



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
JACKSON DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

November 10, 2021

**VIA EMAIL AND CERTIFIED MAIL-RETURN RECEIPT**

David Seegert  
Green for Life Environmental, Arbor Hills Landfill Inc.  
10599 West Five Mile Road  
Northville, MI 48168

SRN: N2688, Washtenaw County

Dear David Seegert:

**VIOLATION NOTICE**

The Michigan Department of Environment, Great Lakes and Energy (EGLE), Air Quality Division (AQD), recently reviewed 2021 landfill gas usage data provided by Green for Life, Arbor Hills Landfill Inc (Company) located at 10690 West Six Mile Road, Northville, Michigan. The purpose of this review was to determine the Company's 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 and the associated Air Pollution Control Rules, the federal National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste Landfills, 40 CFR Part 63, Subpart AAAA, Permit to Install (PTI) 79-17, and the conditions of Renewable Operating Permit (ROP) number MI-ROP-N2688-2011a.

The Company operates a gas collection and control system (GCCS) at the Arbor Hills Landfill. The GCCS consist of approximately 400 active gas wells. The collected landfill gas is routed to a landfill gas-to-energy facility owned by Arbor Hills Energy LLC (AHE) with three backup flares owned by the Company to be used in the event of an outage at the AHE plant.

AQD staff reviewed the Company's landfill gas combustion data and flare operation data during three AHE plant shutdown events in 2021. These occurred on April 18, August 13 & 14 and October 19 & 20, 2021. An Odor Compliant Investigation was also conducted by AQD staff on October 19, 2021. Based on the above reviews, AQD staff identified the following:

Process Description	Rule/Permit Condition Violated	Comments
EULANDFILL-S2, EUACTIVECOLL-S2, FGENCLOSEDFLARES-S2, and EU5000CFMFLARE which comprise the landfill, the landfill gas collection	PTI 79-17: EU5000CFMFLARE Special Condition IX. Other Requirements, 4; FGENCLOSEDFLARES-S2 Special Condition IX. Other	The control system must be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use

system, and the flaring system.	Requirements 1; NESHAP Subpart AAAA: Municipal Solid Waste Landfills, 40 CFR 63.1955(c), and 63.1959(b)(2)(ii)	period of the gas control system equipment. See discussion below.
FGENCLOSEDFLARES-S2, and EU5000CFMFLARE	R 336.1910 (Rule 910)	Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner.

The landfill is currently generating approximately 10,000 standard cubic feet per minute (scfm) of landfill gas that is being collected/burned in 4 gas turbines and/or 3 flares. At the start of 2021, the backup flare system consisted of two enclosed style flares with a combined rating as determined by stack test of 6,200 scfm and a candlestick flare rated at 5,000 scfm. (This gives a combined maximum flaring capacity of 11,200 scfm.)

Review of 2021 landfill gas data consumed at the AHE plant, and the amount of landfill gas consumed by the flares during partial or complete shutdowns of the turbines, duct burners, and associated blowers at AHE showed that flaring consumed less than 90% of the expected gas combustion that would have occurred if the AHE had been operating at the production rate that was occurring just prior to a plant outage. An adequately designed/properly operated flaring system should be able to provide the same level of vacuum to the wellfield and capture/burn similar levels of landfill gas as the AHE plant.

More specifically, the following table shows landfill gas shortfalls averaged over the entire day for AHE plant shutdown events as compared to baseline conditions during normal operations as determined from the most recent data available just before and/or just after the plant shutdown day:

<b>Date:</b>	<b>Shortfall:</b>
04/18/2021	1105 scfm
08/13/2021	1697 scfm
08/14/2021	1580 scfm
10/19/2021	1782 scfm
10/20/2021	1366 scfm

More specific operating data provided by the Company and AHE for the October 19 & 20 event showed that the applied vacuum on the landfill GCCS failed to reach the necessary - 80" W.C. during the event which is the setpoint used by AHE during normal operations. In addition, Flare 391 failed to start despite the full AHE shutdown for parts of the October 19 and 20. Also, some of the data provided by the Company may have been erroneous or otherwise unreliable. For instance, AQD staff observed during the inspection that the candle stick flare was not operating at 7 pm on October 19, 2021, per AQD inspector notes and photo taken of the flare in violation of Rule 910. Data provided by Company indicated that the flare was operating at a full 5,000 scfm gas flow rate. Furthermore, the apparent loss of

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landfill gas that was not being collected by the flares may have contributed to nearby odor complaints that were received by AQD during the same time periods.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by December 1, 2021. The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit written response to the DEQ, AQD Jackson District, at 301 East Louis B Glick Highway Jackson, Michigan 49201 and submit copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at the DEQ, AQD P.O. Box 30260, Lansing, Michigan 48909-7760.

If the Company believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,



Mike Kovalchick  
Senior Environmental Engineer  
Air Quality Division  
517-416-5025

cc/via e-mail: Mr. Anthony Testa, GFL  
Ms. Sarah Marshall, USEPA  
Mr. Neil Gordon, Department of Attorney General  
Ms. Mary Ann Dolehanty, EGLE  
Mr. Chris Ethridge, EGLE  
Ms. Jenine Camilleri, EGLE  
Mr. Jeff Rathbun, EGLE  
Mr. Scott Miller, EGLE  
Ms. Diane Kavanaugh Vetort, EGLE