

# DECISION DOCUMENT

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601-607 Union Street  
Brownfield Cleanup Program  
Brooklyn, Kings County  
Site No. C224392  
June 2026



**Department of  
Environmental  
Conservation**

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

# DECLARATION STATEMENT - DECISION DOCUMENT

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601-607 Union Street  
Brownfield Cleanup Program  
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Site No. C224392  
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## **Statement of Purpose and Basis**

This document presents the remedy for the 601-607 Union Street 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 (NYSDEC) for the 601-607 Union Street site and the public's input to the proposed remedy presented by NYSDEC.

## **Description of Selected Remedy**

The elements of the selected remedy are as follows:

### **1. Remedial Design**

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

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

- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise™ (available in the Sustainable Remediation Forum [SURF] library) or similar NYSDEC accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

## **2. Excavation**

The existing on-site concrete slab and the partial cellar will be demolished and materials which cannot be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

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

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soil exceeding the 6 NYCRR Part 371 hazardous criteria for lead;
- soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and
- Excavation and removal of one 550-gallon and one 3,000- gallon above ground storage tanks (AST), and any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

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

Approximately 20,865 cubic yards of contaminated soil will be removed from the site. Collection and analysis of documentation 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 NYSDEC, submit the sample results and, in consultation with NYSDEC, 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**

Backfill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

### **4. Groundwater Extraction and Treatment**

Groundwater extraction and treatment will be implemented to facilitate remedial excavation and to treat contaminants in groundwater. The groundwater extraction system will be designed and installed so that the capture zone is sufficient to cover the area and vertical extent of the area of concern. The extraction system will create a depression of the water table so that contaminated groundwater is directed toward the extraction wells within the plume area. Further details of the extraction system will be determined during the remedial design.

The extracted groundwater will be treated using one 5,000-gallon settling tank with transfer pump and duplex 2-bag filter skids connected to two 1,000-pound carbon vessels, which will then discharge to a DEP permitted discharge location. Approximately 21 sumps well locations are proposed, two will be located within the two elevator pit excavations (4 sump well points total) and 17 sumps well points will be installed in an even distribution across the remainder of the site. Pre- and post-dewatering monitoring will be conducted at two monitoring wells downgradient of the site.

#### *Engineering and Institutional Controls*

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. 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 NYSDEC 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; and
- Require compliance with the NYSDEC 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 remedy element 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 groundwater use restriction;
  - 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;
  - Provisions for the management and inspection of the identified engineering controls;
  - Maintaining site access controls and NYSDEC 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 to assess the performance and effectiveness of the remedy;
    - A schedule of monitoring and frequency of submittals to the NYSDEC;
    - 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 NYSDEC guidance, as appropriate. The remedy is protective of public health and the environment.

June 11, 2026



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Date

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Scott Deyette, Director  
Remedial Bureau B

# DECISION DOCUMENT

601-607 Union Street  
Brooklyn, Kings County  
Site No. C224392  
June 2026

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## **SECTION 1: SUMMARY AND PURPOSE**

The New York State Department of Environmental Conservation (NYSDEC), 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.

NYSDEC 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**

NYSDEC 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 NYSDEC 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=C224392>

Pacific Library  
25 Fourth Avenue at Pacific Street  
Brooklyn, NY 11217  
Phone: (718) 638-1531

Brooklyn Community Board 6  
250 Baltic Street  
Brooklyn, NY 11201  
Phone: (718) 643-3027

### **Receive Site Citizen Participation Information By Email**

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

### **SECTION 3: SITE DESCRIPTION AND HISTORY**

**Location:** The 0.86-acre site is located at 601-607 Union Street, Brooklyn, NY and is identified as Block 440, Lot 1 and 12 on the New York City Tax Map. The site is in a mixed-use commercial and residential neighborhood. The site is bounded to the north by Sackett Street, followed by commercial and industrial warehouses; to the south by Union Street, followed by mixed residential, commercial, and industrial uses (i.e., auto repair shop); to the east by an eight-story commercial building; and to the west by Third Avenue, followed by a new nine-story mixed residential and commercial use building and additional commercial and mixed-use buildings.

**Site Features:** Lot 1 of the site is currently vacant. The above grade portion of the building was recently demolished. The concrete slab and portion of the cellar remain in place. Lot 12 has no on-site structure and is entirely paved for vehicle parking and storage. The entire site is secured with fencing and gated entrances.

**Current Zoning and Land Use:** The site is zoned M1-4/R7A (manufacturing district with residential overlay). The current use of the site is commercial/manufacturing only. The current zoning allows residential, community and commercial/manufacturing and use.

**Past Use of the Site:** Based upon the historic Sanborn Maps and City Directory Records, Lot 1 was developed with a lumber yard with several 1- and 2-story lumber sheds in the western portion as early as 1906. The development remained the same on this lot till 1950s when the existing building was constructed and operated as auto repair/service station for trucks and buses. These uses continued until recently.

Lot 12 was developed with four 4-story residential buildings in the southern portion prior to 1906. The residential buildings were likely demolished between 1926 and 1951, and a 1-story office building was mapped in the eastern half of the lot. The lot became vacant with no development prior to 1970s and started being used for truck parking in the early 2000s.

**Site Geology and Hydrology:** The ground surface elevation at the site ranges from approximately 18.55 feet in the southwest portion to 20.09 feet in the central portion (in reference to North American Vertical Datum 1988). Based on the findings of the Remedial Investigation (RI), a historic urban fill layer extending to a maximum of 15 feet below grade surface (ft bgs) was identified across most of the site. The fill material predominantly consists of brick, concrete, and miscellaneous debris underlain by silty sand with varying amounts of fine- to coarse-grained gravel. The underlying soil generally consists of medium-dense silty sand with trace to some gravel and clay. Saturated conditions were observed at approximately 12 to 13 ft bgs underlain by medium-dense silty sand with some gravel from 15 feet to 21 ft bgs, followed by intervals of lean clay, gravel, and organics.

Groundwater elevation beneath the site ranged from approximately 4.55 to 6.78 feet (NAVD88) and flows generally towards the north-northwest. Regional groundwater flow is anticipated to be generally west-southwest towards the Gowanus Canal located approximately 900 feet west of the Site.

According to the United States Fish & Wildlife Service National Wetlands Inventory and the NYSDEC regulated wetlands map, there are no wetlands at or adjacent to the Site.

A site location map is attached as Figure 1.

#### **SECTION 4: LAND USE AND PHYSICAL SETTING**

NYSDEC 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 RI to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

#### **SECTION 5: ENFORCEMENT STATUS**

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Applicant does not have an obligation to address off-site contamination. However, NYSDEC 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
- sub-slab vapor
- indoor air

### **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. NYSDEC 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 contaminants of concern identified at this site are:

barium	benzo(a)pyrene
lead	benzo(b)fluoranthene
mercury	benzo(k)fluoranthene
arsenic	chrysene
nickel	indeno(1,2,3-cd)pyrene
tetrachloroethene (PCE)	perfluorooctane sulfonic acid (PFOS)
trichloroethene (TCE)	perfluorooctanoic acid (PFOA)
cis-1,2-dichloroethene	1, 4-dioxane
benzo(a)anthracene	benzene

The contaminants of concern exceed the applicable SCGs for:

- soil
- groundwater

## **6.2: Interim Remedial Measures**

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

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

## **6.3: Summary of Environmental Assessment**

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

### **Nature and Extent of Contamination:**

A site wide and off-site investigation was conducted to delineate contamination in soil, groundwater, and soil vapor. Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), and pesticides. Soil vapor, sub-slab soil vapor, and indoor air were analyzed for VOCs. Based upon the investigations conducted to date, the primary contaminants of concern at the site are metals and SVOCs in soil, petroleum and chlorinated related VOCs and SVOCs in groundwater and in soil vapor.

**Soil:** Soil results were compared to the restricted residential soil cleanup objectives (RRSCOs) or protection of groundwater soil cleanup objectives (PGSCOs), as applicable. Several SVOCs exceed their applicable RRSCOs, including benz(a)anthracene up to 40 parts per million, or ppm (RRSCO is 1.4 ppm, PGSCO is 1.0 ppm); benzo(a)pyrene up to 54.8 ppm (RRSCO is 1 ppm); benzo(b)fluoranthene up to 21.7 ppm (RRSCO is 1.4 ppm); chrysene up to 43 ppm (RRSCO is

4.9 ppm; PGSCO is 1 ppm); indeno(1,2,3-cd) pyrene up to 24.9 ppm (RRSCO is 1.4 ppm); benzo(k)fluoranthene up to 28.2 ppm (RRSCO is 4.9 ppm).

Several metals were detected at concentrations exceeding RRSCOs including lead up to 10,000 ppm (RRSCO is 400 ppm); barium up to 4,910 ppm (RRSCO is 410 ppm); mercury up to 12 ppm (RRSCO is 0.30), nickel up to 451 ppm (RRSCO is 320 ppm), arsenic up to 106 ppm (RRSCO is 16 ppm).

No VOCs, PCBs PFAS, or pesticides were detected at concentration that exceeded their respective RRSCOs. Data does not indicate any off-site impacts in soil related to the site.

**Groundwater:** Groundwater data was compared to Ambient Water Quality Standards and Guidance Values (AWQSGVs). Petroleum related VOCs such as benzene was detected at 1.7 parts per billion, or ppb (AWQSGV is 1.7 ppb). SVOCs detected include benz(a)anthracene up to 0.55 ppb (AWQSGV is 0.002 ppb); benzo(a)pyrene up to 0.93 ppb (AWQS is 0.002 ppb); benzo(b)fluoranthene up to 1.2 ppb (AWQS is 0.002 ppb); and chrysene up to 0.92 (AWQS is 0.002 ppb). Chlorinated related VOCs were detected including cis-1,2-dichloroethene up to 29 ppb (AWQS is 5 ppb); PCE up to 22 ppb (AWQS is 5 ppb); TCE at 10 ppb (AWQS is 5 ppb). Perfluorooctanoic acid (PFOA) was detected up to 57.3 parts per trillion (ppt) (AWQS is 6.7 ppt); PFOS was detected in groundwater samples at a maximum concentration of 29.2 ppt (AWQS is 2.7 ppt).

No metals, PCBs, or pesticides were detected at concentrations that exceed their respective AWQSGVs. Data does not indicate any off-site impacts in groundwater related to the site.

**Soil Vapor, Sub-Slab Soil Vapor, and Indoor Air:** Petroleum-related VOCs that were detected in soil vapor samples include benzene up to 56.2 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ); toluene up to 37  $\mu\text{g}/\text{m}^3$ ; ethylbenzene up to 21.6  $\mu\text{g}/\text{m}^3$ ; and total xylenes up to 64.7  $\mu\text{g}/\text{m}^3$ ; 2,2,4-trimethylpentane detected at 4,500  $\mu\text{g}/\text{m}^3$ . Chlorinated VOCs included PCE at 46.8  $\mu\text{g}/\text{m}^3$ .

Additionally, one indoor air and sub-slab vapor samples were collected from the former on-site building. PCE was detected in the indoor air sample at 0.746  $\mu\text{g}/\text{m}^3$  and at 27.7  $\mu\text{g}/\text{m}^3$  in the co-located sub-slab vapor samples. TCE was detected in the indoor air sample at 0.193  $\mu\text{g}/\text{m}^3$  and at 1.07  $\mu\text{g}/\text{m}^3$  in the co-located sub-slab vapor sample.

Data does not indicate any off-site impacts in soil vapor related to the 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*.

People are not expected to come in contact with contaminated soil or groundwater on-site because the site is fenced, vacant and covered with concrete and pavement. People are not drinking contaminated groundwater because the area is served by public water 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. Soil vapor intrusion does not represent a concern on this site in its current condition, as there are no occupied structures. However, the potential exists for inhalation of site contaminants due to soil vapor intrusion for any future on-site development. In addition, environmental sampling indicates soil vapor intrusion from site contamination is not a concern for off-site buildings.

## **6.5: Summary of the Remediation Objectives**

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

The remedial action objectives for this site are:

### **Groundwater**

#### **RAOs for Public Health Protection**

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

#### **RAOs for Environmental Protection**

- Remove the source of ground 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 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 2 remedy.

The selected remedy is referred to as the Soil Excavation, Backfill, Groundwater Extraction and Treatment, and Soil Vapor Intrusion Evaluation remedy.

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

### **1. Remedial Design**

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

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise<sup>TM</sup> (available in the Sustainable Remediation Forum [SURF] library) or similar

NYSDEC accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

## **2. Excavation**

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

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- soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and
- Excavation and removal of one 550-gallon and one 3,000- gallon above ground storage tanks (AST), and any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

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

Approximately 20,865 cubic yards of contaminated soil will be removed from the site. Collection and analysis of documentation 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 NYSDEC, submit the sample results and, in consultation with NYSDEC, 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.

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### **3. Backfill**

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### **4. Groundwater Extraction and Treatment**

Groundwater extraction and treatment will be implemented to facilitate remedial excavation and to treat contaminants in groundwater. The groundwater extraction system will be designed and installed so that the capture zone is sufficient to cover the area and vertical extent of the area of concern. The extraction system will create a depression of the water table so that contaminated groundwater is directed toward the extraction wells within the plume area. Further details of the extraction system will be determined during the remedial design.

The extracted groundwater will be treated using One 5,000-gallon settling tank with transfer pump and duplex 2-bag filter skids connected to two 1,000 pound carbon vessels, which will then discharge to a DEP permitted discharge location. Approximately 21 sumps well locations are proposed, two will be located within the two elevator pit excavations (4 sump well points total) and 17 sumps well points will be installed in an even distribution across the remainder of the Site. Pre- and post-dewatering monitoring will be conducted at two monitoring wells downgradient of the site.

#### Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. 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 NYSDEC 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; and
- Require compliance with the NYSDEC 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 remedy element 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 groundwater use restriction;
  - 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;
  - Provisions for the management and inspection of the identified engineering controls;
  - Maintaining site access controls and NYSDEC 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 to assess the performance and effectiveness of the remedy;
    - A schedule of monitoring and frequency of submittals to the NYSDEC;
    - Monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.



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Legend:  
 BCP SITE BOUNDARY

Notes:  
 1. BASE MAP PROVIDED BY GOOGLE MAPS







Figure No.	1
Figure Name:	SITE PLAN
Report:	RAWP
Date:	4/23/2026
Drawn By:	KB
Site Address:	601-607 UNION STREET BROOKLYN, NY (C224392)

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### Legend:

-  BCP SITE BOUNDARY
-  EXCAVATION TO 15 FEET TAX LOT
-  BOUNDARY
-  MONITORING WELL LOCATIONS AND ID

### Notes:

1. Groundwater extraction and treatment (dewatering) will be implemented as a remedial element under Track 2 remedy.
2. A pre-dewatering and post-dewatering monitoring will be conducted at B8W and 26MW-1.

### Scale:

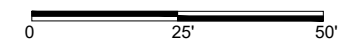


Figure No. 2

Figure Name: TRACK 2 CLEANUP PLAN

Report: RAWP

Date: 4/23/2026

Drawn By: KB

Site Address: 601-607 UNION STREET  
BROOKLYN, NY (C224392)

