

FACTS ABOUT:

BOWLEY'S LANE LANDFILL HERRING RUN STUDY

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 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 approximate center of the property are 39°18.72" north latitude and 76°32.71" west longitude, based on the North American datum of 1983 data measured from the Baltimore East U.S. Geological Survey Quadrangle Map.

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 and a leachate collection system was installed in 1984. The leachate collection system and monitoring wells remain in place.

Environmental Investigation and Action

Following the negotiations with the DHMH to close the 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. 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, a Preliminary Assessment indicated that an evaluation of the site should take place after the installation of the leachate collection system and groundwater monitoring wells.
- In June 1989, a methane gas survey concluded there was no risk of off-site migration of methane gas from the landfill.
- In July 1990, a Site Inspection determined that there were potential risks to both human health and aquatic life.
- In August 1999, a Site Survey 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 combined Preliminary Assessment/Site Inspection was conducted. The results were documented in the August 2006 report "Preliminary Assessment/Site Inspection of the Bowley's Lane Landfill Site."
- In November 2009 MDE conducted an 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.
- In March 2015, MDE completed an ESI of Herring Run to determine if the previously identified metals contamination was related to the landfill. Results of the chemical analyses of the data collected for that ESI identified slightly elevated levels of metals and semivolatile organic contamination in the Herring Run sediments. However, the ESI could not conclude whether the landfill, or the nearby former Pulaski incinerator were the major contributors of the contamination identified in Herring Run. A Toxicological Evaluation was performed from the ESI data that identified slight risks to child and youth recreational users. MDE recommended no further evaluation of contaminant migration from the Bowley's Lane Landfill into Herring Run.

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.

