STATE OF MICHIGAN

DEPARTMENT OF ENVIRONMENTAL QUALITY

JACKSON DISTRICT OFFICE



RICK SNYDER GOVERNOR

November 8, 2016

Mr. Anthony Testa Advanced Disposal Services Arbor Hills Landfill Inc. 10690 Six Mile Road Northville, Michigan 48167

Dear Mr. Testa

SUBJECT: Violation Notice

Arbor Hills West Expanded Sanitary Landfill

First Quarter Inspection FY 2017

On October 4, 2016, staff of the Department of Environmental Quality (DEQ), Office of Waste Management and Radiological Protection (OWMRP) conducted an inspection of Arbor Hills West Expanded Sanitary Landfill located at 10690 Six Mile Road, Northville, Michigan. The purpose of this inspection was to determine compliance with the requirements of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), and the administrative rules.

As a result of the inspection, staff determined that the facility was in compliance with the operational requirements of Part 115 that were evaluated on that day, as shown on the enclosed inspection sheet, except for the continuing violation of the following rule promulgated under Part 115:

Rule 433(1) The owner and operator of a type II landfill will ensure all of the following:

> (c) That gases generated by the facility do not create a nuisance and are not otherwise in violation of part 55 of the act at the property boundary.

The violation is the result of staff observing odors relating to distinct garbage odors being identified at a location 0.75 miles downwind of the active face of Cell 4. The odor survey conducted on the day of the inspection is enclosed for reference.

In order to return to compliance, Advanced Disposal must continue to address offsite odors originating from the active faces of the landfill until the odors are no longer a nuisance for the surrounding neighborhoods.

If you have any questions, please contact me at DEQ-OWMRP, Jackson State Office Building, 301 East Louis Glick Highway, Jackson, Michigan 49201; by telephone at the number below; or by e-mail at WhitlowA@michigan.gov.

Mr. Anthony Testa Page 2 November 8, 2016

Sincerely,

Alex H. Whitlow, E.I.T. Environmental Engineer Office of Waste Management and Radiological Protection 517-614-9712

Enclosure

CC:

Mr. David Rettell, Advanced Disposal Systems, Arbor Hills Landfill Inc.

Mr. Daniel Moody, Washtenaw County Division of Environmental Health

Ms. Diane Kavanaugh Vetort, DEQ

Mr. Lawrence E. Bean, DEQ

Michigan Department of Environmental Quality Part 115 - Landfill Evaluation Report

Name of	Facili	ty	Facility Nu	mber	r License # and Expiration Date		
Advance	ed Dis	sposal Services Arbor Hills Landfill Inc.	475946		9371 5/13/19		
Facility A	Addres	SS	Facility Contact : Name Phone Number				
10690 V	Vest S	Six Mile Road, Northville, MI 48131	Bob Walls		(567)644-5959		
LEGENE	D: (C)	= Compliance (V) = Violation (NE) = Not B	Evaluated	(*)	= See Note () = Does not Apply		
		General Operations			Leachate / Stormwater Management		
С	Α.	Miscellaneous Operational Issues	С	J.	Surface Water Drainage		
V	В.	Blowing Debris, Dust, Odor & Vector Control	С	K.	Protection of Surface Waters		
*	C.	Gas Monitoring & Migration	. *	L.	Leachate Control / Management		
YES	D.	Are there any exceedances of the LEL?	С	М.	Leachate Volume / Head Records		
		Prohibited Waste Restrictions	С	N.	Secondary Volume / ARF/ RFR Records		
C E.		Hazardous Waste / Liquids / Yard Waste /			Daily / Interim / Final Cover		
		Other Materials Prohibited for Disposal	C	Ο.	Adequacy of Daily Cover		
C	F	Random / Suspicious Load Records	YES	Ρ.	Are Alternate Daily Cover Materials Used?		
C	G.	Load Inspection During Evaluation	YES	Q.	Is the Use in Compliance with Approved Plan?		
3 # of L	3 # of Loads Inspected 85 yds. Volume of Loads				Period and Adequacy of Interim Cover		
		Permit and License Compliance	YES	S.	Are all lifts exposed for 90 days covered with interim cover?		
С	H.	Operations Conform to Permit, License, Order Conditions & Construction Certifications	С	Т.	Completion of Area / Final Cover		
С	I.	Operations Conform to Approved Hydrogeo, Monitoring, Engineering and Operational Plans	7				

REMARKS:

The (V) specified for category B in the above table is the result of an Odor Survey conducted at the same time as the inspection. distinct active face odor was identified 0.75 miles downwind.

The (*) specified in category C in the above table is the result of perimeter gas probe data submitted to the department on October 18, 2016. It showed probe 18 over the 100% LEL for methane. Subsequent information provided by Advanced Disposal on October 20, 2016 showed that public health was not in danger due to the location of probe 18 as well as the passive vents in the area.

The (*) specified in Category L of the above table is the result of the secondary liner of Cell 1 showing 12.56 feet of head on the date of the inspection. Subsequent data submitted to the department on October 11, 2016 by email showed that the leachate levels returned to normal levels in an adequate amount of time

Person Interviewed	Date of Inspection	Time of Inspection 7:30 AM			
Bob Walls, Anthony Testa	10/4/16				
Inspected By	By Representing				
Alex Whitlow	DEQ Office of Waste	DEQ Office of Waste Mgmt & Radiological Protection			

⁻The depth of daily cover is calculated using GPS on the equipment.

⁻They had a pile of concrete that contained de minimus other C&D. I informed them that it was not necessary to cover this pile with daily cover as concrete is inert and does not have odor.

Temporary cap was in place during the inspection. I observed no bubbles in the cap and the Gas probes appeared to be active.

DEFINITIONS

- A. The landfill shall control public access and shall supervise the unloading of all solid waste. [Rule 315(3&4), 427, 430(1)]

 On-site roads shall be constructed and operated to allow unrestricted traffic flow and prevent fugitive dust nuisance. [Rule 315(5&10), 426(5)] The burning of solid waste is prohibited (certain exceptions). The burning is to be in designated areas only and with the permission of the Solid Waste Control Agency. Suitable measures shall be available to extinguish accidental fires. [Rule 315(9), 434(2&3)] The facility shall maintain adequate equipment to operate the landfill. [Rule 315(1), 426(1)] Landfill operation shall not result in excessive or objectionable noise. [Rule 315(14), 431] The facility may separate recyclable materials. The operation must be consistent with the requirements for processing plants. The salvaging must not interfere with waste disposal. Scavenging is prohibited. [Rule 315(11), 428] (For Type III) Facilities that do not contain liners in compliance with Rule 307 shall test representative samples of waste on an annual basis and submit the results of those tests to the director. [Rule 311]
- B. The facility shall take measures to control dust, blowing litter, odors, and disease vectors. The entire area shall be kept clean and orderly. [Rule 315(5&12), 426(3), 429(9)]
- C. The facility shall ensure that the concentration of methane gas is not > 25% of the Lower Explosive Limit (LEL) in structures and the leachate collection system. The concentration of methane shall not be more that the LEL at the property boundaries and gases shall not create a nuisance or a violation of Part 55. The facility must implement a routine methane monitoring program. [Rule 315(5) 433(1-3)]
- D. In the facility operating record are monitoring results indicative of the compliance since the last inspection date. [YES / NO]
- E. The facility shall supervise the unloading of all waste and not accept regulated hazardous waste, PCB's, bulk liquid waste, liquid waste containers, sewage, materials that would adversely effect the liner, asbestos waste (unless approved), empty drums, lead acid batteries, or more than a deminimus quantity of whole tires, beverage containers or yard wastes as specified in Part 115. [Rule 315(4&8), 430(1&2)]
- F. In the facility operating record, are records of random/suspicious load inspections available since the last inspection? Do those records demonstrate compliance?
- G. During the inspection document the number of loads inspected, quantity of waste inspected, and compliance status.
- H. Landfill operations must conform to conditions in the construction permit and operating license and comply with final orders and compliance plans contained in final orders.
- I. The landfill must be operated in accordance with previously approved hydrogeologic, engineering, and operational plans. [Rule 904, 905, 906, 907, 910, 911]
- J. The active work area must be sloped, graded, and provided with drainage facilities to prevent the collection of standing water. A surface water monitoring plan must be implemented for any water that may receive runoff from the active face. [Rule 315(13), 426(6), 436(2)]
- K. The facility shall not discharge pollutants into waters of the United States in violation of Part 31 or NPDES permit. [Rule 306(2), 436(1)]
- L. The facility shall remove leachate to ensure that the leachate head is not more than 1' on the liner (excluding the collection sump), remove liquids from the secondary collection system to minimize head on the liner, and inspect the system to assure proper operation. The leachate must be disposed of in compliance with Part 31. [Rule 308, 315(16&17), 432]
- M. In the facility operating record, are leachate volume available since the last inspection. Do those records demonstrate compliance?
- N. In the facility operating record, are secondary collection volumes and flow rates available since the last inspection. Do those records demonstrate compliance?
- O. At least 6" of earthen daily cover must be placed at the end of each operating day. If alternative daily cover is used, it must be approved by the director. If the daily cover is low permeability soil, it must be scraped back daily. If daily cover does not meet the performance standards, it must be modified. [Rule 316(1), 429(1-5, 8)]
- P. Are alternate daily cover materials (ADCM's) utilized at the facility? [YES / NO]
- Q. Is the use of the ADCM's in compliance with the approved plan? [YES / NO]
- R. Any lift that will be exposed for 3 or more months must have 1' of compacted cover that can include the 6" daily cover. Runoff must be handled as leachate unless the area has received approved interim cover. [Rule 316(2), 429(6&7)]
- S. Are all lifts that will not receive addition waste within 90 days covered with at least 1' of soil? [YES / NO]
- The landfill must be brought up to final grade as soon as possible. The final cover must be repaired to correct the effects of settling, subsidence, erosion, and other events. The slopes of the final cover must be sufficient to prevent the ponding of water and excess erosion. The final cover must be stabilized with appropriate vegetation. [Rule 317, 448, 449(1), 425(7-9)]

Source Name:	Arbor Hills Landfill, WDS #475946			Inspector: Alex Whitlow			
Source Address: 10690 W 6 Mile Road, Northville MI, 48168					Date: 10/04/2016		
Sky Conditions: Cloudy, fog present				Temperature: 55-60 degrees Fahrenheit			
Wind Speed:	2-3 MPH	Wind Direction	on: From East	Source	of Meteorological Data: Weather .com		
Location (attach map, if available)	Time	Odor Scale (See below)	Characteristic (See below)		ents (Observations that will aid in the action of the source & properties of the odor.)		
1	7:20 AM	2	Lime based(EQ)				
2	7:50 AM	2	Lime based(EQ)				
3	7:51 AM	3	Garbage	On the	active face of cell 4		
4	7:55 AM	3	Garbage		And a state of the		
5	7:56 AM	3	Garbage		Agrae		
6	7:59 AM	3	Garbage				
7	8:01 AM	2	Lime based (EQ)				
8	8:04 AM	0					
9	8:49 AM	1	Garbage				
10	8:55 AM	1	Garbage				
11	9:00 AM	2	Garbage				
12	9:20 AM	1	Garbage				
13	9:22 AM	1	Garbage				
14	9:24 AM	0	V 000 V 000				
15	9:30 AM	0	4,000				
Odor Scale					Odor characteristic examples:		
0 - Non-Detect				Paint-like			
1 - Just barely detecta			Musty, moldy				
2 - Distinct and definit		_	Burnt, smoky				
3 - Distinct and definit	-		Tar-like, asphalt				
4 - Odor strong enoug	-	•	Cut grass				
5 - Odor so strong as	to be overbow	renng and intolera	Citrus fruit				

