DECISION DOCUMENT

3500 Park Avenue Apartments Brownfield Cleanup Program Bronx, Bronx County Site No. C203096 May 2018



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

DECLARATION STATEMENT - DECISION DOCUMENT

3500 Park Avenue Apartments Brownfield Cleanup Program Bronx, Bronx County Site No. C203096 May 2018

Statement of Purpose and Basis

This document presents the remedy for the 3500 Park Avenue Apartments 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 3500 Park Avenue Apartments 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.
- 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

Excavation and off-site disposal of all on-site soils which exceed restricted-residential SCOs, as defined by 6 NYCRR Part 375-6.8, in the upper 15 feet. If a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 8,500 cubic yards of contaminated soil will be removed from the site.

Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination if encountered.

3. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site.

4. Institutional Control

Imposition of an institutional control in the form of 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 4.
 - Engineering Controls: The Cover System discussed in Paragraph 6.

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 or surface water use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to

address exposures related to soil vapor intrusion;

- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 6 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- o provisions for the management and inspection of the identified engineering controls;
- o 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 the cover system to assess the performance and effectiveness of the remedy;
 - o a schedule of monitoring and frequency of submittals to the Department; and
 - monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Contingency: Track 4

In the event that Track 2 restricted residential use is not achieved, including achievement of groundwater and/or soil vapor remedial objectives, the following contingent remedial elements will be required and the remedy will achieve a Track 4 restricted residential cleanup at a minimum, and will include imposition of a site cover (as a contingency if soil greater than 2 feet but less than 15 feet deep does not meet the restricted residential SCOs) as described below.

6. Cover System

If a Track 2 cleanup is not achieved, a Track 4 remedy will include a site cover. 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.

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.

Ad WBk

<u>May 18, 2018</u> Date

Gerard Burke, Director Remedial Bureau B

DECISION DOCUMENT

3500 Park Avenue Apartments Bronx, Bronx County Site No. C203096 May 2018

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: <u>CITIZEN PARTICIPATION</u>

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:

New York Public Library-Morrisania Library Attn: Colbert Nembhard 610 East 169th Street Bronx, NY 10456 Phone: 718-589-9268

Bronx Community Board District 3 Attn: Etta F. Ritter 1426 Boston Road Bronx, NY 10456 Phone: 718-378-8054

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 Site is located at 3500 Park Avenue in an urban area in the Morrisania neighborhood of the Bronx, New York. The Site is bordered by: 168th Street to the north, followed by Public School (PS) 132 and commercial and residential buildings further north; an industrial yard, vacant lot, residential and commercial buildings to the east; Webster Beverage Wholesale Restaurant Supply facility to the south; and Park Avenue, followed by Metro North Railroad tracks at approximately 20 feet below ground surface, to the west.

Site Features:

The Site consists of a 15,207-square foot asphalt-paved parking lot with a small mobile storage container on the southwestern portion of the lot, which served as an attendant shed. The Site has been vacant or a parking lot since approximately 1995. The site consists of a single tax lot designated as Block 2389, Lot 20.

Current Zoning and Land Use:

The Site is zoned R7-1 which allows for residential use, with a C2-4 overlay which allows for commercial use. The surrounding area is composed of predominantly residential and commercial uses with two auto repair shops and an electrical equipment repair shop south of the Site. The site is currently a vacant asphalt-paved parking lot and unoccupied.

Past Use of the Site:

The Site was developed historically with a one-story building. Previous Site uses included an advertising display and woodworking manufacturer with a spray booth and paint vault, East Coast Aeronautics Inc., Progressive Tool Works, Weskup Manufacturing Jewelry Co., Kingston Manufacturing Corp. Biltrite/Biltbite Fixture Company, and Servrite Refrigeration Inc. from 1949 to 1993; and an automobile garage in 1927 through 1940. The former Site building was demolished in the mid-1990s and the property was converted to a commercial licensed parking lot in 1995. The Site has been vacant or utilized as an automobile parking lot.

Site Geology and Hydrology:

The Site lies at an elevation of approximately 30 to 40 feet above the National Geodetic Vertical

Datum of 1988 (an approximation of mean sea level) and slopes slightly to the west. The soil beneath the site consists of historic fill materials including gravel, brick, wood, and silt down to 12 feet below the sidewalk grade. Presumed bedrock was encountered at the Site between 27 and 40 feet below sidewalk grade. Groundwater was encountered above at a depth of 21.45 feet during Supplemental Remedial Investigation dated March 2018. Based on topography and local hydrogeology, groundwater would be expected to flow in a south-southeast direction.

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 Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: <u>Summary of the Remedial Investigation</u>

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

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: <u>http://www.dec.ny.gov/regulations/61794.html</u>

6.1.2: <u>RI Results</u>

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:

copper	benzo(b)fluoranthene
mercury	benzo[k]fluoranthene
lead	chrysene
tetrachloroethene (PCE)	dibenz[a,h]anthracene
benzo(a)anthracene	indeno(1,2,3-CD)pyrene
benzo(a)pyrene	

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

soil soil vapor intrusion

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: <u>Summary of Environmental Assessment</u>

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), pesticides, poly-chlorinated biphenyls (PCBs), and metals. Soil vapor was analyzed for VOCs.

Soil:

No VOCs were detected at concentrations exceeding the applicable Restricted-Residential Soil Cleanup Objectives (RRSCO). Several SVOCs were detected that are commonly found in fill material, including: benzo(a)anthracene was detected at concentrations up to 28 parts per million (ppm), which exceeds the RRSCO of 1 ppm; benzo(a)pyrene at a maximum concentration of 30 ppm (RRSCO is 1 ppm); benzo(b)fluoranthene at a maximum concentration of 33 ppm (RRSCO is 1 ppm); benzo(b)fluoranthene at a maximum concentration of 33 ppm (RRSCO is 1 ppm); benzo(k)fluoranthene at a maximum concentration of 13 ppm (RRSCO is 3.9 ppm), chrysene at a maximum concentration of 29 ppm (RRSCO is 3.9 ppm); dibenzo(a,h)anthracene at a maximum concentration of 4.5 ppm (RRSCO is 0.33 ppm); and indeno(1,2,3-cd)pyrene at a maximum concentration of 21 ppm (RRSCO is 0.5 ppm). These exceedences were generally found in shallow soil at depths of 0-8 feet below grade. Low levels of mercury at a maximum concentration of 400 ppm (RRSCO is 0.81 ppm) and lead at a maximum concentration of 400 ppm (RRSCO is 0.400 ppm) were detected at depths of 0-8 ft. The investigation did not identify site related contaminants in off-site soil.

Groundwater:

Total and dissolved magnesium, total and dissolved selenium, and total and dissolved sodium were detected at concentrations above their respective AWQS values. These are common compounds of urban areas and are not considered to be site-related contaminants. No site-related contaminants exceed applicable standards in groundwater. The investigation did not identify off-site migration of contaminants in groundwater.

Soil Vapor:

PCE was detected in all four soil vapor samples at concentrations up to 136 micrograms per cubic meter (ug/m3). The investigation did not identify off-site migration of contaminants in soil vapor.

6.4: <u>Summary of Human Exposure Pathways</u>

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*.

Direct contact with contaminants in the soil is unlikely because the majority of the site is covered with buildings and pavement. Contaminated groundwater at the site is not used for drinking or other purposes, and 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 soil vapor (air spaces within the soil) 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-related contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. Sampling indicates that soil vapor intrusion is not a concern for off-site structures.

6.5: <u>Summary of the Remediation Objectives</u>

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.

<u>Soil</u>

RAOs for Public Health Protection

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

<u>Soil Vapor</u>

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 2: Restricted use with generic soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation remedy.

The elements of the selected remedy, as shown in Figures 2 and 3, 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;
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- 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.
- 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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Approximately 8,500 cubic yards of contaminated soil will be removed from the site.

Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination if encountered.

3. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site.

4. Institutional Control

Imposition of an institutional control in the form of 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);
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- require compliance with the Department approved Site Management Plan.

5. Site Management Plan

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- 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 4.
 - Engineering Controls: The Cover System discussed in Paragraph 6.

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 or surface water use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 6 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
- o provisions for the management and inspection of the identified engineering controls;
- o 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 the cover system to assess the performance and effectiveness of the remedy;

- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Contingency: Track 4

In the event that Track 2 restricted residential use is not achieved, including achievement of groundwater and/or soil vapor remedial objectives, the following contingent remedial elements will be required and the remedy will achieve a Track 4 restricted residential cleanup at a minimum, and will include imposition of a site cover (as a contingency if soil greater than 2 feet but less than 15 feet deep does not meet the restricted residential SCOs) as described below.

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LEGEND

	PROJECT SITE
	PROPOSED CE
20	LOT BOUNDAR
2389	TAX BLOCK NU
	BUILDING
X 40.12	EXISTING GRAI
	POTENTIAL DE AND SUMP PIT
	EXCAVATION T
	EXCAVATION T
	EXCAVATION T
H	EXCAVATION T

Map Source: NYCDCP (NYC Dept. of City Planning) GIS database.

Survey Source:

- 1. Elevations Are Based Upon North American Vertical Datum (NAVD) of 1988.
- Elevations and Locations surveyed by Leonard J Strandberg and Assoc, P.C., Block 2389, Lot 20, Feb 2017.



