ARBOR HILLS LANDFILL, NORTHVILLE MICHIGAN

Summary of Actions: September 2018 - February 2019

Background

In January 2016, the Michigan Department of Environmental Quality (MDEQ) began receiving odor complaints from residents living near the Arbor Hills Landfill (Landfill). The MDEQ immediately engaged with the Landfill's operators to address these odor concerns. Fugitive emissions of landfill gas were found to be the source of most of the odors. The MDEQ and the U.S. Environmental Protection Agency (USEPA) conducted investigations of the landfill. Based on these investigations, the MDEQ has issued multiple violations to the landfill for failures to properly operate the landfill and the gas collection and control system. MDEQ staff



Arbor Hills Landfill in Northville, Michigan

have continued to conduct on-site inspections and area odor evaluations of the Arbor Hills Landfill owned by Advanced Disposal Services (ADS) and the adjacent landfill gas to energy plant owned by Arbor Hills Energy LLC (AHE); a subsidiary of the Fortistar Methane Group. MDEQ continues to respond to hundreds of odor complaints filed over the last six months being filed by residents near the landfill.

New flare located adjacent to the two other existing flares begins operation. However, new blowers

10/16-19/2018 Stack testing for sulfur dioxide (SO₂) is conducted at the gas to energy facility.

MDEQ Actions

11/17/2018

,,	that feed landfill gas to all three flares failed to operate properly upon initial start-up. (Refer to 2/7/2019 Violation Notice.)
12/07/2018	MDEQ sends letter requesting an updated fugitive dust plan due to recent observations of excessive dust/track-out of material onto both 6Mile and Napier roads.
12/11/2018	MDEQ commences initial drone testing at the landfill using a thermal imager that can be used to locate surface methane emissions.
12/20/2018	MDEQ conducts annual comprehensive solid waste inspection of the landfill. (See $\underline{1/24/2019}$ Violation Notice.)
01/02/2019	MDEQ sends a Letter of Concern after a highly odorous leachate seep is discovered on the south side of the landfill. Leachate is water that becomes contaminated after percolated through the layers of trash, which accumulates at the bottom of the landfill. It is usually pumped out and handled according to MDEQ regulations. Occasionally, it can seep out of the surface of the landfill through a weakness in the landfill surface cover.
01/04/2019	A Fugitive Dust Plan is submitted outlining the purchase of a new type of road sweeper truck that should help reduce road dust and debris on public roads near the landfill. Rumble strips will also be installed near the landfill exit to help reduce material tracked out by trucks leaving the property.
01/08/2019	MDEQ initiates a <u>comprehensive air quality inspection</u> of the landfill, the gas to energy facility, and composting operations. The inspection took place over three days with additional inspection dates of $1/18/19$ and $1/23/19$.
01/14/2019	A <u>Violation Notice</u> is issued for improper operation of 19 landfill gas collection wells.

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01/17/2019	MDEQ issues Violation Notice for excessive odors.
01/24/2019	MDEQ commences formal escalated enforcement action for previously issued violations.
01/24/2019	MDEQ issues <u>Violation Notice</u> for excessive amounts of leachate laying on top of the landfill liner as well as for failing to prevent the underground movement of landfill gas along the eastern perimeter of the landfill.
02/01/2019	MDEQ issues <u>Violation Notice</u> for numerous air quality violations uncovered during the recent comprehensive inspection. Violations included SO_2 emission exceedances from the October 2018 stack test, use of unpermitted diesel fuel in turbines and for uncontrolled venting of landfill gas from the facility's landfill gas treatment building. Due to these findings, air Permit to Install (PTI) application 53-18 that was submitted in March 2018, requesting emission limits increases for SO_2 was recently put on hold. PTI application 53-18 is the third attempt to obtain a permit for increases to the allowed emissions of SO_2 from the four landfill gas turbines. Previous permit applications have either been withdrawn by the facility or denied by the MDEQ for lack of information.
02/07/2019	MDEQ issues <u>Violation Notice</u> for failing to have enough back-up flaring capacity in the event the energy plant goes offline. Blowers feeding landfill gas to the three flares have not been operating properly since installation in November 2018. The Violation Notice also requested prompt action be taken to fix the blowers and to install a back-up electrical generating system so flares can still operate in the event of a power failure.

02/14/2019

Received response to 2/07/2019 Violation Notice outlining all the measures being taken to fix the

flare blowers. This problem has yet to be resolved.

03/01/2019 Initial enforcement meeting is scheduled to take place between the MDEQ and the facility.

USEPA Actions

The USEPA continued to negotiate with Fortistar Methane Group to resolve violations outlined in its Finding of Violations (FOV) dated September 29, 2016, and September 29, 2018. To date, no settlement has been reached in part because the facility has not obtained a MDEQ air permit to resolve previously discovered SO_2 emission limit exceedances. Exceedances of SO_2 emission limits first occurred in 2015 when sulfur levels in the landfill gas began to increase. Ambient air quality standards for SO_2 are expected to be met without the need for sulfur control equipment.

The USEPA continued to review required compliance update reports submitted as a result of the USEPA's Administrative Order EPA-5-17-113(a)-MI-04. The USEPA is still negotiating with the facility to resolve the penalty portion of the 2017 enforcement action. The MDEQ and USEPA meet regularly to coordinate compliance activities.

More Information and Assistance

The MDEQ has developed a website specifically to keep the community updated on the issues involving Arbor Hills Landfill – www.michigan.gov/deqarborhills. You are also encouraged to register to be part of our e-mail listsery. This is another way the MDEQ hopes to provide up-to-date information to interested parties. Go to our website to sign up, www.michigan.gov/deq, click on the red envelope at the bottom of the page and then choose "Arbor Hills."

Complaints or other concerns may be directed to Arbor Hills using their Community Hotline at 248-305-8432 or their web site at www.arborhills.info. Complaints received through the Arbor Hills website are automatically forwarded to the MDEQ. You may also contact the MDEQ directly by calling our Environmental Assistance Center at 800-662-9278 or by filing out our MDEQ Online Complaint Form located at www.michigan.gov/deqarborhills.

Michigan's Environmental Justice Policy promotes the fair, non-discriminatory treatment and meaningful involvement of Michigan's residents regarding the development, implementation, and enforcement of environmental laws, regulations, and policies by this state. Fair, non-discriminatory treatment intends that no group of people, including racial, ethnic, or low-income populations, will bear a disproportionately greater burden resulting from environmental laws, regulations, policies, and decision-making. Meaningful involvement of residents ensures an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health.