



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
JACKSON DISTRICT OFFICE



KEITH CREAGH  
DIRECTOR

March 15, 2016

Mr. Thomas Flannagan  
General Manager  
Advanced Disposal Services Arbor Hills Landfill  
10690 Six Mile Road  
Northville, Michigan 48167

Ms. Christina Pearse-Bossick  
Environmental Manager  
Republic Services, Inc.  
5011 South Lilly Road  
Canton, Michigan 48188

Dear Mr. Flannagan and Ms. Pearse-Bossick:

SUBJECT: Violation Notice  
Arbor Hills West Expanded Sanitary Landfill  
Continued Odors

On January 28, 2016, staff of the Michigan Department of Environmental Quality (MDEQ), Office of Waste Management and Radiological Protection (OWMRP), and Air Quality Division (AQD), conducted an inspection of Arbor Hills West Expanded Sanitary Landfill located at 10690 Six Mile Road, Northville, Michigan. As a result of odors detected during this inspection as well as complaints received from nearby communities, staff issued a Violation Notice dated February 2, 2016. These odors detected off-site were of sufficient frequency and intensity to be in violation of the following promulgated rule of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451:

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.

In order to return to compliance, the MDEQ required Advance Disposal and Republic Services (Arbor Hills Landfill) to respond to the Violation Notice with a corrective action plan by February 15, 2016. This response was received by the department by the required date and included all of the requested information. Despite the construction taking place as described in the response, odors have continued to be present and observed off site. The MDEQ has received close to 150 odor complaints to date from the nearby residential areas. In addition to complaints from the community, follow up inspections by staff from AQD and OWMRP since the response date have resulted in the detection of odor off-site on the following dates:

February 16 (PM) - Diane Kavanaugh Vetort (DKV) during USEPA inspection  
February 22 (AM) - DKV  
February 26 (AM and PM) - DKV  
March 2 (PM) - Zachary Durham and Alex Whitlow

Mr. Thomas Flannagan  
Ms. Christina Pearse-Bossick  
Page 2  
March 15, 2016

March 4 (PM) - DKV  
March 6 (AM and PM) - DKV  
March 7 (AM) - Scott Miller  
March 8 (PM) - Zachary Durham

In the professional judgment of AQD staff, the landfill gas odors that were observed off site near the Arbor Hills Landfill were of sufficient intensity, frequency, and duration so as to constitute a violation of Rule 901 should they be detected within the residential areas.

The OWMRP and AQD require that Republic Services, as the primary responsible party of the gas collection and control system, now provide additional corrective actions necessary to resolve the current odor complaint situation and prevent a reoccurrence.

1. During a meeting and inspection with AQD on March 7, 2016, Republic agreed to conduct an evaluation and submit a findings report to AQD of all existing wells along the north side of cells 1, 2, and 5 to determine each wells operational condition. This evaluation will identify the as built design specifications for each well, water level in each well, documentation of well integrity through video surveillance, as well as current performance measurements on each well (%O<sub>2</sub>, pressure, and temperature). The report will also include a plan and schedule for correcting all well deficiencies identified.
2. Beginning on March 8, 2016, and until otherwise agreed upon, Republic will conduct daily surface monitoring scans of cells 1, 2, 4, and 5 using an appropriately calibrated flame ionization detector (FID). A plan will be submitted to MDEQ showing all points to be monitored and the results of this monitoring will be submitted to MDEQ on a daily basis.
3. Arbor Hills Landfill's February 15, 2016, violation notice response indicated the main odor generation is likely emanating from Cells 1, 2 and 5. Your response failed to provide a sufficient explanation as to the cause of the failure of the gas collection system leading to this event. The MDEQ is requesting Republic provide a detailed explanation of the cause of this event, including results of all analyses performed on individual wells, force mains, and all associated gas collection and control system equipment.
4. Republic agreed to provide daily updates to AQD on the gas collection system construction.
5. AQD requested Republic install and operate continuous perimeter monitoring for Hydrogen Sulfide and Methane. We also requested periodic perimeter monitoring for the TO15 list of VOC's.

Mr. Thomas Flannagan  
Ms. Christina Pearse-Bossick  
Page 3  
March 15, 2016

Please initiate actions necessary, including the action items listed above to correct the cited violation and submit a written response to this Violation Notice, by **March 29, 2016**, (which coincides with 21 calendar days from the date of this letter). The written response should include an explanation of the causes and duration of the excessive landfill gas; whether the excessive landfill gas is ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the situation and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

If Arbor Hills Landfill 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.

Thank you for your attention to resolving the violation cited above and for the cooperation that has been extended to MDEQ thus far. If you have any questions regarding the violation or the actions necessary to bring this facility into compliance, please contact me at MDEQ-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.

Sincerely,



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

Enclosure

cc: Mr. Robert Nix II, Northville Township Supervisor  
Mr. David Rettell, Advanced Disposal Systems, Arbor Hills Landfill  
Ms. Suparna Chakladar, Fortistar  
Mr. Daniel Moody, Washtenaw County Division of Environmental Health  
Mr. Lawrence E. Bean, MDEQ  
Mr. Scott Miller, MDEQ  
Ms. Diane Kavanaugh Vetort, MDEQ