PROPOSED REMEDIAL ACTION PLAN

Former RKO Dry Cleaners
State Superfund Project
Albany, Albany County
Site No. 401065
February 2021

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. The disposal of hazardous wastes at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the RI indicate that the site no longer poses a threat to human health or the environment. The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the remedy proposed by this Proposed Remedial Action Plan (PRAP). A No Further Action remedy may include site management, which will include continued operation of any remedial system installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site. This PRAP identifies the IRM(s) conducted and discusses the basis for No Further Action.

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:

Albany Public Library - Washington Ave Branch
Attn: James Davies
161 Washington Avenue
Albany, NY 12210
Phone: 518-427-4300

A public comment period has been set from:

February 17, 2021 to March 19, 2021

Written comments may be sent to:

Kyle Forster
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233
kyle.forster@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 Former RKO Dry Cleaners site is located in the City of Albany at the intersection of Ontario Street and Washington Avenue. It is bordered to the west by Ontario Street followed by Beverwyck Park, to the north by Washington Avenue, and to the east and south by residential structures.

Site Features: The site, which is approximately 50 feet by 70 feet, is currently vacant and covered with concrete and gravel. Until June 2012, a circa 1950 building was present on the property covering approximately three-quarters of the site. The building was a one-story structure with a flat roof and a basement beneath approximately half the building. A fire occurred at the building in 2000 that left charred wood on much of the interior of the structure and holes in the roof. The exterior of the building was subsequently boarded up. In June 2012, the building was razed due to safety concerns by Albany County. Remnants of a small concrete driveway exist on the east side of the site.

Current Zoning and Land Use: The site is currently vacant and is zoned for residential use. The surrounding area consists of a mix of residential and commercial properties.

Past Use of the Site: The property was developed as early as 1909. From 1964 to 2005, the site was occupied by RKO Dry Cleaners and Tailors. In December 2000, a large fire occurred at the site and a spill number 0010595 was called in due to the presence of dry cleaning chemical containers that may have leaked.

Site Geology and Hydrogeology: Subsurface soils consist of brown, plastic clay that transitions into a mixture of silt and clay at approximately 7.5 feet to 10 feet below ground surface with occasional fine sand layers. The Phase I Environmental Site Assessment (ESA) indicated bedrock is estimated at approximately 300 feet below ground surface and comprised of Normanskill Shale. Groundwater was encountered at approximately 9.5 feet below ground surface and flows towards the east, eventually discharging into the Hudson River located 2 miles away.

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 restricted residential use (which allows for commercial and industrial use) as described in Part 375-1.8(g) is/are being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use 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.

The PRPs for the site, documented to date, include:

Sekyung Kyung Jeon

Wei J. Huang (Deceased)

Shirley Huang

Florence H. Sheehan

Bin Mo

Alec and Lubov Polishchuk

Louis Lettsome, Sr.

The PRPs for the site declined to implement a remedial program when requested by the Department. After the remedy is selected, the PRPs will again be contacted to assume responsibility for the remedial program. If an agreement cannot be reached with the PRPs, the Department will evaluate the site for further action under the State Superfund. The PRPs are 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 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. 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 contaminants of concern identified at this site are:

tetrachloroethene (PCE)
trichloroethene (TCE)
cis-1,2-dichloroethene

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

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.

The following IRM has been completed at this site based on conditions observed during the RI.

Building Demolition and Waste Removal

A 2012 inspection by the Department and personnel from Albany County determined that the former dry-cleaning building was unsafe and needed to be demolished. A significant quantity of building debris fell into the flooded basement during demolition. Accumulated water in the basement was removed and treated before being discharged to the sanitary sewer. Containers of dry-cleaning chemicals were discovered and disposed as hazardous waste. Hazardous

construction and demolition debris was sorted from the non-hazardous debris and disposed of properly. A suspected fuel oil underground storage tank (UST) was confirmed during backfilling and approximately 124 gallons of a fuel oil, water, and sludge mixture was removed and disposed off-site. The UST was removed and no staining or odors were identified within the surrounding soils. Post excavation endpoint samples were collected and no fuel oil-related contaminants were detected. The basement and tank grave were backfilled with clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d). Crushed stone was placed in the final upper to feet of both excavations.

Source Area Excavation

Approximately 105 cubic yards of nonhazardous soil and 134 cubic yards of PCE-impacted soil were excavated to a depth of approximately 13.5 feet below grade. The excavation addressed the contamination source area which was located near a doorway of the former dry cleaning building. Two post excavation documentation samples were collected from the bottom of the excavation; one of the samples detected PCE at 47 parts per million (ppm), above the RRSCO of 19 ppm. Nine hundred pounds of an in-situ chemical reduction (ISCR) amendment was placed and mixed with soils at the base of the excavation to destroy residual contamination through anaerobic bioremediation. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) was brought in to replace the excavated soils. Crushed stone was then placed within the upper 6 inches to establish pre-existing grades at the site. This IRM is documented in the August 12, 2019 Construction Completion Report.

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 the site.

Soil and groundwater have been analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, poly-chlorinated biphenyls (PCBs), and pesticides. Groundwater has been analyzed for per- and poly-fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor has been analyzed for VOCs. Based upon investigations conducted to date, the primary contaminant of concern is the chlorinated VOC tetrachloroethene (PCE) and its breakdown products, trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE). PCE was found in soil, groundwater, and soil vapor on and off the site.

Soil - Prior to the IRM excavation, PCE was present in site soils at concentrations up to 110 parts per million (ppm) at depths of 8 to 12 feet below grade. For PCE, the restricted residential soil cleanup objective (RRSCO) is 19 ppm and the protection of groundwater soil cleanup objective (PGWSCO) is 1.3 ppm. TCE was also detected at concentrations up to 3.5 ppm, which is below the RRSCO but above the PGWSCO of 0.47 ppm. Cis-1,2-DCE was detected up to 0.46 ppm,

which was also below the RRSCO but above the PGWSCO of 0.25 ppm. Chromium was the only metal detected in site soils above the RRSCO at a concentration of 39 ppm (RRSCO is 36 ppm). No SVOCs, pesticides, or PCBs were detected above RRSCOs. Data does not indicate that PCE or other related contaminants are present in off-site soil.

Groundwater - Prior to the IRM excavation, PCE was present in on-site groundwater at concentrations up to 9,600 parts per billion (ppb), TCE up to 85 ppb, and cis-1,2-DCE up to 36 ppb. The Class GA groundwater standard for all three of these contaminants is 5.0 ppb. April 2020 sampling detected PCE in on-site groundwater at concentrations up to 35 ppb, TCE up to 210 ppb, and cis-1,2-DCE up to 230 ppb. PCE was detected in off-site groundwater at concentrations up to 21 ppb.

For PFAS, perfluorooctanoic acid (PFOA) and perfluorootanesuflonic acid (PFOS) were reported at concentrations of up to 32 and 73 parts per trillion (ppt), respectively, exceeding the Maximum Contaminant Level (MCL) (drinking water standard) of 10 ppt each in groundwater. There are no public water supply wells within a half mile of the site and the local area is served by municipal water.

1,4-dioxane was reported at a concentration of 0.58 ppb which is below the MCL of 1 ppb.

Soil Vapor - Soil vapor intrusion was evaluated at three nearby, off-site structures. PCE was detected in sub-slab vapor at concentrations up to 1,700 micrograms per cubic meter ($\mu g/m^3$), and in indoor air at concentrations up to 4 $\mu g/m^3$. Mitigation was recommended at two structures and a sub-slab depressurization system was installed at one of the structures in August 2013. Poor sub-slab vacuum communication results in the other structure indicated an SSDS was not feasible. Soil vapor intrusion was subsequently re-evaluated at both structures and PCE was detected in sub-slab vapor at concentrations up to 22.4 $\mu g/m^3$, and was not detected in indoor air of any of the structures.

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.*

Access to the site is unrestricted. Contact with contaminated soil is unlikely unless people dig below the ground surface. People are not coming into contact with the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the soil vapor (air spaces within the soil) may move into overlying 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 current concern. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future buildings developed on-site. Actions have been taken to address soil vapor intrusion at two off-site structures. These

actions included installation of a sub-slab depressurization system in one structure and monitoring of another.

6.5: Summary of the Remediation Objectives

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

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of 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: SUMMARY OF PROPOSED REMEDY

1. No Further Action

Based on the results of the investigations at the site, the IRMs that have been performed, and the evaluation presented here, the Department is proposing No Further Action as the remedy for the site. This No Further Action remedy includes continued operation of the off-site sub-slab depressurization system and the implementation of Institutional Controls/Engineering Controls (ICs/ECs), including continued groundwater monitoring, as the proposed remedy for the site.

The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

The elements of the IRM already completed are described in Section 6.2.

2. Cover System

A site cover currently exists and will be maintained to allow for restricted residential use of the site. Any site redevelopment will maintain the site cover. The site cover includes paved surface parking areas, sidewalks and soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

3. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH; and
- require compliance with the Department approved Site Management Plan.

4. Site Management Plan

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

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

Institutional Controls:

- The Environmental Easement discussed in Paragraph 3 above.

Engineering Controls:

- The cover system discussed in Paragraph 2 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 restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- 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. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of on-site groundwater and soil vapor intrusion at one off-site structure to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

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 contaminants are arranged into volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), inorganics (metals and cyanide), pesticides, and polychlorinated biphenyls (PCBs). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater, soil, and soil vapor.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site were substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. A source area was identified at the site outside the building footprint and a doorway of the former dry-cleaning building. Before excavating the source area during the IRM described in Section 6.2, elevated concentrations of chlorinated volatile organic compounds (CVOCs) were present at depths up to 12 feet below grade. Figure 2 shows the location of the source area that was discovered during the investigation.

The source area identified at the site was addressed by the excavation IRM described in Section 6.2.

Groundwater

Groundwater samples were collected from overburden monitoring wells. The samples were collected to assess groundwater conditions on- and off-site. Prior to implementing the IRM, the results indicated that contamination in shallow groundwater exceeded the SCGs for CVOCs. Results also indicated that per- and polyflouroalkyl substances (PFAS) were detected above the established maximum contaminant level of 10 parts per trillion (ppt) for perflourooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). Groundwater samples collected after the IRM excavation and ISCR amendment application demonstrate a significant reduction in CVOC concentrations as illustrated in the below table and when comparing Figure 3A to Figure 3B. Limited site related groundwater contamination was found off-site and the local area is served by municipal water.

Table 1 - Groundwater

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs – post IRM			
tetrachloroethene	ND – 35	5	4 of 7
trichloroethene	ND – 200	5	2 of 7
cis-1,2-dichloroethene	ND – 230	5	3 of 7
SVOCs			
benzo(k)flouranthene	ND – 0.03	0.002	1 of 7
benzo(b)fluoranthene	ND – 0.03	0.002	1 of 7
Inorganics			
Arsenic	2.7 – 63	25	1 of 10
PFAS (reported in ppt)[c]			
Perflourooctanoic acid (PFOA)	2.1 – 32	10	2 of 4
Perflourooctanesulfonic acid (PFOS)	0.72 - 73	10	2 of 4

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). For PFAS, the maximum contaminant level of 10 ppt is used.
c - ppt: parts per trillion, which is equivalent to nanograms per liter, ng/L, in water.

Groundwater contamination identified during the RI was addressed during the IRM described in Section 6.2 and will continue to be monitored as described in Section 7.

Soil

Subsurface soil samples were collected at the site during the RI. The majority of the site is covered with concrete or crushed stone which overlies the former dry-cleaning building substructure. Subsurface soil samples were collected up to a depth of to 26 feet below grade to assess soil contamination impacts to groundwater. The results indicated that soils at the site exceeded the restricted residential and protection of groundwater SCGs for CVOCs. Figure 4 and Table 2 below show the sampling locations and concentrations of the contaminants of concern discovered during the remedial investigation and before the IRM was performed.

Table 2 - Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
VOCs					

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
tetrachloroethene	ND – 110	1.3	6 of 37	19	4 of 37
trichloroethene	ND – 3.5	0.47	4 of 37	21	0 of 37
cis-1,2-dichloroethene	ND – 0.46	0.25	1 of 37	100	0 of 37
Inorganics					
chromium	23 – 39	30	4 of 8	180	0 of 7
copper	40 – 92	50	5 of 8	270	0 of 7
lead	17 – 83	63	1 of 8	400	0 of 7
mercury	ND – 0.36	0.18	1 of 8	0.81	0 of 7
nickel	29 – 55	30	6 of 8	310	0 of 7
Pesticides/PCBs					
chlordane	ND – 0.18	0.094	1 of 4	4.2	0 of 4
polychlorinated biphenyls	ND – 0.68	1	0 of 4	1	0 of 4

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. Also Protection of Groundwater Soil Cleanup Objective for VOCs;
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Restricted Residential Use, unless otherwise noted.

Soil contamination identified during the RI was addressed during the IRM described in Section 6.2.

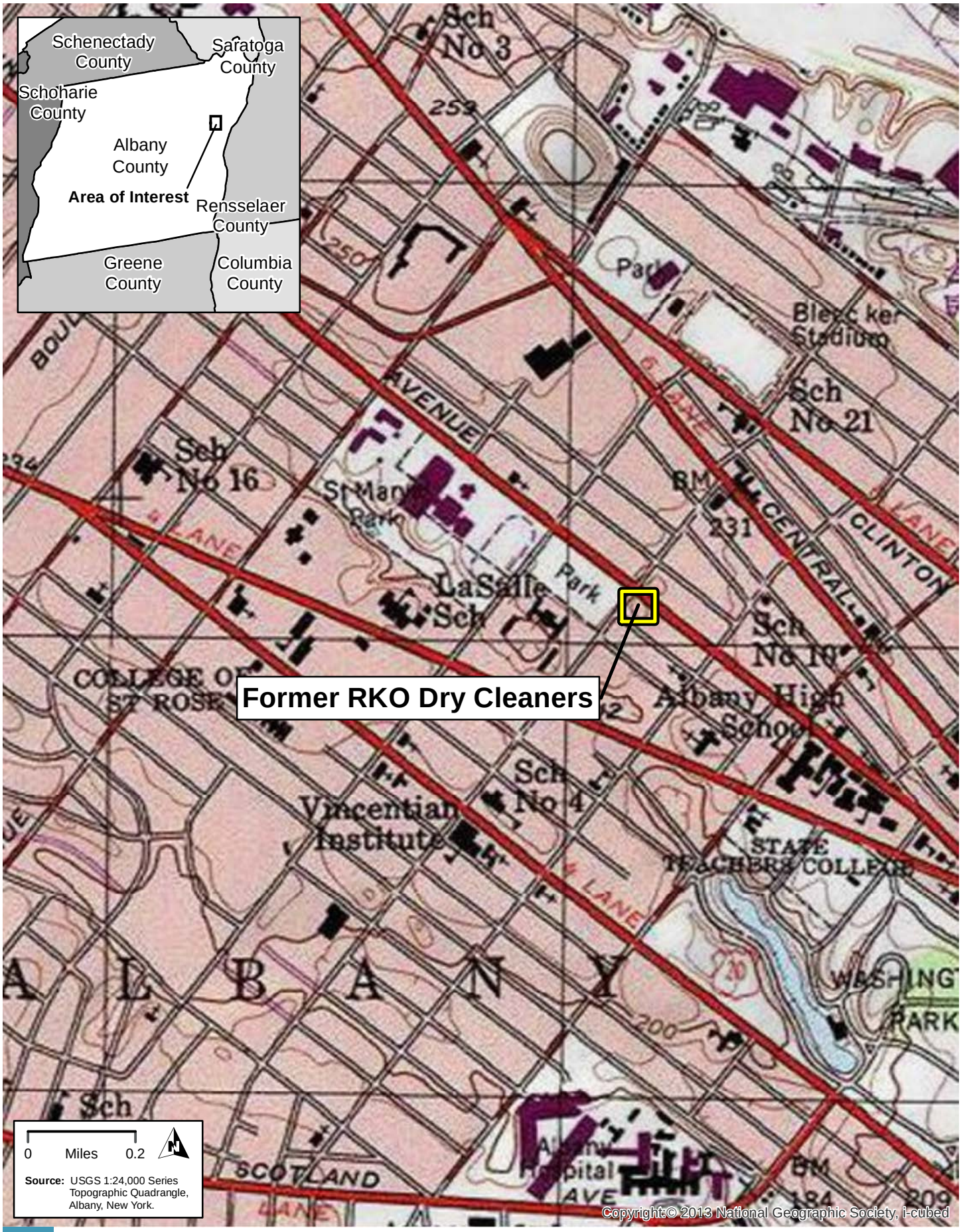
Soil Vapor

The potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated in three nearby residential properties. Due to the presence of buildings near the impacted area of the site, samples were collected for soil vapor, sub-slab soil vapor under the structures, indoor air inside structures and outdoor air to evaluate whether soil vapor intrusion was occurring.

Tetrachloroethylene (PCE) was detected in sub-slab soil vapor at two structures and at a maximum concentration of 1,700 µg/m³, above the NYSDOH mitigation threshold of 1,000 micrograms per cubic meter (µg/m³). PCE was detected in the indoor air at a maximum concentration of 4 µg/m³, below the NYSDOH indoor air guidance value of 30 µg/m³. Installation of a sub-slab depressurization system (SSDS) was attempted at two of the properties, but only one SSDS was successfully installed due to poor vacuum communication test results at the other property.

Following installation and operation of the SSDS, the potential for soil vapor intrusion was re-evaluated at both properties. PCE was detected in sub-slab vapor at a maximum concentration of 22.4 µg/m³, and was not detected in the indoor air at either property. Soil vapor intrusion monitoring will continue at the structure where the SSDS could not be installed.

Based on the concentrations of PCE detected, and in comparison with the NYSDOH Soil Vapor Intrusion Guidance, soil vapor contamination identified during the RI was addressed during the IRM described in Section 6.2, and with the SSDS operation and continued monitoring described above.



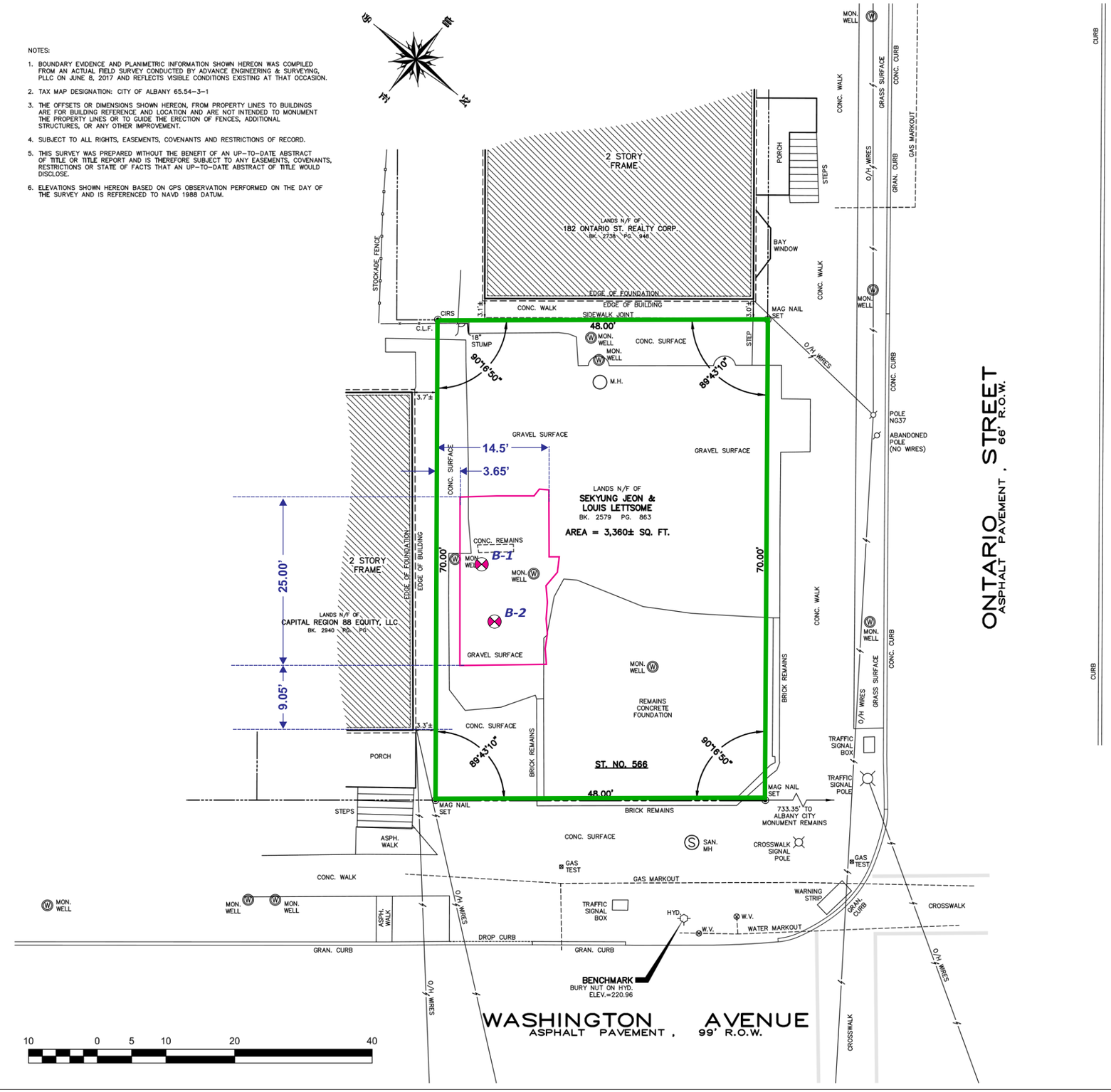
SITE LOCATION MAP

FORMER RKO DRY CLEANERS (NYSDEC SITE #401065)

FIGURE 1

NOTES:

1. BOUNDARY EVIDENCE AND PLANIMETRIC INFORMATION SHOWN HEREON WAS COMPILED FROM AN ACTUAL FIELD SURVEY CONDUCTED BY ADVANCE ENGINEERING & SURVEYING, PLLC ON JUNE 8, 2017 AND REFLECTS VISIBLE CONDITIONS EXISTING AT THAT OCCASION.
2. TAX MAP DESIGNATION: CITY OF ALBANY 65.54-3-1
3. THE OFFSETS OR DIMENSIONS SHOWN HEREON, FROM PROPERTY LINES TO BUILDINGS ARE FOR BUILDING REFERENCE AND LOCATION AND ARE NOT INTENDED TO MONUMENT THE PROPERTY LINES OR TO GUIDE THE ERECTION OF FENCES, ADDITIONAL STRUCTURES, OR ANY OTHER IMPROVEMENT.
4. SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS AND RESTRICTIONS OF RECORD.
5. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN UP-TO-DATE ABSTRACT OF TITLE OR TITLE REPORT AND IS THEREFORE SUBJECT TO ANY EASEMENTS, COVENANTS, RESTRICTIONS OR STATE OF FACTS THAT AN UP-TO-DATE ABSTRACT OF TITLE WOULD DISCLOSE.
6. ELEVATIONS SHOWN HEREON BASED ON GPS OBSERVATION PERFORMED ON THE DAY OF THE SURVEY AND IS REFERENCED TO NAVD 1988 DATUM.



PRECISION ENVIRONMENTAL SERVICES, INC.
831 RT. 67,LOT 38A
BALLSTON SPA, NY 12020
TEL: 518-885-4399
FAX: 518-885-4416
CERTIFIED WOMEN-OWNED BUSINESS ENTERPRISE

FIGURE 2
SOURCE AREA

FORMER RKO DRY CLEANERS

PROJECT #: NYSDEC SITE #401065	
LOCATION: 566 WASHINGTON AVE., ALBANY, NY	
DATE: 6/5/18	**REVISED BY:** SMP
FIGURE: 8	**SCALE:** AS SHOWN

B-1 *POST EXCAVATION SAMPLE*

SOURCE AREA/EXCAVATION LIMITS 12-14 FEET BELOW GRADE

SITE BOUNDARY

NOTES:

- MAP AND SURVEY PROVIDED BY ADVANCE ENGINEERING & SURVEYING, PLLC
- ALL LOCATIONS ARE APPROXIMATE
- MAP TO BE USED FOR REFERENCE ONLY

MW5	
8/6/2015	
cis-1,2-Dichloroethene	0.26 J
Vinyl chloride	0.37 J

MW4	
8/6/2015	
Tetrachloroethene	0.67 J

MW2	
8/6/2015	
Chloroform	0.81 J
Tetrachloroethene	**21**

Beverwyk Park

Ontario Street

Washington Avenue

MW1

MW2

MW3

MW4

MW5

MW6

MW7

MW8

MW3	
8/6/2015	
Chloroform	0.35 J
cis-1,2-Dichloroethene	**36**
Tetrachloroethene	**130**
trans-1,2-Dichloroethene	0.61 J
Trichloroethene	**35**

MW3	
1/26/2016	
cis-1,2-Dichloroethene	**17**
Tetrachloroethene	**110**
Trichloroethene	**24**

MW6	
1/26/2016	
Tetrachloroethene	**9600**
Trichloroethene	**85**

LEGEND

- Groundwater Monitoring Wells
- Temporary Groundwater Monitoring Point
- Approximate RKO Building Outline
- Former RKO Dry Cleaner Parcel Boundary
- Parcel Boundary

0 Feet 50

Notes:
(1) Results shown are detects only
(2) Units: ug/L
(3) Grey/Bold: Exceedance of 6 NYCRR Part 703
(4) Qualifier "J" - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GROUNDWATER SAMPLING RESULTS – VOCS

FORMER RKO DRY CLEANERS (NYSDEC SITE #401065)

FIGURE 3A

NOTES:

1. BOUNDARY EVIDENCE AND PLANIMETRIC INFORMATION SHOWN HEREON WAS COMPILED FROM AN ACTUAL FIELD SURVEY CONDUCTED BY ADVANCE ENGINEERING & SURVEYING, PLLC ON JUNE 8, 2017 AND REFLECTS VISIBLE CONDITIONS EXISTING AT THAT OCCASION.
2. TAX MAP DESIGNATION: CITY OF ALBANY 65.54-3-1
3. THE OFFSETS OR DIMENSIONS SHOWN HEREON, FROM PROPERTY LINES TO BUILDINGS ARE FOR BUILDING REFERENCE AND LOCATION AND ARE NOT INTENDED TO MONUMENT THE PROPERTY LINES OR TO GUIDE THE ERECTION OF FENCES, ADDITIONAL STRUCTURES, OR ANY OTHER IMPROVEMENT.
4. SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS AND RESTRICTIONS OF RECORD.
5. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN UP-TO-DATE ABSTRACT OF TITLE OR TITLE REPORT AND IS THEREFORE SUBJECT TO ANY EASEMENTS, COVENANTS, RESTRICTIONS OR STATE OF FACTS THAT AN UP-TO-DATE ABSTRACT OF TITLE WOULD DISCLOSE.
6. ELEVATIONS SHOWN HEREON BASED ON GPS OBSERVATION PERFORMED ON THE DAY OF THE SURVEY AND IS REFERENCED TO NAVD 1988 DATUM.

MW-3	
Tetrachloroethene	35
Trichloroethene	5.5
1,1-Dichloroethene	ND
cis-1,2-Dichloroethene	2.4
trans-1,2-Dichloroethene	ND
Vinyl Chloride	ND

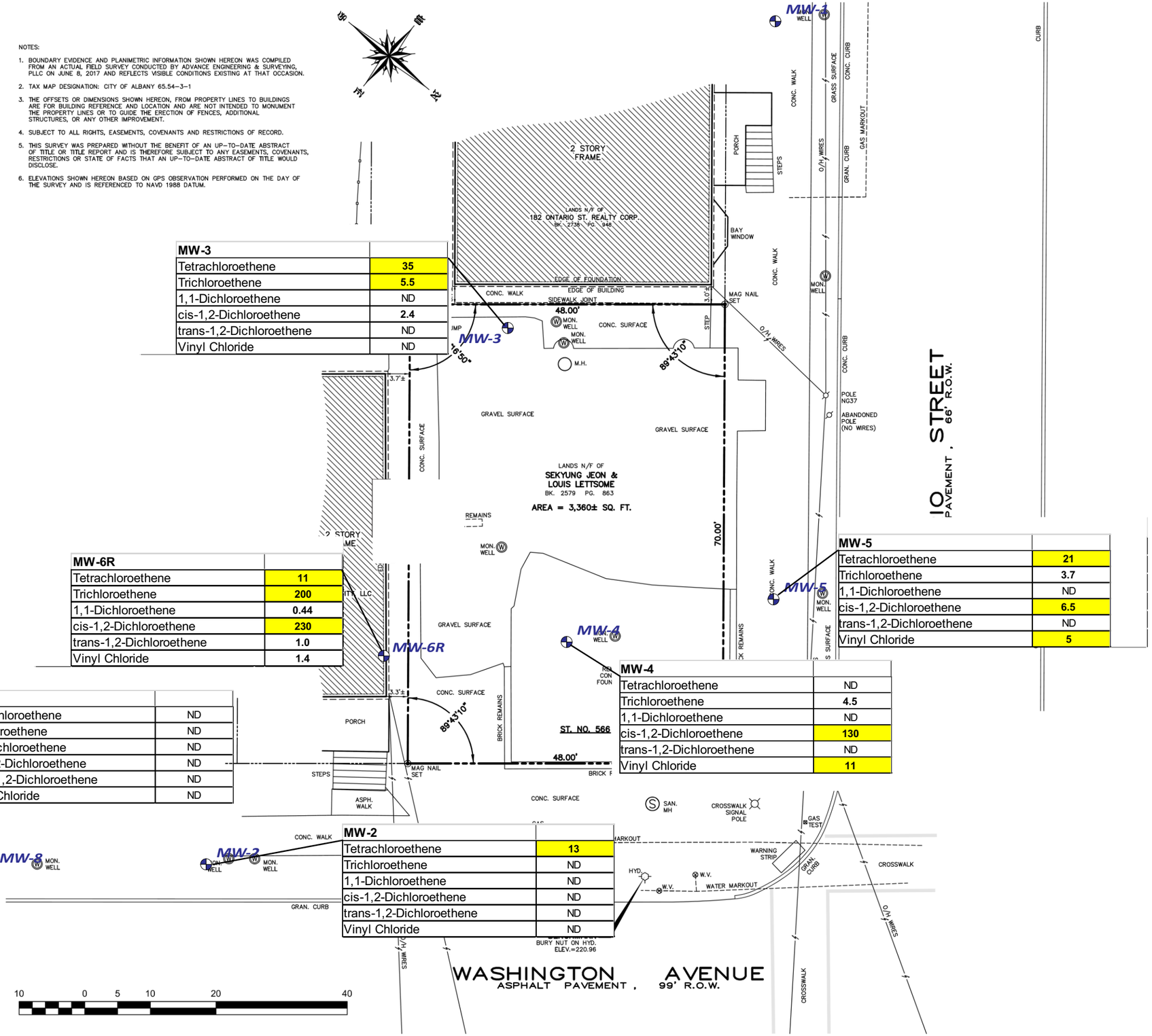
MW-6R	
Tetrachloroethene	11
Trichloroethene	200
1,1-Dichloroethene	0.44
cis-1,2-Dichloroethene	230
trans-1,2-Dichloroethene	1.0
Vinyl Chloride	1.4

MW-8	
Tetrachloroethene	ND
Trichloroethene	ND
1,1-Dichloroethene	ND
cis-1,2-Dichloroethene	ND
trans-1,2-Dichloroethene	ND
Vinyl Chloride	ND

MW-2	
Tetrachloroethene	13
Trichloroethene	ND
1,1-Dichloroethene	ND
cis-1,2-Dichloroethene	ND
trans-1,2-Dichloroethene	ND
Vinyl Chloride	ND

MW-4	
Tetrachloroethene	ND
Trichloroethene	4.5
1,1-Dichloroethene	ND
cis-1,2-Dichloroethene	130
trans-1,2-Dichloroethene	ND
Vinyl Chloride	11

MW-5	
Tetrachloroethene	21
Trichloroethene	3.7
1,1-Dichloroethene	ND
cis-1,2-Dichloroethene	6.5
trans-1,2-Dichloroethene	ND
Vinyl Chloride	5



PRECISION ENVIRONMENTAL SERVICES, INC.
831 RT. 67, LOT 38A
BALLSTON SPA, NY 12020
TEL: 518-885-4399
FAX: 518-885-4416
CERTIFIED WOMEN-OWNED BUSINESS ENTERPRISE

FIGURE 3B
GROUNDWATER ANALYTICAL
APRIL 9, 2020

FORMER RKO DRY CLEANERS

PROJECT #: NYSDEC SITE #401065

LOCATION: 566 WASHINGTON AVE., ALBANY, NY

DATE: 7/13/20	**REVISED BY:** BN
FIGURE: 3	**SCALE:** AS SHOWN

MW-5 MONITORING WELL

Yellow Shade Denotes
NYSDEC Groundwater
Standard Exceedence

NOTES:

- MAP AND SURVEY PROVIDED BY ADVANCE ENGINEERING & SURVEYING, PLLC
- ALL LOCATIONS ARE APPROXIMATE
- MAP TO BE USED FOR REFERENCE ONLY

SP9-0-1-20151218	
12/18/2015	
Methylene chloride	0.027 J
Tetrachloroethene	0.014 J
SP9-9-10-20151218	
12/18/2015	
cis-1,2-Dichloroethene	0.044
Methylene chloride	0.0079 J
Tetrachloroethene	0.37 J
Trichloroethene	0.12

SP8-0-1-20151218	
12/18/2015	
Methylene chloride	0.013
Tetrachloroethene	0.021
SP8-9-11-20151218	
12/18/2015	
Methylene chloride	0.0033 J
Tetrachloroethene	0.0029 J

SS11-0-1-20150701	
7/1/2015	
Methylene chloride	0.0044
Tetrachloroethene	0.0078

SP7-3-4-20151217	
12/17/2015	
Methylene chloride	0.0034
Tetrachloroethene	0.012
SP7-10-20151217	
12/17/2015	
cis-1,2-Dichloroethene	0.018
Methylene chloride	0.013
Tetrachloroethene	0.34
Trichloroethene	0.041

SS12-0-1-20150701	
7/1/2015	
Methylene chloride	0.0022

SP1-0-1-20151217	
12/17/2015	
Tetrachloroethene	0.0089
SP1-15-16-20151217	
12/17/2015	
Methylene chloride	0.0039

SP2-3-4-20151217	
12/17/2015	
Methylene chloride	0.0039 J
Tetrachloroethene	0.0054
SP2-15-16-20151217	
12/17/2015	
Methylene chloride	0.0037

MP7-SS-10-14-20150701	
7/1/2015	
cis-1,2-Dichloroethene	***0.46***
Tetrachloroethene	0.90
Trichloroethene	***3.5***

SP3-3-4-20151217	
12/17/2015	
Methylene chloride	0.0048
Tetrachloroethene	0.0040
SP3-9-10-20151217	
12/17/2015	
Tetrachloroethene	***44***
Trichloroethene	***0.92***

SS10-SS-10-20150701	
7/1/2015	
cis-1,2-Dichloroethene	0.018
Methylene chloride	0.014
Tetrachloroethene	0.084
Trichloroethene	0.026
SS10-SS-26-20150701	
7/1/2015	
Methylene chloride	0.0084

SP12-0-8-20151218	
12/18/2015	
Methylene chloride	0.012 J
Tetrachloroethene	0.0038
SP12-10.5-16-20151218	
12/18/2015	
Methylene chloride	0.011 J
SP12-18-20151218	
12/18/2015	
Chloroform	0.0031
Methylene chloride	0.0062

MP4-SS-10-12-20150701	
7/1/2015	
Benzene	0.0030
m&p-Xylenes	0.0014
Methylene chloride	0.0044
o-Xylene	0.0012
Tetrachloroethene	0.0072
Toluene	0.0025
Trichloroethene	0.0029
Xylenes (Total)	0.0026
MP4-SS-20-20150701	
7/1/2015	
Methylene chloride	0.011

MP6-SS-0-1-20150701	
7/1/2015	
Tetrachloroethene	0.010
MP6-SS-10-12-20150701	
7/1/2015	
Tetrachloroethene	***24 J***
Trichloroethene	***0.53***
MP6-SS-23-24-20150701	
7/1/2015	
Methylene chloride	0.012

SP5-2-4-20151217	
12/17/2015	
Acetone	***0.11***
Chloroform	0.0024
Methylene chloride	0.015
Tetrachloroethene	0.054
SP5-8-12-20151217	
12/17/2015	
Tetrachloroethene	0.72

SP6-5-7-20151217	
12/17/2015	
Tetrachloroethene	0.028
SP6-10-11-20151217	
12/17/2015	
Tetrachloroethene	1.1
Trichloroethene	0.051

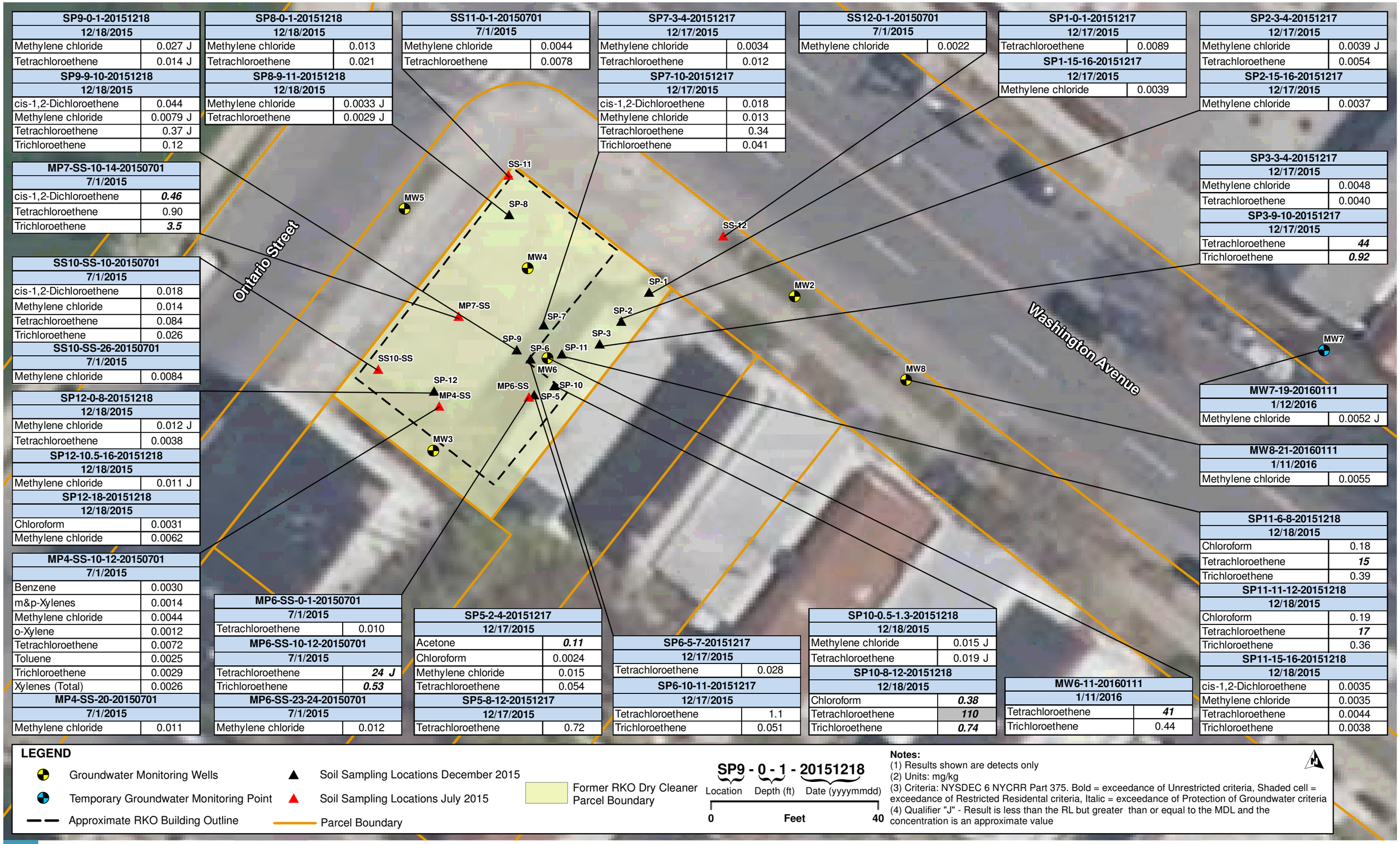
SP10-0.5-1.3-20151218	
12/18/2015	
Methylene chloride	0.015 J
Tetrachloroethene	0.019 J
SP10-8-12-20151218	
12/18/2015	
Chloroform	***0.38***
Tetrachloroethene	***110***
Trichloroethene	***0.74***

MW6-11-20160111	
1/11/2016	
Tetrachloroethene	***41***
Trichloroethene	0.44

MW7-19-20160111	
1/12/2016	
Methylene chloride	0.0052 J

MW8-21-20160111	
1/11/2016	
Methylene chloride	0.0055

SP11-6-8-20151218	
12/18/2015	
Chloroform	0.18
Tetrachloroethene	***15***
Trichloroethene	0.39
SP11-11-12-20151218	
12/18/2015	
Chloroform	0.19
Tetrachloroethene	***17***
Trichloroethene	0.36
SP11-15-16-20151218	
12/18/2015	
cis-1,2-Dichloroethene	0.0035
Methylene chloride	0.0035
Tetrachloroethene	0.0044
Trichloroethene	0.0038



LEGEND

- Groundwater Monitoring Wells
- Temporary Groundwater Monitoring Point
- Approximate RKO Building Outline
- Soil Sampling Locations December 2015
- Soil Sampling Locations July 2015
- Parcel Boundary
- Former RKO Dry Cleaner Parcel Boundary

SP9 - 0 - 1 - 20151218
Location | Depth (ft) | Date (yyyymmdd)

0 Feet 40

Notes:
(1) Results shown are detects only
(2) Units: mg/kg
(3) Criteria: NYSDEC 6 NYCRR Part 375. Bold = exceedance of Unrestricted criteria, Shaded cell = exceedance of Restricted Residental criteria, Italic = exceedance of Protection of Groundwater criteria
(4) Qualifier "J" - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

SOIL SAMPLING RESULTS – VOCS

FORMER RKO DRY CLEANERS (NYSDEC SITE #401065)

FIGURE 4