DECISION DOCUMENT

2135 Westchester
Brownfield Cleanup Program
Bronx, Bronx County
Site No. C203093
March 2020

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

DECLARATION STATEMENT - DECISION DOCUMENT

2135 Westchester
Brownfield Cleanup Program
Bronx, Bronx County
Site No. C203093
March 2020

Statement of Purpose and Basis

This document presents the remedy for the 2135 Westchester 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 2135 Westchester 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;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and

- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Excavation

The existing on-site building(s) will be demolished and materials which can't be beneficially reused on-site will be taken off-site for proper disposal in order to implement the remedy.

Excavation and off-site disposal of contaminant source areas, including:

- Grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- Soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and

All soils in the upper two feet which exceed the restricted residential SCOs (RRSCOs) will be excavated and transported off-site for disposal.

The entire site will be excavated to a development depth of approximately 12 feet below ground surface (bgs). For remedial purposes, approximately 936 cubic yards (cy) of contaminated soil will be removed from the site. In addition, approximately 10 cy of PCE-contaminated soil in a hotspot located below the basement of the former dry cleaner will be excavated and transported off-site to a permitted facility. The remaining soil above 12 feet (approximately 4,809 cy of non-hazardous material) will be removed for development purposes.

3. Cover System

A site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is to be used 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 for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

If a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy.

4. In- Situ Treatment using Activated Carbon and Enhanced Biodegradation

Activated carbon will be added to the subsurface to capture and prevent the migration of CVOCs in groundwater. Sulfate salt solution will be added to enhance anaerobic biodegradation. In the area of the captured contamination, conditions will be maintained that will allow anaerobic degradation of the contaminants of concern to occur. Activated carbon and sulfate salt solution will be added to the subsurface via 30 injection points in an approximately 1,300 square foot area in the eastern portion of the existing parking lot around monitoring wells MW-1 and MW-3. Approximately 300 gallons of a mixture of liquid activated carbon, sulfate salt solution and water will be injected at each location. After the injections, monitoring will be required within, and downgradient of, the treatment zone. Monitoring will be conducted for the detected contaminants and their degradation by-products.

5. Vapor Mitigation

Any on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from soil and groundwater.

6. 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.

7. 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 6 above.

   – Engineering Controls: The soil cover system discussed in Paragraph 3, the in-situ

treatment discussed in paragraph 4, and the sub-slab depressurization system discussed in Paragraph 5 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;
- A provision for removal or treatment of the source area located under the former dry cleaner building when the building is demolished or becomes vacant;
- Descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- A provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 3 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- 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. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- Monitoring of groundwater and soil vapor to assess the performance and effectiveness of the remedy;
- A schedule of monitoring and frequency of submittals to the Department;
- Monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

c. An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:

- Procedures for operating and maintaining the remedy;
- Compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
- Maintaining site access controls and Department notification; and
- Providing the Department access to the site and O&M records

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 protected of public health and the environment.

March 3, 2020

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

2135 Westchester
Bronx, Bronx County
Site No. C203093
March 2020

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:

DECInfo Locator - Web Application
https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C203093

The New York Public Library - Parkchester Library
Attn: Alison Williams
1985 Westchester Avenue
Bronx, NY 10462
Phone: 718-829-7830

Bronx Community Board 9
Attn: William Rivera
1967 Turnbull Avenue
Room 7
Bronx, NY 10473
Phone: 718-823-3034

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 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 site is located at 2135 Westchester Avenue, Bronx, NY in an urban area at the intersection of Westchester Avenue and Purdy Street.

Site Features: The site includes one story building currently used as a laundromat, with a small asphalt paved parking lot to the north. The eastern portion of the building is currently vacant and was formerly used as a dry cleaner.

Current Zoning and Land Use: The site is zoned R6 (residential) with a C2-2/C1-2 (commercial) overlay. The surrounding parcels are used for a combination of residential and commercial uses. The nearest residential area is directly to the north, along Purdy Street.

Past Use of the Site: The site was used as a funeral home from 1955 to 2000. A laundromat has operated on the western portion of the site since 2000 and is still in operation. A dry cleaner operated on the eastern portion of the site from 2000-2016. The portion of the site where the dry cleaner used to operate has been vacant since 2016.

Site Geology and Hydrogeology: Based on findings from the Remedial Investigation, the site is underlain by fill material characterized by silts and sands with concrete, asphalt and wood fragments from surrounding grade to a maximum of five feet below ground surface (bgs) in the parking area and to a maximum of 1.5 feet from the bottom of the basement slab, followed by native material consisting of silt and weathered bedrock to the competent bedrock interface. The overburden groundwater flow direction is to the east at the site. The groundwater that has been encountered is likely perched water at the top of the bedrock interface which was measured to be 14 to 21 feet below grade (ft-bg). Bedrock dips down to the east – northeast, and bedrock groundwater is inferred to flow northeast.

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 under the Brownfield Cleanup Agreement is a Participant. The Applicant has an obligation to address on-site and off-site contamination. Accordingly, no enforcement actions are necessary.

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:

- groundwater
- soil
- soil vapor
- indoor air

- sub-slab 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:

trichloroethene (TCE)
tetrachloroethene (PCE)
cis-1,2-dichloroethene (Cis-1,2-DCE)
trans-1,2-dichloroethene
benzo(a)anthracene
dieldrin
barium
lead
cadmium
vinyl chloride

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

- groundwater
- soil
- soil vapor intrusion - indoor air

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:

A site wide and off-site investigation were conducted to delineate contamination in soil, groundwater and soil vapor. Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Groundwater was also analyzed for the emerging contaminants per-and polyfluoroalkyl substances (PFAS) and 1,4 dioxane. Soil vapor was analyzed for VOCs. According to the most recent analytical results, the primary contaminants of concern at the site are metals and VOCs. Results are summarized below:

Soil - The VOC tetrachloroethene (PCE) was found beneath the building slab at concentrations exceeding the protection of groundwater soil cleanup objective (PGSCO) at a maximum concentration of 6.5 parts per million (ppm) as compared to the PGSCO of 1.3 ppm and the restricted residential SCO (RRSCO) of 19 ppm. The following metals were detected in sub-surface soil at concentrations exceeding the RRSCOs: lead up to 1,110 ppm (RRSCO is 400 ppm), cadmium up to 7.56 ppm (RRSCO is 4.3 ppm), and barium up to 598 ppm (RRSCO is 400 ppm). No SVOCs, pesticides or PCBs were detected at concentrations exceeding the RRSCOs. Based on the sampling results, there is no indication that these contaminants have migrated off-site in soil.

Groundwater - VOCs were the primary contaminants found in on-site overburden and bedrock groundwater. PCE was identified at a maximum concentration of 1,300 parts per billion (ppb), compared to the NYSDEC Groundwater Quality Standard of 5 ppb, trichloroethene (TCE) up to 1,900 ppb (compared to the 5 ppb standard), vinyl chloride up to 2.9 ppb (compared to the 2 ppb standard), cis 1,2-dichloroethene up to 420 ppb (compared to the 5 ppb standard), trans-1,2-dichloroethene up to 76 ppb (compared to the 5 ppb standard). The SVOC benzo(a)anthracene was detected at up to 0.06 ppb (compared to 0.002 ppb standard) and dieldrin up to 0.021 ppb (compared to the 0.004 ppb standard). Downgradient monitoring well MW-2 located on the sidewalk slightly off-site of the site property boundary detected chlorinated VOCs above the groundwater standards (PCE at 8 ppb, TCE at 27 ppb and cis-1,2-DCE at 46 ppb).

Soil Vapor, Sub-slab Vapor and Indoor Air - A sub-slab and indoor air sample collected beneath the dry cleaner portion of the building identified PCE at 444 micrograms per cubic meter ($\mu g/m^3$) in the sub-slab and 7 $\mu g/m^3$ in the indoor air. Sub-slab vapor also showed TCE at 161 ug/m^3, with no detections in indoor air. An indoor air sample collected in the laundromat portion of the on-site building detected TCE at 3.76 ug/m^3, with no detection in sub slab soil vapor sample. Three off-site residences were evaluated for soil vapor intrusion during the remedial investigation. The maximum off-site soil vapor concentration of PCE was detected at 33.6 ug/m^3. Based on the soil vapor, sub-slab and indoor air sampling results, soil vapor intrusion is not a concern for off-site

buildings.

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.*

People will not contact contaminated soil or groundwater unless they dig below the surface. People are not drinking contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into buildings and affect 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. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. Environmental sampling indicates that soil vapor intrusion from this site is not a concern for off-site buildings.

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.
- Remove the source of ground or surface water contamination.

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.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

- 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 Soil Excavation, Sub Slab Depressurization System, In-Situ Groundwater Treatment and Cover System remedy.

The elements of the selected remedy, as shown in Figure 2, is 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;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Excavation

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Excavation and off-site disposal of contaminant source areas, including:

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If a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy.

4. In- Situ Treatment using Activated Carbon and Enhanced Biodegradation

Activated carbon will be added to the subsurface to capture and prevent the migration of CVOCs in groundwater. Sulfate salt solution will be added to enhance anaerobic biodegradation. In the area of the captured contamination, conditions will be maintained that will allow anaerobic degradation of the contaminants of concern to occur. Activated carbon and sulfate salt solution will be added to the subsurface via 30 injection points in an approximately 1,300 square foot area in the eastern portion of the existing parking lot around monitoring wells MW-1 and MW-3.

Approximately 300 gallons of a mixture of liquid activated carbon, sulfate salt solution and water will be injected at each location. After the injections, monitoring will be required within, and downgradient of, the treatment zone. Monitoring will be conducted for the detected contaminants and their degradation by-products.

5. Vapor Mitigation

Any on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from soil and groundwater.

6. 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.

7. 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 6 above.

   – Engineering Controls: The soil cover system discussed in Paragraph 3, the in-situ treatment discussed in paragraph 4, and the sub-slab depressurization system discussed in Paragraph 5 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;

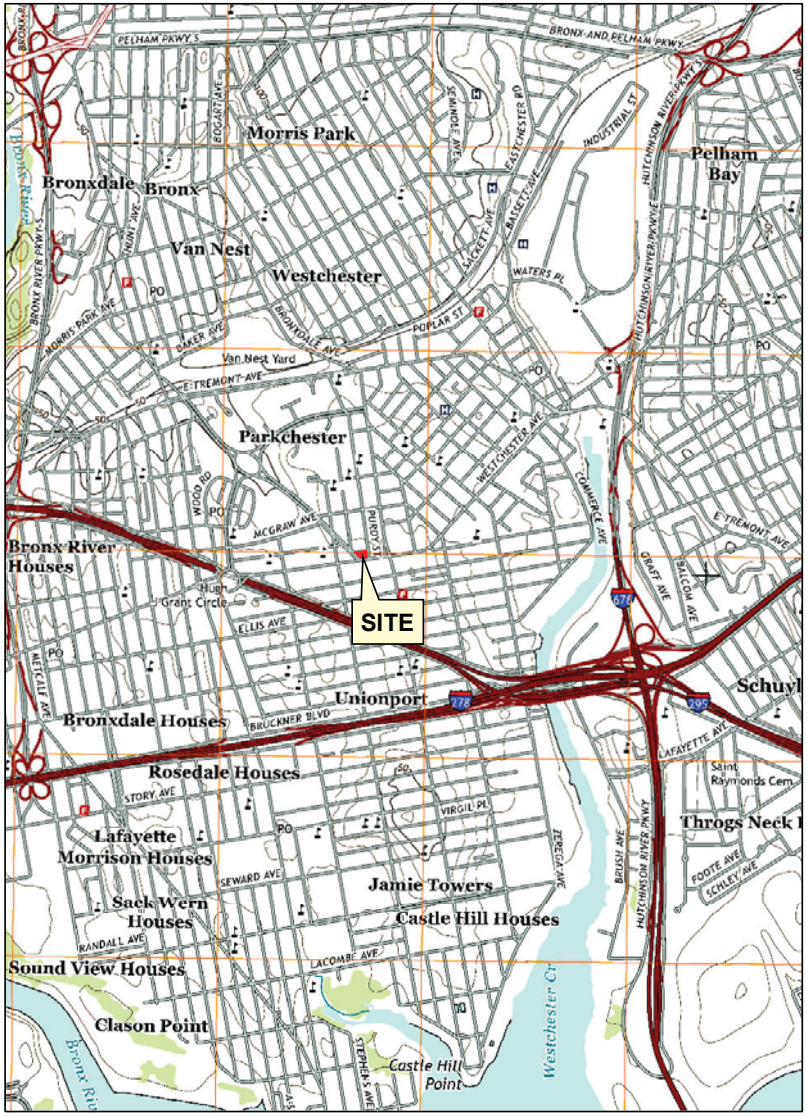
- A provision for removal or treatment of the source area located under the former dry cleaner building when the building is demolished or becomes vacant;
- Descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- A provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 3 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- 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. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- Monitoring of groundwater and soil vapor to assess the performance and effectiveness of the remedy;
- A schedule of monitoring and frequency of submittals to the Department;
- Monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

c. An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:

- Procedures for operating and maintaining the remedy;
- Compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
- Maintaining site access controls and Department notification; and
- Providing the Department access to the site and O&M records

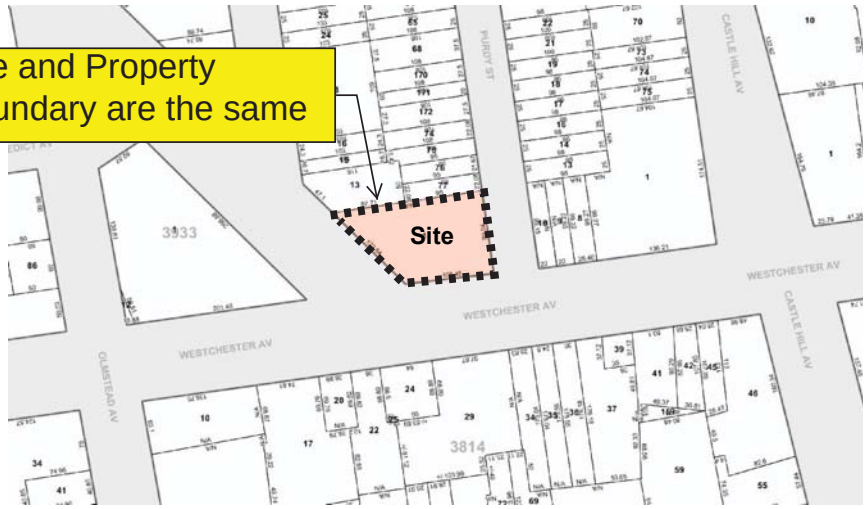


Basemap: Flushing, NY Quandrangle, 2013
http://www.usgs.gov

Site Location

0 1,000 2,000 4,000 Feet

Site and Property Boundary are the same



http://gis.nyc.gov/taxmap/map.htm

Department of Finance Digital Tax Map

0 75 150 300 Feet

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User NYC Department of City Planning, Information Technology Division

Department of City Planning MapPLUTO - 2016 v2

0 75 150 300 Feet

Client

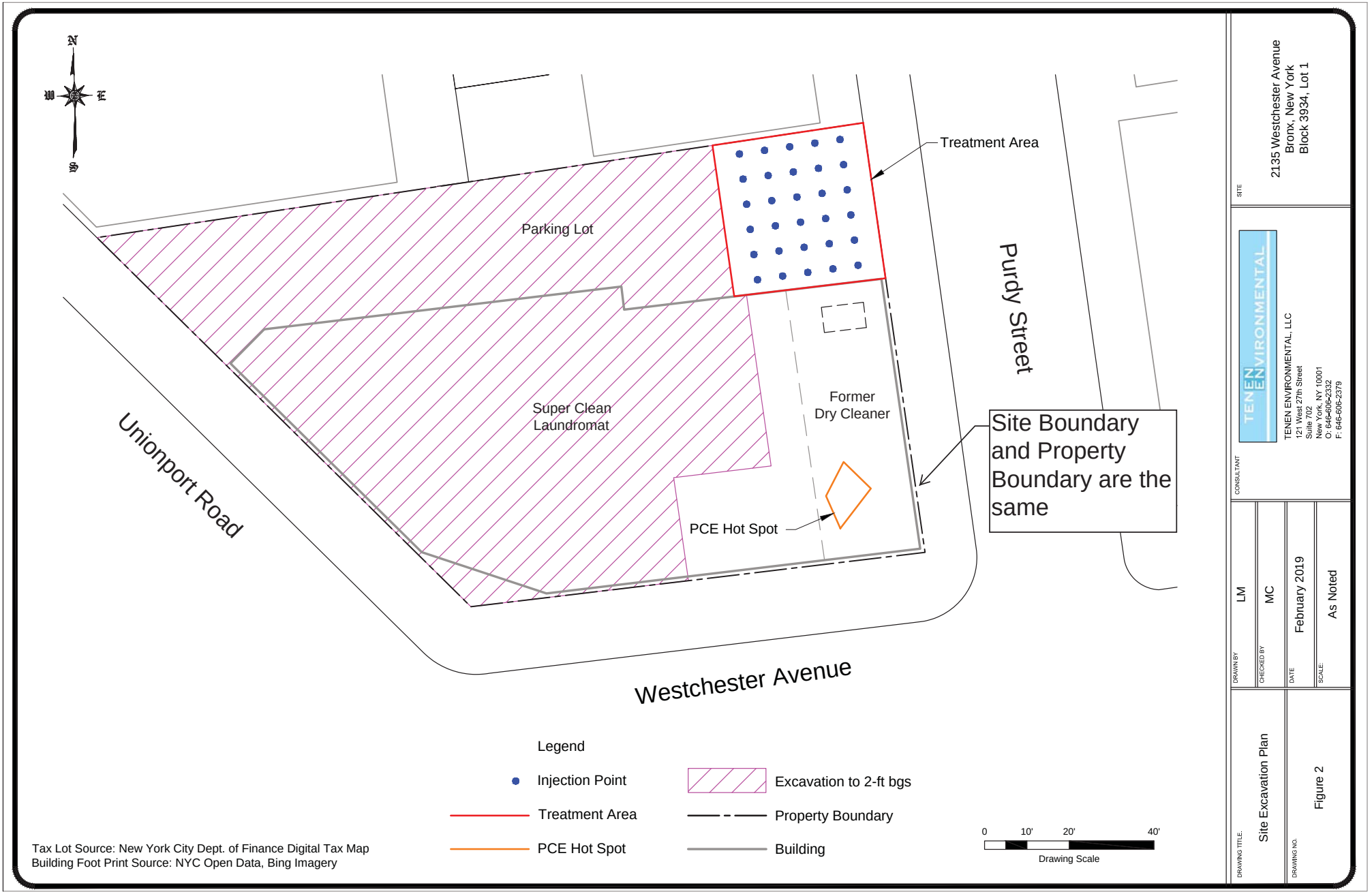
2135 Westchester Avenue
Bronx, New York
Block 3934, Lot 1

TENEN ENVIRONMENTAL
Tenen Environmental, LLC
121 West 27th Street
Suite 702
New York, NY 10001
O: (646) 606-2332
F: (646) 606-2379

Drawn By	Checked By	Date	Scale
LM	MC	May 2017	As Noted

Drawing Title: **Site Location Map and Site Layout**

Drawing No: **Figure 1**



SITE
2135 Westchester Avenue
Bronx, New York
Block 3934, Lot 1

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DRAWN BY: LM
CHECKED BY: MC
DATE: February 2019
SCALE: As Noted

DRAWING TITLE: Site Excavation Plan
DRAWING NO.: Figure 2