UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SEP 2 9 2016

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Tom Flannagan
Advanced Disposal Services
10690 West Six Mile Rd.
Northville, Michigan 48168

Re: Finding of Violation
Arbor Hills Landfill
Northville, Michigan

Dear Mr. Flannagan:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Advanced Disposal Services (Advanced Disposal or you) under Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413(a). We find that you are violating the Clean Air Act and its implementing regulations at your Northville, Michigan facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

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The EPA contacts in this matter are Kenneth Ruffatto and Sara Loiacono. You may call him/her at (312) 886-7886 and (312) 353-9199, respectively, to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Edward Nam
Acting Director
Air and Radiation Division

Enclosure

cc: Diane Kavanaugh Vetort, MDEQ, Senior Environmental Quality Analyst
Alexander Whitlow, MDEQ, Environmental Engineer, E.I.T.
Scott Miller, MDEQ, Jackson District Supervisor

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
Arbor Hills Landfill	)	**FINDING OF VIOLATION**
Northville, Michigan	)	
	)	**EPA-5-16-MI-10**
Proceedings Pursuant to	)	
the Clean Air Act,	)	
42 U.S.C. §§ 7401 et seq.	)	
	)	

FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that Advanced Disposal Services (Advanced Disposal) is violating the Clean Air Act. Specifically, Advanced Disposal is violating the Standards of Performance (NSPS) for Municipal Solid Waste (MSW) Landfill at 40 C.F.R. Part 60, Subpart WWW, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste Landfills at 40 C.F.R. Part 63, Subpart AAAA; the NSPS General Provisions at 40 C.F.R. Part 60, Subpart A; the NESHAP General Provisions at 40 C.F.R. Part 63, Subpart A; and its renewable operating permit (ROP) as follows:

Regulatory Authority

New Source Performance Standards

1. Section 111 of the CAA, 42 U.S.C. § 7411, requires EPA to promulgate performance standards for new stationary sources, including MSW landfills, to achieve the maximum emission reduction possible for each source category.

2. Pursuant to Section 111 of the CAA, 42 U.S.C. § 7411, EPA promulgated the NSPS General Provisions, at 40 C.F.R. Part 60, Subpart A, which contain general provisions that apply to the owner or operator of any stationary source that contains an affected facility, the construction or modification of which is commenced after the date of publication of any NSPS standard applicable to the facility, 40 C.F.R. § 60.1(a).

3. Pursuant to 40 C.F.R. § 60.11(d), the NSPS general provisions require that, at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, which is determined by information that may include monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

4. Pursuant to Section 111 of the CAA, 42 U.S.C. § 7411, on March 12, 1996, EPA promulgated the NSPS for MSW Landfills at 40 C.F.R. Part 60, Subpart WWW. *See* 61 Fed. Reg. 9919.

5. The NSPS requires new MSW landfills with a design capacity over 2.5 million megagrams by mass or 2.5 million cubic meters by volume to calculate the nonmethane organic compound (NMOC) emission rate of the landfill. If the NMOC emission rate is greater than 50 megagrams per year, the landfill is required to install, operate, and monitor a gas collection and control system in accordance with NSPS requirements.

National Emission Standards for Hazardous Air Pollutants

6. Section 112(d) of the CAA, 42 U.S.C. § 7412(d), requires EPA to promulgate emission standards for sources of hazardous air pollutants (HAPs), including MSW landfills, to achieve the maximum emission reduction of HAPs possible for each source category.

7. The HAPs emitted by MSW landfills include, but are not limited to, vinyl chloride, ethyl benzene, toluene, and benzene. Each of the HAPs emitted from MSW landfills can cause adverse health effects.

8. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), EPA promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) General Provisions, at 40 C.F.R. Part 63, Subpart A, which contain general provisions that apply as specified in the relevant NESHAP, 40 C.F.R. § 63.1(a)(4)(i).

9. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), on January 16, 2003, EPA promulgated the NESHAP for MSW landfills at 40 C.F.R. Part 63, Subpart AAAA. *See* 68 Fed. Reg. 2227.

10. The NESHAP General Provisions that apply to Subpart AAAA are specified in 40 C.F.R. Part 63, Subpart AAAA, Table 1, and include the operation and maintenance requirements in 40 C.F.R. § 63.6(e).

11. Pursuant to 40 C.F.R. § 63.6(e), the NESHAP general provisions require that, at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, which is determined by information that may include monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

12. The NESHAP for MSW Landfills requires new MSW landfills to continue to comply with NSPS requirements, 40 C.F.R. Part 60, Subpart WWW, promulgated or approved under Section 111 of the CAA, 42 U.S.C. § 7411, and imposes additional requirements. 40 C.F.R. § 63.1955.

Michigan's Renewable Operating Permit (ROP) Requirements

13. Title V of the CAA, 42 U.S.C. §§ 7661-7661f, establishes an operating permit program for sources of air pollution. Section 502(d) of the CAA, 42 U.S.C. § 7661a(d), provides that each state must submit to EPA an operating permit program meeting the requirements of Title V.

14. In accordance with Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), EPA promulgated regulations implementing Title V of the CAA. *See* 57 Fed. Reg. 32295 (July 21, 1992). Those regulations are codified at 40 C.F.R. Part 70.

15. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b) provided that after the effective date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate except in compliance with a Title V operating permit.

16. EPA gave interim approval of the Michigan Title V permit program on January 10, 1997. *See* 62 Fed. Reg. 1387 (effective on February 10, 1997). EPA granted source category interim approval of Michigan's Title V program on June 18, 1997. *See* 62 Fed. Reg. 34010 (effective on July 19, 1997). EPA fully approved the Michigan Title V program on December 4, 2001. *See* Fed. Reg. 62949 (effective on November 30, 2001).

17. The Michigan regulations governing the Title V permit program, also known as the "Renewable Operating Permit Program," are codified at R 336.1210 – R 336.1219.

18. The Michigan Department of Environmental Quality ("MDEQ") issued a Renewable Operating permit (MI-ROP-N2688-2011) to Veolia-Arbor Hills Landfill, now Advanced Disposal-Arbor Hills Landfill, on January 24, 2011 (the ROP).

19. The ROP requires Advanced Disposal to comply with the NSPS requirements for MSW landfills at 40 C.F.R. Part 60, Subpart WWW, and the NESHAP requirements for MSW landfills at 40 C.F.R. Part 63, Subpart AAAA.

Findings and Violations

20. Advanced Disposal owns and operates Arbor Hills Landfill (Arbor Hills, or the Landfill), a MSW landfill located at 10690 West Six Mile Road, Northville, Michigan.

21. The Landfill consists of an active landfill (Arbor Hills West) and a closed landfill (Arbor Hills East).

22. The Landfill began receiving waste in 1970 and is projected to continue accepting waste until 2028.

23. According to its 2006 GCCS design plan, the Landfill had a design capacity of approximately 46.7 million megagrams, which was revised in 2016 to 53.5 million megagrams. The Landfill currently has approximately 40.8 million megagrams of waste in place.

24. At all times relevant to this FOV, the Landfill had uncontrolled NMOC emissions equal to or greater than 50 megagrams per year, as calculated using the procedures specified at 40 C.F.R. § 60.754.

25. Advanced Disposal owns and operates the Landfill, BFI Waste Systems of North America LLC (BFI) retained ownership and operational responsibility for the landfill gas collection and control system (GCCS) in a Purchase Agreement dated March 8, 2008, and Arbor Hills Energy LLC (Arbor Hills Energy) owns and operates a landfill gas-to-energy (LFGTE) facility servicing the Landfill.

26. On February 16-17, 2016 and May 3-5, 2016, EPA conducted inspections of the Landfill.

27. On June 1, 2016 EPA issued an information request to Advanced Disposal under Section 114(a) of the CAA, 42 U.S.C. § 7414.

28. On June 21, 2016, Advanced Disposal submitted information to EPA in response to the June 1, 2016 Section 114(a) Information Request.

Failure to Ensure Monthly Cover Integrity

29. Pursuant to 40 C.F.R. § 60.755(c)(5), the owner and operator of a landfill shall implement a cover integrity program and implement cover repairs as necessary on a monthly basis.

30. Cover integrity is necessary to minimize surface emissions of landfill gas (LFG) and to ensure efficient extraction of gas through a landfill's GCCS.

31. During EPA's on-site inspections at the Landfill on February 16, 2016 and May 4-6, 2016, EPA identified multiple areas of eroded landfill cover and areas with leachate outbreaks.

32. Information submitted to EPA by Arbor Hills Energy in response to a Section 114(a) Information Request indicates that monthly cover integrity inspections at the Landfill have routinely shown deficiencies in cover, including multiple recurring deficiencies.

33. Table 1, below, shows the percentage of cover integrity inspections at the Landfill from January 2012 to May 2016 that noted various cover deficiencies.

Table 1: Percent of Inspections Finding Cover Deficiencies since January 2012

Cover Deficiencies	Percent of Inspections (%)
Settling of Cap	87
Dead Vegetation	98
Erosion on Cap System	75
Erosion on Side Slopes	75
Ponding of Water on Cap	91
Surface Cracking	100

34. By failing to maintain proper cover integrity at the Landfill to ensure GCCS efficiency, Advanced Disposal violated and continues to violate the requirements at 40 C.F.R. § 60.755(c)(5), 40 C.F.R. § 63.1955, and its ROP.

Failure to Comply with Good Air Pollution Control Practices

35. Pursuant to 40 C.F.R. § 63.6(e)(1)(i), "the owner or operator must operate and maintain any affected 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."

36. Information submitted to EPA by BFI in response to a Section 114(a) Information Request indicates that Advanced Disposal's operations the Landfill compromise the LFG extraction wells (e.g. damaging wells with heavy equipment and/or trucks). This has caused BFI to re-drill multiple LFG extraction wells in active areas of the Landfill.

37. Information submitted to EPA by Arbor Hills Energy in response to a Section 114(a) Information Request indicates that approximately 73 active gas extraction wells at the Landfill contain pumps to address buildup of water in the Landfill, which compromises gas collection.

38. Information submitted to EPA by BFI in response to a Section 114(a) Information Request indicates that, in 2016, more than 70 gas wells at the Landfill had liquid levels in excess of 50% of the perforated portion of the well. Excess liquid in wells reduces the LFG extraction efficiency of the GCCS.

39. As the owner and operator of the Landfill, Advanced Disposal is responsible for leachate management at the Landfill.

40. Information submitted to EPA by Arbor Hills Energy in response to a Section 114(a) Information Request indicates that approximately 8% of cover integrity inspections indicated exposed waste at the Landfill, which contributes to air pollution and odor concerns in the area.

41. By compromising gas extraction well integrity at the Landfill, poorly managing leachate, and failing to consistently cover exposed waste, Advanced Disposal failed and continues to fail to maintain good air pollution control practices to adequately control LFG and minimize fugitive emissions of LFG to the atmosphere, which contributes to air pollution in the area, in violation of the requirements at 40 C.F.R. § 60.6(e)(1)(i) and 40 C.F.R. § 63.6(e).

Environmental Impact of Violations

1. Volatile organic compounds contribute to ozone formation which can result in adverse effects to human health and vegetation. Ozone can penetrate into different regions of the respiratory tract and be absorbed through the respiratory system.

2. Hazardous air pollutant emissions can lead to adverse health effects like cancer, respiratory irritation, and damage to the nervous system.

3. Methane emissions contribute to global climate change and can result in fires or explosions when they accumulate in structures on or off the landfill site.

4. Fugitive emissions of LFG from the Landfill to the local community have resulted in receipt of over 200 odor complaints by MDEQ, Advanced Disposal, and EPA since January 2016.

9/29/16
Date

Edward Nam
Acting Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Finding of Violation, No. EPA-5-16-MI-10, by Certified Mail, Return Receipt Requested, to:

Tom Flannagan
Advanced Disposal Services
10690 West Six Mile Road
Northville, Michigan 48168

I also certify that I sent copies of the Finding of Violation by email to:

Tom Hess
Enforcement Unit Manager
hesst@michigan.gov

On the 30 day of September 2016

Loretta Shaffer

Kathy Jones
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 70091680 0000766 75789