

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
Waste and Hazardous Materials Division
Jackson District Office

RESPONSIVENESS SUMMARY

Proposed Lateral and Vertical Expansion
Veolia Arbor Hills Landfill, Inc.
Arbor Hills West Expanded Sanitary Landfill
Type II Landfill Construction Permit

DATE: December 2, 2009

Comments have been received on the construction permit application for the Veolia Arbor Hills Landfill, Inc. Arbor Hills West Expanded Sanitary Landfill. The construction permit application is being reviewed for compliance with Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the administrative rules promulgated thereunder.

This Responsiveness Summary was prepared by the Department of Environmental Quality (DEQ) Waste and Hazardous Materials Division (WHMD) Jackson District to provide a response to comments received during the October 20, 2009 public hearing, the informal question and answer session that followed the public hearing, and on those written comments received by the WHMD Jackson District Office. The comments are shown below in boldface type and are followed by the DEQ response.

1. Waste hauling trucks sometimes travel on the portion of Napier Road that is north of West Six Mile Road. This is not the approved hauling route and there is too much traffic. Can this be stopped?

Part 115 does not address haul routes. DEQ staff is unaware of restrictions to waste hauler vehicle traffic on Napier Road, north of West Six Mile Road.

2. Who will test our wells to protect us from groundwater contamination from the landfill?

Groundwater monitoring wells at the landfill are sampled and analyzed by consultants twice annually for a long list of contaminants, and four times per year for a short list. The monitoring wells are set in the shallow, intermediate and deep aquifers. From the monitoring system the flow direction has been determined, and it is generally toward the southeast. The shallow aquifer does not exist over the southern portion of the site, and at the northwest portion of the landfill this aquifer is dewatered by a gravity drain line. The intermediate aquifer is believed to be an isolated sand seam within a clay soil. The sample results are statistically evaluated and forwarded to the DEQ for review. In the event that a statistically significant increase occurs, additional sampling and evaluation is done. If an increase proves to be a result of a release from the landfill, Veolia will be required to define the horizontal and vertical extent of contamination and develop a remedial action plan. If necessary, Veolia would be required to sample and analyze residential wells in the pathway of the migrating contaminated groundwater.

landfill gas monitoring, quarterly explosive gas monitoring, and DEQ inspections. Due to the slow travel rate of contaminants in the soil and groundwater, the available pathways in the local earth materials, and the nature of solid waste constituents, it is highly unlikely for a liquid or gaseous release to the soil to pose an immediate danger to the public. There is a higher likelihood of residents experiencing nuisance odors, as these can travel in a linear pathway through the atmosphere. These are infrequent in a well designed and managed landfill; however, even with the best designed and managed landfill, nuisance odors can occur. Nuisance odors can be corrected by various actions, such as increasing the vacuum on the gas collection system, replacement of damaged wells or piping, and application or repair of daily, interim or final cover. Studies indicate that chronic exposure to some trace constituents in landfill gas over many decades could increase the risk of cancer. However, due to frequent changes in wind direction and the fact that landfill operators make necessary repairs quickly, chronic exposure over decades is unlikely.

7. What is the fate of leachate taken from the landfill?

Leachate from Arbor Hills West is collected, stored in a tank and pretreated, then directed to the Northville sewer, and from there to the Western Township Utility Association, and from there to both the Ypsilanti Community Utilities Authority and the City of Detroit waste water treatment plants. Ultimately, the treated water is discharged to the Detroit River, per a National Pollution Elimination Discharge System (NPDES) permit. Leachate from Arbor Hills East is collected, stored in a tank, and then hauled to Disposal Recycling and Technologies in Detroit for treatment and disposal.