NEW YORK STATE
DEPARTMENT OF

ENVIRONMENTAL
CONSERVATION

This Fact Sheet serves to announce the beginning of Remedial Action for the Rockaway Park Manufactured Gas Plant site.

Public Availability Session

Wednesday,
July 23, 2008
6:00 PM to 8:00 PM

Beach Channel High School
Library
100 Beach Channel Drive
Queens, New York 11694

The New York State Departments of Environmental Conservation and Health (NYSDEC and NYSDOH) will discuss the remedial construction for the Rockaway Park Site. At the meeting, representatives from the NYSDEC and NYSDOH will:

- Describe results of the site investigations;
- Explain the proposed construction;
- Answer your questions about the remedy.

FACT SHEET

July, 2008

Rockaway Park MGP SITE
SITE No. 2-41-029
Beach Channel Drive
Queens, NY 11694

Remedial Action for the Rockaway Park MGP Site

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Public Availability Session Announced

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The New York State Department of Environmental Conservation (NYSDEC), working cooperatively with the New York State Department of Health (NYSDOH), are preparing to implement a remedy designed to address contamination identified at the Rockaway Park Manufactured Gas Plant (MGP) site (also known as "the Site") in Queens, NY.

The Proposed Action: The remedy was prescribed in NYSDEC's Record of Decision (ROD), issued in October of 2004. The main components of the remedy are:

- Shallow source removal to an approximate depth of eight feet below grade over the majority of the site to remove coal tar wastes.
- Installation of Dense Non-Aqueous-Phase Liquid (DNAPL) migration barriers to prevent the migration of remaining contamination towards Jamaica Bay. One barrier will be installed along the northern perimeter of the site, south of Beach Channel Drive, and a second barrier will be installed on the bulkhead property north of Beach Channel Drive.
- Installation of DNAPL collection wells at various locations around the site and on the bulkhead property.
- The installation of two feet of clean soil across the entire site.

The upcoming availability session is an informal opportunity for members of the public to learn more about the upcoming construction and to ask any questions or voice any concerns. During the hours listed, representatives of NYSDEC, NYSDOH, National Grid, and the engineers in charge of the design will be available to answer questions and provide more detailed information on the project.

The construction will begin with the mobilization of onsite support facilities (trailers, etc.). After that, some pre-excavation work will occur. This will include the location and capping of any subsurface utilities, as well as the erection of a large temporary fabric enclosure that will completely contain the active excavation area. This enclosure will be used to minimize both the offsite odor and dust effects. The enclosure will be moved on a regular basis to follow the excavation work as it progresses. Excavated soils will be removed on trucks for off-site treatment and disposal.

Initially, the idea of removing the soils via barge was considered. However, the constraints of mooring a barge on the bulkhead property, which is owned by the City of New York, and moving the contaminated soils from the site to the barge was not deemed appropriate, given the risks of spills into Jamaica Bay or other

waterways during transport and the lack of adequate offloading facilities to handle barged waste. A traffic engineering firm was hired to provide a plan to minimize the impact of truck traffic to the surrounding neighborhoods. The plan provides for a limited schedule to prevent the trucks from clogging local roadways at heavy traffic times and it specifies the use of established truck routes. Furthermore, trucks leaving the site will be inspected and covered with a plastic cover to ensure that contaminated soil is not tracked onto surrounding streets and that odors and dust do not escape from the truck. Similar systems have been used at other National Grid former MGP sites without incident.

Concurrent with the excavation, the DNAPL migration barriers will be installed; first on the bulkhead property, then on-site. Finally, the site-wide cap will be constructed and the DNAPL collection wells will be installed.

Throughout the project, air quality will be monitored at the Site's perimeter to ensure the protection of the public.

After the work is completed, the Site will be subject to an environmental easement which will define the conditions for future use of the property and will require long-term monitoring and maintenance of the site-wide cap, DNAPL collection wells, and the DNAPL migration barrier. A soil vapor mitigation plan also may need to be developed, depending on future development on the Site.

Site History

The Site, located at the corner of Beach Channel Drive and Beach 108th Street in Rockaway Park, was historically identified as the location of an MGP. Investigations have identified contaminants related to the production of coal gas at the Site. These contaminants include coal tar and purifier waste.

Gas production began at the Site in the 1880's and continued until the mid-1950's. During its life, the plant expanded several times to increase its production and storage capacities. Most of these expansions were onto adjacent properties created with fill dredged from Jamaica Bay. During the life of the plant, it was owned by three companies. The final owner of the MGP, while it was still producing gas, was the Long Island Lighting Company (LILCO). The property remained LILCO's until they merged with Brooklyn Union Gas Company in 1998 to form KeySpan. KeySpan was recently acquired by National Grid

In 1998, the site was added to the State's Registry of Inactive Hazardous Waste Disposal Sites (Registry), as a Class 2 site. A Class 2 site "poses a significant threat to the public health or environment and requires remedial action." As a result of this classification, KeySpan entered into a Consent Order with the NYSDEC, in 1999, to perform a remedial investigation/feasibility study and remediation of the Site.

Site Investigation

From 1999 through 2002, field work was performed to define the nature and extent of the contamination at the Rockaway Park MGP site. This work included the collection of surface and subsurface soil, groundwater, soil vapor, and ambient air samples for analysis. The samples were taken from locations over the entire site as well as beyond the perimeter of the site. Off-site samples were located along Beach Channel Drive, Beach 108th Street, Rockaway Freeway, and in the area between Rockaway Beach Boulevard and the Metropolitan Transit Authority Right of Way, as well as adjacent to Jamaica Bay along the bulkhead due North of the site.

The chemicals of concern at this site are residues of the former MGP process and include Volatile Organic Compounds (VOC's), Semi-Volatile Organic Compounds (SVOC's), and cyanide. The VOC's of concern are benzene, toluene, ethylbenzene, and xylene. Together they are known as BTEX. The SVOC's of concern are polycyclic aromatic hydrocarbons (PAHs). BTEX and PAHs are the primary constituents of coal tar which was the main byproduct of gas production.

The two main contaminants at MGP plants are coal tar and purifier waste. Coal tar is a thick black substance which was a byproduct of the gas production process. The coal tar was precipitated out of the gas before it was sent to homes. The coal tar typically appears as a Dense Non-aqueous Phase Liquid (DNAPL) that is a flowable product which does not mix with water and is denser than water. Purifier waste was produced when the gas was passed through purifiers to remove certain chemical impurities. The main chemical of concern of purifier waste is cyanide. Both coal tar and purifier waste are subsurface soil contaminants and are sources of groundwater contamination.

Evidence of both coal tar and purifier waste were found at the Site. Coal tar is found in several locations in the subsurface of the site, typically associated with historic MGP structures. The coal tar has migrated vertically from just below the surface to as deep as 110 feet below the surface and appears to be migrating

northward. It has been found on the north side of Beach Channel Drive at depths between 7 and 57 feet below the surface. Evidence of purifier waste has been found up to 6 feet below the surface in several isolated locations on the site and in the bulkhead area. The groundwater contamination from the tar is made up primarily of BTEX compounds with some PAHs and it is moving north by northeast. Evidence of this groundwater contamination has been found on the east side of Beach 108th Street and on the north side of Beach Channel Drive. The purifier waste is in such small quantities that it does not meaningfully contribute to the groundwater contamination plume.

Document Repositories: *To review the site information*:

Queens Borough Public Library
Peninsula Branch
92-25 Rockaway Beach Blvd.
Rockaway Beach, NY 11693
(718) 634-1110

New York State DEC
Region 2 Headquarters
1 Hunters Point Plaza
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Long Island City, NY 11101-5407
(718) 482-4900
(by appointment)

Community Board 14
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Far Rockaway, NY 11694
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For More Information: *Call or write the following staff for more information about:*

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