DECISION DOCUMENT

401 West 207th Street Redevelopment
Brownfield Cleanup Program
New York, New York County
Site No. C231151
January 2023

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

DECLARATION STATEMENT - DECISION DOCUMENT

401 West 207th Street Redevelopment
Brownfield Cleanup Program
New York, New York County
Site No. C231151
January 2023

Statement of Purpose and Basis

This document presents the remedy for the 401 West 207th Street Redevelopment 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 401 West 207th Street Redevelopment 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 contaminant source areas, including:

- 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.

Excavation and off-site disposal of all on-site soils which exceed Unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 22,725 cubic yards of contaminated soil will be removed from the site. Collection and analysis of confirmation samples at the remedial excavation depth will be used to verify that SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify DEC, submit the sample results and, in consultation with DEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal, in a manner suitable to receiving facilities, and in conformance with applicable federal, state, and local laws, rules, and regulations and facility-specific permits.

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. Excavation Dewatering & Treatment

The proposed maximum depth of remedial excavation is 26 feet below grade, which is below the static water table (approximately 9 to 11 feet below grade); therefore, dewatering to facilitate the remedial excavation and to treat petroleum VOCs in groundwater will be conducted. Extracted groundwater will be treated and discharged to the local sewer system in compliance with all municipal requirements, including permits from NYCDEP and/or pre-treatment if warranted.

5. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion.

6. Local Institutional Controls

If no Environmental Easement (EE) or Site Management Plan (SMP) is needed to achieve soil, groundwater, or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the New York City Department of Health & Mental Hygiene (NYCDOHMH) code, which prohibits potable use of

groundwater without prior approval.

Contingent Track 1
The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no EE or SMP is anticipated.

In the event that Track 1 unrestricted use is not achieved, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 restricted residential cleanup.

7. 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 NYCDOHMH; and
- require compliance with the Department approved Site Management Plan.

8. 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 7 above.

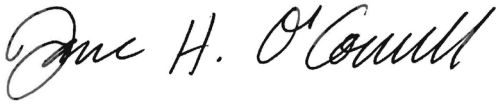
   This plan includes, but may not be limited to:
   - an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
   - descriptions of the provisions of the environmental easement including any land use, and/or groundwater use restrictions;
   - a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
   - 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.

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.



1/21/23

Date

Jane H. O'Connell, Regional Remediation Engineer
Region 2

DECISION DOCUMENT

401 West 207th Street Redevelopment
New York, New York County
Site No. C231151
January 2023

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, where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria, or guidance, based on the reasonably anticipated use of the property.

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=C231151

Manhattan Community Board 12
530 West 166th Street, 6A
New York, NY 10032
Phone: (212) 568-8500

Inwood Library
4857 Broadway
New York, NY 10034
Phone: (212) 942-2445

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

Site Location: The 0.63-acre (27,450 square foot) site is located at 401 West 207th Street in the Inwood neighborhood of Manhattan, NY, and is designated as New York City Tax Block 2189, Lot 60. The site is bounded to the north by the New York City Transit (NYCT) yard, to the east by 9th Avenue followed by another active BCP site (Site Code C231102), to the south by West 207th Street followed by two more active BCP sites (Site Codes C231144 and C231147), and to the west by the remainder of the NYCT yard followed by 10th Avenue.

Site Features: The site is currently vacant. Prior to the Interim Remedial Measure (IRM) activities performed in June 2022, the site was occupied by a Speedway gas station including fuel dispensers, five underground storage tanks (PBS ID #2-297453), and a 1-story 1,800 sq-ft convenience store. As per the approved April 2022 IRM Work Plan (IRMWP), all site features were demolished/removed, and the site was backfilled to grade with clean stone in August 2022.

Current Zoning and Land Use: The site is zoned R8-A and R9-A for residential use with a C2-4 commercial overlay. The surrounding properties are currently used for commercial, residential, and manufacturing/transportation purposes. The nearest residential buildings are located south of the site on West 206th Street.

Past Land Use: The site was first developed in the mid-1930s as an auto-garage and accommodated various auto-related services. The site was redeveloped in the late 1960s as a gas filling station with a car wash facility until the car wash was replaced with a convenience store in 2004. The site remained unchanged until December 2021 when the gas station was permanently closed.

Site Geology and Hydrogeology: The stratigraphy of the site consists primarily of historic fill material comprised of brown silty sand with gravel extending to at least 6 feet below grade surface (ft-bgs) underlain by native fine to coarse sand with gravel. Bedrock was not encountered during the investigation but is anticipated at depths ranging from approximately 20 to 80 ft-bgs and consists primarily of metamorphic Cambrian-Ordovician Inwood Marble formation.

Groundwater was encountered at approximately 9 to 11 ft-bgs and groundwater flow is to the east towards the Harlem River.

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, an alternative that restricts 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) 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 Applicants under the Brownfield Cleanup Agreement are Volunteers. The Applicants 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: 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

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:

xylene (mixed)	2,2,4-trimethylpentane
1,2,4-trimethylbenzene	naphthalene
1,3,5-trimethylbenzene	benzene
ethylbenzene	n-propylbenzene
toluene	phenol

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

- groundwater
- soil

6.2: Interim Remedial Measures

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

The following IRM has been completed at this site based on conditions observed during the Limited Phase II Environmental Site Investigation.

IRM Tank Removal

Based on the results of the November 2021 Phase II Investigation the on-site retail petroleum operations, specifically five underground storage tanks (USTs) located in the northeast portion of the parcel, were identified as the main source of petroleum-related VOC contamination throughout the site. An IRM was conducted in June 2022 which included the demolition of all on-site structures as well as the excavation/removal of four gasoline USTs, one diesel UST, and approximately 1,900 cubic yards of surrounding contaminated soil.

Since the proposed remedial excavation depth of 12 ft-bgs was below the static water table (approximately 9 to 11 ft-bgs), localized dewatering was conducted as needed to facilitate the IRM excavation. Extracted water was characterized and treated before being discharged to the local sewer system in compliance with all municipal requirements. Five end-point samples and six side-wall samples were taken at the remedial excavation depth to confirm that SCOs had been achieved. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) was brought in to complete the backfilling of the excavation and establish the designed grades at the site. The IRM activities were documented in a Construction Completion report submitted in January 2023, which is currently under review.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:
Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), and pesticides. Soil vapor samples were analyzed for VOCs. Based upon investigations conducted to date, the primary contaminants of concern are petroleum-related VOCs in soil, groundwater, and soil vapor.

Soil – Nine VOCs were detected at concentrations exceeding the Unrestricted Use Soil Cleanup Objectives (UUSCOs) and/or Protection of Groundwater Soil Cleanup Objectives (PGWSCOs), including 1,2,4-trimethylbenzene at a maximum concentration of 360 parts per million, or ppm (UUSCO and PGWSCO is 3.6 ppm), 1,3,5-trimethylbenzene at 110 ppm (UUSCO and PGWSCO is 8.4 ppm), benzene at 5.1 ppm (UUSCO and PGWSCO are 0.06 ppm), ethylbenzene at 100 ppm (UUSCO and PGWSCO is 1 ppm), n-propylbenzene at 54 ppm (UUSCO and PGWSCO is 3.9 ppm), toluene at 150 ppm (UUSCO and PGWSCO is 0.7 ppm), and total xylenes at 670 ppm (UUSCO is 0.26 ppm, PGWSCO is 1.6 ppm). Three SVOCs were detected at concentrations exceeding the UUSCOs including naphthalene at 39 ppm (UUSCO is 12 ppm). 1,4-Dioxane was detected at a maximum concentration of 95 ppm (UUSCO and PGWSCO of 0.1 ppm). Data does not indicate any off-site impacts in soil related to this site.

Groundwater – Several VOCs were identified in groundwater samples at concentrations above the Ambient Water Quality Standard (AWQS) including 1,2,4-trimethylbenzene at 3,500 parts

per billion (ppb), 1,3,5-trimethylbenzene at 910 ppb, benzene at 1,700 ppb, ethylbenzene at 4,500 ppb, n-propylbenzene at 470 ppb, o-xylene at 310 ppb, p/m-xylene at 13,000 ppb, and toluene at 5,700 ppb. The AWQS for each of these VOCs is 5 ppb. Five SVOCs were identified at concentrations exceeding the AWQS including benzo(a)anthracene at 1.9 ppb, benzo(b)fluoranthene at 3.2 ppb, benzo(k)fluoranthene at 0.92 ppb, chrysene at 2 ppb, and indeno(1,2,3-cd)pyrene at 2 ppb. The AWQS for each of these contaminants if 0.002 ppb. Additional SVOC exceedances include phenol at 8.1 ppb (AWQS is 1 ppb), benzo(a)pyrene at 2.4 ppb (AWQS is non-detect), and naphthalene at 280 ppb (AWQS is 10 ppb). 1,4-Dioxane was not detected in any groundwater samples above the NYSDOH maximum contaminant limit (MCL or drinking water standard) of 1 ppb. Data does not indicate any off-site impacts in groundwater-related to this site.

Soil Vapor – Several petroleum-related VOCs were detected in soil vapor throughout the site, including benzene at a (maximum concentration of 2,720 micrograms per cubic meter (ug/m3), toluene at 3,650 ug/m3, ethylbenzene at 2,710 ug/m3, total xylenes at 4,496 ug/m3, 2,2,4-trimethylpentane at 312,000 ug/m3, n-hexane at 62,700 ug/m3, heptane at 29,200 ug/m3, 1,2,4-trimethylbenzene at 11.5 ug/m3, and 1,3,5-trimethylbenzene at 3.02 ug/m3). Data does not indicate any off-site impacts in soil vapor related to this site.

6.4: Summary of Human Exposure Pathways

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

The site is fenced, has no structures, and is covered with imported stone. People who enter the site could contact contaminants in the soil by disturbing the stone. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that is not affected by this contamination. Volatile organic 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. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not present a current concern. Environmental sampling indicates soil vapor intrusion is not a concern for off-site structures. However, there is a potential for soil vapor intrusion in future on-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 groundwater 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

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 1: Unrestricted use remedy.

The selected remedy is referred to as the Excavation and Vapor Intrusion Evaluation 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;
- 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 contaminant source areas, including:

- 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.

Excavation and off-site disposal of all on-site soils which exceed Unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8. If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 22,725 cubic yards of contaminated soil will be removed from the site. Collection and analysis of confirmation samples at the remedial excavation depth will be used to verify that SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify DEC, submit the sample results and, in consultation with DEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal, in a manner suitable to receiving facilities, and in conformance with applicable federal, state, and local laws, rules, and regulations and facility-specific permits.

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. Excavation Dewatering & Treatment

The proposed maximum depth of remedial excavation is 26 feet below grade, which is below the static water table (approximately 9 to 11 feet below grade); therefore, dewatering to facilitate the

remedial excavation and to treat petroleum VOCs in groundwater will be conducted. Extracted groundwater will be treated and discharged to the local sewer system in compliance with all municipal requirements, including permits from NYCDEP and/or pre-treatment if warranted.

5. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion.

6. Local Institutional Controls

If no Environmental Easement (EE) or Site Management Plan (SMP) is needed to achieve soil, groundwater, or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the New York City Department of Health & Mental Hygiene (NYCDOHMH) code, which prohibits potable use of groundwater without prior approval.

Contingent Track 1

The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no EE or SMP is anticipated.

In the event that Track 1 unrestricted use is not achieved, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 restricted residential cleanup.

7. 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 NYCDOHMH; and
- require compliance with the Department approved Site Management Plan.

8. 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 7 above.

   This plan includes, but may not be limited to:
   - an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

- descriptions of the provisions of the environmental easement including any land use, and/or groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- 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.

MAP SOURCE: ESRI
SITE COORDINATES: 40°51'51"N, 73°55'02"W

HALEY ALDRICH

FORMER SPEEDWAY #7822
401 WEST 207TH STREET
NEW YORK, NEW YORK

PROJECT LOCUS

APPROXIMATE SCALE: 1 IN = 2000 FT
OCTOBER 2021

FIGURE 1

GIS: C:\Users\khensen\OneDrive - haleyaldrich.com\Desktop\KH_LOCAL\Phase_II\Former_Speedway_#7822\GIS\Maps\2021_09\000000_000_0001_PROJECT_LOCUS.mxd - khensen - 9/8/2021 4:06:55 PM

LEGEND

- SITE BOUNDARY
- PARCEL BOUNDARY
- EXCAVATION TO 15 FT BGS
- EXCAVATION TO 26 FT BGS
- BTEX HOTSPOT EXCAVATION TO 20 FT BGS

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. ASSESSOR PARCEL DATA SOURCE: KINGS COUNTY
3. AERIAL IMAGERY SOURCE: NEARMAP, 22 JULY 2021

N

0 60 120

SCALE IN FEET

HALEY ALDRICH

FORMER SPEEDWAY #7822
401 WEST 207TH STREET
NEW YORK, NEW YORK

TRACK 1 EXCAVATION PLAN

JULY 2022

FIGURE 2

GIS: \\haleyaldrich.com\share\CF\Projects\0201577\GIS\Mxds\2022_06_20513020513O_000_0002_SITE_PLAN.mxd - hwachholz - 6/21/2022 11:10:52 PM

LEGEND

- PROPOSED ENDPOINT SAMPLE
- PROPOSED SIDEWALL SAMPLE
- SITE BOUNDARY
- PARCEL BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. ASSESSOR PARCEL DATA SOURCE: KINGS COUNTY
3. AERIAL IMAGERY SOURCE: NEARMAP, 22 JULY 2021

N

0 60 120

SCALE IN FEET

HALEY ALDRICH

REMEDIAL ACTION WORK PLAN
401 WEST 207TH STREET
NEW YORK, NEW YORK

ENDPOINT SAMPLE LOCATION PLAN

AUGUST 2022

FIGURE 3

GIS: \\haleyaldrich.com\share\CF\Projects\0201577\GIS\Maps\2022_06_20513020513O_000_0011_ENDPOINT_SAMPLE_LOCATION_PLAN.mxd - iwachhdz - 8/22/2022 11:34:56 PM