



Facts About...

Bowley's Lane Landfill Site
(MD-154)

Site Location

The 22-acre Bowley's Lane Landfill is located between Herring Run and Moravia Road, northwest of the Baltimore Harbor Tunnel Throughway in eastern Baltimore City. The roughly triangular-shaped landfill is bordered by Herring Run to the southwest, Herring Run Park on the northwest, and Moravia Road on the east. Biddison Run traverses the site northeast to southwest discharging into Herring Run. Herring Run flows southeast to Back River which flows into the Chesapeake Bay. Geographic coordinates for the geographic center of the property are 39°18.72" north latitude and 76°32.71" west longitude, based on the north American datum of 1983 (NAD83) data measured from the Baltimore East U. S. Geological Survey (USGS) Quadrangle Map. The Maryland grid coordinates for the site are 538,500 feet north and 928,400 feet east based on the geographic center of the property as measured on page 36 of the 2004 Alexandria Drafting Company (ADC) map for Baltimore City and County, Maryland.

Site History

The City of Baltimore acquired the property from the Baltimore County Water and Electric Company in 1927 as part of a City land annexation. The landfill was developed in three sequences. The first sequence, known as fill area No. 1, was filled to roughly 15 feet above the original grade prior to 1968. No records exist for the section, which was located on the northern part of the landfill. Soil borings made during the 2006 sampling of the site brought up various materials including fragments of bricks, mortar, bones, bottles, and metal and plastic debris indicative of a municipal waste landfill.

There were two eastern sequences (Phase I and Phase II), which were grouped together as fill area No. 2. Fill area No. 2 operated between 1968 and 1983 and primarily accepted porous ash from the Pulaski Highway Incinerator. Bulk trash and street sweepings were also accepted at the landfill. After an inspection by Maryland Department of Health and Mental Hygiene (DHMH), Waste Management Administration personnel, negotiations were initiated to develop a closure plan to address on-site leachate seeps, soil erosion, storm water control and surface cover. The landfill was closed in 1984. A leachate collection system discharging into the Baltimore City sewer system and a series of groundwater monitoring wells were installed as part of the 1984 closure. The leachate collection system and monitoring wells remain in place.

Environmental Investigation and Action

Following a 1982 inspection by the Maryland Department of Health and Mental Hygiene (DHMH), Waste Management Administration, negotiations were initiated which required the City to develop a plan to close the facility and provide for remediation of on-site leachate seeps, soil erosion, storm water control and surface cover at the Bowley's Lane Landfill. In November 1983, the City of Baltimore completed a Hydrogeologic Report of the Bowley's Lane Landfill. The report indicated that most precipitation falling on the landfill infiltrated the highly porous incinerator ash and flowed to the upper water-bearing zone six to twenty-five feet below the landfill. The landfill was closed in 1984. A leachate collection system discharging into the Baltimore City sewer system and a series of groundwater monitoring wells were installed as part of the 1984 closure agreement and are currently in place. The existing record is unclear as to whether a soil cap was placed over the full extent of the landfill. Records do indicate that a mix of incinerator ash and sewage sludge was used as a partial cap on the site.



There have been several investigations of the site since the 1984 closure.

- In June 1986, MDE completed a Preliminary Assessment (PA) during closure of the landfill and indicated that an evaluation of the site should take place after the installation of a leachate collection system and groundwater monitoring wells.
- In June 1989, MDE completed a methane gas survey that concluded there was no risk of off-site migration of methane gas from the landfill.
- In July 1990, the NUS Corporation Superfund Division completed a Site Inspection under contract with the EPA. The assessment determined that there were potential risks to both human health and aquatic life.
- In August 1999 MDE conducted a Site Survey of Bowley's Landfill. Based on the information available, MDE had further requirements for the investigation of hazardous waste at the site and recommended that the EPA consider the site for more detailed site investigation. EPA concurred with this analysis and recommended that MDE perform an Expanded Site Inspection (ESI).
- In May of 2006 a Preliminary Assessment/Site Investigation was conducted on the Bowley's Lane Landfill. Sampling began on May 9, 2006 with the collection of soil, sediment and surface water and concluded on May 11, 2006 with the collection of groundwater. All samples were analyzed for Target Analyte List inorganics and Target Compound List organics. The results of the sampling were documented in the August 2006 report "Preliminary Assessment/Site Inspection of the Bowley's Lane Landfill Site."
- In November 2009 MDE conducted an Expanded Site Inspection (ESI) of Herring Run. Samples were collected from nine transects sited from Sinclair Lane to the mouth of Herring Run. Data revealed elevated metals below Bowley's Lane Landfill.

Current Status

A recycled goods and bulk trash transfer center, and a Baltimore City equipment maintenance and storage yard now occupy the site of the landfill. Access to the property is partially controlled by a gated fence. The Herring Run perimeter however is largely unsecured. The elevations in heavy metal concentrations seem to follow the Herring Run boundary of the site. Toxicological data indicates a risk for the child visitor. The Herring Run boundary of the site is an attractive nuisance. The boundary is fairly unprotected. Children were observed playing in the stream and all terrain vehicle riders were seen crossing the capped area of the landfill.

The data in MDE's 2010 ESI indicated heavy metal contamination in Herring Run that may be related to incinerator ash from Bowleys Lane Landfill and the Pulaski Incinerator. The results of the ESI are inconclusive as to whether the landfill or the incinerator is the primary contributor to this contamination; therefore, MDE recommended that additional sampling of the sediments between Biddison Run and Moores Run be conducted in order to more clearly document sediment contamination in the watershed. It is likely that the contamination identified is relative to both contributors in addition to the other industrial sources in the watershed. The 68th Street Dump and adjacent disposal areas are other potential sources of contamination in the lower Herring Run system. MDE recommends that a more detailed evaluation of the stream be conducted in order to more clearly document sediment contamination in the watershed.

Contact:

For additional information, please contact the Land Restoration Program at 410-537-3440.

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