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PERIODIC REVIEW REPORT (MARCH 2020-DECEMBER 2020)

Stanton Cleaners Area Superfund Site
110 Cutter Mill Road
Great Neck, New York 11021

NYSDEC Site Number: 130072

Prepared For:

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233
Contract Number: D009808

Prepared By:

HRP Associates, Inc.
1 Fairchild Square, Suite 110
Clifton Park, NY 12065

HRP #: DEC1003.OM

Issued On: February 16, 2021

TABLE OF CONTENTS

Figures

Tables

Charts

Appendices

General Information

Project/Site Information:

Former Stanton Cleaners
110 Cutter Mill Road
Great Neck, New York, 11021

Report Date: 2/16/2021

Report Authors:

Ali LeMay
Consultant

David Feinson
Project Manager

PE Certification:

I, Thomas S. Seguljic, certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375. For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

(a) The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;

(b) Nothing has occurred that would impair the ability of the control to protect the public health and environment;

(c) Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control; and

(d) Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control.

THOMAS S. SEGULJIC 075180-1 LICENSED PROFESSIONAL ENGINEER STATE OF NEW YORK

Thomas S. Seguljic, P.E., P.G. – Vice President and Contract Manager

1.0 EXECUTIVE SUMMARY

The Stanton Cleaners Area Superfund Site (the "Site") in Great Neck, NY is listed on the New York State Registry of Inactive Hazardous Waste Sites as a Class 4 (NYSDEC Site#130072). The Class 4 designation indicates that the Site was properly closed but requires continued site management until the remedial objectives are achieved. The Site historically operated as a dry cleaner from the 1950s to 2016. In 1983, a Nassau County Department of Health (NCDH) inspection identified a pipe connected to the dry-cleaning fluid/water separator discharging to the unpaved ground surface to the southeast of the Stanton Cleaners building. Twenty (20) cubic yards of tetrachloroethylene (PCE) contaminated soil was subsequently removed from behind the Stanton Cleaners property. As a result of releases associated with the dry-cleaning operations on the Site, PCE migrated from the Site's subsurface soils into the indoor air environments of the surrounding buildings and into the groundwater beneath the Site.

In 1986 New York State Department of Environmental Conservation (NYSDEC) funded the construction of an air stripper treatment system for the Water Authority of Great Neck North (WAGNN) water supply wells located approximately 1000 feet downgradient of the Site. In 2001 EPA installed an active sub-slab depressurization system (SSDS) on a school adjacent to the Site and completed construction of the currently operating soil vapor extraction (SVE) system and the groundwater extraction and treatment (GWE&T) system. The air stripper treatment system on the WAGNN water supply wells still operates today, the sub slab depressurization system on the Long Island Hebrew Academy (LIHA) was removed by United States Environmental Protection Agency (USEPA) prior to NYSDEC assuming operations in November 2012. An air sparge system was installed in 2001, but was shut down December 2014 due to an oil leak. The currently active remedial systems at the Site consist of a GWE&T system and an SVE system.

The remedial program at the Site is effective in reducing contamination in the groundwater on- and off-site, and reducing contamination in the soil vapor on- and off-site.

Influent and effluent samples were collected monthly from the GWE&T system from March 2020 through December 2020. The concentrations of PCE from the influent samples ranged from 3.1 micrograms per liter (µg/l) in October 2020 to 5.4 µg/l in March 2020. Two of the influent samples collected during this period (March and September 2020) contained PCE at concentrations above the groundwater standard of 5 µg/l.

Influent and Effluent samples were collected quarterly (March, June, September, and December) from the SVE system. The concentrations of PCE from the influent samples ranged from 5,300 micrograms per cubic meter (µg/m^3) in December 2020 to 34,000 µg/m^3 in March 2020.

This Periodic Review Report (PRR) documents Site activities from March 2020 through December 2020. HRP Associates, Inc. (HRP) took over operation and maintenance (O&M) activities at the Site in March 2020, at the direction of NYSDEC and did not work on the Site in January and February 2020. While it appears that there is no indication that Site activities were not carried out routinely in January and February 2020, those two months are not part of this certification. The institutional and engineering controls are in place and unchanged since the NYSDEC assumed responsibility for the Site and the existing controls remain protective of public health and the environment. Currently the Stanton Cleaners building located at the Site is vacant and the parking lot is used as additional parking for the Sonia & Max Silverstein Hebrew Academy located across Cutter Mill Road.

2.0 SITE OVERVIEW

2.1 Site Location and Description

Stanton Cleaners is a former dry-cleaning facility located at 110 Cutter Mill Road in Great Neck, Nassau County, New York (The Site location is shown on **Figure 1**). A dry cleaner had operated at the Site since the 1950s. The property had several different owners in subsequent years and the business may have had several names, most recently Stanton Cleaners. Between about 1958 and 1983, waste liquids from the on-Site dry-cleaning processes were discharged, spilled, or leaked onto the ground behind the facility (U.S. Department of Health, 2004). The Site is located approximately 1,000 feet north of an active public water supply well field owned and operated by the Water Authority of Great Neck North (WAGNN). The Site is approximately ¼ acre and includes a two-story building in which the dry-cleaning business operated, an adjacent one-story boiler/storage building, and a building that houses the current remediation system. Site features are depicted on **Figure 2**. The Site is bordered to the west by Cutter Mill Road, to the north and east by a former indoor tennis court, and to the south by a gasoline station (currently out of service). Adjacent areas that have been affected by the contamination include, but are not limited to, the neighboring Plaza Tennis Center, the Century Condominium Complex, the North Shore Sephardic Synagogue, and the Long Island Hebrew Academy.

The area surrounding the Site is serviced by public water and sewer primarily supplied by WAGNN. WAGNN used three supply wells for public water service. Two of the supply wells designated as PW-2A and PW-9 are approximately 145 deep. The third supply well is designated as PW-11A, which replaced a former 434 foot deep well (PW-11). PW-11 was taken out of service in October 2015, and PW-11A began pumping in April 2017.

2.2 Remedial Program

Improper handling and disposal of spent dry cleaning solvents, including PCE, resulted in the release of hazardous substances at the Site. PCE migrated from the Site's subsurface soils into the indoor air environments of the surrounding buildings and into groundwater beneath the Site, resulting in a significant threat to human health. Remedial measures at the Site began as early as 1983. A summary of remedial activities is chronologically listed below:

- 1983: NCDH inspection identified a pipe connected to the dry-cleaning fluid/water separator discharging to the unpaved ground surface to the southeast of the Stanton Cleaners building. Approximately 20 cubic yards of PCE-contaminated soil was removed from behind the Stanton Cleaners property.
- 1989: A GWE&T system was installed by the potentially responsible party (PRP). The system performed poorly and was abandoned shortly after operation began. The system was eventually replaced in 2001.
- 1993: The Site was listed on the New York State Registry of Inactive Hazardous Waste Sites as a Class 2 site.
- 1998: A new air stripper treatment system for the Site impacted WAGNN water supply wells was installed at the WAGNN wellfield.

- 1999: The Site was added to the National Priorities List (NPL) and a Record of Decision (ROD) was issued. The ROD included upgrades to an existing air stripper, construction of a GWE&T system, continued operation of an SVE system, indoor air monitoring of the adjacent buildings, long-term groundwater monitoring, and groundwater use restrictions.
- 2001: The USEPA completed the construction and installation of a SVE system and a GWE&T system on the property to address and contain the on-Site source of contamination.
- 2002: Two 500-gallon underground PCE storage tanks, and one 1,000-gallon fuel oil storage tank were removed. Approximately 20 tons of impacted soil was excavated and disposed.
- 2008: The first five-year review of the Site was conducted by the USEPA. The review concluded that the remedy was in place and functioning as intended. The review did not identify any significant issues that required attention.
- 2011: The Site was reclassified from a Class 2 to a Class 4 Inactive Hazardous Waste Site.
- 2012: The USEPA completed construction and installation of a complementary groundwater air sparge system and began its operation in March 2012. The SSDS at the LIHA was removed prior to NYSDEC assuming remedial system O&M activities.
- 2013: The second five-year USEPA review was initiated in December 2013 and finalized in 2014.
- 2014: The air sparge component of the groundwater system was removed from service due to an oil leak in the system.
- 2015: USEPA representatives met with NYSDEC representatives in July to review RAO progress and to discuss future plans associated with the site management program.
- 2017: NYSDEC completed a RSO investigation during November 2016 and January and February 2017 to evaluate the current Site conditions.
- 2017: The Stanton Cleaners building was vacated and the dry-cleaning machine was removed from the Site.
- 2018: The third five-year USEPA was initiated in October 2018 and was finalized in 2019.
- 2020: Modifications to the SVE system were completed, including the installation of horizontal SVE (hSVE) wells beneath the Site buildings to enhance mass removal from the subsurface soils.

Active remediation systems currently operating at the Site consists of a GWE&T system and SVE system. Extraction wells associated with the GWE&T system are equipped with submersible pumps. Extraction well EPA-EXT-02, located at the intersection of Cutter Mill Road and Ascot Road, is currently the only operational extraction well. Four other extraction wells, EPA-EXT-01, EPA-EXT-03, EPA-EXT-04R, and ST-IW-01, are not in operation. The extracted groundwater is treated through a 2,000-pound liquid phase granular activated carbon (GAC) vessel prior to discharge to the storm sewer. The SVE system consists of six vertical extraction wells and two horizontal SVE (hSVE) wells connected to a blower and knockout tank. The extracted vapor is treated through a 3,000-pound vapor phase GAC vessel prior to discharge to the atmosphere.

2.3 Site Cleanup Objectives

Media	Standards, Criteria, & Guidance	Results
Groundwater	NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations	PCE was detected in the influent GW samples at levels ranging from 3.1 µg/l to 5.4 µg/l. Two samples collected during 2020 exceed the 5 µg/l groundwater standard. PCE concentrations in the groundwater appear to have remained steady over the reporting period. Remedial Action Objectives (RAO's) are to decrease concentrations below GW standards.
Soil Vapor	New York State Department of Heath (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York.	Indoor air sampling at the Long Island Hebrew Academy (LIHA), located adjacent to the Site, detected VOCs below Matrix A, B, and C criteria, except for methylene chloride at 41 µg/m^3. Concentrations of PCE ranging from 5,300 µg/m^3 to 12,000 µg/m^3 were detected in SVE system influent samples collected during 2020.

The objective for operation of the remediation system (GWE&T and SVE) at the Site is to restore the Site to pre-disposal conditions to the extent feasible. At a minimum, the remedies discussed above shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the Site through the proper application of scientific and engineering principles. The criteria for Site closure will be determined by the NYSDEC based on the future monitoring data.

3.0 REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

3.1 Groundwater Extraction and Treatment System Performance, Effectiveness, and Protectiveness

HRP Associates, Inc. (HRP) took over O&M responsibilities in March 2020. During initial inspection of the remediation system on March 17, 2020, the power had been shut-off to the Treatment Building. The power was restored on March 18, 2020. The GWE&T system operated continuously from March 18, 2020 through December 31, 2020. During that period, the GWE&T system treated and discharged approximately 17,857,528 gallons of water. The average flow rate during the operational period was approximately 63 gallons per minutes (GPM).

The GWE&T system extracts groundwater from one recovery well (EPA-EXT-02), which is located at the corner of Cutter Mill Road and Ascot Road. The location of EPA-EXT-02 is shown on **Figure 2**. There are five other extraction wells (EPA-EXT-01, EPA-EXT-03, EPA-EXT-04R, EPA-MW-24, and ST-IW-01) associated with the GWE&T system; however, they are not operational and are instead included as part of the groundwater monitoring well network. In April 2005, extraction well EPA-MW-24 was turned off and replaced with EPA-EXT-4R. Extraction well EPA-EXT-04R was removed from the GWE&T system in 2006. Extraction well ST-IW-01 was removed from the system in May 2003.

The attached **Chart 1** shows a graph of PCE concentrations in the GWE&T system influent samples collected monthly over the reporting period. PCE concentrations ranged from 3.1 µg/l to 5.4 µg/l over the reporting period, with the lowest concentration occurring in the October sample. Sample influent concentrations were generally below 5 µg/l during the reporting period, with the exception of the two highest detections of PCE at 5.4 µg/l collected in June 2020 and 5.1 µg/l collected in September 2020.

The system continues to remove mass from the groundwater, as evidenced by the detections of PCE in the monthly influent samples. An estimate of the cumulative mass of PCE removed by the system is included as **Table 1**. The system appears to continue to be protective of human health by decreasing the concentration of PCE in the groundwater on and off Site.

An estimate of the mass of PCE removed is based on the average system flow rate and PCE concentration detected in the monthly influent samples. An unknown error caused the November total flow reading to be 1,713,164 gallons which is less than the total flow reading of 17,759,245 gallons in October. Due to this error the November total flow reading was calculated using the average daily flow from April to October. No errors were observed during the December total flow reading. Approximately 0.71 pounds (lbs) of PCE were recovered by the GWE&T system in 2020. The total estimated recovery since 2013 is 11.5 lbs.

3.2 Soil Vapor Extraction System Performance, Effectiveness, and Protectiveness

Two hSVE wells were installed at the Site in August 2020 in order to removal additional source mass from beneath the Stanton Cleaners building and the Boiler Room building, and further mitigate soil vapor intrusion at the Site to protect human health and the environment. The locations of the newly installed hSVE wells (hSVE-01 and hSVE-02) are shown on **Figure 2.** The hSVE wells were connected to the existing SVE system in December 2020. Some petroleum impacted soils were discovered

during trench excavation for piping to connect the hSVE wells to the SVE system. Gray-stained soils were observed in the sidewalls and bottom of the trench excavated between the Boiler Room building and the Treatment System building. The encountered staining was reported to NYSDEC and assigned Spill ID No. 2007171. The petroleum impacted soils will be addressed separately by the NYSDEC and are not discussed as part of the operation of the SVE system.

Performance monitoring of the SVE system is conducted monthly while the system is running. Monitoring includes screening for total VOCs, carbon monoxide, oxygen, lower explosive limit (LEL), hydrogen sulfide, temperature, vacuum pressure, relative humidity, dew point, and flow rate in cubic feet per minute (CFM) as specified in the O&M Manual. The following locations are monitored on a monthly basis:

- SVE-Influent (pre-treatment)
- Post-Blower (Pre-Treatment)
- EPA-SVE-1 (shallow)
- EPA-SVE-1 (medium)
- EPA-SVE-2 (shallow)
- EPA-SVE-2 (medium)
- SS-A
- SS-3A
- SS-3B
- SVE-1 Combined
- SVE-2 Combined

Samples are collected from the system influent and effluent (post-GAC treatment) on a quarterly basis and submitted for laboratory analysis. An estimate of the mass of VOCs removed is based on the average system flow rate and concentrations of PCE and degradation products detected in the quarterly influent samples. The cumulative mass removal for 2020 is depicted on **Chart 2**. The system removed approximately 60.28 lbs of PCE during the reporting period at an average vapor flow rate of 188 CFM. The VOC mass removal for 2020 is summarized in **Table 2**.

Based on the laboratory data from SVE system influent and the PID readings at the SVE system during each monthly visit, the SVE system continues to recover mass from the subsurface. Modifications to the SVE system were conducted in the 3rd quarter of 2020, including the installation of two hSVE wells beneath the buildings on the Site. These two hSVE wells were connected to the existing SVE system in the 4th quarter of 2020 to enhance mass removal from the subsurface soils.

The remediation system operated continuously from March through the beginning of December 2020. However, PCE was detected in the SVE effluent (after carbon treatment) sample collected in December 2020 at a concentration exceeding the DAR-1 Short Term Guideline Concentration (SCG). The SVE system was temporarily shut down on December 24, 2020 until the Granular Activated Carbon (GAC) could be replaced. The system remained off through the end of the year while coordination for replacement of the GAC was underway.

4.0 INSTITUTIONAL CONTROLS AND ENGINEERING CONTROLS COMPLIANCE

4.1 Institutional and Engineering Controls Requirements and Compliance

The institutional controls (IC) required for this Site include a groundwater use restriction to ensure that exposure to potentially contaminated groundwater is avoided. A specific deed restriction or easement regarding groundwater use is not in place for this Site; however, Nassau County Department of Health (DOH) Article IV prohibits the use of any private water system to be used for drinking water, and the New York Consolidated Laws, Environmental Conservation Law (ENV § 15-1527) prohibits drilling, digging, or tapping into the local aquifer without having first obtained a permit for wells yielding greater than 45 GPM. The USEPA has determined that this is an adequate groundwater use restriction, and no further ICs are necessary to safeguard public health.

The engineering controls (EC) at the Site include the following:

- Groundwater extraction and treatment system - This system captures and treats the most contaminated groundwater associated with the Site. The groundwater concentrations have been significantly reduced by its continued operation.
- Vapor mitigation - Soil vapor is being mitigated on-Site via the SVE system. As noted in Section 3.2 above, the SVE system was shut down on December 24, 2020 for replacement of the GAC used to treat the system effluent. The system will be re-started following GAC replacement.

4.2 Institutional Controls and Engineer Controls Certification

The Institutional and Engineering Controls – Property Owner Survey is included as **Attachment A**. The Certification of Institutional and Engineering Controls signed by a Professional Engineer is included in **Section 8.0** of this report.

5.0 MONITORING PLAN COMPLIANCE

5.1 Components of the Monitoring Plan

The following table summarizes the components of the Site monitoring plan. The results of all monitoring activities are summarized in reports, which are submitted to NYSDEC under separate cover on a quarterly basis.

Monitoring Plan		
Frequency	**Groundwater**	**Soil Vapor**
Monthly	GWE&T system influent and effluent sampled and analyzed for VOCs Measure water levels of groundwater monitoring well network	SVE influent screened using a PID at monitoring points listed in Section 3.2.
Quarterly	None	SVE influent and effluent sampled and analyzed for VOCs
Semi-Annually	Select groundwater monitoring wells sampled and analyzed for VOCs	None
Annually	System discharge point to city sewer sampled and analyzed for compliance with SPDES Equivalency Parameters	Indoor air quality monitored at LIHA

5.2 Monitoring Completed During Reporting Period

The following table summarizes sampling activities completed at the Site between March 2020 and December 2020.

Monitoring Competed during March 2020 to December 2020 Period							
	GW Inf. & Eff.	Water Level Gauge	Monitoring Well Sampling	Discharge Point	SVE Inf. Screening	SVE Inf. & Eff.	LIHA Indoor Air
March	x	x			x	x	
April	x	x			x		
May	x	x			x		
June	x	x			x	x	
July	x	x			x		
August	x	x	x		x		
September	x	x		x	x	x	
October	x	x			x		
November	x	x			x		
December	x	x			x	x	x

Monitoring Competed during March 2020 to December 2020 Period							
	GW Inf. & Eff.	Water Level Gauge	Monitoring Well Sampling	Discharge Point	SVE Inf. Screening	SVE Inf. & Eff.	LIHA Indoor Air
*Inf. – Influent; *Eff. – Effluent							

5.3 Comparison with Remedial Objectives

5.3.1 Groundwater

PCE was consistently detected in each of the monthly groundwater influent samples collected from the GWE&T system. PCE was detected at concentrations ranging from 3.1 µg/l to 5.4 µg/l over the 2020 monitoring period. PCE concentrations in eight out of ten influent samples collected in 2020 were below the water quality standard of 5 µg/l. Samples collected in March and September exceeded the water quality standard. The attached **Chart 1** shows a graph of PCE concentrations in the GWE&T system influent samples collected monthly over the reporting period. The remedial objective is to treat the groundwater and remove contaminants to below the water quality standard.

Semi-annual sampling was conducted in January 2020, which is not within the monitoring period of this report. Groundwater samples were collected from seven monitoring wells and analyzed for VOCs. Cis-1,2-dichloroethylene and trichloroethylene were detected above the applicable water quality standard in EPA-CL-4D. Monitoring well was not sampled during the August 2020 event. PCE was detected in monitoring wells EPA-CL-4S, EPA-CL-4D, ST-MW-12, ST-MW-13, ST-MW-14, ST-MW-17, and ST-MW-20 during the January sampling event at concentrations ranging from 0.31 µg/l to 3.6 µg/l. Additionally, freon 113, chloroform, cis-1,2-dichloroethylene, methylene chloride, and/or TCE were detected below the water quality standard in monitoring wells EPA-CL-4S, EPA-CL-4D, ST-MW-12, ST-MW-13, ST-MW-14, ST-MW-17, and ST-MW-20.

During the August 2020 semi-annual groundwater sampling event PCE was detected above the water quality standard in the groundwater samples collected in two monitoring wells, EPA-MW-21R and ST-MW-19. Monitoring well ST-MW-19 is located southwest of the Site and monitoring well EPA-MW-21R is located west of the Site. PCE detections in other wells during the August 2020 semi-annual groundwater sampling event ranged from 0.31 µg/l to 4.3 µg/l in monitoring wells EPA-MW-23, EPA-MW-26, ST-MW-11, ST-MW-14, ST-MW-16, and ST-MW-17. Additionally, 1,1-Dichloroethylene, bromodichloromethane, bromoform, chloroform, chloromethane, cis-1,2-dichloroethylene, dibromochloromethane, toluene, and/or TCE were detected below the water quality standard in monitoring wells EPA-MW-21R, EPA-MW-23, EPA-MW-26, ST-MW-11, ST-MW-13, ST-MW-14, ST-MW-16, ST-MW-17, ST-MW-18, and ST-MW-19.

Monitoring well locations are depicted in **Figure 3**. The analytical results of the January and August sampling events are summarized on **Table 3**.

Figures 4, 5, and **6** depict the inferred groundwater flow direction during the August 2020 sampling event in the shallow, intermediate, and deep aquifers, respectively.

In September 2020, the system outfall in the storm water drain at the synagogue parking lot was sampled for SPDES equivalency. PCE was detected below effluent limitations. The effluent discharge location to the storm sewer is shown on **Figure 2**.

5.3.2 Vapor

The SVE influent is screened during each monthly visit using a field calibrated PID which measures total VOC concentrations in parts per million (ppm). PID readings collected during the reporting period ranged from 0.1 to 4.7 ppm of total VOCs. Quarterly influent and effluent samples are collected from the SVE system and analyzed using USEPA TO-15. Influent samples collected during the reporting period exhibited concentrations of PCE ranging from 5,300 µg/m^3 to 34,000 µg/m^3. PCE was detected in the SVE effluent (after carbon treatment) sample collected in December 2020 at a concentration exceeding the DAR-1 Short Term Guideline Concentration (SCG). The SVE system was temporarily shut down on December 24, 2020 until the Granular Activated Carbon (GAC) could be replaced. Except for the 4th quarter of 2020, the SVE influent samples obtained and the monthly PID VOC readings illustrate that the SVE system is working to mitigate potential exposure to soil vapor on- and off-Site when it is operational.

New York State does not currently have any standards, criteria, or guidance specifically for subsurface vapors; however, the matrices in Section 3.4.2 of the *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006) can be used to determine when mitigation would be appropriate to lower possible exposure to elevated VOC concentrations that may be found within sub-slab vapor and indoor air. In December 2020, three indoor air samples and one outdoor air sample were collected at the LIHA and PCE was not detected above laboratory reporting limits in the collected samples. Methylene chloride was detected is sample LIHA-IA-1 at a concentration of 41 µg/m^3, which exceeds the NYSDOH Matrix B criteria (10 µg/m^3). Methylene chloride was also detected in the duplicate sample LIHA-IA-1-DUP, but at a concentration of 3.6 µg/m^3. Based on comparison to the NYSDOH Matrix B criteria, the detection of methylene chloride in the LIHA-IA-1 sample requires an investigation into potential contaminant sources and resampling or mitigation of the contaminant source.

5.4 Monitoring Deficiencies

During the review and certification period associated with this report no deficiencies in the Monitoring Program were encountered.

5.5 Conclusions and Recommendations for Changes

The monitoring plan is effective and provides for an adequate amount of data collection to evaluate the system performance, no changes are recommended. The detection of methylene chloride in LIHA indoor air sampling should be addressed by investigating sources and additional sampling or mitigation.

The remedial effectiveness is adequate in controlling the remaining contamination on-Site, and it is expected that addition of the hSVE wells to the SVE system will improve mass removal. Certain monitoring wells located down-gradient of the Site contained PCE at concentrations above the water quality standard; however, there appears to be an overall decreasing trend in PCE concentrations in groundwater. It is recommended that the SVE and GWE&T systems continue to operate to remove contaminant mass and prevent further off-site contaminant migration.

6.0 OPERATIONS AND MAINTENANCE PLAN COMPLIANCE

The on-going O&M program at the Site includes the following:

- Monthly system checks of the GWE&T system and the SVE system;
- Change-out of the GAC on the GWE&T and SVE systems semi-annually, or as needed;
- Annual GWE&T system effluent sampling at the discharge point for comparison to SPDES limits; and
- A Periodic Review Report will be issued annually.

During the review and certification period associated with this report, the GWE&T system ran without interruption. Similarly, during the review and certification period the SVE system ran for much of the year without interruption, except from December 24th through December 31st due to a need for GAC change-out.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Compliance with Site Management Plan

Based on the activities conducted in 2020 the major elements of the 2012 SMP were met during the reporting period. The ECs, including the GWE&T system and SVE system, are designed to contain the off-site migration of VOCs in soil vapor and groundwater. The GWE&T system's primary purpose is to extract contaminated groundwater for treatment and discharge in order to prevent further migration of the groundwater contaminant plume. The SVE system's purpose is to recover mass from the source areas and prevent off-site migration of contaminated soil vapor. When these systems are operational the contamination is contained to within the immediate vicinity of the Site.

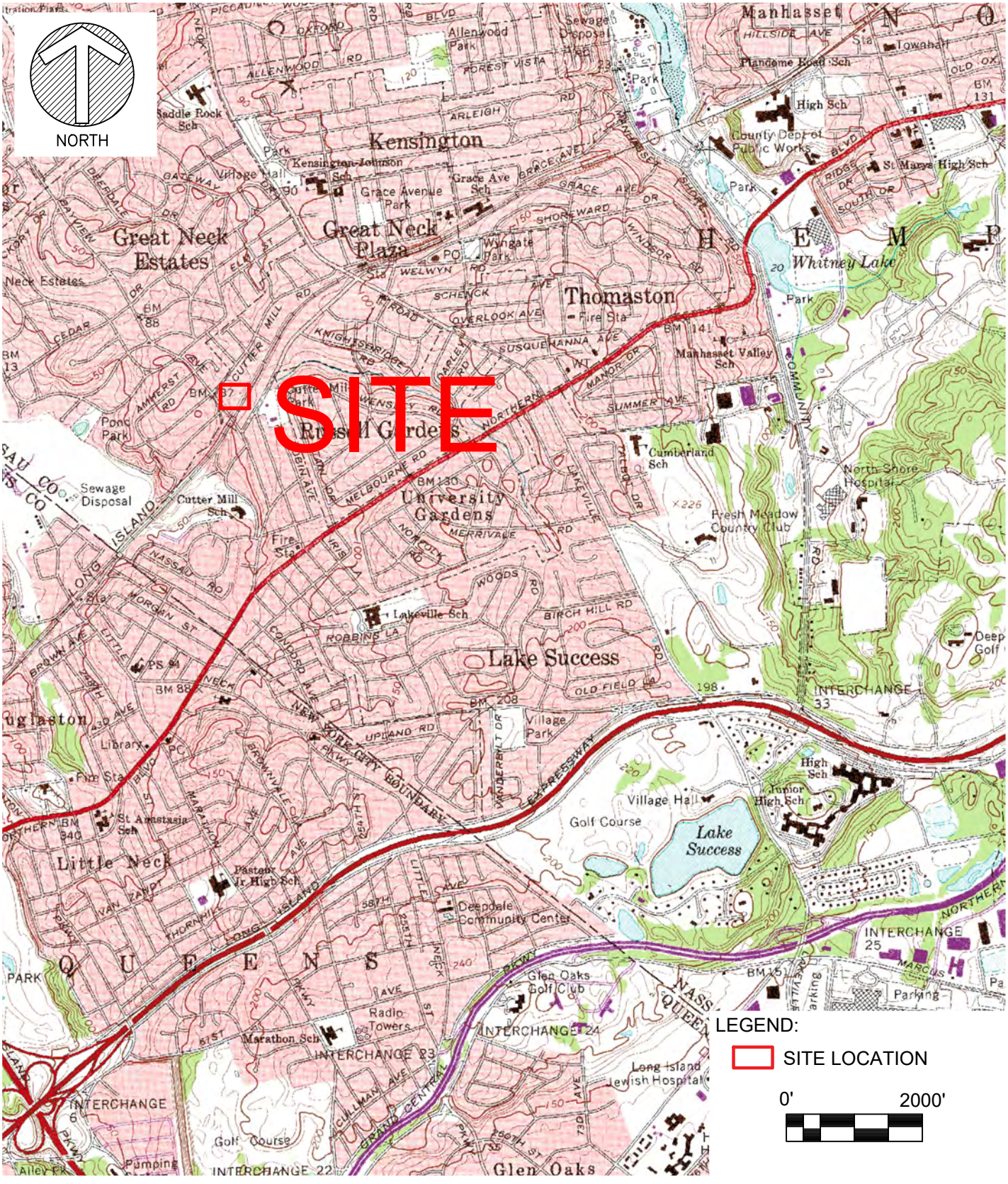
7.2 Effectiveness of the Remedy

Data collected during the reporting period indicates that the remedy is effective for both remediating the source of the contamination and protecting human health by reducing the amount of contamination in the environment surrounding the Site.

7.3 Future Periodic Review Report Submittals

The next Periodic Review Report covering the reporting period from January 1, 2021 to December 31, 2021 will be submitted by January 30, 2022.

FIGURES

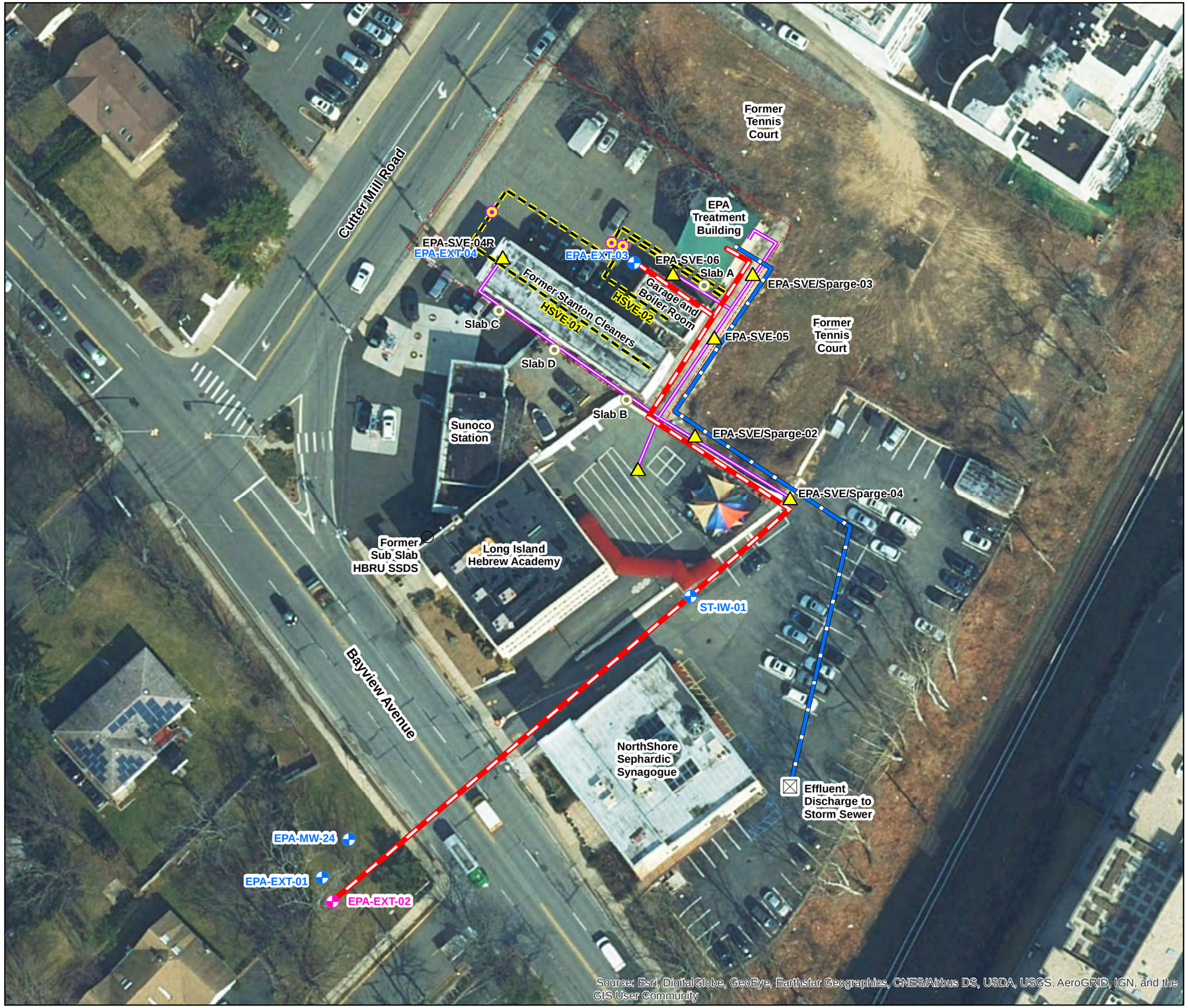


SITE LOCATION MAP

STANTON CLEANERS
110 CUTTER MILL ROAD
GREAT NECK, NEW YORK 11021

SCALE:	1" = 2000'
ISSUE DATE:	05/13/2020
PROJECT NUMBER:	DEC1003.OM

FIGURE
1



Legend

- HSVE Cleanout
- Effluent Discharge
- SVE Well
- Non-Operational Extraction Well
- Groundwater Extraction Well
- Groundwater Treatment Effluent Line
- Groundwater Treatment Influent Line
- Horizontal SVE Well
- Existing SVE System Suction Line
- Stanton Cleaners Property

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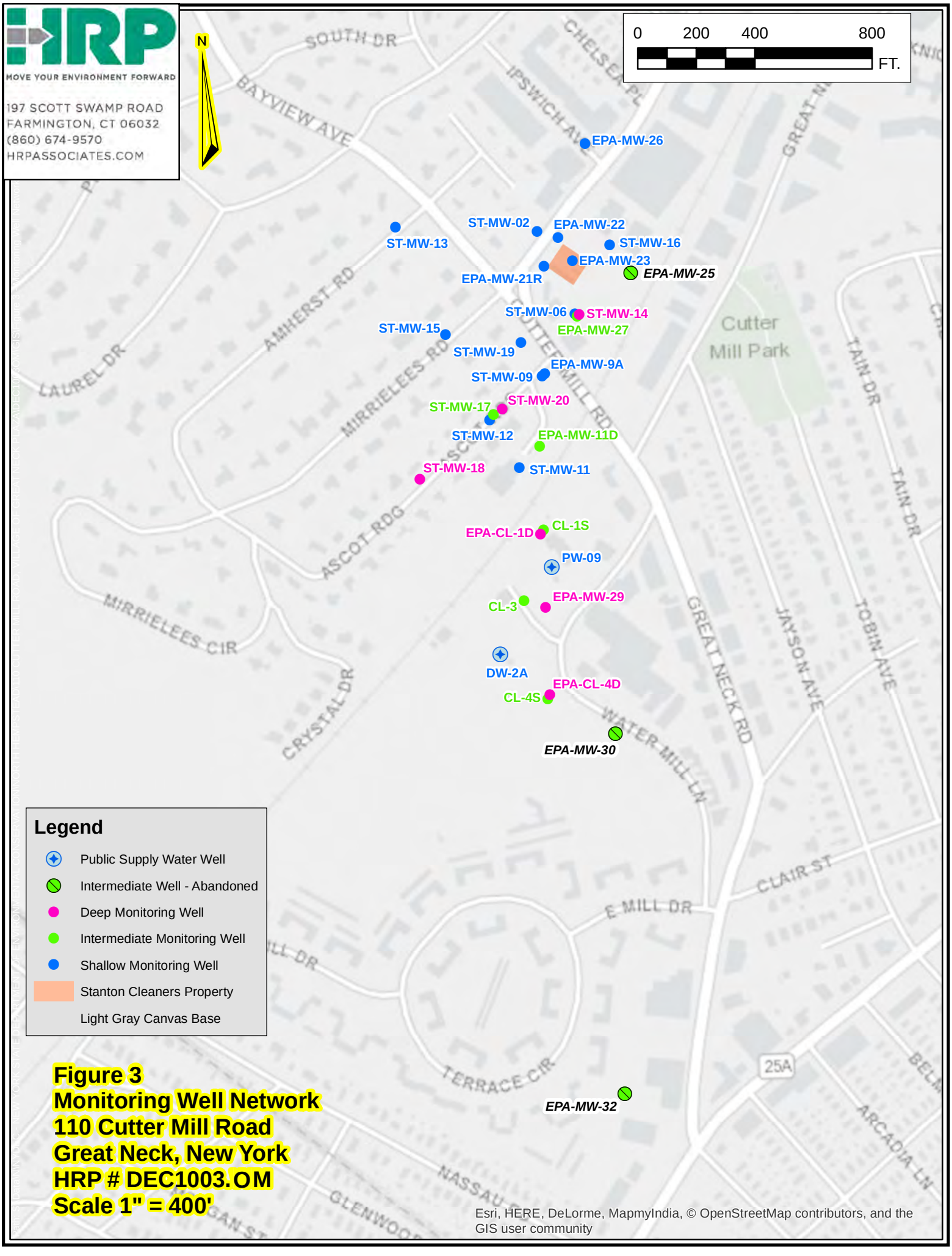
Revisions					
No.					
Date					

Designed By: AAL	Drawn By: BOB	Reviewed By: DJF
Issue Date: 01/11/2021	Project No: DEC1003.OM	Sheet Size: 11x17

Site Layout

Stanton Cleaners Site
110 Cutter Mill Road
Village of Great Neck Plaza
New York

Fig. 2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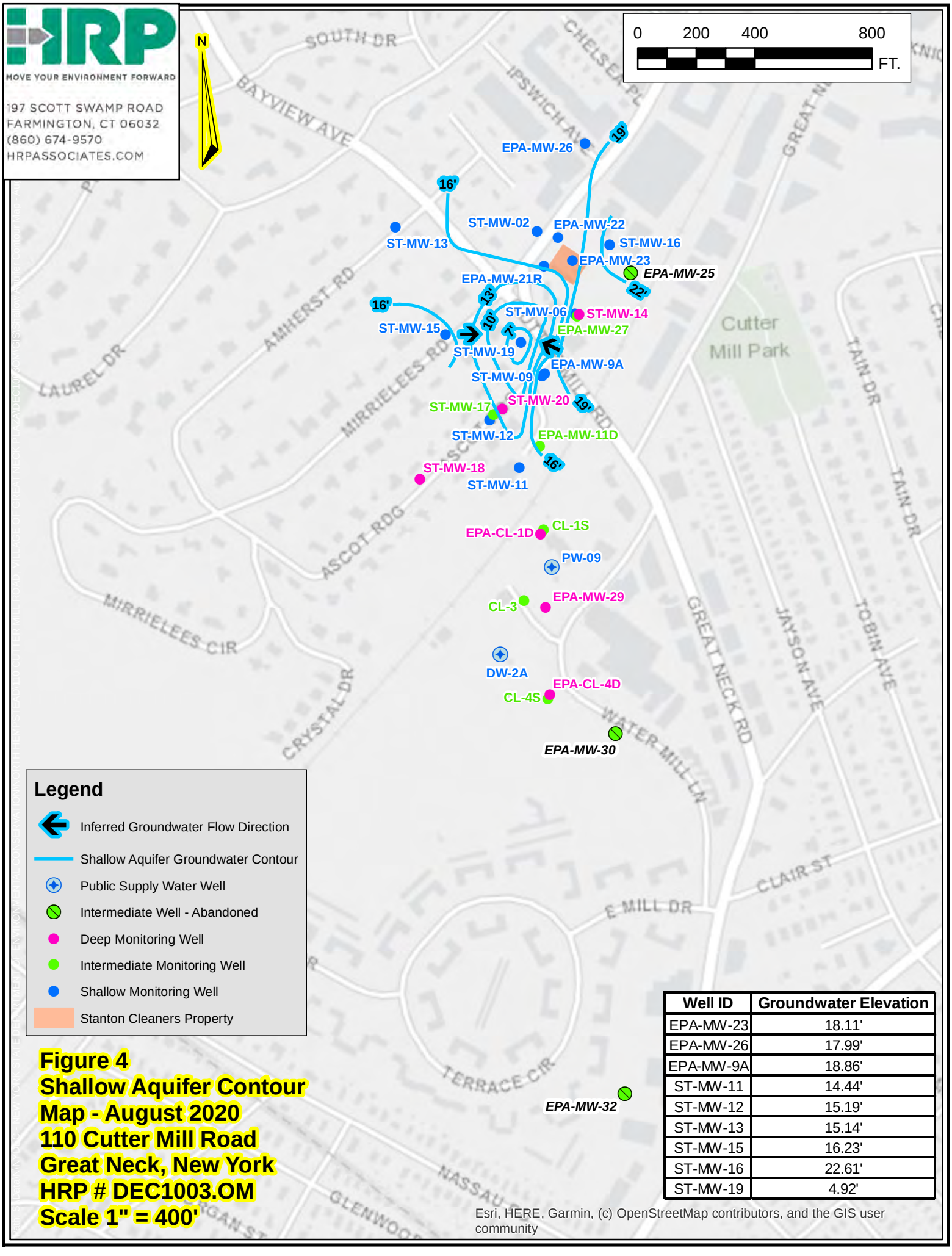
EPA-MW-11D
ST-MW-18
ST-MW-11
EPA-CL-1D
CL-1S
PW-09
CL-3
EPA-MW-29
DW-2A
EPA-CL-4D
CL-4S
EPA-MW-30
EPA-MW-32
Cutter Mill Park
SOUTH DR
BAYVIEW AVE
IPSWICH AVE
CHELSEA PL
GREAT NECK RD
AMHERST RD
LAUREL DR
MIRRIELEES RD
CUTTER MILL RD
ASCOT RDG
MIRRIELEES CIR
CRYSTAL DR
JAYSON AVE
TOBIN AVE
TAIN DR
WATER MILL LN
CLAIR ST
E MILL DR
TERRACE CIR
NASSAU
ARCADIA LN
25A
Legend
Public Supply Water Well
Intermediate Well - Abandoned
Deep Monitoring Well
Intermediate Monitoring Well
Shallow Monitoring Well
Stanton Cleaners Property
Light Gray Canvas Base
Figure 3
Monitoring Well Network
110 Cutter Mill Road
Great Neck, New York
HRP # DEC1003.OM
Scale 1" = 400'
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community



Legend

- Inferred Groundwater Flow Direction
- Shallow Aquifer Groundwater Contour
- Public Supply Water Well
- Intermediate Well - Abandoned
- Deep Monitoring Well
- Intermediate Monitoring Well
- Shallow Monitoring Well
- Stanton Cleaners Property

Well ID	Groundwater Elevation
EPA-MW-23	18.11'
EPA-MW-26	17.99'
EPA-MW-9A	18.86'
ST-MW-11	14.44'
ST-MW-12	15.19'
ST-MW-13	15.14'
ST-MW-15	16.23'
ST-MW-16	22.61'
ST-MW-19	4.92'

Figure 4
Shallow Aquifer Contour Map - August 2020
110 Cutter Mill Road
Great Neck, New York
HRP # DEC1003.OM
Scale 1" = 400'

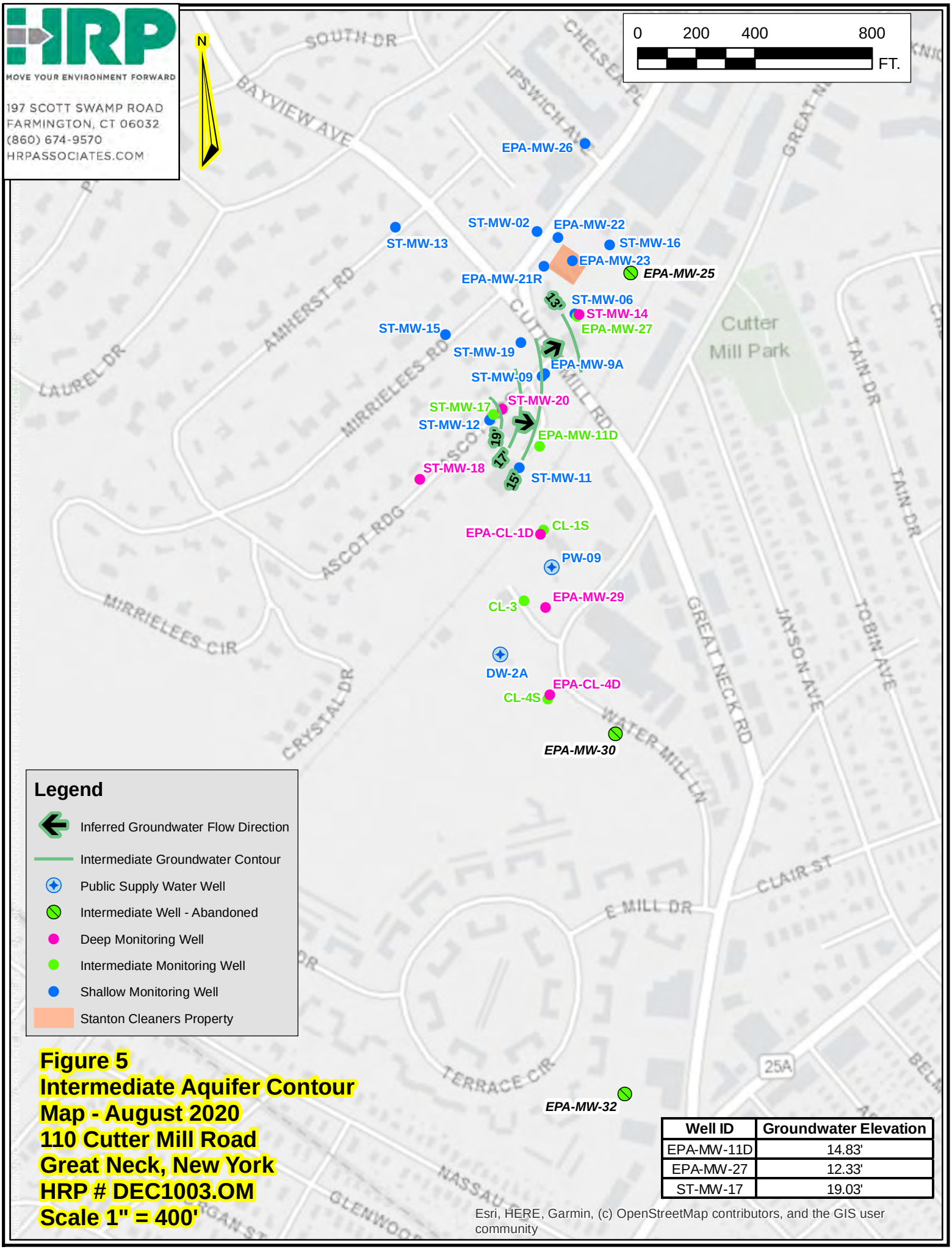


Figure 5
Intermediate Aquifer Contour Map - August 2020
110 Cutter Mill Road
Great Neck, New York
HRP # DEC1003.OM
Scale 1" = 400'

Well ID	Groundwater Elevation
EPA-MW-11D	14.83'
EPA-MW-27	12.33'
ST-MW-17	19.03'

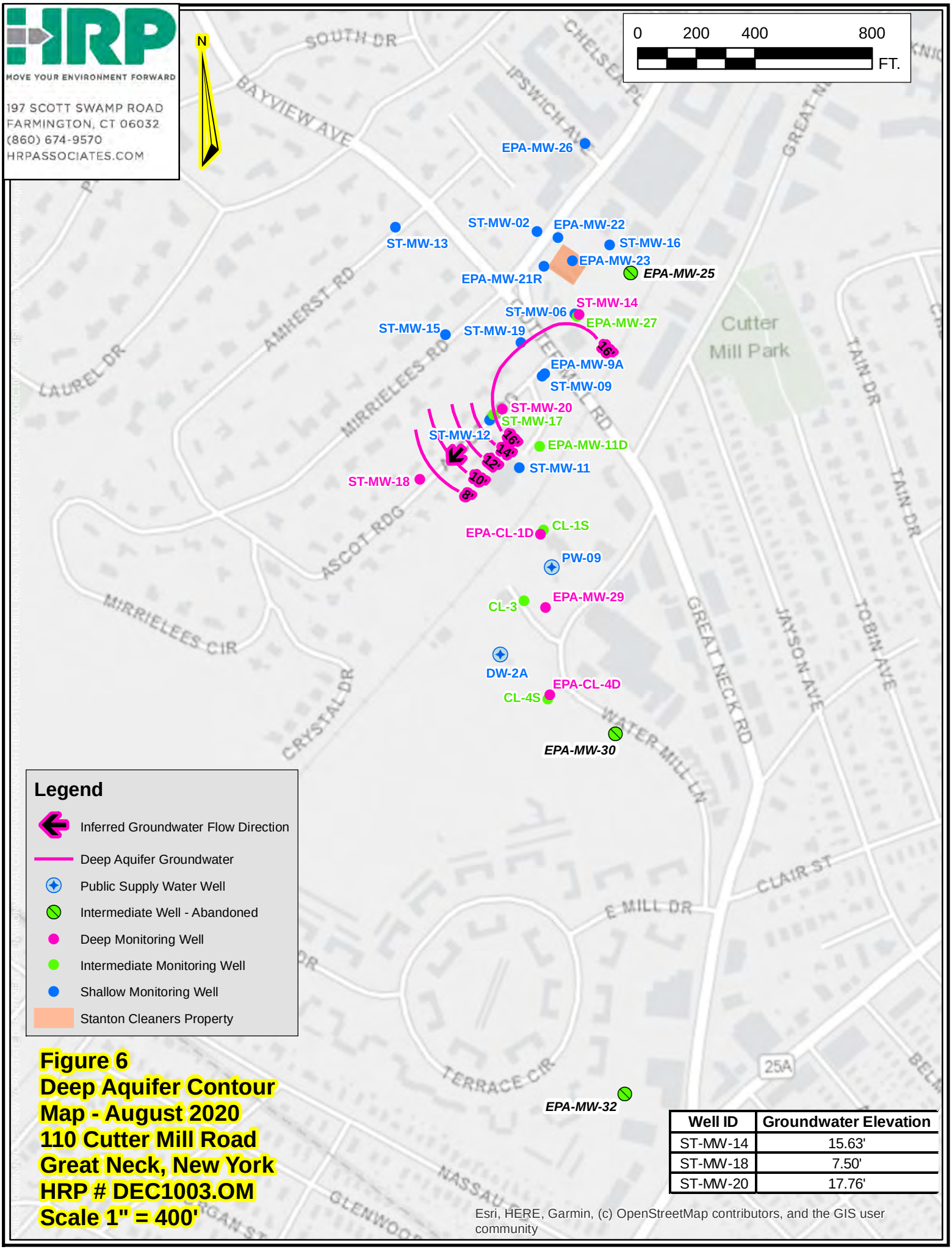


Figure 6
Deep Aquifer Contour Map - August 2020
110 Cutter Mill Road
Great Neck, New York
HRP # DEC1003.OM
Scale 1" = 400'

Well ID	Groundwater Elevation
ST-MW-14	15.63'
ST-MW-18	7.50'
ST-MW-20	17.76'

TABLES

Table 1: Groundwater Extraction and Treatment System

Summary of VOC Mass Removal

Stanton Cleaners - NYSDEC Site # 130072

110 Cutter Mill Road, Great Neck, NY

Sample Date	Period (Number of days between samples)	Total Flow (Gallons)	Influent PCE Concentration (µg/L)	PCE Mass Removed (lbs/month)	Cumulative PCE Mass Removed (lbs)
3/20/2020	---	955939.0	5.4	0	10.79
4/15/2020	26	3154729.6	4.2	0.08	10.87
5/6/2020	21	4943370	4.3	0.06	10.93
6/3/2020	28	7305163	3.3	0.07	11.00
7/6/2020	33	10090087	3.9	0.09	11.09
8/5/2020	30	12578875.3	4.6	0.10	11.18
9/1/2020	27	14821635	5.1	0.10	11.28
10/7/2020	36	17759245	3.1	0.08	11.35
11/12/2020	36	20773518	3.4	0.09	11.44
12/7/2020	25	22720425	3.9	0.06	11.50

Notes

PCE = Tetrachloroethylene

lbs = pounds

µg/L = micrograms per cubic liter

November Total Flow

Average flow (April to Oct.)	83729.81
Period Oct. to Nov. Events (days)	36
Assumed Nov. Reading (gallons)	20773518.16
Total Flow Nov. Reading from Field Notes (gallons)	1,713,164

Table 2: Soil Vapor Extraction System
Summary of VOC Mass Removal
Stanton Cleaners - NYSDEC Site # 130072
110 Cutter Mill Road, Great Neck, NY

Sample Date	Period (Days)	PCE Concentration (mg/m^3)	TCE Concentration (mg/m^3)	cis-1,2-DCE Concentration (mg/m^3)	Flowrate (cfm)	Ave. PCE Concentration (mg/m^3)	PCE Discharge (lbs)	Ave. TCE Concentration (mg/m^3)	TCE Discharge (lbs)	cis-1,2-DCE Concentration (mg/m^3)	cis-1,2-DCE Discharge (lbs)	Cumulative VOC Mass Removed (lbs)
3/20/2020	1	34.00	0.41	0.40	189	17.00	0.29	0.21	0.00	0.20	0.00	0
6/3/2020	75	10.00	0.28	0.40	189	22.00	28.03	0.35	0.44	0.40	0.00	28.47
9/1/2020	90	12.00	0.39	0.32	189	11.00	16.82	0.34	0.51	0.36	0.00	45.81
12/7/2020	97	5.30	0.16	0.15	186	8.65	14.03	0.28	0.45	0.24	0.00	60.28

Notes:
PCE = Tetrachloroethylene
TCE = Trichloroethylene
Cis-1,2-DCE = cis-1,2-dichloroethylene
cfm = cubic feet per minute
ave. = average
lbs = pounds
mg/m^3 = milligrams per cubic meter

Table 3: Semi-Annual Groundwater Monitoring Summary of Analytical Results
Stanton Cleaners Area Superfund Site
110 Cutter Mill Road, Great Neck, NY
HRP# DEC1003.OM

		Lab Report No.:	320575881	320575881	4602171821	4602171691	4602171691	4602170401	4602173051	4602171821	4602171821	320575881	4602170721	320575881	4602170401
		Sample Name:	EPA-CL-4D	EPA-CL-4S	EPA-MW-11D	EPA-MW-21R	EPA-MW-23	EPA-MW-26	EPA-MW-27	EPA-MW-9A	ST-MW-11	ST-MW-12	ST-MW-12	ST-MW-13	ST-MW-13
		ID:	**EPA-CL-4D**	**EPA-CL-4S**	**EPA-MW-11D**	**EPA-MW-21R**	**EPA-MW-23**	**EPA-MW-26**	**EPA-MW-27**	**EPA-MW-9A**	**ST-MW-11**	**ST-MW-12**	**ST-MW-12**	**ST-MW-13**	**ST-MW-13**
		Date Collected:	**1/8/2020**	**1/8/2020**	**8/27/2020**	**8/27/2020**	**8/27/2020**	**8/20/2020**	**8/28/2020**	**8/27/2020**	**8/27/2020**	**1/8/2020**	**8/26/2020**	**1/8/2020**	**8/20/2020**
	Unit	**NYSDEC CLASS GA CRITERIA**													
VOC															
1,1,1,2-Tetrachloroethane	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
1,1,1-Trichloroethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (freon 113)	ug/l	5	**0.93**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethylene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
1,2,3-Trichloropropane	ug/l	0.04	< 1.0	< 1.0								< 1.0		< 1.0	
1,2,3-Trimethylbenzene	ug/l		< 1.0	< 1.0								< 1.0		< 1.0	
1,2,4-Trimethylbenzene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
1,2-Dibromo-3-chloropropane	ug/l	0.04	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane (EDB) (ethylene dibromide)	ug/l	0.0006	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	ug/l	3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	ug/l	0.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
1,3-Dichlorobenzene	ug/l	3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
1,3-Dichloropropene (cis)	ug/l	0.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropene (trans)	ug/l	0.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	ug/l	3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dioxane	ug/l		< 50	< 50								< 50		< 50	
2,2-Dichloropropane	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
2-Butanone (MEK)	ug/l	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Chloroethyl vinyl ether	ug/l		< 1.0	< 1.0								< 1.0		< 1.0	
2-Chlorotoluene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
2-Hexanone (Methyl butyl ketone/MBK)	ug/l	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Propanol (Isopropyl alcohol)	ug/l		< 10	< 10								< 10		< 10	
4-Chlorotoluene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
Acetone	ug/l	50	< 5.0	< 5.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 6.0	< 5.0	< 6.0	< 5.0	< 6.0
Acetonitrile	ug/l		< 10	< 10								< 10		< 10	
Acrolein (Propenal)	ug/l		< 4.0	< 4.0								< 4.0		< 4.0	
Acrylonitrile	ug/l	5	< 2.0	< 2.0								< 2.0		< 2.0	
Allyl chloride	ug/l		< 1.0	< 1.0								< 1.0		< 1.0	
Benzene	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene, 1,2,3-trichloro-	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
Benzene, 1,2,4-trichloro-	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzyl chloride	ug/l		< 1.0	< 1.0								< 1.0		< 1.0	
Bromobenzene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
Bromochloromethane	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
Bromodichloromethane	ug/l	50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.8**
Bromoform	ug/l	50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.0**
Bromomethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	ug/l	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon tetrachloride	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	ug/l	7	**0.47**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.42**	< 1.0	**0.39**	**1.0**
Chloromethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethylene	ug/l	5	**7.5**	< 1.0	< 1.0	**3.8**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	ug/l		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 3: Semi-Annual Groundwater Monitoring Summary of Analytical Results
Stanton Cleaners Area Superfund Site
110 Cutter Mill Road, Great Neck, NY
HRP# DEC1003.OM

		Lab Report No.:	320575881	320575881	4602171821	4602171691	4602171691	4602170401	4602173051	4602171821	4602171821	320575881	4602170721	320575881	4602170401
		Sample Name:	EPA-CL-4D	EPA-CL-4S	EPA-MW-11D	EPA-MW-21R	EPA-MW-23	EPA-MW-26	EPA-MW-27	EPA-MW-9A	ST-MW-11	ST-MW-12	ST-MW-12	ST-MW-13	ST-MW-13
		ID:	**EPA-CL-4D**	**EPA-CL-4S**	**EPA-MW-11D**	**EPA-MW-21R**	**EPA-MW-23**	**EPA-MW-26**	**EPA-MW-27**	**EPA-MW-9A**	**ST-MW-11**	**ST-MW-12**	**ST-MW-12**	**ST-MW-13**	**ST-MW-13**
		Date Collected:	**1/8/2020**	**1/8/2020**	**8/27/2020**	**8/27/2020**	**8/27/2020**	**8/20/2020**	**8/28/2020**	**8/27/2020**	**8/27/2020**	**1/8/2020**	**8/26/2020**	**1/8/2020**	**8/20/2020**
	Unit	**NYSDEC CLASS GA CRITERIA**													
VOC															
Dibromochloromethane	ug/l	50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**2.5**
Dibromomethane	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
Dichlorodifluoromethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Diethyl ether	ug/l		< 1.0	< 1.0								< 1.0		< 1.0	
Diisopropyl ether (DIPE)	ug/l		< 1.0	< 1.0								< 1.0		< 1.0	
Epichlorohydrin	ug/l		< 5.0	< 5.0								< 5.0		< 5.0	
Ethanol	ug/l		< 100	< 100								< 100		< 100	
Ethyl acetate	ug/l		< 2.0	< 2.0								< 2.0		< 2.0	
Ethylbenzene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	ug/l	0.5	< 1.0	< 1.0								< 1.0		< 1.0	
Iodomethane (Methyl iodide)	ug/l		< 1.0	< 1.0								< 1.0		< 1.0	
Isopropylbenzene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m/p-Xylenes	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
METHYL ACETATE	ug/l		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methyl isobutyl ketone (MIBK)	ug/l		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methyl methacrylate	ug/l		< 2.0	< 2.0								< 2.0		< 2.0	
Methylcyclohexane	ug/l		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.96**	< 1.0
Methyltertbutyl ether	ug/l	10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	ug/l	10	< 1.0	< 1.0								< 1.0		< 1.0	
n-Butanol (1-Butanol, n-Butyl alcohol)	ug/l		< 25	< 25								< 25		< 25	
n-Butylbenzene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
n-Propylbenzene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
o-Xylene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
p-Isopropyltoluene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
sec-Butylbenzene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
Styrene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
t-Butyl alcohol	ug/l		< 10	< 10								< 10		< 10	
tert-Butylbenzene	ug/l	5	< 1.0	< 1.0								< 1.0		< 1.0	
Tetrachloroethylene	ug/l	5	**2.1**	**0.65**	< 1.0	**55**	**0.82**	**0.31**	< 1.0	< 1.0	**0.37**	**0.31**	< 1.0	**3.6**	< 1.0
Toluene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethylene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene	ug/l	5	**6.8**	< 1.0	< 1.0	**1.7**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl acetate	ug/l		< 2.0	< 2.0								< 2.0		< 2.0	
Vinyl chloride	ug/l	2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Legend

<1	Parameter not detected above the laboratory reporting limit
BRL	Parameter consists of multiple isomers and were not detected above the laboratory reporting limit
1	Parameter reported at a concentration greater than applicable regulatory standard/criterion

Notes:
µg/l = micrograms per liter

Table 3: Semi-Annual Groundwater Monitoring Summary of Analytical Results
Stanton Cleaners Area Superfund Site
110 Cutter Mill Road, Great Neck, NY
HRP# DEC1003.OM

		Lab Report No.:	320575881	4602171691	4602170401	4602171691	320575881	4602170721	4602173051	4602173051	320575881	4602170721	4602170721
		Sample Name:	ST-MW-14	ST-MW-14	ST-MW-15	ST-MW-16	ST-MW-17	ST-MW-17	ST-MW-18	ST-MW-19	ST-MW-20	ST-MW-20	ST-MW-X
		ID:	**ST-MW-14**	**ST-MW-14**	**ST-MW-15**	**ST-MW-16**	**ST-MW-17**	**ST-MW-17**	**ST-MW-18**	**ST-MW-19**	**ST-MW-20**	**ST-MW-20**	**ST-MW-X**
		Date Collected:	**1/8/2020**	**8/27/2020**	**8/20/2020**	**8/27/2020**	**1/8/2020**	**8/26/2020**	**8/28/2020**	**8/28/2020**	**1/8/2020**	**8/26/2020**	**8/26/2020**
	Unit	**NYSDEC CLASS GA CRITERIA**											
VOC													
1,1,1,2-Tetrachloroethane	ug/l	5	< 1.0				< 1.0				< 1.0		
1,1,1-Trichloroethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (freon 113)	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethylene	ug/l	5	< 1.0	**0.15**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	ug/l	5	< 1.0				< 1.0				< 1.0		
1,2,3-Trichloropropane	ug/l	0.04	< 1.0				< 1.0				< 1.0		
1,2,3-Trimethylbenzene	ug/l		< 1.0				< 1.0				< 1.0		
1,2,4-Trimethylbenzene	ug/l	5	< 1.0				< 1.0				< 1.0		
1,2-Dibromo-3-chloropropane	ug/l	0.04	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane (EDB) (ethylene dibromide)	ug/l	0.0006	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	ug/l	3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	ug/l	0.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	ug/l	5	< 1.0				< 1.0				< 1.0		
1,3-Dichlorobenzene	ug/l	3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	ug/l	5	< 1.0				< 1.0				< 1.0		
1,3-Dichloropropene (cis)	ug/l	0.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropene (trans)	ug/l	0.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	ug/l	3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dioxane	ug/l		< 50				< 50				< 50		
2,2-Dichloropropane	ug/l	5	< 1.0				< 1.0				< 1.0		
2-Butanone (MEK)	ug/l	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Chloroethyl vinyl ether	ug/l		< 1.0				< 1.0				< 1.0		
2-Chlorotoluene	ug/l	5	< 1.0				< 1.0				< 1.0		
2-Hexanone (Methyl butyl ketone/MBK)	ug/l	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Propanol (Isopropyl alcohol)	ug/l		< 10				< 10				< 10		
4-Chlorotoluene	ug/l	5	< 1.0				< 1.0				< 1.0		
Acetone	ug/l	50	< 5.0	< 6.0	< 6.0	< 6.0	< 5.0	< 6.0	< 6.0	< 6.0	< 5.0	< 6.0	< 6.0
Acetonitrile	ug/l		< 10				< 10				< 10		
Acrolein (Propenal)	ug/l		< 4.0				< 4.0				< 4.0		
Acrylonitrile	ug/l	5	< 2.0				< 2.0				< 2.0		
Allyl chloride	ug/l		< 1.0				< 1.0				< 1.0		
Benzene	ug/l	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene, 1,2,3-trichloro-	ug/l	5	< 1.0				< 1.0				< 1.0		
Benzene, 1,2,4-trichloro-	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzyl chloride	ug/l		< 1.0				< 1.0				< 1.0		
Bromobenzene	ug/l	5	< 1.0				< 1.0				< 1.0		
Bromochloromethane	ug/l	5	< 1.0				< 1.0				< 1.0		
Bromodichloromethane	ug/l	50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	ug/l	50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	ug/l	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon tetrachloride	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	ug/l	7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.39**	< 1.0	< 1.0
Chloromethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.1**
cis-1,2-Dichloroethylene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	ug/l		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 3: Semi-Annual Groundwater Monitoring Summary of Analytical Results
Stanton Cleaners Area Superfund Site
110 Cutter Mill Road, Great Neck, NY
HRP# DEC1003.OM

		Lab Report No.:	320575881	4602171691	4602170401	4602171691	320575881	4602170721	4602173051	4602173051	320575881	4602170721	4602170721
		Sample Name:	ST-MW-14	ST-MW-14	ST-MW-15	ST-MW-16	ST-MW-17	ST-MW-17	ST-MW-18	ST-MW-19	ST-MW-20	ST-MW-20	ST-MW-X
		ID:	**ST-MW-14**	**ST-MW-14**	**ST-MW-15**	**ST-MW-16**	**ST-MW-17**	**ST-MW-17**	**ST-MW-18**	**ST-MW-19**	**ST-MW-20**	**ST-MW-20**	**ST-MW-X**
		Date Collected:	**1/8/2020**	**8/27/2020**	**8/20/2020**	**8/27/2020**	**1/8/2020**	**8/26/2020**	**8/28/2020**	**8/28/2020**	**1/8/2020**	**8/26/2020**	**8/26/2020**
	Unit	**NYSDEC CLASS GA CRITERIA**											
VOC													
Dibromochloromethane	ug/l	50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	ug/l	5	< 1.0				< 1.0				< 1.0		
Dichlorodifluoromethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Diethyl ether	ug/l		< 1.0				< 1.0				< 1.0		
Diisopropyl ether (DIPE)	ug/l		< 1.0				< 1.0				< 1.0		
Epichlorohydrin	ug/l		< 5.0				< 5.0				< 5.0		
Ethanol	ug/l		< 100				< 100				< 100		
Ethyl acetate	ug/l		< 2.0				< 2.0				< 2.0		
Ethylbenzene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	ug/l	0.5	< 1.0				< 1.0				< 1.0		
Iodomethane (Methyl iodide)	ug/l		< 1.0				< 1.0				< 1.0		
Isopropylbenzene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m/p-Xylenes	ug/l	5	< 1.0				< 1.0				< 1.0		
METHYL ACETATE	ug/l		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methyl isobutyl ketone (MIBK)	ug/l		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methyl methacrylate	ug/l		< 2.0				< 2.0				< 2.0		
Methylcyclohexane	ug/l		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	ug/l	5	**0.95**	< 1.0	< 1.0	< 1.0	**0.91**	< 1.0	< 1.0	< 1.0	**0.85**	< 1.0	< 1.0
Methyltertbutyl ether	ug/l	10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	ug/l	10	< 1.0				< 1.0				< 1.0		
n-Butanol (1-Butanol, n-Butyl alcohol)	ug/l		< 25				< 25				< 25		
n-Butylbenzene	ug/l	5	< 1.0				< 1.0				< 1.0		
n-Propylbenzene	ug/l	5	< 1.0				< 1.0				< 1.0		
o-Xylene	ug/l	5	< 1.0				< 1.0				< 1.0		
p-Isopropyltoluene	ug/l	5	< 1.0				< 1.0				< 1.0		
sec-Butylbenzene	ug/l	5	< 1.0				< 1.0				< 1.0		
Styrene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
t-Butyl alcohol	ug/l		< 10				< 10				< 10		
tert-Butylbenzene	ug/l	5	< 1.0				< 1.0				< 1.0		
Tetrachloroethylene	ug/l	5	**3.6**	**4.3**	< 1.0	**1.9**	**1.7**	**0.95**	< 1.0	**22**	**0.58**	< 1.0	< 1.0
Toluene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.56**	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethylene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethylene	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	ug/l	5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl acetate	ug/l		< 2.0				< 2.0				< 2.0		
Vinyl chloride	ug/l	2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Legend

<1	Parameter not detected above the laboratory reporting limit
BRL	Parameter consists of multiple isomers and were not detected above the laboratory reporting limit
1	Parameter reported at a concentration greater than applicable regulatory standard/criterion

Notes:
µg/l = micrograms per liter

CHARTS

Chart 1: Summary of Tetrachloroethylene Concentrations: EPA-EXT-02
March 1, 2020 - December 31, 2020

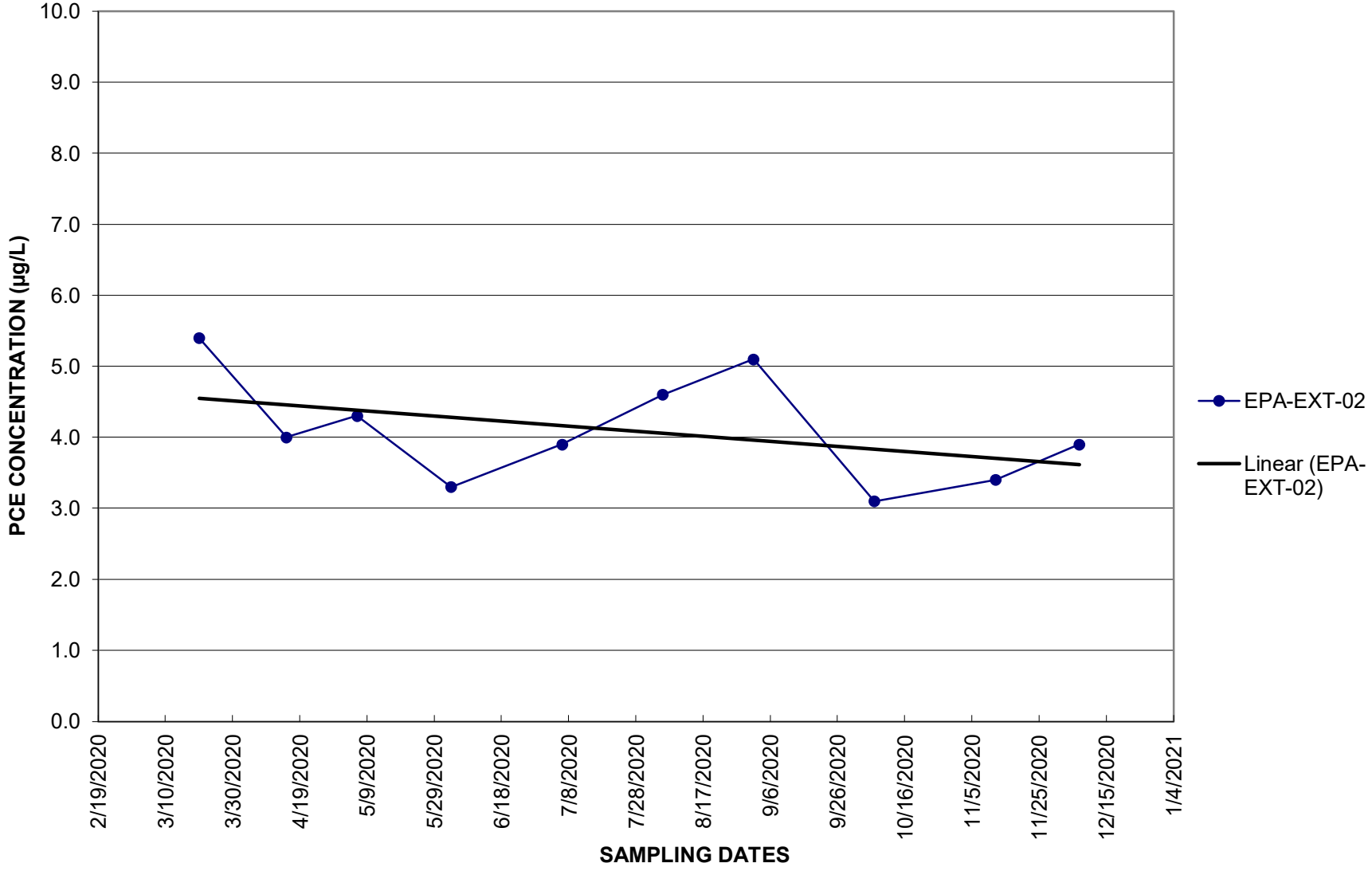
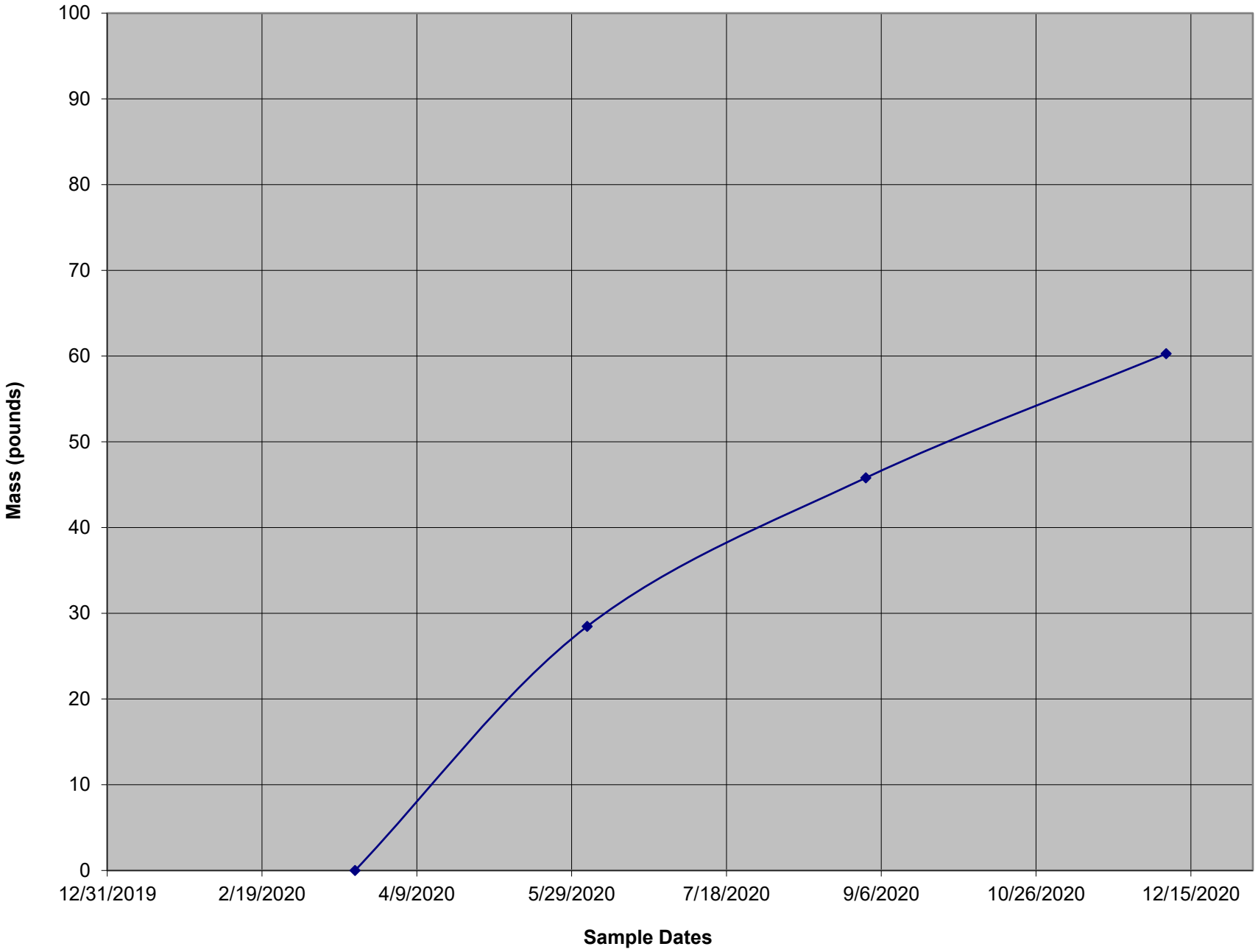


Chart 2: SVE Cummulative Mass Removal

March 1, 2020 - December 31, 2020



Appendix A
IC/EC Property Owner Survey

Enclosure 1
Institutional and Engineering Controls - Property Owner Survey

Site Details **Box 1**

Site No. **130072**

Site Name Stanton Cleaners

Site Address: 110 Cutter Mill Road Zip Code: 11021
City/Town: Great Neck
County: Nassau
Site Acreage: 0.4

Reporting Period: December 31, 2017 to December 31, 2020

	YES	NO
1. Is the information above correct?	X	
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		X
If you answered YES to questions 2, 3 or 4, include documentation with this form.		
5. Is the site currently undergoing development?		X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Industrial	X	
7. Are all Institutional Controls (ICs) in place and functioning as designed?	X	

Signature of Property Owner

11/23/2020
Date

SITE NO. 130072 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
2-376-8	Plaza Gate LLC	Monitoring Plan Site Management Plan O&M Plan

EPA ROD calls for groundwater use restrictions.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
2-376-8	Groundwater Treatment System Vapor Mitigation Air Sparging/Soil Vapor Extraction

-Groundwater Extraction and Treatment System
-Operation of the Source Control SVE System, including vapor-phase discharge treatment as necessary
-A groundwater monitoring well network currently includes fifteen (15) observation wells.

Box 5

Periodic Review Report (PRR) Survey Statements

For each Institutional or Engineering control listed in Boxes 3 and/or 4, by checking "YES" below I believe all of the following statements to be true:

(a) the Institutional Control(s) and/or Engineering Control(s) employed at this site remain unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control; and

(d) if a Site Management Plan (SMP) exists, nothing has occurred that would constitute a violation or failure to comply with the SMP for this Control.

YES	NO
☒ X	☐

11/23/2020

Signature of Property Owner — Date