Department of Environmental Conservation

December 2015

FACT SHEET

Brownfield Cleanup Program

Receive Site Fact Sheets by *Email.* See "For More Information" to Learn How.

Site Name: GDC LIC Development
DEC Site #: C241172
Address: 45-35 11th Street and 11-22 45th Road, Queens, LIC, NY

Have questions? See "Who to Contact" Below

Remedy Proposed for Brownfield Site Contamination; Public Comment Period Announced

The public is invited to comment on a proposed remedy being reviewed by the New York State Department of Environmental Conservation (NYSDEC) to address contamination related to GDC LIC Development site located in Long Island City, Queens County. Please see the map for the site location. Documents related to the cleanup of this site can be found at the location(s) identified below under "Where to Find Information."

The cleanup activities will be performed and funded by GDC LIC Development, Inc. with oversight provided by NYSDEC. When NYSDEC is satisfied that cleanup requirements have been achieved, the applicant may be eligible for tax credits to offset the costs of performing cleanup activities and for redevelopment of the site.

Based on the findings of the investigation, NYSDEC, in consultation with the New York State Department of Health (NYSDOH) has determined that the site does not pose a significant threat.

Additional site details, including environmental and health assessment summaries, are available on NYSDEC's website at:
http://www.dec.ny.gov/cfmx/extapps/derexternal/haz/details.cfm?pageid=3&progno=C241172

How to Comment
NYSDEC is accepting written comments about the proposed cleanup plan for 45 days, from **December 28, 2015** through **February 11, 2016**. The draft Remedial Action Work Plan (RAWP) containing the proposed site remedy is available for public review at the location(s) identified below under "Where to Find Information." Please submit comments to the NYSDEC project manager listed under Project Related Questions in the "Who to Contact" area below.

The proposed remedy consists of:

- Removal of all soil/fill to consistent with the development plan; that is, removal of all fill soils within the footprints of the proposed buildings as well as removal of isolated areas of soils to greater depths based on characteristics that would categorize these hot spot soils as "source material" for known on-site contamination. Current calculations estimate that the excavation area necessary for the footprints of the buildings will generate 8,900 cubic yards of regulated material; an additional 2,600 cubic yards of regulated material will be generated from excavations necessary to remove soils within hot spots (because hot spots are located in part or in whole within the areas of building excavation, the shallow hot spot soils (i.e., first five feet of excavation) are included within the former volume (i.e., the 8,900 cubic yards). A total volume of 11,500 cubic yards of regulated material will be excavated at this Site.

- Removal of existing above ground storage tank (AST) located at the southwest corner of Lot 20 and the existing underground storage tank (UST) located at the northern portion of Lot 13.

- To address groundwater impacted by primarily BTEX related compounds, Oxygen Release Compound (ORC) will be applied at the base of the hot-spot excavations followed by post-remediation groundwater monitoring at the perimeter of the site to restore groundwater to pre-disposal/pre-release conditions, to the extent practicable. Additional ORC treatment may be applied if necessary.

- With accepted contaminated soils remaining on the Site, a minimum 20 mil thick soil vapor barrier would be installed and a sub-slab depressurization system (SSDS) will be installed under each new structure (operation of the SSDS will be based on post-excavation soil vapor sampling results).

- Placement of a composite cover system over the entire Site, in compliance with 6NYCRR Part 375-3.8(e)(4), consisting of the building slabs and a minimum 2 foot thick soil cover in the rear of the buildings. To the extent feasible, urban fill soils suitable for on-Site reuse will be reused in areas beneath the composite cover; it is estimated that 2,000 cubic yards of fill material may be reused on-Site in this way;

- Establishment of use restrictions including prohibitions on the use of groundwater from the Site; prohibitions of restricted Site uses, such as farming or vegetable gardening, to prevent future exposure pathways; and prohibition of a higher level of land use without NYSDEC approval;

- Establishment of an approved Site Management Plan (SMP) to ensure long-term management of these Engineering and Institutional Controls including the performance of periodic inspections and certification that the controls are performing as they were

intended. The SMP will note that the property owner and property owner's successors and assigns must comply with the approved SMP; and,

- The property would receive an environmental easement registered with the county clerk memorializing engineering and institutional controls and the SMP and continue to be encumbered with an E-designation for hazardous materials.

The proposed remedy was developed by GDC Development LIC. Inc. ("applicant(s)") after performing a detailed investigation of the site under New York's Brownfield Cleanup Program (BCP).

Summary of the Investigation

The principal objective of the Remedial Investigation (RI) was to characterize and delineate the horizontal and vertical limits of the historical fill materials, to investigate the potential soil, groundwater and soil gas contamination, and to evaluate exposure pathways with respect to public and the environment. To accomplish these objectives, the following task were concluded.

- Conducted a Site inspection to identify Areas of Concern and physical obstructions (i.e. structures, buildings, etc.) and performed a geophysical survey to identify underground features;
- Collected samples from 39 mechanized soil borings, and submitted 69 soil samples (from multiple depths) for chemical analysis to evaluate soil quality;
- Collected 15 samples from 9 groundwater monitoring wells, and submitted samples for chemical analysis to evaluate groundwater quality. Depth to groundwater measurements were taken at the wells to determine static groundwater elevations and to establish groundwater flow direction;
- Installed 13 temporary soil vapor probes, and collected 13 soil vapor samples for chemical analysis.
- Investigative work has been completed on the horizontal spatial dimensions of soil and groundwater (including free-product) contamination associated with on-site fill soils. Additional work is warranted to remediate on-site soils that are considered source areas.
- Investigative work has been completed with respect to two known areas of significantly contaminated soils, located at the central portion of the Site in the vicinity of monitoring well MW-4R and at the northwestern corner at MW-1. Impacted soils in central area are likely to be contributing to dissolved hydrocarbon contamination on the Site. The lateral (and, to a lesser degree, vertical) extent of these "hot spots" has been defined. Additional work is warranted to identify and evaluate remedial options to address these known conditions.

- Investigative work has been completed with respect to on-site groundwater contamination. Dissolved hydrocarbon concentrations (primarily petroleum compounds)

are highest in monitoring wells MW-2, MW-4/MW-4R and MW-9, supporting the conclusion that the source of dissolved petroleum compounds in on-site groundwater is, in part or in whole, the impacted soils in the central hot spot area. Removal of these soils will likely result in reductions in dissolved hydrocarbon concentrations in on-site groundwater.

- Investigative work has been completed with respect to soil vapor concerns on the Site. An area of elevated volatile organic compounds (VOCs) is present at S-SG-2, at the southeastern portion of the Site. Response actions to address VOCs in other media (soil and groundwater) are expected to substantially reduce soil vapor levels but reuse of this Site should consider the installation and operation of active vapor interceptor systems.
- Investigative work has been completed with respect to metals, PCBs and pesticides in on-site soils and groundwater. Elevated arsenic concentrations in soil were identified is the central portion of the site.

Next Steps

NYSDEC will consider public comments received on the proposed remedy presented in the draft RAWP and ultimately issue a final Decision Document. The New York State Department of Health (NYSDOH) must also concur with the remedy. The final Remedial Action Work Plan (with revisions if necessary) and the Decision Document will be made available to the public. The applicant(s) may then design and perform the cleanup action to address the site contamination, with oversight by NYSDEC and NYSDOH.

NYSDEC will keep the public informed throughout the investigation and cleanup of the site.

Background

Location: The 50,000 square foot (1.15 acre) site is comprised of two tax parcels and is located in an urban area in the Hunters Point section of the Borough of Queens. The site is bordered by 45th Road, 11th Street, 46th Avenue Street and existing commercial structures to the east.

Site Features: The Site is currently vacant. There are two known petroleum storage tanks within the site footprint. One is above ground and the other is below ground.

Current Zoning/Use(s): The site is zoned under the Long Island City Mixed Use District (LIC) which promotes the development and expansion of the longstanding mix of commercial, industrial and cultural uses in the Hunters Point sub-district. The location of the site is specifically zoned M1-4/R6A.

Historical Use(s): The site has been utilized as a warehouse for various products and a manufacturing site for clothing, light fixtures, and paper coatings.

Site Geology/Hydrogeology: Fill material is present to depths up to 18 to 27 feet bgs. Silt and silty sand is present below the fill to top of bedrock at 30 to 40 feet bgs. Groundwater is present at 9 feet bgs and is predicted to flow to the northwest.

Brownfield Cleanup Program: New York's Brownfield Cleanup Program (BCP) encourages the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and redeveloped. These uses include recreation, housing, business or other uses.

A brownfield is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination.

For more information about the BCP, visit: http://www.dec.ny.gov/chemical/8450.html

FOR MORE INFORMATION

Where to Find Information
Project documents are available at the following location(s) to help the public stay informed.

Queens Library
Attn: Archives
89-11 Merrick Boulevard
Jamaica, NY 11432
Phone: 718-990-0770

Who to Contact
Comments and questions are always welcome and should be directed as follows:

Project Related Questions
MD Hoque
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7016
Phone: (518) 402-9475
Email: md.hoque@dec.ny.gov

Site-Related Health Questions
Stephanie Selmer
New York State Department of Health
Empire State Plaza, Corning Tower
Albany, NY 12233
Phone: (518) 402-7860
Email: beei@health.ny.gov

We encourage you to share this fact sheet with neighbors and tenants, and/or post this fact sheet in a prominent area of your building for others to see.

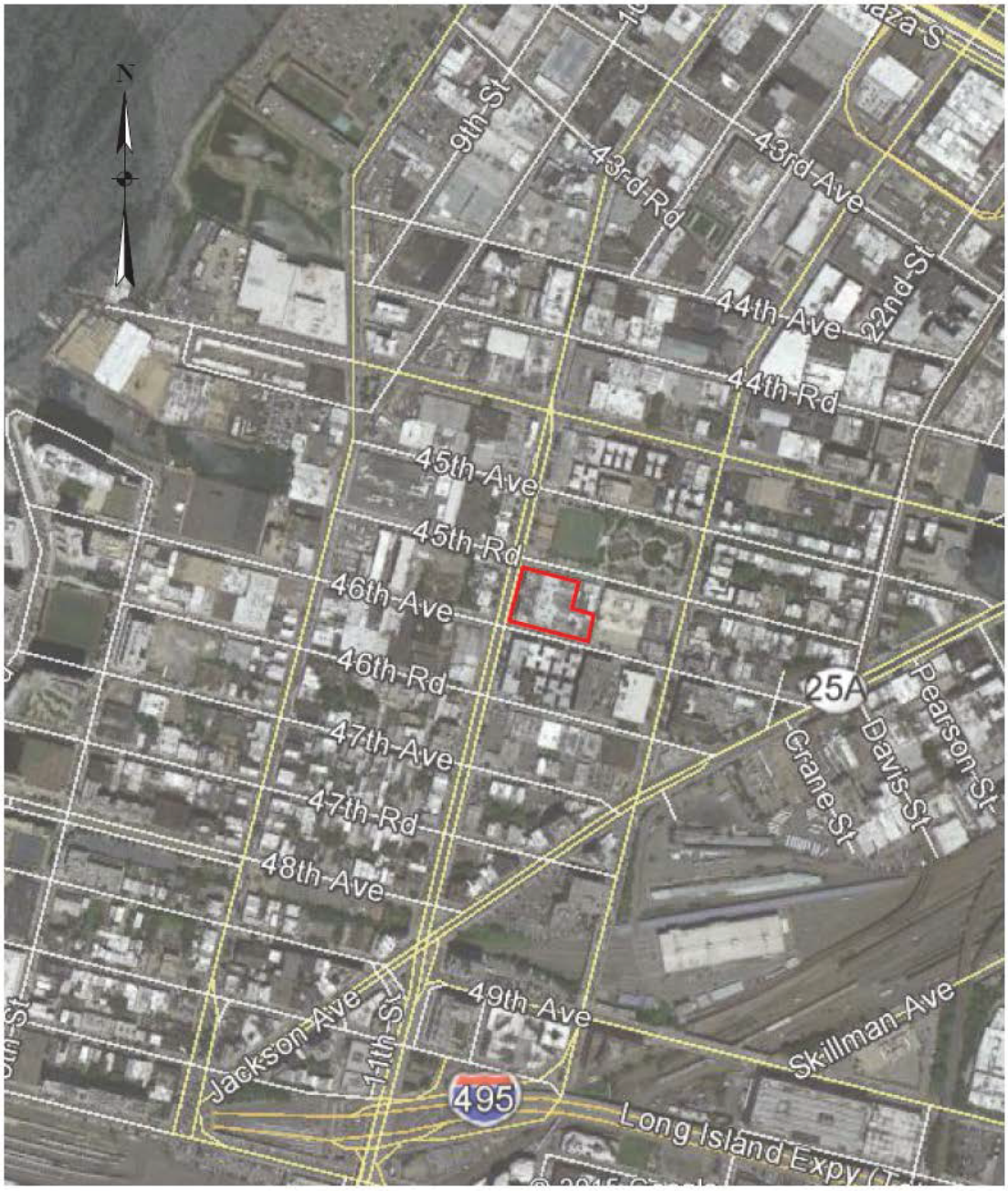
Receive Site Fact Sheets by Email

Have site information such as this fact sheet sent right to your email inbox.

NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: http://www.dec.ny.gov/chemical/61092.html. It's quick, it's free, and it will help keep you *better informed*.

As a listserv member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies) you select.

Note: Please disregard if you already have signed up and received this fact sheet electronically.



All feature locations are approximate. This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Site Location Map 45-35 11th Street and 11-22 45th Road Queens, New York	Legend: subject property border Longitude = -73°56'58.29" W Latitude = 40°44'47.86" N 0 250 500 SCALE IN FEET (APPROXIMATELY)	ESI File: GQ14076.10 July 2015 Appendix C