



GRETCHEN WHITMER
GOVERNOR

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



LIESL EICHLER CLARK
DIRECTOR

July 28, 2020

Certified Mail

Mr. Don Kindig, General Manager
Arbor Hills Landfill, Inc. - Advanced Disposal Services
10833 West Five Mile Road - Building B
Northville, Michigan 48168

SRN: N2688, Washtenaw County

Dear Mr. Kindig:

VIOLATION NOTICE

On June 1, 2020, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) received a report entitled "Initial Landfill Gas Collection System Assessment" for the Arbor Hills Landfill (AHL) owned and operated by Advanced Disposal Services (Company) located at 10690 West Six Mile Road, Northville, Michigan. The report was reviewed to determine if this facility was in 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 (Act 451); the conditions of Renewable Operating Permit (ROP) number MI-ROP-N2688-2011a; National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills 40 CFR Part 63, Subpart AAAA (NESHAP AAAA); and the Federal New Source Performance Standard for Municipal Solid Waste Landfills 40 CFR Part 60, Subpart WWW (NSPS WWW).

After reviewing the report, AQD staff noted the following violation:

Process Description	Rule/Permit Condition Violated	Comments
Gas Collection and Control System (GCCS)	40 CFR 60.752, 60.753 (a) & 60.759 Standards of Performance for Municipal Solid Waste Landfills (NSPS WWW); 40 CFR 63.6(e)(1)(i) National Emissions Standards for Hazardous Air Pollutants (NESHAP AAAA)	The GCCS ability to collect landfill gas continues to be impaired at least in part due to high liquid levels in the gas wells. This problem was first identified in 2016 and continues to worsen. This violation was previously cited in Violation Notices (VN) dated 3/14/19 and 10/21/19. It was also cited by the United States Environmental Protection Agency Region V (USEPA) on September 29, 2016.

NSPS WWW requires proper well design to properly handle water/leachate condensate in landfill gas wells. NESHAP AAAA requires the owner or operator to operate and maintain any affected

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source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

The report, in part outlined liquid level in the gas wells determined from liquid level sounding data obtained in the 1st Quarter of 2020. It showed that at least 185 vertical gas wells had more than 50% of the well screen blocked by liquid. 48 vertical wells were listed as having at least 100% of the well screen submerged. 73 vertical gas wells were listed as needing to be completely replaced. More than 80 wells that despite having existing liquid pumps installed, still have more than 50% of the screen flooded. Furthermore, of the 192 vertical wells listed as having pumps, nearly half of the pumps had operational problems over the January to April 2020 reporting period. It is noted that the design for vertical gas extraction wells includes an estimated radius of influence (ROI) which is based in part on the length of perforated pipe available for gas flow. A substantially flooded well will be limited in its ROI and this will lead to gaps in gas collection coverage and lead to surface breakouts of landfill gas. Furthermore, the long-term presence of liquid can contribute to fouling of the stone and well screen, reducing the effectiveness of these wells over time. Finally, the presence of high levels of liquid in the landfill raises concerns about landfill slope stability.

Review of the liquid level data of all the vertical wells shows a continuation of elevated liquid levels that has been ongoing since at least 2016. This despite a new gas well dewatering program implemented by the Company in the Spring of 2019, which included repairing/installing new liquid well pumps and an improvement in the air pressure across the landfill used to activate the pumps.

To date, the Company has yet to submit an acceptable dewatering program that would result in actual dewatering/improvement of impaired vertical wells. Further, on June 25, 2020, the AQD conducted an abbreviated methane surface emission monitoring (SEM) survey and found nineteen areas with surface methane concentrations greater than 500 ppm most of which were in the north part of the landfill. Many of these methane surface exceedances appear to occur above areas with flooded wells showing that the GCCS system remains impaired.

Please initiate actions necessary to correct the cited violation and submit a written response to this Violation Notice by August 18. The written response should include: the dates the violation occurred; an explanation of the causes and duration of the violation; whether the violation is 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 EGLE, 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 EGLE, 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.

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Thank you for your attention to resolving the violation cited above and for the cooperation that was extended to me during my recent inspections of the landfill. If you have any questions regarding the violation 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: Mr. Jay Warzinski, ADS
Mr. Anthony Testa, ADS
Ms. Suparna Chakladar, Fortistar
Mr. Neil Gordon, DAG
Mr. Nathan Frank, USEPA
Ms. Sarah Marshall, USEPA
Mr. Kenneth Ruffatto, USEPA
Ms. Mary Ann Dolehanty, EGLE
Mr. Chris Ethridge, EGLE
Mr. Scott Miller, EGLE
Ms. Jenine Camillari, EGLE
Mr. Jeff Rathbun, EGLE
Ms. Diane Kavanaugh Vetort, EGLE
Mr. Lonnie Lee, EGLE
Mr. Larry Bean, EGLE
Mr. Greg Morrow, EGLE
Ms. Alexandria Clark, EGLE
Ms. Melinda Shine, EGLE
Mr. Gary Schwerin, EGLE