DECISION DOCUMENT

Rego Park Center III
Brownfield Cleanup Program
Rego Park, Queens County
Site No. C241259
March 2023

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

DECLARATION STATEMENT - DECISION DOCUMENT

Rego Park Center III
Brownfield Cleanup Program
Rego Park, Queens County
Site No. C241259
March 2023

Statement of Purpose and Basis

This document presents the remedy for the Rego Park Center III 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 Rego Park Center III site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design:

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

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

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

2. Excavation

Excavation and off-site disposal of all on-site soils which exceed restricted-residential use SCOs (RRSCOs) as defined by 6 NYCRR Part 375-6.8 to depths ranging from 2 to 15 feet below grade in the Track 2 area of the site, and to a depth of 2 feet below grade in the Track 4 area of the site.

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

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u); and
- soil exceeding the 6 NYCRR Part 371 hazardous criteria for lead;

Contaminant source soils will be excavated from a depth of one to five feet from a location in the Track 4 area of the site exhibiting nuisance petroleum conditions (e.g., visual, olfactory). Contaminant source soils will be excavated to depths ranging between five and fifteen feet from two isolated locations in the Track 2 area of the site and depths ranging from nine to fifteen feet from two isolated areas of the Track 4 area of the site with lead concentrations over the 6 NYCRR Part 371 hazardous criteria for lead.

The estimated total volume of soil requiring removal and off-site disposal is 48,000 cubic yards from the Track 2 area of the site and 3,000 cubic yards from the Track 4 area of the site. Excavation will include the removal of any encountered underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination in accordance with DER-10, 6 NYCRR Part 613.9, NYSDEC CP-51, and other applicable NYSDEC UST closure requirements.

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, 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.

3. Backfill

Clean fill 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. Cover System

A site cover will be required for the Track 4 portion of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs), to allow for future restricted residential use of the site. Where a soil cover is to be used it will be a minimum

of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

5. Institutional Controls

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, commercial, or industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and
- require compliance with the Department approved Site Management Plan.

7. Site Management Plan

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

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in remedy element 5 above.
Engineering Controls: The Cover System for the Track 4 portion of the site discussed in remedy element 4 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 and groundwater use restrictions;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provisions 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 Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

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

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.

March 16, 2023

Date

Jane H. O'Connell
Regional Remediation Engineer
Region 2

DECISION DOCUMENT

Rego Park Center III
Rego Park, Queens County
Site No. C241259
March 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=C241259

Queens Community Board 6
104-01 Metropolitan Ave.
Forest Hills, NY 11375
Phone: (718) 623-9250

Queens Public Library at Rego Park
91-41 63rd Drive,
Rego Park, NY 11374
Phone: (718) 459-5140

Receive Site Citizen Participation Information By Email

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

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is located at 93-30 93rd Street within an urban area of the Rego Park, neighborhood of Queens, NY. The site is currently identified as Block 2076, Lot 50. The site is bounded by the Horace Harding Expressway to the north, Junction Boulevard to the east, 62nd Avenue to the south, and 93rd Street to the west.

Site Features: The approximately 3.20-acre site is comprised of an asphalt paved private parking lot. The topography of the site and surrounding area is generally level, with a slight topographic gradient downward towards the east.

Current Zoning and Land Use: The site is located in a mixed-used residential and commercial district (R8/C2-2). Zoning is consistent with the proposed mixed-use development.

Land use within a half-mile radius is urban and includes primarily commercial and industrial, but also includes residential buildings, public parks, day care centers, and schools. The nearest ecological receptor is Meadow Lake, which is located about 1 mile to the east of the site.

Past Use of the Site: Historical Sanborn Fire Insurance Maps indicate that the site was vacant until at least 1931 with a creek (Horse Creek) transecting the central eastern portion of the site from west to east. From 1950 onward, the site was occupied by various commercial facilities including a gasoline filling station on the northwestern corner (1950), a commercial trucking and private parking lot (1981 to present) and a vehicle repair shop (1995) on the northeastern corner. Evidence of commercial truck repair operations was documented near the former one-story vehicle repair shop in 2002. A geophysical survey in 2004 identified potential underground storage tanks (USTs) associated with the former automotive repair facility.

Site Geology and Hydrogeology: Based on remedial investigation observations, site soils generally consist of historic fill predominantly characterized as dark brown to grey, fine- to coarse-grained sand and gravel with some silt, brick, glass, concrete and wood fragments. Fill

was observed from surface grade to between 15 feet and 20 feet below grade surface (bgs). A silt layer with peat and or fine sand was identified below the historic fill. An underlying organic peat layer with sand and clay is present below the historic fill extending to between 23 and 32 feet bgs, except on the southwestern portion of the site. Bedrock was not encountered during the investigation and is anticipated to be present at depths of over 100 feet bgs. Groundwater was encountered at depths ranging from about 9.96 to 11.13 feet bgs across the site. Based on the survey readings, groundwater flows towards northeast.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives 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) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Participant. The Applicant has an obligation to address on-site and off-site contamination. Accordingly, no enforcement actions are necessary. However, the Department has determined that the site does not pose a significant threat to public health of 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:

benzo(a)anthracene	cadmium
benzo(a)pyrene	copper
benzo(b)fluoranthene	lead
chrysene	mercury
dibenz[a,h]anthracene	zinc
indeno(1,2,3-cd)pyrene	chlorobenzene
barium	vinyl chloride

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: 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), pesticides, and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. Based upon the investigations conducted to date, the primary contaminants of concern for the site are SVOCs and metals in soil and VOCs in soil vapor.

Soil - Soil data were compared to Restricted-Residential Soil Cleanup Objectives (RRSCOs). Contaminants of concern in soil include SVOCs and metals attributed to historic fill.

The depth of SVOCs above RRSCOs in soil ranged from two to fifteen feet throughout the site. The following SVOCs exceeded RRSCOs in site soils: benzo(a)anthracene up to 12 parts per million (ppm) (RRSCO is 1 ppm), benzo(a)pyrene up to 12 ppm (RRSCO is 1 ppm), benzo(b)fluoranthene up to 16 ppm (RRSCO is 1 ppm), chrysene up to 13 ppm (RRSCO is 3.9 ppm), dibenzo(a,h)anthracene up to 1.7 ppm (RRSCO is 0.33 ppm), and indeno(1,2,3-cd)pyrene up to 8.8 ppm (RRSCO is 0.5 ppm).

Seven metals were detected at concentrations above the RRSCOs in site soils including arsenic up to 39.8 ppm (RRSCO of 16 ppm), barium up to 1,340 ppm (RRSCO of 400 ppm), cadmium up to 11.1 ppm (RRSCO of 4.3 ppm), copper up to 1,760 ppm (RRSCO of 270 ppm), lead up to 10,100 ppm (RRSCO of 400 ppm), mercury up to 2.37 ppm (RRSCO of 0.81 ppm) and zinc up to 37,100 ppm (RRSCO of 10,000 ppm). The highest metals concentrations in soils were generally encountered in samples collected between 13 and 15 feet bgs.

In addition, four isolated areas of the site exhibited lead at concentrations exceeding the 6 NYCRR Part 371 hazardous criteria of 5 milligrams per liter (5 mg/l) by Toxicity Characteristic Leaching Protocol (TCLP) analysis.

No VOCs, PCBs, pesticides or 1,4-dioxane were detected at concentrations exceeding RRSCOs. No PFAS compounds were detected at concentrations exceeding the restricted residential guidance values.

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

Groundwater - One VOC, chlorobenzene, was detected at a concentration of 31 parts per billion (ppb), which exceeds its ambient water quality standard (AWQS) of 5 ppb. Several SVOCs were detected in groundwater samples throughout the site, including acenaphthene at 58 ppb (AWQS 1 ppb), benzo(a)anthracene at 0.45 ppb (AWQS 0.002 ppb), benzo(a)pyrene at 0.15 ppb (AWQS 0.002 ppb), benzo(b)fluoranthene at 0.22 ppb (AWQS 0.002 ppb), benzo(k)fluoranthene at 0.08 ppb at 0.1 ppb (AWQS 0.002 ppb), chrysene at 0.32 ppb (AWQS 0.002 ppb), and indeno(1,2,3-cd)pyrene at 0.1 ppb (AWQS 0.002 ppb). Although SVOCs are present in both site soils and groundwater, it is unlikely SVOCs in site soils are impacting groundwater. SVOCs in groundwater are likely due to entrained sediments in groundwater samples.

Groundwater samples contained dissolved metals at concentrations above their respective AWQS, including barium at concentrations up to 4,516 ppb (AWQS 1,000 ppb), lead at concentrations of up to 34.5 ppb (AWQS 25 ppb), and manganese at concentrations of up to 1,686 ppb (AWQS 300 ppb). Barium and manganese were not present in site soils at concentrations that would result in groundwater exceedances. Lead in dissolved groundwater at one location slightly above the AWQS may be attributable to the presence of high lead levels in site soils. However, high lead levels in soil were not present in the area of the site near the AWQS exceedance for dissolved lead in groundwater.

Perfluorooctanoic acid (PFOA) was detected in groundwater samples at a maximum concentration of 48.3 parts per trillion (ppt), which exceeds the maximum contaminant level (MCL, or drinking water standard) of 10 parts per trillion (ppt). Perfluorooctanesulfonic acid (PFOS) was detected at a maximum concentration of 51.4 ppt (MCL is 10 ppt).

PCBs, pesticides, and 1,4-dioxane were not detected in groundwater above AWQSs.

Data does not indicate any off-site impacts in groundwater related to the site.

Soil Vapor: Thirteen soil vapor samples and one ambient air sample were collected from the site and analyzed for VOCs. Several petroleum related VOCs as well as two chlorinated VOCs (CVOCs) were detected in soil vapor samples. CVOC concentrations in soil vapor for cis-1,2-dichloroethene ranged from 1.78 micrograms per cubic meter (ug/m3) to 2.93 ug/m3 and for vinyl chloride ranged from 26.6 ug/m3 to 43.2 ug/m3. The petroleum-related VOCs in soil vapor detected throughout the site. Highest benzene concentration was detected at 52.7 ug/m3, toluene at 16.6 ug/m3, ethylbenzene at 7.73 ug/m3 and total xylene at 83.4 ug/m3. One vapor sample from central portion of the site, also contained cyclohexane at a concentration of 2,280 ug/m3. Total VOC concentrations in soil vapor samples ranged from about 136.7 ug/m3 to 3,416.9 ug/m3 in. The total VOC concentration in the ambient air sample was 40.7 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.*

Direct contact with contaminants in soil is unlikely because the majority of the site is covered with asphalt pavement. 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. Because there is no on-site building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for future buildings. In addition, environmental sampling indicates soil vapor intrusion 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 chosen 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 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 Multiple Cleanup Tracks remedy. A Track 2 restricted-residential cleanup will be implemented for majority of the site, and a Track 4 restricted-residential cleanup will be implemented for the southeast corner of the site and portions of the site along the northern, eastern, and southern site boundaries.

The selected remedy is referred to as the Excavation, Cover System and 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 will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

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3. Backfill

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Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

5. Institutional Controls

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, commercial, or industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and
- require compliance with the Department approved Site Management Plan.

7. Site Management Plan

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

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in remedy element 5 above.
Engineering Controls: The Cover System for the Track 4 portion of the site discussed in remedy element 4 above.

This plan includes, but may not be limited to:

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- descriptions of the provisions of the environmental easement including any land and groundwater use restrictions;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provisions 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 Department notification; and

- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

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