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August 2023

From Hazard to Haven: Prioritizing Remediation of Bingham Park

Bingham Park is located in Greensboro, North Carolina and sits on top of a former landfill and incinerator that operated from the 1920s to the 1950s, predating modern state and federal regulatory standards. Several sources of data have documented the presence of hazardous substances, raising the potential for significant risks to human health and the environment. The contamination at Bingham Park is a critical environmental justice issue that disproportionately affects the predominantly African American neighborhoods of Cottage Grove and Willow Oaks surrounding the park. The presence of vulnerable populations, including children and the elderly, heightens the urgency for remediation efforts to ensure their protection from the harmful effects of the landfill's legacy.

Scope of the Problem

Across North Carolina, there are over 656 sites of pre-regulatory landfills disproportionately located in neighborhoods of color. Bingham Park is one of these sites. Between the 1870s and 1920's, African American families began to settle in a farming community on the east side of Greensboro where Bingham Park is located. In June of 1922, the city council of Greensboro announced its plan to construct a new incinerator in the area. Despite more than 300 to 400 people – mainly women- protesting this decision, the incinerator began operation in 1925. The incinerator produced ash and other toxic materials that were lightly covered with soil in 1953 when the incinerator was shut down. Bingham Park was established by the City in 1972 and included amenities such as a basketball court, baseball field, and picnic tables. The neighborhoods around the park began to develop in the early part of the 20th century, and the park was heavily used by residents in the 1970s and 80s for recreational purposes. The legacy of the landfill posed a significant, but hidden, environmental and health risk for residents.

Effects of Landfill Contamination

The landfill, established before modern regulatory requirements, lacked essential safeguards such as liners, resulting in the leaching of contaminants into the soil, groundwater, and nearby streams. Today, the park is bisected by a tributary of the South Buffalo Creek. The tributary passes through residential areas, raising concern over environmental toxins potentially dispersed to a wider area. It also passes through the campus of Hampton Elementary School, which was severely damaged and closed due to a tornado in 2018.

Recent investigations by the City of Greensboro (2010-2012, EPA Brownfield Studies) and North Carolina Department of Environmental Quality (2013-2020 NC DEQ Site Reports) found several hazardous materials in the soil and stream sediment. A report synopsis from NC DEQ provided to the community in 2017 (DEQPRLF244_20170810 Bingham Information Session) revealed the following contaminants in soil: antimony, arsenic, cadmium, iron, lead, manganese, benzo(a)anthracene, and benzo(b) fluoranthene. Surface water sampling results also identified several contaminants above applicable standards, including copper, nickel, and zinc. No health risks were identified in groundwater monitoring wells or in landfill gas probes. In the past decade, community members, local elected officials, and community-based organizations have joined forces to advocate for the restoration and cleanup of Bingham Park. Efforts have included filing legislation to secure funding and partnering with academic institutions and healthcare providers to conduct research and raise awareness about the risks posed by the landfill.

A Call to Action

The following policy recommendations, supported by evidence and community input, are put forth to address the historical legacy of racial discrimination, ensure the safety of local residents, promote environmental justice, and restore Bingham Park as a usable city park.

1. Full Remediation and Site Restoration

This recommendation includes comprehensive removal of the waste material, implementation of appropriate soil and groundwater remediation techniques, and restoration of the site to ensure it meets environmental and health standards.

2. Community Engagement and Empowerment

Engaging community members will ensure that their concerns, aspirations, and needs are central to the remediation and redevelopment plans of the park. This includes creating leadership roles for local community members, increasing public participation, soliciting input on the park's redesign and amenities, and fostering collaboration between residents, community organizations, and relevant stakeholders.

3. Environmental Justice Framework

The adoption of an environmental justice framework is crucial to address the historical racial discrimination and social inequities experienced by the residents of this neighborhood. This includes explicitly acknowledging the disproportionate impacts of environmental hazards on marginalized communities and integrating environmental justice considerations into all phases of the remediation and redevelopment process in order to promote social equity and justice.

4. Sustainable Land Use Planning and Design

Incorporating sustainable land use planning principles and design features is vital for the future use and redevelopment of Bingham Park. This includes integrating green infrastructure, such as stormwater management systems, native landscaping, and biodiversity enhancement, into the park's design. Additionally, providing accessible amenities, recreational facilities, and open green spaces will enhance the park's usability and contribute to community well-being.

5. Continued Monitoring and Evaluation

Regular monitoring of soil and water quality, air pollution levels, and community health indicators will ensure that the site, and other potentially impacted areas, remain safe and free from contamination. Monitoring results should be made accessible to the public to foster transparency and accountability.

6. Improving Inclusive Community Engagement Across NC

The North Carolina Department of Environmental Quality (NC DEQ) and other government stakeholders should prioritize purposeful engagement with residents affected by pre-regulatory landfills. This includes meaningful involvement of impacted residents in decision-making, building collaborative partnerships with community-based organizations and advocacy groups, enhancing the transparency and availability of information and educational resources related to pre-regulatory landfills including health impacts, and lastly, integrating environmental justice principles into the decision-making processes to ensure equitable distribution of environmental benefits and burdens, particularly in neighborhoods with a history of disproportionate exposure to environmental contaminants.