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 the 34-11 Beach Channel Drive site ("site") located at 34-11 Beach & Far Rockaway Blvd, Far Rockaway, 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."

Based on the findings of the investigation, NYSDEC in consultation with the New York State Department of Health (NYSDOH) has determined that the site's significant threat status is unknown.

How to Comment

NYSDEC is accepting written comments about the proposed plan for 45 days, from April 14, 2015 through May 29, 2015. The proposed plan 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.

Draft Remedial Action Work Plan

The cleanup plan is described in a more detailed "Remedial Action Work Plan". The proposed remedy consists of:

1. Removal of the underground storage tank (UST) previously identified at Lot 14, and remediation of any contaminated soil and groundwater resulting from the UST.

2. A chemical oxidant injection program will be implemented to address groundwater contamination at Lot 24.

3. Excavation of top two feet of soil (fill) throughout the site (Lot 14 and Lot 24). At areas where building foundations will be located, soil will be excavated to a depth of four feet.
   a. Excavation will also include hazardous lead-impacted material and grossly-impacted soils, if encountered.
   b. Clean native soil will be reused on-site for backfill and cover material.
   c. Additional clean material for backfill and cover will be imported as needed.
d. DER-10, section 5.4(e), will apply to all soil that exists at or is imported to the site for use as backfill and soil cover material.
e. Soil that cannot be reused at the site will be properly disposed off-site.

4. Confirmation sampling will be conducted to verify that the top two feet of soil meet the restricted residential soil cleanup objectives (SCOs).
   a. In addition to bottom samples, sidewall samples will also be collected from areas excavated to a depth of four feet.
   b. All soil samples will be analyzed for VOCs and metals.

5. The entire site, including parking lots and landscaped areas, will have a composite cover consisting of building slabs, asphalt parking areas and two feet of clean soil in all exposed areas.

6. Installation of a vapor barrier and sub-slab depressurization system (SSDS) beneath all occupied areas of planned buildings. This includes areas that are only occasionally occupied.

7. Institutional Controls (ICs) in the form of an environmental easement (EE) that include:
   a. restricting groundwater use at the site without treatment as determined by NYSDOH or County DOH; and
   b. allowing for restricted residential use at the site, subject to local zoning laws.

8. Engineering Controls (ECs) for the soil cover system and SSDS.

9. A Site Management Plan (SMP) for the ICs, ECs and any operation and maintenance of the remedial systems at the site.

The proposed remedy was developed by Alprof Realty LLC, VFP Realty LLC and other parties ("applicant(s)") after performing a detailed investigation of the site under New York's Brownfield Cleanup Program (BCP).

Summary of the Investigation

There is groundwater and soil vapor contamination at the site, mostly from chlorinated volatile organic compounds (CVOCs). It should be noted that in 2004, 13,882 tons of petroleum contaminated soil, 12,430 gallons of petroleum mixed with groundwater, and 418.3 tons of soil impacted with trichloroethene (TCE) were removed from Lot 29 (the off-site property that is adjacent to Lot 24).

Significant investigation activities completed at the site (Lot 14 and Lot 24) include the following:

- In 2002, MTBE was detected in groundwater at Lot 14 (23 µg/l and 34 µg/l). An underground storage tank (UST) was also identified at Lot 14.
- In 2007, groundwater at the eastern edge of Lot 24 had elevated concentrations of CVOCs. Vinyl chloride ranged from 650 µg/l to 2,800 µg/l. TCE was detected at 478 µg/l and benzene at 35 µg/l.
- In 2008, vertical profiling determined that CVOCs increased downward within the shallow sand (416 µg/l to 9,573 µg/l). Within the intermediate sand, concentrations decreased downward (17,508 µg/l to 6.2 µg/l).
- In 2012, a soil, groundwater and soil vapor investigation was completed. The highest concentrations of CVOCs in groundwater and soil vapor were present at Lot 24.
  - In groundwater, vinyl chloride ranged from 470 µg/l to 21,000 µg/l. Cis-1,2-DCE ranged from 320 µg/l to 310,000 µg/l. Benzene was 32 µg/l and toluene was 23 µg/l.
In soil vapor, TCE ranged from 110 µg/m³ to 36000 µg/m³. Vinyl chloride ranged from 27000 µg/m³ to 160000 µg/m³.

- In 2013, additional soil, groundwater and soil vapor sampling was conducted.
  - In soil, primarily copper and lead were detected in the upper five feet.
  - In groundwater, the highest CVOC concentrations were in the intermediate groundwater at the eastern edge of Lot 24 (31 to 36 feet bgs). TCE was 310 µg/l; vinyl chloride was 420 µg/l; cis-1,2-DCE was 4,800 µg/l. Off-site, MEK was detected in shallow and intermediate groundwater at 2,200 µg/l and 1,000 µg/l, respectively.
  - In soil vapor at off-site locations, the highest concentrations were found at locations south and southeast of the site.

- In 2014, cone penetration testing was conducted on-site. Soil, groundwater and soil vapor sampling was also conducted on-site and off-site. The highest concentrations of CVOCs were again located along the eastern edge of Lot 24.
  - In soil, only copper exceeded the commercial SCO at two on-site locations.
  - In shallow groundwater, several CVOCs exceeded the groundwater standards. Vinyl chloride was 440 µg/l, TCE was 130 µg/l and MEK was 2200 µg/l. In the intermediate groundwater, vinyl chloride ranged from 23 µg/l to 1,100 µg/l and TCE ranged from 16 µg/l to 410 µg/l. At off-site locations, vinyl chloride was detected at 84 µg/l and MEK at 1,000 µg/l.
  - In on-site soil vapor, TCE ranged from 4.9 µg/m³ to 1100 µg/m³; toluene ranged from 190 µg/m³ to 670 µg/m³; and PCE ranged from 22 µg/m³ to 150 µg/m³. Also present in soil vapor at Lot 14 was heptane (5,700 µg/m³), hexane (2,800 µg/m³) and cyclohexane (3,600 µg/m³).

**Next Steps**

NYSDEC will consider public comments, revise the plan as necessary, and issue a final Decision Document. New York State Department of Health (NYSDOH) must concur with the proposed remedy. After approval, the proposed remedy becomes the selected remedy. The draft Remedial Action Work Plan is revised as needed to describe the selected remedy, and 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 34-11 Beach Channel Drive site is located in a commercial area at Beach Channel Drive and Far Rockaway Blvd. in Queens. It is 0.85 acres composed of two separate parcels and is bounded by Far Rockaway Blvd to the north, Beach Channel Drive to the west and Rockaway Expressway to the south.

**Site Features:**
The site consists of two one-story temporary buildings that are connected and a vacant lot. The buildings do not contain basements. The total area of the buildings is approximately 11,500 square feet and they are situated on a plot of land approximately 17,500 square feet in area. An asphalt parking area, with three concrete pads, is located in the northern and western portions of the property.
Current Zoning/Use(s):
The site is located in an area zoned R6 with a commercial overlay district zoned C2-2. Generally, the R6 zoning designation allows for a broad range of housing development options, while the C2 overlay allows for a variety of commercial uses in the first two floors of any building. One parcel is currently vacant and the other is used for the storage of construction equipment and materials. Brooklyn Hospital is located approximately 1,500 feet east of the site and City Park is located approximately 2,250 feet to the northeast of the site.

Site Geology and Hydrogeology:
The topography of the area is generally level (10 feet above mean sea level). Soils at the site consist of grey, orange and tan fine sand. The subsurface below the site consists of unconsolidated sediments of the Upper Glacial formation to a depth of approximately 100 feet below ground surface. The major aquifer systems beneath the site are the unconsolidated Upper Glacial and Jameco aquifers of the Pleistocene Series and the Magothy and Lloyd Aquifers of the Cretaceous Series. The Upper Glacial and Jameco aquifers are separated by the Gardiners clay. The Magothy and Lloyd Aquifers are separated by the Raritan confining unit. Bedrock beneath the subject property is approximately 1,200 feet bgs. The regional direction of groundwater flow beneath the site is undetermined but local groundwater flow was determined to be towards the northwest. The closest body of water is the North Basin located about 350 feet northwest of the site. Groundwater is not used as potable water in the county.

Historical Use(s):
Lot 14 was historically operated as an automotive service and gasoline filling station from the 1930's until the mid-1980s. Underground storage tanks (UST's) filled with concrete were identified at this parcel. A 1987 map shows Lot 14 contained ten commercial units. Presently, Lot 14 has some remnants of the former gasoline station, including deteriorated pavement and building slab. It is used for temporary storage of construction equipment and materials including roll-off containers. The only structure on Lot 14 is a temporary building. Lot 24 never had any operations and has been vacant land except for recent storage of mobile office trailers, construction equipment and materials.

Additional site details, including environmental and health assessment summaries, are available on NYSDEC's website at:

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.

Far Rockaway Branch
Attn: Queensborough Public Library
1637 Central Avenue
Far Rockaway, NY  11691
Phone:  (718) 327-2549

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

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<tr>
<th>Project Related Questions</th>
<th>Site-Related Health Questions</th>
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<tbody>
<tr>
<td>Alicia Barraza</td>
<td>Bridget Boyd</td>
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<tr>
<td>Department of Environmental Conservation</td>
<td>New York State Department of Health</td>
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<tr>
<td>Division of Environmental Remediation</td>
<td>Bureau of Environmental Exposure Investigation</td>
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<tr>
<td>625 Broadway</td>
<td>Empire State Plaza - Corning Tower Room 178</td>
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<tr>
<td>Albany, NY  12233-7016</td>
<td>Albany, NY  12237</td>
</tr>
<tr>
<td>Phone:  518-402-9690</td>
<td>Phone:  (518) 402-7860</td>
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<tr>
<td>Email:  <a href="mailto:alicia.barraza@dec.ny.gov">alicia.barraza@dec.ny.gov</a></td>
<td>Email:  <a href="mailto:BEEI@health.ny.gov">BEEI@health.ny.gov</a></td>
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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.
SITE LOCATION

[Map showing site location with labels for Bayswater Park, Far Rockaway Blvd, Church Property, Beach Channel Dr, Rockaway Freeway, Sea Girt Blvd, Residential, and approximate scale]