DECISION DOCUMENT

CPB Site
Brownfield Cleanup Program
Far Rockaway, Queens County
Site No. C241158
August 2016

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

CPB Site
Brownfield Cleanup Program
Far Rockaway, Queens County
Site No. C241158
August 2016

Statement of Purpose and Basis

This document presents the remedy for the CPB Site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the CPB Site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Cover System

A site cover will be required to allow for restricted residential use of the site. The cover will

consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d).

3. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and
- require compliance with the Department approved Site Management Plan.

4. Site Management Plan

A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.
Engineering Controls: The soil cover discussed in Paragraph 2 above.
This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

Michael J Cruden

Digitally signed by Michael J Cruden
DN: cn=Michael J Cruden, o=DER, ou=RBE, email=mjcruden@gw.dec.state.ny.us, c=US
Date: 2016.09.15 11:21:36 -04'00'

Date

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

CPB Site
Far Rockaway, Queens County
Site No. C241158
August 2016

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Queens Library - Far Rockaway Branch
Attn: Shannon Anderson
1637 Central Ave.
Queens, NY 11691
Phone: 718-327-2549

Community Board 14
Attn: Mr. Jonathan Gaska
1931 Mott Avenue
Room 311

Far Rockaway, NY 11961
Phone: (718) 471-7300

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The CPB site is located in an urban area in Far Rockaway Queens, between Far Rockaway Boulevard and the Rockaway Freeway, near Beach 32nd Street. The property has been designated on local tax maps as Block 15950, Lot 29.

Site Features: The site is a vacant 1.14-acre parcel. The site is relatively flat lying at an elevation between 3.5 and 7.6 feet (Queens Datum). Jamaica Bay is less than 580 feet northwest of the site and the Atlantic Ocean is approximately 2,100 feet south of the site. A portion of the site lies in Special Flood Zone AE (100 year coastal flood zone) with the remainder lying in Zone X (500 year coastal flood zone).

Current Zoning and Land Use: The site is currently vacant but is zoned R6 with a C2-2 commercial overlay, allowing for mixed commercial and residential use. The entire area surrounding the site is urban. A shopping center is located north of the site, consisting of several small store fronts and a super market. A high-rise residential building, known as Sea View Towers is located south of the site across Rockaway Freeway. Vacant lots are located east and west of the property.

Past Use of the Site: A structure or building was formerly located in the southwestern portion of the site. The structure was reportedly used as a garage and plumbing supply house. It is unclear if the former building is related to the site contamination.

In 2002 the property owner uncovered evidence of a pre-existing release of petroleum product (heating oil) on site. The petroleum release was reported to the Department and Spill # 02-07599 was assigned. Under the Spills program, a number of investigations (2002, 2005, 2006, 2007, 2008, and 2009) were completed at the site by the property owner to define the nature and extent of contamination. In addition to petroleum contamination, the investigations identified soil and groundwater contaminated with chlorinated volatile organic compounds (CVOCs), primarily TCE and its breakdown products.

Remedial actions were also completed at the site by the property owner under the Department's

Spill program to address the contamination. The remedial actions included excavations to remove impacted soils (2004 and 2009), and an in-situ thermal treatment (ISTT) program to remove chlorinated solvents from groundwater (2010-2011).

In total, the property owner excavated and disposed of 13,882 tons of petroleum impacted soils, 12,430 gallons of an oil-water mixture, and 418 tons of CVOC impacted soils. The excavations removed the majority of the petroleum and CVOC contaminated soils and the thermal remediation removed the majority of the chlorinated solvents from the groundwater. TCE concentrations as high as 400,000 parts per billion (ppb) had been detected in intermediate depth monitoring wells on the site prior to the thermal treatment. The treatment goal was a 99% reduction in TCE concentrations and this goal was generally achieved. As of January 2015 the greatest concentration of TCE in groundwater within the site was 50.5 ppb. Concentrations of TCE show a downward trend over time.

Following completion of the remedial actions conducted under the Spill program, contamination consisting of chlorinated solvents, petroleum (PAHs), mercury and manganese remained on site still needed to be addressed. In 2014, the property owner entered into the State's Brownfield Cleanup Program to investigate and address the remaining on-site contamination.

Site Geology and Hydrogeology: The area is generally flat and lies between the Jamaica Bay and the Atlantic Ocean. Three distinct geologic units exist: Shallow, Intermediate and Deep Zone.
The Shallow Zone is approximately 20 feet thick. Fill material consisting of brown fine to coarse sand and gravel with varying portions of wood, metal and concrete debris, occurs from the ground surface to approximately 5 to 8 feet below grade (fbg). The fill material is underlain by a 5 to 10 feet of loose fine gray sand and organic silty clay lenses (1 to 4 feet thick), containing small amounts peat and shell fragments. These clay lenses at the base of the Shallow Zone act as a semi-confining unit. The Intermediate Zone, consists of two units: a light brown-green sand with gravel and varying amounts of silt and clay at a depth of approximately 20 fbg with silt and clay content increasing with depth and a clay unit (approximately 17 feet thick) at approximately 37 fbg to 54 fbg. This lower clay layer serves as an aquitard or confining/semi-confining unit separating the intermediate and deep zones. The Deep Zone consists of a brown-gray sand layer with a thickness greater than 40 feet. The Deep Zone begins at a depth of approximately 54 fbg.

Groundwater in the shallow and intermediate zones flows toward Norton Basin to the north/northwest of the site. Deeper groundwater flow direction is not certain. The deep zone is segregated from the shallow and intermediate by an aquitard,, and no permanent monitoring wells were screened within it. The depth to groundwater is approximately 4 fbg.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were/was

evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Volunteer(s) does/do not have an obligation to address off-site contamination. The Department has determined that this site poses a significant threat to human health and the environment and there are off-site impacts that require remedial activities; accordingly, enforcement actions are necessary.

The Department will seek to identify any parties (other than the Volunteer) known or suspected to be responsible for contamination emanating from the site, referred to as Potentially Responsible Parties (PRPs). The Department will bring an enforcement action against the PRPs. If an enforcement action cannot be brought, or does not result in the initiation of a remedial program by any PRPs, the Department will evaluate the off-site contamination for action under the State Superfund. The PRPs are subject to legal actions by the State for recovery of all response costs the State incurs or has incurred.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- air

- groundwater
- soil
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

1,1,2-trichlorethylene
petroleum products
polycyclic aromatic hydrocarbons (PAHS), total
manganese
mercury

The contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

There were no IRMs performed at this site during the RI.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure

pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides.

The site is primarily contaminated with petroleum products and chlorinated solvents, including tricholoroethene and its breakdown products, along with PAHs and metals in soils that were used as fill. Contamination has been identified in the soil, groundwater and soil gas at the site.

As summarized above , several remedial investigations and remedial actions were completed at the site under the Department's Spill program prior to the site's entry into the Brownfield Cleanup Program (BCP). These actions were effective in reducing the levels and extent of contamination at the site. The contamination remaining at the site was further investigated during the BCP by a Remedial Investigation (RI). Groundwater, soil, and soil vapor samples were collected from on-site locations as part of the RI. Results are as follows:

Soil
Shallow soil samples were collected from nine locations across the site. The results of these samples were compared for screening purposes to the Department's restricted residential use soil cleanup objectives (RR-SCOs). The analyses confirmed that concentrations for only three shallow samples marginally exceeded RR-SCO for the secondary parameters of manganese (SS-3), mercury (SS-8) and PAHs (SS-9). No exceedances of commercial use SCOs were observed, except for a marginal exceedance of manganese at SS-3.

The maximum concentrations in soil remaining on the site are 2,250 parts per million (ppm) of manganese, 1.9 ppm of mercury and 83.67 ppm of total PAHs.

No soil sampling was conducted beyond the limits of the property.

Groundwater
Groundwater samples were collected from ten temporary well pointsand five shallow monitoring wells. Groundwater sample results indicated that impacts are limited to VOCs and metals. The metals are the naturally occurring inorganics iron, manganese and sodium.

VOC analyses demonstrated that TCE and its breakdown products, cis-1,2 dichloroethlyene (cis-1,2 DCE) and vinyl chloride (VC), remain the main contaminants of concern at the site, with locally limited exceedances of benzene and toluene. The maximum TCE, cis-1,2 DCE and VC concentrations observed on-site were 50.5, 167 and 151 parts per billion (ppb), respectively. The highest concentrations were observed near the former source area. Away from the source area, the contaminant concentrations decrease to near groundwater standards. The maximum benzene and toluene concentrations were 3.6 and 32.7 ppb, respectively.

The only off-site VOC contaminated groundwater was located to the south, beneath Rockaway Freeway. It will be evaluated under a separate site number, C241158A.

Soil Vapor
Soil vapor samples were collected from ten on-site locations installed near the groundwater sample (temporary well) locations. In general, high concentrations of VOCs in soil vapor were limited to the area around SG-2 and SG-10. This limited area is coincident with an area of elevated dissolved VOC levels in groundwater. Concentrations of TCE and cis-1,2 DCE were found at concentrations of up to 1,800 and 92 micrograms per cubic meter of air (ug/m^3), respectively. Concentrations of VC were below detection limits in the SG-2 and SG-10 samples. Outside of the area of SG-2 and SG-10, TCE and cis-1,2 DCE concentrations decrease substantially, with maximum observed concentrations of 60.7 and 42 ug/m3, respectively.

The only off-site VOC contaminated soil vapor was located to the south, beneath Rockaway Freeway. It will be evaluated under a separate site number, C241158A.

There are no SCGs for soil vapor, and there are no current structures on-site where sub-slab soil gas samples can be collected.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

The site is completely fenced, which restricts public access. However, persons who enter the site could contact contaminants in the soil by walking on the soil, digging or otherwise disturbing the soil. Contaminated groundwater at the site is not used for drinking or other purposes as the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. The potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. Environmental sampling indicates that soil vapor is contaminated at the western property boundary and off of the property to the south. Therefore, the potential exists for the inhalation of site contaminants due to soil vapor intrusion in off-site structures and additional investigation is needed.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the

contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The selected remedy is referred to as the cover system remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Cover System

A site cover will be required to allow for restricted residential use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d).

3. Vapor Mitigation

Any on-site buildings will be required to have a sub-slab depressurization system, or a similar engineered system, to mitigate the migration of soil vapors into the building from contaminated soil and/or contaminated groundwater. The contaminated air removed from beneath the slab will be treated, if necessary, to meet air guidelines prior to being discharged to the atmosphere.

4. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and
- require compliance with the Department approved Site Management Plan.

5. Site Management Plan

A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.

Engineering Controls: The soil cover and vapor mitigation systems discussed in Paragraphs 2 and 3 above.
This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:

- procedures for operating and maintaining the system(s); and
- compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.


SITE LOCATION
Tidal Flat
Tidal Flat
HEMPSTEAD
Inwood Country Club
PIER
HEAD
NASSAU CO.
QUEENS CO.
Tidal Flat
Light
Negro Bar Channel
Inwood Park
Jo Co Marsh
Creek
Black Pt
Motts Pt
Jo Co
Tidal Flat
Motts Basin
Powerplant
PS 104
Channel
Hassock
Grass
Creek
Conchs Hole Pt
Tidal Flat
Norton Basin
Far Rockaway
High Sch
YMCA-YWCA
Wave Crest
Mott Sch
Sta
Little Bay
Sommerville Basin
Park
PS 105
Hosp
PS 42
PS 106
Edgemere
Sta
Fire Sta
BOARDWAY
Light
East Rockaway
0 1,500 FT.
APPROXIMATE SCALE
TRC ENVIRONMENTAL CORP.
57 East Willow Street
Millburn, New Jersey 07041
SITE LOCATION MAP
CPB – EDGEMERE, NEW YORK
JOB NO.: 159807
HN
DATE: AUGUST 2009
FIGURE: 1

Figure 1

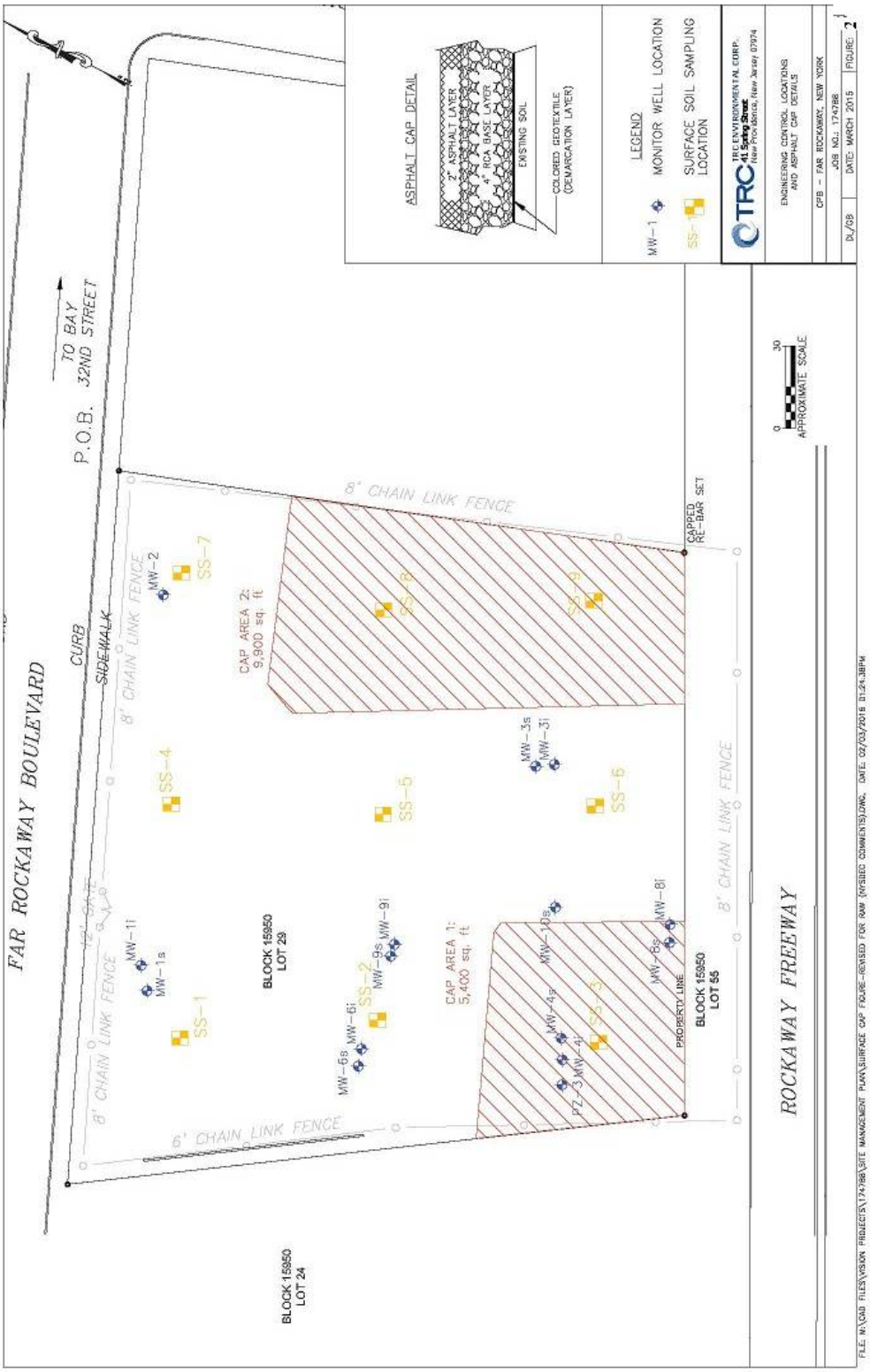
FAR ROCKAWAY BOULEVARD
TO BAY
32ND STREET
P.O.B.
CURB
SIDEWALK
8' CHAIN LINK FENCE
6' CHAIN LINK FENCE
CAP AREA 1: 5,400 sq. ft
CAP AREA 2: 9,900 sq. ft
CAPPED RE-BAR SET
PROPERTY LINE
BLOCK 15950 LOT 24
BLOCK 15950 LOT 29
BLOCK 15950 LOT 55
ROCKAWAY FREEWAY
ASPHALT CAP DETAIL
2" ASPHALT LAYER
4" RCA BASE LAYER
EXISTING SOIL
COLORED GEOTEXTILE (DEMARCATION LAYER)
LEGEND
MONITOR WELL LOCATION
SURFACE SOIL SAMPLING LOCATION
TRC ENVIRONMENTAL CORP.
ENGINEERING CONTROL LOCATIONS AND ASPHALT CAP DETAILS
CPB - FAR ROCKAWAY, NEW YORK
JOB NO.: 174788
DATE: MARCH 2015
FIGURE: 2
APPROXIMATE SCALE

Figure 2


Figure 3
3229 Far Rockaway Blvd
1.14 Acres
Site Boundary
Falcon Ave
Oceancrest Blvd
Beach 32nd St
Far Rockaway Blvd
Rockaway Fwy
Brookhaven Ave
Beach 36th St
Beach 35th St
Beach Channel Dr
Beach 34th St
Beach 31st St
Beach 30th St
362 ft
1994
© 2016 Google
Google earth
Imagery Date: 10/11/2014 40°35'52.16" N 73°45'57.77" W elev 7 ft eye alt 1695 ft

Figure 3