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Region 2 RAC2
Remedial Action Contract

Draft Supplemental Phase II Environmental Site Assessment

77 Westchester Avenue, Pound Ridge/ Scotts Corners Site

Targeted Brownfields Assessment

Pound Ridge, New York

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CDM Smith

Table of Contents

Acronyms ..... **v**

Executive Summary **ES-1**

Section 1 Introduction **1-1**

1.1 Purpose 1-1
1.2 Special Terms and Conditions 1-1
1.3 Limitations, Methodology and Exceptions of Investigation 1-2

Section 2 Site Description **2-1**

2.1 Site Description 2-1
2.2 Site History and Land Use 2-1
2.3 Physical Setting 2-2
2.4 Adjacent Property Land Use 2-2
2.5 Summary of Previous Assessments 2-2

Section 3 Phase II Activities **3-1**

3.1 Scope 3-1
3.2 Site Access and Reconnaissance 3-3
3.3 Geophysical Survey 3-3
3.4 Sampling Activities and Sample Analysis 3-4
3.4.1 Soil Vapor Intrusion Sampling 3-4
3.4.2 Soil Borings and Subsurface Soil Samples 3-5
3.4.3 Existing and Temporary Monitoring Well Installation and Sampling 3-6
3.4.4 Potable Water Sampling 3-7
3.4.5 Investigative Derived Waste Sampling and Disposal 3-7
3.5 Deviations from the QAPP 3-7

Section 4 Summary and Evaluation of Data **4-1**

4.1 Selection of Evaluation Criteria 4-1
4.2 Soil Sample Results 4-2
4.2.1 Subsurface Soil Analytical Results 4-2
4.2.1.1 VOCs 4-2
4.2.1.2 TPH DRO and GRO 4-2
4.2.1.3 SVOCs 4-2
4.2.1.4 PCBs 4-3
4.2.1.5 Metals 4-3
4.3 Groundwater and Potable Water Sample Results 4-3
4.3.1 Groundwater Sample Analytical Results 4-3
4.3.1.1 VOCs 4-3
4.3.1.2 TPH 4-4
4.3.1.3 SVOCs 4-4
4.3.1.4 PCBs 4-5
4.3.1.4 Metals 4-5
4.3.2 Potable Water Sample Analytical Results 4-5

4.3.2.1 VOCs 4-5
4.3.2.2 SVOCs 4-5
4.3.2.3 Metals 4-6
4.4 Soil Vapor Intrusion Sample Results 4-6
4.4.1 Soil Vapor Analytical Results 4-6
4.4.1.1 VOCs 4-6
4.4.2 Outdoor Air Analytical Results 4-6
4.4.2.1 VOCs 4-6
4.4.3 Sub-Slab Vapor Analytical Results 4-6
4.4.3.1 VOCs 4-7
4.4.4 Indoor Air Analytical Results 4-7
4.4.3.1 VOCs 4-7
4.5 Quality Assurance/Quality Control 4-7
4.5.1 Initial Phase II ESA Investigation 4-7
4.5.2 Supplemental Phase II ESA Investigation 4-8
4.6 Evaluation of Recognized Environmental Conditions 4-11
4.6.1 Evaluation of Historic Spills (REC-1 – Spill #9412600/9507568, HREC – Spill #020451) 4-11
4.6.2 On-Site Dry Wells (REC-2) 4-12
4.6.2.1 Eastern Dry Well 4-12
4.6.2.2 Western Dry Well 4-13
4.6.3 Potable Water Well Evaluation 4-14
4.6.4 Potential Waste Oil Discharge 4-14
4.6.5 Evaluation of Soil Vapor Intrusion Potential 4-15

Section 5 Conclusions and Recommendations 5-1
5.1 Conclusions 5-1
5.2 Recommendations 5-2

Section 6 References 6-1

List of Tables

Table 3-1 Sample Summary
Table 4-1a Soil Sample Detections – VOCs
Table 4-1b Soil Sample Detections – TPH
Table 4-1c Soil Sample Detections – SVOCs
Table 4-1d Soil Sample Detections – PCBs
Table 4-1e Soil Sample Detections – Metals
Table 4-2a Groundwater Sample Detections – VOCs
Table 4-2b Groundwater Sample Detections – TPH
Table 4-2c Groundwater Sample Detections – SVOCs
Table 4-2d Groundwater Sample Detections – PCBs
Table 4-2e Groundwater Sample Detections – Metals
Table 4-3a Potable Water Sample Detections – VOCs
Table 4-3b Potable Water Sample Detections – SVOCs
Table 4-3c Potable Water Sample Detections – Metals
Table 4-4a Soil Vapor Detections – VOCs
Table 4-4b Soil Vapor Intrusion Detections - VOCs
Table 4-5 Soil Vapor Intrusion Investigation Recommendations Based on NYSDOH Decision Matrices

List of Figures

Figure 1-1 Site Location Map
Figure 3-1a Initial Phase II Site Plan and Sampling Locations
Figure 3-1b Supplemental Phase II Site Plan and Sampling Locations
Figure 4-1a Initial Phase II Soil and Groundwater Exceedances
Figure 4-1b Supplemental Phase II Soil and Groundwater Exceedances
Figure 4-2 Soil Vapor Sample Exceedances

Appendices

Appendix A Geophysical Investigation Report
Appendix B Field Log Book
Appendix C Soil Boring Logs
Appendix D Groundwater Sampling Logs
Appendix E Waste Manifests
Appendix F Data Validation Reports
Appendix G New York State Department of Health Indoor Air Quality Questionnaire Building Inventory Form

Acronyms

AAI	All Appropriate Inquiries
AGVs	Air Guideline Values
AWQS	ambient water quality standards
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylene
CCV	Continuing Calibration Verification
CDM Smith	CDM Federal Programs Corporation
CIH	Certified Industrial Hygienist
CRQL	Contract required quantitation limit
Delta	Delta Geophysics Inc.
DER	Division of Environmental Remediation
DPT	direct push technology
DRO	diesel range organics
EES JV	Engineering and Environmental Solutions Joint Venture
EM	Electromagnetic
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
GC/MS	gas chromatography/mass spectrometry
GPR	ground penetrating radar
GRO	gasoline range organics
GPS	Global Positioning System
HASP	health and safety plan
IDW	Investigative derived waste
J	estimated value
J+	biased high estimated value
J-	biased low estimated value
LTR	Land Tech Remedial, Inc.
mg/kg	milligram per kilogram
MS/MSD	matrix spike/matrix spike duplicate
MTBE	methyl tert-butyl ether
No.	number
NYCRR	New York Codes Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSWER	Office of Solid Waste and Emergency Response
PAL	Project Action Limit
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PID	photoionization detector
ppm	part per million
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
QC	quality control
REC	recognized environmental condition
RSL	Regional Screening Levels
SCG	Soil Cleanup Guidance

SCO	Soil Cleanup Objectives
SVE/AS	soil vapor extraction/air sparge
SVOC	semi-volatile organic compound
TAL	Target Analyte List
TBA	Targeted Brownfields Assessment
TCL	Target Compound List
TOGS	Technical & Operational Guidance Series
TPH	total petroleum hydrocarbons
µg/L	microgram per liter
µg/m^3	micrograms per cubic meter
U	undetected
UJ	undetected estimated
UST	underground storage tank
VOC	volatile organic compound
WCDOH	Westchester County Department of Health
%	percent

Executive Summary

This report presents the results of CDM Federal Programs Corporation's (CDM Smith) Phase II Environmental Site Assessment (ESA) for 77 Westchester Avenue, Pound Ridge/Scotts Corners site (the "subject property") located in Pound Ridge, New York. This Phase II ESA was conducted on behalf of the United States Environmental Protection Agency (EPA)to support a Targeted Brownfields Assessment (TBA) request from the Town of Pound Ridge, Contract Number (No.): EP-W-09-002, WA No.: 029-SION-0200. The results of the initial and supplemental Phase II ESAs will assist the Town of Pound Ridge in identifying areas or contaminants of concern on the property and appropriate options for future commercial use redevelopment.

The subject property is approximately 0.343 acres and is comprised of one tax parcel (parcel No. 9454-9). The subject property is currently owned by John DiFulvio and is improved with a 4,864-square foot, two-story, mixed use building occupied by Pound Ridge Auto Body, Town and Country Auto Repair, with vacant apartments on the second floor. Historically, the property was occupied by a gasoline fueling station from the 1940s or 1950s that closed prior to 2002.

The 2016 Phase II ESA was performed by CDM Smith to investigate and confirm the recognized environmental conditions (RECs) identified by the Phase I ESA conducted by Engineering and Environmental Solutions Joint Venture (EES JV) in March 2016.

The March 2016 Phase I ESA was performed to support the potential redevelopment of the subject property. The Phase I ESA identified three recognized environmental conditions (RECs) for the subject property as detailed below.

- ***REC-1 – Spill #9412600/9507568:*** From 1993 to 1995, the property was investigated in association with a petroleum spill (New York State Department of Environmental Conservation (NYSDEC) Spill #9412600) that originated at a Shell station located downgradient at 66 Westchester Avenue. The subject property was not ruled out as a contributor to the contamination that had been detected in local potable wells. This spill is still open. In 1995, sampling related to Spill #9412600 on the subject property identified six inches of free product in monitoring well (MW-3) and was reported to the (NYSDEC) Spill Hotline. Spill #9507568 was assigned. A soil vapor extraction/air sparge (SVE)/AS system was installed to address the contamination but was removed based on the reduction of contaminant levels. This spill was closed on March 27, 2013.

- ***REC-2 – On-Site Dry Wells:*** A concealed dry well (eastern dry well) exists in the parking lot to the east of Pound Ridge Auto Body. Floor drains in the garage bay of Pound Ridge Auto Body formerly discharged into the dry well. It is unknown what repair shop chemicals may have been discharged into the dry well. An additional drywell (western dry well) was identified to the northwest of the building during the Phase II ESA and was added to the REC-2 investigation. The subject property owner claimed this well was used for discharge from the laundry machine in the former apartment.

- ***HREC – Spill #020451****:* Three gasoline USTs and one diesel UST associated with the former fueling station operations were removed in August 2002; one fuel oil UST was abandoned in place. During excavation activities, gasoline contamination was observed in the tank graves. A total of 176 tons of contaminated soil was removed. The spill was closed on November 12, 2002.

To investigate the RECs identified by the Phase I ESA, the following Phase II ESA activities were completed by CDM Smith and their subcontractors in 2016 (initial Phase II ESA) and 2018 (supplemental Phase II ESA) at the subject property:

Initial Phase II ESA Investigation

- *Site Reconnaissance*: Existing site features (monitoring wells, septic tanks, etc.) including evidence of former site features (dry wells and soil vapor extraction/air sparge (SVE/AS) system) previously discussed in the Phase I ESA were confirmed during the site reconnaissance.

- *Geophysical Survey:* The survey was conducted using electromagnetic conductivity, GPR and utility detection equipment to identify any subsurface anomalies including underground storage tanks (USTs), septic tanks, buried drums, and utilities. The survey identified an additional dry well on the northwestern side of the site property building.

- *Soil Borings*: 20 subsurface soil samples were collected from 10 soil boring. Subsurface soil was analyzed for TCL VOCs, semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH) diesel range organics (DRO), TPH gasoline range organics (GRO), polychlorinated biphenyls (PCBs), and Target Analyte List (TAL) Metals, based on the requirements of each REC.

- *Existing Monitoring Well Sampling*: Two existing monitoring wells (MW-01 and MW-02), set adjacent to the former USTs located in the southeastern portion of the property, were sampled via low flow sample methodology. The analysis for each groundwater sample was based on the goals of the REC and sample volume available, with TCL VOCs, SVOCs, TPH DRO, TPH GRO, PCBs and TAL metals being the full suite of analysis.

- *Installation and Sampling of Temporary Monitoring Wells*: Groundwater samples were collected from five temporary monitoring wells. The analysis for each groundwater sample was based on the goals of the REC and sample volume available, with TCL VOCs, SVOCs, TPH DRO, TPH GRO, PCBs and TAL metals being the full suite of analysis.

- *Potable Water Sampling*: The onsite potable water well was sampled from the tap of a sink within the subject property building. The potable water sample was analyzed for TCL VOCs, SVOCs and TAL metals.

- *Soil Vapor and Ambient Air Sampling*: Two soil vapor samples and one outdoor ambient air sample were collected within the parking lot adjacent to the subject property building. Soil vapor samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs).

Supplemental Phase II ESA Investigation

- *Soil Borings*: three subsurface soil samples were collected from two soil borings. Subsurface soil was analyzed for TCL VOCs, SVOCs, TPH DRO, TPH GRO, PCBs, and TAL metals.
- *Installation and Sampling of Monitoring Wells*: Four permanent monitoring wells were installed during the supplemental Phase II investigation. Groundwater samples were collected from all four permanent monitoring wells for TCL VOCs, SVOCs, TPH DRO, TPH GRO, PCBs and TAL metals.
- *Soil Vapor Intrusion Sampling*: Two sub-slab vapor samples with two co-located indoor air samples, and one outdoor ambient air sample were collected within and adjacent to the subject property building. Vapor intrusion samples were analyzed for TCL VOCs.

Phase II ESA Conclusions

CDM Smith's conclusions are based on analytical results, historic information, and visual observations summarized below.

- There is no significant evidence of impacts from the former USTs or other petroleum related sources at the subject property (REC-1 and HREC). There are low concentrations of TPH GRO and DRO across the subject property in soil and in the groundwater downgradient from former USTs and other petroleum related sources. There are no exceedances of VOCs above 6 NYCRR Part 375-6(b) Restricted Use – Commercial, NYSDEC CP-51 supplemental soil cleanup objectives (SCOs) or soil cleanup levels for gasoline or fuel oil contaminated soils.
- The subject property potable water well had exceedances of the NYSDEC ambient water quality standards (AWQS) and EPA RSLs for sodium and antimony, respectively. The potable water well is not currently used for drinking water. Therefore, the exceedances do not present concern.
- Soil and groundwater associated with the eastern former dry well contain TPH DRO and GRO, BTEX (benzene, toluene, ethylbenzene, xylenes), chlorinated benzene compounds, PAHs, PCBs, and metals. These compounds are consistent with the former use of the dry well as the discharge for the rinse sink in the automotive garage. There are no exceedances in soil, but compounds from all analyte groups exceed NYSDEC AWQS in groundwater. Additional soil and groundwater samples collected during the supplemental investigation confirmed samples the presence of groundwater contamination as a result of the use of the eastern dry well and the lack of contamination exceeding standards in soil.
- Soil associated with the western dry well contains TPH DRO and GRO, toluene, PAHs, PCBs, and metals, although the only exceedance of NYSDEC Commercial Use SCOs was barium in one sample, which may be related to the laundry wastewater that discharged into the dry well. The groundwater sample collected adjacent to the western dry well during the supplemental investigation did not exceed NYSDEC AWQS.

- The four permanent wells installed during the supplemental Phase II aided in the characterization of VOCs, TPH GRO and DRO, SVOCs, PCBs, and metals after poor recharge in temporary well points sampled during the initial Phase II prevented adequate groundwater characterization. Both TPH DRO and GRO were consistently detected in groundwater, the highest concentrations were noted in MW-4 adjacent to the eastern dry well. Three metals (iron, manganese, and sodium) exceeded the NYSDEC AWQS in all four of the groundwater samples, however, the concentration of these metals was consistent with those seen across the subject property in both the initial and supplemental Phase II ESAs and do not appear to be related to any RECs. Therefore, these metals are likely naturally occurring. Other analytes such as SVOCs and PCBs were either not detected or only found at concentrations below NYSDEC AWQS.

- Groundwater samples collected downgradient of former USTs (HREC) indicate that petroleum contamination is still present in low concentrations, however no BTEX or methyl tert-butyl ether (MTBE) was detected in these samples.

- Detections of PCE at concentrations in soil vapor above New York State Department of Health Air Guidance Values (NYSDOH AGVs) suggested there was a potential for soil vapor intrusion of PCE into the building located at 77 Westchester Avenue. However, soil and groundwater samples collected throughout the subject property did not detect PCE. During the supplemental Phase II both the indoor air and sub-slab vapor sampling indicated that concentrations of PCE in the vapor samples do not require additional actions or mitigation.

- Soil vapor intrusion sample results from the supplemental Phase II were compared to the NYSDOH Vapor Intrusion guidance matrices and generally, VOC results were at concentrations that recommended No further action. Elevated concentrations of methylene chloride were noted in the indoor air within the subject property building while lower concentrations were detected in the sub-slab vapor. Low levels of methylene chloride were noted in the outdoor ambient air sample, as well. Methylene chloride was also noted as a main ingredient of one of the paint stripping products observed within the subject property building. As methylene chloride indoor air concentrations are higher than sub-slab vapor concentrations and products containing methylene chloride were present within the subject property building during the supplemental Phase II ESA, it is likely that the source of methylene chloride is a result of current subject property operations and does not require mitigation.

Recommendations

Based on the results of the initial and supplemental Phase II ESA activities and an evaluation of subject property information based on previous environmental investigations, the following recommendations are made:

- The exceedances of NYSDEC AWQS in MW-1 indicated an impact to groundwater likely associated with the eastern dry well during the initial Phase II ESA. Soil sample results from beneath the eastern dry well collected during the supplemental Phase II did not find concentrations of contaminants in soils above standards. However, groundwater samples collected during the supplemental investigation from wells in close proximity to the eastern dry well found even higher concentrations of the chlorinated benzenes noted during the

initial Phase II downgradient groundwater samples. TPH concentrations were also elevated at these wells, most significantly at MW-4 which also had exceedances for several aromatic hydrocarbons. Due to the elevated levels of TPH and VOCs in MW-4, it is suggested that groundwater be further monitored over the course of two rounds in one year to account for seasonal variability and characterize temporal changes. Onsite monitoring wells should be surveyed so groundwater elevations can be compared, and localized groundwater flow direction can be characterized. Samples should be collected for VOCs and TPH. This is necessary for a more comprehensive characterization of groundwater impacts associated with the dry well.

- Should the potable water well on the subject property be used for drinking water in the future, sampling and treatment would be required to ensure water quality meets EPA RSLs and NYSDEC AWQS. Presently a deed restriction should be employed limiting the use of the well to non-potable. Furthermore, it is recommended that no additional potable water wells are installed at the subject property.

- Shallow soil in the area of the dry well northwest of the building did exhibit barium contamination at levels exceeding Commercial Use SCOs. It is recommended that this covered dry well be excavated or formally abandoned.

- Soil vapor intrusion sampling indicated that No further action is required within the subject property building and does not presently require mitigation via engineering controls.

When undertaking subject property development, it is recommended that the developer enlist a professional engineer or scientist to prepare a health and safety plan, construction contingency plans, and a soils management plan, in order to safely and appropriately remove (and control) impacted materials. It is recommended that any work performed at the subject property be performed by an environmental professional (or if necessary a professional engineer) following approved plans and a site-specific health safety plan approved by a certified industrial hygienist (CIH).

In the absence of the limited remediation suggested above, engineering controls should be implemented, requiring that any construction involving the disturbance of soils within the subject property (including non-emergency excavation, which may be part of utility repair or maintenance, or construction) be performed with the involvement of a professional engineer, and be conducted in accordance with local state and federal rules and regulations, providing adequate engineering controls and worker protection. In the absence of remediation, the values of adjacent and surrounding properties may be (and currently be) negatively impacted. The loss of property value may represent some risk to public welfare, yet this risk may not be considered significant risk.

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Section 1
Introduction

This report presents the results of CDM Federal Programs Corporation's (CDM Smith) Phase II Environmental Site Assessment (ESA) for the Targeted Brownfield Assessment (TBA) at the 77 Westchester Avenue, Pound Ridge/Scotts Corners site (the "subject property") located in Pound Ridge, New York (Figure 1-1). The initial and supplemental Phase II ESAs were conducted on behalf of the United States Environmental Protection Agency (EPA) as a result of a TBA request from the Town of Pound Ridge.

The subject property is approximately 0.343 acres and is comprised of one tax parcel (parcel No. 9454-9). The subject property is currently improved with a 4,864-square foot, two-story, mixed use building occupied by Pound Ridge Auto Body, Town and Country Auto Repair, with vacant apartments on the second floor. Historically, the property was occupied by a gasoline fueling station from the 1940s or 1950s that closed prior to 2002.

1.1 Purpose

The Phase II ESAs was conducted to investigate the potential for contamination associated with the recognized environmental conditions (RECs) identified during the Phase I ESA (March 2016), in addition to site conditions identified during the site reconnaissance performed by CDM Smith (June 2016). The objective of the Phase II ESAs was to:

- confirm the presence/absence of previously identified underground storage tanks (USTs) and identify additional potential anomalies on the subject property
- determine if onsite soil and groundwater contamination exists above applicable criteria in areas not previously investigated and confirm the results of previous sampling events
- determine if the potential for soil vapor intrusion into the building on the subject property exists
- determine if conditions at the subject property impacted the potable water well present within the building
- collect hydrogeological information

The Town of Pound Ridge intends to redevelop the property for commercial use, therefore the remediation goal for the property is Restricted Use Commercial.

1.2 Special Terms and Conditions

Special terms and conditions in relation to this project have been addressed throughout various sections of this assessment.

1.3 Limitations, Methodology and Exceptions of Investigation

The Phase II investigations conducted by CDM Smith in September of 2016 and in November/December 2018 was executed in accordance with the following documents:

- *"U.S. EPA Region 2 Brownfields Project Planning Guidance" (EPA 2000)*
- *"Generic Brownfields Quality Assurance Project Plan" (CDM Smith 2008)*
- *Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites, May 2016 (EPA 2016)*
- *NYSDEC Division Environmental Remediation (DER)-10 Technical Guidance for Site Investigations and Remediation, May 2010 (DER-10)*
- *6 New York Codes Rules and Regulations (NYCRR) Part 375 Environmental Remediation Programs*
- *NYSDEC Technical & Operational Guidance Series (TOGS), Section 1.1.1 Ambient Water Quality Standards & Guidance Values and Groundwater Effluent, June 1998, 2000 and 2004 addendum*
- *6 NYCRR Part 703 – Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations*
- *"Final Generic Quality Assurance Project Plan (QAPP), Targeted Brownfields Assessments" (CDM Smith 2018a)*
- *"Final Site-Specific Quality Assurance Project Plan (QAPP), 77 Westchester Avenue, Pound Ridge/Scotts Corners Site, Targeted Brownfields Assessment, Pound Ridge, New York" (CDM Smith 2016)*
- *"Site-Specific Health and Safety Plan Addendum, 77 Westchester Avenue, Pound Ridge/Scotts Corners Site, Targeted Brownfields Assessment, Pound Ridge, New York" (CDM Smith 2018b)*
- *"Site-Specific Health and Safety Plan , 77 Westchester Avenue, Pound Ridge/Scotts Corners Site, Targeted Brownfields Assessment, Pound Ridge, New York" (CDM Smith 2016)*
- *"Final Work Plan, Targeted Brownfields Assessments for Selected Region 2 Brownfields Initiative Sites" (CDM Smith 2010)*
- *"Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process, Designation: E 1903-11" (ASTM International 2000) (Reapproved 2011)*
- *"Quality Assurance Guidance for Conducting Brownfields Site Assessments" (EPA 1998)*

Site assessment activities, including reporting of findings and conclusions, were conducted in accordance with ASTM International site assessment guidance to the extent practicable.

The results for the TBA Phase II ESAs are based on a review of available information obtained through a review of historic records, reported spill records, a Phase I ESA report, a site reconnaissance, a geophysical survey, and field sampling analytical data. The Phase II ESAs were completed to identify, locate, and characterize contamination present at the subject property. To meet this objective, sample locations were chosen based on the subject property history obtained by CDM Smith. The results of the Phase II ESAs only characterize the nature of contamination at the subject property; the ESA has not fully characterized the extent of contamination.

This assessment has been prepared and conducted under the guidance of a qualified environmental professional as defined in New York State Department of Environmental Conservation (NYSDEC)'s DER-10, 40 CFR Part 312, Standards and Practices for All Appropriate Inquiries (AAI) and ASTM E1903-11. The conclusions represent CDM Smith's professional opinions based on these aforementioned sources of information. A Phase II investigation is not a comprehensive site characterization or regulatory compliance audit and should not be construed as such. CDM Smith cannot represent that the subject property contains no hazardous or toxic materials, products, or other latent conditions beyond those observed during the ESA. Further, the services herein shall not be construed, designed or intended to be relied upon as legal interpretation or advice. This report was prepared for the exclusive use by EPA and is not intended for use by any other parties. Use of this report by any other party is at their sole risk without liability to CDM Smith.

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Section 2
Site Description

2.1 Site Description

The subject property is currently owned by Mr. John DiFulvio and is located at 77 Westchester Avenue in the Town of Pound Ridge, Westchester County, New York. The subject property is 0.343 acres with the south side of the parcel bordered by Westchester Avenue. The subject property is identified as tax parcel 9454-9. The subject property is zoned as PB-A, which is maintained as "planned business" zoning. Figure 3-1a depicts the Site Plan.

2.2 Site History and Land Use

The subject property is mainly comprised of a single 4,864-square foot, two-story, mixed use building. The first floor of the building has two automobile repair garages maintained by Pound Ridge Auto Body and Town and Country Auto Repair. The second floor of the building contains a vacant three-bedroom apartment. Historically, the property was occupied by a gasoline fueling station from the 1940s or 1950s and closed prior to 2002 when the last of the USTs were removed/decommissioned.

From 1993-1995, the property was investigated in association with a petroleum spill (#9412600) that originated at a Shell station located downgradient at 66 Westchester Avenue. The subject property was not ruled out as a contributor to the contamination that had been detected in local potable wells. This spill is still open.

In 1995, six inches of free product were observed in an existing monitoring well (MW-3) at the subject property. The presence of separate phase product in the well was reported to the NYSDEC Spill Hotline and Spill #9507568 was assigned. A soil vapor extraction/air sparge (SVE/AS) system was installed to address onsite contamination. The system operated for an unknown length of time and was removed based on the reduction of contaminant levels. No documentation of the contaminant levels reached was available. This spill was closed on March 27, 2013.

Three gasoline USTs (two 6,000 and one 4,000 gallon) and one diesel UST (one 4,000 gallon) associated with former fueling station operations were removed in August 2002; in addition, one fuel oil UST was abandoned in place in the garage attached to the back of Pound Ridge Auto Body. During excavation activities, gasoline contamination was observed in the tank graves and NYSDEC Spill #020451 was assigned. 176 tons of contaminated soil were removed. This spill was closed on November 12, 2002.

A dry well exists in the parking lot to the east of Pound Ridge Auto Body, which has been abandoned and sealed with concrete. According to the subject property owner, floor drains in the garage bays of Town and Country Repair Shop and Pound Ridge Auto Body formerly discharged into the dry well. It is unknown what repair shop chemicals may have discharged into the dry well.

The property utilizes a potable well which currently only supplies water to a single sink in Pound Ridge Auto Body. This sink is only used for handwashing. The operator of Pound Ridge Auto Body indicated that it is not used for drinking water.

2.3 Physical Setting

The property is flat and mostly paved, however, the local topography slopes to the southwest. From the subsurface investigations, soil types at the subject property were generally consistent. The first few feet of soil encountered at the subject property is generally brown silty sand and gravel fill material. Underlying the fill material to the water table, at approximately 10 feet bgs (below ground surface), the soil is gray to brown silt and sand. Soil encountered below the water table to the top of bedrock generally remains silt and sand becoming more gravel-rich with depth. Bedrock is encountered approximately 15 feet bgs. Due to the shallow water table it is estimated that groundwater flows to the west-southwest in the direction of local topography.

2.4 Adjacent Property Land Use

The subject property is primarily surrounded by mixed use residential and some commercial parcels in a downtown area. This area is referred to as Scotts Corners. The immediate surrounding area is a small downtown retail strip in a rural residential community. The subject property is bordered by Westchester Avenue to the south, a vacant commercial building to the east, a Town of Pound Ridge owned parking lot to the north, and residential properties to the west. Subject property access is unrestricted and can be gained from the south via Westchester Avenue and from the north by the Town-owned parking lot.

2.5 Summary of Previous Assessments

In February 1995, Land Tech Remedial, Inc. (LTR) performed a subsurface investigation on behalf of NYSDEC for the properties at 66 Westchester Avenue and the subject property (77 Westchester Avenue). The investigation was meant to determine the source(s) of gasoline constituents detected in various potable water wells located within the area. During the investigation three overburden monitoring wells (MW-1, MW-2, and MW-3), and two bedrock monitoring wells (MW-A and BR-1) were installed and 33 groundwater screening borings were advanced in the vicinity of the subject property. All samples were analyzed for volatile organic compounds (VOCs).

As a result of benzene, toluene, ethylbenzene, and xylene (BTEX) and methyl tert-butyl ether (MTBE) contamination in overburden groundwater identified during the subsurface investigation, LTR installed and provided the operations and maintenance of a soil SVE/AS system. The system, installed in 1995, consisted of five soil vapor extraction points and five air sparge points to remediate petroleum contamination at the subject property. It is unknown when the system was decommissioned.

The March 2016 Phase I ESA was performed to support the potential redevelopment of the subject property. The Phase I ESA identified three RECs for the subject property as detailed below.

- ***REC-1 – Spill #9412600/9507568****:* From 1993 to 1995, the property was investigated in association with a petroleum spill (NYSDEC Spill #9412600) that originated at a Shell station located downgradient at 66 Westchester Avenue. The subject property was not ruled out as a contributor to the contamination that had been detected in local potable wells. This spill is still open. In 1995, sampling on the subject property related to Spill #9412600 identified six inches of free product in monitoring well (MW-3). This finding was reported to the NYSDEC Spill Hotline. Spill #9507568 was assigned. A soil SVE/AS system was installed to address the contamination but was removed based on the reduction of contaminant levels. This spill was closed on March 27, 2013.

- ***REC-2 – On-Site Dry Wells:*** A concealed dry well (eastern dry well) exists in the parking lot to the east of Pound Ridge Auto Body. Rinse water from cleaning with degreasers was discharged to this dry well. Westchester County Health Department notified NYSDEC in a letter on July 1, 2002. The letter required ceasing discharge to the dry well and sealing the sink. The property owner reported that the sink and associated piping were removed and the dry well was plugged on July 10th. Floor drains in the garage bay of Pound Ridge Auto Body formerly discharged into the dry well; it is unknown what repair shop chemicals may have been discharged into the dry well. An additional drywell (western dry well) was identified to the northwest of the building during the Phase II ESA and was added to the REC-2 investigation. The subject property owner claimed this well was used for discharge from the laundry machine in the former apartment.

- ***Historical Recognized Environmental Condition (HREC) – Spill #020451****:* Three gasoline USTs and one diesel UST associated with the former fueling station operations were removed in August 2002; one fuel oil UST was abandoned in place. During excavation activities, gasoline contamination was observed in the tank graves. A total of 176 tons of contaminated soil was removed. The spill was closed on November 12, 2002.

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Section 3
Phase II Activities

3.1 Scope

CDM Smith performed an initial Phase II ESA at the subject property in September 2016 to investigate the RECs identified during the Phase I ESA. The activities performed as part of this Phase II ESA included:

- Preparing of a Site-Specific quality assurance project plan (QAPP)
- Preparing of a Site-Specific health and safety plan (HASP)
- Conducting a field planning meeting on September 2, 2016
- Site Reconnaissance
- Site Investigation:
    - *Geophysical Survey*: An Electromagnetic (EM) 31 and Ground Penetrating Radar (GPR) survey was performed by Delta Geophysics Inc. (Delta) of the property to identify any subsurface anomalies including USTs, buried pipes, utilities and to clear soil boring locations. The survey was conducted using electromagnetic conductivity, GPR and utility detection equipment.
    - *Soil Vapor and Ambient Air Sampling*: Two soil vapor samples (SV-01 and SV-02) and one outdoor air sample (AO-01) were collected within the parking lot adjacent to the subject property building. All air samples were collected via Summa Canister. Soil vapor samples were collected at a depth of approximately 8 feet bgs (2 feet above the water table).
    - *Soil Borings*: Ten direct push technology (DPT) soil borings (SB-01, SB-03 through SB-11) were advanced by Talon Drilling Company and sampled by CDM Smith. Borings were advanced to a maximum depth of 15 feet. A total of 20 subsurface soil samples were collected from the 10 soil boring locations. Each soil boring had one sample collected from 0 to 2 feet bgs and one sample collected from the interval immediately above the groundwater table. The locations selected for soil sampling were based on RECs and field observations. Lithologic logging, visual and olfactory observations, and photoionization (PID) field screening of subsurface soil samples were used to characterize environmental media and aid in the determination of sample collection and depth.
    - *Existing Monitoring Well Sampling*: Two existing monitoring wells (MW-1 and MW-2), set adjacent to the former USTs located in the southeastern portion of the property, were sampled via low flow and grab sample methodology. The existing monitoring wells ranged in depth from 12 to 20 feet bgs.

- *Installation and Sampling of Temporary Groundwater Monitoring Wells*: Four temporary groundwater monitoring wells (GW-01, GW-05, GW-09, and GW-11) were advanced and installed by Talon Drilling Company while CDM Smith provided oversight. The temporary monitoring wells ranged in depths from 12.3 to 13.4 feet bgs. Groundwater samples were collected via low flow and grab sample methodology.

- *Potable Water Sampling*: The onsite potable water well was sampled from the tap of a sink present within the subject property building. Prior to sampling water was allowed to flow from the sink until the water tank volume was replaced.

All samples were analyzed by RTI Laboratories, a subcontractor laboratory. Soil vapor samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs). Subsurface soil was analyzed for TCL VOCs, semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH) diesel range organics (DRO), TPH gasoline range organics (GRO), polychlorinated biphenyls (PCBs), and Target Analyte List (TAL) Metals. Groundwater samples were analyzed for TCL VOCs, SVOCs, PCBs, TPH DRO, TPH GRO, and TAL metals, with exceptions due to lack of volume from slow recharge. The potable water sample (PW-01) was analyzed for TCL VOCs, and SVOCs and TAL metals.

CDM Smith performed a supplemental Phase II ESA at the subject property in November and December 2018 to further investigate the RECs and data gaps identified during the initial Phase II ESA. The activities performed as a part of the Supplemental Phase II ESA included:

- Preparing a Site-Specific addendum to the initial Phase II ESA HASP
- Conducting a field planning meeting on November 5, 2018
- Supplemental Site Investigations including:

  - *Soil Vapor Intrusion Sampling*: Two co-located indoor air and sub-slab vapor samples (IA/SS-01 and IA/SS-02) were collected within the Pound Ridge Auto Body and the Town and County Auto Repair facilities at the subject property. One outdoor air sample (AO-01) was collected northwest of the subject property building. All air samples were collected via Summa Cannister.

  - *Soil Borings*: Two DPT soil borings (SB-12 and SB-13) were advanced by Talon Drilling Company and sampled by CDM Smith. Borings were advanced to a maximum depth of 12 feet. Soil boring, SB-12 had one sample collected from 10 to 12 feet bgs. Soil boring, SB-13 had one sample collected from 0 to 2 feet bgs and one sample collected from 6 to 8 feet bgs. The locations selected for soil sampling were based on RECs, field observations, and the finding from the initial Phase II ESA. Lithologic logging, visual and olfactory observations, and PID field screening of subsurface soil samples were used to characterize environmental media and aid in the determination of sample collection and depth.

  - *Monitoring Well Installation*: Four permanent monitoring wells (MW-4, MW-5, MW-6, and MW-7) were installed on the subject property. Monitoring wells were installed by

Talon Drilling Company via a hollow stem auger rig. Monitoring well screened intervals are approximately 15 feet long with total depths targeting the water table.

- *Monitoring Well Development and Sampling*: The four newly installed permanent monitoring wells were set adjacent to both the western and eastern dry wells in the northern portion of the subject property. All wells were developed and sampled via low flow groundwater sampling methodology.

All samples were analyzed by Katahdin Analytical Services, a subcontractor laboratory. Soil vapor intrusion samples were analyzed for TCL VOCs. Subsurface soil was analyzed for TCL VOCs, SVOCs, PCBs, TPH DRO, TPH GRO and TAL Metals. Groundwater samples were analyzed for TCL VOCs, SVOCs, PCBs, TPH DRO, TPH GRO, and TAL Metals. Potable water samples were not collected during the supplemental Phase II investigation.

3.2 Site Access and Reconnaissance

A site reconnaissance was performed by CDM Smith in June 2016. During the reconnaissance, CDM Smith observed the following:

- The subject property building, at 77 Westchester Avenue is currently in use by two businesses, Pound Ridge Auto Body and Town & Country Auto Repair.
- A diagonal pavement cut/patch, observed in the front parking lot, is most likely from the former SVE/AS system.
- Topography is generally flat with the surrounding area sloping to the southwest.
- There is a private well on the subject property located on the southwest corner of the building. The plumbing from the well leads to a pressure tank in a rear utility room. The pressure tank is not filtered and supplies the sink in the business in the building. The sink is used for handwashing only and not drinking water. There is also a sump pump in the utility room.
- MW-1, MW-2, MW-3, MW-4, BR-2, and MW-A wells were located.
- The location of the former dry well and floor drains in Pound Ridge Auto Body were located.
- The abandoned-in-place fuel oil UST in the rear garage was located as an L-shaped patch.
- A private septic tank is located at the rear (northeast) corner of the building

3.3 Geophysical Survey

A geophysical survey was performed by Delta Geophysics on August 16, 2016 to identify subsurface anomalies including USTs, buried pipes, and utilities. The survey is presented in Appendix A and is summarized below:

- A GPR survey was conducted using a Geophysical Survey System Inc. SIR-3000 cart-mounted GPR unit, a Radiodetection RD7000 precision utility detector, a Fisher M-Scope

TW-6 magnetic locator, a Genomics EM-61 Mark II-time domain metal detector, and a Trimble Global Positioning System (GPS) Pathfinder Pro XRS.

- GPR anomalies identified disturbed soil in the parking lot in the area of the former UST graves.
- Two magnetic anomalies were identified to the west of the building. One of these anomalies revealed an additional drywell under a metal plate. The subject property owner claimed this was used for discharge from the laundry machine in the former apartment. This dry well was investigated using additional borings added to the sampling program and will be discussed as a part of REC-2 in Section 4.6.2.
- The floor drain in Pound Ridge Auto Body and the associated dry well to the east of the building were identified. No floor drain was identified in Town and Country Auto Repair.
- The abandoned-in-place UST was identified as a former excavation but removal/in-place abandonment was not confirmed due to the disturbance from the reinforced concrete floor.
- All accessible areas within the survey areas were examined during this investigation. Based on the data gathered, the following utilities were detected: water, gas, sanitary sewer and storm sewer. All detected utilities were marked onsite with appropriate colors. Anomalous features and unknown utilities were marked onsite in pink.

3.4 Sampling Activities and Sample Analysis

Field log book notes and sampling information recorded during investigation activities are provided in Appendix B. Sample locations are shown on Figure 3-1 and a summary of the samples collected and sample parameters are presented in Table 3-1. Sampling locations and analytical parameters were selected based on the potential contaminants of concern in the RECs identified during the Phase I ESA, previous environmental sample locations, and evidence of staining. Analytical results are discussed in Section 4.

3.4.1 Soil Vapor Intrusion Sampling

Two soil vapor samples (SV-01 and SV-02) and one outdoor air sample (AO-01) were collected according to the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (New York State Department of Health (NYSDOH) 2006) on September 12, 2016 to determine if the potential for soil vapor intrusion into the onsite building exists. The samples were collected using 1.4 liter Summa canisters over 30 minutes, and helium tracer tests were performed at both locations. The soil vapor samples were taken at a depth of eight feet bgs (approximately two feet above the water table). Soil vapor samples were collected within the parking lot adjacent to the subject property building at a distance of approximately six feet from the building. An outdoor ambient air sample was collected in close proximity to the soil vapor samples in order to monitor ambient air conditions.

Two co-located indoor air and sub-slab vapor samples (IA/SS-01 and IA/SS-02) and one outdoor air sample (AO-01) were collected according to the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (New York State Department of Health (NYSDOH) 2006 on November 13, 2018 as a part of the supplemental Phase II ESA, to determine if soil vapor

intrusion issues exist within the onsite building. The samples were collected using 6-liter Summa canisters equipped with 24-hour laboratory-calibrated flow regulators. Helium tracer tests were performed at both locations. One co-located indoor air and sub-slab vapor sample location (IA/SS-01) was located within Pound Ridge Auto Body and the second co-located indoor air and sub-slab vapor sample location was located within the former Town and Country Auto Repair. The outdoor air sample (AO-01) was collected north of the subject property building due monitor ambient air conditions.

3.4.2 Soil Borings and Subsurface Soil Samples

Initial Phase II ESA

Ten soil borings (SB-01, SB-03 through SB-11) were advanced on September 7 and 8, 2016 by Talon Drilling Company, via DPT drilling methods, to characterize environmental media and to screen for potential impacts. The soil borings were advanced to a maximum depth of 15 feet bgs. Bedrock was not encountered. Lithologic logging, visual and olfactory observations, and PID field screening were performed at all 10 locations. A description of the soil encountered during drilling was provided in Section 2.3. Appendix C presents the soil boring logs. The locations of the soil borings that were sampled during the initial Phase II ESA are shown in Figure 3-1a. Two soil samples were collected from each boring. A shallow sample was collected from 0 to 2 feet bgs in all borings, with the exception of SB-05, where a four-foot interval was used due to limited recovery during advance of the macro-core in the building. The shallow sample at SB-07 was collected from 0 to 1-foot bgs to most accurately characterize the material at the top of the former dry well, since the dry well was accessible. A second sample was collected from each boring based on RECs and field observations. PID readings across the subject property varied by location. At 7 of the 10 boring locations VOCs were detected with the PID. The intervals with PID readings ranged in depth from 1.5 to 12.5 feet bgs. The highest PID reading was recorded at 450 parts per million (ppm) at 12.5 feet bgs from SB-10 located in the southeast corner of the subject property. Subsurface soil samples were analyzed by a subcontract laboratory (RTI Laboratories). Analyses for each sample are presented in Table 3-1.

Supplemental Phase II ESA

Two additional soil borings (SB-12 and SB-13) were advanced on November 13 and December 12, 2018, respectively by Talon Drilling Company, via DPT drilling methods, to characterize environmental media and to screen for potential impacts. SB-12 was advanced to a maximum depth of 12 feet bgs through the bottom of the concrete filled eastern dry well and SB-13 was advanced to a depth of 8 feet bgs in an area of potential release identified following the Initial Phase II.

The locations of the soil borings that were sampled during the supplemental Phase II ESA are shown in Figure 3-1b. Lithologic logging, visual and olfactory observations, and PID field screening of the soil cores were performed at both locations. A description of the soil encountered during drilling is provided in Section 2.3. Appendix C presents the soil boring logs.

At SB-12 one subsurface sample was collected from 10-12 feet bgs, immediately below the eastern dry well. At SB-13 a shallow sample was collected from 0 to 2 feet bgs and a deeper subsurface sample was collected from 6 to 8 feet bgs based on field observations. The samples at SB-13 were collected to characterize a potential waste oil discharge. PID readings from both

borings were non-detect. Subsurface soil samples were analyzed by a subcontract laboratory (Katahdin Analytical Services). Analyses for each sample are presented in Table 3-1.

3.4.3 Monitoring Well Installation and Sampling

Initial Phase II ESA

Temporary monitoring wells were installed via DPT drilling methods at four of the subsurface borings (SB-01/GW-01, SB-05/GW-05, SB-09/GW-09, and SB-11/GW-11). Locations were determined based on the RECs and field observations. The temporary wells were constructed of one-inch diameter polyvinyl chloride (PVC) with five feet of 0.010-inch slot screen. The total depth of the temporary wells ranged from 12.4 to 13.4 feet bgs. Each temporary well was screened across the water table. Groundwater was encountered at approximately 10 feet bgs in each well.

Groundwater samples were collected from the two existing monitoring wells (MW-1 and MW-2) and the four temporary well points. A water level from all well locations was recorded prior to sampling, ranging from 9.57 to 11.13 feet bgs. Figure 3-1a shows the existing well locations and the temporary well point locations. The direction of groundwater flow is assumed to be toward the west-southwest based on the local topography, however, the lack of surveyed monitoring wells and intact casings prevented an analysis of these water levels.

Groundwater samples were collected using ¼-inch inner diameter Teflon™-lined polyethylene tubing and a peristaltic pump. Due to limited recovery, wells were not developed. Temporary wells GW-01, GW-05, and GW-11 had low recharge and were pumped dry even when purging at a low rate. Field personnel waited 24 hours to return to the well prior to sample collection. GW-09 was able to be purged using low-flow methodology. The groundwater sample from MW-2 was collected as a grab sample following purging the well dry, due to slow recharge. The groundwater sample from MW-1 was collected via low-flow methodology. Prior to sample collection, water quality parameters (pH, specific conductivity, turbidity, dissolved oxygen, temperature and redox potential) were collected at five-minute intervals where possible. Where recovery was poor, water quality parameters were not collected. Groundwater samples were collected once water quality parameters stabilized or when wells were able to produce sufficient volume. Groundwater sampling logs can be found in Appendix D.

The groundwater samples were submitted to a subcontract laboratory (RTI Laboratories). Analyses for each sample are presented in Table 3-1.

Supplemental Phase II ESA

As a part the supplemental Phase II ESA, permanent monitoring wells were installed via hollow stem auger rig at four locations. Locations were determined based on the RECs, field observations and the initial Phase II ESA investigation. The permanent wells were constructed of two-inch diameter PVC with 15 feet of 0.010-inch slot screen. The total depth of the permanent wells ranged from 19 to 20 feet bgs. Each permanent well was screened across the water table. Groundwater was encountered at approximately 4 to 5 feet bgs in each well.

Groundwater samples were collected from all four of the newly installed permanent monitoring wells (MW-4, MW-5, MW-6, and MW-7). A water level from all well locations was recorded prior to sampling, ranging from 4.84 to 5.35 feet bgs. Figure 3-1b shows the newly installed permanent

monitoring well locations. The direction of groundwater flow is assumed to be toward the west-southwest based on the local topography. The lack of surveyed monitoring wells prevented an analysis of these water levels, however the water level measurements suggest west-southwest groundwater flow direction.

Groundwater samples were collected using ¼-inch inner diameter Teflon™-lined polyethylene tubing and a peristaltic pump. Each permanent well was developed until water quality parameters (pH, specific conductivity, turbidity, dissolved oxygen, temperature, and redox potential), recorded at five-minute intervals, were stabilized. Prior to sample collection at each well, water quality parameters (pH, specific conductivity, turbidity, dissolved oxygen, temperature and redox potential) were collected at five-minute intervals. Groundwater samples were collected once water quality parameters stabilized. Groundwater sampling logs can be found in Appendix D.

The groundwater samples were submitted to a subcontract laboratory (Katahdin Analytical Services). Analyses for each sample are presented in Table 3-1.

3.4.4 Potable Water Sampling

One sample (PW-01) was taken from the onsite potable water well during the initial Phase II ESA. The screened depth of the well is unknown. A direct sample from the potable water well was not able to be taken. The sample was collected from the tap of a sink within the Pound Ridge Auto Body section of the subject property building. The sink was allowed to run until the water tank (inline after the potable water well) volume was replaced, prior to sample collection.

Samples from the onsite potable water well were not collected during the supplemental Phase II ESA.

3.4.5 Investigative Derived Waste Sampling and Disposal

Initial Phase II ESA

All soil cuttings and purge water were collected and containerized in 55-gallon drums and stored on the subject property. Seacoast Environmental Services, Inc. collected investigative derived waste (IDW) soil and groundwater samples on September 21, 2016. Following receipt of the data and waste profiling, the drums were removed for off-site disposal on November 3, 2016. Waste manifests are provided in Appendix E.

Supplemental Phase II ESA

All soil cuttings and purge water were collected and containerized in 55-gallon drums and stored on the subject property for the activities. Seacoast Environmental Services, Inc. collected IDW soil and groundwater samples on December 11, 2018. Following receipt of the data and waste profiling, a total of six drums were removed for off-site disposal on February 14, 2019. Waste manifests are provided in Appendix E.

3.5 Deviations from the QAPP

Based on field conditions, the following changes were implemented during the investigation:

- A total of ten locations were installed; however, several of the boring locations were moved and the proposed SB-02/GW-02 location was eliminated due to the inability to access the garage for that location. Location SB-11/GW-11 was installed as the tenth location.
- The groundwater sample planned for location SB-02/GW-02 was relocated and collected at SB-05/GW-05. This allowed the groundwater sample to represent contamination downgradient of both the former drain and the abandoned UST in the garage.
- Temporary wells were allowed to sit for over 24 hours to equilibrate, but were not developed due to poor recovery.
- Groundwater quality parameters were not collected from temporary wells due to poor recovery.
- As a result of limited groundwater volume in the wells, the proposed sample volume for certain temporary wells was not collected for some analyte groups. VOCs and TPH GRO were collected for GW-01, however insufficient volume was available for TPH DRO, SVOCs, PCBs, and metals. VOCs and TPH GRO was collected for GW-02, GW-10 and GW-11 however, insufficient volume was available for TPH DRO.
- There were no deviations from the generic QAPP during the supplemental Phase II investigation.

Section 4
Summary and Evaluation of Data

This section describes the selection of evaluation criteria and summarizes the analytical results of the Phase II ESA samples. The results of this Phase II ESA will assist the Town of Pound Ridge in identifying areas and media of concern, determine if there is a need for additional delineation, and identify some appropriate options for remediation, if necessary, based on future use.

The Data Validation Reports for all data are included in Appendix F.

4.1 Selection of Evaluation Criteria

Except as noted, the data were evaluated in accordance with the site-specific QAPP, analytical results are compared to both federal and state project action limits (PALs) presented in Worksheet #15 and listed below.

Vapor Intrusion Criteria

- Office of Solid Waste and Emergency Response (OSWER) Vapor Intrusion Assessment, Vapor Intrusion Screening Level Calculator Version 3.5.1 (May 2016)
- New York State Department of Health (NYSDOH) Center for Environmental Health Bureau of Environmental Exposure Investigation (CEH BEEI) Soil Vapor Intrusion Guidance (October 2016), Air Guidelines Values (AGVs) Table 3.1

Soil Criteria

The soil evaluation criteria were revised subsequent to the finalization of the site-specific QAPP based on information provided by the Town of Pound Ridge indicating that the future use of the site is intended to be commercial use. As such the unrestricted and restricted residential soil cleanup objectives were no longer deemed appropriate. The following PALs were used for soil:

- NYSDEC Subpart 375-6: Table 375-6.8(b): Restricted Use Commercial Soil Cleanup Objectives (SCOs), supplemented with CP-51 Soil Cleanup Guidance (SCG) Table 1 (Commercial) (October 21, 2010)
- NYSDEC CP-51 SCG Table 2 (Soil Cleanup Levels for Gasoline Contaminated Soils) supplemented with CP-51 SCG Table 1 (Protection of Groundwater) (October 21, 2010)

Groundwater Criteria

- NYSDEC Part 703.5 Ambient Water Quality Standards (AWQS) for Class GA Groundwater (TOGS 1.1.1. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations)
- EPA Regional Screening Levels (RSLs) for Tap Water (November 2015)

PALs are based on federal and state groundwater guidance values (referenced as "evaluation criteria" in this report), however the federal regulations are less stringent than the remediation goals established for the subject property; therefore, groundwater analytical results are compared to NYSDEC evaluation criteria. EPA RSLs for Tap Water criteria were included for the evaluation of the PW-01-A sample collected from a tap in Pound Ridge Auto Body.

4.2 Soil Sample Results

4.2.1 Subsurface Soil Analytical Results

Table 4-1a through Table 4-1e present the results of the analytes detected in subsurface soil samples collected during the initial and supplemental Phase II ESA. Section 4.6 – Evaluation of Results provides a discussion of the sample results. The soil sample exceedances are presented on Figure 4-1a.

4.2.1.1 VOCs

No VOCs exceeded the NYSDEC Commercial Use SCOs or the CP-51 SCG values. Thirteen VOCs were detected in subsurface soil samples below the NYSDEC Commercial Use SCOs or the CP-51 SCG values.

No VOCs exceeded the NYSDEC Commercial Use SCOs or the CP-51 SCG values in samples collected during the supplemental Phase II ESA. Five VOCs were detected in subsurface soil samples collected during the supplemental Phase II ESA, at levels below the NYSDEC Commercial Use SCOs or the CP-51 SCG values.

4.2.1.2 TPH DRO and GRO

In samples collected during the initial Phase ESA, TPH DRO was detected in 19 of the 20 subsurface soil samples. The concentrations ranged from 0.48 J- milligrams per kilogram (mg/kg) (SB-11-B, 8 to 10 feet bgs) to 250 J- mg/kg (SB-07-A, 0 to 1 feet bgs). TPH GRO was detected in 4 of the 20 subsurface soil samples. The concentrations ranged from 3.7 mg/kg (SB-04-B, 9 to 11 feet bgs) to 14 J+ mg/kg (SB-07-A, 0 to 1 feet bgs). Due to the lack of state and federal guidance for TPH DRO and GRO, no exceedances were recognized.

TPH DRO was detected in two subsurface soil samples collected during the supplemental Phase II ESA. The concentrations ranged from 76 J µg/L (SB-13-A-20181113, 0 to 2 feet bgs) to 110 µg/L (SB-12-B-20191113, 10 to 12 feet bgs). TPH GRO was not detected in any subsurface soil samples collected during the supplemental Phase II ESA. Due to the lack of state and federal guidance for TPH DRO and GRO, no exceedances were recognized.

4.2.1.3 SVOCs

No SVOCs exceeded the NYSDEC Commercial Use SCOs or the CP-51 SCG values in samples collected during the initial Phase II ESA. Twenty-three SVOCs were detected below screening criteria in subsurface soil samples at levels that did not exceed either the NYSDEC Commercial Use SCOs or the CP-51 SCG values.

No SVOCs exceeded the NYSDEC Commercial Use SCOs or the CP-51 SCG values in samples collected during the supplemental Phase II ESA. Fourteen SVOCs were detected below screening

criteria in two subsurface soil samples collected during the supplemental Phase II ESA, at levels that did not exceed either the NYSDEC Commercial Use SCOs or CP-51 SCG values.

4.2.1.4 PCBs

No PCBs exceeded the NYSDEC Commercial Use SCOs. One PCB (Aroclor 1260) was detected in four subsurface soil samples at levels that did not exceed NYSDEC Commercial Use SCOs.

No PCBs exceeded the NYSDEC Commercial Use SCOs in samples collected during the supplemental Phase II ESA. Two PCBs (Aroclor 1242 and Aroclor 1260) were detected in the two subsurface soil samples collected during the supplemental Phase II ESA, at levels that did not exceed NYSDEC Commercial Use SCOs.

4.2.1.5 Metals

One metal (barium) exceeded the NYSDEC Commercial Use SCOs in one subsurface soil sample, SB-07-A. The concentration of barium at SB-07-A (0 to 1-foot bgs) is 2,000 J mg/kg, which exceeds the NYSDEC Commercial Use SCO of 400 mg/kg. Nineteen metals were detected in most of the subsurface soil samples at levels that did not exceed NYSDEC Commercial Use SCOs.

No metals exceeded the NYSDEC Commercial Use SCOs in samples collected during the supplemental Phase II ESA. Twenty metals were detected in the subsurface soil samples collected during the supplemental Phase II ESA, at levels that did not exceed NYSDEC Commercial Use SCOs.

4.3 Groundwater and Potable Water Sample Results

4.3.1 Groundwater Sample Analytical Results

Tables 4-2a through 4-2e present the results of the analytes detected in the existing (MW-1 and MW-2), temporary monitoring well samples (GW-01, GW-05, GW-09, and GW-11) and the newly installed permanent monitoring wells (MW-4, MW-5, MW-6 and MW-7) collected during both initial and supplemental Phase II ESA investigations. Section 4.6 – Evaluation of Results provides a discussion of the sample results. The exceedances for groundwater are presented on Figure 4-1a and Figure 4-1b.

4.3.1.1 VOCs

Three chlorinated benzenes were detected at concentrations that exceeded the NYSDEC AWQS in groundwater in the sample collected from MW-1-A during the initial Phase II ESA. The same three chlorinated benzenes, in addition to, one additional chlorinated benzene and four aromatic hydrocarbons were identified at concentrations that exceeded the NYSDEC AWQS in groundwater samples (MW-4-20181219 and MW-5-20181219) collected during the supplemental Phase II investigation. VOC concentrations that exceed the AWQS in MW-1, MW-4, and MW-5 are listed below:

- *1,2-Dichlorobenzene* – detected above the NYSDEC AWQS of 3 microgram per Liter (µg/L) in MW-1-A (3.2 µg/L), MW-4-20181219 (520 µg/L), and MW-5-20181219 (4.6 µg/L).
- *1,3-Dichlorobenzene* – detected above the NYSDEC AWQS of 3 µg/L in MW-4-20181219 (95 µg/L).

- *1,4-Dichlorobenzene* – detected above the NYSDEC AWQS of 3 µg/L in MW-1-A (15 µg/L), MW-4-20181219 (140 µg/L), and MW-5-20181219 (26 µg/L).
- *Chlorobenzene* – detected above the NYSDEC AWQS of 5 µg/L in MW-1-A (79 µg/L), MW-4-20181219 (190 µg/L), and MW-5-20181219 (92 µg/L).
- *Ethylbenzene* – detected above the NYSDEC AWQS of 5 µg/L in MW-4-20181219 (140 µg/L).
- *Isopropylbenzene* – detected above the NYSDEC AWQS of 5 µg/L in MW-4-20181219 (13 µg/L).
- *M,p-xylene* – detected above the NYSDEC AWQS of 5 µg/L in MW-4-20181219 (520 µg/L).
- *O-xylene* – detected above the NYSDEC AWQS of 5 µg/L in MW-4-20181219 (330 µg/L).

Fourteen other VOCs were detected in groundwater samples at levels that did not exceed AWQS. No VOCs were detected in GW-09 and MW-6.

4.3.1.2 TPH

During the initial Phase II ESA, TPH DRO was detected in the two temporary wells that produced enough sample volume for analysis. The concentrations ranged from 140 J µg/L (GW-09-A, 11.13 to 13.4 feet bgs) to 270 J µg/L (MW-91-A (non-detect in parent sample MW-1-A at 10.6 to 20 feet bgs). TPH GRO was detected in two of the six groundwater samples. The concentrations ranged from 120 µg/L (MW-1-A, 10.6 to 20 feet bgs) to 390 µg/L (MW-2-A, 10.79 to 12 feet bgs). Due to lack of state and federal guidance for TPH DRO and GRO, no exceedances were recognized.

TPH DRO was detected in all four groundwater samples collected during the supplemental Phase II ESA. The concentrations ranged from 57 J µg/L (MW-6-20181219, 5 to 19 feet bgs) to 2,200 J-µg/L (MW-4-20181219, 5 to 20 feet bgs). TPH GRO was detected in two of the four groundwater samples. The concentrations ranged from 140 µg/L (MW-5-20181219, 4 to 19 feet bgs) to 3,400 µg/L (MW-4-20181219, 5 to 20 feet bgs). Due to lack of state and federal guidance for TPH DRO and GRO, no exceedances were recognized.

4.3.1.3 SVOCs

At MW-1, five SVOCs were detected at concentrations that exceeded the NYSDEC AWQS in the duplicate sample, MW-91-A (but not the parent sample, MW-1-A) during the initial Phase II ESA. Five SVOCs were detected in the same duplicate sample at levels that did not exceed AWQS. SVOC concentrations that exceeded the AWQS of 0.002 µg/L at MW-1 are listed below:

- *1,2-Benzphenanthracene* – MW-91-A (0.41 µg/L)
- *Benzo(a)anthracene* – MW-91-A (0.28 µg/L)
- *Benzo(b)fluoranthene* – MW-91-A (0.52 µg/L)
- *Benzo(k)fluoranthene* – MW-91-A (0.14 µg/L)
- *Indeno(1,2,3-cd)pyrene* – MW-91-A (0.24 µg/L)

Four SVOCs were detected but did not exceed NYSDEC AWQS in any of the groundwater samples collected during the supplemental Phase II investigation.

4.3.1.4 PCBs

One PCB (Aroclor 1260) was detected at a concentration that exceeded the NYSDEC AWQS in the only sample analyzed for PCBs (MW-1-A) during the initial Phase II ESA. The concentration of Aroclor 1260 in this sample was 0.11 J µg/L which is above the NYSDEC AWQS of 0.09 µg/L.

PCBs were not detected in any of the groundwater samples collected during the supplemental Phase II investigation.

4.3.1.4 Metals

During the initial Phase II ESA, three metals were detected at concentrations that exceeded the NYSDEC AWQS in the only groundwater sample for which metals were analyzed (MW-1-A). The same three metals were detected at concentrations that exceeded the NYSDEC AWQS in all four groundwater samples (MW-4-20181219, MW-5-20181219, MW-6-20181219 and MW-7-20181219) collected during the supplemental Phase II ESA. Ten metals were detected in the groundwater at levels that did not exceed the NYSDEC AWQS. Metal concentrations detected in MW-1, MW-4, MW-5, MW-6 and MW-7 that exceed the AWQS are listed below:

- *Iron* – MW-1-A (2,200 J µg/L), MW-4-20181219 (2,260 µg/L), MW-5-20181219 (28,000 µg/L), MW-6-20181219 (1,570 µg/L), and MW-7-20181219 (1,760 µg/L), above NYSDEC AWQS of 300 µg/L.
- *Manganese* – MW-1-A (440 µg/L), MW-4-20181219 (2,360 µg/L), MW-5-20181219 (5,060 µg/L), MW-6-20181219 (629 µg/L), and MW-7-20181219 (6,360 µg/L), above NYSDEC AWQS of 300 µg/L.
- *Sodium* – MW-1-A (120,000 µg/L), MW-4-20181219 (72,000 µg/L), MW-5-20181219 (109,000 µg/L), MW-6-20181219 (140,000 µg/L), and MW-7-20181219 (264,000 µg/L), above NYSDEC AWQS of 20,000 µg/L.

4.3.2 Potable Water Sample Analytical Results

Tables 4-3a through 4-3c present the results of the analytes detected in the potable water sample (PW-01) collected during the initial Phase II ESA. Section 4.6 – Evaluation of Results provides a discussion of the sample results. The potable water sample exceedances are presented on Figure 4-1. Potable water samples were not collected during the supplemental Phase II ESA.

4.3.2.1 VOCs

Two VOCs (methyl acetate and toluene) were detected in the potable water sample (PW-01-A) at levels that did not exceed NYSDEC AWQS or the EPA RSLs.

4.3.2.2 SVOCs

No SVOCs were detected in the potable water sample.

4.3.2.3 Metals

Sodium exceeded the NYSDEC AWQS (but not the EPA RSL) in the potable water sample. Antimony exceeded the EPA RSL for Tap Water (but not the NYSDEC AWQS) in the potable water sample. Fourteen metals were detected at levels that did not exceed the NYSDEC AWQS or the EPA RSLs in the potable water sample. Metal concentrations that exceed the AWQS or EPA RSLs are listed below for the potable water sample.

- *Antimony* – PW-01-A (2.4 J µg/L), detected above the EPA RSLs for Tap Water of 0.78 µg/L.
- *Sodium* – PW-01-A (67,000 µg/L), detected above the NYSDEC AWQS of 20,000 µg/L.

4.4 Soil Vapor Intrusion Sample Results

4.4.1 Soil Vapor Analytical Results

Table 4-4a and Table 4-4b presents the results of the analytes detected in soil vapor intrusion samples collected during the initial and supplemental Phase II ESA. Section 4.6 – Evaluation of Results provides a discussion of the sample results. The soil vapor exceedances are presented on **Figure 4-2.**

4.4.1.1 VOCs

There are no NYSDOH criteria for soil vapor; however, results can be compared to AGV for indoor air as a means of evaluating the potential for vapor intrusion. Tetrachloroethene (PCE) concentrations exceeded the NYSDOH AGV at both soil vapor locations. Six VOCs (2-butanone, acetone, carbon disulfide, chloroform, m,p-xylene, and toluene) were also detected in soil vapor samples. There are no NYSDOH AGVs for these compounds. **Table 4-4** presents detections and exceedances. VOC concentrations that exceed the NYSDOH AGVs are listed below for all soil vapor locations.

- *PCE* – Concentrations above the NYSDOH AGV of 30 micrograms per cubic meter (µg/m^3) were detected in SV-01-A at 8 feet bgs (64 J µg/m^3) and SV-02-A at eight feet bgs (67 J µg/m^3).

4.4.2 Outdoor Air Analytical Results

Table 4-4a presents the results of the analytes detected in the outdoor air sample collected during the initial Phase II ESA. **Table 4-4b** presents the results of the analytes detected in the outdoor air sample collected during the supplemental Phase II ESA.

4.4.2.1 VOCs

No VOCs exceeded the NYSDOH AGVs. One VOC, acetone was detected at a level that did not exceed NYSDOH AGVs.

4.4.3 Sub-Slab Vapor Analytical Results

Table 4-4b presents the results of the analytes detected in sub-slab soil vapor samples collected during the supplemental Phase II ESA. Section 4.6 – Evaluation of Results provides a discussion of the sample results with respect to NYSDOH Vapor Intrusion Guidelines.

4.4.3.1 VOCs

No VOCs exceeded the NYSDOH AGVs. Twenty-five VOCs were detected at levels that did not exceed NYSDOH AGVs.

4.4.4 Indoor Air Analytical Results

Table 4-4b presents the results of the analytes detected in indoor air samples collected during the supplemental Phase II ESA. Section 4.6 – Evaluation of Results provides a discussion of the sample results with respect to NYSDOH Vapor Intrusion Guidelines.

4.4.3.1 VOCs

No VOCs exceeded the NYSDOH AGVs. Twenty VOCs were detected at a level that did not exceed NYSDOH AGVs.

4.5 Quality Assurance/Quality Control

4.5.1 Initial Phase II ESA Investigation

Two field rinsate blanks were collected, one by pouring deionized water over dedicated soil sampling equipment, and the other by pouring deionized water over dedicated groundwater sampling equipment and into sample bottles. Field rinsate blanks were submitted with the environmental samples and analyzed for the same parameters. The field rinsate blank associated with soil and groundwater collection has detections of VOCs (acetone, 2-butanone and methylene chloride), SVOC (naphthalene), and metals below the contract reporting quantitation limit (CRQL), and metals, GRO and DRO above the CRQL. Two trip blanks were collected, shipped with the aqueous field samples and analyzed for VOCs. Acetone, 2-butanone, chloromethane and methylene chloride was detected in the trip blank.

All data were validated by CDM Smith and have been reviewed to assess whether data quality is sufficient to support the project objectives. All laboratory analyses were method compliant. Some quality control (QC) parameters were outside criteria; associated sample results were qualified accordingly. Data qualified as estimated J, J+, J-, U, or UJ are usable for project decisions; rejected data (R) are not considered usable for project purposes. Data validation reports are included in Appendix F. QC outliers noted within the EPA validation reports are described below.

- *Analytical Blanks* - Laboratory method blanks that had detections include VOCs and TPH. Associated sample results were appropriately qualified as estimated non-detect U.
- *Field Rinsate Blanks* – Field rinsate blanks that had detections include VOCs and metals. Associated sample results were appropriately qualified as estimated non-detect (U).
- *Trip Blanks* – Trip blanks had detections for VOCs. Associated sample results were appropriately qualified as estimated non-detect (U).
- *Surrogate Recoveries* – Several surrogates exceeded QC criteria. This affected sample results for VOCs, SVOCs and TPHs which were estimated (J/J+/J-/UJ) by the data validator.
- *Matrix Spike/Matrix Spike Duplicate (MS/MSD)* – These QC data were generated to determine the long-term precision and accuracy of the analytical method in various

matrices. Several MS/MSDs did not meet QC criteria. The MS/MSD results affected VOC, SVOC, TPH and metal sample results, which were qualified as estimated (J/J-/UJ) by the data validator. In addition, seven SVOC compounds in sample SB-01-A and three SVOC compounds in sample MW-1-A were qualified as rejected by the validator.

- *Initial Calibration* - The initial calibration for air VOCs exceeded QC criteria. The affected sample results were estimated (J) by the data validator.
- *Continuing Calibration Verification (CCV)* – Several CCVs exceeded QC criteria. This affected sample results for VOCs, SVOCs and PCB which were estimated (J/UJ) by the data validator.
- *Field Duplicate* – One analyte had a relative percent difference above the validation criteria in the field duplicate sample pairs. This metal result was qualified estimated (J) by the data validator for the parent sample and field duplicate sample.
- *Canister Pressure Criteria* – Several canister pressures exceeded QC criteria. This affected sample results for air VOCs which were estimated (J/UJ) by the data validator.
- *Target Compound Identification* – One target compound identification percent difference exceeded QC criteria. This affected one PCB sample result which was estimated (U) by the data validator.
- *Laboratory Control Sample* - Several laboratory control samples exceeded criteria and were qualified as estimated (J/UJ) for VOC and SVOC. In addition, one SVOC compound in two samples (MW-1-A and MW-91-A) was rejected by the validator.
- *Internal Standards* - Internal standards performance criteria ensure that gas chromatography (GC)/ mass spectrometry (MS) sensitivity and response are stable during every analytical run. Some SVOCs internal standards results were outside criteria. Associated sample results were estimated (J/J+/UJ).

The final percentages of valid data are 99.26 percent (%) for groundwater, 99.72% for soil and 100% for air. The rejected data should not be used for project decisions. The ninety percent completeness goal for usable data has been met.

Data failing QC criteria were appropriately qualified as estimated, non-detect or rejected during data validation. All data reported herein are usable with the data validation qualifiers added except for rejected data.

In general, sampling was conducted in accordance with the QAPP, with the exception of items noted in Section 3.5. Deviations from the QAPP noted in Section 3.5 did not negatively impact the achievement of data quality or project objectives.

4.5.2 Supplemental Phase II ESA Investigation

One soil and one groundwater equipment blank were collected by pouring deionized water over the respective dedicated soil or and groundwater sampling equipment. Soil and groundwater equipment blanks were submitted with the environmental samples and analyzed for the same parameters; VOCs, SVOCs, PCBs, metals, mercury, TPH DROs and TPH GROs. The soil equipment

blank had detections of VOCs (carbon disulfide, methylene chloride and toluene), SVOCs (benzaldehyde) and metals (magnesium and sodium). The groundwater equipment blank had detections of SVOCs (benzaldehyde), metals (calcium, iron, magnesium, potassium, sodium and zinc) and TPH DRO. Applicable soil and groundwater sample results for sodium, zinc and TPH DRO were qualified as non-detect based on the soil and groundwater equipment blank criteria. The remaining sample results did not require qualification. One trip blank associated with groundwater and one trip blank associated with soil were collected and shipped with the samples for VOC analysis. Groundwater trip blank results were non-detect. Chloroform was detected in the soil trip blank sample. One soil sample result was qualified as non-detect based on trip blank criteria.

All data were validated by CDM Smith and have been reviewed to assess whether data quality is sufficient to support the project objectives. Some quality control (QC) parameters were outside criteria; associated sample results were qualified accordingly. Data qualified as estimated J, J-, J+, U, or UJ are usable for project decisions. Six 3,3'-dichlorobenzidine results and one result for 4-chloroaniline and 3-nitroaniline were rejected for the groundwater analysis. Three soil results, vinyl acetate, 1,2,4-trichlorobenzene and 1,2,3-trichlorobenzene were rejected. These results are reported but should not be used for project decisions.

Data validation reports are included in Appendix H. QC outliers noted within the validation reports are described below.

- *Analytical Blanks* - Laboratory method blanks were non-detect for all analyses except for the soil DRO analysis, air TO-15 VOC analysis and some soil and groundwater metal blank results. Applicable mercury results for groundwater samples and antimony and sodium results in the soil samples were appropriately qualified as non-detect at the RL (U). No qualification was required for the soil DRO results as this blank was associated with the field blank sample and the air TO-15 VOC associated sample results were greater than the RL.

- *Field Blanks* – Field blanks had VOC, SVOC, metal, and DRO detections. Associated sample results were appropriately qualified as estimated non-detect at the RL (U).

- *Deuterated Monitoring Compounds (DMCs) and Surrogate Recoveries* – Some DMCs and surrogates (VOCs, SVOCs, PCBs and DROs) were outside of acceptable QC criteria for the soil and groundwater analysis. Associated soil and groundwater sample results were qualified as estimated (J+/J-/J/UJ).

- *Percent Relative Standard Deviation (%RSD) and Percent Difference (%D)* – %RSD and %Ds are calculated from initial, continuing, and independent calibration checks to indicate the stability of specific compound response factors over increasing concentration, and the instrument's daily performance. A value outside these limits indicates potential detection and quantitation errors. Some soil and groundwater initial calibration percent recoveries (independent source check) and continuing calibration %Ds did not meet QC criteria for VOC, SVOC, PCB analysis and the Freon-113 %RSD for the air analysis. Associated soil and groundwater results and one air sample result were appropriately qualified as estimated (J/UJ).

- *Matrix Spike/Matrix Spike Duplicate (MS/MSD)* – These QC data were generated to determine the long-term precision and accuracy of the analytical method in various matrices. Some MS/MSDs did not meet either the relative percent difference (RPD) or recovery QC criteria. The affected soil and groundwater VOC, SVOC, metal, and DRO sample results were qualified as estimated (J/UJ). Three non-detect soil VOC results were qualified as rejected (R) based on MS/MSD recoveries below 30 percent. The results are reported but should not be used for project decisions.

- *Spike Sample Analysis* – Several soil VOC and SVOC spike sample analysis results did not meet QC criteria. Associated results were qualified as estimated (J/UJ). Several groundwater VOC and DRO spike sample analysis results did not meet QC criteria. Associated results were qualified as estimated (J/J-/UJ). In addition, spike recoveries for 3,3'-dichlorobenzidine were zero percent (%) for the groundwater SVOC analysis; each of the six groundwater 3,3'-dichlorobenzidine results were rejected (R) based on low spike recoveries. The results are reported but should not be used for project decisions.

- *Target Analyte Identification (PCBs)* – For detected target analytes the %Ds between the concentrations on two gas chromatography (GC) columns is evaluated in order to ensure a high confidence in the target analyte identification and to minimize the number of erroneous analyte identifications. The %D for Aroclor 1242 in one soil sample did not meet acceptable QC criteria. The Aroclor 1242 result was qualified as estimated (J).

- *Field Duplicate* – Field duplicate RPD results were within acceptable criteria except for 1,4-dichlorobenzene and chlorobenzene VOC results in soil field duplicate pair SB-12-B / SB-912-B. The methylene chloride VOC RPD result for the air field duplicate pair IA-01-A / IA-901-A was also outside acceptable criteria. Associated results were qualified as estimated (J).

- *Internal Standards* - Internal standard performance criteria ensure that GC/ mass spectrometry (MS) sensitivity and response are stable during every analytical run. Internal standard results were outside acceptable criteria for the TO-15 VOC analysis in several air samples. Associated results were qualified as estimated (J-).

- *Inductively Coupled Plasma (ICP) Serial Dilution (Inorganics)* – Cadmium and sodium ICP serial dilutions did not yield acceptable percent differences for the soil samples in SDG TL1348. The affected metal results were qualified as estimated (J/UJ).

- *Sample preservation, handling, and holding times* – Samples were analyzed within the appropriate holding times except for the VOC analysis for one soil sample and the DRO analysis for five reanalyzed groundwater samples. The affected soil VOC and groundwater DRO results were qualified as estimated (J/UJ). One air sample was received with insufficient pressure. The canister was pressurized to atmospheric pressure and analyzed with an 800 milliliter aliquot resulting in an dilution factor of 1.6257. All remaining sampling preservation and handling criteria were met.

Data failing QC criteria were appropriately qualified as estimated or non-detect. Eight groundwater results and three soil results were rejected. The results have been reported but

should not be used for project decisions. Over ninety percent of the soil and groundwater data validated and reported, are suitable for their intended use and therefore, the ninety percent completeness goal for usable data has been met.

The data generated during field investigation are considered definitive level data and, are usable for the intended purpose which is to determine the extent of contamination and to allow for the grantee to best determine the appropriate future use of the subject property based on the nature of the contamination.

4.6 Evaluation of Recognized Environmental Conditions

4.6.1 Evaluation of Historic Spills (REC-1 – Spill #9412600/9507568, HREC – Spill #020451)

Four subsurface soil borings (SB-01, -08, -09, and -10), three temporary wells (GW-01, GW-05, and GW-09), one permanent monitoring well (MW-2), one potable water well (PW-01), two soil vapor samples (SV-01 and SV-02) and one outdoor air sample (OA-01) were used to evaluate potential impacts associated with the historical offsite spill. Analytical exceedances are presented on Figure 4-1a. There were no exceedances of Commercial Use or CP-51 SCOs in subsurface soil, including petroleum related compounds toluene, ethylbenzene, xylene, and MTBE. BTEX constituents toluene, ethylbenzene, and xylenes were detected in SB-08-A, although at low concentrations. TPH GRO was not detected and the highest TPH DRO concentration was identified at the upgradient background location (9.6 J- mg/kg in SB-01-A). Therefore, it is likely that minimal residual petroleum in soil is present on the subject property, related to these spills.

There were also no exceedances in groundwater and no detections specifically of petroleum-related compounds (including BTEX, MTBE, and TPH GRO), and only one detection of TPH DRO (140 J µg/L at GW-09-A). Therefore, it is likely that minimal residual petroleum in groundwater is present on the subject property, related to these spills.

One temporary well (GW-05) and one existing monitoring well (MW-2) were used to evaluate the spill associated with the historic UST removal. Monitoring well MW-2 was sampled to characterize groundwater contamination associated with this spill, downgradient of the former gasoline and diesel USTs. Due to a limited groundwater recharge, there was only enough sample volume for VOC and TPH GRO analysis. There were no exceedances of VOCs, and only a few detections. TPH GRO was detected at 390 µg/L, which is a low concentration, but the highest detected during this investigation. Therefore, there is still a small impact to groundwater from the former USTs.

Temporary well GW-05 was used to characterize the abandoned fuel oil UST in the garage on the north side of the building. VOCs and TPH GRO were the only analyses collected from this sample due to poor recovery. TPH GRO was not detected and no VOCs were detected with the exception of trace levels of methyl acetate. Therefore, there is no evidence of impacts to groundwater from the abandonment of this UST based on the samples collected from this area. Since data was not collected for TPH DRO, it is uncertain whether diesel impacted media within this REC.

Permanent well MW-6 was installed during the supplemental Phase II ESA to characterize the groundwater contamination associated with the former fuel oil UST in the north side of the

subject property building. There were no detections of VOCs, SVOCs, PCBs or TPH GRO in MW-6. TPH DRO was detected in MW-6, however, concentrations were fairly low at 57 µg/L. MW-6 did have exceedances of three metals (iron, manganese, and sodium), however, the detection of these metals was consistent with those seen across the subject property in both the initial and supplemental Phase II ESAs and do not appear to be related to any RECs. Therefore, these metals are likely naturally occurring. MW-6 confirmed there is likely no impacts to groundwater from the abandonment of the fuel oil UST, and diesel impacted media is not a concern within this REC.

4.6.2 On-Site Dry Wells (REC-2)

Data from six soil borings (SB-03, -04, -05, -06, -07, -11), two temporary wells (GW-05 and GW-11), and one existing monitoring well (MW-1) are being used to evaluate the onsite dry wells. An additional soil boring (SB-12) and four permanent monitoring wells (MW-4, MW-5, MW-6 and MW-7) samples collected during the supplemental Phase II ESA were also utilized in further evaluating the onsite dry wells. Analytical exceedances are presented on Figure 4-1a and Figure 4-1b.

4.6.2.1 Eastern Dry Well

The soil samples collected during the initial Phase II ESA associated with the eastern dry well contained no exceedances above Commercial Use or CP-51 SCOs. Low concentrations of TPH DRO and TPH GRO, toluene, ethylbenzene, and chlorinated benzene compounds were detected in SB-03-B (5 to 7 feet bgs), just north of the dry well. Low concentrations of numerous SVOCs and polyaromatic hydrocarbons (PAHs) were also identified in soil. One PCB, Aroclor 1260 was detected with a low concentration at SB-03-A (0 to 2 feet bgs). Numerous metals were detected in all soil samples but all below Commercial Use SCOs.

To supplement the characterization of contamination associated with former eastern dry well one soil boring (SB-12) was advanced during the supplemental Phase II ESA through the former eastern dry well location. There were no exceedances of the Commercial Use SCOs in soil at SB-12 (10 to 12 feet bgs). Detections for a few chlorinated benzenes, TPH DRO, Aroclor 1242, and several metals were noted in SB-12, all below the Commercial Use SCOs.

During the initial Phase II ESA, GW-05, located downgradient of the former floor drain was only analyzed for VOCs and TPH GRO due to sample volume limitations and contained only trace levels of VOCs. Due to the lack in groundwater sample recovery at the subject property, SVOCs, PCBs, TPH DRO, and metals were not collected at all proposed locations. Therefore, the characterization of groundwater contamination at the eastern dry well was primarily based on existing monitoring well MW-1. This well is located downgradient from the former dry well and had exceedances above NYSDEC AWQS for VOCs, SVOCs, PCBs, and metals. The only VOC exceedances in MW-1 are chlorinated benzene compounds, commonly found in solvents. The Phase I ESA reports that degreasers were historically used in the sink that lead to the dry well, which could account for these detections. TPH DRO and TPH GRO were detected in low concentrations in this well as well. PAHs associated with petroleum, including benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd) pyrene exceeded NYSDEC AWQS. Aroclor 1260 was detected in this well and exceeded the NYSDEC AWQS. Iron, manganese, and sodium were detected above the NYSDEC AWQS.

To address poor recharge in the temporary well points experienced during the initial Phase II ESA three permanent groundwater wells (MW-4, MW-5 and MW-6) were installed during the supplemental Phase II ESA to further characterize the contamination associated with the former eastern dry well. VOC concentrations in the two monitoring wells (MW-4 and MW-5) associated with the eastern dry well exceeded NYSDEC AWQS, while no VOCs were detected at MW-6. MW-4 and MW-5 had exceedances of the same chlorinated benzene compounds previously identified in MW-1 during the initial Phase II ESA. MW-4 also had exceedances of one additional chlorinated benzene compound and the aromatic hydrocarbons, ethylbenzene, isopropylbenzene, m,p-xylene, and o-xylene. The aromatic hydrocarbons exceeding AWQS in MW-4 were not noted in the downgradient groundwater samples collected during the initial Phase II. As MW-4 is located upgradient and in close proximity (approximately 30 feet east) to the eastern dry well, there is a potential these aromatic hydrocarbons originate onsite or from an offsite source. Three metals (iron, manganese, and sodium) exceeded NYSDEC AWQS in all three monitoring wells however, the detection of these metals was consistent with those seen across the subject property in both the initial and supplemental Phase II ESAs and do not appear to be related to any RECs. Therefore, these metals are likely naturally occurring. PCBs were not detected in any of the wells and only three SVOCs were detected at concentrations below the NYSDEC AWQS. TPH DRO and GRO were also detected in all three monitoring wells. The TPH DRO and GRO concentrations detected in MW-4 were the highest observed at the subject property. MW-4 is located upgradient to the east and MW-5 is located somewhat downgradient to the south of the eastern dry well. The soil sample (SB-12) did not indicate soil impacts below the dry well however, groundwater samples do indicate petroleum impacted groundwater is present on the surrounding property. There is potential that VOC-impacted groundwater is both a result of historical subject property activities and/or offsite source(s) due to location of the impacted wells in relation to the eastern dry well.

4.6.2.2 Western Dry Well

The soil samples associated with the western dry well contained no exceedances above Commercial Use or CP-51 SCOs exception for barium at SB-07-A (0 to 1-foot bgs); its concentration was 2,000 J mg/kg. This soil boring was installed from the surface soil within the former dry well. The subject property owner stated that the laundry facilities within the building drained to this dry well. Barium compounds are known to be used in laundry detergents and soaps. Barium is also naturally occurring in both soil and water. A barium concentration of 48 J mg/kg was detected in the second subsurface soil sample, SB-07 (9 to 11 feet bgs), similar to the other subsurface soil samples. It is likely that the barium exceedance seen in SB-07 from 0 to 1 feet bgs is not associated with background levels and was a result of materials drained to that dry well. Soil samples related to the western dry well contained trace levels of VOCs and TPH, consistent with the rest of the site, although the highest TPH DRO concentration was found in SB-07-A (0 to 1-foot bgs), which was 250 J- mg/kg. This indicates that diesel fuel or wastewater containing diesel fuel may have been disposed in this location in the past. Low concentrations of Aroclor 1260 were found in the shallow soil samples in this area. Numerous SVOCs and PAHs were detected in this area with highest concentrations in shallow samples but all below the Commercial Use SCOs. These compounds are likely related to the current operations of the auto repair and auto body shops, since the concentrations are significantly lower in the dry well (SB-07) than in the location downgradient (SB-11) and lower still in the deeper samples.

Due to limited groundwater recharge observed in the temporary wells during the investigation, SVOCs, PCBs, TPH DRO, and metals were not analyzed in the sample collected at GW-11. Therefore, the only characterization of groundwater downgradient of the western dry well during the initial Phase II investigation is that TPH GRO was not detected and no VOCs were detected with the exception of trace levels of carbon tetrachloride.

In order to supplement this data, permanent monitoring well MW-7 was installed adjacent to the western former dry well during the Supplemental Phase II investigation. The groundwater samples collected from MW-7 had no detections of SVOCs and PCBs and had one VOC detection (1,2-dichlorobenzene) below the NYSDEC AWQS. The groundwater sample did have exceedances of the NYSDEC AWQS for three metals (iron, manganese, and sodium), however, the detection of these metals is consistent with those seen across the subject property in both the initial and supplemental Phase II ESAs and the metals do not appear to be related to any RECs. Therefore, these metals are likely naturally occurring. Low levels of TPH DRO were detected in MW-7 while TPH GRO was not detected. Overall, detections and exceedances were minimal in MW-7 indicating the former western dry well is not impacting local groundwater.

4.6.3 Potable Water Well Evaluation

Historically, potable water wells in the area have contained BTEX and MTBE. The potable well on the subject property contained 7.9 µg/L of MTBE and no BTEX in 1995. The potable water well sample collected from the tap within the subject property building contained 0.98 J µg/L of toluene and no MTBE. This detection of toluene is below both the EPA RSL and NYSDEC AWQS. Based on these results, the potable water well is minimally impacted by the spills associated with this REC. Furthermore, the Town of Pound Ridge Supervisor stated that adjacent properties' potable water wells had recently been sampled with no detections of VOCs, as a part of routine Westchester County Department of Health (WCDOH)-mandated testing. While unsubstantiated, this information suggests contamination associated with the RECs at the subject property is not impacting the bedrock aquifer. The potable well sample did have an exceedance of the AWQS for sodium. No EPA RSL for tap water exists for sodium. The owner of the subject property confirmed with the field team that the potable water onsite was not used for drinking. If the tap water is used as a future drinking source, a level of sodium greater than 20 milligrams per liter (mg/L) (the NYSDEC AWQS for sodium) is not recommended by NYSDOH for those on a sodium restricted diet or those with high blood pressure. However, the concentration in the potable water well (67 mg/L) is well within the range of someone on a moderately restricted sodium diet (maximum of 270 mg/L).

The potable water sample also had an exceedance of the EPA RSL for antimony, the result value did not exceed the NYSDEC AWQS. Antimony can be leached from fixtures and plumbing. Although skin contact with antimony in solution is safe, the ingestion of antimony at this concentration can pose a concern. There was one detection of toluene below both the EPA RSL and NYSDEC AWQS. Analytical exceedances are presented on Figure 4-1a.

4.6.4 Potential Waste Oil Discharge

One soil boring location, SB-13 was advanced adjacent to the western corner of the building on the subject property. There was anecdotal evidence of a waste oil discharge below the side window closest to the western corner of the building. A shallow subsurface soil sample was

collected from the 0 to 2-foot bgs interval, as well, as one sample from the 6 to 8-foot bgs interval. The sample collected from the 6 to 8-foot interval had no detections for VOCs, SVOCs, PCBs, or TPH. The sample did have detections for metals but no exceedances of the Commercial Use SCOs were noted. The shallow subsurface soil sample collected from SB-13 also did not have any exceedances of the Commercial Use SCOs. However, the sample did have detections for TPH DRO, several PAHs, Aroclor 1260, and several metals. Due to the lack of exceedances of the Commercial Use SCOs in SB-13, the waste oil discharge below the window did not significantly impact the subsurface soil.

4.6.5 Evaluation of Soil Vapor Intrusion Potential

Soil vapor was investigated due to the potential for petroleum-related compounds or PCE to impact air quality at the subject property building. Analytical exceedances are presented on Figure 4-2. PCE was detected at low concentrations historically in tap water at a dry cleaner at 72 Westchester Avenue. There were detections for seven VOCs within soil vapor samples collected from 8 feet bgs outside the subject property building. These VOCs include both BTEX compounds and PCE. New York State does not have any standards, criteria or guidance values for concentrations of compounds in soil vapor. There are also no available background levels for soil vapor but soil vapor results can be compared to background outdoor air levels or the NYSDOH AGVs. The outdoor air sample (AO-01) collected for reference did not have any detections except for acetone. All VOC detections were observed to be below EPA criteria, however PCE was detected above the NYSDOH AGV of 30 µg/m^3 in both soil vapor samples. This lends to the possibility of soil vapor intrusion into the subject property building.

The potential for soil vapor intrusion in the subject property building was further investigated during the supplemental Phase II ESA. Two indoor air samples co-located with two sub-slab vapor samples were collected within the subject property building. There were detections for twenty-five VOCs in the sub-slab vapor samples and twenty VOCs in indoor air samples. Detections mainly consisted of BTEX and chlorinated solvent compounds. Indoor air results were compared to NYSDEC AGVs and EPA VISLs and no exceedances were noted. There are currently no standards, criteria or guidance values for sub-slab vapor samples. To comply with NYSDEC guidelines, comparisons were made to the NYSDOH Vapor Intrusion guidance matrices to determine if vapor mitigation-related actions are recommended within the subject property building based on the relationship between sub-slab vapor and indoor air samples results. The results for trichloroethylene (TCE), *cis*-1,2- Dichloroethene (cis-1,2-DCE), 1,1-Dichloroethene (1,1-DCE) and carbon tetrachloride were compared to Matrix A of the NYSDOH soil vapor guidance. The results for tetrachloroethylene (PCE), 1,1,1-trichloroethane (TCA), and methylene chloride were compared to Matrix B of the NYSDOH soil vapor guidance. The results for vinyl chloride were compared to Matrix C of the NYSDOH soil vapor guidance. The outdoor air sample (AO-01) collected during the supplemental Phase II ESA for reference had seventeen VOC detections. Detections were observed below both EPA criteria and the NYSDOH AGVs.

Using the aforementioned NYSDOH matrix guidance, a comparison of the supplemental Phase II ESA sample results was completed. Refer to the Table 4-5 for a comparison of the results. All compounds with the exception of methylene chloride had recommendations of no further action, due to the lack of elevated concentrations. Elevated levels of methylene chloride were seen in both the indoor air and sub-slab vapor. Based on the NYSDOH matrix guidance for the methylene

chloride concentrations, it is recommended that reasonable and practical actions are taken to identify source(s), resample or mitigate. The outdoor air sample did indicate levels of methylene chloride and the levels methylene chloride within the indoor air samples were at twice as great as those detected in the sub-slab vapor. Based on these observations, it is likely the source of methylene chloride is from within the subject property building and would not require mitigation. Autobody maintenance and painting occurs within the subject property building regularly. Methylene chloride is common constituent of both paint strippers and products utilized for automotive care. Methylene chloride was noted as the main ingredient of one of the paint stripping products observed within the subject property building. The NYSDOH indoor air quality building inventory form is provided in Appendix G.

PCE was detected at levels exceeding the NYSDOH AGV in soil vapor during the initial Phase II ESA however, further investigation within the subject property building indicated that PCE concentrations detected within the sub-slab vapor and indoor air do not warrant further action within the building. Elevated methylene chloride concentrations are likely a result of current subject property operations and does not require mitigation.

Section 5
Conclusions and Recommendations

5.1 Conclusions

CDM Smith's conclusions are based on analytical results, historic information, and visual observations summarized below.

- There is no significant evidence of impacts from the former USTs or other petroleum related sources at the subject property (REC-1 and HREC). There are low concentrations of TPH GRO and DRO across the subject property in soil and in the groundwater downgradient from former USTs and other petroleum related sources. There are no exceedances of VOCs above 6 NYCRR Part 375-6(b) Restricted Use – Commercial, NYSDEC CP-51 supplemental SCOs or soil cleanup levels for gasoline or fuel oil contaminated soils.

- The subject property potable water well had exceedances of the NYSDEC AWQS and EPA RSLs for sodium and antimony, respectively. The potable water well is not currently used for drinking water. Therefore, the exceedances do not present concern.

- Soil and groundwater associated with the eastern former dry well contain TPH DRO and GRO, BTEX (benzene, toluene, ethylbenzene, xylenes), chlorinated benzene compounds, PAHs, PCBs, and metals. These compounds are consistent with the former use of the dry well as the discharge for the rinse sink in the automotive garage. There are no exceedances in soil, but compounds from all analyte groups exceed NYSDEC AWQS in groundwater. Additional soil and groundwater samples collected during the supplemental investigation confirmed samples the presence of groundwater contamination as a result of the use of the eastern dry well and the lack of contamination exceeding standards in soil.

- Soil associated with the western dry well contains TPH DRO and GRO, toluene, PAHs, PCBs, and metals, although the only exceedance of NYSDEC Commercial Use SCOs was barium in one sample, which may be related to the laundry wastewater that discharged into the dry well. The groundwater sample collected adjacent to the western dry well during the supplemental investigation did not exceed NYSDEC AWQS.

- The four permanent wells installed during the supplemental Phase II aided in the characterization of VOCs, TPH GRO and DRO, SVOCs, PCBs, and metals after poor recharge in temporary well points sampled during the initial Phase II prevented adequate groundwater characterization. Both TPH DRO and GRO were consistently detected in groundwater, the highest concentrations were noted in MW-4 adjacent to the eastern dry well. Three metals (iron, manganese, and sodium) exceeded the NYSDEC AWQS in all four of the groundwater samples, however, the concentration of these metals was consistent with those seen across the subject property in both the initial and supplemental Phase II ESAs and do not appear to be related to any RECs. Therefore, these metals are likely naturally occurring. Other analytes such as SVOCs and PCBs were either not detected or only found at concentrations below NYSDEC AWQS.

- Groundwater samples collected downgradient of former USTs (HREC) indicate that petroleum contamination is still present in low concentrations, however no BTEX or methyl tert-butyl ether (MTBE) was detected in these samples.

- Detections of PCE at concentrations in soil vapor above New York State Department of Health Air Guidance Values (NYSDOH AGVs) suggested there was a potential for soil vapor intrusion of PCE into the building located at 77 Westchester Avenue. However, soil and groundwater samples collected throughout the subject property did not detect PCE. During the supplemental Phase II both the indoor air and sub-slab vapor sampling indicated that concentrations of PCE in the vapor samples do not require additional actions or mitigation.

- Soil vapor intrusion sample results from the supplemental Phase II were compared to the NYSDOH Vapor Intrusion guidance matrices and generally, VOC results were at concentrations that recommended No further action. Elevated concentrations of methylene chloride were noted in the indoor air within the subject property building while lower concentrations were detected in the sub-slab vapor. Low levels of methylene chloride were noted in the outdoor ambient air sample, as well. Methylene chloride was also noted as a main ingredient of one of the paint stripping products observed within the subject property building. As methylene chloride indoor air concentrations were higher than sub-slab vapor concentrations and products containing methylene chloride were present within the subject property building during the supplemental Phase II ESA, it is likely that the source of methylene chloride is a result of current subject property operations and does not require mitigation.

5.2 Recommendations

Based on the results of the initial and supplemental Phase II ESA activities and an evaluation of subject property information based on previous environmental investigations, the following recommendations are made:

- The exceedances of NYSDEC AWQS in MW-1 indicated an impact to groundwater likely associated with the eastern dry well during the initial Phase II ESA. Soil sample results from beneath the eastern dry well collected during the supplemental Phase II did not find concentrations of contaminants in soils above standards. However, groundwater samples collected during the supplemental investigation from wells in close proximity to the eastern dry well found even higher concentrations of the chlorinated benzenes noted during the initial Phase II downgradient groundwater samples. TPH concentrations were also elevated at these wells, most significantly at MW-4 which also had exceedances for several aromatic hydrocarbons. Due to the elevated levels of TPH and VOCs in MW-4, it is suggested that groundwater be further monitored over the course of two rounds in one year to account for seasonal variability and characterize temporal changes. In addition, onsite monitoring wells should be surveyed so groundwater elevations can be compared, and localized groundwater flow direction can be characterized. Samples should be collected for VOCs and TPH. This is necessary for a more comprehensive characterization of groundwater impacts associated with the dry well.

- Should the potable water well on the subject property be used for drinking water in the future, sampling and treatment would be required to ensure water quality meets EPA RSLs and NYSDEC AWQS. Presently a deed restriction should be employed limiting the use of the well to non-potable. Furthermore, it is recommended that no additional potable water wells are installed at the subject property.
- Shallow soil in the area of the dry well northwest of the building did exhibit barium contamination at levels exceeding Commercial Use SCOs. It is recommended that this covered dry well be excavated or formally abandoned.
- Soil vapor intrusion sampling indicated that No further action is required within the subject property building and does not presently require mitigation via engineering controls.

When undertaking subject property development, it is recommended that the developer enlist a professional engineer or scientist to prepare a health and safety plan, construction contingency plans, and a soils management plan, in order to safely and appropriately remove (and control) impacted materials. It is recommended that any work performed at the subject property be performed by an environmental professional (or if necessary, a professional engineer) following approved plans and a site-specific health safety plan approved by a certified industrial hygienist (CIH).

In the absence of the limited remediation suggested above, engineering controls should be implemented, requiring that any construction involving the disturbance of soils within the subject property (including non-emergency excavation, which may be part of utility repair or maintenance, or construction) be performed with the involvement of a professional engineer, and be conducted in accordance with local state and federal rules and regulations, providing adequate engineering controls and worker protection. In the absence of remediation, the values of adjacent and surrounding properties may be (and currently be) negatively impacted. The loss of property value may represent some risk to public welfare, yet this risk may not be considered significant risk.

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Section 6
References

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Tables

Table 3-1
Sample Summary
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

REC	Location	Sample ID	Collection Date-Time	Depth Interval (feet)	PID Response (ppm)	QA/QC	Analyses				
							VOCs	SVOCs	TPH	PCBs	Metals
Initial Phase II Environmental Site Assessment											
Soil Samples											
1 - Investigation relating to offsite spill and product observed at MW-3	SB-01	SB-01-A	9/7/2016 9:20	0 - 2	0.0	MS/MSD	x	x	x	x	x
	SB-01	SB-01-B	9/7/2016 10:00	6 - 8	0.0		x	x	x	x	x
	SB-08	SB-08-A	9/7/2016 15:30	0 - 2	5.3		x		x		
	SB-08	SB-08-B	9/7/2016 15:40	5 - 7	0.0		x		x		
	SB-09	SB-09-A	9/7/2016 14:20	0 - 2	0.0		x		x		
	SB-09	SB-09-B	9/7/2016 14:40	8 - 10	0.0		x		x		
	SB-10	SB-10-A	9/7/2016 16:30	0 - 2	0.0		x		x		
	SB-10	SB-10-B	9/7/2016 16:45	8 - 10	0.0		x		x		
2 - Investigation of onsite dry wells and magnetic anomaly	SB-03	SB-03-A	9/7/2016 10:40	0 - 2	0.0		x	x	x	x	x
	SB-03	SB-03-B	9/7/2016 12:35	5 - 7	62.0		x	x	x	x	x
	SB-04	SB-04-A	9/7/2016 12:55	0 - 2	0.0		x	x	x	x	x
	SB-04	SB-04-B	9/7/2016 13:40	9 - 11	0.0		x	x	x	x	x
	SB-05	SB-05-A	9/8/2016 9:55	0 - 4	0.0		x	x	x	x	x
	SB-05	SB-05-B	9/8/2016 10:30	5.5 - 9.5	0.0		x	x	x	x	x
	SB-06	SB-06-A	9/8/2016 8:25	0 - 2	0.0		x	x	x	x	x
	SB-06	SB-06-B	9/8/2016 9:00	7 - 9	0.2		x	x	x	x	x
	SB-06	SB-906-B	9/8/2016 9:00	7 - 9	0.2	Field Duplicate	x	x	x	x	x
	SB-07	SB-07-A	9/8/2016 11:20	0 - 1	0.1		x	x	x	x	x
	SB-07	SB-07-B	9/8/2016 11:55	9 - 11	0.3		x	x	x	x	x
	SB-11	SB-11-A	9/8/2016 12:30	0 - 2	0.3		x	x	x	x	x
	SB-11	SB-11-B	9/8/2016 12:45	8 - 10	0.0		x	x	x	x	x

Table 3-1
Sample Summary
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

REC	Location	Sample ID	Collection Date-Time	Depth Interval (feet)	PID Response (ppm)	QA/QC	Analyses				
							VOCs	SVOCs	TPH	PCBs	Metals
Aqueous Samples											
1 - Investigation relating to offsite spill and product observed at MW-3	GW-01	GW-01-A	9/9/2016 14:00	8 - 13	NS		x		x*		
	GW-09	GW-09-A	9/12/2016 11:00	11.13 - 12.3	NS		x		x		
	PW-01	PW-01-A	9/12/2016 12:15	N/A	NS		x	x			x
2 - Investigation of onsite dry wells and magnetic anomaly	MW-1	MW-1-A	9/9/2016 11:45	10.6 - 20	NS	MS/MSD	x	x	x	x	x
	MW-1	MW-91-A	9/9/2016 11:45	10.6 - 20	NS	Field Duplicate	x	x	x	x	x
	GW-11	GW-11-A	9/12/2016 10:00	10.5 - 12.6	NS		x				
2/HREC	GW-05	GW-05-A	9/9/2016 14:30	11 - 12.3	NS		x				
2/HREC	GW-05	GW-05-B	9/12/2016 11:30	11 - 12.3	NS		x		x*		
HREC - Investigation relating to historical UST removal	MW-2	MW-2-A	9/12/2016 12:35	10.79-12	NS		x		x*		
Air Samples											
1 - Investigation relating to offsite spill and product observed at MW-3	SV-01	SV-01-A	9/12/2016 15:57	8	NS		x				
	SV-02	SV-02-A	9/12/2016 16:07	8	NS		x				
	SV-02	SV-902-A	9/12/2016 16:07	8	NS	Field Duplicate	x				
	AO-01	AO-01-A	9/12/2016 16:04	N/A	NS	Outdoor Ambient	x				

Table 3-1
Sample Summary
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

REC	Location	Sample ID	Collection Date-Time	Depth Interval (feet)	PID Response (ppm)	QA/QC	Analyses				
							VOCs	SVOCs	TPH	PCBs	Metals
Supplemental Phase II Environmental Site Assessment											
Soil Samples											
2 - Investigation of onsite dry wells and potential waste oil discharge	SB-13	SB-13-A-20181113	11/13/2018 13:35	0 - 2	0.0	MS/MSD	x	x	x	x	x
	SB-13	SB-13 (6-8)-20181212	12/12/2018 10:00	6 - 8	0.0		x	x	x	x	x
	SB-12	SB-12-B-20181113	11/13/2018 12:45	10 - 12	0.0	Field Duplicate	x	x	x	x	x
Aqueous Samples											
2 - Investigation of onsite dry wells and abandonded fuel oil UST	MW-4	MW-4-20181219	12/19/2018 15:00	5 - 20	NS		x	x	x	x	x
	MW-5	MW-5-20181219	12/19/2018 11:45	4 - 19	NS	Field Duplicate	x	x	x	x	x
	MW-6	MW-6-20181219	12/19/2018 11:30	5 - 19	NS	MS/MSD	x	x	x	x	x
	MW-7	MW-7-20181219	12/19/2018 16:15	5 - 20	NS		x	x	x	x	x
Air Samples											
1 - Investigation relating to offsite spill and product observed at MW-3	SS-01	SS-01-A-20181113	11/13/2018 10:35	N/A	NS		x				
	SS-02	SS-02-A-20181113	11/13/2018 14:00	N/A	NS		x				
	IA-01	IA-01-A-20181113	11/13/2018 10:45	N/A	NS	Field Duplicate	x				
	IA-02	IA-02-A-20181113	11/13/2018 14:05	N/A	NS		x				
	AO-01	AO-01-A	11/13/2018 10:50	N/A	NS	Outdoor Ambient	x				

Acronyms

ID - identification
QA/QC - quality assurance/quality control
MS/MSD - matrix spike/matrix spike duplicate
N/A - not applicable
NS - not sampled
ppm - parts per million
VOCs - volatile organic compounds
SVOCs - semi-volatile organic compounds
PCBs - polychlorinated biphenyls
PID - photoionization detector
REC - recognized environmental condition
TPH - total petroluem hydrocarbons
HREC - historical recognized environmental condition
* - gasoline-range organics only

Table 4-1a
Soil Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	SB-01-A		SB-01-B		SB-03-A		SB-03-B		SB-04-A		SB-04-B		SB-05-A		SB-05-B		SB-06-A		SB-06-B		SB-906-B		SB-07-A		SB-07-B		SB-08-A		SB-08-B	
					Location ID	SB-01		SB-01		SB-03		SB-03		SB-04		SB-04		SB-05		SB-05		SB-06		SB-06		SB-06		SB-07		SB-07		SB-08		SB-08		
					Sample Date	9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/7/2016		9/7/2016		
					Sample Type	N		N		N		N		N		N		N		N		N		N		FD		N		N		N		N		
					Parent Sample Code																					SB-06-B										
					Depth (feet bgs)	0-2		6-8		0-2		5-7		0-2		9-11		0-4		5.5-9.5		0-2		7-9		7-9		0-1		9-11		0-2		5-7		
CAS No.	Chemical	NYSDEC Commercial Use SCOs	NYSDEC CP-51 Soil Cleanup Guidance	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	
71-55-6	1,1,1-TRICHLOROETHANE	500000	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	NL	600	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROET	NL	6000	µg/kg	0.89	UJ	0.8	UJ	0.87	UJ	0.84	UJ	1.1	UJ	0.8	UJ	0.89	U	0.94	U	1	UJ	0.92	UJ	0.94	UJ	1.2	U	0.87	U	1	U	0.96	U	
79-00-5	1,1,2-TRICHLOROETHANE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
75-34-3	1,1-DICHLOROETHANE	240000	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
75-35-4	1,1-DICHLOROETHENE	500000	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
87-61-6	1,2,3-TRICHLOROBENZENE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
120-82-1	1,2,4-TRICHLOROBENZENE	NL	3400	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	UJ	0.87	U	1	U	0.96	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	NL	NL	µg/kg	4.5	U	4	U	4.3	U	4.2	U	5.4	U	4	U	4.5	U	4.7	U	5	U	4.6	U	4.7	U	6	U	4.4	U	5.2	U	4.8	U	
106-93-4	1,2-DIBROMOETHANE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
95-50-1	1,2-DICHLOROBENZENE	500000	NL	µg/kg	0.89	U	0.8	U	0.87	U	**0.98**	J+	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	UJ	0.87	U	1	U	0.96	U	
107-06-2	1,2-DICHLOROETHANE	30000	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
78-87-5	1,2-DICHLOROPROPANE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
541-73-1	1,3-DICHLOROBENZENE	280000	NL	µg/kg	0.89	U	0.8	U	0.87	U	**59**	J+	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
106-46-7	1,4-DICHLOROBENZENE	130000	NL	µg/kg	0.89	U	0.8	U	0.87	U	**120**	J+	1.1	U	**0.58**	J	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	UJ	0.87	U	1	U	0.96	U	
78-93-3	2-BUTANONE (MEK)	500000	300	µg/kg	**6.6**	J	16	U	17	U	**21**		22	U	16	U	18	U	19	U	20	U	18	U	19	U	24	U	17	U	21	U	19	U	
591-78-6	2-HEXANONE	NL	NL	µg/kg	4.5	U	4	U	4.3	U	4.2	U	5.4	U	4	U	4.5	U	4.7	U	5	U	4.6	U	4.7	U	6	U	4.4	U	5.2	U	4.8	U	
108-10-1	4-METHYL-2-PENTANONE (MIBK)	NL	1000	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
67-64-1	ACETONE	500000	NL	µg/kg	**83**	J	**26**	J	**62**	J	**89**	J	**53**	J	5	J	8.9	UJ	**1.8**	J	**60**	J	**61**	J	**49**	J	**7.6**	J	**2.2**	J	**5.6**	J	9.6	UJ	
71-43-2	BENZENE	44000	60	µg/kg	0.54	U	0.48	U	0.52	U	0.5	U	0.65	U	0.48	U	0.53	U	0.56	U	0.6	U	0.55	U	0.56	U	0.72	U	0.52	U	0.62	U	0.57	U	
74-97-5	BROMOCHLOROMETHANE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
75-27-4	BROMODICHLOROMETHANE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
75-25-2	BROMOFORM	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
74-83-9	BROMOMETHANE	NL	NL	µg/kg	8.9	U	8	U	8.7	U	8.4	U	11	U	8	U	8.9	U	9.4	U	10	U	9.2	U	9.4	U	12	U	8.7	U	10	U	9.6	U	
75-15-0	CARBON DISULFIDE	NL	2700	µg/kg	0.89	U	**0.58**	J	0.87	U	**18**		1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	**0.65**	J	1	U	0.96	U	
56-23-5	CARBON TETRACHLORIDE	22000	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
108-90-7	CHLOROBENZENE	500000	NL	µg/kg	0.89	U	0.8	U	0.87	U	**41**	J+	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
75-00-3	CHLOROETHANE	NL	1900	µg/kg	1.8	U	1.6	U	1.7	U	1.7	U	2.2	U	1.6	U	1.8	U	1.9	U	2	U	1.8	U	1.9	U	2.4	U	1.7	U	2.1	U	1.9	U	
67-66-3	CHLOROFORM	350000	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
74-87-3	CHLOROMETHANE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
156-59-2	CIS-1,2-DICHLOROETHENE	500000	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
110-82-7	CYCLOHEXANE	NL	NL	µg/kg	1.8	U	1.6	U	1.7	U	1.7	U	2.2	U	1.6	U	1.8	U	1.9	U	2	U	1.8	U	1.9	U	2.4	U	1.7	U	2.1	U	1.9	U	
124-48-1	DIBROMOCHLOROMETHANE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	
75-71-8	DICHLORODIFLUOROMETHANE	NL	NL	µg/kg	0.89	UJ	0.8	UJ	0.87	UJ	0.84	UJ	1.1	UJ	0.8	UJ	0.89	U	0.94	U	1	UJ	0.92	UJ	0.94	UJ	1.2	U	0.87	U	1	U	0.96	U	
100-41-4	ETHYLBENZENE	390000	1000	µg/kg	0.89	U	0.8	U	0.87	U	**4.3**		1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	**0.89**	J	0.96	U	
98-82-8	ISOPROPYLBENZENE	NL	2300	µg/kg	0.89	U	0.8	U	0.87	U	**11**	J+	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U	

Table 4-1a
Soil Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	SB-01-A		SB-01-B		SB-03-A		SB-03-B		SB-04-A		SB-04-B		SB-05-A		SB-05-B		SB-06-A		SB-06-B		SB-906-B		SB-07-A		SB-07-B		SB-08-A		SB-08-B	
					Location ID	SB-01		SB-01		SB-03		SB-03		SB-04		SB-04		SB-05		SB-05		SB-06		SB-06		SB-06		SB-07		SB-07		SB-08		SB-08	
					Sample Date	9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/7/2016		9/7/2016	
					Sample Type	N		N		N		N		N		N		N		N		N		N		FD		N		N		N		N	
					Parent Sample Code																					SB-06-B									
					Depth (feet bgs)	0-2		6-8		0-2		5-7		0-2		9-11		0-4		5.5-9.5		0-2		7-9		7-9		0-1		9-11		0-2		5-7	
CAS No.	Chemical	NYSDEC Commercial Use SCOs	NYSDEC CP-51 Soil Cleanup Guidance	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
179601-23-1	M,P-XYLENE	500000	260	µg/kg	1.8	U	1.6	U	1.7	U	**6.4**	J+	2.2	U	1.6	U	1.8	U	1.9	U	2	U	1.8	U	1.9	U	2.4	U	1.7	U	**3.6**		1.9	U
79-20-9	METHYL ACETATE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U
1634-04-4	METHYL TERT-BUTYL ETHER	500000	930	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U
108-87-2	METHYLCYLOHEXANE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	**1.3**		0.96	U
75-09-2	METHYLENE CHLORIDE	500000	NL	µg/kg	4.5	U	4	U	4.3	U	4.2	U	5.4	U	4	U	4.5	U	4.7	U	5	U	**4.9**	J	**4.8**	J	6	U	4.4	U	5.2	U	4.8	U
95-47-6	O-XYLENE	500000	260	µg/kg	0.89	U	0.8	U	0.87	U	**1.7**	J+	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	**2.4**		0.96	U
100-42-5	STYRENE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U
127-18-4	TETRACHLOROETHENE	150000	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U
108-88-3	TOLUENE	500000	700	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	**1.2**		0.87	U	**2.4**		0.96	U
156-60-5	TRANS-1,2-DICHLOROETHENE	500000	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U
79-01-6	TRICHLOROETHENE	200000	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U
75-69-4	TRICHLOROFLUOROMETHANE	NL	NL	µg/kg	0.89	U	0.8	U	0.87	U	0.84	U	1.1	U	0.8	U	0.89	U	0.94	U	1	U	0.92	U	0.94	U	1.2	U	0.87	U	1	U	0.96	U
108-05-4	VINYL ACETATE	NL	NL	µg/kg	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-	
75-01-4	VINYL CHLORIDE	13000	NL	µg/kg	0.72	U	0.64	U	0.69	U	0.67	U	0.86	U	0.64	U	0.71	U	0.75	U	0.8	U	0.74	U	0.75	U	0.96	U	0.7	U	0.83	U	0.77	U

Bolded - detected

all results are in µg/kg except blanks are in µg/L

µg/kg - microgram per kilogram

µg/L - micrograms per liter

bgs - below ground surface

FD - field duplicate

RB - rinsate blank

TB - trip blank

ID - identification

N - normal

No. - number

NL - not listed

NYSDEC - New York State Department of Environmental Conservation

Q - qualifier

RSLs - regional screening levels

SCO - soil cleanup objective

J - estimated result

J+ - estimated result, biased high

U - non-detect

ethylbenzene not reported for trip blank and rinsate blank

Table 4-1a
Soil Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	SB-09-A	SB-09-B	SB-10-A	SB-10-B	SB-11-A	SB-11-B	RB-01	TB-01	SB-12-B-20181113	SB-912-B-20181113	SB-13-A-20181113	SB-13 (6-8)-20181212	FB-01-A-20181113
					Location ID	SB-09	SB-09	SB-10	SB-10	SB-11	SB-11			SB-12	SB-12	SB-13	SB-13	
					Sample Date	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/8/2016	9/8/2016	9/9/2016	9/9/2016	11/13/2018	11/13/2018	11/13/2018	12/12/2018	11/13/2018
					Sample Type	N	N	N	N	N	N	RB	TB	N	FD	N	N	FB
					Parent Sample Code										SB-12-B-20181113			
					Depth (feet bgs)	0-2	8-10	0-2	8-10	0-2	8-10			10-12		0-2	6-8	
CAS No.	Chemical	NYSDEC Commercial Use SCOs	NYSDEC CP-51 Soil Cleanup Guidance	Unit	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
71-55-6	1,1,1-TRICHLOROETHANE	500000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 U	5 UJ	1 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	NL	600	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROET	NL	6000	µg/kg	1.1 U	0.98 U	0.88 UJ	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 U	5 UJ	1 U
79-00-5	1,1,2-TRICHLOROETHANE	NL	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U
75-34-3	1,1-DICHLOROETHANE	240000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	1 U	1 U	4.4 U	4.4 U	5.5 U	5 UJ	1 U
75-35-4	1,1-DICHLOROETHENE	500000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 U	5 UJ	1 U
87-61-6	1,2,3-TRICHLOROBENZENE	NL	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 R	5 UJ	1 U
120-82-1	1,2,4-TRICHLOROBENZENE	NL	3400	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 R	5 UJ	1 U
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	NL	NL	µg/kg	5.3 U	4.9 U	4.4 U	4.4 U	4.6 U	4.3 U	2 U	2 U	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U
106-93-4	1,2-DIBROMOETHANE	NL	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U
95-50-1	1,2-DICHLOROBENZENE	500000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	**1.1** J	**4.3** J	5.5 UJ	5 UJ	1 U
107-06-2	1,2-DICHLOROETHANE	30000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 U	5 UJ	1 U
78-87-5	1,2-DICHLOROPROPANE	NL	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U
541-73-1	1,3-DICHLOROBENZENE	280000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	**2** J	**6.2**	5.5 UJ	5 UJ	1 U
106-46-7	1,4-DICHLOROBENZENE	130000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	**8.5** J	**28** J	5.5 UJ	5 UJ	1 U
78-93-3	2-BUTANONE (MEK)	500000	300	µg/kg	21 U	20 U	18 U	18 U	19 U	17 U	**3.1** J	**2.5** J	22 U	22 U	28 UJ	25 UJ	5 UJ
591-78-6	2-HEXANONE	NL	NL	µg/kg	5.3 U	4.9 U	4.4 U	4.4 U	4.6 U	4.3 U	1 U	1 U	22 U	22 U	28 UJ	25 UJ	5 U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	NL	1000	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	22 U	22 U	28 U	25 UJ	5 U
67-64-1	ACETONE	500000	NL	µg/kg	**3.9** J	**5.5** J	**64** J	8.8 UJ	**18** J	**0.84** J	**16**	**13**	**37**	**60**	28 UJ	25 UJ	5 UJ
71-43-2	BENZENE	44000	60	µg/kg	0.63 U	0.59 U	0.53 U	0.53 U	0.56 U	0.51 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 U	5 UJ	1 U
74-97-5	BROMOCHLOROMETHANE	NL	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 U	5 UJ	1 U
75-27-4	BROMODICHLOROMETHANE	NL	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 U	5 UJ	1 U
75-25-2	BROMOFORM	NL	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U
74-83-9	BROMOMETHANE	NL	NL	µg/kg	11 U	9.8 U	8.8 U	8.8 U	9.3 U	8.5 U	1 U	1 U	8.8 U	8.7 U	11 U	10 UJ	2 U
75-15-0	CARBON DISULFIDE	NL	2700	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 U	5 UJ	**1.5**
56-23-5	CARBON TETRACHLORIDE	22000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 U	5 UJ	1 U
108-90-7	CHLOROBENZENE	500000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	**24** J	**60** J	5.5 UJ	5 UJ	1 U
75-00-3	CHLOROETHANE	NL	1900	µg/kg	2.1 U	2 U	1.8 U	1.8 U	1.9 U	1.7 U	1 U	1 U	8.8 U	8.7 UJ	11 UJ	10 UJ	2 U
67-66-3	CHLOROFORM	350000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U
74-87-3	CHLOROMETHANE	NL	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	**0.82** J	8.8 U	8.7 UJ	11 UJ	10 UJ	2 U
156-59-2	CIS-1,2-DICHLOROETHENE	500000	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	**1.6** J	5.5 UJ	5 UJ	1 U
10061-01-5	CIS-1,3-DICHLOROPROPENE	NL	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U
110-82-7	CYCLOHEXANE	NL	NL	µg/kg	2.1 U	2 U	1.8 U	1.8 U	1.9 U	1.7 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 U	5 UJ	1 U
124-48-1	DIBROMOCHLOROMETHANE	NL	NL	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U
75-71-8	DICHLORODIFLUOROMETHANE	NL	NL	µg/kg	1.1 U	0.98 U	0.88 UJ	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	8.8 U	8.7 U	11 U	10 UJ	2 UJ
100-41-4	ETHYLBENZENE	390000	1000	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	-	-	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U
98-82-8	ISOPROPYLBENZENE	NL	2300	µg/kg	1.1 U	0.98 U	0.88 U	0.88 U	0.93 U	0.85 U	0.6 U	0.6 U	4.4 U	4.4 U	5.5 UJ	5 UJ	1 U

Table 4-1a
Soil Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID		SB-09-A		SB-09-B		SB-10-A		SB-10-B		SB-11-A		SB-11-B		RB-01		TB-01		SB-12-B-20181113		SB-912-B-20181113		SB-13-A-20181113		SB-13 (6-8)-20181212		FB-01-A-20181113	
					Location ID		SB-09		SB-09		SB-10		SB-10		SB-11		SB-11						SB-12		SB-12		SB-13		SB-13			
					Sample Date		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/8/2016		9/8/2016		9/9/2016		9/9/2016		11/13/2018		11/13/2018		11/13/2018		12/12/2018		11/13/2018	
					Sample Type		N		N		N		N		N		N		RB		TB		N		FD		N		N		FB	
					Parent Sample Code																				SB-12-B-20181113							
					Depth (feet bgs)		0-2		8-10		0-2		8-10		0-2		8-10						10-12				0-2		6-8			
CAS No.	Chemical	NYSDEC Commercial Use SCOs	NYSDEC CP-51 Soil Cleanup Guidance	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
179601-23-1	M,P-XYLENE	500000	260	µg/kg	2.1	U	2	U	1.8	U	1.8	U	1.9	U	1.7	U	1.2	U	1.2	U	8.8	U	8.7	U	11	UJ	10	UJ	2	U
79-20-9	METHYL ACETATE	NL	NL	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	0.93	U	0.85	U	1	U	1	U	4.4	U	4.4	U	5.5	UJ	5	UJ	1	U
1634-04-4	METHYL TERT-BUTYL ETHER	500000	930	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	0.93	U	0.85	U	0.6	U	0.6	U	4.4	U	4.4	UJ	5.5	UJ	5	UJ	1	U
108-87-2	METHYLCYLOHEXANE	NL	NL	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	0.93	U	0.85	U	0.6	U	0.6	U	4.4	U	4.4	U	5.5	U	5	UJ	1	U
75-09-2	METHYLENE CHLORIDE	500000	NL	µg/kg	5.3	U	4.9	U	4.4	U	4.4	U	4.6	U	4.3	U	0.6	U	**0.34**	J	22	U	22	U	28	U	25	UJ	**1.3**	J
95-47-6	O-XYLENE	500000	260	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	0.93	U	0.85	U	0.6	U	0.6	U	4.4	U	4.4	U	5.5	UJ	5	UJ	1	U
100-42-5	STYRENE	NL	NL	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	0.93	U	0.85	U	0.6	U	0.6	U	4.4	U	4.4	U	5.5	UJ	5	UJ	1	U
127-18-4	TETRACHLOROETHENE	150000	NL	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	0.93	U	0.85	U	0.6	U	0.6	U	4.4	U	4.4	U	5.5	UJ	5	UJ	1	U
108-88-3	TOLUENE	500000	700	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	**0.65**	J	0.85	U	0.6	U	0.6	U	4.4	U	4.4	U	5.5	UJ	5	UJ	**0.36**	J
156-60-5	TRANS-1,2-DICHLOROETHENE	500000	NL	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	0.93	U	0.85	U	0.6	U	0.6	U	4.4	U	4.4	U	5.5	U	5	UJ	1	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	NL	NL	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	0.93	U	0.85	U	0.6	U	0.6	U	4.4	U	4.4	U	5.5	UJ	5	UJ	1	U
79-01-6	TRICHLOROETHENE	200000	NL	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	0.93	U	0.85	U	0.6	U	0.6	U	4.4	U	4.4	U	5.5	UJ	5	UJ	1	U
75-69-4	TRICHLOROFLUOROMETHANE	NL	NL	µg/kg	1.1	U	0.98	U	0.88	U	0.88	U	0.93	U	0.85	U	0.6	U	0.6	U	8.8	U	8.7	U	11	U	10	UJ	2	U
108-05-4	VINYL ACETATE	NL	NL	µg/kg	-		-		-		-		-		-		-		-		4.4	U	4.4	U	5.5	R	5	UJ	1	U
75-01-4	VINYL CHLORIDE	13000	NL	µg/kg	0.84	U	0.79	U	0.71	U	0.7	U	0.74	U	0.68	U	0.6	U	0.6	U	8.8	U	8.7	U	11	U	10	UJ	2	U

Bolded - detected

all results are in µg/kg except blanks are in µg/L

µg/kg - microgram per kilogram

µg/L - micrograms per liter

bgs - below ground surface

FD - field duplicate

RB - rinsate blank

TB - trip blank

ID - identification

N - normal

No. - number

NL - not listed

NYSDEC - New York State Department of Environmental Conservation

Q - qualifier

RSLs - regional screening levels

SCO - soil cleanup objective

J - estimated result

J+ - estimated result, biased high

U - non-detect

ethylbenzene not reported for trip blank and rinsate blank

Table 4-1b
Soil Sample Detections – TPH
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID		SB-01-A		SB-01-B		SB-03-A		SB-03-B		SB-04-A		SB-04-B		SB-05-A		SB-05-B		SB-06-A		SB-06-B		SB-906-B		SB-07-A		SB-07-B		SB-08-A		SB-08-B		SB-09-A		SB-09-B		SB-10-A	
				Sample Date		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016	
				Location ID		SB-01		SB-01		SB-03		SB-03		SB-04		SB-04		SB-05		SB-05		SB-06		SB-06		SB-06		SB-07		SB-07		SB-08		SB-08		SB-09		SB-09		SB-10	
				Sample Type		N		N		N		N		N		N		N		N		N		N		FD		N		N		N		N		N		N		N	
				Parent Sample Code																						SB-06-B															
				Depth (feet bgs)		0-2		6-8		0-2		5-7		0-2		9-11		0-4		5.5-9.5		0-2		7-9		7-9		0-1		9-11		0-2		5-7		0-2		8-10		0-2	
CAS No.	Chemical	NYSDEC Commercial Use SCOs	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
68334-30-5	DIESEL RANGE ORGANICS	NL	mg/kg	**9.6**	J-	1.8	U	**0.92**	J	**28**		**4.5**	J+	**0.98**	J	**1.7**	J	**0.72**	J-	**1.1**	J	**1.3**	J	**1.6**	J-	**250**	J-	**1.8**	J-	**1.4**	J	**1.8**		**5.4**	J-	**0.92**	J	**1.9**	J-
8006-61-9	GASOLINE RANGE ORGANICS	NL	mg/kg	4.1	UJ	3.8	UJ	4.1	UJ	**12**		3.7	UJ	**3.7**		4.4	UJ	3.6	UJ	2.6	UJ	4.7	UJ	4.3	UJ	**14**	J+	3.4	UJ	4.2	UJ	4.3	UJ	3.9	UJ	4.5	UJ	3.8	UJ

Bolded - detected
all results are in mg/kg except rinsate blank is in µg/L
mg/kg - milligram per kilogram
µg/L - microgram per liter
bgs - below ground surface
ID - identification
N - normal
FD - field duplicate
RB - rinsate blank
No. - number
NL - not listed
NYSDEC - New York StateDepartment of Environmental Conservation
Q - qualifier
SCO - soil cleanup objective
J - estimated result
J+ - estimated result, biased high
J- = estimated result, biased low
U - non-detect
UJ - estimated non detect

Table 4-1b
Soil Sample Detections – TPH
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	SB-10-B		SB-11-A		SB-11-B		RB-01		SB-12-B-20181113		SB-912-B-20181113		SB-13-A-20181113		SB-13 (6-8)-20181212		FB-01-A-20181113	
				Sample Date	9/7/2016		9/8/2016		9/8/2016		9/9/2016		SB-12		SB-12		SB-13		SB-13			
				Location ID	SB-10		SB-11		SB-11				11/13/2018		11/13/2018		11/13/2018		12/12/2018		11/13/2018	
				Sample Type	N		N		N		RB		N		FD		N		N		FB	
				Parent Sample Code											SB-12-B-20181113							
				Depth (feet bgs)	8-10		0-2		8-10				10-12				0-2		6-8			
CAS No.	Chemical	NYSDEC Commercial Use SCOs	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
68334-30-5	DIESEL RANGE ORGANICS	NL	mg/kg	**1.7**	J	**14**	J+	**0.48**	J-	**64**	J	**110**		**79**		**76**	J	5.4	U	49	U
8006-61-9	GASOLINE RANGE ORGANICS	NL	mg/kg	4.1	UJ	**5.7**		3.5	UJ	**23**	J	4.7	U	4.9	U	6.8	U	2.4	U	10	U

Bolded - detected
all results are in mg/kg except rinsate blank is in µg/L
mg/kg - milligram per kilogram
µg/L - microgram per liter
bgs - below ground surface
ID - identification
N - normal
FD - field duplicate
RB - rinsate blank
No. - number
NL - not listed
NYSDEC - New York StateDepartment of Environmental Conservation
Q - qualifier
SCO - soil cleanup objective
J - estimated result
J+ - estimated result, biased high
J- = estimated result, biased low
U - non-detect
UJ - estimated non detect

Table 4-1c
Soil Sample Detections – SVOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID		SB-01-A		SB-01-B		SB-03-A		SB-03-B		SB-04-A		SB-04-B		SB-05-A		SB-05-B		SB-06-A		SB-06-B		SB-906-B	
					Location ID		SB-01		SB-01		SB-03		SB-03		SB-04		SB-04		SB-05		SB-05		SB-06		SB-06		SB-06	
					Sample Date		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016	
					Sample Type		N		N		N		N		N		N		N		N		N		N		FD	
					Parent Sample Code																						SB-06-B	
					Depth (feet bgs)		0-2		6-8		0-2		5-7		0-2		9-11		0-4		5.5-9.5		0-2		7-9		7-9	
CAS No.	Chemical	NYSDEC Commercial Use SCOs	NYSDEC CP-51 Soil Cleanup Guidance	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
92-52-4	1,1'-BIPHENYL	NL	NL	µg/kg	180	R	170	U	180	U	170	U	170	U	180	U	180	U	180	U	170	U	180	U	200	U	190	U
95-94-3	1,2,4,5-TETRACHLOROBENZENE	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	180	U	170	U	180	U	200	U	190	U
218-01-9	1,2-BENZPHENANTHRACENE	56000	NL	µg/kg	**400**	J	7.2	U	**65**		**3.3**	J	**260**		7.3	U	**75**		**15**		**43**		**2**	J	**12**			
123-91-1	1,4-DIOXANE	130000	NL	µg/kg	190	U	180	U	190	U	180	U	180	U	180	U	180	U	180	U	180	U	200	U	200	U		
58-90-2	2,3,4,6-TETRACHLOROPHENOL	NL	NL	µg/kg	950	U	900	U	930	U	900	U	900	U	910	U	920	U	880	U	920	U	1000	U	1000	U		
95-95-4	2,4,5-TRICHLOROPHENOL	NL	100	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
88-06-2	2,4,6-TRICHLOROPHENOL	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
120-83-2	2,4-DICHLOROPHENOL	NL	400	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
105-67-9	2,4-DIMETHYLPHENOL	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
51-28-5	2,4-DINITROPHENOL	NL	200	µg/kg	950	UJ	900	U	930	U	900	U	900	U	910	U	920	U	880	U	920	U	1000	U	1000	U		
121-14-2	2,4-DINITROTOLUENE	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
606-20-2	2,6-DINITROTOLUENE	NL	1000	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
91-58-7	2-CHLORONAPHTHALENE	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
95-57-8	2-CHLOROPHENOL	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
91-57-6	2-METHYLNAPHTHALENE	NL	36400	µg/kg	**13**	J	7.2	U	**1.5**	J	**37**		**6.1**	J	7.3	U	**1.5**	J	7.1	U	7.4	U	8.1	U	8.1	U		
95-48-7	2-METHYLPHENOL	500000	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
88-74-4	2-NITROANILINE	NL	400	µg/kg	360	U	350	U	360	U	350	U	350	U	350	U	360	U	340	U	350	U	390	U	390	U		
88-75-5	2-NITROPHENOL	NL	300	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
91-94-1	3,3'-DICHLOROBENZIDINE	NL	NL	µg/kg	1100	R	1100	U	1100	U	1100	U	1100	U	1100	U	1100	U	1100	U	1100	U	1200	U	1200	U		
78-59-1	3,5,5-TRIMETHYL-2-CYCLOHEXENE-1-ONE	NL	4400	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
99-09-2	3-NITROANILINE	NL	NL	µg/kg	360	U	350	U	360	U	350	U	350	U	350	U	360	U	340	U	350	U	390	U	390	U		
534-52-1	4,6-DINITRO-2-METHYLPHENOL	NL	NL	µg/kg	360	U	350	U	360	U	350	U	350	U	350	U	360	U	340	U	350	U	390	U	390	U		
101-55-3	4-BROMOPHENYL PHENYL ETHER	NL	NL	µg/kg	230	U	220	U	220	U	220	U	220	U	220	U	220	U	210	U	220	U	240	U	240	U		
59-50-7	4-CHLORO-3-METHYLPHENOL	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
106-44-5	4-METHYLPHENOL	500000	NL	µg/kg	360	U	350	U	360	U	350	U	350	U	350	U	360	U	340	U	350	U	390	U	390	U		
100-02-7	4-NITROPHENOL	NL	100	µg/kg	950	U	900	U	930	U	900	U	900	U	910	U	920	U	880	U	920	U	1000	U	1000	U		
83-32-9	ACENAPHTHENE	500000	NL	µg/kg	**12**	J	7.2	U	7.5	U	7.2	U	**4.7**	J	7.3	U	**7.4**	J	**2.8**	J	**2.6**	J	8.1	U	**2.4**	J		
208-96-8	ACENAPHTHYLENE	500000	NL	µg/kg	**110**		7.2	U	**22**		7.2	U	**100**		7.3	U	**5.6**	J	7.1	U	**2.9**	J	8.1	U	8.1	U		
98-86-2	ACETOPHENONE	NL	NL	µg/kg	180	R	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
120-12-7	ANTHRACENE	500000	NL	µg/kg	**65**		7.2	U	**8.2**		7.2	U	**44**		7.3	U	**20**		**4.6**	J	**5.5**	J	8.1	U	**4.8**	J		
1912-24-9	ATRAZINE	NL	NL	µg/kg	180	R	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
100-52-7	BENZALDEHYDE	NL	NL	µg/kg	180	R	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
56-55-3	BENZO(A)ANTHRACENE	5600	NL	µg/kg	**350**	J	7.2	U	**69**		7.2	U	**260**		7.3	U	**83**		**16**		**50**		8.1	U	**10**			
50-32-8	BENZO(A)PYRENE	1000	NL	µg/kg	**380**	J	7.2	UJ	**72**	J+	**2.5**	J+	**280**	J+	**1.8**	J+	**62**		**15**		**43**	J+	**2**	J+	**11**	J+		
205-99-2	BENZO(B)FLUORANTHENE	5600	NL	µg/kg	**660**	J	7.2	UJ	**140**	J+	7.2	UJ	**460**	J+	7.3	UJ	**120**		**23**		**90**	J+	8.1	UJ	**17**	J+		
191-24-2	BENZO(G,H,I)PERYLENE	500000	NL	µg/kg	**150**	J	7.2	UJ	**32**	J+	7.2	UJ	**130**	J+	7.3	UJ	**21**		**6**	J	**18**	J+	8.1	UJ	**5.6**	J+		
207-08-9	BENZO(K)FLUORANTHENE	56000	NL	µg/kg	**190**	J	7.2	UJ	**35**	J+	7.2	UJ	**160**	J+	7.3	UJ	**30**		**8.5**		**25**	J+	8.1	UJ	**8.9**	J+		
85-68-7	BENZYL BUTYL PHTHALATE	NL	122000	µg/kg	180	UJ	170	UJ	180	UJ	170	UJ	170	UJ	180	UJ	180	U	170	U	180	UJ	200	UJ	190	UJ		
111-91-1	BIS(2-CHLOROETHOXY)METHANE	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
111-44-4	BIS(2-CHLOROETHYL) ETHER	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	NL	435000	µg/kg	**72**	J	170	UJ	180	UJ	170	UJ	170	UJ	180	UJ	180	U	170	U	180	UJ	200	UJ	190	UJ		
108-60-1	BIS-CHLOROISOPROPYL ETHER	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U		
105-60-2	CAPROLACTAM	NL	NL	µg/kg	180	R	170	U	180	U	**500**		170	U	180	U	180	U	170	U	180	U	200	U	190	U		
86-74-8	CARBAZOLE	NL	NL	µg/kg	**29**	J	170	U	180	U	170	U	170	U	180	U	**13**	J	170	U	180	U	200	U	190	U		

Table 4-1c
Soil Sample Detections – SVOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID		SB-01-A		SB-01-B		SB-03-A		SB-03-B		SB-04-A		SB-04-B		SB-05-A		SB-05-B		SB-06-A		SB-06-B		SB-906-B	
					Location ID		SB-01		SB-01		SB-03		SB-03		SB-04		SB-04		SB-05		SB-05		SB-06		SB-06		SB-06	
					Sample Date		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016	
					Sample Type		N		N		N		N		N		N		N		N		N		N		FD	
					Parent Sample Code																						SB-06-B	
					Depth (feet bgs)		0-2		6-8		0-2		5-7		0-2		9-11		0-4		5.5-9.5		0-2		7-9		7-9	
CAS No.	Chemical	NYSDEC Commercial Use SCOs	NYSDEC CP-51 Soil Cleanup Guidance	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
53-70-3	DIBENZO(A,H)ANTHRACENE	560	NL	µg/kg	**49**		7.2	UJ	**10**	J+	7.2	UJ	**41**	J+	7.3	UJ	**7.4**	J	7.1	U	**6.3**	J+	8.1	UJ	8.1	UJ
132-64-9	DIBENZOFURAN	350000	6200	µg/kg	180	U	170	U	180	U	170	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U
84-66-2	DIETHYL PHTHALATE	NL	7100	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	180	U	170	U	180	U	200	U	190	U
131-11-3	DIMETHYL PHTHALATE	NL	27000	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	180	U	170	U	180	U	200	U	190	U
84-74-2	DI-N-BUTYLPHTHALATE	NL	8100	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	180	U	170	U	180	U	200	U	190	U
117-84-0	DI-N-OCTYLPHTHALATE	NL	120000	µg/kg	180	U	170	UJ	180	UJ	170	UJ	170	UJ	180	UJ	180	UJ	180	U	170	U	180	UJ	200	UJ	190	UJ
206-44-0	FLUORANTHENE	500000	NL	µg/kg	**610**		7.2	U	**75**	J+	**8**		**320**		**1.8**	J	**150**		**37**		**81**	J+	**4.5**	J	**29**	
86-73-7	FLUORENE	500000	NL	µg/kg	**23**	J	7.2	U	**2.2**	J+	7.2	U	**6.8**	J	7.3	U	**5.9**	J	**1.8**	J	7.4	U	8.1	U	**1.6**	J
87-68-3	HEXACHLORO-1,3-BUTADIENE	NL	NL	µg/kg	57	U	54	U	56	U	54	U	54	U	55	U	56	U	53	U	55	U	61	U	60	U
118-74-1	HEXACHLOROBENZENE	6000	1400	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	NL	NL	µg/kg	180	R	170	UJ	180	UJ	170	UJ	170	UJ	180	UJ	180	UJ	180	U	170	U	180	UJ	200	UJ	190	UJ
67-72-1	HEXACHLOROETHANE	NL	NL	µg/kg	180	UJ	170	UJ	180	UJ	170	UJ	170	UJ	180	UJ	180	UJ	180	U	170	U	180	UJ	200	UJ	190	UJ
193-39-5	INDENO(1,2,3-CD)PYRENE	5600	NL	µg/kg	**140**	J	7.2	UJ	**30**	J+	7.2	UJ	**120**	J+	7.3	UJ	**20**		**5.3**	J	**17**	J+	8.1	UJ	**5.2**	J+
65794-96-9	M-CRESOL & P-CRESOL	NL	NL	µg/kg	-		-		-		-		-		-		-		-		-		-		-	
78-59-1	ISOPHORONE	NL	NL	µg/kg	-		-		-		-		-		-		-		-		-		-		-	
91-20-3	NAPHTHALENE	500000	12000	µg/kg	**18**	J	7.2	U	**3**	J+	**22**	J+	**14**		7.3	U	**1.9**	J	7.1	U	7.4	U	8.1	U	8.1	U
98-95-3	NITROBENZENE	69000	170	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U
86-30-6	N-NITROSODIPHENYLAMINE	NL	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U
106-47-8	P-CHLOROANILINE	NL	220	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U
87-86-5	PENTACHLOROPHENOL	6700	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U
85-01-8	PHENANTHRENE	500000	NL	µg/kg	**300**	J	7.2	U	**17**	J+	**10**		**110**		7.3	U	**99**		**26**		**23**	J+	**2.8**	J	**19**	
108-95-2	PHENOL	500000	NL	µg/kg	180	U	170	U	180	U	170	U	170	U	180	U	180	U	170	U	180	U	200	U	190	U
100-01-6	P-NITROANILINE	NL	NL	µg/kg	360	UJ	350	U	360	U	350	U	350	U	350	U	360	U	340	U	350	U	390	U	390	U
129-00-0	PYRENE	500000	NL	µg/kg	**760**	J	7.2	U	**110**	J+	7.2	U	**530**		7.3	U	**190**		**39**		**110**	J+	**5.7**	J	8.1	U

Bolded - detected
all results are in µg/kg except rinsate blank is in µg/L
µg/kg - microgram per kilogram
µg/L - microgram per kilogram
bgs - below ground surface
FD - field duplicate
RB - rinsate blank
ID - identification
N - normal
No. - number
NL - not listed
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
R - rejected result
SCO - soil cleanup objective
J - estimated result
J+ - estimated result, biased high
U - non-detect
2-methylnaphthalene, 2-methylphenol, 4-methylphenol, and phenanthrene not reported for rinsate blank
m-cresol and p-cresol not reported for soil samples

Table 4-1c
Soil Sample Detections – SVOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	SB-07-A		SB-07-B		SB-11-A		SB-11-B		RB-01		SB-12-B-20181113		SB-912-B-20181113		SB-13-A-20181113		SB-13 (6-8)-20181212		FB-01-A-20181113	
					Location ID	SB-07		SB-07		SB-11		SB-11				SB-12		SB-12		SB-13		SB-13			
					Sample Date	9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/9/2016		11/13/2018		11/13/2018		11/13/2018		12/12/2018		11/13/2018	
					Sample Type	N		N		N		N		RB		N		FD		N		N		FB	
					Parent Sample Code													SB-12-B-20181113							
					Depth (feet bgs)	0-1		9-11		0-2		8-10				10-12				0-2		6-8			
CAS No.	Chemical	NYSDEC Commercial Use SCOs	NYSDEC CP-51 Soil Cleanup Guidance	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
92-52-4	1,1'-BIPHENYL	NL	NL	µg/kg	170	U	170	U	170	U	170	U	2.1	U	380	U	380	U	380	U	360	U	9.5	U
95-94-3	1,2,4,5-TETRACHLOROBENZENE	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	1	U	380	U	380	U	380	U	360	U	9.5	U
218-01-9	1,2-BENZPHENANTHRACENE	56000	NL	µg/kg	**610**	J-	**58**		**1100**		7.2	U	0.15	U	380	U	380	U	**1100**		360	U	9.5	U
123-91-1	1,4-DIOXANE	130000	NL	µg/kg	180	UJ	180	U	170	U	180	U	0.21	U	380	U	380	U	380	U	360	U	9.5	UJ
58-90-2	2,3,4,6-TETRACHLOROPHENOL	NL	NL	µg/kg	900	UJ	880	U	870	U	890	U	2.6	U	380	U	380	U	380	U	360	U	9.5	U
95-95-4	2,4,5-TRICHLOROPHENOL	NL	100	µg/kg	170	UJ	170	U	170	U	170	U	2.6	U	940	U	930	U	930	U	890	U	24	UJ
88-06-2	2,4,6-TRICHLOROPHENOL	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	1	U	380	U	380	U	380	U	360	U	9.5	UJ
120-83-2	2,4-DICHLOROPHENOL	NL	400	µg/kg	170	UJ	170	U	170	U	170	U	2.6	U	380	U	380	U	380	U	360	U	9.5	UJ
105-67-9	2,4-DIMETHYLPHENOL	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	2.6	U	380	U	380	U	380	U	360	U	9.5	U
51-28-5	2,4-DINITROPHENOL	NL	200	µg/kg	900	UJ	880	U	870	U	890	U	10	U	940	U	930	U	930	U	890	U	24	U
121-14-2	2,4-DINITROTOLUENE	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	1	U	380	U	380	U	380	U	360	U	9.5	U
606-20-2	2,6-DINITROTOLUENE	NL	1000	µg/kg	170	UJ	170	U	170	U	170	U	1	U	380	U	380	U	380	U	360	U	9.5	U
91-58-7	2-CHLORONAPHTHALENE	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	1	U	380	U	380	U	380	U	360	U	9.5	U
95-57-8	2-CHLOROPHENOL	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	1	U	380	U	380	U	380	U	360	U	9.5	UJ
91-57-6	2-METHYLNAPHTHALENE	NL	36400	µg/kg	**36**	J-	**1.8**	J	7	U	7.2	U	-		380	U	380	U	380	U	360	U	9.5	U
95-48-7	2-METHYLPHENOL	500000	NL	µg/kg	170	UJ	170	U	170	U	170	U	-		380	U	380	U	380	U	360	U	9.5	UJ
88-74-4	2-NITROANILINE	NL	400	µg/kg	350	UJ	340	U	340	U	340	U	1	U	940	U	930	U	930	U	890	U	24	U
88-75-5	2-NITROPHENOL	NL	300	µg/kg	170	UJ	170	U	170	U	170	U	2.6	U	380	U	380	U	380	U	360	U	9.5	UJ
91-94-1	3,3'-DICHLOROBENZIDINE	NL	NL	µg/kg	1100	U	1100	U	1100	U	1100	U	2.6	U	380	U	380	U	380	U	360	U	9.5	U
78-59-1	3,5,5-TRIMETHYL-2-CYCLOHEXENE-1-ONE	NL	4400	µg/kg	170	U	170	U	170	U	170	U	1	U	-		-		-		-		-	
99-09-2	3-NITROANILINE	NL	NL	µg/kg	350	UJ	340	U	340	U	340	U	1	U	940	U	930	U	930	U	890	U	24	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	NL	NL	µg/kg	350	UJ	340	U	340	U	340	U	1	U	940	U	930	U	930	U	890	U	24	U
101-55-3	4-BROMOPHENYL PHENYL ETHER	NL	NL	µg/kg	220	UJ	210	U	210	U	210	U	1	U	380	U	380	U	380	U	360	U	9.5	UJ
59-50-7	4-CHLORO-3-METHYLPHENOL	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	2.6	U	380	U	380	U	380	U	360	U	9.5	U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	1	U	380	U	380	U	380	U	360	U	9.5	U
106-44-5	4-METHYLPHENOL	500000	NL	µg/kg	**69**	J	340	U	340	U	340	U	-		-		-		-		-		-	
100-02-7	4-NITROPHENOL	NL	100	µg/kg	900	UJ	880	U	870	U	890	U	2.6	U	940	UJ	930	UJ	930	UJ	890	U	24	U
83-32-9	ACENAPHTHENE	500000	NL	µg/kg	**39**	J-	**4.3**	J	**150**		7.2	U	0.15	U	380	U	380	U	**90**	J	360	U	9.5	U
208-96-8	ACENAPHTHYLENE	500000	NL	µg/kg	**97**	J-	**15**		**33**		7.2	U	0.15	U	380	U	380	U	380	U	360	U	9.5	U
98-86-2	ACETOPHENONE	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	2.1	U	380	U	380	U	380	U	360	U	9.5	UJ
120-12-7	ANTHRACENE	500000	NL	µg/kg	**130**	J-	**13**		**330**		7.2	U	0.15	U	380	U	380	U	**170**	J	360	U	9.5	UJ
1912-24-9	ATRAZINE	NL	NL	µg/kg	170	UJ	170	U	170	UJ	170	U	2.1	U	380	UJ	380	UJ	380	UJ	360	UJ	9.5	UJ
100-52-7	BENZALDEHYDE	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	2.1	U	380	UJ	380	UJ	380	UJ	360	UJ	**2.1**	J-
56-55-3	BENZO(A)ANTHRACENE	5600	NL	µg/kg	**550**	J-	**63**		**1100**		7.2	U	0.15	U	380	U	380	U	**910**		360	U	9.5	U
50-32-8	BENZO(A)PYRENE	1000	NL	µg/kg	**640**	J+	**59**	J+	**1000**		7.2	U	0.15	U	380	U	380	U	**1000**		360	U	9.5	U
205-99-2	BENZO(B)FLUORANTHENE	5600	NL	µg/kg	**930**	J+	**120**	J+	**1400**		7.2	U	0.15	U	380	U	380	U	**1400**		360	U	9.5	U
191-24-2	BENZO(G,H,I)PERYLENE	500000	NL	µg/kg	**260**	J+	**22**	J+	**380**		7.2	U	0.15	U	380	U	380	U	**900**		360	U	9.5	U
207-08-9	BENZO(K)FLUORANTHENE	56000	NL	µg/kg	**480**	J+	**28**	J+	**610**		7.2	U	0.15	U	380	U	380	U	**650**		360	U	9.5	U
85-68-7	BENZYL BUTYL PHTHALATE	NL	122000	µg/kg	**8800**	J-	170	U	**4000**	J-	170	U	2.6	U	380	U	380	U	380	U	360	U	9.5	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	2.6	U	380	U	380	U	380	U	360	U	9.5	U
111-44-4	BIS(2-CHLOROETHYL) ETHER	NL	NL	µg/kg	170	UJ	170	U	170	U	170	U	2.6	U	380	U	380	U	380	U	360	U	9.5	UJ
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	NL	435000	µg/kg	**5600**	J-	170	U	**220**	J-	170	U	1	U	**210**	J	380	U	380	U	360	U	9.5	U
108-60-1	BIS-CHLOROISOPROPYL ETHER	NL	NL	µg/kg	170	U	170	U	170	U	170	U	2.6	U	380	UJ	380	UJ	380	UJ	360	UJ	9.5	UJ
105-60-2	CAPROLACTAM	NL	NL	µg/kg	170	U	170	U	170	U	170	U	2.1	U	380	U	380	U	380	U	360	U	9.5	U
86-74-8	CARBAZOLE	NL	NL	µg/kg	170	UJ	170	U	**250**		170	U	1	U	380	U	380	U	380	U	360	U	9.5	UJ

Table 4-1c
Soil Sample Detections – SVOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	SB-07-A	SB-07-B	SB-11-A	SB-11-B	RB-01	SB-12-B-20181113	SB-912-B-20181113	SB-13-A-20181113	SB-13 (6-8)-20181212	FB-01-A-20181113
					Location ID	SB-07	SB-07	SB-11	SB-11		SB-12	SB-12	SB-13	SB-13	
					Sample Date	9/8/2016	9/8/2016	9/8/2016	9/8/2016	9/9/2016	11/13/2018	11/13/2018	11/13/2018	12/12/2018	11/13/2018
					Sample Type	N	N	N	N	RB	N	FD	N	N	FB
					Parent Sample Code							SB-12-B-20181113			
					Depth (feet bgs)	0-1	9-11	0-2	8-10		10-12		0-2	6-8	
CAS No.	Chemical	NYSDEC Commercial Use SCOs	NYSDEC CP-51 Soil Cleanup Guidance	Unit	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q	Result Q
53-70-3	DIBENZO(A,H)ANTHRACENE	560	NL	µg/kg	**75** J+	**7.1** J+	**110**	7.2 U	0.15 U	380 U	380 U	**190** J	360 U	9.5 U
132-64-9	DIBENZOFURAN	350000	6200	µg/kg	170 U	170 U	**68** J	170 U	1 U	380 U	380 U	380 U	360 U	9.5 U
84-66-2	DIETHYL PHTHALATE	NL	7100	µg/kg	170 U	170 U	170 U	170 U	1 U	380 U	380 U	380 U	360 U	9.5 U
131-11-3	DIMETHYL PHTHALATE	NL	27000	µg/kg	170 U	170 U	170 U	170 U	1 U	380 U	380 U	380 U	360 U	9.5 U
84-74-2	DI-N-BUTYLPHTHALATE	NL	8100	µg/kg	**190**	170 U	**52** J	170 U	1 U	380 U	380 U	380 U	360 U	9.5 UJ
117-84-0	DI-N-OCTYLPHTHALATE	NL	120000	µg/kg	170 UJ	170 UJ	**18** J	170 U	2.6 U	380 UJ	380 UJ	380 UJ	360 U	9.5 U
206-44-0	FLUORANTHENE	500000	NL	µg/kg	**710**	**100**	**2800**	7.2 U	0.15 U	380 U	380 U	**1700**	360 U	9.5 UJ
86-73-7	FLUORENE	500000	NL	µg/kg	**53**	**4.6** J	**140**	7.2 U	0.15 U	380 U	380 U	380 U	360 U	9.5 U
87-68-3	HEXACHLORO-1,3-BUTADIENE	NL	NL	µg/kg	54 U	53 U	53 U	54 U	1 U	380 U	380 U	380 U	360 U	9.5 UJ
118-74-1	HEXACHLOROBENZENE	6000	1400	µg/kg	170 U	170 U	170 U	170 U	1 U	380 U	380 U	380 U	360 U	9.5 U
77-47-4	HEXACHLOROCYCLOPENTADIENE	NL	NL	µg/kg	170 U	170 U	170 U	170 U	1 U	380 U	380 U	380 U	360 U	9.5 U
67-72-1	HEXACHLOROETHANE	NL	NL	µg/kg	170 U	170 U	170 U	170 U	1 U	380 U	380 U	380 U	360 U	9.5 UJ
193-39-5	INDENO(1,2,3-CD)PYRENE	5600	NL	µg/kg	**240** J+	**21** J+	**350**	7.2 U	0.15 U	380 U	380 U	**940** J	360 U	9.5 U
65794-96-9	M-CRESOL & P-CRESOL	NL	NL	µg/kg	-	-	-	-	5.2 U	380 U	380 U	380 U	360 U	9.5 UJ
78-59-1	ISOPHORONE	NL	NL	µg/kg	-	-	-	-	-	380 U	380 U	380 U	360 U	9.5 U
91-20-3	NAPHTHALENE	500000	12000	µg/kg	**26**	**2.8** J	**45**	7.2 U	0.15 U	380 U	380 U	380 U	360 U	9.5 U
98-95-3	NITROBENZENE	69000	170	µg/kg	170 U	170 U	170 U	170 U	2.6 U	380 U	380 U	380 U	360 U	9.5 U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	NL	NL	µg/kg	170 U	170 U	170 U	170 U	2.6 U	380 U	380 U	380 U	360 U	9.5 UJ
86-30-6	N-NITROSODIPHENYLAMINE	NL	NL	µg/kg	170 U	170 U	170 U	170 U	1 U	380 U	380 U	380 U	360 U	9.5 UJ
106-47-8	P-CHLOROANILINE	NL	220	µg/kg	170 UJ	170 U	170 U	170 U	1 U	380 U	380 U	380 U	360 U	9.5 U
87-86-5	PENTACHLOROPHENOL	6700	NL	µg/kg	170 UJ	170 U	170 U	170 U	1 U	940 UJ	930 UJ	930 UJ	890 UJ	24 UJ
85-01-8	PHENANTHRENE	500000	NL	µg/kg	**570**	**58**	**1700**	7.2 U	-	380 U	380 U	**1000**	360 U	9.5 UJ
108-95-2	PHENOL	500000	NL	µg/kg	170 UJ	170 U	170 U	170 U	1 U	380 U	380 U	380 U	360 U	9.5 UJ
100-01-6	P-NITROANILINE	NL	NL	µg/kg	350 UJ	340 U	340 U	340 U	2.6 U	940 U	930 U	930 U	890 U	24 U
129-00-0	PYRENE	500000	NL	µg/kg	**1200**	**140**	**2900**	7.2 U	0.15 U	380 U	380 U	**2200**	360 U	9.5 UJ

Bolded - detected
all results are in µg/kg except rinsate blank is in µg/L
µg/kg - microgram per kilogram
µg/L - microgram per kilogram
bgs - below ground surface
FD - field duplicate
RB - rinsate blank
ID - identification
N - normal
No. - number
NL - not listed
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
R - rejected result
SCO - soil cleanup objective
J - estimated result
J+ - estimated result, biased high
U - non-detect
2-methylnaphthalene, 2-methylphenol, 4-methylphenol, and phenanthrene
not reported for rinsate blank
m-cresol and p-cresol not reported for soil samples

Table 4-1d
Soil Sample Detections – PCBs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID		SB-01-A		SB-01-B		SB-03-A		SB-03-B		SB-04-A		SB-04-B		SB-05-A		SB-05-B		SB-06-A		SB-06-B		SB-906-B		SB-07-A		SB-07-B		SB-11-A		SB-11-B		RB-01		SB-12-B-20181113		SB-912-B-20181113		SB-13-A-20181113		SB-13 (6-8)-20181212		FB-01-A-20181113	
				Location ID		SB-01		SB-01		SB-03		SB-03		SB-04		SB-04		SB-05		SB-05		SB-06		SB-06		SB-06		SB-07		SB-07		SB-11		SB-11				SB-12		SB-12		SB-13		SB-13			
				Sample Date		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/9/2016		11/13/2018		11/13/2018		11/13/2018		12/12/2018		11/13/2018	
				Sample Type		N		N		N		N		N		N		N		N		N		N		FD		N		N		N		N		RB		N		FD		N		N		FB	
				Parent Sample Code																						SB-06-B														SB-12-B-20181113								
				Depth (feet bgs)		0-2		6-8		0-2		5-7		0-2		9-11		0-4		5.5-9.5		0-2		7-9		7-9		0-1		9-11		0-2		8-10				10-12				0-2		6-8			
CAS No.	Chemical	NYSDEC Commercial Use SCOs	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
12674-11-2	AROCLOR 1016	1000	µg/kg	38	U	36	U	38	U	36	U	36	U	36	U	36	U	35	U	36	U	40	U	39	U	36	U	36	U	35	U	35	U	0.17	U	19	U	19	U	19	U	18	U	0.094	UJ
11104-28-2	AROCLOR 1221	1000	µg/kg	38	U	36	U	38	U	36	U	36	U	36	U	36	U	35	U	36	U	40	U	39	U	36	U	36	U	35	U	35	U	0.17	U	19	U	19	U	19	U	18	U	0.094	U
11141-16-5	AROCLOR 1232	1000	µg/kg	38	U	36	U	38	U	36	U	36	U	36	U	36	U	35	U	36	U	40	U	39	U	36	U	36	U	35	U	35	U	0.17	U	19	U	19	U	19	U	18	U	0.094	U
53469-21-9	AROCLOR 1242	1000	µg/kg	38	U	36	U	38	U	36	U	36	U	36	U	36	U	35	U	36	U	40	U	39	U	36	U	36	U	35	U	35	U	0.17	U	**17**	J	**17**	J	19	U	18	U	0.094	U
12672-29-6	AROCLOR 1248	1000	µg/kg	38	U	36	U	38	U	36	U	36	U	36	U	36	U	35	U	36	U	40	U	39	U	36	U	36	U	35	U	35	U	0.17	U	19	U	19	U	19	U	18	U	0.094	U
11097-69-1	AROCLOR 1254	1000	µg/kg	38	U	36	U	38	U	36	U	36	U	36	U	36	U	35	U	36	U	40	U	39	U	36	U	36	U	35	U	35	U	0.17	U	19	U	19	U	19	U	18	U	0.094	U
11096-82-5	AROCLOR 1260	1000	µg/kg	**12**	J	36	U	**15**	J	36	U	36	U	36	U	36	U	35	U	36	U	40	U	39	U	**35**	J	36	U	**27**	J	35	U	0.17	U	19	U	19	U	**32**		18	U	0.094	U
37324-23-5	AROCLOR 1262	1000	µg/kg	38	U	36	U	38	U	36	U	36	U	36	U	36	U	35	U	36	U	40	U	39	U	36	U	36	U	35	U	35	U	0.43	U	19	U	19	U	19	U	18	U	0.094	U
11100-14-4	AROCLOR 1268	1000	µg/kg	38	U	36	U	38	U	36	U	36	U	36	U	36	U	35	U	36	U	40	U	39	U	36	U	36	U	35	U	35	U	0.17	U	19	U	19	U	19	U	18	U	0.094	U
1336-36-3	TOTAL PCBS	1000	µg/kg	**12**	J	36	U	**15**	J	36	U	36	U	36	U	36	U	35	U	36	U	40	U	39	U	**35**	J	36	U	**27**	J	35	U	0.43	U	-		-		-		-		-	

Bolded - detected
all results are in µg/kg except rinsate blank is in µg/L
µg/kg - microgram per kilogram
µg/L - microgram per liter
bgs - below ground surface
FD - field duplicate
RB - rinsate blank
ID - identification
N - normal
No. - number
NL - not listed
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
RSLs - regional screening levels
SCO - soil cleanup objective
J - estimated result
U - non-detect

Table 4-1e
Soil Sample Detections – Metals
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID		SB-01-A		SB-01-B		SB-03-A		SB-03-B		SB-04-A		SB-04-B		SB-05-A		SB-05-B		SB-06-A		SB-06-B		SB-906-B		SB-07-A		SB-07-B		SB-11-A		SB-11-B		RB-01		SB-12-B-20181113		SB-912-B-20181113		SB-13-A-20181113		SB-13 (6-8)-20181212		FB-01-A-20181113	
				Location ID		SB-01		SB-01		SB-03		SB-03		SB-04		SB-04		SB-05		SB-05		SB-06		SB-06		SB-06		SB-07		SB-07		SB-11		SB-11				SB-12		SB-12		SB-13		SB-13			
				Sample Date		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/7/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/8/2016		9/9/2016		11/13/2018		11/13/2018		11/13/2018		12/12/2018		11/13/2018	
				Sample Type		N		N		N		N		N		N		N		N		N		N		FD		N		N		N		N		RB		N		FD		N		N		FB	
				Parent Sample ID																						SB-06-B														SB-12-B-20181113								
				Depth (feet bgs)		0-2		6-8		0-2		5-7		0-2		9-11		0-4		5.5-9.5		0-2		7-9		7-9		0-1		9-11		0-2		8-10				10-12				0-2		6-8			
CAS No.	Chemical	NYSDEC Commercial Use SCOs	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
7429-90-5	ALUMINUM	NL	mg/kg	**12000**		**8900**		**11000**		**8700**		**15000**		**10000**		**12000**		**11000**		**13000**		**15000**		12000		**12000**		**11000**		**14000**		**11000**		**6.1**	J	**11100**		**14000**		**11600**		**8930**		300	U
7440-36-0	ANTIMONY	NL	mg/kg	**5.4**		**2.7**		**3.3**		**2.5**		**7.8**		**4.4**		**3.6**		**3.3**		**6.2**		**3.1**		**2.7**		**4.4**		**4.5**		**6.6**		**2.1**		0.5	U	0.61	UJ	0.77	UJ	0.75	UJ	0.67	U	8	U
7440-38-2	ARSENIC	16	mg/kg	**2.2**		**1.8**		**1.8**		**2.1**		**2**		**2**		**2**		**1.1**	J	**1.8**		**2.4**		**2**		**2**		**2**		**4.1**		**1.4**	J	2	U	**3.27**		**2.83**		**4.26**		**1.65**		8	U
7440-39-3	BARIUM	400	mg/kg	**77**	J	**25**	J	**38**	J	**32**	J	**73**	J	**42**	J	**31**	J	**35**	J	**46**	J	**36**	J	**32**	J	**2000**	J	**48**	J	**97**	J	**33**	J	1	U	**46.8**		**55**		**62.4**		**37.9**		5	U
7440-41-7	BERYLLIUM	590	mg/kg	**0.047**	J	**0.077**	J	**0.13**	J	**0.083**	J	**0.094**	J	**0.057**	J	**0.12**	J	**0.17**	J	**0.11**	J	**0.19**	J	**0.16**	J	**0.13**	J	0.17	J	**0.16**	J	**0.2**		1	U	**0.704**		**0.641**		**0.623**		**0.486**		5	U
7440-43-9	CADMIUM	9.3	mg/kg	**0.25**		**0.043**	J	**0.19**		**0.058**	J	**0.53**		**0.075**	J	**0.032**	J	0.18	U	**0.039**	J	**0.085**	J	**0.088**	J	**0.75**		0.049	J	**1.2**		**0.028**	J	1	U	0.38	UJ	0.48	UJ	**0.689**	J	**0.02**	J	5	U
7440-70-2	CALCIUM METAL	NL	mg/kg	**5500**	J	**1500**	J	**1600**	J	**1200**	J	**1700**	J	**1800**	J	**2800**	J	**1600**	J	**1400**	J	**1500**	J	**1400**	J	**2500**	J	1400	J	**2400**	J	**1300**	J	250	U	**2420**		**1820**		**2040**		**1350**		100	U
7440-47-3	CHROMIUM	NL	mg/kg	**18**		**7**		**11**		**6.1**		**20**		**12**		**12**		**7.7**		**15**		**9.4**		**7.9**		**34**		**12**		**24**		**5.2**		**0.62**	J	**14.1**	J	**17.1**	J	**16.5**	J	**9.22**		10	U
7440-48-4	COBALT	NL	mg/kg	**5.9**		**3**		**3.7**		**2.8**		**8.4**		**4.8**		**3.9**		**3.6**		**6.7**		**3.4**		**3**		**4.9**		**5**		**7.3**		**2.3**		1	U	**4.78**		**4.62**		**5.66**		**3.35**		10	U
7440-50-8	COPPER	270	mg/kg	**58**	J	**30**	J	**38**	J	**23**	J	**67**	J	**35**	J	**33**	J	**32**	J	**48**	J	**27**	J	**25**	J	**240**	J	**45**	J	**96**	J	**28**	J	**1**	J	**12.1**	J	**9.96**	J	**50**	J	**5.67**		25	U
7439-89-6	IRON	NL	mg/kg	**16000**	J	**11000**	J	**13000**	J	**9100**	J	**21000**	J	**13000**	J	**13000**	J	**12000**	J	**17000**	J	**10000**	J	**8800**	J	**12000**	J	**15000**	J	**27000**	J	**10000**	J	**110**	J	**16600**	J	**15000**	J	**16400**	J	**10900**		100	U
7439-92-1	LEAD	1000	mg/kg	**34**		**3**	J	**53**		**3.9**		**76**		**3.9**		**5.9**		**2.9**	J	**4.7**		**6.9**		6.8		**570**		**8.2**		**490**		**2.9**	J	1	U	**7.26**		**6.18**		**166**		**3.28**		5	U
7439-95-4	MAGNESIUM	NL	mg/kg	**4700**	J	**2400**	J	**2600**	J	**1700**	J	**5300**	J	**3000**	J	**2700**	J	**3100**	J	**4000**	J	**1800**	J	1600	J	**4000**	J	**3300**	J	**4300**	J	**2200**	J	250	U	**3240**		**3290**		**3880**		**2710**		**4.6**	J
7439-96-5	MANGANESE	10000	mg/kg	**330**		**130**		**240**		**140**		**310**		**360**		**160**		**140**		**270**		**160**		160		**160**		**310**		**490**		**210**		**1.5**	J	**287**	J	**273**	J	**256**	J	**102**		5	U
7439-97-6	MERCURY	2.8	mg/kg	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		**0.0072**	J	**0.012**	J	**0.032**	J	0.03	U	0.2	U
7440-02-0	NICKEL	310	mg/kg	**16**		**5.5**		**9.3**		**4.7**		**18**		**11**		**8.4**		**9.3**		**14**		**7.4**		**5.9**		**23**		**11**		**19**		**4.8**		**6.7**	J	**10.7**		**11.3**		**13.4**		**6.49**		10	U
7440-09-7	POTASSIUM	NL	mg/kg	**1600**		**2800**		**1400**		**2100**		**3000**		**2500**		**1700**		**2500**		**2400**		**1700**		**1600**		**1700**		**2700**		**2600**		**2900**		250	U	**2170**		**2350**		**2000**		**2730**		1000	U
7782-49-2	SELENIUM	1500	mg/kg	1.5	UJ	1.4	UJ	1.4	UJ	1.4	UJ	1.4	UJ	1.5	UJ	1.5	UJ	1.4	UJ	1.4	UJ	1.6	UJ	1.5	UJ	1.4	UJ	1.4	UJ	1.4	UJ	1.4	UJ	5	U	0.76	U	0.96	U	0.94	U	0.84	U	10	U
7440-22-4	SILVER	1500	mg/kg	0.73	U	0.7	U	0.72	U	0.7	U	0.71	U	0.73	U	0.73	U	0.71	U	0.71	U	0.78	U	0.76	U	0.71	U	0.71	U	0.69	U	0.71	U	**0.28**	J	0.76	UJ	0.96	UJ	0.94	UJ	0.84	U	10	U
7440-23-5	SODIUM	NL	mg/kg	**250**	J	**190**	J	**170**	J	**130**	J	**220**	J	**170**	J	**220**	J	**140**	J	**110**	J	**180**	J	**140**	J	**210**	J	**140**	J	**120**	J	**100**	J	250	U	**171**	J	**176**	J	94	UJ	**93.2**		**86**	J
7440-28-0	THALLIUM	NL	mg/kg	1.5	UJ	1.4	UJ	1.4	UJ	1.4	UJ	1.4	UJ	1.5	UJ	1.5	UJ	1.4	UJ	1.4	UJ	1.6	UJ	1.5	UJ	1.4	UJ	1.4	UJ	1.4	UJ	1.4	UJ	1	U	1.1	U	1.4	U	1.4	U	**0.08**	J	15	U
7440-62-2	VANADIUM	NL	mg/kg	**28**	J	**12**	J	**15**	J	**10**	J	**29**	J	**17**	J	**16**	J	**11**	J	**22**	J	**17**	J	**13**	J	**18**	J	**17**	J	**28**	J	**9.1**	J	1	U	**23**		**22.8**		**22.9**		**15.5**		10	U
7440-66-6	ZINC	10000	mg/kg	**62**	J	**34**	J	**150**	J	**31**	J	**56**	J	**41**	J	**32**	J	**31**	J	48	J	**48**	J	**38**	J	**2200**	J	**44**	J	**160**	J	**32**	J	**9.6**	J	**47**	J	**52.8**	J	**118**	J	**34.6**		20	U

Bolded - detected
exceeds NYSDEC Commercial Use SCOs
all results are in mg/kg except rinsate blank is in µg/L
mg/kg - milligram per kilogram
µg/L - microgram per liter
bgs - below ground surface
FD - field duplicate
RB - rinsate blank
ID - identification
N - normal
No. - number
NL - not listed
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
SCO - soil cleanup objective
J- = estimated result, biased low
U - non-detect
UJ - estimated non detect

Table 4-2a
Groundwater Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	MW-1-A		MW-91-A		MW-2-A		GW-01-A		GW-05-A		GW-09-A		GW-11-A		PW-01-A		RB-02		TB-02		MW-4-20181219	
				Location ID	MW-1		MW-1		MW-2		GW-01		GW-05		GW-09		GW-11		PW-01						MW-4	
				Sample Date	9/9/2016		9/9/2016		9/12/2016		9/9/2016		9/9/2016		9/12/2016		9/12/2016		9/12/2016		9/9/2016		9/12/2016		12/19/2018	
				Sample Type	N		FD		N		N		N		N		N		N		RB		TB		N	
				Parent Sample Code			MW-1-A																			
				Depth (feet bgs)	10.6-20		10.6-20		10.79-12		9.57-13		11-12.3		11.13-13.4		10.5-12.6		N/A						5-20	
CAS No.	Chemical	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q			Result	Q	Result	Q	Result	Q
71-55-6	1,1,1-TRICHLOROETHANE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	5	µg/L	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	U	0.5	U
79-00-5	1,1,2-TRICHLOROETHANE	1	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
75-34-3	1,1-DICHLOROETHANE	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
75-35-4	1,1-DICHLOROETHENE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	UJ
87-61-6	1,2,3-TRICHLOROBENZENE	5	µg/L	0.6	UJ	0.6	UJ	0.6	UJ	0.6	U	0.6	U	0.6	UJ	0.6	UJ	0.6	UJ	0.6	U	0.6	U	**8.2**	
120-82-1	1,2,4-TRICHLOROBENZENE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**9.6**	
96-12-8	1,2-Dibromo-3-Chloropropane	0.04	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.5	U
106-93-4	1,2-DIBROMOETHANE	0.0006	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
95-50-1	1,2-DICHLOROBENZENE	3	µg/L	**3.2**		**3.1**		0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**520**	
107-06-2	1,2-DICHLOROETHANE	0.6	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
78-87-5	1,2-DICHLOROPROPANE	1	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
541-73-1	1,3-DICHLOROBENZENE	3	µg/L	**0.73**	J	**0.74**	J	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**95**	
106-46-7	1,4-DICHLOROBENZENE	3	µg/L	**15**		**14**		0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**140**	
78-93-3	2-BUTANONE (MEK)	50	µg/L	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	**2.4**	J	**2.8**	J	**3.5**	J
591-78-6	2-HEXANONE	50	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	2.5	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	NL	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	2.5	U
67-64-1	ACETONE	50	µg/L	10	UJ	10	UJ	**17**		10	UJ	**19**		10	U	10	U	10	U	**14**		**13**		**7.2**	
71-43-2	BENZENE	1	µg/L	**0.75**	J	**0.74**	J	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**0.34**	J
74-97-5	BROMOCHLOROMETHANE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
75-27-4	BROMODICHLOROMETHANE	50	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
75-25-2	BROMOFORM	50	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
74-83-9	BROMOMETHANE	5	µg/L	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
75-15-0	CARBON DISULFIDE	60	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**0.87**	J	0.6	U	0.6	U	0.6	U	0.5	U
56-23-5	CARBON TETRACHLORIDE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U

Table 4-2a
Groundwater Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	MW-1-A		MW-91-A		MW-2-A		GW-01-A		GW-05-A		GW-09-A		GW-11-A		PW-01-A		RB-02		TB-02		MW-4-20181219	
				Location ID	MW-1		MW-1		MW-2		GW-01		GW-05		GW-09		GW-11		PW-01						MW-4	
				Sample Date	9/9/2016		9/9/2016		9/12/2016		9/9/2016		9/9/2016		9/12/2016		9/12/2016		9/12/2016		9/9/2016		9/12/2016		12/19/2018	
				Sample Type	N		FD		N		N		N		N		N		N		RB		TB		N	
				Parent Sample Code			MW-1-A																			
				Depth (feet bgs)	10.6-20		10.6-20		10.79-12		9.57-13		11-12.3		11.13-13.4		10.5-12.6		N/A						5-20	
108-90-7	CHLOROBENZENE	5	µg/L	**79**		**76**		0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**190**	
75-00-3	CHLOROETHANE	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
67-66-3	CHLOROFORM	7	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
74-87-3	CHLOROMETHANE	5	µg/L	1	UJ	1	UJ	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**0.65**	J	1	UJ
156-59-2	CIS-1,2-DICHLOROETHENE	5	µg/L	**0.5**	J	**0.46**	J	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**0.5**	J
10061-01-5	CIS-1,3-DICHLOROPROPENE	0.4	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
110-82-7	CYCLOHEXANE	NL	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**5.2**	
124-48-1	DIBROMOCHLOROMETHANE	50	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
75-71-8	DICHLORODIFLUOROMETHANE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	1	U
100-41-4	ETHYLBENZENE	5	µg/L																					**140**	
98-82-8	ISOPROPYLBENZENE	5	µg/L	0.6	U	0.6	U	**3.6**		0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**13**	
179601-23-1	M,P-XYLENE	5	µg/L	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	**520**	
79-20-9	METHYL ACETATE	NL	µg/L	1	U	1	U	1	U	1	U	**1.2**	J	1	U	1	U	**5.5**		1	U	1	U	0.75	U
1634-04-4	METHYL TERT-BUTYL ETHER	10	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	UJ
108-87-2	METHYLCYLOHEXANE	NL	µg/L	0.6	U	0.6	U	**1.6**		0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**11**	
75-09-2	METHYLENE CHLORIDE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**0.29**	J	**0.3**	J	2.5	U
95-47-6	O-XYLENE	5	µg/L	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	UJ	0.6	U	0.6	U	**330**	
100-42-5	STYRENE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	UJ	0.6	UJ	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
127-18-4	TETRACHLOROETHENE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**0.96**	J
108-88-3	TOLUENE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**0.98**	J	0.6	U	0.6	U	**4.3**	
156-60-5	TRANS-1,2-DICHLOROETHENE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	0.4	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.5	U
79-01-6	TRICHLOROETHENE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	**0.66**	J
75-69-4	TRICHLOROFLUOROMETHANE	5	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	1	U
75-01-4	VINYL CHLORIDE	2	µg/L	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	1	U

Bolded - detection
exceeds NYSDEC AWQS

µg/L - microgram per liter
AWQS - Ambient Water Quality Standards
bgs - below ground surface
FD - field duplicate
ID - identification
N - normal
N/A - not available
No. - number
RB - rinsate blank
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
J - estimated result
TB - trip blank
UJ - estimated non-detect
U - non-detect
NL - not listed

Table 4-2a
Groundwater Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	MW-5-20181219		DUP-1-20181219		MW-6-20181219		MW-7-20181219		FB-01-20181219		TB-01-A-20181113		TB-20181219	
				Location ID	MW-5		MW-5		MW-6		MW-7							
				Sample Date	12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018		11/13/2018		12/19/2018	
				Sample Type	N		FD		N		N		FB		TB		TB	
				Parent Sample Code			MW-5-20181219											
				Depth (feet bgs)	4-19				5-19		5-20							
CAS No.	Chemical	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
71-55-6	1,1,1-TRICHLOROETHANE	5	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	5	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
79-00-5	1,1,2-TRICHLOROETHANE	1	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
75-34-3	1,1-DICHLOROETHANE	5	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
75-35-4	1,1-DICHLOROETHENE	5	µg/L	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	5	U	0.5	UJ
87-61-6	1,2,3-TRICHLOROBENZENE	5	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
120-82-1	1,2,4-TRICHLOROBENZENE	5	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.04	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
106-93-4	1,2-DIBROMOETHANE	0.0006	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
95-50-1	1,2-DICHLOROBENZENE	3	µg/L	**4.6**		**4.8**		0.5	U	**0.32**	J	0.5	U	5	U	0.5	U
107-06-2	1,2-DICHLOROETHANE	0.6	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
78-87-5	1,2-DICHLOROPROPANE	1	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
541-73-1	1,3-DICHLOROBENZENE	3	µg/L	**2.7**		**2.7**		0.5	U	0.5	U	0.5	U	5	U	0.5	U
106-46-7	1,4-DICHLOROBENZENE	3	µg/L	**26**		**25**		0.5	U	0.5	U	0.5	U	5	U	0.5	U
78-93-3	2-BUTANONE (MEK)	50	µg/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	25	U	2.5	U
591-78-6	2-HEXANONE	50	µg/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	25	U	2.5	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	NL	µg/L	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	25	U	2.5	U
67-64-1	ACETONE	50	µg/L	**3.6**	J	**3.8**	J	2.5	U	2.5	U	2.5	U	25	U	2.5	U
71-43-2	BENZENE	1	µg/L	**0.92**	J	**0.88**	J	0.5	U	0.5	U	0.5	U	5	U	0.5	U
74-97-5	BROMOCHLOROMETHANE	5	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
75-27-4	BROMODICHLOROMETHANE	50	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
75-25-2	BROMOFORM	50	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
74-83-9	BROMOMETHANE	5	µg/L	1	U	1	U	1	U	1	U	1	U	10	U	1	U
75-15-0	CARBON DISULFIDE	60	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
56-23-5	CARBON TETRACHLORIDE	5	µg/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U

Table 4-2a
Groundwater Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	MW-5-20181219		DUP-1-20181219		MW-6-20181219		MW-7-20181219		FB-01-20181219		TB-01-A-20181113		TB-20181219	
				Location ID	MW-5		MW-5		MW-6		MW-7							
				Sample Date	12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018		11/13/2018		12/19/2018	
				Sample Type	N		FD		N		N		FB		TB		TB	
				Parent Sample Code			MW-5-20181219											
				Depth (feet bgs)	4-19				5-19		5-20							
108-90-7	CHLOROBENZENE	5	µg/L		**92**		**87**		0.5	U	0.5	U	0.5	U	5	U	0.5	U
75-00-3	CHLOROETHANE	5	µg/L		1	U	1	U	1	U	1	U	1	U	10	UJ	1	U
67-66-3	CHLOROFORM	7	µg/L		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.43**	J	0.5	U
74-87-3	CHLOROMETHANE	5	µg/L		1	UJ	1	UJ	1	UJ	1	UJ	1	UJ	10	UJ	1	UJ
156-59-2	CIS-1,2-DICHLOROETHENE	5	µg/L		**1.8**		**1.7**		0.5	U	0.5	U	0.5	U	5	U	0.5	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	0.4	µg/L		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
110-82-7	CYCLOHEXANE	NL	µg/L		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
124-48-1	DIBROMOCHLOROMETHANE	50	µg/L		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
75-71-8	DICHLORODIFLUOROMETHANE	5	µg/L		1	U	1	U	1	U	1	U	1	U	10	U	1	U
100-41-4	ETHYLBENZENE	5	µg/L		**2.1**		**2**		0.5	U	0.5	U	0.5	U	5	U	0.5	U
98-82-8	ISOPROPYLBENZENE	5	µg/L		**0.67**	J	**0.63**	J	0.5	U	0.5	U	0.5	U	5	U	0.5	U
179601-23-1	M,P-XYLENE	5	µg/L		**2**		**1.9**	J	1	U	1	U	1	U	10	U	1	U
79-20-9	METHYL ACETATE	NL	µg/L		0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	5	U	0.75	U
1634-04-4	METHYL TERT-BUTYL ETHER	10	µg/L		0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	5	UJ	0.5	UJ
108-87-2	METHYLCYLOHEXANE	NL	µg/L		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
75-09-2	METHYLENE CHLORIDE	5	µg/L		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	25	U	2.5	U
95-47-6	O-XYLENE	5	µg/L		**2.6**		**2.6**		0.5	U	0.5	U	0.5	U	5	U	0.5	U
100-42-5	STYRENE	5	µg/L		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
127-18-4	TETRACHLOROETHENE	5	µg/L		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
108-88-3	TOLUENE	5	µg/L		**0.29**	J	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
156-60-5	TRANS-1,2-DICHLOROETHENE	5	µg/L		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	0.4	µg/L		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
79-01-6	TRICHLOROETHENE	5	µg/L		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
75-69-4	TRICHLOROFLUOROMETHANE	5	µg/L		1	U	1	U	1	U	1	U	1	U	10	U	1	U
75-01-4	VINYL CHLORIDE	2	µg/L		1	U	1	U	1	U	1	U	1	U	10	U	1	U

Bolded - detection
exceeds NYSDEC AWQS

µg/L - microgram per liter
AWQS - Ambient Water Quality Standards
bgs - below ground surface
FD - field duplicate
ID - identification
N - normal
N/A - not available
No. - number
RB - rinsate blank
NYSDEC - New York State Departr
Q - qualifier
J - estimated result
TB - trip blank
UJ - estimated non-detect
U - non-detect
NL - not listed

Table 4-2b
Groundwater Sample Detections – TPH
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

			Sample ID		MW-1-A		MW-91-A		GW-01-A		GW-11-A		GW-09-A		GW-05-B		MW-2-A		RB-02		MW-4-20181219		MW-5-20181219		DUP-1-20181219		MW-6-20181219		MW-7-20181219		FB-01-20181219	
			Location ID		MW-1		MW-1		GW-01		GW-11		GW-09		GW-05		MW-2				MW-4		MW-5		MW-5		MW-6		MW-7			
			Sample Date		9/9/2016		9/9/2016		9/9/2016		9/12/2016		9/12/2016		9/12/2016		9/12/2016		9/9/2016		12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018	
			Sample Type		N		FD		N		N		N		N		N		RB		N		N		FD		N		N		FB	
			Parent Sample Code				MW-1-A																		MW-5-20181219							
			Depth (feet bgs)		10.6-20		10.6-20		9.57-13		10.5-12.6		11.13-13.4		11-12.3		10.79-12				5-20		4-19				5-19					
CAS No.	Chemical	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
68334-30-5	DIESEL RANGE ORGANICS	µg/L	190	UJ	**270**	J	NA		NA		**140**	J	NA		NA		**50**	J	**2200**	J-	**930**	J	**1100**	J	**57**	J	**70**	J	**22**	J		
8006-61-9	GASOLINE RANGE ORGANICS	µg/L	**120**		**120**		100	UJ	100	U	100	U	100	U	**390**		**23**	J	**3400**		**140**		**130**		8	U	8	U	8	U		

µg/L - microgram per liter
AWQS - Ambient Water Quality Standards
bgs - below ground surface
FD - field duplicate
RB - rinsate blank
ID - identification
N - normal
NA - not analyzed
No. - number
Q - qualifier
J - estimated result
UJ - estimated non-detect

Table 4-2c
Groundwater Sample Detections – SVOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	MW-1-A		MW-91-A		PW-01-A		RB-02		MW-4-20181219		MW-5-20181219		DUP-1-20181219		MW-6-20181219		MW-7-20181219		FB-01-20181219	
				Location ID	MW-1		MW-1		PW-01				MW-4		MW-5		MW-5		MW-6		MW-7			
				Sample Date	9/9/2016		9/9/2016		9/12/2016		9/9/2016		12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018	
				Sample Type	N		FD		N		RB		N		N		FD		N		N		FB	
				Parent Sample Code			MW-1-A										MW-5-20181219							
				Depth (feet bgs)	10.6-20		10.6-20						5-20		4-19				5-19		5-20			
CAS No.	Chemical	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
95-52-4	1,1-BIPHENYL	NL	µg/L	1.9	R	1.9	U	2.1	UJ	2	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
95-94-3	1,2,4,5-TETRACHLOROBENZENE	5	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
218-01-9	1,2-BENZPHENANTHRACENE	0.002	µg/L	0.14	U	**0.41**		0.16	U	0.15	U	7.1	U	7.3	U	7.1	UJ	7.1	U	7.1	U	7.1	U
123-91-1	1,4-DIOXANE	NL	µg/L	0.19	U	0.19	U	0.21	U	0.2	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
58-90-2	2,3,4,6-TETRACHLOROPHENOL	NL	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
95-95-4	2,4,5-TRICHLOROPHENOL	NL	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	18	U	18	U	18	U	18	U	18	U	18	U
88-06-2	2,4,6-TRICHLOROPHENOL	NL	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
120-83-2	2,4-DICHLOROPHENOL	5	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
105-67-9	2,4-DIMETHYLPHENOL	50	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	7.1	U	7.3	U	7.1	U	7.1	UJ	7.1	U	7.1	U
51-28-5	2,4-DINITROPHENOL	10	µg/L	9.6	U	9.4	U	11	U	10	U	18	U	18	U	18	U	18	U	18	U	18	U
121-14-2	2,4-DINITROTOLUENE	5	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
606-20-2	2,6-DINITROTOLUENE	5	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
91-58-7	2-CHLORONAPHTHALENE	NL	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
95-57-8	2-CHLOROPHENOL	NL	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
91-57-6	2-METHYLNAPHTHALENE	NL	µg/L	-		-		-		-		**13**		7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
95-48-7	2-METHYLPHENOL	NL	µg/L	-		-		-		-		7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
88-74-4	2-NITROANILINE	5	µg/L	0.96	U	0.94	U	1.1	U	1	U	18	U	18	U	18	U	18	U	18	U	18	U
88-75-5	2-NITROPHENOL	NL	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
91-94-1	3,3'-DICHLOROBENZIDINE	5	µg/L	2.4	R	2.4	U	2.6	U	2.5	U	7.1	R	7.3	R	7.1	R	7.1	R	7.1	R	7.1	R
78-59-1	3,5,5-TRIMETHYL-2-CYCLOHEXENE-1-ONE	50	µg/L	0.96	U	0.94	U	1.1	U	1	U			-		-		-		-		-	
99-09-2	3-NITROANILINE	5	µg/L	0.96	U	0.94	U	1.1	U	1	U	18	U	18	U	18	U	18	R	18	U	18	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	NL	µg/L	0.96	U	0.94	U	1.1	UJ	1	U	18	U	18	U	18	U	18	U	18	U	18	U
101-55-3	4-BROMOPHENYL PHENYL ETHER	NL	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
59-50-7	4-CHLORO-3-METHYLPHENOL	NL	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	NL	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
100-02-7	4-NITROPHENOL	NL	µg/L	2.4	U	2.4	U	5.3	U	2.5	U	18	U	18	U	18	U	18	U	18	U	18	U
83-32-9	ACENAPHTHENE	NL	µg/L	0.14	U	0.14	U	2.6	U	0.15	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
208-96-8	ACENAPHTHYLENE	NL	µg/L	0.14	U	0.14	U	0.16	U	0.15	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
98-86-2	ACETOPHENONE	NL	µg/L	1.9	U	1.9	U	0.16	U	2	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
120-12-7	ANTHRACENE	50	µg/L	0.14	U	0.14	U	2.1	UJ	0.15	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
1912-24-9	ATRAZINE	7.5	µg/L	1.9	R	1.9	UJ	0.16	U	2	U	7.1	UJ	7.3	UJ	7.1	UJ	7.1	UJ	7.1	UJ	7.1	UJ
100-52-7	BENZALDEHYDE	NL	µg/L	1.9	UJ	1.9	UJ	2.1	UJ	2	U	7.1	UJ	7.3	UJ	7.1	UJ	7.1	UJ	7.1	UJ	**7.3**	J
56-55-3	BENZO(A)ANTHRACENE	0.002	µg/L	0.14	U	**0.28**		2.1	UJ	0.15	U	7.1	U	7.3	U	7.1	UJ	7.1	U	7.1	U	7.1	U
50-32-8	BENZO(A)PYRENE	NL	µg/L	0.14	U	**0.34**		0.16	U	0.15	U	7.1	U	7.3	U	7.1	UJ	7.1	U	7.1	U	7.1	U
205-99-2	BENZO(B)FLUORANTHENE	0.002	µg/L	0.14	U	**0.52**		0.16	U	0.15	U	7.1	U	7.3	U	7.1	UJ	7.1	U	7.1	U	7.1	U
191-24-2	BENZO(G,H,I)PERYLENE	NL	µg/L	0.14	U	**0.28**		0.16	U	0.15	U	7.1	U	7.3	U	7.1	UJ	7.1	U	7.1	U	7.1	U
207-08-9	BENZO(K)FLUORANTHENE	0.002	µg/L	0.14	U	**0.14**	J	0.16	U	0.15	U	7.1	U	7.3	U	7.1	UJ	7.1	U	7.1	U	7.1	U
85-68-7	BENZYL BUTYL PHTHALATE	50	µg/L	2.4	U	2.4	U	0.16	U	2.5	U	7.1	U	**1.9**	J	7.1	UJ	7.1	U	7.1	U	7.1	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	5	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
111-44-4	BIS(2-CHLOROETHYL) ETHER	1	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	5	µg/L	0.96	U	0.94	U	2.6	U	1	U	7.1	U	7.3	U	7.1	UJ	7.1	U	7.1	U	7.1	U
108-60-1	BIS-CHLOROISOPROPYL ETHER	5	µg/L	2.4	U	2.4	U	1.1	U	2.5	U	7.1	UJ	7.3	UJ	7.1	UJ	7.1	UJ	7.1	UJ	7.1	UJ
105-60-2	CAPROLACTAM	NL	µg/L	1.9	R	1.9	R	2.6	U	2	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
86-74-8	CARBAZOLE	NL	µg/L	0.96	U	0.94	U	2.1	UJ	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
53-70-3	DIBENZO(A,H)ANTHRACENE	NL	µg/L	0.14	U	**0.075**	J	1.1	U	0.15	U	7.1	U	7.3	U	7.1	UJ	7.1	U	7.1	U	7.1	U

Table 4-2c
Groundwater Sample Detections – SVOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	MW-1-A		MW-91-A		PW-01-A		RB-02		MW-4-20181219		MW-5-20181219		DUP-1-20181219		MW-6-20181219		MW-7-20181219		FB-01-20181219	
				Location ID	MW-1		MW-1		PW-01				MW-4		MW-5		MW-5		MW-6		MW-7			
				Sample Date	9/9/2016		9/9/2016		9/12/2016		9/9/2016		12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018	
				Sample Type	N		FD		N		RB		N		N		FD		N		N		FB	
				Parent Sample Code			MW-1-A										MW-5-20181219							
				Depth (feet bgs)	10.6-20		10.6-20						5-20		4-19				5-19		5-20			
CAS No.	Chemical	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
132-64-9	DIBENZOFURAN	NL	µg/L	0.96	U	0.94	U	0.16	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
84-66-2	DIETHYL PHTHALATE	50	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
131-11-3	DIMETHYL PHTHALATE	50	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
84-74-2	DI-N-BUTYLPHTHALATE	50	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
117-84-0	DI-N-OCTYLPHTHALATE	50	µg/L	2.4	U	2.4	U	1.1	U	2.5	U	7.1	U	**1.8**	J	7.1	UJ	7.1	U	7.1	U	7.1	U
206-44-0	FLUORANTHENE	50	µg/L	0.14	U	**0.78**		2.6	U	0.15	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
86-73-7	FLUORENE	50	µg/L	0.14	U	0.14	U	0.16	U	0.15	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
87-68-3	HEXACHLORO-1,3-BUTADIENE	0.5	µg/L	0.96	U	0.94	U	0.16	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U		U
118-74-1	HEXACHLOROBENZENE	0.04	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
87-68-3	HEXACHLOROBUTADIENE	0.5	µg/L	-		-		-		-		-		-		-		-		-		-	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	5	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	UJ	7.3	UJ	7.1	UJ	7.1	UJ	7.1	UJ	7.1	UJ
67-72-1	HEXACHLOROETHANE	5	µg/L	0.96	U	0.94	U	1.1	UJ	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
193-39-5	INDENO(1,2,3-CD)PYRENE	0.002	µg/L	0.14	U	**0.24**		1.1	U	0.15	U	7.1	U	7.3	U	7.1	UJ	7.1	U	7.1	U	7.1	U
65794-96-9	M-CRESOL & P-CRESOL	NL	µg/L	4.8	U	4.7	U	0.16	U	5	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
78-59-1	ISOPHORONE	NL	µg/L	-		-		-		-		7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
91-20-3	NAPHTHALENE	NL	µg/L	0.14	UJ	0.14	U	0.16	U	**0.1**	J	71		7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
98-95-3	NITROBENZENE	0.4	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	NL	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
86-30-6	N-NITROSODIPHENYLAMINE	50	µg/L	0.96	UJ	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
106-47-8	P-CHLOROANILINE	5	µg/L	0.96	U	0.94	U	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	R	7.1	U	7.1	U
87-86-5	PENTACHLOROPHENOL	2	µg/L	0.96	U	0.94	U	1.1	U	1	U	18	U	18	U	18	U	18	U	18	U	18	U
85-01-8	PHENANTHRENE	NL	µg/L	-		-		-		-		7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
108-95-2	PHENOL	2	µg/L	0.96	UJ	0.94	UJ	1.1	U	1	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U
100-01-6	P-NITROANILINE	5	µg/L	2.4	U	2.4	U	2.6	U	2.5	U	18	U	18	U	18	U	18	UJ	18	U	18	U
129-00-0	PYRENE	50	µg/L	0.14	U	**0.68**		0.16	U	0.15	U	7.1	U	7.3	U	7.1	U	7.1	U	7.1	U	7.1	U

Bolded - detection
exceeds NYSDEC AWQS

µg/L - microgram per liter
AWQS - Ambient Water Quality Standards
bgs - below ground surface
FD - field duplicate
RB - rinsate blank
ID - identification
N - normal
No. - number
NL - not listed
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
R - rejected result
J - estimated result
UJ - estimated non-detect
U - non-detect

Table 4-2d
Groundwater Sample Detections – PCBs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

			Sample ID	MW-1-A		MW-91-A		RB-02		MW-4-20181219		MW-5-20181219		DUP-1-20181219		MW-6-20181219		MW-7-20181219		FB-01-20181219	
			Location ID	MW-1		MW-1				MW-4		MW-5		MW-5		MW-6		MW-7			
			Sample Date	9/9/2016		9/9/2016		9/9/2016		12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018	
			Sample Type	N		FD		RB		N		N		FD		N		N		FB	
			Parent Sample Code			MW-1-A								MW-5-20181219							
			Depth (feet bgs)	10.6-20		10.6-20				5-20		4-19				5-19		5-20			
CAS No.	Chemical	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
12674-11-2	AROCLOR 1016	0.09	µg/L	0.038	U	0.038	U	0.04	U	0.24	U	0.24	UJ	0.24	UJ	0.24	U	0.24	U	0.24	U
11104-28-2	AROCLOR 1221	0.09	µg/L	0.038	U	0.038	U	0.04	U	0.24	U	0.24	UJ	0.24	UJ	0.24	U	0.24	U	0.24	U
11141-16-5	AROCLOR 1232	0.09	µg/L	0.038	U	0.038	U	0.04	U	0.24	U	0.24	UJ	0.24	UJ	0.24	U	0.24	U	0.24	U
53469-21-9	AROCLOR 1242	0.09	µg/L	0.038	U	0.038	U	0.04	U	0.24	U	0.24	UJ	0.24	UJ	0.24	U	0.24	U	0.24	U
12672-29-6	AROCLOR 1248	0.09	µg/L	0.038	U	0.038	U	0.04	U	0.24	U	0.24	UJ	0.24	UJ	0.24	U	0.24	U	0.24	U
11097-69-1	AROCLOR 1254	0.09	µg/L	0.038	U	0.038	U	0.04	U	0.24	U	0.24	UJ	0.24	UJ	0.24	U	0.24	U	0.24	U
11096-82-5	AROCLOR 1260	0.09	µg/L	**0.11**	J	**0.12**	J	0.04	U	0.24	U	0.24	UJ	0.24	UJ	0.24	U	0.24	U	0.24	U
37324-23-5	AROCLOR 1262	0.09	µg/L	0.096	U	0.094	U	0.1	U	0.24	U	0.24	UJ	0.24	UJ	0.24	U	0.24	U	0.24	U
11100-14-4	AROCLOR 1268	0.09	µg/L	0.038	U	0.038	U	0.04	U	0.24	U	0.24	UJ	0.24	UJ	0.24	U	0.24	U	0.24	U
1336-36-3	TOTAL PCBS	NL	µg/L	0.11	J	0.12	UJ	0.1	U	-		-		-		-		-		-	

Bolded - detection
exceeds NYSDEC AWQS
µg/L - microgram per liter
AWQS - Ambient Water Quality Standards
bgs - below ground surface
FD - field duplicate
RB - rinsate blank
ID - identification
N - normal
No. - number
NL - not listed
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
J - estimated result
UJ - estimated non-detect
U - non-detect

Table 4-2e
Groundwater Sample Detections – Metals
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	MW-1-A		MW-91-A		PW-01-A		RB-02		MW-4-20181219		MW-5-20181219		DUP-1-20181219		MW-6-20181219		MW-7-20181219		FB-01-20181219	
				Location ID	MW-1		MW-1		PW-01				MW-4		MW-5		MW-5		MW-6		MW-7			
				Sample Date	9/9/2016		9/9/2016		9/12/2016		9/9/2016		12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018		12/19/2018	
				Sample Type	N		FD		N		RB		N		N		FD		N		N		FB	
				Parent Sample Code			MW-1-A										MW-5-20181219							
				Depth (feet bgs)	10.6-20		10.6-20						5-20		4-19				5-19		5-20			
CAS No.	Chemical	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
7429-90-5	ALUMINUM	NL	µg/L	**330**	J	**720**	J	**3.5**	J	**6.5**	J	**339**		**10800**		**9880**		**1130**		**1610**		100	U
7440-36-0	ANTIMONY	3	µg/L	2.5	UJ	**2.8**		**2.4**	J	0.75	U	5	U	5	U	5	U	5	U	5	U	5	U
7440-38-2	ARSENIC	25	µg/L	**1.8**	J	**2.5**	J	2	U	2	U	**10**		**4**	J	**4.1**	J	**1.7**	J	5	U	5	U
7440-39-3	BARIUM	1000	µg/L	**39**	J	**42**	J	**17**	J	1	U	**26.2**		**77.6**		**75.1**		**30.8**		**40.9**		3	U
7440-41-7	BERYLLIUM	3	µg/L	1	U	1	U	1	U	1	U	0.5	U	**0.24**	J	**0.25**	J	0.5	U	0.5	U	0.5	U
7440-43-9	CADMIUM	5	µg/L	1	U	1	U	1	U	1	U	**0.59**	J	3	U	3	U	**0.25**	J	**1.35**	J	3	U
7440-70-2	CALCIUM METAL	NL	µg/L	**27000**		**26000**		**24000**		250	U	**38200**		**41200**		**41600**		**22900**		**51200**		**16**	J
7440-47-3	CHROMIUM	50	µg/L	20	U	20	U	1	U	1	U	**0.82**	J	**8.21**	J	**7.96**	J	**1.1**	J	**1**	J	4	U
7440-48-4	COBALT	NL	µg/L	**5.1**	J	**8.2**	J	**0.39**	J	1	U	**2.33**	J	**3.33**	J	**3.21**	J	**1.7**	J	**7.93**	J	4	U
7440-50-8	COPPER	200	µg/L	10	U	10	U	**65**		3	U	**4.4**	J	**13.9**	J	**13.3**	J	**10.9**	J	**5.82**	J	10	U
7439-89-6	IRON	300	µg/L	**2200**	J	**5100**	J	**170**	J	250	U	**2260**		**28000**		**27500**		**1570**		**1760**		**7.3**	J
7439-92-1	LEAD	25	µg/L	**2**	J	**2.7**		**0.85**	J	1	U	**2.6**	J	**9.1**		**8.8**		4	U	**1.3**	J	4	U
7439-95-4	MAGNESIUM	35000	µg/L	**7000**		**6700**		**9400**		250	U	**9290**		**13700**		**13700**		**5680**		**15500**		**7.2**	J
7439-96-5	MANGANESE	300	µg/L	**440**		**700**		**15**		**0.57**	J	**2360**		**5060**		**5120**		**629**		**6360**		4	U
7439-97-6	MERCURY	0.7	µg/L									0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
7440-02-0	NICKEL	100	µg/L	20	UJ	20	UJ	**6.1**	J	**6.4**	J	**4.72**	J	**6.81**	J	**6.88**	J	**3.4**	J	**25.8**		4	U
7440-09-7	POTASSIUM	NL	µg/L	**4900**		**4900**		**2400**		250	U	**4130**		**10600**		**10400**		**7480**		**7520**		**96**	J
7782-49-2	SELENIUM	10	µg/L	5	U	5	U	5	U	5	U	7	U	7	U	7	U	7	U	7	U	7	U
7440-22-4	SILVER	50	µg/L	**0.3**	J	**1**	J	**1.3**	J	0.5	U	4	U	4	U	4	U	4	U	4	U	4	U
7440-23-5	SODIUM	20000	µg/L	**120000**		**130000**		**67000**		250	U	**72000**		**109000**		**109000**		**140000**		**264000**		**69**	J
7440-28-0	THALLIUM	0.5	µg/L	1	U	1	U	1	U	1	U	5	U	5	U	5	U	5	U	5	U	5	U
7440-62-2	VANADIUM	NL	µg/L	**3.9**	J	**6.2**	J	**1.1**	J	1	U	**0.54**	J	**13.2**		**12.7**		**4.1**	J	**2**	J	4	U
7440-66-6	ZINC	2000	µg/L	100	UJ	100	UJ	**170**		**15**	J	10	U	**44.8**		**42.8**		**53.5**		10	U	**0.84**	J

Bolded - detection
exceeds NYSDEC AWQS
µg/L - microgram per liter
AWQS - Ambient Water Quality Standards
bgs - below ground surface
FD - field duplicate
RB - rinsate blank
ID - identification
N - normal
No. - number
NL - not listed
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
J - estimated result
UJ - estimated non-detect
U - non-detect

Table 4-3a
Potable Water Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	PW-01-A	
					Location ID	PW-01	
					Sample Date	9/12/2016	
					Sample Type	N	
CAS No.	Chemical	RSLs for Tap Water	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q
71-55-6	1,1,1-TRICHLOROETHANE	800	5	µg/L	0.6	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	0.076	5	µg/L	0.6	U
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5500	5	µg/L	0.6	UJ
79-00-5	1,1,2-TRICHLOROETHANE	0.041	1	µg/L	0.6	U
75-34-3	1,1-DICHLOROETHANE	2.8	5	µg/L	1	U
75-35-4	1,1-DICHLOROETHENE	28	5	µg/L	0.6	U
87-61-6	1,2,3-TRICHLOROBENZENE	0.7	5	µg/L	0.6	UJ
120-82-1	1,2,4-TRICHLOROBENZENE	0.4	5	µg/L	0.6	U
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	0.00033	0.04	µg/L	2	U
106-93-4	1,2-DIBROMOETHANE	0.0075	0.0006	µg/L	0.6	U
95-50-1	1,2-DICHLOROBENZENE	30	3	µg/L	0.6	U
107-06-2	1,2-DICHLOROETHANE	0.17	0.6	µg/L	0.6	U
78-87-5	1,2-DICHLOROPROPANE	0.44	1	µg/L	0.6	U
541-73-1	1,3-DICHLOROBENZENE	NL	3	µg/L	0.6	U
106-46-7	1,4-DICHLOROBENZENE	0.48	3	µg/L	0.6	U
78-93-3	2-BUTANONE (MEK)	560	50	µg/L	5	U
591-78-6	2-HEXANONE	3.8	50	µg/L	1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	630	NL	µg/L	0.6	U
67-64-1	ACETONE	1400	50	µg/L	10	U
71-43-2	BENZENE	0.46	1	µg/L	0.6	U
74-97-5	BROMOCHLOROMETHANE	8.3	5	µg/L	0.6	U
75-27-4	BROMODICHLOROMETHANE	0.13	50	µg/L	0.6	U

Table 4-3a
Potable Water Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	PW-01-A	
				Location ID	PW-01	
				Sample Date	9/12/2016	
				Sample Type	N	
CAS No.	Chemical	RSLs for Tap Water	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q
75-25-2	BROMOFORM	3.3	50	µg/L	0.6	U
74-83-9	BROMOMETHANE	0.75	5	µg/L	1	U
75-15-0	CARBON DISULFIDE	81	60	µg/L	0.6	U
56-23-5	CARBON TETRACHLORIDE	0.46	5	µg/L	0.6	U
108-90-7	CHLOROBENZENE	7.8	5	µg/L	0.6	U
75-00-3	CHLOROETHANE	2100	5	µg/L	1	U
67-66-3	CHLOROFORM	0.22	7	µg/L	0.6	U
74-87-3	CHLOROMETHANE	19	5	µg/L	0.6	U
156-59-2	CIS-1,2-DICHLOROETHENE	3.6	5	µg/L	0.6	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	NL	0.4	µg/L	0.6	U
110-82-7	CYCLOHEXANE	1300	NL	µg/L	0.6	U
124-48-1	DIBROMOCHLOROMETHANE	0.87	50	µg/L	0.6	U
75-71-8	DICHLORODIFLUOROMETHANE	20	5	µg/L	0.6	U
98-82-8	ISOPROPYLBENZENE	45	5	µg/L	0.6	U
179601-23-1	M,P-XYLENE	5	5	µg/L	1.2	U
79-20-9	METHYL ACETATE	2000	NL	µg/L	**5.5**	
1634-04-4	METHYL TERT-BUTYL ETHER	14	10	µg/L	0.6	U
108-87-2	METHYLCYLOHEXANE	NL	NL	µg/L	0.6	U
75-09-2	METHYLENE CHLORIDE	11	5	µg/L	0.6	U
95-47-6	O-XYLENE	5	5	µg/L	0.6	UJ
100-42-5	STYRENE	120	5	µg/L	0.6	U
127-18-4	TETRACHLOROETHENE	4.1	5	µg/L	0.6	U

Table 4-3a
Potable Water Sample Detections – VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	PW-01-A
					Location ID	PW-01
					Sample Date	9/12/2016
					Sample Type	N
CAS No.	Chemical	RSLs for Tap Water	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q
108-88-3	TOLUENE	110	5	µg/L	**0.98**	J
156-60-5	TRANS-1,2-DICHLOROETHENE	36	5	µg/L	0.6	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	NL	0.4	µg/L	0.6	U
79-01-6	TRICHLOROETHENE	0.28	5	µg/L	0.6	U
75-69-4	TRICHLOROFLUOROMETHANE	520	5	µg/L	0.6	U
75-01-4	VINYL CHLORIDE	0.019	2	µg/L	0.6	U

µg/L - microgram per liter
AWQS - Ambient Water Quality Standards
bgs - below ground surface
EPA - Environmental Protection Agency
ID - identification
N - normal
No. - number
NL - not listed
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
RSLs - regional screen levels
J - estimated result
U - non-detect
UJ - estimated non-detect

Table 4-3b
Potable Water Sample Detections – SVOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

			Sample ID	PW-01-A	
			Location ID	PW-01	
			Sample Date	9/12/16	
			Sample Type	N	
			Parent Sample Code		
CAS No.	Chemical	EPA RSLs for Tap Water	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q
95-52-4	1,1-BIPHENYL	NL	NL	µg/L	2.1	UJ
95-94-3	1,2,4,5-TETRACHLOROBENZENE	0.17	5	µg/L	1.1	U
218-01-9	1,2-BENZPHENANTHRACENE	3.4	0.002	µg/L	0.16	U
123-91-1	1,4-DIOXANE	0.46	NL	µg/L	0.21	U
58-90-2	2,3,4,6-TETRACHLOROPHENOL	24	NL	µg/L	2.6	U
95-95-4	2,4,5-TRICHLOROPHENOL	120	NL	µg/L	2.6	U
88-06-2	2,4,6-TRICHLOROPHENOL	1.2	NL	µg/L	1.1	U
120-83-2	2,4-DICHLOROPHENOL	4.6	5	µg/L	2.6	U
105-67-9	2,4-DIMETHYLPHENOL	36	50	µg/L	2.6	U
51-28-5	2,4-DINITROPHENOL	3.9	10	µg/L	11	U
121-14-2	2,4-DINITROTOLUENE	0.24	5	µg/L	1.1	U
606-20-2	2,6-DINITROTOLUENE	0.049	5	µg/L	1.1	U
91-58-7	2-CHLORONAPHTHALENE	75	NL	µg/L	1.1	U
95-57-8	2-CHLOROPHENOL	9.1	NL	µg/L	1.1	U
88-74-4	2-NITROANILINE	19	5	µg/L	1.1	U
88-75-5	2-NITROPHENOL	NL	NL	µg/L	2.6	U
91-94-1	3,3'-DICHLOROBENZIDINE	0.13	5	µg/L	2.6	U
78-59-1	3,5,5-TRIMETHYL-2-CYCLOHEXENE-1-ONE	78	50	µg/L	1.1	U
99-09-2	3-NITROANILINE	NL	5	µg/L	1.1	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	0.15	NL	µg/L	1.1	UJ
101-55-3	4-BROMOPHENYL PHENYL ETHER	NL	NL	µg/L	1.1	U

Table 4-3b
Potable Water Sample Detections – SVOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	PW-01-A
					Location ID	PW-01
					Sample Date	9/12/16
					Sample Type	N
					Parent Sample Code	
CAS No.	Chemical	EPA RSLs for Tap Water	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q
59-50-7	4-CHLORO-3-METHYLPHENOL	140	NL	µg/L	2.6	U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	NL	NL	µg/L	1.1	U
106-44-5	4-METHYLPHENOL	190	NL	µg/L	5.3	U
100-02-7	4-NITROPHENOL	NL	NL	µg/L	2.6	U
83-32-9	ACENAPHTHENE	53	NL	µg/L	0.16	U
208-96-8	ACENAPHTHYLENE	NL	NL	µg/L	0.16	U
98-86-2	ACETOPHENONE	190	50	µg/L	2.1	UJ
120-12-7	ANTHRACENE	180	7.5	µg/L	0.16	U
1912-24-9	ATRAZINE	0.3	NL	µg/L	2.1	UJ
100-52-7	BENZALDEHYDE	190	0.002	µg/L	2.1	UJ
56-55-3	BENZO(A)ANTHRACENE	0.012	NL	µg/L	0.16	U
50-32-8	BENZO(A)PYRENE	0.0034	0.002	µg/L	0.16	U
205-99-2	BENZO(B)FLUORANTHENE	0.034	NL	µg/L	0.16	U
191-24-2	BENZO(G,H,I)PERYLENE	NL	0.002	µg/L	0.16	U
207-08-9	BENZO(K)FLUORANTHENE	0.34	50	µg/L	0.16	U
85-68-7	BENZYL BUTYL PHTHALATE	16	5	µg/L	2.6	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	5.9	1	µg/L	2.6	U
111-44-4	BIS(2-CHLOROETHYL) ETHER	0.014	5	µg/L	2.6	U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	5.6	5	µg/L	1.1	U
108-60-1	BIS-CHLOROISOPROPYL ETHER	71	NL	µg/L	2.6	U
105-60-2	CAPROLACTAM	990	NL	µg/L	2.1	UJ

Table 4-3b
Potable Water Sample Detections – SVOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	PW-01-A
					Location ID	PW-01
					Sample Date	9/12/16
					Sample Type	N
					Parent Sample Code	
CAS No.	Chemical	EPA RSLs for Tap Water	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q
86-74-8	CARBAZOLE	NL	NL	µg/L	1.1	U
53-70-3	DIBENZO(A,H)ANTHRACENE	0.0034	NL	µg/L	0.16	U
132-64-9	DIBENZOFURAN	0.79	50	µg/L	1.1	U
84-66-2	DIETHYL PHTHALATE	1500	50	µg/L	1.1	U
131-11-3	DIMETHYL PHTHALATE	NL	50	µg/L	1.1	U
84-74-2	DI-N-BUTYLPHTHALATE	90	50	µg/L	1.1	U
117-84-0	DI-N-OCTYLPHTHALATE	20	50	µg/L	2.6	U
206-44-0	FLUORANTHENE	80	50	µg/L	0.16	U
86-73-7	FLUORENE	29	0.5	µg/L	0.16	U
87-68-3	HEXACHLORO-1,3-BUTADIENE	0.14	0.04	µg/L	1.1	U
118-74-1	HEXACHLOROBENZENE	0.0098	5	µg/L	1.1	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	0.041	5	µg/L	1.1	UJ
67-72-1	HEXACHLOROETHANE	0.33	0.002	µg/L	1.1	U
193-39-5	INDENO(1,2,3-CD)PYRENE	0.034	NL	µg/L	0.16	U
91-20-3	NAPHTHALENE	0.17	NL	µg/L	0.16	U
98-95-3	NITROBENZENE	0.14	0.4	µg/L	2.6	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	0.011	NL	µg/L	2.6	U
86-30-6	N-NITROSODIPHENYLAMINE	12	50	µg/L	1.1	U
106-47-8	P-CHLOROANILINE	0.37	5	µg/L	1.1	U
87-86-5	PENTACHLOROPHENOL	0.041	2	µg/L	1.1	U
108-95-2	PHENOL	580	2	µg/L	1.1	U

Table 4-3b
Potable Water Sample Detections – SVOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

			Sample ID	PW-01-A	
			Location ID	PW-01	
			Sample Date	9/12/16	
			Sample Type	N	
			Parent Sample Code		
CAS No.	Chemical	EPA RSLs for Tap Water	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q
100-01-6	P-NITROANILINE	3.8	5	µg/L	2.6	U
129-00-0	PYRENE	12	50	µg/L	0.16	U

µg/L - microgram per liter
AWQS - Ambient Water Quality Standards
bgs - below ground surface
EPA - Environmental Protection Agency
ID - identification
N - normal
No. - number
NL - not listed
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
RSLs - regional screen levels
U - non-detect
UJ - estimated non-detect

Table 4-3c
Potable Water Sample Detections – Metals
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	PW-01-A	
				Location ID	PW-01	
				Sample Date	9/12/2016	
				Sample Type	N	
CAS No.	Chemical	EPA RSLs for Tap Water	NYSDEC Standards and Guidance Values for Class GA Groundwater (AWQS)	Unit	Result	Q
7429-90-5	ALUMINUM	2000	NL	µg/L	**3.5**	J
7440-36-0	ANTIMONY	0.78	3	µg/L	**2.4**	J
7440-38-2	ARSENIC	0.052	25	µg/L	2	U
7440-39-3	BARIUM	380	1000	µg/L	**17**	J
7440-41-7	BERYLLIUM	2.5	3	µg/L	1	U
7440-43-9	CADMIUM	NL	5	µg/L	1	U
7440-70-2	CALCIUM METAL	NL	NL	µg/L	**24000**	
7440-47-3	CHROMIUM	NL	50	µg/L	1	U
7440-48-4	COBALT	0.6	NL	µg/L	**0.39**	J
7440-50-8	COPPER	80	200	µg/L	**65**	
7439-89-6	IRON	1400	300	µg/L	**170**	J
7439-92-1	LEAD	15	25	µg/L	**0.85**	J
7439-95-4	MAGNESIUM	NL	35000	µg/L	**9400**	
7439-96-5	MANGANESE	NL	300	µg/L	**15**	
7440-02-0	NICKEL	39	100	µg/L	**6.1**	J
7440-09-7	POTASSIUM	NL	NL	µg/L	**2400**	
7782-49-2	SELENIUM	10	10	µg/L	5	U
7440-22-4	SILVER	9.4	50	µg/L	**1.3**	J
7440-23-5	SODIUM	NL	20000	µg/L	**67000**	
7440-28-0	THALLIUM	0.02	0.5	µg/L	1	U
7440-62-2	VANADIUM	8.6	NL	µg/L	**1.1**	J
7440-66-6	ZINC	600	2000	µg/L	**170**	

Bolded - detection
exceeds NYSDEC AWQS
exceeds EPA RSL

µg/L - microgram per liter
AWQS - Ambient Water Quality Standards
bgs - below ground surface
EPA - Environmental Protection Agency
ID - identification
N - normal
No. - number
NL - not listed
NYSDEC - New York State Department of Environmental Conservation
Q - qualifier
RSLs - regional screening levels
J - estimated result
U - non-detect

Table 4-4a
Soil Vapor Detections - VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	AO-01-A		SV-01-A		SV-02-A		SV-902-A	
				Location ID	AO-01		SV-01		SV-02		SV-02	
				Sample Date	9/12/2016		9/12/2016		9/12/2016		9/12/2016	
				Sample Type	N		N		N		FD	
				Parent Sample Code							SV-02-A	
CAS No.	Chemical	EPA VISL	NYSDOH AGVs	Unit	Result	Q	Result	Q	Result	Q	Result	Q
71-55-6	1,1,1-TRICHLOROETHANE	173809.5	NL	µg/m³	6.5	UJ	6	UJ	6	UJ	7.6	UJ
79-34-5	1,1,2,2-TETRACHLOROETHANE	1.6	NL	µg/m³	8.2	UJ	7.6	UJ	7.6	UJ	9.6	UJ
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1042857.1	NL	µg/m³	9.2	UJ	8.4	UJ	8.4	UJ	11	UJ
79-00-5	1,1,2-TRICHLOROETHANE	5.8	NL	µg/m³	6.5	UJ	6	UJ	6	UJ	7.6	UJ
75-34-3	1,1-DICHLOROETHANE	58.5	NL	µg/m³	4.9	UJ	4.5	UJ	4.5	UJ	5.7	UJ
75-35-4	1,1-DICHLOROETHENE	6952.4	NL	µg/m³	4.8	UJ	4.4	UJ	4.4	UJ	5.6	UJ
120-82-1	1,2,4-TRICHLOROBENZENE	69.5	NL	µg/m³	8.9	UJ	8.2	UJ	8.2	UJ	10	UJ
95-63-6	1,2,4-TRIMETHYLBENZENE	NL	NL	µg/m³	5.9	UJ	5.4	UJ	5.4	UJ	6.9	UJ
106-93-4	1,2-DIBROMOETHANE	0.2	NL	µg/m³	9.2	UJ	8.5	UJ	8.5	UJ	11	UJ
95-50-1	1,2-DICHLOROBENZENE	6952.4	NL	µg/m³	7.2	UJ	6.6	UJ	6.6	UJ	8.4	UJ
107-06-2	1,2-DICHLOROETHANE	3.6	NL	µg/m³	4.9	UJ	4.5	UJ	4.5	UJ	5.7	UJ
78-87-5	1,2-DICHLOROPROPANE	9.4	NL	µg/m³	5.5	UJ	5.1	UJ	5.1	UJ	6.5	UJ
76-14-2	1,2-DICHLOROTETRAFLUOROETHANE;FLUOROCARBON 114	NL	NL	µg/m³	8.4	UJ	7.7	UJ	7.7	UJ	9.8	UJ
108-67-8	1,3,5-TRIMETHYLBENZENE	NL	NL	µg/m³	5.9	UJ	5.4	UJ	5.4	UJ	6.9	UJ
541-73-1	1,3-DICHLOROBENZENE	NL	NL	µg/m³	7.2	UJ	6.6	UJ	6.6	UJ	8.4	UJ
106-46-7	1,4-DICHLOROBENZENE	8.5	NL	µg/m³	7.2	UJ	6.6	UJ	6.6	UJ	8.4	UJ
123-91-1	1,4-DIOXANE	NL	NL	µg/m³	4.3	UJ	4	UJ	4	UJ	5	UJ
78-93-3	2-BUTANONE (MEK)	173809.5	NL	µg/m³	3.5	UJ	**7.7**	J	**4.8**	J	4.1	UJ
591-78-6	2-HEXANONE	1042.9	NL	µg/m³	4.9	UJ	4.5	UJ	4.5	UJ	5.7	UJ
622-96-8	4-ETHYLTOLUENE	NL	NL	µg/m³	5.9	UJ	5.4	UJ	5.4	UJ	6.9	UJ
108-10-1	4-METHYL-2-PENTANONE (MIBK)	104285.7	NL	µg/m³	4.9	UJ	4.5	UJ	4.5	UJ	5.7	UJ
67-64-1	ACETONE	1077619.0	NL	µg/m³	**15**	J	**110**	J	**41**	J	**35**	J
107-05-1	ALLYL CHLORIDE	NL	NL	µg/m³	3.8	UJ	3.4	UJ	3.4	UJ	4.4	UJ
71-43-2	BENZENE	12.0	NL	µg/m³	3.8	UJ	3.5	UJ	3.5	UJ	4.5	UJ
100-44-7	BENZYL CHLORIDE	NL	NL	µg/m³	6.2	UJ	5.7	UJ	5.7	UJ	7.2	UJ
75-27-4	BROMODICHLOROMETHANE	2.5	NL	µg/m³	8	UJ	7.4	UJ	7.4	UJ	9.4	UJ
75-25-2	BROMOFORM	85.1	NL	µg/m³	12	UJ	11	UJ	11	UJ	14	UJ
74-83-9	BROMOMETHANE	173.8	NL	µg/m³	4.7	UJ	4.3	UJ	4.3	UJ	5.4	UJ
75-15-0	CARBON DISULFIDE	24333.3	NL	µg/m³	3.7	UJ	**25**	J	**86**	J	**85**	J
56-23-5	CARBON TETRACHLORIDE	15.6	NL	µg/m³	7.5	UJ	6.9	UJ	6.9	UJ	8.8	UJ
108-90-7	CHLOROBENZENE	1738.1	NL	µg/m³	5.5	UJ	5.1	UJ	5.1	UJ	6.4	UJ
75-00-3	CHLOROETHANE	347619.0	NL	µg/m³	3.2	UJ	2.9	UJ	2.9	UJ	3.7	UJ
67-66-3	CHLOROFORM	4.1	NL	µg/m³	5.9	UJ	**5.3**	J	**9.3**	J	**9.3**	J
74-87-3	CHLOROMETHANE	3128.6	NL	µg/m³	2.5	UJ	2.3	UJ	2.3	UJ	2.9	UJ
156-59-2	CIS-1,2-DICHLOROETHENE	NL	NL	µg/m³	4.8	UJ	4.4	UJ	4.4	UJ	5.6	UJ
10061-01-5	CIS-1,3-DICHLOROPROPENE	23.4	NL	µg/m³	5.4	UJ	5	UJ	5	UJ	6.4	UJ

Table 4-4a
Soil Vapor Detections - VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

				Sample ID	AO-01-A		SV-01-A		SV-02-A		SV-902-A	
				Location ID	AO-01		SV-01		SV-02		SV-02	
				Sample Date	9/12/2016		9/12/2016		9/12/2016		9/12/2016	
				Sample Type	N		N		N		FD	
				Parent Sample Code							SV-02-A	
CAS No.	Chemical	EPA VISL	NYSDOH AGVs	Unit	Result	Q	Result	Q	Result	Q	Result	Q
110-82-7	CYCLOHEXANE		NL	µg/m³	-		-		-		-	
124-48-1	DIBROMOCHLOROMETHANE	NL	NL	µg/m³	10	UJ	9.4	UJ	9.4	UJ	12	UJ
75-71-8	DICHLORODIFLUOROMETHANE	3476.2	NL	µg/m³	5.9	UJ	5.4	UJ	5.4	UJ	6.9	UJ
100-41-4	ETHYLBENZENE	37.4	NL	µg/m³	5.2	UJ	4.8	UJ	4.8	UJ	6.1	UJ
87-68-3	HEXACHLORO-1,3-BUTADIENE	NL	NL	µg/m³	13	UJ	12	UJ	12	UJ	15	UJ
98-82-8	ISOPROPYLBENZENE	NL	NL	µg/m³	-		-		-		-	
108-38-3	M,P-XYLENE	NL	NL	µg/m³	5.2	UJ	**6.4**	J	4.8	UJ	6.1	UJ
1634-04-4	METHYL TERT-BUTYL ETHER	360.0	NL	µg/m³	4.3	UJ	4	UJ	4	UJ	5	UJ
75-09-2	METHYLENE CHLORIDE	3379.6	60	µg/m³	4.2	UJ	3.8	UJ	3.8	UJ	4.9	UJ
91-20-3	NAPHTHALENE	NL	NL	µg/m³	6.3	UJ	5.8	UJ	5.8	UJ	7.3	UJ
142-82-5	N-HEPTANE	NL	NL	µg/m³	4.9	UJ	4.5	UJ	4.5	UJ	5.7	UJ
95-47-6	O-XYLENE	NL	NL	µg/m³	5.2	UJ	4.8	UJ	4.8	UJ	6.1	UJ
100-42-5	STYRENE	34761.9	NL	µg/m³	5.1	UJ	4.7	UJ	4.7	UJ	6	UJ
127-18-4	TETRACHLOROETHENE	360.0	30	µg/m³	8.1	UJ	**64**	J	**67**	J	**66**	J
108-88-3	TOLUENE	173809.5	NL	µg/m³	4.5	UJ	**50**	J	**8**	J	**6.5**	J
156-60-5	TRANS-1,2-DICHLOROETHENE	NL	NL	µg/m³	4.8	UJ	4.4	UJ	4.4	UJ	5.6	UJ
10061-02-6	TRANS-1,3-DICHLOROPROPENE	23.4	NL	µg/m³	5.4	UJ	5	UJ	5	UJ	6.4	UJ
79-01-6	TRICHLOROETHENE	15.9	2	µg/m³	6.4	UJ	5.9	UJ	5.9	UJ	7.5	UJ
75-69-4	TRICHLOROFLUOROMETHANE	NL	NL	µg/m³	6.8	UJ	6.2	UJ	6.2	UJ	7.9	UJ
108-05-4	VINYL ACETATE	NL	NL	µg/m³	42	UJ	39	UJ	39	UJ	49	UJ
75-01-4	VINYL CHLORIDE	5.6	NL	µg/m³	3.1	UJ	2.8	UJ	2.8	UJ	3.6	UJ

Bolded - detection
exceeds NYSDOH AGV
µg/m³ - microgram per cubic meter
AGVs - air guideline values
EPA - Environmental Protection Agency
VISL - vapor intrusion screening levels
FD - field duplicate
ID - identification
J - estimated result
N - normal
NL - not listed
No.- number
NYSDOH - New York State Department of Health
UJ - estimated undetected
Q - qualifier

Table 4-4b
Soil Vapor Intrusion Detections - VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	IA-01-A-20181113		IA-901-A-20181113		IA-02-A-20181113		SS-01-A-20181113		SS-901-A-20181113		SS-02-A-20181113		AO-01-B-20181113	
					Location ID	IA-01		IA-01		IA-02		SS-01		SS-01		SS-02		AO-01	
					Sample Date	11/13/2018		11/13/2018		11/13/2018		11/13/2018		11/13/2018		11/13/2018		11/13/2018	
					Sample Type	N		FD		N		N		FD		N		N	
					Parent Sample ID			IA-01-A-20181113						SS-01-A-20181113					
CAS No.	Chemical	EPA VISL	NYSDOH AGVs	Unit		Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
71-55-6	1,1,1-TRICHLOROETHANE	173809.5	NL	µg/m³		0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	**0.18**	J-	0.44	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	1.6	NL	µg/m³		0.34	U	0.34	U	0.34	U	0.34	U	0.34	U	0.34	U	0.56	U
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1042857.1	NL	µg/m³		**0.34**	J-	**0.3**	J-	**0.34**	J-	**0.57**	J	**0.38**	J	**0.31**	J-	**0.67**	J
79-00-5	1,1,2-TRICHLOROETHANE	5.8	NL	µg/m³		0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.27	U	0.44	U
75-34-3	1,1-DICHLOROETHANE	58.5	NL	µg/m³		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.33	U
75-35-4	1,1-DICHLOROETHENE	6952.4	NL	µg/m³		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.32	U
120-82-1	1,2,4-TRICHLOROBENZENE	69.5	NL	µg/m³		0.37	U	**0.16**	J-	0.37	U	0.37	U	0.37	U	0.37	U	0.6	U
106-93-4	1,2-DIBROMOETHANE	0.2	NL	µg/m³		0.38	U	0.38	U	0.38	U	0.38	U	0.38	U	0.38	U	0.62	U
95-50-1	1,2-DICHLOROBENZENE	6952.4	NL	µg/m³		0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.49	U
107-06-2	1,2-DICHLOROETHANE	3.6	NL	µg/m³		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.33	U
78-87-5	1,2-DICHLOROPROPANE	9.4	NL	µg/m³		0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.38	U
541-73-1	1,3-DICHLOROBENZENE	NL	NL	µg/m³		0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.49	U
106-46-7	1,4-DICHLOROBENZENE	8.5	NL	µg/m³		0.3	U	0.3	U	0.3	U	**4.4**		**3.4**	J-	**2.8**	J-	0.49	U
78-93-3	2-BUTANONE (MEK)	173809.5	NL	µg/m³		**1400**		**1500**		**64**		**67**		**39**		**3.5**	J-	**1.6**	
591-78-6	2-HEXANONE	1042.9	NL	µg/m³		0.2	U	0.2	U	0.2	U	**0.9**		**0.9**	J-	0.2	U	0.33	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	104285.7	NL	µg/m³		96	U	81	U	**6.1**	J-	**33**		**32**	J-	**0.53**	J-	**0.57**	J
67-64-1	ACETONE	1077619.0	NL	µg/m³		**6300**		**6000**		**400**		**1400**		**1600**		**22**	J-	**28**	
71-43-2	BENZENE	12.0	NL	µg/m³		**9.9**	J-	**9.6**	J-	**5.1**	J-	**0.57**		**0.89**		**0.57**	J-	**0.45**	J
75-27-4	BROMODICHLOROMETHANE	2.5	NL	µg/m³		0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.54	U
75-25-2	BROMOFORM	85.1	NL	µg/m³		0.52	U	0.52	U	0.52	U	0.52	U	0.52	U	0.52	U	0.84	U
74-83-9	BROMOMETHANE	173.8	NL	µg/m³		0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.32	U
75-15-0	CARBON DISULFIDE	24333.3	NL	µg/m³		0.16	U	0.16	U	0.16	U	**0.4**		**0.34**		**0.16**	J-	0.25	U
56-23-5	CARBON TETRACHLORIDE	15.6	NL	µg/m³		**0.33**	J-	**0.3**	J-	**0.28**	J-	**0.3**	J	**0.27**	J	0.31	U	**0.44**	J
108-90-7	CHLOROBENZENE	1738.1	NL	µg/m³		0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.37	U
75-00-3	CHLOROETHANE	347619.0	NL	µg/m³		0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.21	U
67-66-3	CHLOROFORM	4.1	NL	µg/m³		0.24	U	0.24	U	0.24	U	**0.073**	J	**0.088**	J	**0.11**	J-	**0.13**	J

Table 4-4b
Soil Vapor Intrusion Detections - VOCs
77 Westchester Avenue, Pound Ridge/Scotts Corners Site

					Sample ID	IA-01-A-20181113		IA-901-A-20181113		IA-02-A-20181113		SS-01-A-20181113		SS-901-A-20181113		SS-02-A-20181113		AO-01-B-20181113	
					Location ID	IA-01		IA-01		IA-02		SS-01		SS-01		SS-02		AO-01	
					Sample Date	11/13/2018		11/13/2018		11/13/2018		11/13/2018		11/13/2018		11/13/2018		11/13/2018	
					Sample Type	N		FD		N		N		FD		N		N	
					Parent Sample ID			IA-01-A-20181113						SS-01-A-20181113					
CAS No.	Chemical	EPA VISL	NYSDOH AGVs	Unit	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
74-87-3	CHLOROMETHANE	3128.6	NL	µg/m^3	**0.95**	J-	**0.91**	J-	**0.95**	J-	0.1	U	**0.11**	J	**0.08**	J-	**1.2**	
156-59-2	CIS-1,2-DICHLOROETHENE	NL	NL	µg/m^3	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.32	U
10061-01-5	CIS-1,3-DICHLOROPROPENE	23.4	NL	µg/m^3	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.37	U
110-82-7	CYCLOHEXANE	0.0	NL	µg/m^3	**14**	J-	**13**	J-	**9.3**	J-	0.17	U	0.17	U	0.17	U	**0.12**	J
124-48-1	DIBROMOCHLOROMETHANE	NL	NL	µg/m^3	0.42	U	0.42	U	0.42	U	0.42	U	0.42	U	0.42	U	0.69	U
75-71-8	DICHLORODIFLUOROMETHANE	3476.2	NL	µg/m^3	**1.3**	J-	**1.2**	J-	**1.2**	J-	**1.1**		**1.5**		**1.3**	J-	**1.6**	
100-41-4	ETHYLBENZENE	37.4	NL	µg/m^3	**310**		**340**		**42**	J-	**13**		**12**	J-	**2.3**	J-	**2.2**	
98-82-8	ISOPROPYLBENZENE	NL	NL	µg/m^3	**11**	J-	**11**	J-	**2.6**	J-	**0.54**		**0.54**	J-	**0.17**	J-	0.4	U
179601-23-1	M,P-XYLENE	NL	NL	µg/m^3	**1300**		**1300**		**130**	J-	**50**		**45**	J-	**9.1**	J-	**10**	
1634-04-4	METHYL TERT-BUTYL ETHER	360.0	NL	µg/m^3	**1.1**	J-	**1**	J-	0.18	U	0.18	U	0.18	U	**0.33**	J-	0.29	U
75-09-2	METHYLENE CHLORIDE	3379.6	60	µg/m^3	**47**	J-	**43**	J-	**16**	J-	**8.3**		**16**		**6.2**	J-	**1.5**	
95-47-6	O-XYLENE	NL	NL	µg/m^3	**340**		**330**		**51**	J-	**16**		**16**	J-	**3.5**	J-	**3.1**	
100-42-5	STYRENE	34761.9	NL	µg/m^3	**140**	J	**150**	J	**17**	J-	**42**		**37**	J-	**0.64**	J-	**0.12**	J
127-18-4	TETRACHLOROETHENE	360.0	30	µg/m^3	**0.31**	J-	**0.29**	J-	**0.59**	J-	**16**		**16**	J-	**5**	J-	0.55	U
108-88-3	TOLUENE	173809.5	NL	µg/m^3	**4000**		**3900**		**300**		**260**		**220**		**15**	J-	**17**	
156-60-5	TRANS-1,2-DICHLOROETHENE	NL	NL	µg/m^3	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.32	U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	23.4	NL	µg/m^3	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.37	U
79-01-6	TRICHLOROETHENE	15.9	2	µg/m^3	0.27	U	0.27	U	0.27	U	0.27	U	**0.13**	J-	0.27	U	0.44	U
75-69-4	TRICHLOROFLUOROMETHANE	NL	NL	µg/m^3	**0.79**	J-	**0.79**	J-	**0.79**	J-	**1.2**		**0.84**		**0.73**	J-	**2**	
75-01-4	VINYL CHLORIDE	5.6	NL	µg/m^3	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.21	U

Bolded - detection
µg/m^3 - microgram per cubic meter
AGVs - air guideline values
EPA - Environmental Protection Agency
VISL - vapor intrusion screening levels
FD - field duplicate
ID - identification
J - estimated result
N - normal
NL - not listed
No.- number
NYSDOH - New York State Department of Health
UJ - estimated undetected
Q - qualifier

Table 4-5
Soil Vapor Intrusion Investigation Recommendations Based on NYSDOH Decision Matrices
77 Westchester Avenue, Pound Ridge/Scotts Corner Site

Location	Sample Date	Compound	Sub-Slab Air Concentrations	Indoor Air Concentrations	Outdoor Air Concentrations	Action Recommended[2]	Final Action Recommended[3]
SS/IA-01	11/13/2018	Carbon tetrachloride	0.3 J	**0.33 J-**	**0.44 J**	No further action.	Based on methylene chloride concentrations, identification of the source or resampling is recommended. Methylene chloride was noted in the outdoor air and had higher concentrations in the indoor air. The presence of methylene chloride is likely due to current subject property operations and does not require mitigation.
		1,1-Dichloroethene	<0.2	<0.2	<0.32	No further action.	
		Cis-1,2-dichloroethene	<0.2	<0.2	<0.32	No further action.	
		Trichloroethene (TCE)	<0.27	<0.27	<0.44	No further action.	
		Methylene chloride	**8.3**	**47 J-**	**1.5**	Identify source(s), resample, or mitigate.	
		Tetrachloroethene (PCE)	**16**	**0.31 J-**	<0.55	No further action.	
		1,1,1-Trichloroethane	<0.27	<0.27	<0.44	No further action.	
		Vinyl chloride	<0.13	<0.13	<0.21	No further action.	
SS/IA-02	11/13/2018	Carbon tetrachloride	<0.31	**0.28 J-**	**0.44 J**	No further action.	Based on methylene chloride concentrations, identification of the source or resampling is recommended. Methylene chloride was noted in the outdoor air and had higher concentrations in the indoor air. The presence of methylene chloride is likely due to current subject property operations and does not require mitigation.
		1,1-Dichloroethene	<0.2	<0.2	<0.32	No further action.	
		Cis-1,2-dichloroethene	<0.2	<0.2	<0.32	No further action.	
		Trichloroethene (TCE)	<0.27	<0.27	<0.44	No further action.	
		Methylene chloride	**6.2 J-**	**16 J-**	**1.5**	Identify source(s), resample, or mitigate.	
		Tetrachloroethene (PCE)	**5 J-**	**0.59 J-**	<0.55	No further action.	
		1,1,1-Trichloroethane	**0.18 J-**	<0.27	<0.44	No further action.	
		Vinyl chloride	<0.13	<0.13	<0.21	No further action.	

Notes:
1. "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", NYSDOH, October 2006
2. Action levels based on NYSDOH Matrix A for trichloroethene, cis-1,2-dichloroethene, and carbon tetrachloride, Matrix B for PCE and 1,1,1-TCA and Matrix C for vinyl chloride effective May 2017.
3. NYSDOH Soil Vapor/Indoor Air Matricies A, B and C also include guidance for 1,1-dichloroethene, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride. Results for these four compounds were non-detect at all sampling locations.

All Concentrations in µg/m^3

Figures

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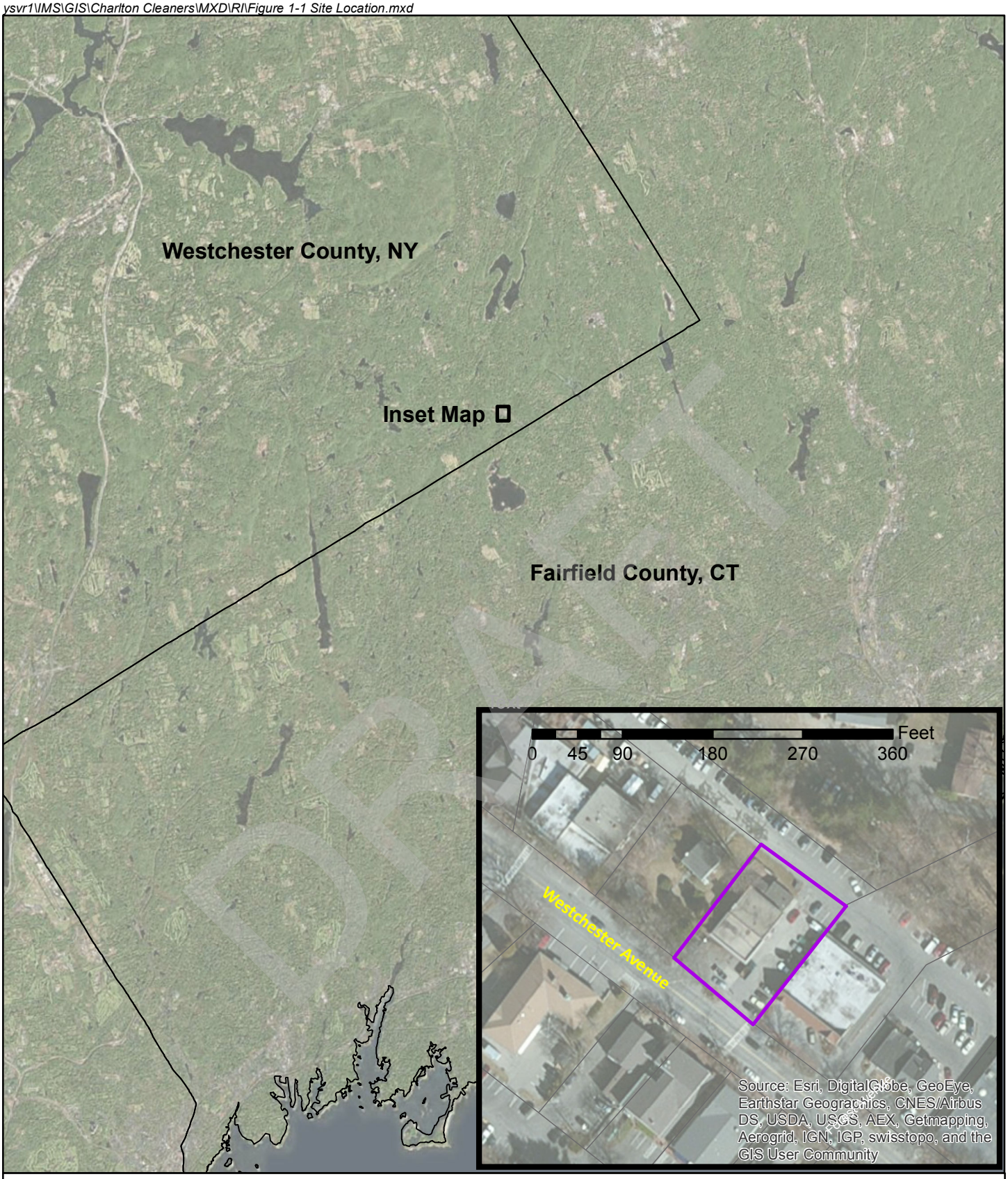
ysvr1\IMS\GIS\Charlton Cleaners\MXD\RI\Figure 1-1 Site Location.mxd



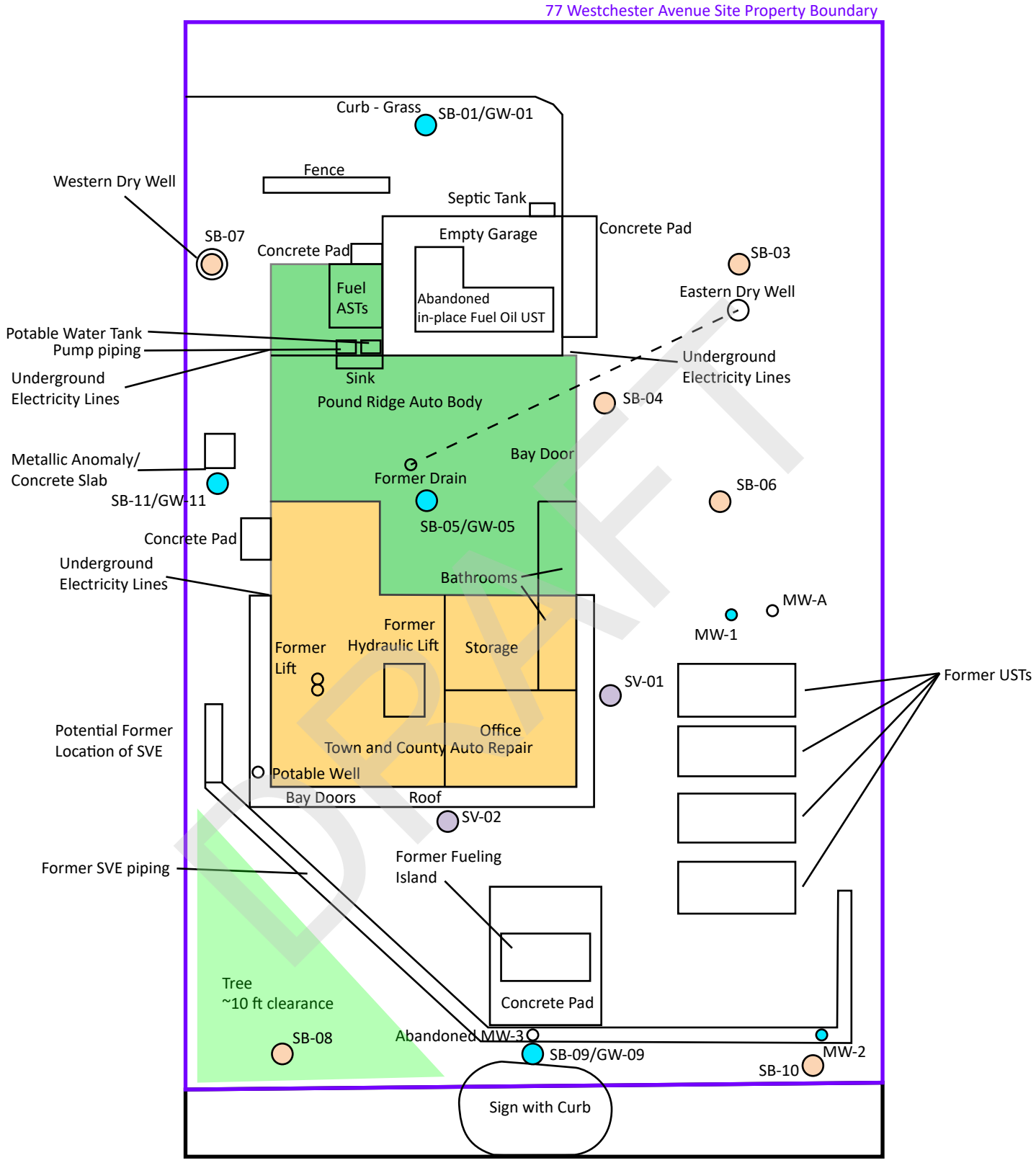
Subject Property (parcel No. 9454-9)

N

Miles
0 1 2 4

CDM Smith

Figure 1-1
Site Location Map
TBA66 - Phase II Investigation
77 Westchester Avenue,
Pound Ridge/Scotts Corners Site
Pound Ridge, NY



Adapted from EES JV Phase I (2016)
REFERENCE: Plan by Kulhanek & Plan Land Surveyors, 6-28-2007

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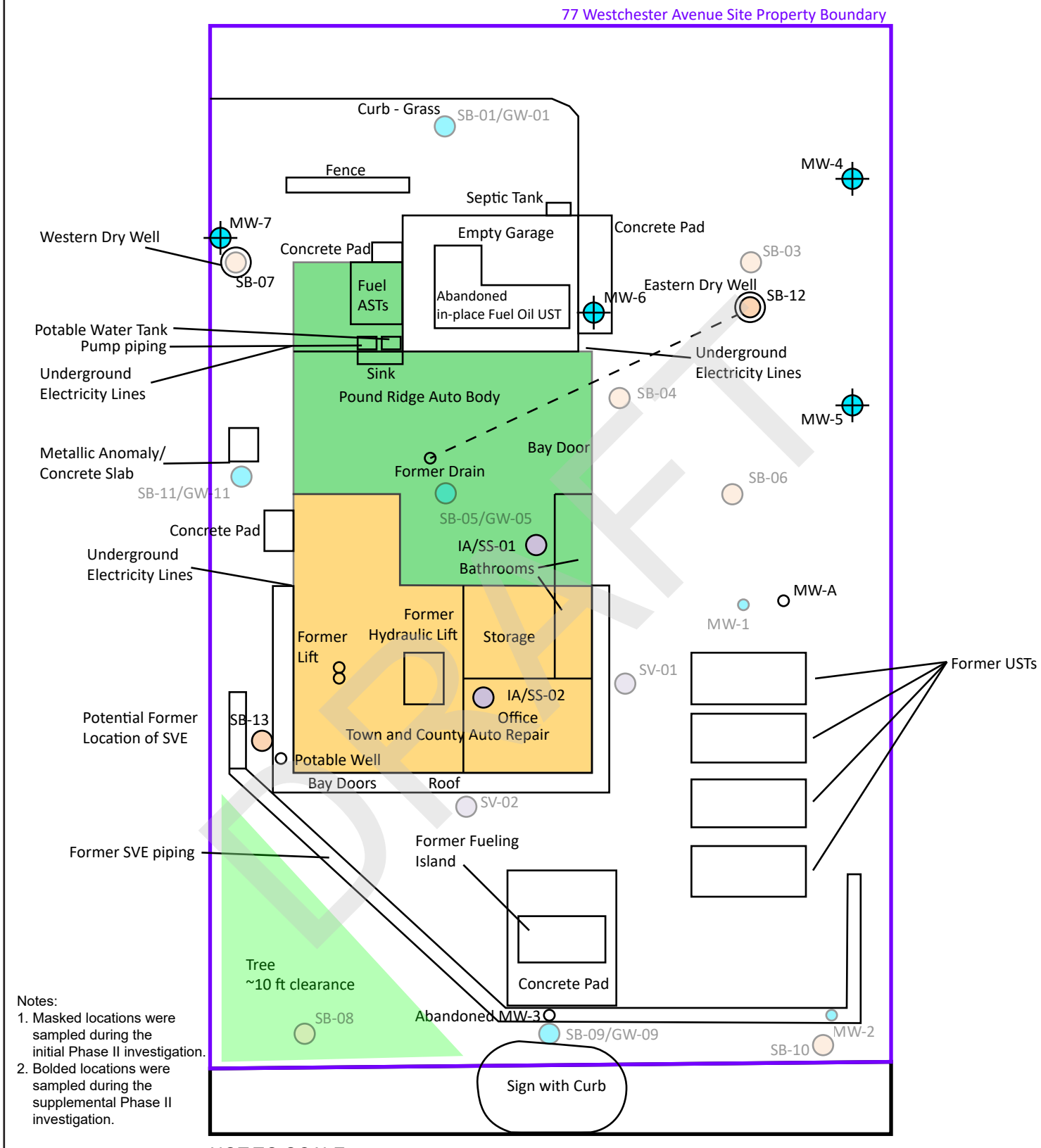
Figure 3-1a
Initial Phase II Site Plan and Sampling Locations
TBA66 - Phase II Investigation
77 Westchester Avenue, Pound Ridge/Scotts Corners Site
Pound Ridge, New York



Notes:
1. Masked locations were sampled during the initial Phase II investigation.
2. Bolded locations were sampled during the supplemental Phase II investigation.

NOT TO SCALE

Soil Boring
Permanent Monitoring Well
Soil Boring with collocated Groundwater Sample
Vapor Sampling Point
Existing Monitoring Well (sampled wells in blue)

Adapted from EES JV Phase I (2016)
REFERENCE: Plan by Kulhanek & Plan Land Surveyors, 6-28-2007

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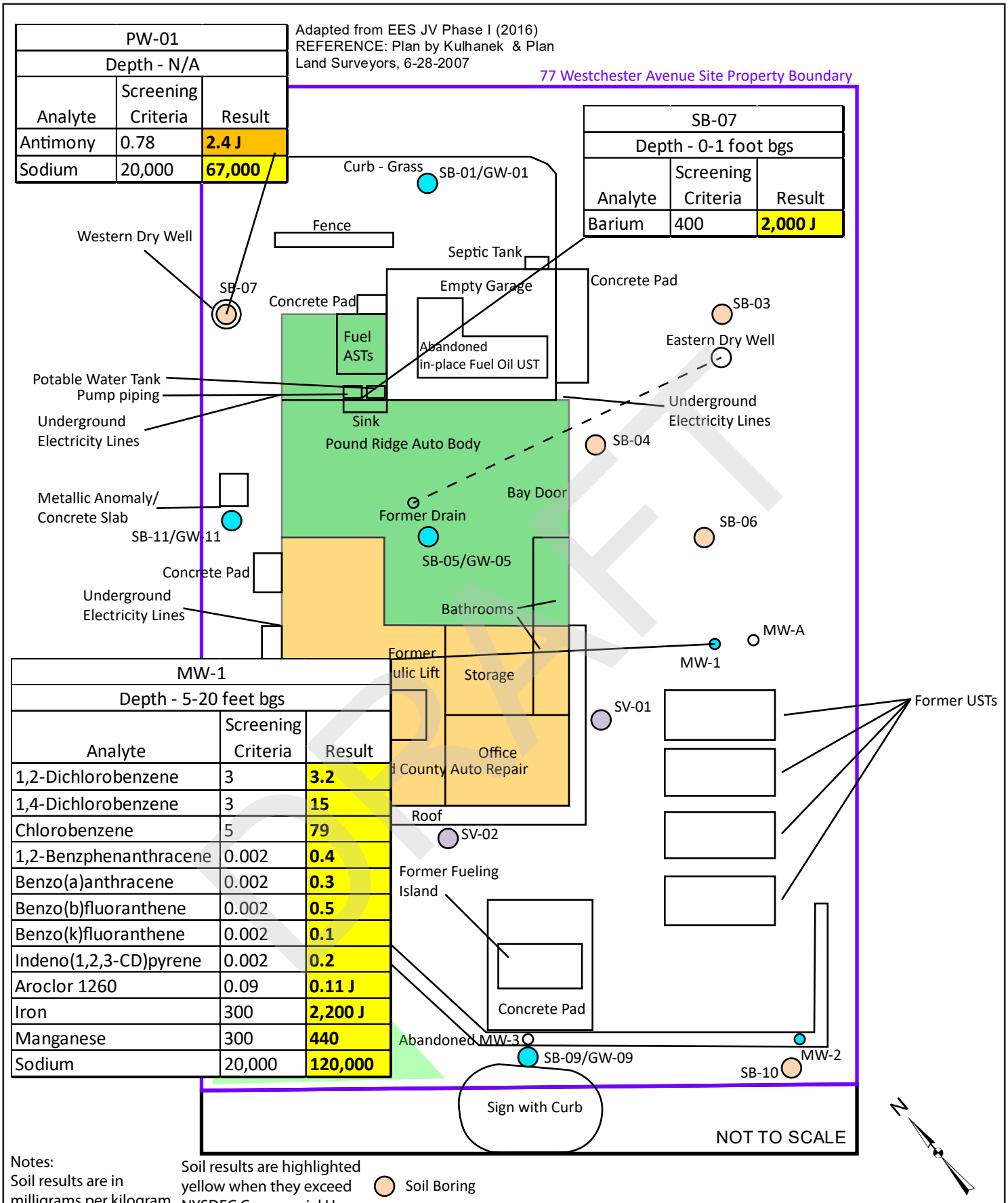
Figure 3-1b
Supplemental Phase II Site Pan and Sampling Locations
TBA66 - Phase II Investigation
77 Westchester Avenue, Pound Ridge/Scotts Corners Site
Pound Ridge, New York



Notes:
Soil results are in milligrams per kilogram. Aqueous results are in micrograms per liter.

Soil results are highlighted yellow when they exceed NYSDEC Commercial Use SCOs. Aqueous results are highlighted yellow when they exceed NYSDEC AWQS and are highlighted orange when they exceed EPA RSLs for Tap Water.

- Soil Boring
- Soil Boring with collocated Groundwater Sample
- Soil Vapor Sampling Point
- Existing Monitoring Well (sampled wells in blue)

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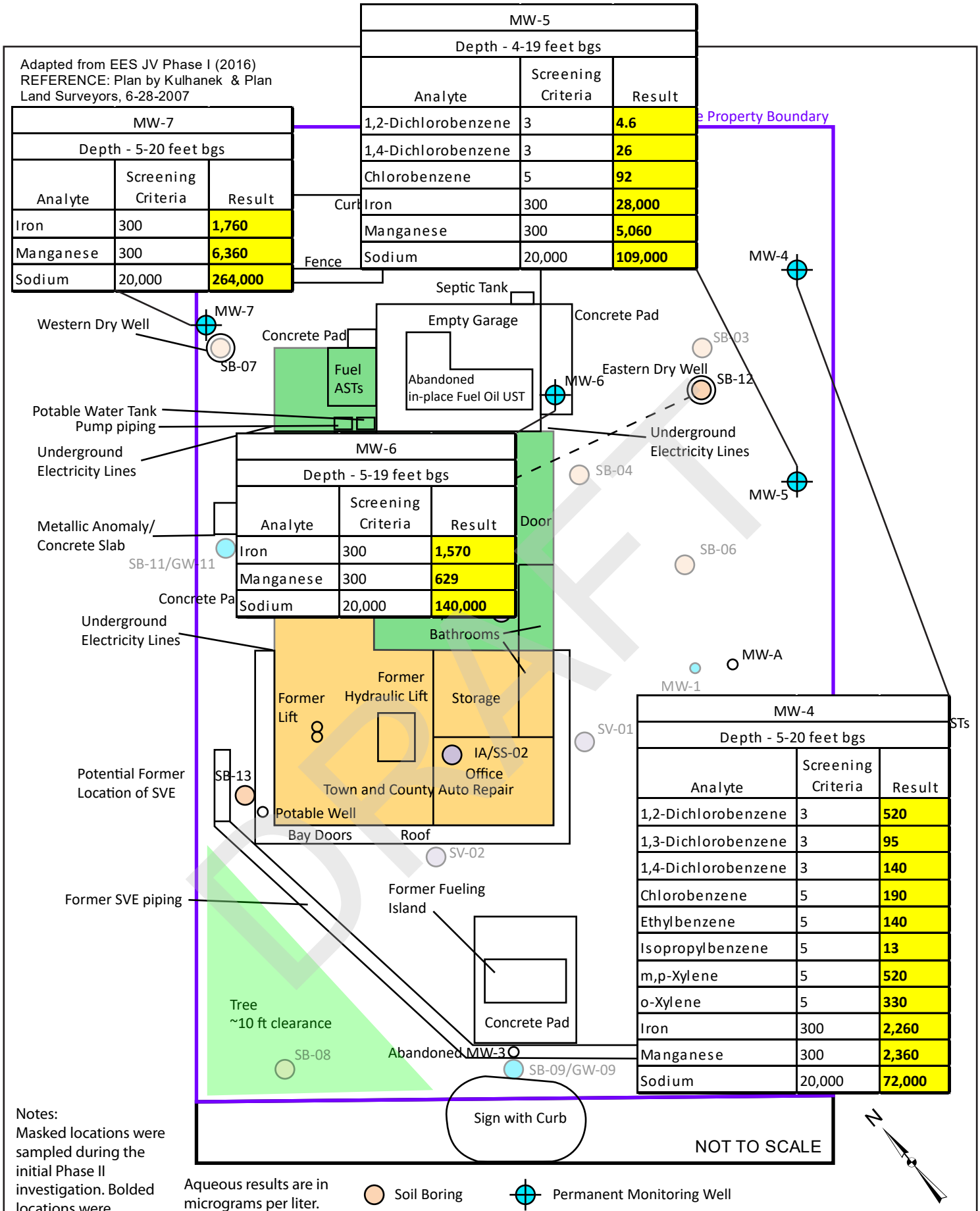
Figure 4-1a
Initial Phase II Soil and Groundwater Exceedances
TBA66 - Phase II Investigation
77 Westchester Avenue, Pound Ridge/Scotts Corners Site
Pound Ridge, New York



Notes:
Masked locations were sampled during the initial Phase II investigation. Bolded locations were sampled during the supplemental Phase II investigation.

Aqueous results are in micrograms per liter.

Aqueous results are highlighted yellow when they exceed NYSDEC AWQS.

Soil Boring
Permanent Monitoring Well
Soil Boring with collocated Groundwater Sample
Vapor Sampling Point
Existing Monitoring Well (sampled wells in blue)

Figure 4-1b
Supplemental Phase II Groundwater Exceedances
TBA66 - Phase II Investigation
77 Westchester Avenue, Pound Ridge/Scotts Corners Site
Pound Ridge, New York

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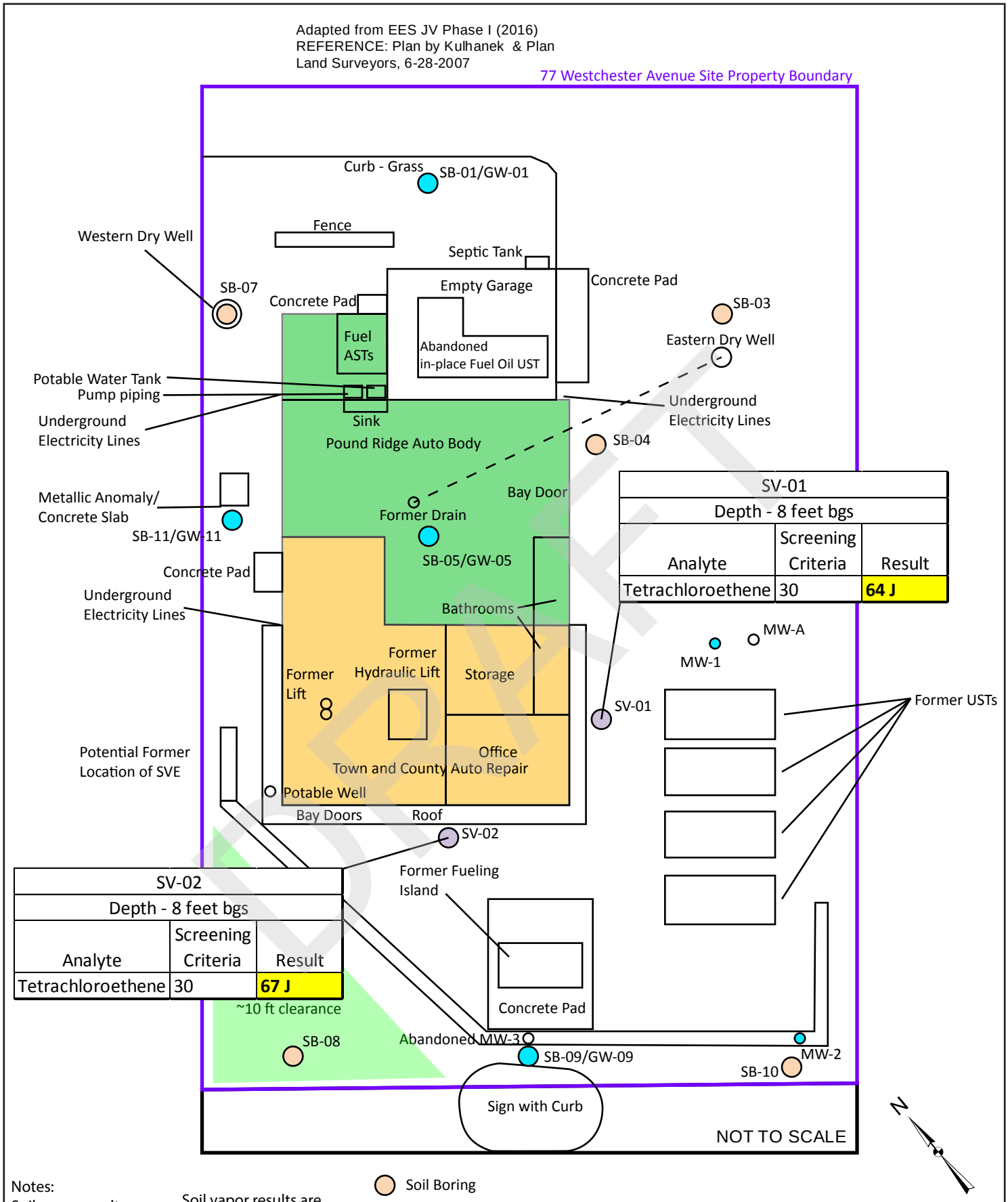

Notes:
Soil vapor results are in micrograms per cubic meter.

Soil vapor results are highlighted yellow when they exceed NYSDOH AGVs.

- Soil Boring
- Soil Boring with collocated Groundwater Sample
- Soil Vapor Sampling Point
- Existing Monitoring Well (sampled wells in blue)

Figure 4-2
Soil Vapor Exceedances
TBA66 - Phase II Investigation
77 Westchester Avenue, Pound Ridge/Scotts Corners Site
Pound Ridge, New York

CDM Smith