

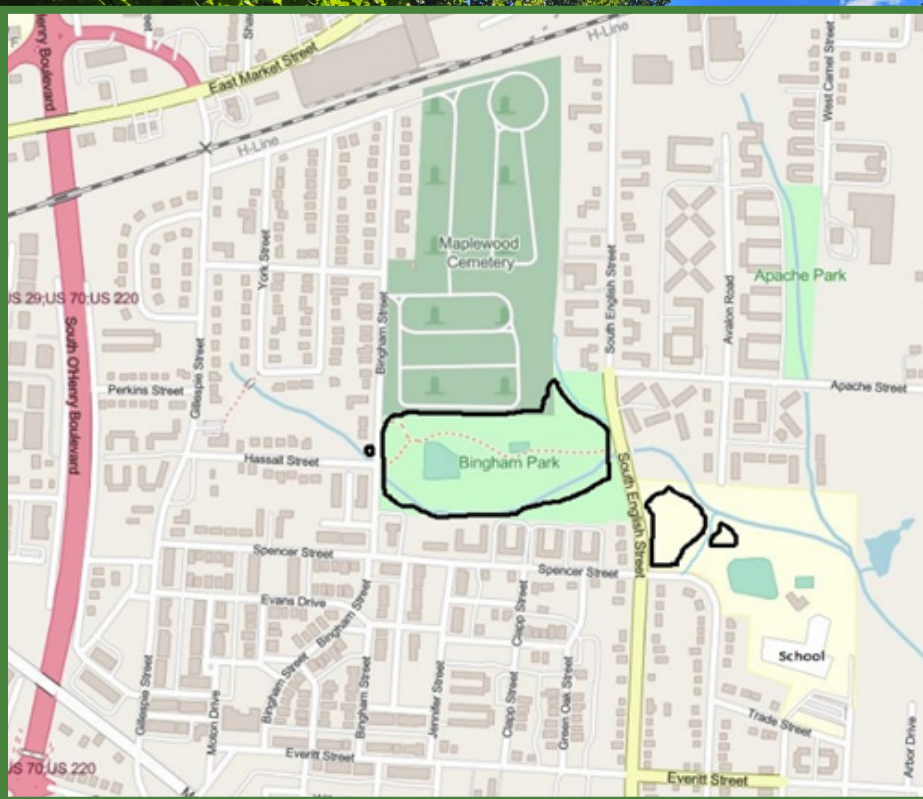
Bingham Park Pre-Regulatory Landfill

Greensboro, NC

PRLF ID# NONCD0000244

Location Information

The Bingham Park Pre-Regulatory Landfill site is nearly 13 acres of grassy open space and woods covering the former waste disposal area. The City of Greensboro owns about 11 acres west of South English Street, while the Guilford County Board of Education owns the remaining 1.7 acres east of South English Street. The site has sewer and fiberoptic easements running through it. Public water and sewer utilities service the areas surrounding Bingham Park PRLF.



Background

The Bingham Park landfill operated from the mid-1920s to the mid-1950s as a city landfill. The site is called a Pre-Regulatory Landfill, or PRLF, because it was in operation before 1983 when landfill standards were established to protect health and the environment. Pre-regulatory landfills could have types of waste that are not allowed in today's modern, lined landfills.

In 2011, the City of Greensboro, the property owner for this site, proposed plans for park improvements and as required for major construction on pre-regulatory landfill property, city representatives notified the North Carolina Department of Environmental Quality (DEQ) Division of Waste Management.

Investigation

Between 2011 to 2016, the Division worked to determine the location and depth of the buried waste, the presence of landfill gas and the impacts of the waste to the surrounding land. Samples were collected from the soil, waste, sediment and water, and landfill gas/vapor gas surveys were completed. Soil, waste and sediment samples showed levels of up to three semi-volatile organic compounds (SVOCs) and metals. Arsenic, iron, manganese, and lead are metals that were found in the waste sampled onsite – all of which can be toxic at high concentrations. Water samples had detections of metals and SVOCs, and above-ground vapor surveys found little to no detections of VOCs.

The Division of Waste Management determined the following site aspects based on its investigation:

- Waste is up to 20-feet-thick and covers about 12.7 acres.
- Soil cover and vegetation prevents park users from coming into physical contact with the waste except along 1,200 feet of the onsite streambank where exposed waste presents physical hazards.
- Contamination is contained onsite according to samples taken outside the waste disposal area.
- No harmful or explosive landfill gases were identified in landfill gas monitoring.
- The community surrounding the site uses public water for drinking purposes.
- There are no known drinking water wells within 1,000 feet of the landfill.

Assessment

The Division of Waste Management uses a risk-based approach to find out what is the greatest risk of exposure posed by pre-1983 landfills, and how to reduce environmental and human health risks. Sampling data and results collected during the investigation are entered into DEQ's electronic Risk Calculator, which determines risks and exposure routes from soil, water or air based on the largest concentration of contaminants found. Using the data collected from Bingham Park during the investigation, the greatest risk comes from high levels of arsenic, iron, manganese, and lead in the waste and metals/SVOCs in water.

Based on the assessment and risk calculations, DEQ advises:

- Park users should not drink water from or wade in the stream channel.
- Digging in or eating the soil could put a child or other park user at risk for exposure to arsenic, iron, manganese, lead, and SVOCs.

Next Steps

The Division of Waste Management and its contractor will design a Remedial Action Plan to protect human health and the environment by controlling contact with site contaminants and will mitigate hazards by working with the City of Greensboro and community members. DEQ has been actively engaging with City staff and community stakeholders on the plan's design. Community input will be incorporated into the final design of the plan. A timeline for project completion will be determined based on the final plan provided by the City of Greensboro.

Who to Call

For more information, contact Jordan Brummal, DWM project manager, at jordan.brummal@ncdenr.gov or (919) 707-8364. You may also contact Shawna Tillery with the Greensboro Parks and Recreation Department's Planning and Project Management, at shawna.tillery@greensboro-nc.gov or (336) 373-7808.

