Spring Creek Park Site May 2025

National Park Service U.S. Department of the Interior **Interior Region 1 (NER) Gateway National Recreation Area**



SITE BACKGROUND

Spring Creek Park (SCP), located in the Borough of Queens, New York City, NY, is a 237-acre area managed by the National Park Service (NPS) as part of the Jamaica Bay Unit of Gateway National Recreation Area. The entirety of Spring Creek Park (the "Site") includes filled/reclaimed land composed of dredged material, waste fill, and ash that was deposited from 1948 to the early 1960s as part of "land modification" projects and when the Site was owned and operated by the City of New York as a waste disposal area. Most of the waste filling by the City occurred between 1949 and 1957. From the late-1950s to the late-1960s/mid-1970s, sewage sludge was mixed with clay and used as a soil amendment (artificial topsoil) to cover the ground surface after the completion of waste disposal activities. In the early 1970s, the Site was transferred from the City to the United States for inclusion within the NPS, Gateway National Recreation Area.

Previous investigations conducted at the Site by the New York State Department of Environmental Conservation (NYSDEC) and the United States Army Corps of Engineers (USACE) as part of planning for possible habitat restoration and coastal storm risk management projects identified chemical contaminants in Site soils including pesticides, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and various metals. In December 2017, as a public safety measure, NPS conducted a limited gamma radiation walkover survey of NPS-maintained park fire roads that



Phragmites (reed grass) at Spring Creek Park

allow for pedestrian access. The survey was conducted due to the historical similarities of the Site with that of the Great Kills Park Site, a site within Gateway National Recreation Area where radiological contamination was found and determined to be associated with waste disposal operations analogous to those conducted at Spring Creek Park. The survey identified elevated levels of radiation, including five man-made radiological artifacts that were recovered and removed from the Site.

ENVIRONMENTAL INVESTIGATIONS



Gamma Walkover Survey

In 2017, NPS initiated response actions pursuant to its cleanup authority under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also referred to as Superfund, to investigate the nature and extent of contamination resulting from the City's historical sanitation operations at the Site. As the CERCLA "lead agency" at the Site, NPS plans the Site investigation and cleanup activities. Since 2017, NPS has initiated and completed several CERCLA investigations at the Site. Based on these investigations, NPS determined in the fall of 2020 that it was necessary to initiate a CERCLA Remedial Investigation/Feasibility Study (RI/FS).

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In February 2022, limited gamma walkover surveys were performed at the Site in areas that had been opened after NPS cleared vegetation (Phragmites) to maintain fire roads. Three radiological hotspots of concern were identified within the cleared area. As a protective measure, NPS immediately placed steel plates over the hotspots, which reduced radiation exposure rates to background levels at each location.

RADIUM HISTORY AND POTENTIAL EXPOSURE AT SPRING CREEK PARK

The radioactive contaminants that have been identified at the Site are radium, thorium, uranium and their decay progeny. The most prevalent being radium. Radium is a naturally occurring element that is radioactive. It is constantly formed by the decay of two elements, uranium and thorium, which exist naturally in rock and soil. Small quantities of naturally occurring radium are also present in building materials such as granite, cement, and clay brick. In the United States we are exposed to many sources of radiation every day from naturally occurring radioactive elements in our bodies and the environment from cosmic (sun) rays, as well as from man-made exposures, primarily from medical diagnosis (like x-rays) and treatment.

Historically, radium was erroneously used to treat rheumatism and mental disorders, and as a general tonic. It was widely used in luminescent paint for watches, aircraft switches, clocks, instrument dials, glow in the dark buttons, and many other products. The danger of radium was exposed in the 1920s by the Radium Girls – young female factory workers who contracted radiation poisoning from painting radium watch dials with self-luminous paint. Ensuing litigation, covered broadly by the media, brought the danger of radium to the forefront, spurring both the field of health physics and the labor rights movement. However, it was not until the 1970s that radium was no longer used in the manufacture of watches and clock dials.

The greatest potential risk from radiological Site contaminants results from coming into direct contact with man-made radiological articles and the ingestion of contaminated soil. Exposure, and ultimately risk, from an actual man-made radioactive article depends on the amount of time and how close you are to it. Both man-made articles and contaminated soil are known to exist at the surface at the



Deck marker containing radium

and contaminated soil are known to exist at the surface at the Spring Creek Park Site.

NEXT STEPS

NPS is in the process of conducting a Site-wide RI/FS. The RI is a comprehensive investigation often conducted over multiple phases and includes sampling soil, groundwater, and sediment as well as gamma surveys to identify elevated radioactivity. Field investigation activities are anticipated to take place in 2025.

The results of the RI will provide the foundation for how NPS will evaluate cleanup alternatives in the Feasibility Study (FS) to ensure Site conditions are protective of human health and the environment and allow for the continued use of Spring Creek Park by the community once the remediation is completed. The results of the RI and FS will be presented in a combined RI/FS Report. NPS will then develop a Proposed Plan for public review and comment, which

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will outline the preferred cleanup option identified for the Site. Public feedback will be sought and considered prior to finalization of the Proposed Plan, which will be documented in the Site Record of Decision (ROD). Once the ROD is finalized, NPS will prepare the Remedial Design and commence Remedial Action in all areas of Spring Creek Park determined to require cleanup.

The **Spring Creek Park Site is closed to visitors** for their safety and will remain closed as NPS continues to collect and evaluate data on the nature and extent of contamination at the Site.



Spring Creek Park - Closed Area

COMMUNITY INVOLVEMENT

Community involvement is an important part of the NPS CERCLA process. NPS has established an information repository, which houses a copy of the Spring Creek Park Site Administrative Record File. CERCLA administrative record files consist of those documents that form the basis for the selection of the response at the Site. The Spring Creek Park Site Administrative Record File currently includes documents associated with Site historical information, environmental investigations, and community relations materials. The Site Administrative Record File will be updated periodically as new information and reports are finalized. The public can view the Site Administrative Record File and make copies of documents at the following information repository location.

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Spring Creek Park Site Information Repository

Queens Public Library – Howard Beach Branch

92-06 156 Avenue Howard Beach, NY 11414

Phone: 718.641.7086

Website for Hours of Operation: Howard Beach | Queens Public Library (queenslibrary.org)

FOR MORE INFORMATION

If you have questions concerning the information contained in this Community Update and/or would like to sign up to receive project updates via email, please contact the NPS Public Affairs Office at 917.282.9393 or email gate-springcreekcleanupproject@nps.gov. Additional information and project updates are available through the Park's website at Spring Creek Park Environmental Cleanup Project - Gateway National Recreation Area (U.S. National Park Service) (nps.gov) or by scanning this QR code:

