

RECORD OF DECISION

College Point 3
State Superfund Project
College Point, Queens County
Site No. 241122
March 2022



**Department of
Environmental
Conservation**

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

DECLARATION STATEMENT - RECORD OF DECISION

College Point 3
State Superfund Project
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Statement of Purpose and Basis

This document presents the remedy for the College Point 3 site, a Class 2 inactive hazardous waste disposal 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, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the College Point 3 site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore, No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the remedy for the site.

The IRM(s) conducted at the site attained the remediation objectives identified for this site in Section 6.5 for the protection of public health and the environment.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 28, 2022

Susan L. Edwards

Date

Susan Edwards, P.E., Assistant Director
Division of Environmental Remediation

RECORD OF DECISION

College Point 3
College Point, Queens County
Site No. 241122
March 2022

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 hazardous wastes at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include site management, which will include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This ROD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

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 repository:

Poppenhusen Queens Library
12123 14th Ave
College Point, NY 11356
Phone: (718) 359-1102

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

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 in an urban residential area of the College Point section of Queens adjacent to the East River. The site lies within the Riverview Condominium complex. The complex is comprised of multiple tax lots. The 0.24-acre site occupies one tax lot within the larger condominium property. The site and off-site areas/surrounding property, totaling 4.7 acres, were the subject of the Interim Remedial Measures. The project site is bounded by the East River to the north, the Soundview Pointe condominiums to the west, and the Powell Cove Estates condominiums to the east. Additional condominiums within the Riverview complex, but outside the site boundary, are located to the south. The adjacent property to the west, Soundview Pointe condominiums, was remediated under the NYSDEC Voluntary Cleanup Program (NYSDEC Site No. V00254: College Point Properties) and is currently in site management; the adjacent property to the east, Powell Cove Estates condominiums, was remediated under the NYC Office of Environmental Remediation Hazardous Materials Restrictive Declaration program (Project Nos. 10RHAZ022Q, 10RHAZ177Q, 11RHAZ019Q, 11RHAZ241Q, 12RHAZ231Q, 12RHAZ357Q and 13RHAZ191Q) and is currently in site management.

Site Features: The site is a courtyard area within four multi-story condominium buildings. The surrounding area includes streets and green spaces. The lawn along the East River is a NYC waterfront park with public access during the day.

Current Zoning: The site and adjacent properties are zoned R4 – residential which allows for low-rise attached residences such as condominiums.

Past Uses of the Site: The local area landmass was created from the East River by unregulated landfilling. Land within the site boundary was created between 1966-1975 and developed into condominiums during the 1980s. The landfilled material primarily consists of soil mixed with varying amounts of construction and demolition (C&D) debris; however, hazardous waste, in the form of polychlorinated biphenyl (PCB) contaminated oil, was also disposed. Prior to landfilling, the College Point Dry Dock & Supply Company, Inc. operated at the site from the 1920s to the early 1950s.

Site Geology: This land, as well as the adjacent properties to the east and west, is part of a large-scale landfilling and reclamation project. The landfill thickness varies from approximately 20-40 feet and extends 20 feet or more into the water table. The fill material consists of a heterogeneous mixture of sand, silt, clay and varying amounts of C&D debris (e.g., bricks, wood, concrete, gravel, rubber, slag, metal, asphalt, wire, foam, and plastic). Native soils, consisting of stratified mixtures of sand and silt were encountered at depths ranging from 15-35 feet below ground surface. Groundwater is approximately 11-18 feet below ground surface and flows to the north and west across the site. Tidal influence from the East River is negligible.

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 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 investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

- New York City Department of Citywide Administrative Services (DCAS)
- Blankman Associates, Inc.
- Schorr Brothers Development Corp.
- Jopel's Construction and Trucking Company, Inc.

-Jack Diamond Trust

The PRPs for the site declined to implement a remedial program when requested by the Department. After the remedy is selected, the PRPs will again be contacted to assume responsibility for the remedial program. If an agreement cannot be reached with the PRPs, the Department will evaluate the site for further action under the State Superfund. The PRPs are subject to legal actions by the state for recovery of all response costs the state has incurred.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- surface water
- soil
- sediment
- 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. The tables found in Exhibit A list the applicable SCG in the footnotes. 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 hazardous waste 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 in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

polychlorinated biphenyls (PCBs)	tetrachloroethene (PCE)
benzene	naphthalene
toluene	benzo(b)fluoranthene
ethylbenzene	lead
xylene (mixed)	

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

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 Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

LNAPL (Oil) Recovery

The Department began passive collection of oil or LNAPL as an IRM beginning in March 2008. An oil-absorbent material, referred to as a "sock", was placed in 15-20 monitoring wells across the site to collect LNAPL for disposal. Absorbent socks were removed and replaced on a bi-weekly schedule from March 2008 to June 2010. Bi-weekly absorbent sock replacement resumed in January 2012, after additional wells were installed as part of the remedial investigation. Bi-weekly to monthly absorbent sock replacement has continued since that time. The Department evaluated different technologies to enhance LNAPL recovery; however, the viscosity of the LNAPL and the heterogeneous nature of the landfill material limits the effectiveness of active

recovery methods. A peristaltic pump is used if sufficient LNAPL is present in wells during recovery events.

LNAPL Recovery through May 2016 was summarized in the August 2016 Interim Remedial Measure Letter Report. To date, 248 gallons of LNAPL have been collected and properly disposed. As a result, the extent and thicknesses of oil has decreased substantially, and groundwater quality has significantly improved. LNAPL recovery will continue in site management as necessary.

Soil Cover

The Department designed and constructed an engineered soil cover on the site and surrounding area in 2018. As part of the soil cover installation, surface soil was excavated from vegetated areas and replaced with a clean soil cover to prevent potential direct contact exposures. All excavated soil was properly disposed and backfilled with soil meeting restricted-residential SCOs. Prior to backfilling, a demarcation layer was placed at depth to represent a visual boundary between clean and potentially contaminated soil. Vegetation (grass, shrubs, trees) was replaced to prevent soil erosion and to provide an aesthetically pleasing community for residents.

Based on the use of the properties (lots), either a one or two-foot soil cover was installed. Refer to the description below and Figure 3: Cover Type Map for clarification.

- Block 3916, Lots 250 and 255 are privately-owned condominium properties and meet the definition restricted-residential use, as defined in 6 NYCRR Part 375-1.8(g)(2)(ii). Lots 250 and 255 received a two-foot soil cover.
- Block 3916, Lot 27 is owned by the NYC Department of Citywide Administrative Services (DCAS) through tax lien foreclosure. While the lot does not meet the definition of restricted-residential use due to its ownership status, the Department installed a two-foot soil cover given the property's use and proximity to restricted-residential areas. The lot is surrounded by private condominium properties which meet the definition of restricted-residential use and property is used as a common backyard area by condo residents.
- Block 3916, Lot 108 meets the definition of commercial use, as defined in 6 NYCRR Part 375-1.8(g)(2)(iii) and received a one-foot soil cover. While privately-owned, Lot 108 has a deed restriction establishing the property as a public access park and tidal wetland buffer area. The deed restriction prohibits "performing any gardening, agricultural activity, change in grade, or change in vegetation on or within said public park" which meets the definition of a passive recreational (commercial) use.
- The condominium properties (Lots 250 and 255) contained numerous planter boxes and small landscaped areas which also required installation of a soil cover. A two-foot soil cover was installed in any landscaped areas large enough to excavate without undermining the adjacent concrete or asphalt. Smaller areas and planter boxes received a one-foot soil cover.

Installation of the soil cover was documented in a September 2019 IRM Construction Completion Report.

Drum/Soil Removal

Approximately ten steel drums were identified in the subsurface during construction of the soil cover. The drums contained waste oil when buried; however, corrosion of the steel over time allowed the liquid inside to leak out into the surrounding soil, and the drums eventually collapsed under the weight of the landfilled material. Samples were collected to characterize the material and determine the regulatory requirements to remediate the area. In addition to petroleum compounds, impacted soil was contaminated with PCBs, which were detected up to 3,000 parts per million (ppm). At this concentration, the material meets the definition of PCB remediation waste which requires disposal at a permitted hazardous waste landfill. After a comprehensive subsurface investigation to delineate the extent of contamination, 268.10 tons of PCB remediation waste was excavated and properly disposed. A demarcation layer was placed at the base of the excavation and the area was backfilled with soil meeting restricted-residential SCOs. The disposal of the drums and associated soil was documented in the September 2019 IRM Construction Completion Report.

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.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary.

Nature and Extent of Contamination Post-Remediation:

Subsurface Soil

Soil below the cover system at the site (and surrounding area) is impacted by volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals above restricted-residential SCOs.

- VOC and SVOC contamination related to residual waste oil is present in soil at the groundwater interface. For example, benzene was detected up to 280 ppm (compared to the restricted-residential SCO of 4.8 ppm) and naphthalene was detected up to 1,100 ppm (compared to the restricted-residential SCO of 100 ppm).
- SVOC and metals contamination related to historic fill/solid waste is present in the vadose and saturated zones. For example, benzo(b)fluoranthene was detected up to 75.1 ppm (compared to the restricted-residential SCO of 1 ppm) and the lead was detected up to 14,400 ppm (compared to a restricted-residential SCO of 400 ppm).

- PCB contamination related to both residual waste oil and historic fill is present both above and below the groundwater table. PCBs were detected up to 49.2 ppm (compared to a restricted-residential SCO of 1 ppm).

LNAPL

Measurable floating oil or LNAPL remains in multiple wells. Prior analysis identified the LNAPL as petroleum waste oil with total PCB concentrations up to 490 ppm. The LNAPL on-site is generally not mobile in the subsurface; however, to prevent potential migration, a subsurface barrier was installed along the western property boundary. The barrier was installed as part of the remedial program at the adjacent site, NYSDEC Site No. V00254: College Point Properties (Soundview Pointe condominiums). A fiberglass reinforced plastic sheet pile wall was installed into the water table to prevent LNAPL from potentially re-contaminating the property.

Groundwater

Several VOCs and SVOCs were detected above Ambient Water Quality Standards and Guidance Values. For example, benzene was detected up to 120 parts per billion or ppb (compared to a standard of 1 ppb) and naphthalene was detected up to 150 ppb (compared to a guidance value of 10 ppb). Based on the January 2020 groundwater sampling event, dissolved-phase contamination related to residual waste oil is contained on-site.

Soil Vapor

Soil vapor, sub-slab soil vapor (below structures) and indoor air (inside structures) samples were collected to determine whether actions are needed to address exposures to site-related contaminants. 19 first floor residences were evaluated for potential exposure from soil vapor intrusion. Low levels of VOCs were identified in both sub-slab and indoor air samples; however, based on the concentrations detected, and in comparison, with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion, no actions were necessary to address indoor air impacts to site-related contaminants via the soil vapor intrusion pathway.

Sediment and Surface Water

Sediment and surface water samples were collected along the East River shoreline bordering the site. Several SVOCs, PCBs and metals were detected in sediment samples at concentrations above sediment screening criteria; only copper exceeded water quality standards in the surface water samples. Sediment and surface water are not considered site-specific media of concern due to the local area's history and the large-scale unregulated landfilling which took place prior to development. Therefore, sediment and surface water are not addressed by the remedy.

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*.

Access to the site is unrestricted. However, contact with contaminated soil or groundwater is unlikely unless people dig below the ground surface. People are not drinking the 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 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. Environmental sampling indicates soil vapor intrusion is not a concern onsite or for offsite buildings as a result of this site.

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 contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

SECTION 7: SUMMARY OF SELECTED REMEDY

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is proposing No Further Action as the remedy for the

site. This No Further Action remedy includes continued LNAPL recovery, maintenance of the cover system as an engineering control and the implementation of institutional controls. The Department believes that this remedy is protective of human health and the environment and satisfies the remedial action objectives described in Section 6.5.

The elements of the IRM already completed and the institutional and engineering controls are listed below:

LNAPL Recovery

Existing monitoring wells and recovery wells will be used to collect and dispose of PCB-contaminated waste oil (LNAPL) floating on the water table. An oil-absorbent material will be placed in existing wells and replaced after the material becomes saturated with oil. The absorbent material will be stored on-site in a fenced-in and locked drum storage area prior to disposal. LNAPL recovery will continue in site management as necessary.

Cover System

A site cover currently exists in areas not occupied by buildings and will be maintained to allow for restricted residential use for the condominium properties and commercial use for the waterfront park. Currently, the site cover includes paved streets, paved parking areas, sidewalks and soil where the exposed surface soil meets the applicable soil cleanup objectives (SCOs). The upper two feet of exposed soil meets restricted-residential SCOs on the condominium properties and the upper one foot of exposed soil meets commercial SCOs for the waterfront park property. Refer to Section 6.2 for additional information. Any future site redevelopment will maintain the existing site cover and any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

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 on the condominium properties and commercial use on the waterfront park property, 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.

Site Management Plan

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

1. 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 above.

Engineering Controls: The oil collection system and site cover discussed 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 further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes on-site condominium buildings built prior to the remedial investigation;
 - descriptions of the provisions of the environmental easement including any land use and groundwater restrictions;
 - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described above will be placed in any areas where the upper one or two feet of exposed surface soil, depending on location, 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.
2. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of groundwater to assess the performance and effectiveness of the remedy;
 - a schedule of monitoring and frequency of submittals to the Department
- 3. 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

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides/ polychlorinated biphenyls (PCBs), and inorganics (metals). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, the Restricted Use SCGs (i.e. restricted-residential) identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater and soil.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Waste/source areas identified at the site include the following:

- PCB-contaminated oil or LNAPL was encountered floating on the groundwater table. Lab analysis of the oil revealed the presence of multiple petroleum products with high viscosities. The results indicate a mixture of fuel oil #2, fuel oil #6, hydraulic oil and lube oil (i.e., waste oil) with total PCB concentrations up to 490 ppm. The Department began collecting oil as an IRM beginning in 2008; a significant reduction in the extent/volume of oil has been achieved during that time.
- Drums of PCB-contaminated oil had previously been disposed on the property. Over time, the metal drums corroded and allowed oil to seep out into the surrounding soil. PCB concentrations in soil were encountered up to 3,000 ppm. Drums and associated PCB-contaminated soil exceeding 10 ppm were excavated and disposed of as an IRM.

Refer to Section 6.2 for additional information on IRMs.

Soil

Surface soil and subsurface soil samples from various depths were analyzed to determine the nature and extent of contamination at the site and to implement IRMs. All soil samples were compared to 6 NYCRR Part 375 Soil Cleanup Objectives for unrestricted use and restricted-residential use. Site-specific contaminants of concern were also compared to protection of groundwater SCOs. Since the previously implemented IRMs

included the excavation and disposal of soil, only soil currently remaining on-site is presented in Table 1 and Figure 4. As of December 2018, when construction of the soil cover IRM was completed, all surface soil within the site boundary, as well as those lots that comprised the IRM project area, meets restricted-residential SCOs.

All samples were analyzed for VOCs, SVOCs, PCBs, pesticides and metals during the remedial investigation. The results identified contaminants commonly associated with historic urban fill (i.e., polycyclic aromatic hydrocarbons, metals and low-level pesticides) as well as hazardous waste. The hazardous waste encountered during the RI (PCB-contaminated waste oil and soil exceeding 50 ppm total PCBs by weight) were remediated as IRMs and are discussed in Section 6.2.

Oil staining at the groundwater interface resulted in the exceedance of multiple petroleum-related VOCs and SVOCs. For example, benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX) and naphthalene exceeded restricted-residential SCOs in several isolated locations at the groundwater interface; however, any remaining oil-stained soil post-IRMs is present a minimum of 10 feet below ground surface.

Table 1 - Soil

Detected Constituents	Concentration Range Detected (ppm)	375 Soil – Unrestricted Use ^b (ppm)	Frequency Exceeding Unrestricted Use SCG	375 Soil – Protection of Groundwater ^c (ppm)	Frequency Exceeding Restricted Use SCG	375 Soil – Restricted-Residential Use ^d (ppm)	Frequency Exceeding Restricted Use SCG
Metals PART 375							
Arsenic	0-104	13	10/104	16	7/104	16	7/104
Barium	13.8-4,790	350	7/118	820	3/118	400	7/118
Beryllium	0-7.40	7.2	1/118	47	0/118	72	0/118
Cadmium	0-17.2	2.5	16/118	7.5	4/118	4.3	6/118
Chromium, Total	3.90-168	30	14/118	19	53/118	110	2/118
Copper	14.1-1,430	50	66/109	1720	0/109	270	8/109
Lead	17.3-14,400	63	108/118	450	23/118	400	27/118
Mercury	0-6.42	0.18	79/118	0.73	11/118	0.81	9/118
Nickel	0-1,100	30	26/118	130	5/118	310	2/118
Selenium	0-37.6	3.9	4/118	4	4/118	180	0/118
Silver	0-2.30	2	2/72	8.3	0/72	180	0/72
Zinc	11.3-17,300	109	97/118	2480	3/118	10000	1/118
Pesticides/PCBs PART 375							
Alpha Chlordane	0-1.30	0.094	2/47	2.9	0/47	4.2	0/47
Endrin	0-0.210	0.014	3/46	0.06	3/46	11	0/46
P,P'-DDD	0-0.280	0.0033	1/47	14	0/47	13	0/47
P,P'-DDE	0-0.480	0.0033	1/47	17	0/47	8.9	0/47

Detected Constituents	Concentration Range Detected (ppm)	375 Soil – Unrestricted Use ^b (ppm)	Frequency Exceeding Unrestricted Use SCG	375 Soil – Protection of Groundwater ^c (ppm)	Frequency Exceeding Restricted Use SCG	375 Soil – Restricted-Residential Use ^d (ppm)	Frequency Exceeding Restricted Use SCG
P,P'-DDT	0-0.900	0.0033	5/47	136	0/47	7.9	0/47
PCB-1016 (Aroclor 1016)	0-5.10	0.1	7/144	3.2	1/144	1	4/144
PCB-1242 (Aroclor 1242)	0-12.0	0.1	30/144	3.2	6/144	1	18/144
PCB-1248 (Aroclor 1248)	0-16.0	0.1	25/144	3.2	6/144	1	17/144
PCB-1254 (Aroclor 1254)	0-6.40	0.1	37/142	3.2	5/142	1	11/142
PCB-1260 (Aroclor 1260)	0-5.90	0.1	56/142	3.2	6/142	1	16/142
PCB-1262 (Aroclor 1262)	0-48.0	0.1	2/144	3.2	2/144	1	2/144
PCB-Total	0-49.2	0.1	102/144	3.2	24/144	1	52/144
SVOC PART 375							
Acenaphthene	0-350	20	15/143	98	4/143	100	4/143
Benzo(A)Anthracene	0-110	1	102/143	1	102/143	1	102/143
Benzo(A)Pyrene	0-110	1	101/142	22	14/142	1	101/142
Benzo(B)Fluoranthene	0-75.1	1	99/142	1.7	79/142	1	99/142
Benzo(K)Fluoranthene	0-68.0	0.8	90/142	1.7	62/142	3.9	35/142
Chrysene	0-110	1	103/143	1	103/143	3.9	52/143
Dibenz(A,H)Anthracene	0-13.0	0.33	40/140	1000	0/140	0.33	40/140
Dibenzofuran	0-100	7	12/143	210	0/143	59	1/143
Fluoranthene	0-190	100	10/143	1000	0/143	100	10/143
Fluorene	0-210	30	10/143	386	0/143	100	5/143
Indeno(1,2,3-C,D)Pyrene	0-100	0.5	81/142	8.2	15/142	0.5	81/142
Naphthalene	0-1,100	12	33/159	12	33/159	100	14/159
Phenanthrene	0-710	100	13/143	1000	0/143	100	13/143
Phenol	0-8.50	0.33	3/143	0.33	3/143	100	0/143
Pyrene	0-410	100	9/143	1000	0/143	100	9/143
VOC PART 375							
1,1,1-Trichloroethane (TCA)	0-1.20	0.68	1/100	0.68	1/100	100	0/100
1,1-Dichloroethane	0-0.290	0.27	1/100	0.27	1/100	26	0/100
1,2,4-Trimethylbenzene	0-57.0	3.6	14/61	3.6	14/61	52	1/61
1,2-Dichlorobenzene	0-10.0	1.1	6/146	1.1	6/146	100	0/146
1,2-Dichloroethane	0-1.20	0.02	1/101	0.02	1/101	3.1	0/101
1,3,5-Trimethylbenzene	0-25.0	8.4	3/60	8.4	3/60	52	0/60
Acetone	0-58.0	0.05	31/88	0.05	31/88	100	0/88

Detected Constituents	Concentration Range Detected (ppm)	375 Soil – Unrestricted Use ^b (ppm)	Frequency Exceeding Unrestricted Use SCG	375 Soil – Protection of Groundwater ^c (ppm)	Frequency Exceeding Restricted Use SCG	375 Soil – Restricted-Residential Use ^d (ppm)	Frequency Exceeding Restricted Use SCG
Benzene	0-280	0.06	19/101	0.06	19/101	4.8	6/101
Ethylbenzene	0-270	1	27/101	1	27/101	41	1/101
Methyl Ethyl Ketone (2-Butanone)	0-5.00	0.12	1/90	0.12	1/90	100	0/90
Methylene Chloride	0-0.270	0.05	2/100	0.05	2/100	100	0/100
N-Butylbenzene	0-43.0	12	4/60	12	4/60	100	0/60
N-Propylbenzene	0-12.0	3.9	5/60	3.9	5/60	100	0/60
Tetrachloroethylene (PCE)	0-10.0	1.3	2/100	1.3	2/100	19	0/100
Toluene	0-250	0.7	11/101	0.7	11/101	100	1/101
Trichloroethylene (TCE)	0-4.20	0.47	3/101	0.47	3/101	21	0/101
Xylenes, Total	0-129	0.26	29/101	1.6	22/101	100	1/101

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives;

c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Groundwater;

d - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Restricted-Residential Use.

Groundwater

Groundwater samples were collected from 30 groundwater monitoring wells to assess overburden groundwater conditions during the RI. Groundwater was analyzed for VOCs, SVOCs, PCBs, pesticides, metals and per/polyfluoroalkyl substances (PFAS) at select wells. The results indicate that contamination in groundwater at the site exceeds SCGs for VOCs, SVOCs, PCBs and metals. Refer to Table 2 and Figure 5.

Predominantly, the contaminants exceeding SCGs in groundwater are petroleum VOCs and SVOCs related to the partitioning of waste oil. All properly developed monitoring wells were subsequently found to contain non-detectable concentrations of PCBs, suggesting that the previous detections were due to suspended particles. Dissolved metals are not considered site-specific contaminants of concern due to large-scale landfilling which occurred on and proximate to the site.

Table 2 - Groundwater

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
Metals NYS CLASS GA			
Arsenic	0-63.7	25	2/98
Barium	0-1,080	1000	1/76
Beryllium	0-1.00	3	0/100
Cadmium	0-40.3	5	5/100
Chromium, Hexavalent	0-3.70	50	0/2
Chromium, Total	0-246	50	3/100

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
Iron	0-160,000	300	90/100
Iron (DISSOLVED)	0-175,000	300	66/73
Lead	0-474	25	6/100
Magnesium	2,220-502,000	35000	49/100
Manganese	0-15,700	300	75/100
Manganese (DISSOLVED)	0-4,810	300	56/73
Nickel	0-101	100	1/100
Selenium	0-169	10	2/76
Sodium	9,860-4,180,000	20000	95/100
Thallium	0-62.6	0.5	1/94
Zinc	0-26,000	2000	3/100
Pesticides/PCBs NYS CLASS GA			
PCB-1242 (Aroclor 1242)	0-15.0	0.09	3/128
PCB-1260 (Aroclor 1260)	0-1.70	0.09	3/128
SVOC NYS CLASS GA			
2,4-Dimethylphenol	0-21.0	1	5/121
Acenaphthene	0-100	20	11/126
Benzo(A)Anthracene	0-5.40	0.002	12/126
Benzo(A)Pyrene	0-4.50	0	112/126
Benzo(B)Fluoranthene	0-4.70	0.002	9/126
Benzo(K)Fluoranthene	0-2.10	0.002	1/126
Biphenyl (Diphenyl)	0-21.0	5	5/86
Bis(2-Ethylhexyl) Phthalate	0-10.0	5	2/126
Chrysene	0-5.40	0.002	2/126
Indeno(1,2,3-C,D)Pyrene	0-2.50	0.002	1/126
Naphthalene	0-2,000	10	36/150
Phenanthrene	0-100	50	3/126
Phenol	0-200	1	12/121
VOC NYS CLASS GA			
1,2,4-Trimethylbenzene	0-140	5	6/62
1,2-Dibromoethane (Ethylene Dibromide)	0-3.00	0.0006	1/114
1,2-Dichlorobenzene	0-9.00	3	15/154
1,3,5-Trimethylbenzene (Mesitylene)	0-33.0	5	4/62
1,4-Dichlorobenzene	0-4.40	3	2/154
Acetone	0-70.0	50	2/106
Benzene	0-1,700	1	38/130
Chlorobenzene	0-29.0	5	25/130
Chloroethane	0-31.0	5	1/130

Detected Constituents	Concentration Range Detected (ppb)^a	SCG^b (ppb)	Frequency Exceeding SCG
Cis-1,2-Dichloroethylene	0-8.00	5	1/130
Cymene	0-12.0	5	3/24
Ethylbenzene	0-590	5	12/130
Isopropylbenzene (Cumene)	0-43.0	5	11/119
N-Butylbenzene	0-19.0	5	2/24
N-Propylbenzene	0-20.0	5	3/24
Styrene	0-14.0	5	1/130
Toluene	0-420	5	10/130
Vinyl Chloride	0-2.40	2	1/130
Xylenes, Total	0-43.0	5	12/130

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

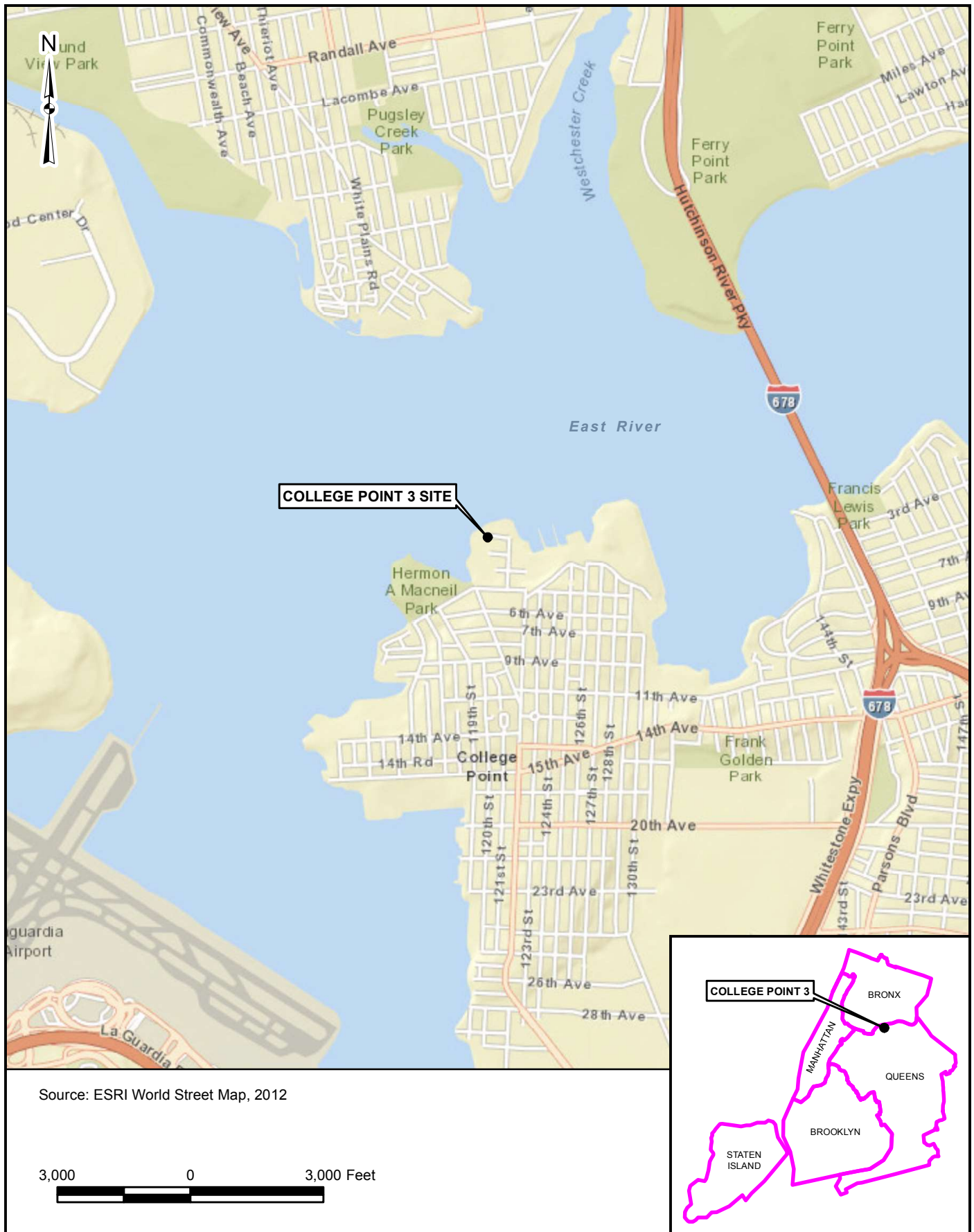
b - SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703.

Sediments and Surface Water

The remedial investigation included the collection of sediment, seep and surface water samples to evaluate the potential impact from the site to the adjacent East River. No site-related contamination of concern was identified during the RI; therefore, sediment and surface water were not addressed in the remedy.

Soil Vapor


Nineteen individual condominiums were sampled to evaluate soil vapor intrusion. Sub-slab vapor, indoor air and outdoor air samples were collected at each residence to evaluate if VOCs are moving from a subsurface source of contamination into the indoor air of overlying structures. Multiple chlorinated and petroleum-related VOCs were detected in samples during the soil vapor intrusion evaluation but at low levels, so that no action was required to prevent potential exposures at any residence. Tetrachloroethene (PCE), a chlorinated VOC commonly used in dry cleaning, was detected up to 17 micrograms per cubic meter (µg/m³) in sub-slab air and detected up to 2.4 µg/m³ in indoor air. Xylene, a petroleum VOC commonly used in paint thinner, was detected up to 7.1 µg/m³ in sub-slab air and up to 170 µg/m³ in indoor air. Based on the soil vapor intrusion evaluation, soil vapor was not addressed in the remedy.






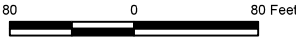
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Legend

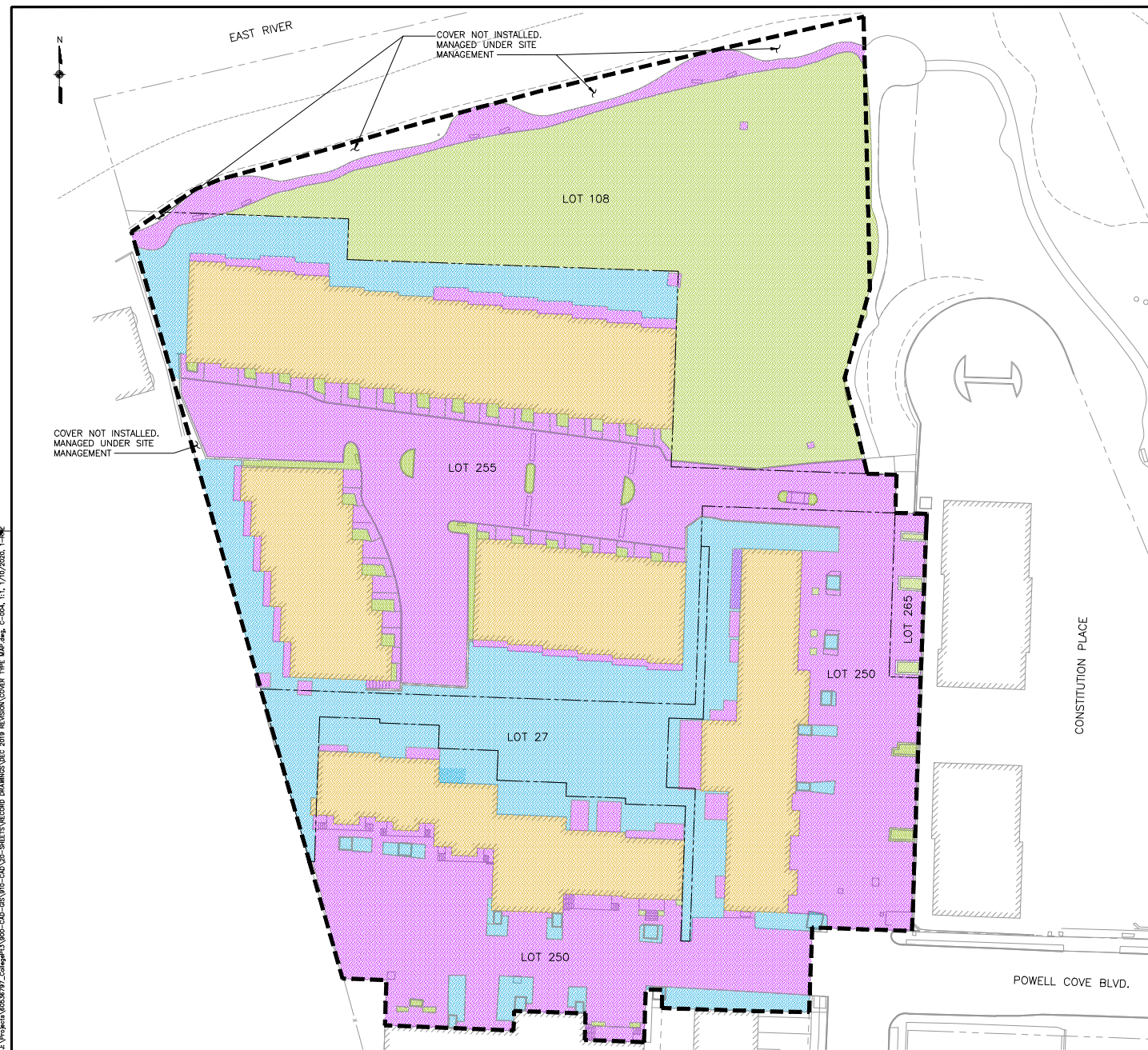
 Class 2 Area

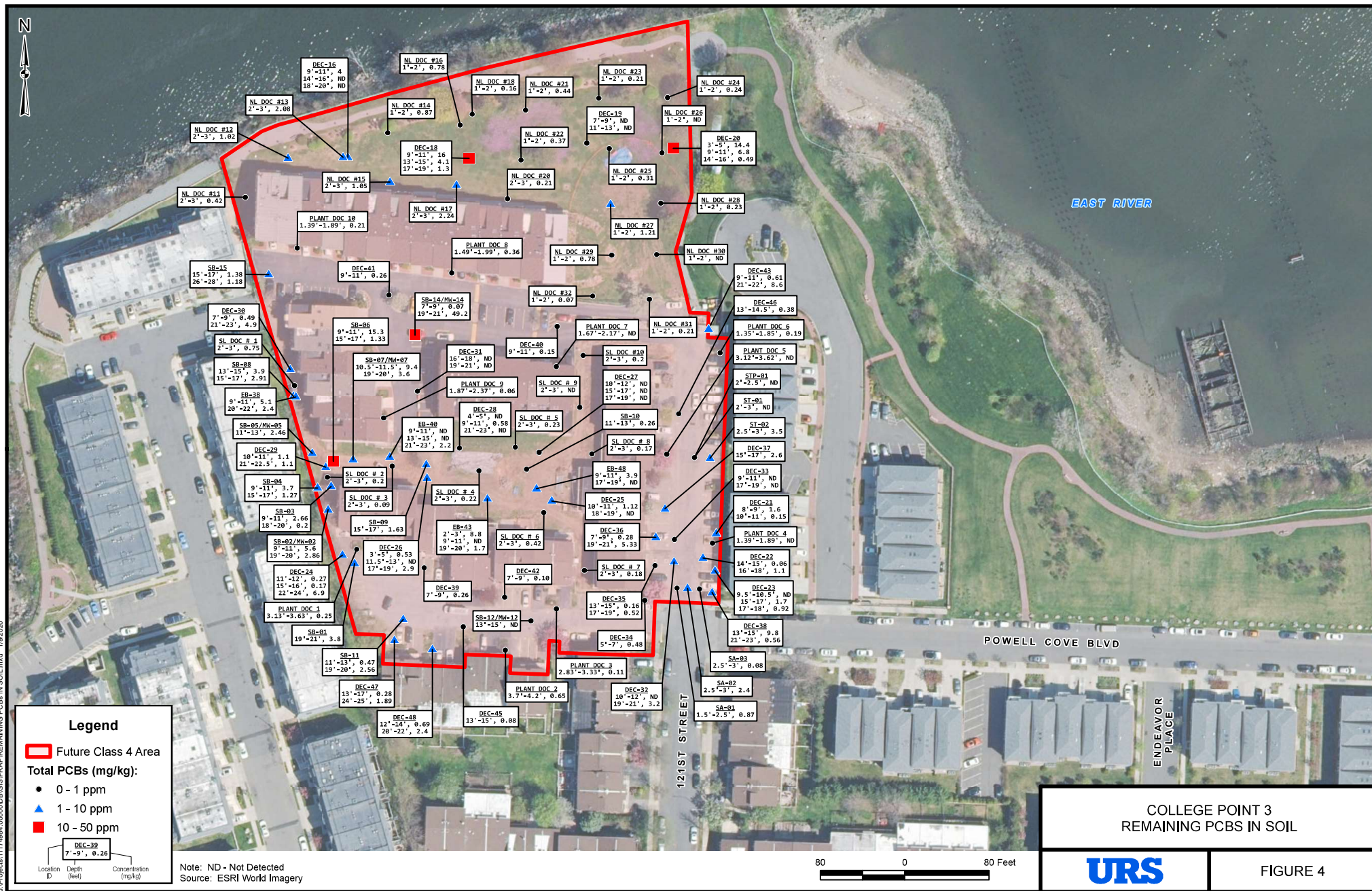
 Future Class 4 Area

Source: ESRI World Imagery



COLLEGE POINT 3 SITE LOCATION	
	FIGURE 2





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APPENDIX A

Responsiveness Summary

APPENDIX A

RESPONSIVENESS SUMMARY

College Point 3 State Superfund Project College Point, Queens County, New York Site No. 241122

The No Further Action - Proposed Remedial Action Plan (PRAP) for the College Point 3 site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was made available to the public via DECinfo Locator on February 4, 2022. The PRAP outlined the remedial measures proposed to address contaminated soil and groundwater at the College Point 3 site.

The release of the No Further Action PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A virtual public meeting was held on March 2, 2022, which included a presentation of the remedial investigation and feasibility study for the College Point 3 site as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the No Further Action PRAP ended on March 6, 2022.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

Question 1: Please explain why the remedy is unusual and why it's being handled this way?

Response 1: NYSDEC proposed a No Further Action – Proposed Remedial Action Plan (PRAP) at the College Point 3 site. A No Further Action PRAP is a cleanup where construction has already been completed as Interim Remedial Measures (IRMs) and the physical components of the remedy are in-place. A typical site would propose a cleanup in the PRAP, then implement the work after the remedy is selected and finalized in the Record of Decision (ROD). At College Point 3, NYSDEC met with the stakeholders (impacted condominium boards, owners and residents) and proposed implementing the physical components of the remedy first as an IRM, as a way of expediting the cleanup. The remedy is now complete and NYSDEC will reclassify the impacted condo properties to a Class 4 Inactive Hazardous Waste Disposal Site after the ROD is issued. A Class 4 is a site that's properly closed but requires continued management.

Question 2: A resident expressed concern over subsurface work conducted inside her parent's condo where a section of sewer was replaced. She stated the contractor hired by the condominium's property management company to repair the sewer line did not follow the procedures outlined in the Site Management Plan (SMP) for conducting intrusive work below the cover system. She asked why the work inside her parent's condo didn't follow the SMP and what are the potential health impacts associated with exposure?

Response 2: Environmental easements, which require compliance with the SMP, have been recorded with the Queens County Clerk for each of the impacted condominium properties. Any contractor performing work below the cover system must follow the SMP to prevent potential exposures to residents and workers. NYSDEC is again meeting with the impacted condo presidents and property managers to reinforce their commitment to site management and the requirements of the SMP.

The soil excavated during work on the sewer pipe was not tested; therefore, we do not know what contaminants, if any, were in the soil. There was exposure to potentially contaminated soil while the basement floor was open and the soil was stockpiled on the basement floor and outside of the home, before being placed back into the excavation and re-covered with concrete. It is difficult to specify what the health effects could be without knowing what contaminants and at what levels and because everyone has different risk factors such as genetics, age and diet. Based on the contaminants found at the site in general and the relatively short duration of the exposure, adverse health effects are not expected.

Question 3: Please explain the process for excavating soil below the cover system. Is the soil evaluated on a case-by-case basis to determine if the soil can be reused?

Response 3: The SMP calls for an excavation work plan to be submitted to the NYSDEC prior to the conducting work below the cover system. The minimum requirements for the excavation work plan are provided in Appendix D of the SMP. A Community Air Monitoring Plan (CAMP) and a Health & Safety Plan (HASP) are required for work below the cover system. Soil must be pre-characterized prior to implementing work in potentially contaminated soil or the soil must be segregated and protected while the soil samples are analyzed. If the results meet re-use criteria as provided in the SMP, the soil could be reused; otherwise, the soil must be properly disposed.

Question 4: How long do cover systems last?

Response 4: Since the cover system at the site is a composite of different cover types and materials (concrete, asphalt and soil), lifespans will vary. The asphalt and concrete lifespans will not be impacted by the presence of urban fill material; however, differential settlement or the settlement of land at different rates, may necessitate replacement prematurely. Areas with a soil cover should last indefinitely if the vegetation is properly maintained to prevent erosion.

Question 5: Who paid for the soil cover and who pays for maintaining or replacing it in the future?

Response 5: NYSDEC funded the remediation including the installation of the soil cover (areas of the site not covered by asphalt or concrete) at a cost of approximately \$3,000,000. Future maintenance of the soil cover is the responsibility of the condominium owners and any replacement of asphalt and/or concrete is the responsibility of the condominium owners.

Question 6: A resident noticed mice entered her home after NYSDEC installed the soil cover in 2018 and believes the subsurface work caused the mice infestation. She requested NYSDEC restore her living conditions.

Response 6: The mice infestation is not related to the implementation of the site remedy. NYSDEC has provided the concerns to property management to address.

APPENDIX B

Administrative Record

APPENDIX B

ADMINISTRATIVE RECORD

College Point 3 State Superfund Project College Point, Queens County, New York Site No. 241122

1. Proposed Remedial Action Plan for the College Point 3 site, dated February 2022, prepared by the Department
2. SSF Referral Memorandum dated May 4, 2010 for a state-funded Remedial Program Remedial Investigation/Feasibility Study and Interim Remedial Measures)
3. "Remedial Investigation – Phase I Data Summary Report" dated October 2011, prepared by URS Corporation
4. "Remedial Investigation Report" dated June 2013, prepared by URS Corporation
5. "NAPL Recovery Interim Remedial Measure Letter Report – July 2012 to May 2016" dated August 2016, prepared by URS Corporation
6. "Feasibility Study Report" dated January 2017, prepared by URS Corporation
7. Letter to Lisette Camilo - Commissioner, NYC Dept. of Citywide Administrative Services from Robert Schick – Director of Environmental Remediation, NYSDEC, re: ownership and future site management, dated May 1, 2017
8. Letter response from Margaret Holden – Assistant Corporation Counsel, Environmental Law Division, NYC Law Department to Robert Schick - Director of Environmental Remediation, NYSDEC, dated May 30, 2017
9. "Construction Completion Report" dated September 2019, prepared by URS Corporation
10. "Site Management Plan" for Block 3916, Lot 250, dated January 2020, prepared by URS Corporation
11. "Site Management Plan" for Block 3916, Lot 255, dated January 2020, prepared by URS Corporation
12. "Site Management Plan" for Block 3916, Lot 108, dated January 2020, prepared by URS Corporation
13. "Site Management Plan" NYSDEC responsibilities, dated February 2021, prepared by AECOM
14. Environmental Easement for Block 3916, Lot 250, executed July 27, 2021
15. Environmental Easement for Block 3916, Lot 255, executed July 27, 2021
16. Environmental Easement for Block 3916, Lot 108, executed August 10, 2021