PROPOSED REMEDIAL ACTION PLAN

192 Ralph Avenue
Operable Unit Number 01: Off-site Remedial Program
State Superfund Project
Brooklyn, Kings County
Site No. 224042
February 2018

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

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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. Based on the findings of the investigation of the site the past disposal of hazardous wastes and hazardous material at the site does not pose a threat to public health and the environment. Therefore, the remedy proposed by this Proposed Remedial Action Plan (PRAP) is No Action with Continued Monitoring.

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

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents in the document repository identified below.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all PRAPs. This is an opportunity for public participation in the remedy selection process. The public is encouraged to review the reports and documents, which are available at the following repository:

Saratoga Library
8 Thomas S. Boyland St
Brooklyn, NY 11233
Phone: 718-573-5224

A public comment period has been set from:

2/23/2018 to 3/25/2018

A public meeting is scheduled for the following date:

3/20/2018 at 7:00 PM

Public meeting location:

P.S. 005 Ronald McNair School Auditorium
820 Hancock St.
Brooklyn

At the meeting, the findings of the remedial investigation (RI) will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP.

Written comments may also be sent through 3/28/2018 to:

Robert Filkins
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-
robert.filkins@dec.ny.gov

The Department may modify the proposed remedy presented in this PRAP based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein. Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

Receive Site Citizen Participation Information By Email

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

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is located in an urban area in the southeastern part of the Bedford Stuyvesant section of Brooklyn. The on-site portion (on-site) of the site (ID No. 224042) occupies 188 through 192 Ralph Avenue and is identified on the New York City Tax Map as Section 3, Block

1678, Lot 53.

Site Features: The main on-site feature is the existing three-story building on the property and an attached one-story addition with a basement at the rear (192 Ralph Avenue). The building structure is 20' x 80' occupying an area of approximately 0.037 acres. The on-site building is currently occupied.

Current Zoning/Use: The zoning for the off-site area near the dry cleaners that was the subject of the investigation is a mixture of Residential and Commercial (R6B) or Residential (R5B) 1 and 2 family.

Past Use of the Site: Dry-cleaning operations (wet chemical) were conducted on-site from approximately 1946 until 1998. The dry-cleaning operations took place in the 20 x 20 foot addition at the rear of the building with the equipment located on the first floor. It appears that the on-site contamination came from releases of process chemicals into the basement area of the one-story building addition, which at the time had a dirt floor in the basement allowing migration of contaminants into the underlying soils and groundwater.

On-site contamination was discovered in 2002 during an owner-initiated subsurface investigation within the basement area of the building. With the confirmation of waste disposal on-site the property owner entered the Department's Voluntary Cleanup Program (VCP) as a Volunteer in 2004. The VCP site is defined as the entire 80' x 20' on-site parcel. The State Superfund site is a 20' x 20' area at the southern end of the on-site parcel.

Operable Units: The site was divided into two operable units. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination. Operable Unit 2 (OU2) is the on-site source area. A Record of Decision, declaring a remedy for OU2, was signed on October 18, 2013.

Operable Unit 1, the subject of this document, is the off-site portion. The off-site area investigated runs along Ralph Ave. and the side streets one half a block east of Ralph Ave. from approximately MacDonough St. in the north, to Marion St. in the south. Going forward, the off-site portion will be identified as ID No. 224042A.

Site Geology and Hydrogeology: The general area geology is composed of outwash sand and gravel deposits. Locally, there are highly permeable fine to medium sands with some gravel. There appears to be a confining silt/clay layer of unknown thickness present in the site area around 60 to 70 feet below the ground surface. Groundwater is encountered at 35 to 40 feet below ground surface (~9 feet above sea level). The area groundwater flow is to the south/southeast.

A Record of Decision was issued previously for OU 02.

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 the off-site portion of this site, an alternative which allows for unrestricted use was evaluated.

A comparison of the results of the investigation against unrestricted use standards, criteria and guidance values (SCGs) for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

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

No PRPs have been documented to date.

Any PRPs identified would be subject to legal actions by the state for recovery of all response costs the state has incurred.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

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

The following general activities are conducted during an RI:

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

The analytical data collected during this off-site investigation 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. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified for the off-site Operable Unit at this site are:

tetrachloroethene (PCE)
trichloroethene (TCE)

Based on the investigation results, comparison to the SCGs, and an evaluation of potential public health and environmental exposure routes, no remediation is required for the off-site portion of this site. More complete information can be found in the RI Report and Exhibit A.

6.2: Interim Remedial Measures

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

There were no IRMs performed off-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.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 01.

Nature and Extent of Contamination: Based upon investigations conducted to date the only contaminant of concern on-site is the dry cleaning solvent PCE and its breakdown product, TCE. Therefore, off-site sampling was limited to VOC analysis only.

Chemical concentrations are reported in parts per billion (ppb) for water, soil samples are reported in parts per million (ppm) while air samples are reported in micrograms per cubic meter (ug/m3).

For OU 1: Off-Site Areas

The off-site investigation was conducted to determine if volatile organic compound (VOC) contamination from on-site had migrated off-site. Samples were only analyzed for VOCs. The area of investigation ran along Ralph Ave. and its side streets from approximately MacDonough St. in the north to Marion St. in the south.

Soil - 20 subsurface soil samples were taken at depths ranging from 34 to 62 feet below ground surface from 10 soil borings. None of the soil samples collected exceeded unrestricted Soil Cleanup Objectives (SCOs) for VOCs.

Groundwater - 14 monitoring wells and piezometers were installed and sampled during the investigation in three rounds between September 2012 and January 2017. During the most recent round of groundwater sampling, the 5 wells with the greatest historical concentrations of the contaminants, PCE and its breakdown products, were resampled. Groundwater samples from 4 of these 5 wells contained tetrachloroethene (PCE) at concentrations in excess of the groundwater standard for PCE of 5 ppb. The maximum concentration detected was 95 ppb. One well also exceeded the groundwater standard of 5 ppb for trichloroethene (TCE) with a concentration of 8 ppb.

Soil Vapor - 33 soil vapor samples were collected in three rounds of sampling between September 2012 and September 2013. PCE was detected in every sample, with concentrations ranging from 4.2 to 6,700 ug/m3. TCE was detected in 21 samples with concentrations ranging from 0.14 ug/m3 to 220 ug/m3. Other PCE degradation products were only present at concentrations below 1 ug/m3.

Indoor Air and Sub-slab Vapor - Access to conduct indoor air and sub-slab vapor sampling was gained in five off-site buildings in 2014. PCE was detected in the indoor air of one building at a concentration of 1.1 ug/m3. PCE was not detected in the indoor air of the four other buildings above the method reporting limit of 0.11 ug/m3. TCE and other degradation products were not detected in the indoor air of any buildings above their respective reporting limits (4.6 ug/m3 or less). Sub-slab vapor samples in three of the buildings contained PCE, with a maximum concentration of 1,300 ug/m3. TCE was detected in one sub-slab vapor sample at a concentration of 6.9 ug/m3. Overall, the following actions were identified as being warranted to address

exposures related to soil vapor intrusion: mitigation actions in one building, monitoring in one building, and no further actions at the remaining three buildings. The mitigation system offered by the state to one property owner was declined. A monitoring program for one building will be initiated with completion of the Site Management Plan.

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 will not come into contact with contaminated soils on the site since they are located at depth and beneath a building foundation. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into overlying buildings and affect 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. A soil vapor extraction system has been installed beneath the on-site building to prevent the indoor air quality from being affected by the contamination in soil vapor beneath the building. Environmental sampling indicates that soil vapor intrusion is a concern for off-site buildings and actions have been recommended at two buildings. Additional investigation is on-going; however, many nearby property owners have declined the Agencies' sampling offers.

6.5: Summary of the Remediation Objectives

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

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.

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: SUMMARY OF PROPOSED REMEDY

Based on the results of the investigation off-site and the evaluation presented here, the Department is proposing No Action with Continued Monitoring as the off-site remedy. The findings of the investigation of the off-site area indicate that the site poses a significant threat to human health or the environment. This remedy is effective in protecting human health and the environment and complies with the New York State standards, criteria, and guidance.

The No Action with Continued Monitoring remedy requires monitoring of off-site structures for soil vapor intrusion. The elements of the monitoring are as follows:

1. Soil Vapor Remediation

It is anticipated that the SVE system installed on-site will remove source material thus mitigating the potential for further off-site migration of contamination.

2. Institutional Controls

The following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the NYCDOH code that prohibits potable use of groundwater without prior approval.

3. 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 local use restriction discussed in paragraph 2 above.

This plan includes, but may not be limited to:

- a provision for evaluation of the potential for soil vapor intrusion for buildings in off-site areas of contamination, including provision to offer to implement actions recommended to address exposures related to soil vapor intrusion;

- a provision that should the owners of properties where sampling was previously declined request to have their properties sampled in the future, the NYSDEC, in consultation with the NYSDOH, shall assess the need for soil vapor intrusion sampling and take appropriate action;

- a provision that should the owners of properties where mitigation systems were previously declined request to have their properties mitigated in the future, the NYSDEC, in consultation with the NYSDOH, shall assess the need for soil vapor intrusion mitigation and take appropriate action;

- provisions for the management and inspection of the identified engineering controls; and the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls;

- provisions for the management and inspection of the identified engineering controls; 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, sub-slab vapor, indoor air, and groundwater to assess the performance and effectiveness of the remedy; and

- a schedule of monitoring and frequency of submittals to the Department; and

To ensure that future monitoring will be conducted and periodic review of the site continues, the off- site area of 192 Ralph Avenue will be identified as Site #224042A.

Exhibit A

Nature and Extent of Contamination

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

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The on-site investigation included sampling for VOCs, SVOCs, metals, pesticides and PCBs. Only VOCs were found to be of concern on-site. Therefore, off-site sampling was limited to VOC analysis only. For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Groundwater

Groundwater samples were collected from off-site overburden monitoring wells to assess groundwater conditions off-site. Collected sampled were analyzed for the presence of volatile organic compounds (VOCs). The January 2016 sampling results indicate that contamination in shallow groundwater downgradient of the site exceeds the SCGs for tetrachloroethene (PCE)e. (See Figure 2)

Table #1 - Groundwater

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Tetrachloroethene	1.6 - 95	5	4 of 5

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The only groundwater contaminant found to exceed SCGs in the most recent sampling event is tetrachloroethene. With the ongoing treatment of the on-site (laundry) source of contamination, concentrations of PCE and its breakdown products have been decreasing and are expected to continue to decrease over time. Therefore, no off-site groundwater remedy is required beyond continued monitoring.

Soil

A total of 20 subsurface soil samples from 10 soil borings were collected at the site during the RI. Subsurface soil samples were collected from a depth of 0-2 inches to assess direct human exposure. Subsurface soil samples were collected depths ranging from 34 to 62 feet below ground surface to assess soil contamination impacts to groundwater. None of the soil samples collected exceeded unrestricted or protection of groundwater soil cleanup objectives (SCOs).

Table 2 - Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG
PCE	ND - 0.004	1.3	0 of 20

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

No site-related soil contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for soil.

Soil Vapor, Sub-slab Vapor, and Indoor Air

To determine the nature and extent of contamination in soil vapor, 33 soil vapor samples were collected in three rounds of sampling between September 2012 and September 2013. PCE was detected in every sample, with concentrations ranging from 4.2 to 6,700 ug/m3.

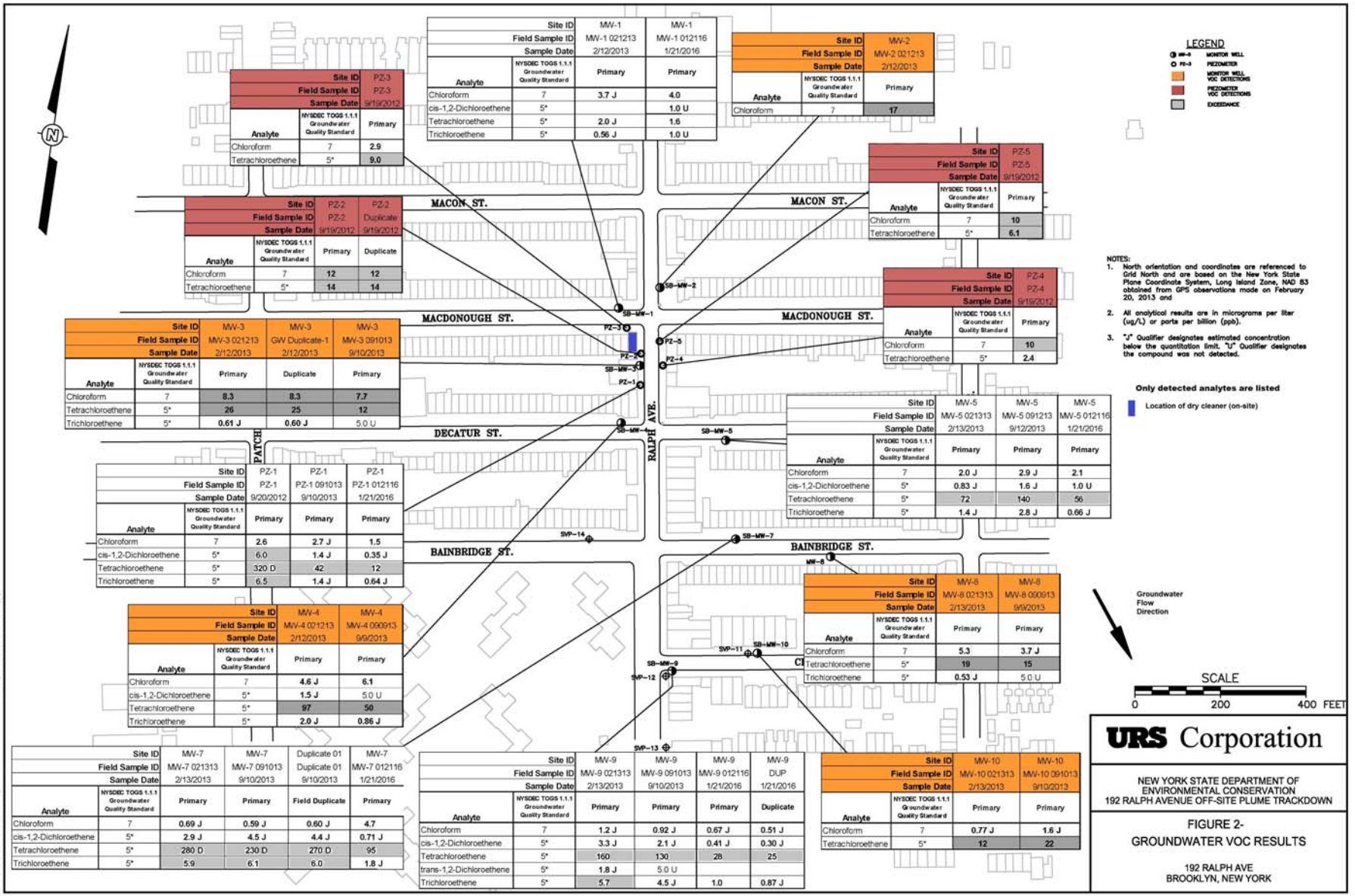
To determine whether actions are needed to address exposures related to soil vapor intrusion, indoor air and sub-slab vapor samples were collected from nearby buildings in 2014. Access to conduct indoor air and sub-slab vapor sampling was gained in five off-site buildings. PCE was detected in the indoor air of one building at a concentration of 1.1 ug/m3. PCE was not detected in the indoor air of the four other buildings above the method reporting limit of 0.11 ug/m3. TCE and other degradation products were not detected in the indoor air of any buildings above their respective reporting limits (4.6 ug/m3 or less). Sub-slab vapor samples in three of the buildings contained PCE, with a maximum concentration of 1,300 ug/m3. TCE was detected in one sub-slab vapor sample at a concentration of 6.9 ug/m3. Overall, the following actions were identified as being warranted to address exposures related to soil vapor intrusion: mitigation actions in one building, monitoring in one building, and no further actions at the remaining three buildings. The mitigation system offered by the state to one property owner was declined. A monitoring program for one building will be initiated with completion of the Site Management Plan.

Based on the findings of the Remedial Investigation, the presence of PCE has resulted in the contamination of soil vapor. Indoor air concentrations are within background ranges in the buildings that have been sampled, and PCE concentrations in groundwater appear to be decreasing. Thus no environmental remediation is required beyond continued monitoring. As stated above, one property was offered a mitigation system but declined.

Google Earth

feet 800
meters 200

Figure 1 - Site Location



Site ID	MW-1	MW-1
Field Sample ID	MW-1 021213	MW-1 012116
Sample Date	2/12/2013	1/21/2016
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary	Primary
Chloroform	7	3.7 J	4.0
cis-1,2-Dichloroethene	5*		1.0 U
Tetrachloroethene	5*	2.0 J	1.6
Trichloroethene	5*	0.56 J	1.0 U

Site ID	MW-2
Field Sample ID	MW-2 021213
Sample Date	2/12/2013
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary
Chloroform	7	17

Site ID	PZ-3
Field Sample ID	PZ-3
Sample Date	9/19/2012
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary
Chloroform	7	2.9
Tetrachloroethene	5*	9.0

Site ID	PZ-5
Field Sample ID	PZ-5
Sample Date	9/19/2012
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary
Chloroform	7	10
Tetrachloroethene	5*	6.1

Site ID	PZ-2	PZ-2
Field Sample ID	PZ-2	Duplicate
Sample Date	9/19/2012	9/19/2012
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary	Duplicate
Chloroform	7	12	12
Tetrachloroethene	5*	14	14

Site ID	PZ-4
Field Sample ID	PZ-4
Sample Date	9/19/2012
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary
Chloroform	7	10
Tetrachloroethene	5*	2.4

Site ID	MW-3	MW-3	MW-3
Field Sample ID	MW-3 021213	GW Duplicate-1	MW-3 091013
Sample Date	2/12/2013	2/12/2013	9/10/2013
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary	Duplicate	Primary
Chloroform	7	8.3	8.3	7.7
Tetrachloroethene	5*	26	25	12
Trichloroethene	5*	0.61 J	0.60 J	5.0 U

Site ID	MW-5	MW-5	MW-5
Field Sample ID	MW-5 021313	MW-5 091213	MW-5 012116
Sample Date	2/13/2013	9/12/2013	1/21/2016
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary	Primary	Primary
Chloroform	7	2.0 J	2.9 J	2.1
cis-1,2-Dichloroethene	5*	0.83 J	1.6 J	1.0 U
Tetrachloroethene	5*	72	140	56
Trichloroethene	5*	1.4 J	2.8 J	0.66 J

Site ID	PZ-1	PZ-1	PZ-1
Field Sample ID	PZ-1	PZ-1 091013	PZ-1 012116
Sample Date	9/20/2012	9/10/2013	1/21/2016
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary	Primary	Primary
Chloroform	7	2.6	2.7 J	1.5
cis-1,2-Dichloroethene	5*	6.0	1.4 J	0.35 J
Tetrachloroethene	5*	320 D	42	12
Trichloroethene	5*	6.5	1.4 J	0.64 J

Site ID	MW-8	MW-8
Field Sample ID	MW-8 021313	MW-8 090913
Sample Date	2/13/2013	9/9/2013
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary	Primary
Chloroform	7	5.3	3.7 J
Tetrachloroethene	5*	19	15
Trichloroethene	5*	0.53 J	5.0 U

Site ID	MW-4	MW-4
Field Sample ID	MW-4 021213	MW-4 090913
Sample Date	2/12/2013	9/9/2013
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary	Primary
Chloroform	7	4.6 J	6.1
cis-1,2-Dichloroethene	5*	1.5 J	5.0 U
Tetrachloroethene	5*	97	50
Trichloroethene	5*	2.0 J	0.86 J

Site ID	MW-7	MW-7	Duplicate 01	MW-7
Field Sample ID	MW-7 021313	MW-7 091013	Duplicate 01	MW-7 012116
Sample Date	2/13/2013	9/10/2013	9/10/2013	1/21/2016
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary	Primary	Field Duplicate	Primary
Chloroform	7	0.69 J	0.59 J	0.60 J	4.7
cis-1,2-Dichloroethene	5*	2.9 J	4.5 J	4.4 J	0.71 J
Tetrachloroethene	5*	280 D	230 D	270 D	95
Trichloroethene	5*	5.9	6.1	6.0	1.8 J

Site ID	MW-9	MW-9	MW-9	MW-9
Field Sample ID	MW-9 021313	MW-9 091013	MW-9 012116	DUP
Sample Date	2/13/2013	9/10/2013	1/21/2016	1/21/2016
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary	Primary	Primary	Duplicate
Chloroform	7	1.2 J	0.92 J	0.67 J	0.51 J
cis-1,2-Dichloroethene	5*	3.3 J	2.1 J	0.41 J	0.30 J
Tetrachloroethene	5*	160	130	28	25
trans-1,2-Dichloroethene	5*	1.8 J	5.0 U		
Trichloroethene	5*	5.7	4.5 J	1.0	0.87 J

Site ID	MW-10	MW-10
Field Sample ID	MW-10 021313	MW-10 091013
Sample Date	2/13/2013	9/10/2013
Analyte	NYSDEC TOGS 1.1.1 Groundwater Quality Standard	Primary	Primary
Chloroform	7	0.77 J	1.6 J
Tetrachloroethene	5*	12	22

URS Corporation

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
192 RALPH AVENUE OFF-SITE PLUME TRACKDOWN

FIGURE 2-
GROUNDWATER VOC RESULTS

192 RALPH AVE
BROOKLYN, NEW YORK