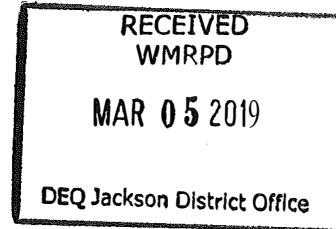




Advanced Disposal

March 1, 2019

Mr. Lawrence Bean
Jackson & Lansing District Supervisor
Waste Management and Radiological Protection Division
Michigan Department of Environmental Quality
301 East Louis Glick Highway
Jackson, MI 49201-1556



Subject: **Advanced Disposal Services – Arbor Hills Landfill, Inc.**
Response to Notice of Violation Dated January 24, 2019

Dear Mr. Bean:

This letter responds to the Violation Notice (“VN”) dated January 24, 2019 as a result of the FY2018 Comprehensive Inspection. The VN states that Arbor Hills has levels in the Cell 4 primary leachate collection system above 1 foot and has exceedances of the allowable action flow rate (AFR) in the secondary collection system. Additionally, the VN claims that facility has not initiated a Liquids Management Plan. The VN also states that the facility has ongoing methane exceedances of Lower Explosive Limit (LEL) at the property boundary. ADS Arbor Hills is providing this response to the VN which summarizes the actions that have and will be undertaken to correct these issues.

In addition to the above mentioned violations, the VN letter states a concern that existing operational procedures and Best Management Practices have not been consistently followed when handling odorous contaminated soil. Advanced Disposal (ADS) also understands that the DEQ continues to receive odor complaints regarding the facility. ADS remains committed to minimizing off-site odor impacts and that it maintains operational practices designed to minimize odor impacts while accommodating the continued management of landfill operations. Please understand that necessary construction activities at the landfill may periodically expose garbage that may potentially cause odors, but ADS will continue to do everything within reason to minimize these effects.

Proposed Corrective Actions To Be Taken

Leachate Levels – Primary Collection System Cell 4

The current primary collection leachate levels in Cell 4 are primarily due to excessive leachate generation attributed to newly opened Cell 4E. The limited waste placed in this newly opened area and limited compactive effort due to the proximity of the liner have provided have allowed a greater amount of surface water to enter into the drainage layer.

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This creates a situation where temporary measures are required to provide additional extraction capacity to remove these high volumes of leachate generated that have overwhelmed the pumping system. Arbor Hills has instituted a multi-tiered approach in order to reduce the leachate head levels under these challenging conditions. Arbor Hills has also reevaluated the capacity of the existing system to extract leachate at the rate necessary to achieve compliance during high flow periods. Arbor Hills has also upgraded the pump capacity of the on-site leachate lift station and sideslope riser pumps to mitigate this situation in the future.

ADS is also evaluating a stormwater run-on reduction initiative to reduce leachate generation volumes caused by precipitation entering the newly constructed landfill cells.

ADS is in the process of installing an additional pump to the on-site lift station to allow further increased capacity. At the time of this letter, the leachate level in the Cell 4 continues to decrease.

Secondary Collection Flow Rates and Response

ADS has initiated a Liquids Management Plan to address the measured flow in the Cell 4 secondary collection system (SCS) above the action flow rate. The evaluation includes the determination of the likely source of this flow and placement of documentation showing the implementation of this LMP in the operating record in accordance with R299.4432. Actions taken in response to an exceedance of the Cell 4 AFR include:

1. ADS has taken active steps to increase the extraction rate in the Cell 4 primary system to reduce levels as quickly as possible.
2. Identification of potential outside sources of excess liquid in the SCS (e.g., liner defects, anchor trench, pooling/ponding of water along perimeter of landfill). These investigations have indicated additional stormwater diversion is warranted and will be implemented to reduce surface water infiltration into Cell 4.
3. Verification of liquid pumping data for the primary and secondary sumps to assess the accuracy of the data. ADS has determined an upgrade of the leachate flowmeter measurement system would be beneficial and is developing an upgraded leachate control system for installation as soon as practical in 2019.
4. Assessment of the need for cleaning of the primary sump to improve leachate collection and drainage. A contractor has been retained by ADS to clean the Cell 4 sump as soon as practical.
5. Assessment of the liquid chemistry in the SCS has been done by sampling the liquid in accordance with the schedule presented in R299.4437. The results of the analytical testing have been evaluated and compared with the leachate chemistry to determine if it is characteristic of leachate or other water source. Initial results of analytical testing did not establish a direct correlation between the chemistry of the leachate and secondary liquids, indicating other sources of

liquid may be entering the SCS. ADS will continue to sample the SCS and analyze the results on a monthly basis as long as the Cell 4 AFR is exceeded.

Methane Exceedances

The gas probes which have periodically exhibited readings above the LEL include GP-14, GP-15, and GP-16 which are located along the eastern boundary of Arbor Hills East. ADS operates these probes in accordance with the 2002 Consent Order. The current gas collection system was designed to collect near surface gas at the landfill boundary to prevent migration. ADS believes the recent methane hits in Arbor Hills East gas probes have been caused by frozen and or saturated soil conditions near the surface as well as liquid accumulation in portions of the collection system which may have impeded system performance.

To remedy this issue, ADS has enlisted a technical team to evaluate the current gas extraction and control system performance and prepare a modified design for needed gas collection system upgrades. ADS is prepared to go over and above the current system design to address the migration issue. The proposed design modifications to prevent gas probe exceedances will be prepared and included in the annual gas probe report which is due to MDEQ by May 1, 2019. ADS anticipates the system modifications can be implemented during the 2019 construction season.

Sincerely,

ADVANCED DISPOSAL SERVICES ARBOR HILLS LANDFILL, INC.



Mark A. Johnson
General Manager

cc: (via e-mail)

Jay Warzinski, Advanced Disposal Services
Mr. Todd Whittle, Advanced Disposal Services
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