# **Action Summary**

# Arbor Hills Landfill, Northville Michigan Summary of Updates for January – April 2018

#### **DEQ Actions**

During this period, DEQ staff and contractors continued to conduct on-site inspections and/or area odor evaluations.

On March 13, 2018 DEQ held an information session and hearing for a new permanent flare to be located at the landfill to help control landfill gas (LFG). The permit, <u>No. 79-17</u>, was issued on April 13, 2018. A copy of the permit and response to comments can be found at www.michigan.gov/degarborhills, in the "Company Actions" column.

## **DEQ and EPA Air Monitoring**

EPA conducted monitoring for methane, hydrogen sulfide, and VOC's in October 2017.

- No public health concerns were identified as a result of this monitoring. AQD toxicologists reviewed the
  monitoring results and prepared a <u>summary report</u>. The results of the October 2017 monitoring did not
  show air concentrations that raise health concerns. Furthermore, the concentrations of methane and
  hydrogen sulfide are much lower than previous air monitoring conducted by EPA in 2016.
- LFG is a natural byproduct of the decomposition of organic material in anaerobic (without oxygen) conditions. LFG contains roughly 50 to 55 percent methane and 45 to 50 percent carbon dioxide, with less than 1 percent non-methane organic compounds (NMOCs) and trace amounts of other compounds. Hydrogen sulfide is a constituent of landfill gas, but in low overall concentration. However, hydrogen sulfide has a very low odor threshold, which allows a person to smell it long before quantities would exist that would pose health concerns.

# Status of Gas Collection System Upgrades

- Approximately 6000 feet of new 24-inch diameter pipe has been installed along the north, west, and south sides of the landfill. This new header system will improve gas collection and conveyance.
- A 36-inch main pipe was placed under the rail road. This pipe will be used to improve gas conveyance from the landfill to the gas to energy plant and as needed to the flares. –
- In response to on-site surveys and well monitoring data, 15 new wells were installed at strategic locations around the landfill.
- Installation of the new 5,000 SCFM flare, connections to the new 36-inch pipe and installation of a new blower/compressor station are scheduled to be completed by the end of July/early August.
- The new control system upgrades and system wide tuning will be commissioned in August.
- Gas system upgrades conducted since January 2016 have resulted in a significant increase in gas collection and control.

#### **Complaints, Inspections, and Odor Surveys**

From January – April 2018 DEQ has received 243 Odor complaints. The complaints are most often received in the early morning and late afternoon/early evening. Odor descriptions vary (rotten egg, trash, gas, sewage related), and they are most often associated with west/southwest wind directions. During this time-period, DEQ staff and contractors conducted over 200 on-site and area inspections and odor observations.

On-site inspections indicate surface emissions of gas are occurring on the west and north sides of the landfill. The ongoing gas system improvements are expected to further reduce surface emissions of landfill gas. On-site inspections also indicate odors of garbage and compost within the landfill boundaries, and along the perimeter roads. However, daily odor observations indicate either no odor or low intensity odors of garbage, compost and landfill gas within the residential areas. These odors are not of an intensity, frequency, and duration to constitute a violation of DEQ rules. One exception, was an odor observation conducted on January 25, 2018. On this date, DEQ Air Quality Division staff documented a strong odor of garbage/compost within a residential area. In response to this observation, DEQ issued a Violation to Advanced Disposal (ADS). ADS is evaluating their waste management and compost practices and will be implementing further improvements this Spring and Summer.

#### **Additional Odor Control Actions**

ADS continues to apply at least 8 inches of daily cover to the landfill open face. In addition to exceeding required daily soil cover levels, ADS is compacting the daily cover at the end of each day to help further reduce odors from the active face.

In May 2018, ADS will be evaluating the use of drones to conduct surface methane monitoring in compliance with EPA monitoring requirements.

A third-party evaluation of ADS's compost and waste management practices was recently completed. The compost evaluation identified several actions, which ADS will be implementing to further reduce compost odors.

EPA and DEQ will continue to work with ADS to identify further improvements to continue to mitigate offsite odors. It should be noted, however, that due to the proximity of homes to a landfill of this size, odors will not be completely eliminated.

## Where can I find more information or get help?

The MDEQ has developed a website 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 listserv. This is another way the MDEQ hopes to provide up to date information to interested parties. You can sign up on our website, <a href="https://www.michigan.gov/deq">www.michigan.gov/deq</a>, click on the red envelope at the bottom of the page and then choose "Arbor Hills".

For complaints or other concerns, you may contact Arbor Hills Directly using their Community Hotline at 248-305-8432 or go to their website and fill out an online complaint form. The MDEQ is automatically sent all complaints received by the Arbor Hills website. You may also contact MDEQ Directly by calling our MDEQ Environmental Assistance Center at 800-662-9278 or by filling out our MDEQ Online Odor Complaint Form located on <a href="https://www.michigan.gov/deqarborhills">www.michigan.gov/deqarborhills</a> website.

