Bingham Park PRLF Location

Maplewood Cemetery

Bingham City Park

W. M. Hampton Elementary School

Department of Environmental Quality
Bingham Park PRLF Location

- Landfill operated by the City of Greensboro
- Operated from the mid-1920s to the mid-1950s
- Incinerator on-site
Goal of Investigation

• Location of waste

• Impacts to:
  o Soil
  o Air
  o Groundwater
  o Surface water

• Identify risks
Investigation Summary

• 12.7 acres of waste

• Waste is up to 20 feet thick

• 13 property parcels
Risk Assessment

• Tool to determine risks of multiple contaminants and exposure routes such as breathing, eating, drinking, and touching

• Risks are specific for non-residential use such as a park setting and construction workers
Risk Assessment

- Children digging in the soil could be exposed to arsenic, iron, manganese, nickel, and lead that are in near surface soils.

- Park is covered in grass and vegetation

- Physical hazards in stream such as broken glass, bricks, plastic, and metal

- Park users should avoid drinking water from or wading in the stream
Risk Assessment

- No groundwater or surface water contamination outside the landfill areas
- Public water available
- No landfill gas issues found
Developing the Remedial Action Plan

- Based on contaminants of concern
- Topography
- Sensitive environments
- Public utilities
- Property ownership (number of parcels)
- Permitting – erosion control, stream buffers, waters of the U.S. (404/401)
- Stream and slope analysis
- Recordation of land use restrictions
- Contract firm funding
- Program funding
Developing the Remedial Action Plan

- Remedial action plan possibilities:
  - Removing surface debris
  - Removing hotspots (groundwater or vapor)
  - Waste consolidation
  - Removing waste in utility easements
  - Slope stabilization
  - Installation of engineered cover system

- Land Use Restrictions
Bingham Park Remedial Action Plan

• Waste Removal versus Cover:
  • Approximately 11 acres of park waste
  • Over $29 million for waste removal

• Total waste removal cost excludes:
  • Restoration of the park
  • Clearing and replacing utilities
  • Relocation of fiber optic cable
  • Mitigation fees for stream impacts
  • Clean fill material
Bingham Park Remedial Action Plan

• Cover Waste In Place
  • Cost too high to remove waste
  • Cover system cost $3 to $5 million
  • Cover system will encapsulate and stabilize the waste

• Remedial Action Plan implemented in two phases
  • Phase I - north side of park (9 to 12 months)
  • Phase II – stabilize stream bank in park and install cover system over waste on school property
  • Phase II - permitting in progress and should start in 2022
Remedial Action Implementation

• Topographic and boundary survey completed - April 2021
• Draft Phase I Remedial Action Plan summary submitted to DEQ - June 2021
• Draft Remedial Action Plan summary public comment period - June 2021
• State & City supported community meeting to review draft Remedial Action Plan
• 45-day public comment period – July/August 2021
• Recordation of Land Use Restrictions and Plat Notice
• 21-day subcontract bid advertisement
• Subcontract awarded within 30 days after bid advertisement
• Subcontractor mobilize equipment to site
• Process will be repeated for Phase II Remedial Action Plan
Remedial Action Plan Phase I Components

- Grading
- Installation of geotextile
- Installation of geoweb
- Infilling geoweb with soil
- Topsoil
- Seeding
Previous Remedy Photos

Department of Environmental Quality
Post Closure Monitoring

• Post construction site inspections for Erosion and Sediment Control and stormwater devices

• Land use restrictions require annual compliance updates from property owners