THIRD FIVE-YEAR REVIEW REPORT FOR
SMITHTOWN GROUNDWATER CONTAMINATION SUPERFUND SITE
SUFFOLK COUNTY, NEW YORK

Prepared by

U.S. Environmental Protection Agency
Region 2
New York, New York

Evangelista, Pat

Digitally signed by Evangelista, Pat
Date: 2020.11.20 13:23:34 -05'00'

Pat Evangelista, Division Director
Superfund and Emergency Management Division

See Signature Block

Date

Table of Contents

LIST OF ABBREVIATIONS & ACRONYMS

COC	Contaminant of Concern
EPA	United States Environmental Protection Agency
FYR	Five-Year Review
ICs	Institutional Controls
MCL	Maximum Contaminant Level
PCE	Tetrachloroethylene
RAO	Remedial Action Objectives
ROD	Record of Decision
RPM	Remedial Project Manager
SCDHS	Suffolk County Department of Health Services
SCWA	Suffolk County Water Authority
VOC	Volatile Organic Compounds

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act Section 121, consistent with the National Contingency Plan (40 CFR Section 300.430(f)(4)(ii)) and considering EPA policy.

This is the third FYR for the Smithtown Groundwater Contamination Superfund Site (the site). The triggering action for this policy review is the completion date of the previous FYR, June 23, 2016. The FYR has been prepared due to the fact that the remedial action will not leave hazardous substances, pollutants or contaminants on site above levels that allow for unlimited use and unrestricted exposure but requires five or more years to complete.

The site consists of one operable unit, which is addressed in this FYR.

The site FYR was led by Sherrel Henry, EPA Remedial Project Manager. Participants included: Diana Cutt, EPA hydrogeologist, Nicholas Mazziotta, EPA human health risk assessor, Charles Nace, EPA ecological risk assessor, Shereen Kandil, EPA community involvement coordinator, Pietro Mannino, Western New York Remediation Section Chief.

Site Background

The site includes an area of contaminated groundwater within the Village of Nissequogue, Village of Head of the Harbor and the Hamlet of St. James, all in the Town of Smithtown, Suffolk County, New York (see Figure 1). The site is bounded to the north by Stony Brook Harbor, to the south by Edgewood Avenue and Route 25 A, to the west by Nissequogue River, and to the east by Hitherbrook Road. The contamination of residential wells in the area was documented by extensive residential well sampling performed by the Suffolk County Department of Health Services (SCDHS) in 1997 and by EPA in 1998.

While commercial and or residential septic systems were suspected to have been the source of the groundwater contamination, no specific facility was identified as the source of site contamination at the time of the listing of the site on the National Priorities List (NPL) in January 1999, so the site was listed as an area-wide groundwater contamination site.

Prior to the discovery of contaminated groundwater, residents of both villages used private wells for both drinking and irrigation. Currently, the majority of the residences within the site are connected to the public water supply. Water is provided by the Suffolk County Water Authority (SCWA) and the St. James Water Authority.

The predominant land use within the boundaries of the site is residential (single family). A horse farm is located within the north-central portion of the site along Moriches Road. The Nature Conservancy-Long Island Chapter owns a parcel of property, approximately 67 acres in size, in the central portion of the site. Limited commercial retail, office development (including gasoline stations and strip malls) and a high school are located south of the residential area. The more densely developed residential and commercial retail districts of St. James are located less than one-quarter mile from the site, south of the Port Jefferson Branch of the Long Island Railroad. Future use of the site is expected to remain unchanged.

The wells at the site are within the unconfined Upper Glacial/Magothy aquifer unit. The aquifer is approximately 500 feet thick; the depth to the water table ranges from less than 5 feet to 200 feet below ground surface. The regional flow is toward the north from the business/retail area towards the predominantly residential area; however, the two major bodies of water, the Nissequogue River and Stony Brook Harbor induce flow to the west and east, respectively.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Smithtown Groundwater Contamination Superfund Site		
EPA ID: NY0002318889		
Region: 2	**State:** NY	**City/County:** Smithtown/ Suffolk County

SITE STATUS	
NPL Status: Final	
Multiple OUs? No	**Has the site achieved construction completion?** Yes

REVIEW STATUS
Lead agency: EPA ***[If "Other Federal Agency", enter Agency name]*:**
Author name (Federal or State Project Manager): Sherrel Henry
Author affiliation: EPA
Review period: 6/12/2016 - 11/17/2020
Date of site inspection: 11/16/2020
Type of review: Policy
Review number: 3
Triggering action date: 6/23/2016
Due date *(five years after triggering action date)*: 6/23/2021

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

Following the listing of the site on the National Priorities List, EPA performed a remedial investigation (RI) at the site from 1999 through 2005. The results from the analysis of environmental samples taken during the RI indicated that the groundwater was contaminated with PCE, trichloroethylene (TCE) and arsenic. The baseline human health risk assessment concluded that an unacceptable risk existed for future residents' consumption of groundwater; this was primarily driven by arsenic, PCE and TCE concentrations in the groundwater.

A screening level ecological risk assessment was also conducted to determine if risks existed to ecological receptors in the Nissequogue River and Stony Brook Harbor. Results of the screening level ecological risk assessment process indicated that the potential exists for ecological risk at the site resulting from exposure to chemicals detected in site sediment and surface water; however, these contaminants were metals and Polycyclic aromatic hydrocarbons (PAHs) which were not contaminants found in the groundwater.

Response Actions

In 1997, the Suffolk County Department of Health Services (SCDHS) collected samples from approximately 150 homes throughout the area of the site. Analytical results from these samples indicated that 23 residences were contaminated with tetrachloroethylene (PCE) at concentrations exceeding the State and Federal maximum contaminant level (MCL) of 5 micrograms per liter (µg/L). Four of these residences had PCE concentrations exceeding EPA's Removal Action Level (RAL) of 70 µg/L. As a follow-up to the SCDHS sampling, in April 1998, EPA collected 330 samples from 295 private wells to further delineate the extent of PCE contamination. Based on the SCDHS and EPA analytical data, a total of 35 residential wells were identified as contaminated with PCE (or its breakdown products) at concentrations above the Federal MCLs. The RAL for PCE was exceeded in six homes. The SCDHS advised all affected residents not to use the well water for drinking or cooking purposes and to limit exposure through direct contact. In April 1998, EPA began the delivery of bottled water on an emergency basis to the affected homes where the RAL was exceeded. On July 23, 1998, an EPA Action Memorandum was signed that authorized Removal Action activities to be conducted at the site. EPA provided the service connection to the public supply from the SCWA distribution system to the household water distribution system at residences where the Federal MCL was exceeded and where public water was available. Existing wells were disconnected. At residences where the Federal MCL was exceeded and public water was not available, EPA installed individual household granular activated carbon treatment systems or upgraded the existing treatment systems installed independently by the residents.

In 1998, EPA collected additional samples from several hundred private wells in the Smithtown area. As a result of this sampling, EPA provided hookup to the existing public water supply or treatment at the tap for 39 residences with PCE levels in private wells above or equal to 5 µg/L.

SCDHS sampled 11 current and former commercial facilities located south-southeast of the contaminated wells from November 1997 through April 1998 to identify potential sources of the contaminated groundwater. These investigations included the installation and subsequent sampling of test wells in the area of these facilities. Each facility utilizes a private sanitary sewage disposal system consisting of septic tanks, cesspools/leaching pits, and/or other on-site wastewater disposal. Sample results showed detections of a number of VOCs, suggesting that several of the suspected source facilities were discharging hazardous wastes to the subsurface through their septic systems. Concentrations of PCE in liquid samples ranged from nondetectable levels to 65,000,000 µg/L. PCE in sludge samples ranged from non-detectable levels to 160,000 µg/L. At the direction of SCDHS, the septic systems were cleaned out subsequent to the 1997-1998 sampling. SCDHS issued letters to each property owner that clean outs were adequate and that no further action was necessary.

In an effort to identify additional potential source areas, in the Spring of 2003, groundwater screening using vertical profile wells (VPW) was performed by EPA at the 11 locations. Twenty-five VPW groundwater screening samples were collected. The groundwater Federal MCL screening criteria for Site-related chlorinated VOCs were exceeded at only one location, at which a monitoring well was installed. Septic system sludge and wastewater samples were also collected. The resulting data indicates that waste handling practices were improved at the 11 facilities since septic systems were cleaned out in the late 1990's and that these facilities are not currently contributing contamination to the groundwater.

Remedy Selection

A Record of Decision (ROD) was issued by EPA in September 2005 documenting the selected remedial action for the site.

The following remedial action objectives (RAO) for groundwater were established for the site:

- Prevent or minimize potential current and future human exposures including ingestion and dermal contact with volatile organic compounds (VOCs)-contaminated groundwater that exceeds Federal and State drinking water standards, and,
- Restore groundwater to levels which meet Federal and State drinking water standards within a reasonable time frame.

A RAO for surface water was also developed to verify that no significant impact on surface water quality will occur from VOC contamination reaching the Nissequogue River and Stony Brook Harbor.

The major components of the remedy include:

- Approximately 270 homes within the affected area of the site will be connected to either the SCWA or St. James Water District for their future potable water needs. This action will provide the physical connection from the houses to the water mains near the houses. After hookup to the water mains, the residential wells will be properly abandoned (in accordance with New York State requirements) to eliminate possible risk to human health.

- No active groundwater remedy is being utilized. However, aquifer restoration is anticipated to occur within a reasonable time frame based on natural processes such as dispersion, dilution and volatilization. Long-term monitoring to ensure aquifer restoration will include groundwater and surface water sampling. Surface water samples will be collected in select locations along the Nissequogue River and Stony Brook Harbor. Groundwater will be sampled from selected monitoring wells to monitor the contaminant concentrations and migration over time. Additional monitoring wells will be installed as necessary to allow for effective monitoring of the contamination.

- Institutional controls such as groundwater use restrictions (through well drilling permit restrictions) will be utilized to prevent future use of contaminated groundwater.

A review of site conditions will be conducted no less often than once every five years using data obtained through the groundwater sampling program. The site reviews will include an evaluation of the extent of contamination and an assessment of contamination migration and attenuation over time. The long-term monitoring program may be modified, if necessary, based on the monitoring results.

Status of Implementation

Remedial construction activities commenced on September 15, 2005, when a Task Order was opened with EPA's removal contractor, WRS Infrastructure and Environment, Inc. (WRS). EPA and WRS mobilized to the site on November 15, 2005. The ROD estimated that there were 270 homes within the area of remediation. EPA subsequently determined that there were 692 residences within the remedial area. In addition, EPA determined that 581 of these residences were already connected to the public-water supply. This was accomplished through consultation with the SCWA, by confirmation through physical inspection (presence of water meter), by consultation with homeowners (either by telephone or in person) and through responses to EPA mailings to homeowners.

EPA provided lateral water lines and service connections to 79 homes within the remedial area. The lateral water lines and service connections were installed by subcontractors to WRS, including Suffolk Water Connections, We Dig Long Island and Asplundh. These water lines were installed either by directional drilling, air missile or trenching.

In addition, EPA entered into a contract through WRS with SCWA to extend the water main on Smith Lane in order to connect several homes that were not serviced by the existing main. SCWA extended the existing main to the end of Smith Lane and WRS subcontracted the installation of the lateral water lines and service connections.ost residences were connected to the public water supply provided by SCWA and just a few homes were connected to the St. James Water District. Overall, thirty-two (32) residences declined to be connected by EPA to the public water supply. These residents informed EPA of their intent to decline either through a form supplied by EPA, by telephone or personal interview with EPA personnel. Residents declined to be connected to the public water supply for various reasons, including having a preference for well water. EPA issued a Preliminary Close-out Report that documented the completion of the residential hookups in September 2006 and the Remedial Action report was issued in September 2009.

Subsequent to the September 2006 Preliminary Close-out Report, several residents that had previously rejected hookups, requested connection s to the public-water supply. In addition, property ownership changed at several residences and some of these new owners requested a connection to the public-water supply. As a result, EPA connected 10 additional residences to the public-water supply. A total of 89 of the 111 eligible homes were connected to date. Any additional connections will need to be performed by the property owner in coordination with the water purveyor.

Institutional Controls Implementation

IC Summary Table

Table 1: Summary of Planned and/or Implemented ICs

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Groundwater	Yes	Yes	Groundwater	Restrict future groundwater use at the site	ICs in the form of existing state and local regulations will be relied upon to restrict future groundwater use at the site. Specifically, the SCDHS regulations that require new residences and businesses to hook up to public water supplies whenever public water mains are reasonably available. Where such mains are not available, the SCDHS regulations require proposed wells for new residences and businesses to be tested for water quality prior to use. For certain contaminant ranges, appropriate treatment is to be provided. Application of these regulations should minimize the potential for exposure to contaminated drinking water.

Systems Operations/Operation & Maintenance

A long-term groundwater and surface water monitoring program has been instituted to collect data on contaminant concentrations and movement at the site. Groundwater samples are collected from eleven existing monitoring wells and surface-water samples are collected from Stony Brook Harbor and the Nissequogue River. From 2009 to 2015 sampling was conducted on a biennial basis. The sampling is now being conducted annually and samples are analyzed for VOCs using low detection limit analytical methods.

Potential site impacts from climate change have been assessed, and the performance of the remedy is currently not at risk due to the expected effects of climate change in the region and near the site.

III. PROGRESS SINCE THE LAST REVIEW

Table 2: Protectiveness Determinations/Statements from the 2016 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1	Protective	The remedy at the Smithtown Groundwater Contamination Superfund site is protective of human health and the environment.
Sitewide	Protective	The remedy at the Smithtown Groundwater Contamination Superfund site is protective of human health and the environment.

There were no issues and recommendations identified in the last FYR.

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Involvement & Site Interviews

On September 22, 2020, EPA Region 2 posted a notice on its website indicating that it would be reviewing site cleanups and remedies at Superfund sites in New York and New Jersey, Puerto Rico and the U.S. Virgin Islands, including the Endicott Well Field Superfund site. The announcement can be found at the following web address: https://www.epa.gov/superfund/R2-fiveyearreviews.

In addition, to this notification, a notice of the commencement of the FYR was sent to local public officials. The notice was provided to the Town of Smithtown by email on November 2, 2020, with a request that the notice be posted in municipal offices and on the village webpages. The purpose of the public notice was to inform the community that EPA would be conducting a FYR to ensure that the remedy implemented at the site remains protective of public health. In addition, the notice included contact information, including addresses and telephone numbers, for questions related to the FYR process or the site.

Once the FYR is completed, the results will be made available on EPA's Smithtown site webpage (www.epa.gov/superfund/smithtown-groundwater) and at the local site repository, Smithtown Library, Smithtown Main Building, One North Country Road, Smithtown, New York 11787 and the EPA Region 2, Superfund Records Center, 290 Broadway, 18th Floor, New York, NY 10007.

Data Review

EPA began conducting groundwater monitoring at the site in April 2009. From 2009 to 2015, EPA's Lab Services and Applied Sciences Division collected samples from about 11 monitoring wells and two surface water locations on a biennial basis (2009, 2011, 2013, and 2015). Since 2016, sampling has been conducted annually. This five-year review covers the sampling period from 2016 through 2019. The monitoring well network consists of monitoring well (MW)-1S, MW-1I, MW-4S, MW-4I, MW-4D, MW-5S, MW-5I, MW-6S, MW-6I, MW-E, and MW-C (Figure 2). Monitoring wells are screened in the Upper Glacier and Magothy Aquifers and water level data indicate some variations in groundwater flow patterns specifically in the direction of surface water bodies. The predominant direction of groundwater flow is to the north/northwest direction, toward Long Island Sound. On a smaller scale, groundwater flow is complex because of the influence of surface water bodies, such as the Nissequogue River and Stony Brook Harbor (Figure 3). Since these two surface water bodies act as groundwater discharge points, one sample is collected from each location (NR-1, SBH-1).

Groundwater

The contaminants of concern identified at the site were arsenic, PCE and its degradation products. In 2009, arsenic was determined to be associated with background concentrations and is no longer included in the sampling. For this reason, samples have been strictly analyzed for trace level VOCs since 2009. Groundwater data collected during this review period indicates that VOCs were either not detected (nondetect) or detected at levels below their respective New York State standards or Federal MCLs at all monitoring well locations, with the exception of PCE (see Table 3). In 2016, PCE was detected above the State standard and Federal MCL (5 ug/L) in monitoring wells MW-4D, MW-5S and MW-6S at concentrations of 6 ug/L, 6.8 ug/L and 7.0 ug/L, respectively. In 2017, PCE was only detected above the State standard and Federal MCL in monitoring wells MW-4D and MW-5S, the concentration at both these wells was 5.3 ug/L. In 2018, PCE was detected above the State standard and Federal MCL in MW-6S at 5.3 ug/L. In 2019, PCE was not detected in any monitoring wells above the State standard and Federal MCL.

Figures 3-5 shows PCE concentrations graphed over time for MW-4D, MW-5S and MW-6S.

Given the historically low PCE concentrations in these three monitoring wells, a Mann-Kendall statistical analysis was previously conducted on data from MW-4D, MW-5S and MW-6S to determine if there were discernable trends in PCE concentrations. As part of this effort, three analyses with different data sets were conducted (2011-2019, 2013-2019 and 2015-2019). The analysis had indicated that PCE concentrations in MW-4D and MW-5S show a decreasing trend and those in MW-6S showed no trend. As depicted in Figure 3-5, PCE concentrations from the 2019 groundwater sampling event were below the State standards and Federal MCLs at each of the monitoring wells. At least two additional rounds of groundwater sampling will occur to evaluate whether MW-6S, MW-4D and MW-5S remain below cleanup levels.

Surface water

Surface water data from Stony Brook Harbor and Nissequogue River has consistently shown no detections of contaminants above the reporting levels; suggesting that further monitoring of the surface water bodies is not warranted.

Site Inspection

The inspection of the site was conducted on 11/16/2020. In attendance was Sherrel Henry, EPA-RPM. The purpose of the inspection was to assess the protectiveness of the remedy. No issues or adverse conditions were observed.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

The residents affected by the groundwater contamination were provided with water lines and service connections in order to ensure protection of public health. Appropriate institutional controls were also put in place to restrict future access to contaminated ground water. These actions have ensured that the remedy is currently preventing any complete pathway for exposure.

Groundwater data collected during the most recent sampling event, 2019, indicates that all VOCs were below Federal MCLs. The larger data set for the entire review period indicates that VOCs were either not detected (nondetect) or detected at levels below their respective New York State standards or Federal MCLs at all monitoring well locations, with the exception of PCE (see Table 3). In 2016, PCE was detected above the State standard and Federal MCL in monitoring wells MW-4D, MW-5S and MW-6S at concentrations of 6 ug/L, 6.8 ug/L and 7.0 ug/L, respectively. In 2017, PCE was only detected above the State standard and Federal MCL in monitoring wells MW-4D and MW-5S, the concentration at both these wells was 5.3 ug/. In 2018, PCE was detected above the State standard and Federal MCL in MW-6S at 5.3 ug/L. In 2019, PCE was not detected in any monitoring wells above the State standard and Federal MCL.

Figures 3-5 show PCE concentrations graphed over time for MW-4D, MW-5S and MW-6S. A Mann-Kendall statistical analysis was conducted on data from MW-4D, MW-5S and MW-6S to determine if there were discernable trends in PCE concentrations. The analysis indicated that PCE concentrations in MW-4D and MW-5S show a decreasing trend and those in MW-6S showed no trend. The most recent round of data from 2019 indicate that the aquifer has been restored to drinking water conditions; however, given that this has been demonstrated in one monitoring event thus far, additional monitoring is warranted to confirm that the groundwater criteria continue to be met.

Surface water data indicate that groundwater contaminant concentrations discharging to surface water do not have an adverse impact on the surrounding water bodies.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

There have been no changes in the physical conditions of the site over the past five years that

would change the protectiveness of the remedy. The human health risk assessment concluded that future residential exposure to contaminants in groundwater would result in human health risk and hazard exceeding EPA threshold criteria. The site-related contaminants of concern (COCs) identified in the 2005 ROD include PCE and TCE. The exposure assumptions, pathways, and receptors that were used to estimate the potential risks and hazards to human health followed the Risk Assessment Guidance for Superfund used by the Agency. Although specific parameters may have changed since the time the risk assessment was completed, the process that was used remains valid.

The ROD established the Federal MCLs and New York State Department of Environmental Conservation (NYSDEC) Class GA groundwater standards as the cleanup criteria for the COCs in groundwater, which remain valid. The RAOs established in the ROD, discussed in Section II, also remain valid and the selected remedy is protective of human health. Residential connections to the public water supply have effectively eliminated the potential for exposure through drinking water uses. Although residents from 22 of the 111 eligible homes refused connection to the public water supply, concentrations of PCE and TCE have continued to decline to concentrations below the cleanup goals. In addition, no new private wells are expected as institutional controls have been implemented to restrict future groundwater use at the site.

An exposure pathway that was not considered in the original assessment is vapor intrusion into indoor air. However, since the VOC concentrations in groundwater are significantly less than the corresponding EPA risk-based vapor intrusion screening values for this media, which are protective of indoor air exposures, the potential for vapor intrusion issues related to this site are extremely unlikely.

The screening level ecological risk assessment conducted to evaluate risks to ecological receptors in the Nissequogue River and Stony Brook Harbor also followed the general risk assessment practices at the time it was performed and remain acceptable. Although potential risks were identified for sediment and surface water exposure, the contaminants driving that risk were metals and PAHs which are not associated with groundwater contamination at the site. Furthermore, surface water data from Stony Brook Harbor and Nissequogue River has consistently shown no detections of site-related COCs above the reporting levels.

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No other information has come to light that would call into question the protectiveness of the remedy. There have been no changes at the site as the result of natural disasters or climate change impacts.

VI. ISSUES/RECOMMENDATIONS

There are no recommendations or follow-up actions resulting from this FYR.

VII. PROTECTIVENESS STATEMENT

Protectiveness Statement(s)		
Operable Unit: OU1	*Protectiveness Determination:* Protective	*Planned Addendum Completion Date:* Click here to enter a date
Protectiveness Statement: The remedy is protective of human health and the environment		

Sitewide Protectiveness Statement	
Protectiveness Determination: Protective	*Planned Addendum Completion Date:* Click here to enter a date
Protectiveness Statement: The implemented remedy is protective of human health and the environment	

VIII. NEXT REVIEW

The next FYR report for the Smithtown Groundwater Contamination Superfund Site is required five years from the completion date of this review.

Attachments

Figure 1 Site Location Map
Figure 2 Groundwater Monitoring Well Location Map
Figure 3-5 PCE trends in select wells where concentrations were previously exceeding the Federal MCL of 5 ug/L

Table 1 Site Chronology
Table 2 Documents, Data and Information Reviewed in Completing the Second Five- Year Review
Table 3 Groundwater Sampling PCE Results

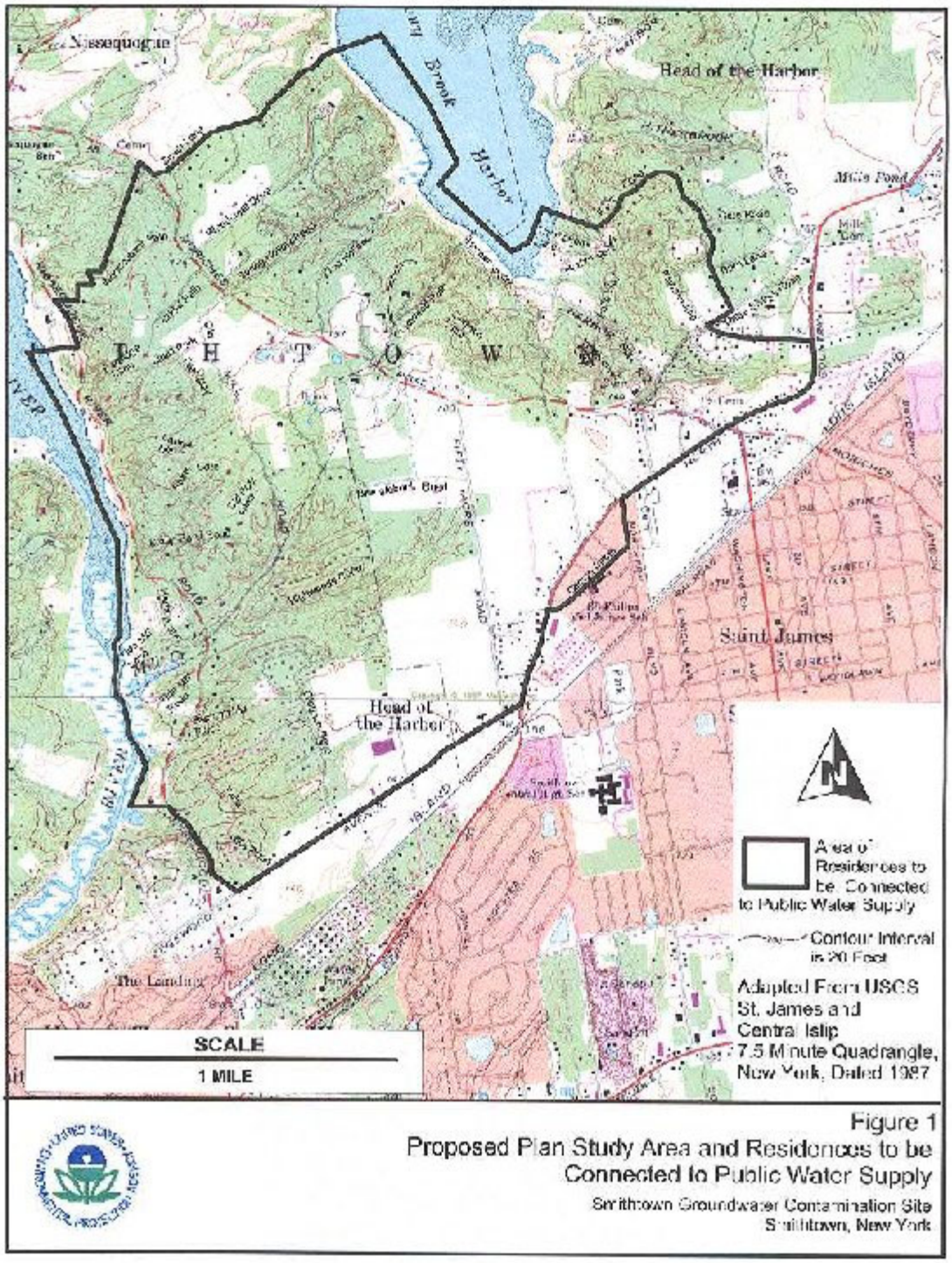

Figure 1—Site Location Map

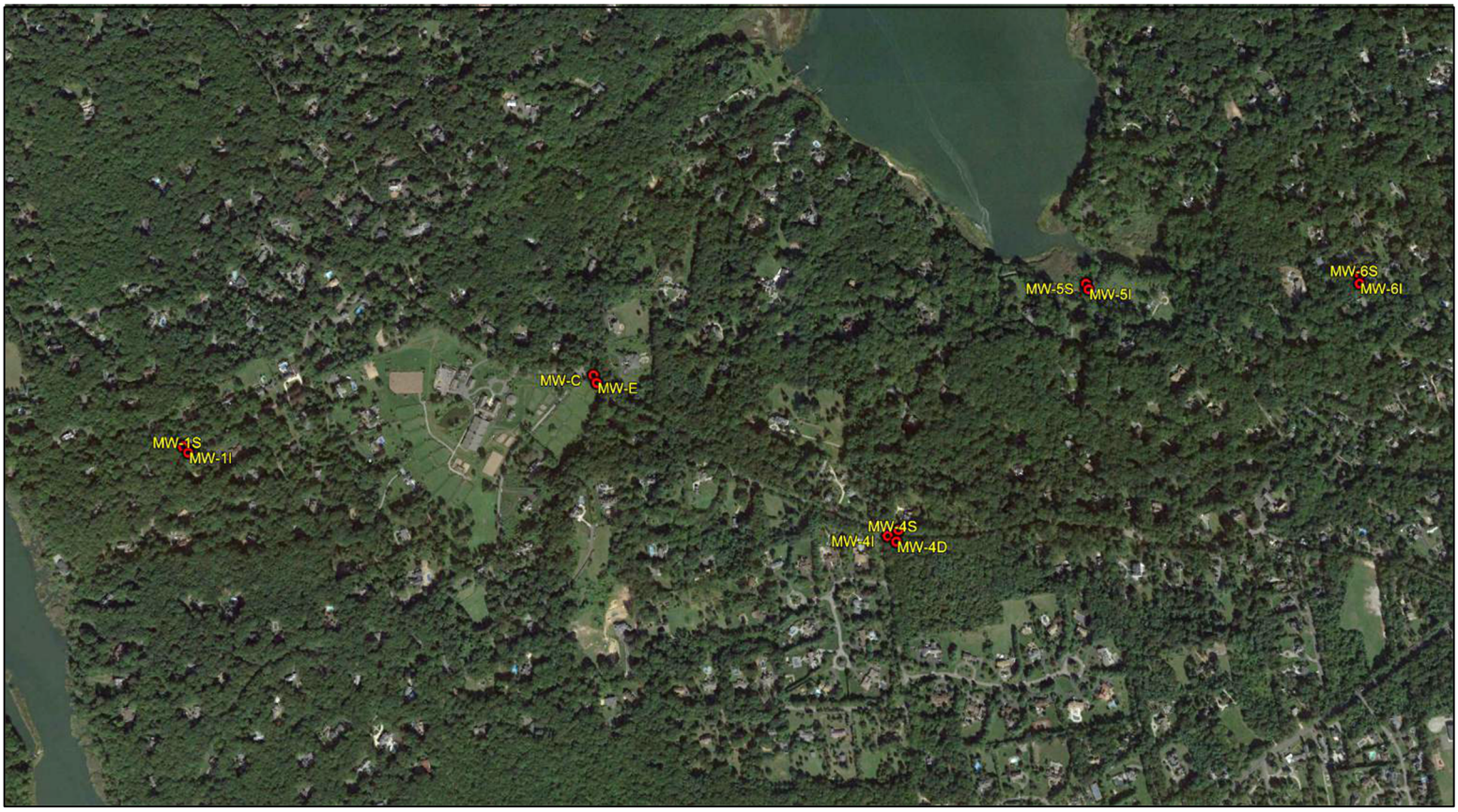

Figure 2—Groundwater Monitoring Well Locations

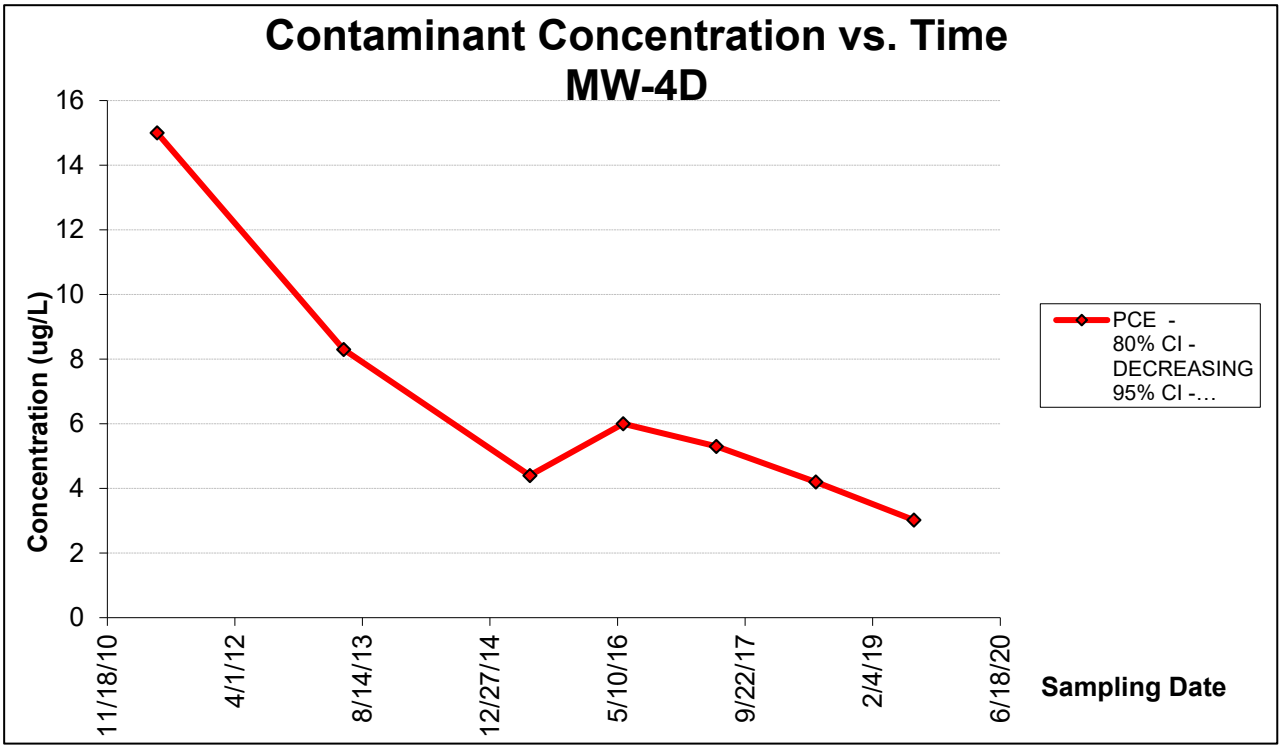

Figure 3 – PCE Concentration Trends for MW 4-D

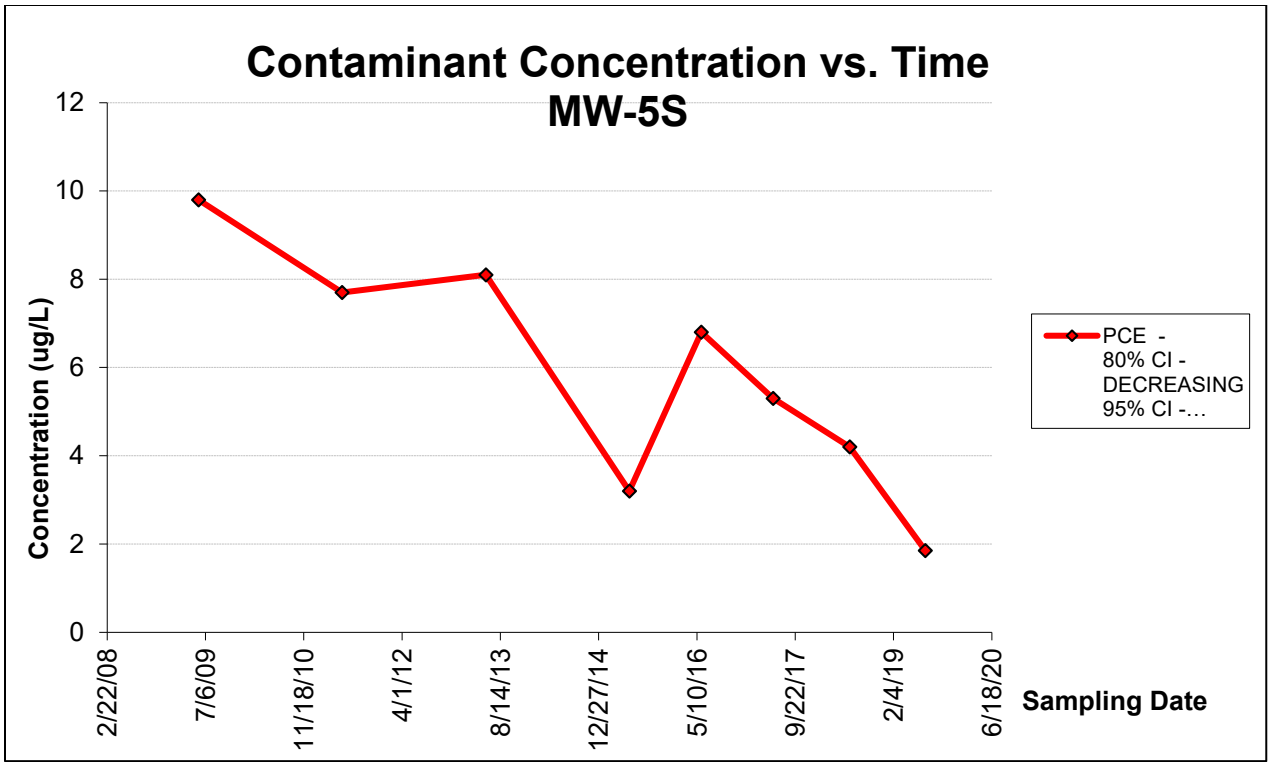

Figure 4 – PCE Concentration Trends for MW-5S

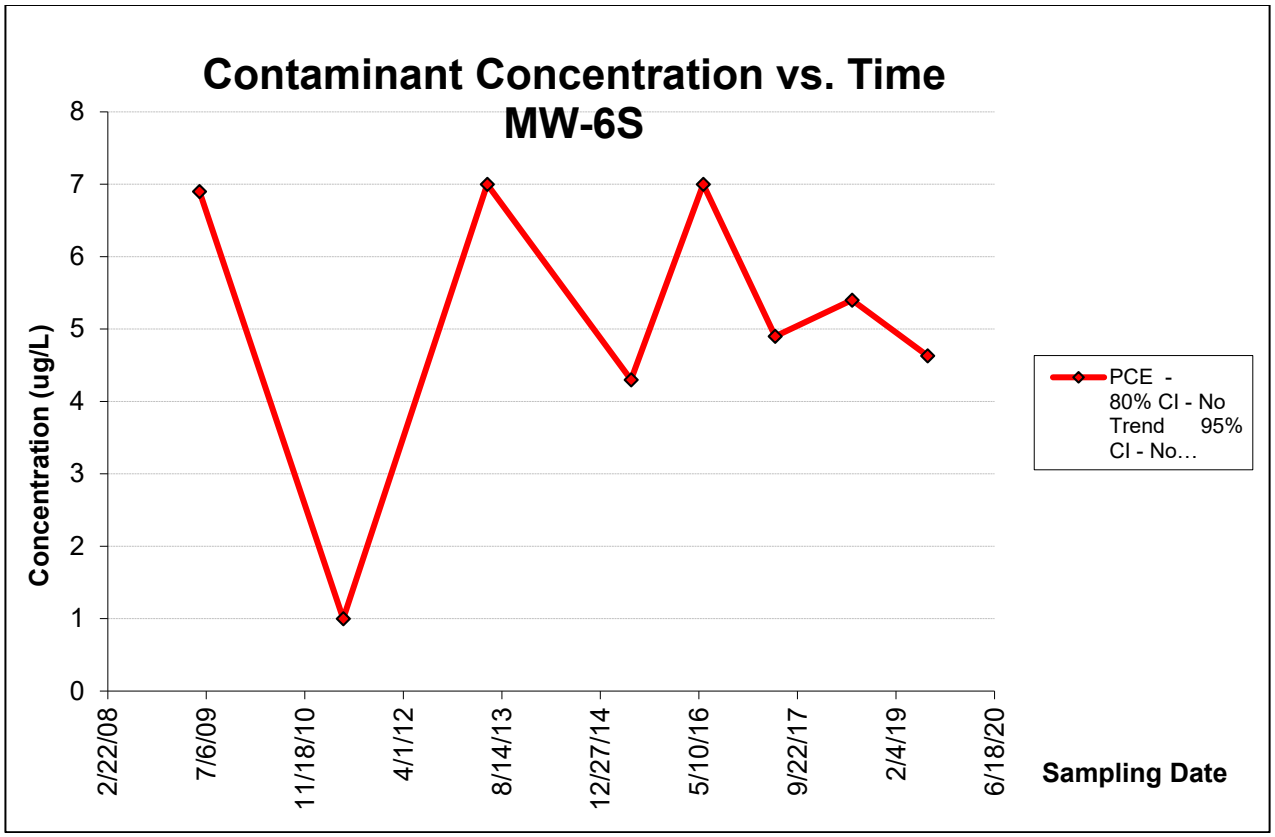

Figure 5 – PCE Concentration Trends for MW-6S

Table 1: Site Chronology

EVENT	DATE
SCDHS conducts private well survey	1997
NYSDEC requests assistance in funding alternate-water supply	October 1997
EPA begins removal action	April 1998
Site placed on NPL	January 1999
RI/FS activities initiated by EPA	March 2000
RI/FS documents released by EPA	September 2004
ROD issued by EPA	September 2004
Remedial construction activities begin	September 2005
Remedial construction completed	September 2006
Final construction site inspection conducted by EPA	September 2006
EPA issues PCOR	September 2006
EPA conducts first five-year review	September 2011
EPA conducts second five-year review	June 2016

Table 2: Documents, Data and Information Reviewed in Completing the Third Five-Year Review

DOCUMENT	DATE
Record of Decision	September 2004
Preliminary Close-Out Report	September 2006
Interim Remedial Action Report	September 2009
Second Five-Year Review	June 2016
Superfund Support Team Sampling Report	April 2016
Superfund Support Team Sampling Report	June 2017
Superfund Support Team Sampling Report	June 2018
Superfund Support Team Sampling Report	July 2019

Table 3: Smithtown Groundwater Sampling PCE Results *all concentrations are in µg/L*				
Monitoring Wells	**2016** *µg/L*	**2017** *µg/L*	**2018** *µg/L*	**2019** *µg/L*
MW-1S	0.28	ND	ND	ND
MW-1I	0.45	ND	ND	ND
MW–4S	ND	ND	ND	ND
MW–4I	**6.00**	0.52	ND	ND
MW–4D	ND	**5.30**	4.20	3.02
MW–5S	**6.80**	**5.30**	ND	1.85
MW–5I	0.53	ND	ND	ND
MW–6S	**7.0**	ND	**5.4**	4.63
MW–6I	ND	ND	ND	ND
MW–C	ND	ND	ND	ND
MW–E	ND	0.68	ND	ND

ND=not detected

Bolded values indicate exceedance of the PCE Federal MCL and NYSDEC Class GA groundwater standard of 5 ug/L