DECISION DOCUMENT

68-19 Rego Park LLC
Brownfield Cleanup Program
Queens, Queens County
Site No. C241258
April 2022

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

DECLARATION STATEMENT - DECISION DOCUMENT

68-19 Rego Park LLC
Brownfield Cleanup Program
Queens, Queens County
Site No. C241258
April 2022

Statement of Purpose and Basis

This document presents the remedy for the 68-19 Rego Park LLC site a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the 68-19 Rego Park LLC 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 residential use SCOs, as defined by 6 NYCRR Part 375-6.8 in the upper 15 feet and the removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination. Approximately 8,300 cubic yards of material will be removed from the site. Depth of excavation varies from 6 to 11 feet throughout the site. The existing on-site buildings 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.

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. Vapor Intrusion Evaluation

As part of the track 2 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.

5. Local Institutional Controls

If no Environmental Easement or Site Management Plan 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 NYCDOH code, which prohibits potable use of groundwater without prior approval.

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.

April 28, 2022

Date

Gerard Burke, Director
Remedial Bureau B

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Queens, Queens County
Site No. C241258
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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=C241258

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

Queens Community Board 6
Attn: Joseph Hennessy
104-01 Metropolitan Avenue
Forest Hills, NY 11375
Phone: (718) 263-9250

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 68-19 Rego Park LLC site is 0.588 acres in size and is located in the Rego Park neighborhood of Queens, New York. The site is surrounded by a mix of commercial, industrial and residential buildings. The site is located on the northeast corner of Woodhaven Blvd. and 68th Road.

Site Features: The property currently has two separate buildings which are unoccupied. A florist was located in a one-story building on the corner of Woodhaven Blvd. and 68th Road. This portion of the site includes the one-story building and an asphalt covered area for plant sales and storage. The second building is a large warehouse that is used as an auto repair shop. This building has a small cellar that formerly housed an aboveground storage tank (AST) before the building was converted to a natural gas heating system.

Current Zoning and Land Use: The subject property is zoned R4 and C81, low density residential with a commercial component for the auto repair shop.

Past Uses of the Site: Starting circa 1932, the site was developed with two buildings, a fireplace manufacturer and a burial vault manufacturer. Circa 1950 the buildings were modified with an additional structure added connecting the two buildings. By 1972, paint storage and auto repair were noted in the historical record as property uses. In 1981, the entire site was occupied by an auto repair facility with a storage yard and garage. In 1986, the western portion of the property became a plant nursery.

The past uses of manufacturing and auto repair shop have likely contributed to the on-site contamination.

Site Geology and Hydrogeology: The subsurface soil generally consisted of historic fill material (fine-to-coarse grained sand and silt mixed with gravel, cobbles and brick) to depths ranging

from six (6) to ten (10) feet bgs, underlain by native undisturbed brown silty clay which extended to depths of twenty (20) to twenty-five (25) feet bgs, at which depth native silty sands with gravel was encountered. Depth of groundwater at the site is 25-27 feet bgs. The direction of groundwater flow is northeasterly.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to residential use (which allows for restricted-residential use, 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 Volunteer. The Applicant does 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
- 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. 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	copper
benzo(a)pyrene	benzo(k)fluoranthene
benzo(b)fluoranthene	chrysene
indeno(1,2,3-cd)pyrene	dibenz[a,h]anthracene

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

- 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.

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) and pesticides. 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.

Soil - Soil data were compared to Residential Use Soil Cleanup Objectives (RUSCOs). Contaminants of concern in soil include SVOCs and metals attributed to historic fill. The following SVOCs exceeded RUSCOs in site soils: benzo(a)anthracene up to 17.9 parts per million (ppm) (RUSCO is 1 ppm), benzo(a)pyrene up to 15.3 ppm (RUSCO is 1 ppm), benzo(b)fluoranthene up to 14.7 ppm (RUSCO is 1 ppm), benzo(k)fluoranthene up to 12.4 ppm (RUSCO is 1 ppm), chrysene up to 16.5 ppm (RUSCO is 1 ppm), dibenzo(a,h)anthracene up to 3.27 ppm (RUSCO is 0.33 ppm), and indeno(1,2,3-cd)pyrene up to 10 ppm (RUSCO is 0.5 ppm).

For metals, only copper was detected above RUSCOs at a maximum concentration of 444 ppm exceeding the RUSCO of 270 ppm.

PCBs were detected in one soil sample taken at shallow depth with a concentration of 4.15 ppm (RUSCO is 1 ppm). Perfluorooctanesulfonic acid (PFOS) was detected in two locations at a maximum concentration of 4.86 parts per billion (ppb) in near surface soil which exceeds the protection of groundwater guidance value of 3.7 ppb but does not exceed the residential guidance value of 8.8 ppb. Data does not indicate any off-site impacts in soil related to this site.

Groundwater - The following VOCs were detected in on-site groundwater exceeding Class GA Ambient Water Quality Standards (AWQS) in one monitoring well: 1,2,4-trimethylbenzene at a concentration of 5.27 parts per billion (ppb) (AWQS is 5 ppb), chloroform at a concentration of 24.7 ppb (AWQS is 7 ppb), ethylbenzene at a concentration of 11 ppb (AWQS is 5 ppb), and styrene at a concentration of 7.95 ppb (AWQS is 5 ppb). Low levels of SVOCs were detected in groundwater in several on-site monitoring wells. However, only the SVOCs 3- & 4-methylphenols and phenol were reported at concentrations above their AWQSs (1 ppb for both) with concentrations of 15.7 ppb and 14.7 ppb respectively.

Several metals including arsenic, barium, chromium, copper, lead, magnesium, manganese, nickel, selenium, and sodium were detected in groundwater samples collected from the site. The metals arsenic, barium, chromium, copper, lead, nickel, and selenium were detected in total (non-filtered) groundwater samples and are likely reflective of small amounts of these compounds in soil particles which could not be segregated from groundwater samples, and not

actual impacts to groundwater. The metals manganese, magnesium and sodium were present in dissolved phase (filtered) groundwater samples. These metals are commonly associated with naturally occurring hydrogeologic conditions and/or road salt applications.

Perfluorooctanesulfonic acid (PFOS) was detected in site groundwater at a maximum concentration of 106 parts per trillion (ppt) exceeding the maximum contaminant level (MCL) of 10 ppt. Perfluorooctanoic acid (PFOA) was also detected above its MCL of 10 ppt at a concentration of 39.5 ppt. No other individual PFAS were detected in groundwater at or above the 100 ppt screening level. PFOA concentrations in groundwater are approximately the same throughout the site. PFOS concentrations in groundwater increase from upgradient site monitoring wells to down gradient site monitoring wells. Groundwater is present at the site at depths greater than 25 feet, therefore it is unlikely that near surface soil impacted by PFOS is impacting groundwater.

No pesticides, herbicides, PCBs, or 1,4-dioxane were detected above the AWQS in groundwater. Data does not indicate any off-site impacts in groundwater related to this site.

Soil Vapor, Indoor Air, Outdoor Air - Chlorinated VOCs (CVOCs) as well as petroleum related VOCs were detected in several soil vapor samples. The maximum concentration of CVOCs detected in soil vapor were tetrachloroethylene (PCE) at 50 microgram per meter cube (ug/m3), 1,1,1-trichloroethane (1,1,1-TCA) at 28 ug/m3, and methylene chloride at 47 ug/m3. The maximum concentration of petroleum related VOCs in soil vapor were benzene at 14 ug/m3, n-heptane at 77 ug/m3, and n-hexane at 70,000 ug/m3. The CVOC methylene chloride was detected in indoor air at a concentration of 11 ug/m3; however, a similar concentration of methylene chloride was detected in an outdoor air sample.

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 the soil is unlikely because the majority of the site is covered with buildings and 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 structures 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 structures, is referred to as soil vapor intrusion. Because the site is vacant, 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, environmental sampling indicates that soil vapor intrusion may present a concern for any on-site redevelopment and occupancy. Environmental sampling indicates that vapor intrusion in not a concern for other off-site structures.

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.

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.

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: Restricted use with generic soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation 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.

2. Excavation

Excavation and off-site disposal of all on-site soils which exceed residential use SCOs, as defined by 6 NYCRR Part 375-6.8 in the upper 15 feet and the removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination. Approximately 8,300 cubic yards of material will be removed from the site. Depth of excavation varies from 6 to 11 feet throughout the site. The existing on-site buildings will be demolished and materials which can not be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

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.

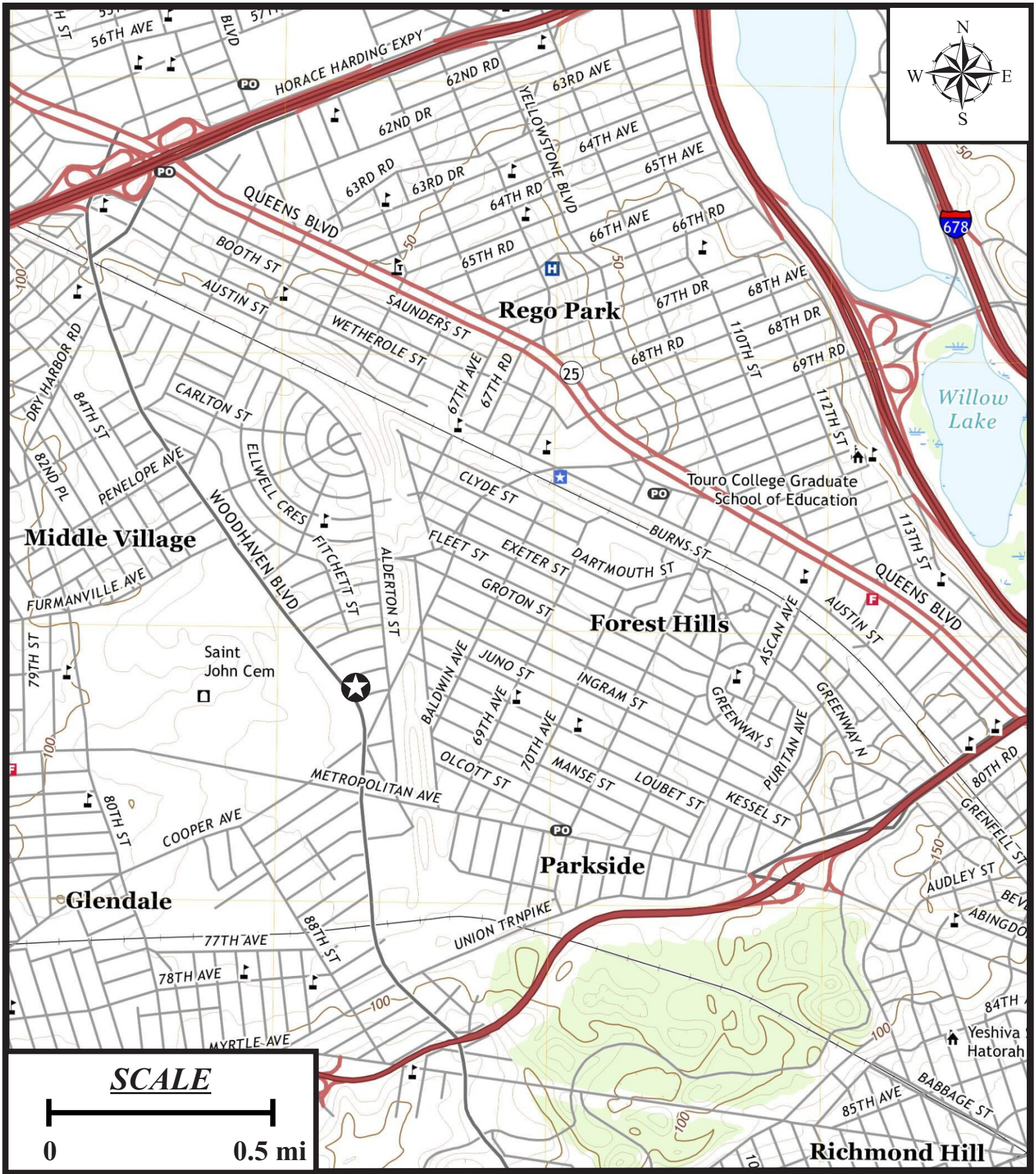
4. Vapor Intrusion Evaluation

As part of the track 2 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.

5. Local Institutional Controls

If no Environmental Easement or Site Management Plan 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 NYCDOH code, which prohibits potable use of groundwater without prior approval.



PREFERRED ENVIRONMENTAL SERVICES

323 Merrick Avenue - North Merrick, New York 11566
Tel: (516) 546-1100 Fax : (516) 213-8156

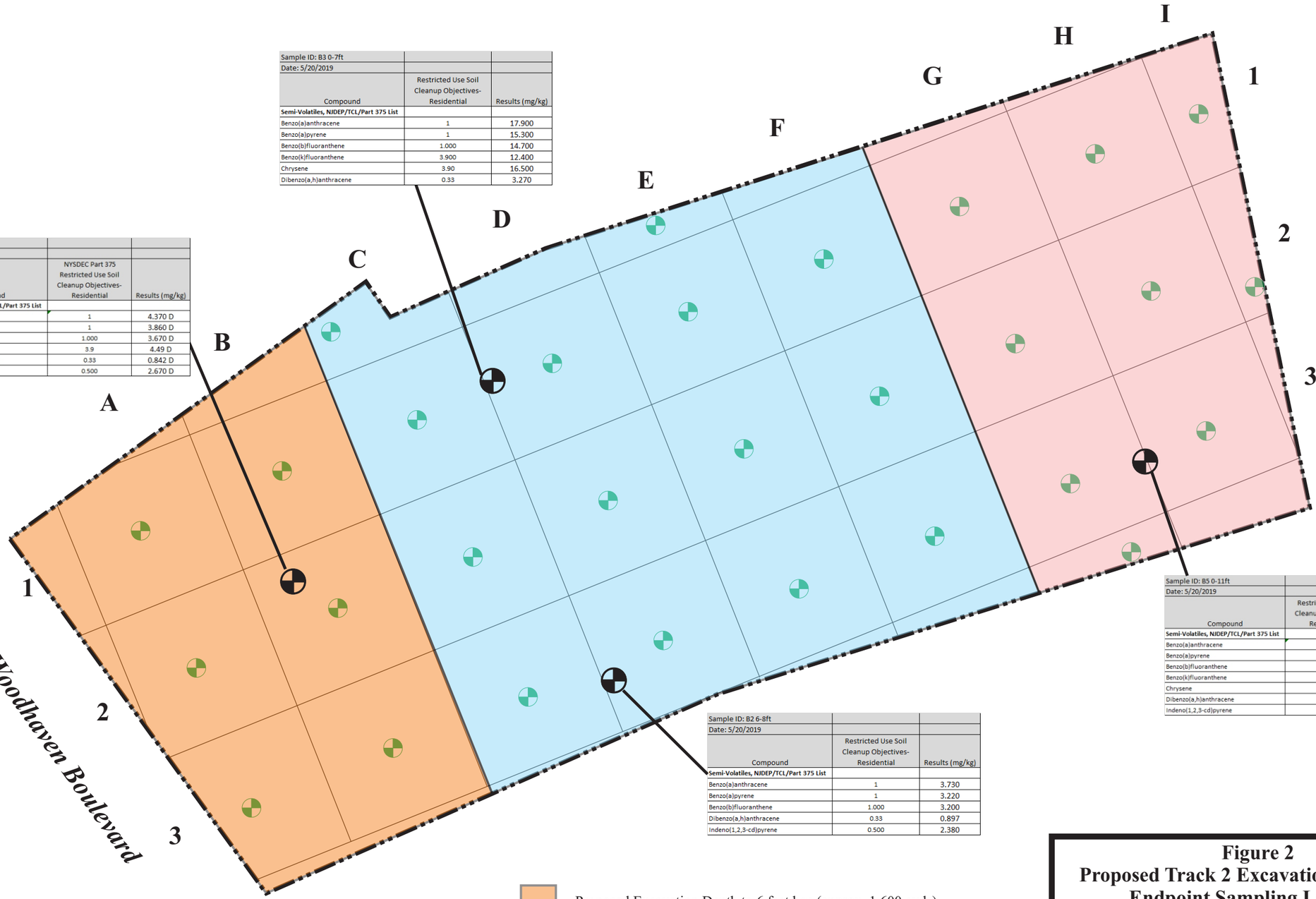
Figure 1 - Site Location Map

-Approximate Location of Subject Property

Source: United States Geologic Survey Jamaica Quadrangle

Site: 68-19 Rego Park LLC
68-19 Woodhaven Blvd.
Rego Park, New York
C241258

Date: April 2022



Sample ID: B9 0-6ft		
Date: 3/2/2021		
Compound	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Residential	Results (mg/kg)
Semi-Volatiles, NJDEP/TCL/Part 375 List		
Benzo(a)anthracene	1	4.370 D
Benzo(a)pyrene	1	3.860 D
Benzo(b)fluoranthene	1.000	3.670 D
Chrysene	3.9	4.49 D
Dibenzo(a,h)anthracene	0.33	0.842 D
Indeno(1,2,3-cd)pyrene	0.500	2.670 D

Sample ID: B3 0-7ft		
Date: 5/20/2019		
Compound	Restricted Use Soil Cleanup Objectives-Residential	Results (mg/kg)
Semi-Volatiles, NJDEP/TCL/Part 375 List		
Benzo(a)anthracene	1	17.900
Benzo(a)pyrene	1	15.300
Benzo(b)fluoranthene	1.000	14.700
Benzo(k)fluoranthene	3.900	12.400
Chrysene	3.90	16.500
Dibenzo(a,h)anthracene	0.33	3.270

Sample ID: B5 0-11ft		
Date: 5/20/2019		
Compound	Restricted Use Soil Cleanup Objectives-Residential	Results (mg/kg)
Semi-Volatiles, NJDEP/TCL/Part 375 List		
Benzo(a)anthracene	1	12.300
Benzo(a)pyrene	1	12
Benzo(b)fluoranthene	1.000	10.100
Benzo(k)fluoranthene	3.900	10.100
Chrysene	3.9	10.400
Dibenzo(a,h)anthracene	0.33	3.140
Indeno(1,2,3-cd)pyrene	0.500	7.560

Sample ID: B2 6-8ft		
Date: 5/20/2019		
Compound	Restricted Use Soil Cleanup Objectives-Residential	Results (mg/kg)
Semi-Volatiles, NJDEP/TCL/Part 375 List		
Benzo(a)anthracene	1	3.730
Benzo(a)pyrene	1	3.220
Benzo(b)fluoranthene	1.000	3.200
Dibenzo(a,h)anthracene	0.33	0.897
Indeno(1,2,3-cd)pyrene	0.500	2.380

- Proposed Excavation Depth to 6 feet bgs (approx. 1,600 cyds)

- Proposed Excavation Depth to 8 feet bgs (approx. 3700 cyds.)

- Proposed Excavation Depth to 11 feet bgs (approx. 3,000 cyds.)

SCALE

0 — 25 FT.

-Approximate Property Line

- Proposed Endpoint Sample Location

- 900 square foot grid areas

Figure 2
Proposed Track 2 Excavation Depths and Endpoint Sampling Locations

Site: 68-19 Rego Park LLC
68-19 Woodhaven Boulevard
Rego Park, New York

Date: April 2022

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