		**ACTIVITY DATE:** 10/28/2024
STAFF: Drew Yesmunt	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Targeted inspection for compliance with EUASBESTOS in MI-ROP-N6035-2022.		
RESOLVED COMPLAINTS:		

Facility: Delta Solid Waste Management Authority (SRN: N6035)

Location: 5701 19th Avenue North, Escanaba, MI 49829

Contact(s): Dave Lundquist, Operations Manager; Terri Rabitoy, Administration Manager

Regulatory Authority

Under the Authority of Section 5526 of Part 55 of NREPA, the Department of Environment, Great Lakes, and Energy may upon the presentation of their card, and stating the authority and purpose of the investigation, enter and inspect any property at reasonable times for the purpose of investigating either an actual or suspected source of air pollution or ascertaining compliance or noncompliance with NREPA, Rules promulgated thereunder, and the federal Clean Air Act.

Facility Description

Delta County Landfill is a municipal solid waste (MSW) landfill owned by Delta Solid Waste Management Authority (DSWMA) and the City of Escanaba. The landfill covers 277.9 acres and is located in Wells Township, Delta County, Michigan. The source is in a rural setting approximately 2.5 miles NW of Escanaba and is surrounded by undeveloped forests and wetlands. A sports club located to the east is the nearest developed property.

Delta County Landfill is classified as a Type II sanitary landfill. The Southern Landfill has been closed since July 26, 2016. The Northern Expansion began accepting waste May 18, 2015, and is the current active area. There are two closed Type III landfills which contain construction demolition waste and fly ash. The Type III cells are not subject to the requirements of the NSPS or NESHAP for Municipal Landfills or Part 70 permitting.

On July 9, 2009, the MDEQ Waste and Hazardous Materials Division sent DSWMA an approval for a construction expansion permit (Northern Expansion). The proposed landfill expansion increased the maximum design capacity of the landfill site from 1.65 million cubic yards to 7.85 million cubic yards. Since the landfills design capacity exceeds 2.5 million cubic meters, the

stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70 requiring a Title V renewable operating permit.

Actual NMOC emissions at Delta County Landfill exceed 34 Megagrams per year, thus the landfill maintains an active gas collection control system (GCCS) with an open flare as a control device at both the North Landfill and the closed South Landfill. The South Landfill collection system and flare were completed and started on October 1, 1998. On March 26, 2020, the North Landfill gas collection system was installed, and the flare was started.

Process Description

A landfill consists of an area of land or an excavation in which wastes are placed for permanent disposal. The process begins with collected waste being transported to the landfill where it is dumped into an area (cell). A synthetic liner, such as high-density polyethylene, is used at the bottom to prevent contamination of leachate and landfill gas with ground water and soil. Heavy equipment then spreads the waste, compacts it, covers the waste with soil or alternate daily cover materials (ADCM), and further compacts it on a daily basis. When a cell is full, it is covered permanently with a liner cap and compacted soil.

Emissions

Landfill gas is generated through bacterial decomposition of organic materials contained in solid waste. Initially, decomposition is aerobic until the oxygen supply is exhausted. With the solid waste being insulated from the atmosphere, decomposition then occurs anaerobically producing most of the landfill gas. Landfill gas (LFG) consists approximately of equal parts methane and carbon dioxide, and less than 1% non-methane organic compounds (NMOC). The NMOC fraction consists of various organic hazardous air pollutants (HAP), greenhouse gases, and volatile organic compounds (VOC).

LFG can be collected through one of two methods: active and passive gas collection systems. Delta County Landfill has an active collection system. There are 21 wells on the south landfill and 3 at the north. 4 of the wells on the south landfill are shut off. Each landfill also has an active open flare.

Emissions Reporting

Delta County Landfill is required to report its annual emissions. The following table lists the source total emissions for the reporting year 2023.

Pollutant	Emissions (TPY)
CO	179.4
PM 10 FLTRBL	<1
NMOC	46
NOX	9.57
SO2	1.9
VOC	1.3

Regulatory Analysis

The facility is permitted under MI-ROP-N6035-2022. The facility is subject to 40 CFR Part 62, Subpart OOO for MSW Landfills that commenced construction on or before July 17, 2014, and have not been modified or reconstructed since July 17, 2014. In addition, the stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because its design capacity exceeds 2.5 million Mg and 2.5 million cubic meters. Actual NMOC emissions at Delta County Landfill exceed 34 Megagrams annually (Mg/yr), therefore the landfill has an active GCCS with an open flare as a control device at both the North Landfill and the closed South Landfill.

EULANDFILL, EUACTIVECOLL, and EUOPENFLARENORTH, EUOPENFLARESOUTH at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for MSW Landfill promulgated in 40 CFR Part 63, Subparts A and AAAA.

The facility is subject to the asbestos regulations found in 40 CFR Part 61, Subparts A and M, as the facility accepts asbestos-containing waste material (ACWM).

Compliance History

DSWMA has received three violation notices in the last five years. In December 2022, upon inspection, the facility received a violation notice for the following violations: inadequate warning signs for asbestos (EUASBESTOS, SC III.1), asbestos was not being covered at the frequency required in SC III.1.c or daily Method 22 readings for 15 minutes were not being performed and recorded (EUASBESTOS, SC III.1), a map of the location of asbestos in cell 6 was

initially not available (EUASBESTOS SC VI.2), the facility was not keeping records on all fuels combusted in the furnace on an hourly basis or observing and recording daily visible emissions (EUFURANCE1, SC VI.2, 3), SEMS data was not being properly reviewed with exceedances documented and exceedance procedures followed (FGLANDFILL-AAAA, SC V.3, VI. 1, VII.4). The violations were addressed and considered resolved on 3/14/23.

The facility was most recently inspected in May 2024 and received a violation notice for the following violations: asbestos was not being covered at the frequency required in SC III.1.c or daily Method 22 readings for 15 minutes were not being performed and recorded (EUASBESTOS, SC III.1), and records of the amount and type of material that has been used to cover the asbestos waste and documentation that the cover material was applied in the frequency required in Special Condition III.1.c were not available (EUASBESTOS, SC VI.4.b). In the response to the violation notice, the facility stated that the asbestos waste observed during the inspection was unintentionally uncovered during regrading of the asbestos waste area. A violation notice was then sent to the facility for disturbing asbestos waste deposited in the North landfill without sending written notification to the AQD Technical Programs Unit and Marquette District Office at least 45 days prior. These violations have yet to be considered resolved until AQD observes that asbestos waste is being adequately covered and receives record that cover is being applied in the frequency required by Special Condition III.1.c in EUASBESTOS.

<u>Inspection</u>

On October 28, 2024, AQD Staff (Drew Yesmunt, Joseph Scanlan, and Jarod Maggio) conducted an unannounced inspection of Delta Solid Waste Management Authority. AQD Staff arrived at the office building and met with the Operations Manager, Dave Lindquist. It was explained that the purpose of the inspection was to ensure compliance with the conditions of MI-ROP-N6035-2022 and all other air pollution control rules and federal regulations applicable to EUASBESTOS.

The inspection began with reviewing asbestos waste shipment records. DSWMA keeps records of the name, address, and phone number of the waste generator and transporter for each shipment as well as the quantity of the ACWM received on Waste Shipment Record forms. Records of all shipments from July 2024 through October 2024 were provided on-site. From the record, ACWM was most recently accepted and deposited on October 24, 2024. Following the previous inspection, the facility also keeps photo documentation of covering activities for each shipment of waste. AQD staff were then taken to the asbestos waste area.

During the inspection, ACWM was observed to be covered, but the cover material appeared to have been partially eroded, causing parts of the material to be visible. It was explained to the facility that the ACWM was not fully covered by 6 inches of cover as required by MI-ROP-N6035-

2022. The facility responded stating that the wind had likely blown away the cover over the weekend. It was explained to the facility that if the daily cover over the ACWM is ever broken, recovering is needed to maintain compliance. AQD staff stated that going forward, daily checks for breaks in cover will need to be done along with recovering as breaks in the cover are observed. It was explained that records of these activities will also need to be kept. The facility responded stating that they would conduct the daily checks, recover as needed, and document the activities. The facility also proposed a change of cover material from sand to compost as it may not be eroded as quickly by the wind. AQD staff stated that the change would be fine, but the facility would need to first ensure that the compost is acceptable for use as an alternate daily cover material.

AQD staff were then shown around the facility to check for adequate warning signs. Asbestos warning signs were clearly visible and were observed along the perimeter and entrances to the landfill.

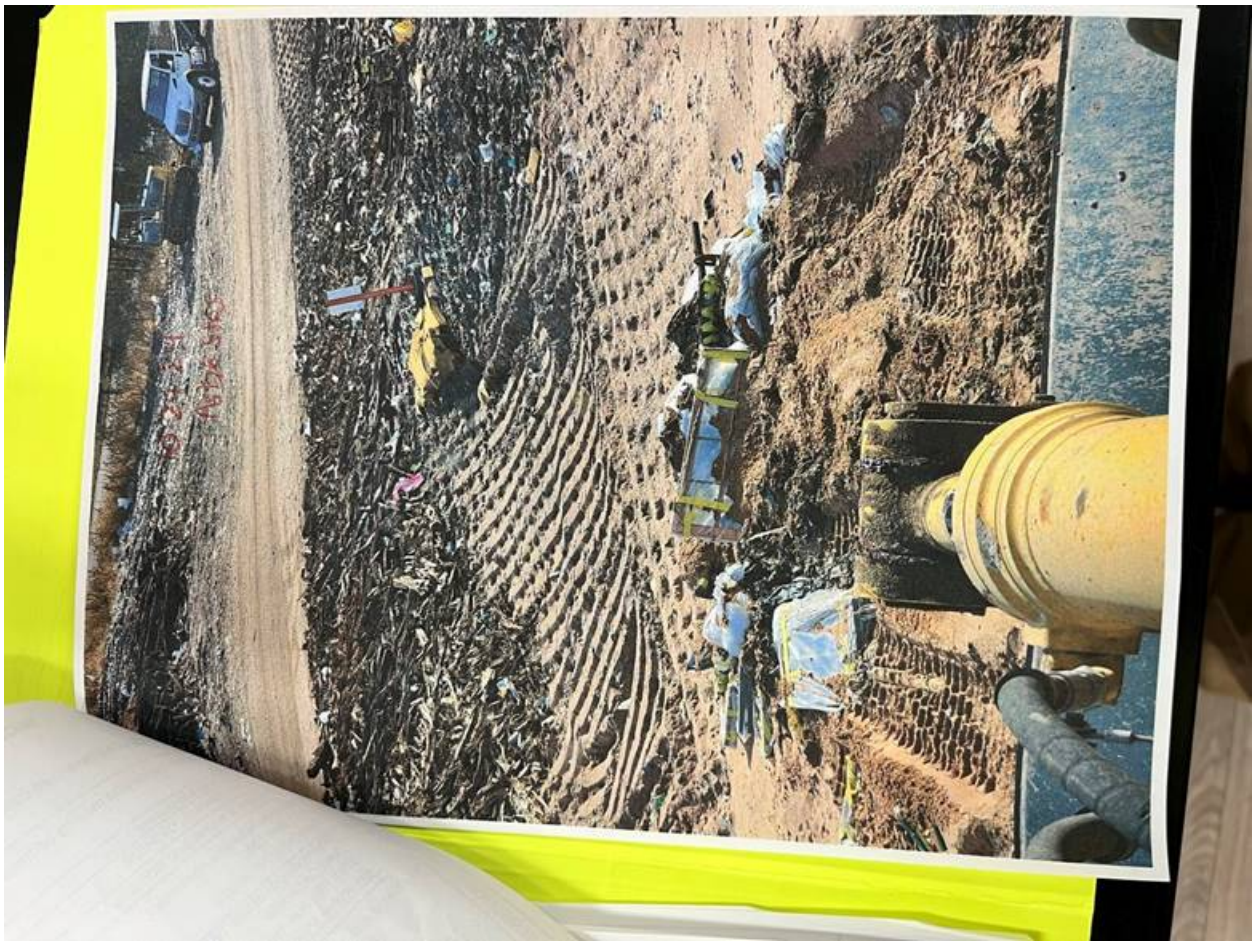
Following the on-site inspection, a request was sent to DSWMA for records documenting the cover activities over the asbestos waste area and the most recent asbestos waste map. Records of cover application for the active landfill were provided for July 2024 through October 2024. From the record, six inches of cover was applied each operating day to the active face, and six inches of cover is also applied to the asbestos waste area upon depositing the waste. The dates of the cover activities over the asbestos area also matched with the date of deposition found on the asbestos waste shipment records. The most recent asbestos location map was also provided, detailing the coordinates and elevation of the active asbestos waste area.

<u>Compliance</u>

Based on the inspection performed and records reviewed, Delta County Landfill appears to be in compliance with the conditions in MI-ROP-N6035-2022 and all other regulations applicable to EUASBESTOS. It was conveyed to the facility, that no violations were observed during the inspection, but going forward, daily checks for breaks in the cover and recovering of ACWM would be needed, as well as recordkeeping of these activities.

EUASBESTOS asbestos waste hole. Breaks in cover are visible.

Break in cover of a bag containing ACWM.



Asbestos waste deposition prior to covering dated 10/24/2024.

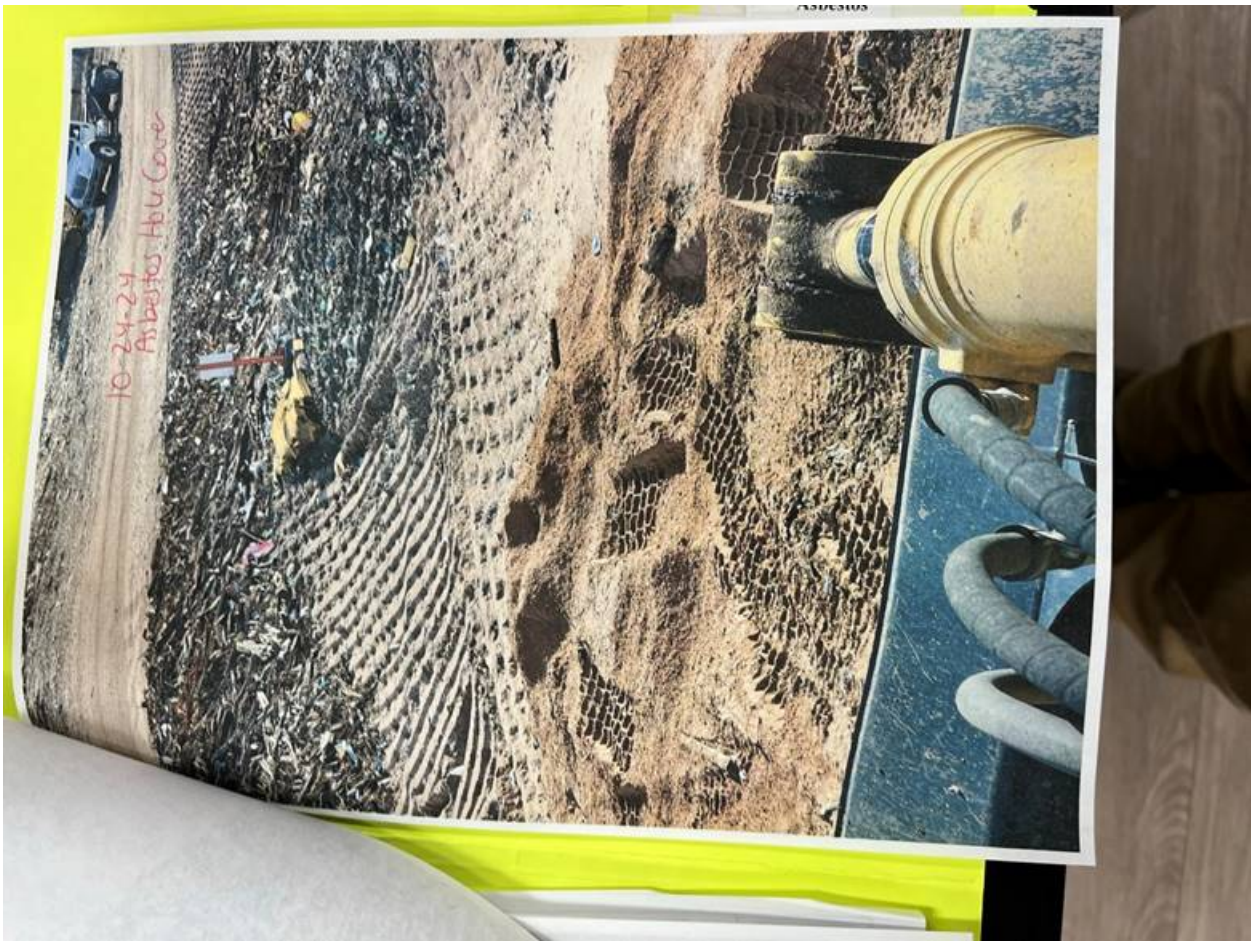


Photo documentation of cover application for EUASBESTOS dated 10/24/2024.

Asbestos waste warning sign in front of EUASBESTOS area.

NAME _____ DATE 12-10-24 SUPERVISOR _____