388 Bridge Street
Brooklyn, New York

NYSDEC BCP Site No. C224134

ANNUAL PERIODIC REVIEW REPORT AND ENGINEERING CERTIFICATION

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EXECUTIVE SUMMARY

This Periodic Review Report (PRR) documents the activities subject to the Site Management Plan (SMP) for 388 Bridge Street (Site) for the reporting period (January 3, 2019 to January 3, 2020). The Site (BCP No. C224134) was remediated under the Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC). The engineering and institutional controls (EC/IC) are maintained in accordance with the NYSDEC-approved SMP.

The purpose of this PRR and Annual Certification is to document on-going Site management activities associated with the permanent ECs and ICs in place at the Site, and to certify that these controls are being maintained in accordance with the SMP.

The Site management activities conducted in 2019 include the following:

- Routine system inspections of the on-Site SVE system;
- Routine system check of the sub-slab depressurization system (SSDS), a component of the vapor mitigation system implemented at the Site;
- Routine system check of the off-Site ECs including the SSDS and basement pressurization system (BPS), components of the vapor mitigation systems implemented at Saint Joseph's High School (SJHS);
- Semi-annual groundwater sampling and monitoring;
- Visual inspection of the basement floor and perimeter for signs of vapor intrusion;
- Visual inspection of the concrete slab to determine the absence of cracks and fissures.

The implementation of remedial action, Site management activities, and continuous media monitoring were performed by FLS under direct supervision of Arnold F. Fleming, P.E. It was determined that ECs and ICs remain effective and continue to be protective of public health and environment. The SVE data collected during monitoring demonstrated that the concentration of tetrachloroethylene (PCE) in the soil vapor has reduced significantly since system start-up in 2013. Groundwater samples have been collected on a semi-annual basis, starting in March 2016. PCE

was the only chlorinated VOCs exceeding NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values (TOGS) during the most recent groundwater monitoring event conducted in May 2019 (report dated July 2019). PCE concentrations decreased compared to the last sampling event and remain well below pre-treatment maximum concentrations.

Compliance with the EC/IC Plan is further discussed in Section 3. Compliance with the media monitoring plan is discussed in Section 4 and compliance with the Operation and Maintenance of the ECs is discussed in Section 5. Conclusions with recommendations are provided in Section 6.

1.0 SITE OVERVIEW

1.1 Site Description

The Site is located in the Brooklyn, Kings County, New York and is identified as Block 152 and Lots 1001-1006 (formerly Lots 37 and 118) on the current New York City Tax Map. The Site is an approximately 0.46-acre area bounded by SJHS and a portion of a 5-story commercial building (Lots 33 and 31, respectively) to the north, a fabric discount store (Lot 6) and ASA Institute of Business (Lot 18) to the south, Bridge Street to the east, and Lawrence Street to the west. The Site Location and Layout are included as Figures 1 and 2, respectively. The boundaries of the Site are more fully described in Appendix A - Metes and Bounds. Responsible parties are listed in Table 1.

1.2 Site Development Status

The development on the Site includes the 53-story residential building with retail spaces on the ground floors and parking from the sub cellar to the 3rd floor of the building. Overall building construction on the Site has been completed since the 2017 PRR submittal. The development footprint is a lot line-to-lot line building as shown in Figure 2.

1.3 Nature and Extent of Contamination

Remedial investigations completed at the Site between May 2008 and July 2008 found several underground storage tanks (USTs). NYSDEC spill number #0801499 was opened and then subsequently closed on August 18, 2009 after removal of these USTs. Additional remedial investigations on the Site detected soils indicative of urban fill with elevated levels of semi-volatile organic compounds and metals. Also, elevated levels of chlorinated volatile organic compounds (VOCs) were detected in groundwater and soil vapor samples. Off-Site remedial investigations were completed to determine potential off-Site impacts from the historic dry cleaning tenant which operated on the Site until 1982. The offsite investigations found elevated levels of chlorinated VOCs from the Site at SJHS only.

Of note, a diagnostic testing conducted by FLS in 2015 confirmed that the remaining PCE contamination in soil vapor beneath the building was primarily present in the area of SVE well 2. The SVE system was modified in 2016 to more effectively target the area where soil vapor contamination remains.

1.4 Site Remediation

The Site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index # A2-0623-07-09. which was executed on August 10, 2009. The BCA was amended on July 13, 2010, to correct the Site size, add a survey map, and add R, K & G Associates, LLC as a Remedial Party.

The Site was remediated in accordance with the NYSDEC-approved Remedial Action Work Plan dated April 2012, which enumerated the following remedial activities:

1. Excavation of soil/fill for development purposes. The soil was screened for indications of contamination (by visual means, odor, and monitoring with a photoionization detector) of all excavated soil during intrusive Site work. All remaining soil met Track 2 RUSCOs;
2. Off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
3. Collection and analysis of end-point samples to evaluate attainment of Track 2 RUSCOs;
4. Installation of a SVE system to remove soil vapor above New York State Department of Health (NYSDOH) air guideline values (AGV), as listed in the NYSDOH *Final Guidance for Evaluating Vapor Intrusion in the State of New York, October 2006*;
5. Installation of an active SSDS as a preventative measure from residual contamination at the Site;
6. Construction and maintenance of an engineered composite cover consisting of a vapor barrier and a concrete pressure slab to prevent human exposure to residual contaminated soil/fill remaining under the Site;
7. Monitoring natural attenuation of groundwater;

8. Installation of an active SSDS, BPS, and sealing of the elevator pit at SJHS, which borders the Site to the north, to address off-Site soil vapor contamination; and
9. Development of an SMP for long term management of residual contamination as required by the Environmental Easement, including plans for: (1) ECs /ICs, (2) monitoring, (3) operation and maintenance and (4) reporting.

2.0 REMEDY EVALUATION

The annual inspection of the on-Site ECs, which includes the SSDS, composite cover system, and SVE system, demonstrated that the ECs continue to perform as designed and continue to be protective of human health and the environment.

The groundwater sampling results are included in Table 2 and shows that PCE concentrations continue to decline overall compared to pre-remediation concentrations. The SVE monitoring results are included in Table 3 and demonstrate a large reduction in the concentrations of chlorinated VOCs in soil vapor since system start-up. These data are discussed further in Section 4.

The annual inspection of the off-Site ECs, which include the SSDS and a composite cover system, demonstrated that the off-site ECs also continue to perform as designed and continue to be protective of human health and the environment. The EC details and inspection results are discussed in Section 5.

3.0 INSTITUTIONAL AND ENGINEERING CONTROLS COMPLIANCE

3.1 Institutional Controls

The ICs are non-physical controls, such as Site use restrictions, implemented in order to protect human health and the environment. The SMP requires annual certification of the ICs for the Site to ensure that they continue to be implemented in order to prevent exposure to residual contamination. The ICs for the Site include the SMP, Soils/Materials Management Plan, groundwater use, use restrictions, provisions for deed restrictions and environmental easements, EC/IC plans, and the Operation, Maintenance and Monitoring plan.

3.2 Engineering Controls

The ECs are physical controls employed to contain, stabilize, and monitor residual contamination. Since residual contaminated soil, groundwater, and soil vapor exists beneath the Site, the ECs will continue to remain protecting human health and the environment. The on-Site ECs required by the SMP consist of a SSDS, a SVE system, and a composite cover system. The SSDS will not be operational until the SVE system is fully decommissioned. The active SVE system extracts soil vapors from a limited area where the bulk of the PCE mass remains. The SVE system installed in 2013 was modified in 2016 with the approval of NYSDEC and NYSDOH. Groundwater is monitored at the other areas where soil vapor extractions ceased. Off-Site ECs required by the SMP and implemented at SJHS consist of an active SSDS, BPS, and a composite cover system.

The SMP requires an annual inspection and certification of the ECs to ensure that they continue to perform as designed and continue to be protective of human health and the environment.

3.3 Certification of Engineering and Institutional Controls

The owner is responsible for overseeing, documenting, and certifying that the Site management activities were performed in accordance with the applicable SMP. The annual certifications were performed by Arnold F. Fleming, P.E. on behalf of 384 Bridge Street, LLC. The completed EC/IC Certification Form is provided as Appendix B.

4.0 MONITORING PLAN COMPLIANCE

4.1 Groundwater Monitoring

The majority of the existing groundwater monitoring wells were demolished during building construction. As outlined in the SMP, semi-annual groundwater monitoring is conducted to confirm natural attenuation of chlorinated VOCs in groundwater. Following the modification of the SVE system in January 2016, five of the six SVE wells were converted to groundwater monitoring wells. Of these five, two wells (SVE-MW-3 and SVE-MW-6) were subsequently abandoned as they did not extend into the groundwater table. The SVE and groundwater monitoring well locations are shown on Figure 3.

In 2019, a semi-annual groundwater monitoring event was completed on May 7, 2019. A report summarizing the groundwater monitoring event was prepared by FLS and submitted to NYSDEC on July 17, 2019. In an email dated July 18, 2019, NYSDEC granted approval for a reduction in the groundwater monitoring schedule from semi-annual to annual, due to the relatively low and declining concentrations of site-related chlorinated VOCs. The next annual sampling event is to be conducted in May 2020. A copy of the approval is presented as Appendix E.

4.2 Groundwater Monitoring Results

Since March 2016, groundwater samples were collected on a semi-annual basis and analyzed for VOCs and geochemical parameters including nitrate, nitrite, sulfate, ferrous iron, total organic carbon, and dissolved organic carbon. As mentioned previously, NYSDEC approved a reduction in groundwater monitoring frequency from semiannual to annual in July 2019, and therefore only one monitoring event was conducted in the 2019 calendar year.

As discussed in the July 2019 groundwater monitoring report, PCE was the only contaminant of concern detected at concentrations above the TOGS. The highest concentration of PCE was found in SVE-MW-4 (46.5 µg/L), with SVE-MW-5 and SVE-MW-1 following in descending concentration (36.6 µg/L and 7.3 µg/L respectively). PCE concentrations decreased compared to the last sampling event and remain well below pre-treatment concentrations. Additionally, concentrations of chloroform in monitoring well SVE-MW-4 were detected slightly above TOGS at 7.1 µg/L (the TOGS standard for chloroform is 7.0 µg/L).

4.3 Soil Vapor Monitoring

The soil vapor monitoring was completed in accordance with the SMP. The objectives of the soil vapor monitoring in conjunction with the SVE system on the Site are to (1) track system performance and (2) monitor for carbon breakthrough. Quarterly sampling of soil vapor was conducted at the system prior to the carbon treatment (influent), after the first carbon treatment unit (midstream), and after the second carbon treatment unit (outlet). Samples were collected with 1-liter summa canisters provided by SGS Accutest Laboratories using 2-hour flow regulators and were analyzed for VOCs by EPA Method TO-15.

4.4 Soil Vapor Monitoring Results

The quarterly soil vapor monitoring analytical results shown in Table 3 were reviewed, and compared to the NYSDOH AGVs for PCE and TCE. The analytical results show that concentrations of PCE and TCE above the AGVs remain in the soil vapor beneath the building.

The results and findings of the soil vapor sampling of the SVE system, are summarized below:

- The highest historical concentrations of PCE (39,700 µg/m^3) and TCE (120 µg/m^3) detected at the 2013 SVE system inlet were recorded on July 3, 2013, one week after the system was turned on.
- Overall, the system installed in 2013 effectively removed 87.88 kg of PCE and 0.30 kg of TCE from June 2013 through October 2016. Graphs showing the cumulative mass removal for PCE and TCE are presented in Figure 4 and 5, respectively.
- Sixteen (16) quarterly events have been completed since the modification of the 2016 SVE system. Due to scheduling conflicts during the first quarter, the first sampling event of this calendar year was completed in early second quarter.
- In the most recent sampling event, the SVE inlet readings of PCE and TCE were 1.4 µg/m^3 and non-detect (ND), respectively. When compared to the highest concentrations detected (sample collected July 3, 2013), concentrations of PCE and TCE have been reduced approximately 99.9% and 99.2%, respectively.

- New carbon was installed in the lead and lag carbon vessels on May 24, 2019 following evidence of carbon saturation in the May 2019 sampling event. Spent carbon was disposed of at an approved facility under EPA ID No. NYD981079932.

- As of the date of the last SVE sampling event, December 20, 2019, the modified SVE system has removed a total of 18.01 kg of PCE and 0.09 kg of TCE since 2016 (Figure 6 and 7).

- To date, a total of seventy-one (71) soil vapor sampling (monthly/quarterly) events have been completed. As of the date of the last SVE sampling event, December 20, 2019, a total of 105.88 kg of PCE and 0.54 kg of TCE have been removed and treated from the Site.

5.0 OPERATION AND MAINTENANCE PLAN COMPLIANCE

5.1 Site Inspections

The inspections of the ECs were conducted by FLS on a quarterly basis. FLS inspected the on-Site SVE system, the on-Site and off-Site SSDSs, the on-Site and off-Site composite covers, and the off-Site BPS system. The quarterly inspection reports, which tabulate both SVE system readings and on and off-Site vacuum readings are included as Appendix C. Site and SVE system photographs are included in Appendix D.

The inspections consisted of the following elements:

- Inspection of the on-Site SVE system, including temperature and pressure readings at the system's components;
- Pressure readings were collected at the SVE extraction wells using digital manometer;
- Inspections of the on-Site and off-Site SSDSs including differential pressure readings using digital manometer at each of the monitoring points;
- Inspection of the BPS at the off-Site property (SJHS);
- Inspections of the composite cover systems, including the conditions of the on-Site and off-Site buildings' foundation slab and sidewalls; and
- Inspections of the basement floor and perimeter for signs of moisture intrusion.

5.2 Inspection Results

The ECs for the Site were inspected and continue to perform as designed, protecting human health and the environment. There are no areas where the composite cover systems appeared impaired, compromised or otherwise damaged.

On May 6, 2019, FLS was notified by SJHS maintenance staff that the electric line for the SSDS blower for SJHS was accidently cut by a contractor resulting in loss of power. FLS and Systematic Technologies (Systematic) mobilized to the Site, but were unable to restart the blower. On May 15, 2019 Systematic removed and repaired the blower at their workshop. On May 23, 2019 the blower fan was reinstalled. As outlined in the SMP, start-up testing procedures were reconducted

and found that negative pressure differential at SSDS monitoring locations was equal to or greater than -.0.002 in.-WC and sub-slab depressurization was reestablished at SJHS. A copy of the Corrective Measures Report (CMR) for the event is provided as Appendix F. The system has remained fully operational since the installment of the repaired blower. There were no modifications made to the HVAC system at either the on-Site development building or the off-Site SJHS that would have impacted the SSDSs (or the BPS). The off-Site SSDS and BPS were functioning normally during the time of inspection.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Compliance with the SMP

Based on the evaluation of the inspections and monitoring data, FLS concludes the following:

- The ECs and ICs were in place and remained effective at the Site in 2019.
- The ECs and ICs were in place and remained effective at SJHS in 2019, despite the temporary shutdown due to contractor error.
- The operation and maintenance activities were conducted properly.
- The quarterly soil vapor sampling of the SVE system was properly implemented. There has been a significant reduction in concentrations of PCE and TCE since SVE system start-up in 2013.
- The groundwater sampling was properly implemented and the PCE concentrations are above the TOGS Standard of 5 µg/L. As approved by NYSDEC on July 18, 2019, groundwater sampling frequency has been reduced from semi-annual to annual.

Based on the evaluation of the inspections and monitoring data, FLS recommends the following:

- All ECs and ICs both at the Site and off-Site will continue in operation and monitoring in 2019.
- The soil vapor sampling of the SVE system will continue to monitor system performance, breakthrough of carbon, and potential for conversion to SSDS operation only.
- Groundwater monitoring will continue to be conducted on an annual basis. These results will evaluate the natural attenuation occurring in the subsurface.

6.2 Future PRR Submittals

In accordance with the approved SMP, PRRs will be submitted on an annual basis. The next PRR is due no later than February 4, 2021.

TABLES

Table 1 - Responsible Parties
388 Bridge Street Brooklyn, NY

NYSDEC SITE #	DEVELOPMENT WORK	RESPONSIBLE PARTY
BCP Site C224134	On-Site Building (New Development Building)	384 Bridge Street LLC
	Off-Site Buiding (Saint Joseph's High School)	384 Bridge Street LLC

Table 2 - Groundwater Analytical Results
Semi-Annual Groundwater Report
388 Bridge Street Brooklyn NY

Client Sample ID:			SVE-MW-1							SVE-MW-4							SVE-MW-5						
Lab Sample ID:	Units	NY TOGS Class GA GW Standards	JC17514-1	JC28127-3	JC39116-1	JC51891-1	JC62395-1	JC62395-1	JC87667-1	JC17514-2	JC28127-2	JC39116-2	JC51891-2	JC62395-3	JC62395-3	JC87667-2	JC17514-3	JC28127-1	JC39116-3	JC51891-3	JC62395-2	JC73688-3	JC87667-3
Date Sampled:			3/31/2016	9/20/2016	3/17/2017	9/26/2017	3/14/2018	9/12/2018	5/7/2019	3/31/2016	9/20/2016	3/17/2017	9/26/2017	3/14/2018	9/12/2018	5/7/2019	3/31/2016	9/20/2016	3/17/2017	9/26/2017	3/14/2018	9/12/2018	5/7/2019
Matrix:			Groundwater							Groundwater							Groundwater						
GC/MS Volatiles (SW846 8260C)																							
Acetone	ug/l	-	ND (3.3)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (6.0)	ND (6.0)	ND (3.3)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (6.0)	ND (6.0)	ND (3.3)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (6.0)	ND (6.0)
Benzene	ug/l	1	ND (0.24)	ND (0.14)	ND (0.14)	ND (0.17)	ND (0.17)	ND (0.43)	ND (0.43)	ND (0.24)	ND (0.14)	ND (0.14)	ND (0.17)	ND (0.17)	ND (0.43)	ND (0.43)	ND (0.24)	ND (0.14)	ND (0.14)	ND (0.17)	ND (0.17)	ND (0.43)	ND (0.43)
Bromochloromethane	ug/l	5	ND (0.37)	ND (0.46)	ND (0.46)	ND (0.38)	ND (0.38)	ND (0.48)	ND (0.48)	ND (0.37)	ND (0.46)	ND (0.46)	ND (0.38)	ND (0.38)	ND (0.48)	ND (0.48)	ND (0.37)	ND (0.46)	ND (0.46)	ND (0.38)	ND (0.38)	ND (0.48)	ND (0.48)
Bromodichloromethane	ug/l	-	ND (0.23)	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.22)	ND (0.58)	ND (0.58)	ND (0.23)	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.22)	ND (0.58)	ND (0.58)	ND (0.23)	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.22)	ND (0.58)	ND (0.58)
Bromoform	ug/l	-	ND (0.23)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.42)	ND (0.63)	ND (0.63)	ND (0.23)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.42)	ND (0.63)	ND (0.63)	ND (0.23)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.42)	ND (0.63)	ND (0.63)
Bromomethane	ug/l	5	ND (0.42)	ND (0.46)	ND (0.46)	ND (1.4)	ND (1.4)	ND (1.6)	ND (1.6)	ND (0.42)	ND (0.46)	ND (0.46)	ND (1.4)	ND (1.4)	ND (1.6)	ND (1.6)	ND (0.42)	ND (0.46)	ND (0.46)	ND (1.4)	ND (1.4)	ND (1.6)	ND (1.6)
2-Butanone (MEK)	ug/l	-	ND (5.6)	ND (1.9)	ND (1.9)	ND (4.8)	ND (4.8)	ND (6.9)	ND (6.9)	ND (5.6)	ND (1.9)	ND (1.9)	ND (4.8)	ND (4.8)	ND (6.9)	ND (6.9)	ND (5.6)	ND (1.9)	ND (1.9)	ND (4.8)	ND (4.8)	ND (6.9)	ND (6.9)
Carbon disulfide	ug/l	60	ND (0.25)	ND (0.33)	ND (0.33)	ND (0.23)	ND (0.50)	ND (0.95)	ND (0.95)	ND (0.25)	ND (0.33)	ND (0.33)	ND (0.23)	ND (0.50)	ND (0.95)	ND (0.95)	ND (0.25)	ND (0.33)	ND (0.33)	ND (0.23)	ND (0.50)	ND (0.95)	ND (0.95)
Carbon tetrachloride	ug/l	5	ND (0.22)	ND (0.54)	ND (0.54)	ND (0.34)	ND (0.34)	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.54)	ND (0.54)	ND (0.34)	ND (0.34)	ND (0.55)	ND (0.55)	ND (0.22)	ND (0.54)	ND (0.54)	ND (0.34)	ND (0.34)	ND (0.55)	ND (0.55)
Chlorobenzene	ug/l	5	ND (0.19)	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.24)	ND (0.56)	ND (0.56)	ND (0.19)	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.24)	ND (0.56)	ND (0.56)	ND (0.19)	ND (0.17)	ND (0.17)	ND (0.24)	ND (0.24)	ND (0.56)	ND (0.56)
Chloroethane	ug/l	5	ND (0.34)	ND (0.44)	ND (0.44)	ND (0.59) [a]	ND (0.59)	ND (0.73)	ND (0.73)	ND (0.34)	ND (0.44)	ND (0.44)	ND (0.59) [a]	ND (0.59)	ND (0.73)	ND (0.73)	ND (0.34)	ND (0.44)	ND (0.44)	ND (0.59) [a]	ND (0.59)	ND (0.73)	ND (0.73)
Chloroform	ug/l	7	1.7	1	1.3	ND (0.29)	1.2	2.9	3	0.89 J	1.3	0.93 J	3.6	**10.7**	5.7	7.1	0.79 J	0.85 J	0.71 J	**9.9**	**9.9**	6.5	3.8
Chloromethane	ug/l	5	ND (0.41)	ND (0.96)	ND (0.96)	ND (0.53) [a]	ND (0.53)	ND (0.76)	ND (0.76)	ND (0.41)	ND (0.96)	ND (0.96)	ND (0.53) [a]	ND (0.53)	ND (0.76)	ND (0.76)	ND (0.41)	ND (0.96)	ND (0.96)	ND (0.53) [a]	ND (0.53)	ND (0.76)	ND (0.76)
Cyclohexane	ug/l	-	ND (0.28)	ND (0.73)	ND (0.73)	ND (0.63)	ND (0.63)	ND (0.78)	ND (0.78)	ND (0.28)	ND (0.73)	ND (0.73)	ND (0.63)	ND (0.63)	ND (0.78)	ND (0.78)	ND (0.28)	ND (0.73)	ND (0.73)	ND (0.63)	ND (0.63)	ND (0.78)	ND (0.78)
1,2-Dibromo-3-chloropropane	ug/l	0.04	ND (0.99)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (1.2) a	ND (1.2)	ND (0.99)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (1.2) a	ND (1.2)	ND (0.99)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (1.2) [a]	ND (1.2)
Dibromochloromethane	ug/l	-	ND (0.15)	ND (0.23)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.56)	ND (0.56)	ND (0.15)	ND (0.23)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.56)	ND (0.56)	ND (0.15)	ND (0.23)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.56)	ND (0.56)
1,2-Dibromoethane	ug/l	0.0006	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.48)	ND (0.48)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.48)	ND (0.48)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.48)	ND (0.48)
1,2-Dichlorobenzene	ug/l	3	ND (0.19)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)	ND (0.53)	ND (0.53)	ND (0.19)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)	ND (0.53)	ND (0.53)	ND (0.19)	ND (0.23)	ND (0.23)	ND (0.50)	ND (0.50)	ND (0.53)	ND (0.53)
1,3-Dichlorobenzene	ug/l	3	ND (0.23)	ND (0.19)	ND (0.19)	ND (0.50)	ND (0.50)	ND (0.54)	ND (0.54)	ND (0.23)	ND (0.19)	ND (0.19)	ND (0.50)	ND (0.50)	ND (0.54)	ND (0.54)	ND (0.23)	ND (0.19)	ND (0.19)	ND (0.50)	ND (0.50)	ND (0.54)	ND (0.54)
1,4-Dichlorobenzene	ug/l	3	ND (0.27)	ND (0.21)	ND (0.21)	ND (0.50)	ND (0.50)	ND (0.51)	ND (0.51)	ND (0.27)	ND (0.21)	ND (0.21)	ND (0.50)	ND (0.50)	ND (0.51)	ND (0.51)	ND (0.27)	ND (0.21)	ND (0.21)	ND (0.50)	ND (0.50)	ND (0.51)	ND (0.51)
Dichlorodifluoromethane	ug/l	5	ND (0.90)	ND (0.70)	ND (0.70)	ND (1.9) [a]	ND (1.9)	ND (1.4)	ND (1.4)	ND (0.90)	ND (0.70)	ND (0.70)	ND (1.9) [a]	ND (1.9)	ND (1.4)	ND (1.4)	ND (0.90)	ND (0.70)	ND (0.70)	ND (1.9) [a]	ND (1.9)	ND (1.4)	ND (1.4)
1,1-Dichloroethane	ug/l	5	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.57)	ND (0.57)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.57)	ND (0.57)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.57)	ND (0.57)
1,2-Dichloroethane	ug/l	0.6	ND (0.18)	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.20)	ND (0.60)	ND (0.60)	ND (0.18)	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.20)	ND (0.60)	ND (0.60)	ND (0.18)	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.20)	ND (0.60)	ND (0.60)
1,1-Dichloroethene	ug/l	5	ND (0.51)	ND (0.20)	ND (0.20)	ND (0.47)	ND (0.47)	ND (0.59)	ND (0.59)	ND (0.51)	ND (0.20)	ND (0.20)	ND (0.47)	ND (0.47)	ND (0.59)	ND (0.59)	ND (0.51)	ND (0.20)	ND (0.20)	ND (0.47)	ND (0.47)	ND (0.59)	ND (0.59)
cis-1,2-Dichloroethene	ug/l	5	ND (0.27)	ND (0.31)	ND (0.31)	ND (0.50)	ND (0.50)	ND (0.51)	ND (0.51)	0.85 J	1.6	0.79 J	1.3	0.68 J	**6.8**	**3**	0.34 J	ND (0.31)	ND (0.31)	1.4	0.52 J	2.3	1.3
trans-1,2-Dichloroethene	ug/l	5	ND (0.65)	ND (0.36)	ND (0.36)	ND (0.40)	ND (0.40)	ND (0.54)	ND (0.54)	ND (0.65)	ND (0.36)	ND (0.36)	ND (0.40)	ND (0.40)	ND (0.54)	ND (0.54)	ND (0.65)	ND (0.36)	ND (0.36)	ND (0.40)	ND (0.40)	ND (0.54)	ND (0.54)
1,2-Dichloropropane	ug/l	1	ND (0.39)	ND (0.33)	ND (0.33)	ND (0.24)	ND (0.24)	ND (0.51)	ND (0.51)	ND (0.39)	ND (0.33)	ND (0.33)	ND (0.24)	ND (0.24)	ND (0.51)	ND (0.51)	ND (0.39)	ND (0.33)	ND (0.33)	ND (0.24)	ND (0.24)	ND (0.51)	ND (0.51)
cis-1,3-Dichloropropene	ug/l	-	ND (0.21)	ND (0.19)	ND (0.19)	ND (0.25)	ND (0.25)	ND (0.47)	ND (0.47)	ND (0.21)	ND (0.19)	ND (0.19)	ND (0.25)	ND (0.25)	ND (0.47)	ND (0.47)	ND (0.21)	ND (0.19)	ND (0.19)	ND (0.25)	ND (0.25)	ND (0.47)	ND (0.47)
trans-1,3-Dichloropropene	ug/l	-	ND (0.19)	ND (0.26)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.43)	ND (0.43)	ND (0.19)	ND (0.26)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.43)	ND (0.43)	ND (0.19)	ND (0.26)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.43)	ND (0.43)
1,4-Dioxane	ug/l	-	ND (41)	ND (32)	ND (32)	ND (52)	ND (52)	ND (69)	ND (69)	ND (41)	ND (32)	ND (32)	ND (52)	ND (52)	ND (69)	ND (69)	ND (41)	ND (32)	ND (32)	ND (52)	ND (52)	ND (69)	ND (69)
Ethylbenzene	ug/l	5	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.22)	ND (0.22)	ND (0.60)	ND (0.60)	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.22)	ND (0.22)	ND (0.60)	ND (0.60)	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.22)	ND (0.22)	ND (0.60)	ND (0.60)
Freon 113	ug/l	5	ND (0.52)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.9)	ND (1.9)	ND (0.52)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.9)	ND (1.9)	ND (0.52)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.9)	ND (1.9)
2-Hexanone	ug/l	-	ND (1.7)	ND (1.5)	ND (1.5)	ND (3.3)	ND (3.3)	ND (2.0)	ND (2.0)	ND (1.7)	ND (1.5)	ND (1.5)	ND (3.3)	ND (3.3)	ND (2.0)	ND (2.0)	ND (1.7)	ND (1.5)	ND (1.5)	ND (3.3)	ND (3.3)	ND (2.0)	ND (2.0)
Isopropylbenzene	ug/l	5	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.25)	ND (0.25)	ND (0.65)	ND (0.65)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.25)	ND (0.25)	ND (0.65)	ND (0.65)	ND (0.23)	ND (0.16)	ND (0.16)	ND (0.25)	ND (0.25)	ND (0.65)	ND (0.65)
Methyl Acetate	ug/l	-	ND (1.9)	ND (1.5)	ND (1.5)	ND (3.1)	ND (3.1)	ND (0.80)	ND (0.80)	ND (1.9)	ND (1.5)	ND (1.5)	ND (3.1)	ND (3.1)	ND (0.80)	ND (0.80)	ND (1.9)	ND (1.5)	ND (1.5)	ND (3.1)	ND (3.1)	ND (0.80)	ND (0.80)
Methylcyclohexane	ug/l	-	ND (0.22)	ND (0.78)	ND (0.78)	ND (1.8)	ND (1.8)	ND (0.60)	ND (0.60)	0.31 J	ND (0.78)	ND (0.78)	ND (1.8)	ND (1.8)	ND (0.60)	ND (0.60)	ND (0.22)	ND (0.78)	ND (0.78)	ND (1.8)	ND (1.8)	ND (0.60)	ND (0.60)
Methyl Tert Butyl Ether	ug/l	10	ND (0.24)	ND (0.34)	ND (0.34)	ND (0.25)	ND (0.25)	ND (0.51)	ND (0.51)	0.24 J	ND (0.34)	ND (0.34)	ND (0.25)	ND (0.25)	ND (0.51)	ND (0.51)	ND (0.24)	ND (0.34)	ND (0.34)	ND (0.25)	ND (0.25)	ND (0.51)	ND (0.51)
4-Methyl-2-pentanone(MIBK)	ug/l	-	ND (1.0)	ND (1.2)	ND (1.2)	ND (3.0)	ND (3.0)	ND (1.9)	ND (1.9)	ND (1.0)	ND (1.2)	ND (1.2)	ND (3.0)	ND (3.0)	ND (1.9)	ND (1.9)	ND (1.0)	ND (1.2)	ND (1.2)	ND (3.0)	ND (3.0)	ND (1.9)	ND (1.9)
Methylene chloride	ug/l	5	ND (0.73)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.73)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.73)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Styrene	ug/l	5	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)	ND (0.24)	ND (0.70)	ND (0.70)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)	ND (0.24)	ND (0.70)	ND (0.70)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)	ND (0.24)	ND (0.70)	ND (0.70)
1,1,2,2-Tetrachloroethane	ug/l	5	ND (0.21)	ND (0.39)	ND (0.39)	ND (0.17)	ND (0.17)	ND (0.65)	ND (0.65)	ND (0.21)	ND (0.39)	ND (0.39)	ND (0.17)	ND (0.17)	ND (0.65)	ND (0.65)	ND (0.21)	ND (0.39)	ND (0.39)	ND (0.17)	ND (0.17)	ND (0.65)	ND (0.65)
Tetrachloroethene	ug/l	5	**11.9**	**11.8**	**9.7**	2.4	**7.4**	**7.3**	**7.3**	**12.5**	**11.9**	**11.6**	**34.6**	**28.7**	**72**	**46.5**	**12.1**	**11.3**	**6.6**	**32**	**21.5**	**39.3**	**36.6**
Toluene	ug/l	5	ND (0.16)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.25)	ND (0.53)	ND (0.53)	ND (0.16)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.25)	ND (0.53)	ND (0.53)	ND (0.16)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.25)	ND (0.53)	ND (0.53)
1,2,3-Trichlorobenzene	ug/l	5	ND (0.23)	ND (0.20)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50) a	ND (0.50)	ND (0.23)	ND (0.20)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50) a	ND (0.50)	ND (0.23)	ND (0.20)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50) [a]	ND (0.50)
1,2,4-Trichlorobenzene	ug/l	5	ND (0.21)	ND (0.25)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50) a	ND (0.50)	ND (0.21)	ND (0.25)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50) a	ND (0.50)	ND (0.21)	ND (0.25)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50) [a]	ND (0.50)
1,1,1-Trichloroethane	ug/l	5	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.25)	ND (0.54)	ND (0.54)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.25)	ND (0.54)	ND (0.54)	ND (0.25)	ND (0.22)	ND (0.22)	ND (0.25)	ND (0.25)	ND (0.54)	ND (0.54)
1,1,2-Trichloroethane	ug/l	1	ND (0.21)	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.24)	ND (0.53)	ND (0.53)	ND (0.21)	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.24)	ND (0.53)	ND (0.53)	ND (0.21)	ND (0.28)	ND (0.28)	ND (0.24)	ND (0.24)	ND (0.53)	ND (0.53)
Trichloroethene	ug/l	5	0.49 J	0.40 J	0.46 J	ND (0.27)	0.28 J	ND (0.53)	ND (0.53)	**7.8**	**8.8**	**7.2**	2	1.9	4.7	3.2	3.3	2.6	1.4	2.9	1.7	3.0	2.2
Trichlorofluoromethane	ug/l	5	ND (0.43)	ND (0.58)	ND (0.58)	ND (0.60)	ND (0.60)	ND (0.84)	ND (0.84)	ND (0.43)	ND (0.58)	ND (0.58)	ND (0.60)	ND (0.60)	ND (0.84)	ND (0.84)	ND (0.43)	ND (0.58)	ND (0.58)	ND (0.60)	ND (0.60)	ND (0.84)	ND (0.84)
Vinyl chloride	ug/l	2	ND (0.15)	ND (0.33)	ND (0.33)	ND (0.62) [a]	ND (0.62)	ND (0.79)	ND (0.79)	ND (0.15)	ND (0.33)	ND (0.33)	ND (0.62) [a]	ND (0.62)	ND (0.79)	ND (0.79)	ND (0.15)	ND (0.33)	ND (0.33)	ND (0.62) [a]	ND (0.62)	ND (0.79)	ND (0.79)
m,p-Xylene	ug/l	-	ND (0.38)	ND (0.42)	ND (0.42)	ND (0.43)	ND (0.43)	ND (0.78)	ND (0.78)	ND (0.38)	ND (0.42)	ND (0.42)	ND (0.43)	ND (0.43)	ND (0.78)	ND (0.78)	ND (0.38)	ND (0.42)	ND (0.42)	ND (0.43)	ND (0.43)	ND (0.78)	ND (0.78)
o-Xylene	ug/l	5	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.59)	ND (0.59)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.59)	ND (0.59)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.59)	ND (0.59)
Xylene (total)	ug/l	5	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.59)	ND (0.59)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.59)	ND (0.59)	ND (0.17)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.59)	ND (0.59)
General Chemistry																							
Dissolved Organic Carbon*	mg/l	-	-	<1.0	-	1.5	1.2	4.8	<1.0	-	<1.0	-	1.4	1.4	1.1	<1.0	-	<1.0	-	1.4	<1.0	1.2	1.1
Iron, Ferrous	mg/l	-	-	<0.20	<0.20 [a]		<0.20	<0.20 b	<0.20 [a]	-	<0.20	<0.20 [a]		<0.20	<0.20 b	<0.20 [a]	-	<0.20	<0.20 [a]		<0.20	<0.20 [b]	<0.20 [a]
Nitrogen, Nitrate	mg/l	10	-	**12.2**	**10.3** [b]	**15.8** [b]	**10.6**	**9.2 c**	7.8 [b]	-	6.7	8.1 [b]	10 [b]	4.9	9.2 c	**10.8** [b]	-	9.4	**23.2** [b]	6.3 [b]	5.7	**10.6** [c]	**13.0** [b]
Nitrogen, Nitrate + Nitrite	mg/l	10	-	**12.2**	**10.3**	**15.8**	**10.6**	**9.2**	7.8	-	6.7	8.1	10	4.9	9.2	**10.8**	-	9.4	**23.2**	6.3	5.7	**10.6**	**13**
Nitrogen, Nitrite	mg/l	1	-	<0.010	<0.010	ND (0.010)	<0.010	<0.010	<0.010	-	<0.010	<0.010	0.017	<0.010	<0.010	<0.010	-	<0.010	<0.010	ND (0.010)	<0.010	<0.010	<0.010
Sulfate	mg/l	250	-	95.7	88.3	62.7	114	98.2	115	-	94.4	96.6	74.7	40.9	78.4	94.7	-	75	108	39.5	40.8	102	72.7
Total Organic Carbon	mg/l	-	-	<1.0	1.2		1.2	1.4	<1.0	-	1	1		1.6	1.2	<1.0	-	<1.0	1.3		<1.0	1.2	<1.0

Notes:

ND - not detected

J - estimated concentration

[a] Associated CCV outside of control limits high, sample was ND

[b] Field analysis required. Received out of hold time and analyzed by request.

[c] Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

* Groundwater filtered

Exceedances of a standard are highlighted in yellow and bolded

Detection of a compound is highlighted in blue

Table 3 - SVE Sampling Results June 2013 - December 2019
388 Bridge Street Brooklyn, New York

Compound/ Date	System installation date	Sampling Frequency	PCE Tetrachloroethylene			TCE Trichloroethylene		
		Sample ID	SVE-INLET	SVE-MIDSTREAM	SVE-OUTLET	SVE-INLET	SVE-MIDSTREAM	SVE- OUTLET
		NYSDOH Guidance [1]	**30**	**30**	**30**	**2**	**2**	**2**
6/28/2013	2013	Monthly	29400	1650	124	51	4.3	0.42
7/3/2013	2013	Monthly	39700	1690	22	120	5.9	1.5
7/10/2013	2013	Monthly	29800	80.7	73.9	73.1	0.42	0.42
7/17/2013	2013	Monthly	8750	486	40	37	4.8	0.42
7/24/2013**	2013	Non-routine	12	433	45	0.42	2.2	0.42
7/31/2013	2013	Monthly	6850	163	31	19	0.42	0.42
8/7/2013	2013	Monthly	4710	264	39	17	1.3	0.42
8/14/2013	2013	Monthly	6750	475	39	30	1.7	0.42
8/28/2013	2013	Monthly	5580	364	26	22	1.3	0.42
9/11/2013	2013	Monthly	4650	321	NS	16	1.2	NS
9/25/2013	2013	Monthly	5440	291	NS	21	1.1	NS
10/9/2013	2013	Monthly	3040	232	30	14	0.42	0.42
10/23/2013	2013	Monthly	4950	356	NS	18	1.2	NS
11/6/2013	2013	Monthly	4400	311	NS	17	1.1	NS
11/20/2013	2013	Monthly	5280	174	70.5	17	0.64	0.22
12/4/2013	2013	Monthly	4140	334	45	14	0.97	0.1
12/18/2013	2013	Monthly	5160	516	78.7	20	2.4	0.39
1/2/2014	2013	Monthly	2840	248	18	10	1.6	0.32
1/15/2014	2013	Monthly	7050	1470	62	20	5.3	0.42
1/29/2014	2013	Monthly	8540	263	NS	19	2.2	NS
2/12/2014	2013	Monthly	8000	664	31	23	4.5	0.42
2/27/2014	2013	Monthly	9900	14	83.4	26	1.9	0.81
3/12/2014	2013	Monthly	4240	1170	140	11	6.4	0.81
3/26/2014	2013	Monthly	1630	156	50	7	0.51	0.81
4/23/2014	2013	Monthly	3230	317	48	11	1.4	1
5/20/2014	2013	Monthly	2530	269	39	7	0.91	0.1
6/18/2014	2013	Monthly	1510	41	27	6.4	0.48	0.7

Table 3 - SVE Sampling Results June 2013 - December 2019
388 Bridge Street Brooklyn, New York

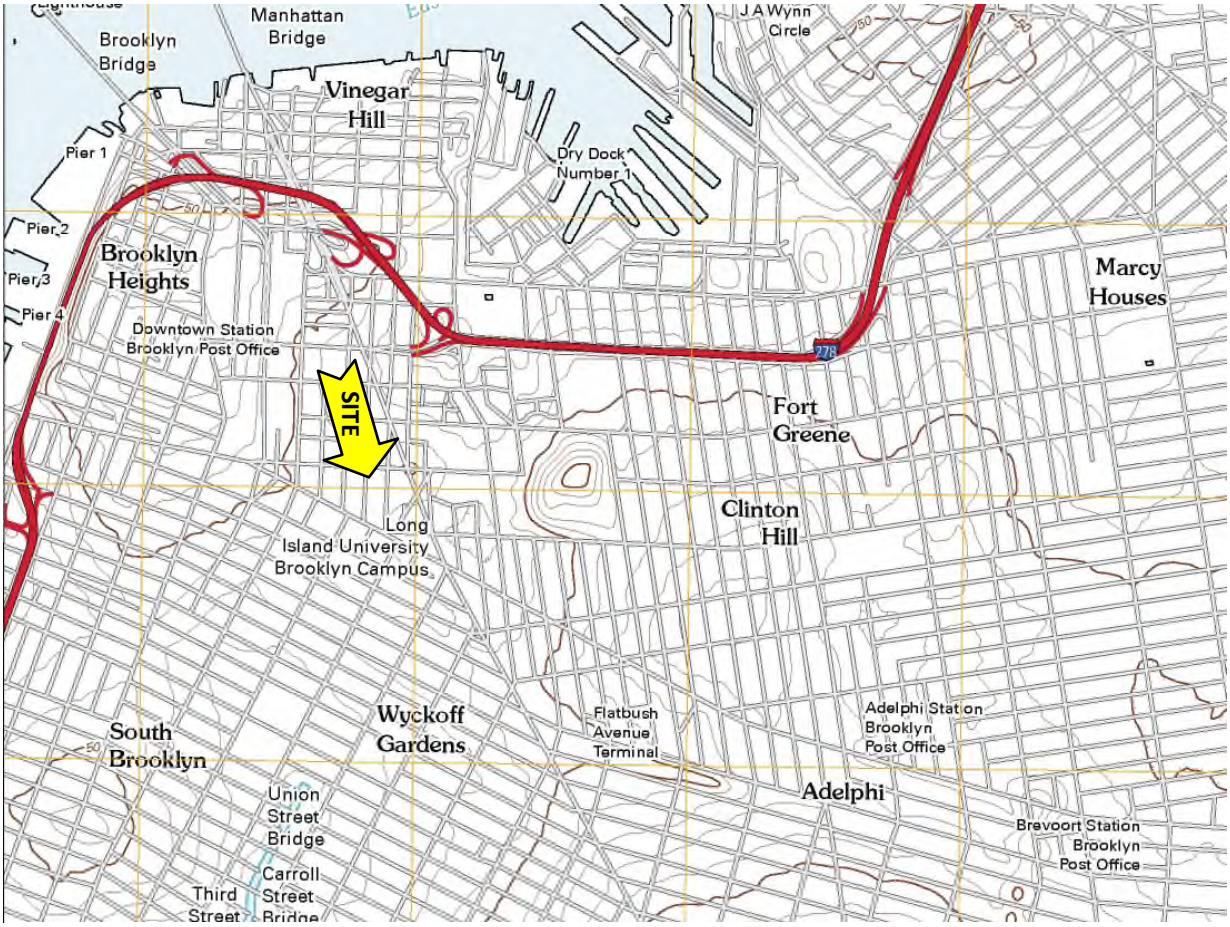
Compound/ Date	System installation date	Sampling Frequency	PCE Tetrachloroethylene			TCE Trichloroethylene		
		Sample ID	SVE-INLET	SVE-MIDSTREAM	SVE-OUTLET	SVE-INLET	SVE-MIDSTREAM	SVE- OUTLET
		NYSDOH Guidance [1]	30	30	30	2	2	2
7/23/2014	2013	Monthly	5230	466	22	17	3.6	0.35
8/27/2014	2013	Monthly	3860	579	35	13	4	0.44
9/24/2014	2013	Monthly	2960	529	26	28	7.5	0.75
10/15/2014	2013	Non-routine	1380	NS	NS	7	NS	NS
10/16/2014	2013	Non-routine	2430	NS	NS	9.1	NS	NS
10/17/2014	2013	Non-routine	14400	NS	NS	28	NS	NS
10/20/2014	2013	Non-routine	1020	NS	NS	4.8	NS	NS
10/21/2014	2013	Non-routine	1250	NS	NS	4.4	NS	NS
10/22/2014	2013	Non-routine	324	NS	NS	1.6	NS	NS
10/29/2014	2013	Monthly	3040	385	18	10	6.4	0.75
11/26/2014	2013	Monthly	3560	524	22	17	9.7	1.1
12/15/2014	2013	Non-routine	315	NS	NS	0.81	NS	NS
12/16/2014	2013	Non-routine	202	NS	NS	1.4	NS	NS
12/17/2014	2013	Non-routine	7730	NS	NS	13	NS	NS
12/18/2014	2013	Non-routine	207	NS	NS	1.6	NS	NS
12/19/2014	2013	Non-routine	142	NS	NS	0.59	NS	NS
12/22/2014	2013	Non-routine	65	NS	NS	0.4	NS	NS
12/30/2014	2013	Monthly	7660	589	1.3	13	8.1	0.16
1/29/2015	2013	Monthly	5450	990	38	13	8.1	0.91
2/26/2015	2013	Monthly	6760	1170	35	14	9.1	1
3/27/2015	2013	Monthly	3490	1990	58	13	17	1.3
4/29/2015	2013	Monthly	5110	834	60	11	9.1	2
5/27/2015	2013	Monthly	4060	800	54	9.7	11	1.6
6/23/2015	2013	Monthly	4300	530	44	9.7	8.6	1.2
7/30/2015	2013	Monthly	5830	1180	54	12	13	1.4
8/26/2015	2013	Monthly	3490	599	8.8	12	12	1.1
9/23/2015	2013	Monthly	6250	1060	28	16	16	1.1
10/28/2015	2013	Monthly	4130	759	36	20	12	1.1

Table 3 - SVE Sampling Results June 2013 - December 2019
388 Bridge Street Brooklyn, New York

Compound/ Date	System installation date	Sampling Frequency	PCE Tetrachloroethylene			TCE Trichloroethylene		
		Sample ID	SVE-INLET	SVE-MIDSTREAM	SVE-OUTLET	SVE-INLET	SVE-MIDSTREAM	SVE- OUTLET
		NYSDOH Guidance [1]	30	30	30	2	2	2
			Installation of new system completed in the 1 Q 2016					
*1/26/2016	2013	Non-routine	0.31	0.31	NS	0.2	0.2	NS
3/30/2016	2016	Non-routine	487	16	NS	8.6	10	NS
3/31/2016	2016	Quarterly	NS	NS	8.1	NS	NS	15
8/5/2016	2016	Quarterly	3410	80	0.81	28	0.52	0.2
9/20/2016	2016	Quarterly	10800	399	5.4	31	4.9	2
12/9/2016	2016	Quarterly	275	334	6.8	2.9	6.4	2.6
3/17/2017	2017	Quarterly	773	13	10	7.5	1.3	4.9
6/13/17	2017	Quarterly	99.7	712	189	2.9	13	12
9/26/2017	2017	Quarterly	10600	6580	5780	25	24	40
12/21/17	2017	Quarterly	4.7	33	21	6.4	4.1	5.3
3/14/18	2018	Quarterly	44.1	1.9	1.6	0.65	7.1	3.8
6/26/18	2018	Quarterly	16.8	26.9	0.31	0.8	1.5	ND (0.047)
9/12/18	2018	Quarterly	8.3	20.2	0.58	0.51	1.2	1.2
12/18/18	2018	Quarterly	1	727	5.7	0.91	3.2	1.6
1/11/19	2019	QC	-	4400	-	-	20	-
5/7/19	2019	Quarterly	976	556	450	4.7	3.6	17
6/7/19	2019	Quarterly	3.4	24	62	0.81 J	4.9	2.8
9/5/19	2019	Quarterly	34	442	4.2	1.8	2.7	ND
12/20/19	2019	Quarterly	1.4	3.6	4.3	ND	ND	ND

Notes:
All concentrations measured in ug/m3
Exceedences to NYSDOH Guidance values highlighted in yellow
* A new and downsized system was installed in 2016 with prior approval of NYSDEC
** SVE Inlet data from 7/24/13 appears to be invalid based on results. It is suspected to have been a bad summa cannister. Data collected at this event is not to be use
[1] : NYSDOH Guidance for Evaluating Soil Vapor Intrusion. Revised PCE and TCE values as per 2013 & 2014 DOH Guidance/ FactSheet
SVE-INLET: Sample collected at the port prior to the carbon treatment
SVE-MIDSTREAM: Sample collected after 1st carbon treatment but before 2nd carbon treatment
SVE-OUTLET: Sample collected after 2nd carbon treatment
Criteria for Termination of SVE Sytem: If the contaminant concentrations in soil vapor become asymptotic to a lower level over an extended period of time, FLS will con

FIGURES



SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2

1000 500 0 METERS 1000 2000

1 0.5 0 1

MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

FEET

CONTOUR INTERVAL 10 FEET

Site: *Brooklyn Quadrangle, New York 7.5 Minute series USGS Topographic Map (79287)\ Obtained from United States Geological Survey topography compiled 2010*

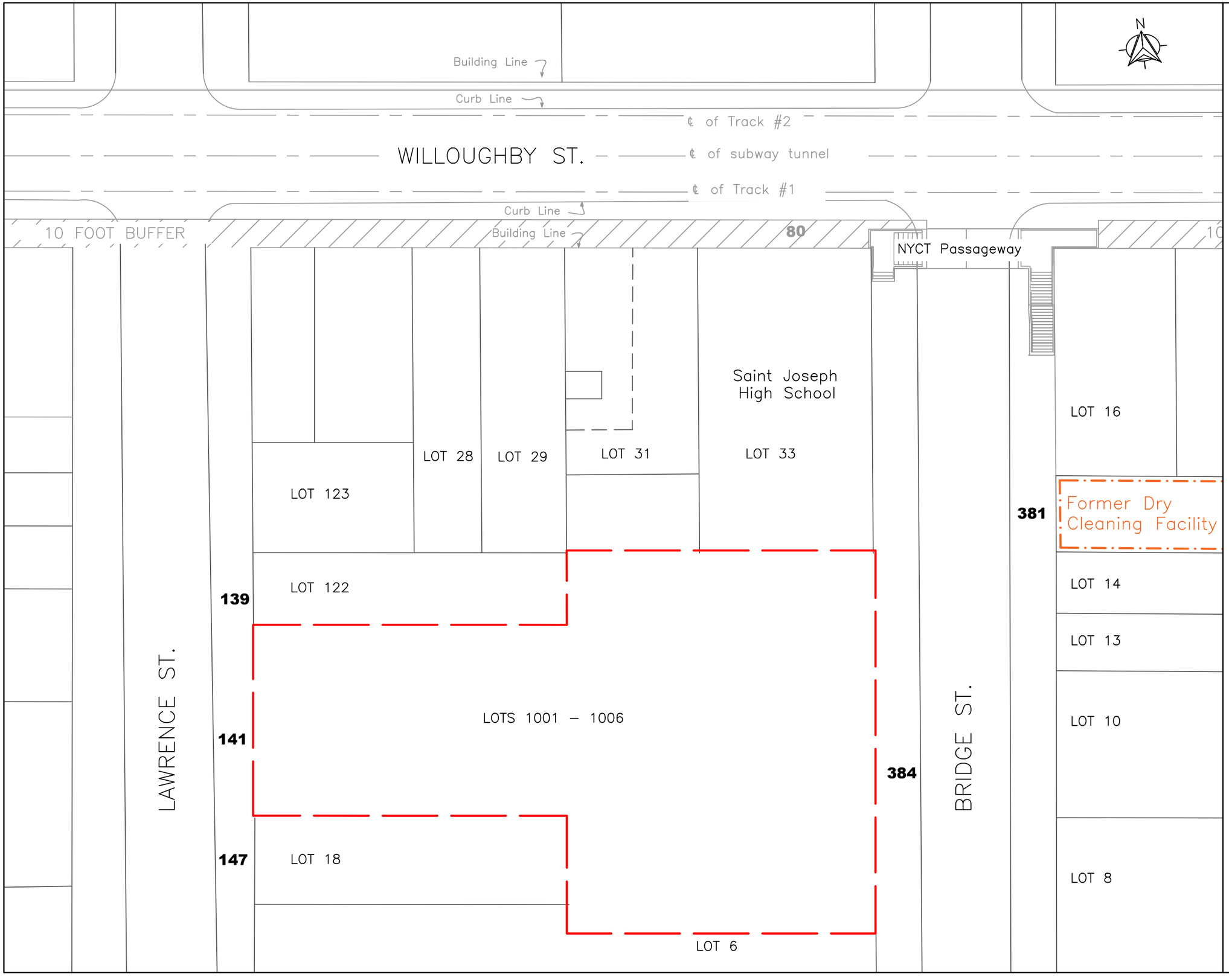
Fleming Lee Shue

Environmental Management & Consulting
158 West 29th Street, New York, NY 10001

Figure 1 – Site Location

January 2019

388 Bridge Street
Brooklyn, New York



FILE: P:\10149 – Stahl Real Estate\001 – 388 Bridge St\Figures\PRR\2016\Figure 2 – Site Plan.dwg DATE: 1/18/2017

Fleming Lee Shue

Environmental Management & Consulting

158 West 29th Street, 9th Fl.
New York, NY 10001

384 Bridge Street
Brooklyn, NY
BCP Site #C224134

Figure 2

Site Plan

January 2019

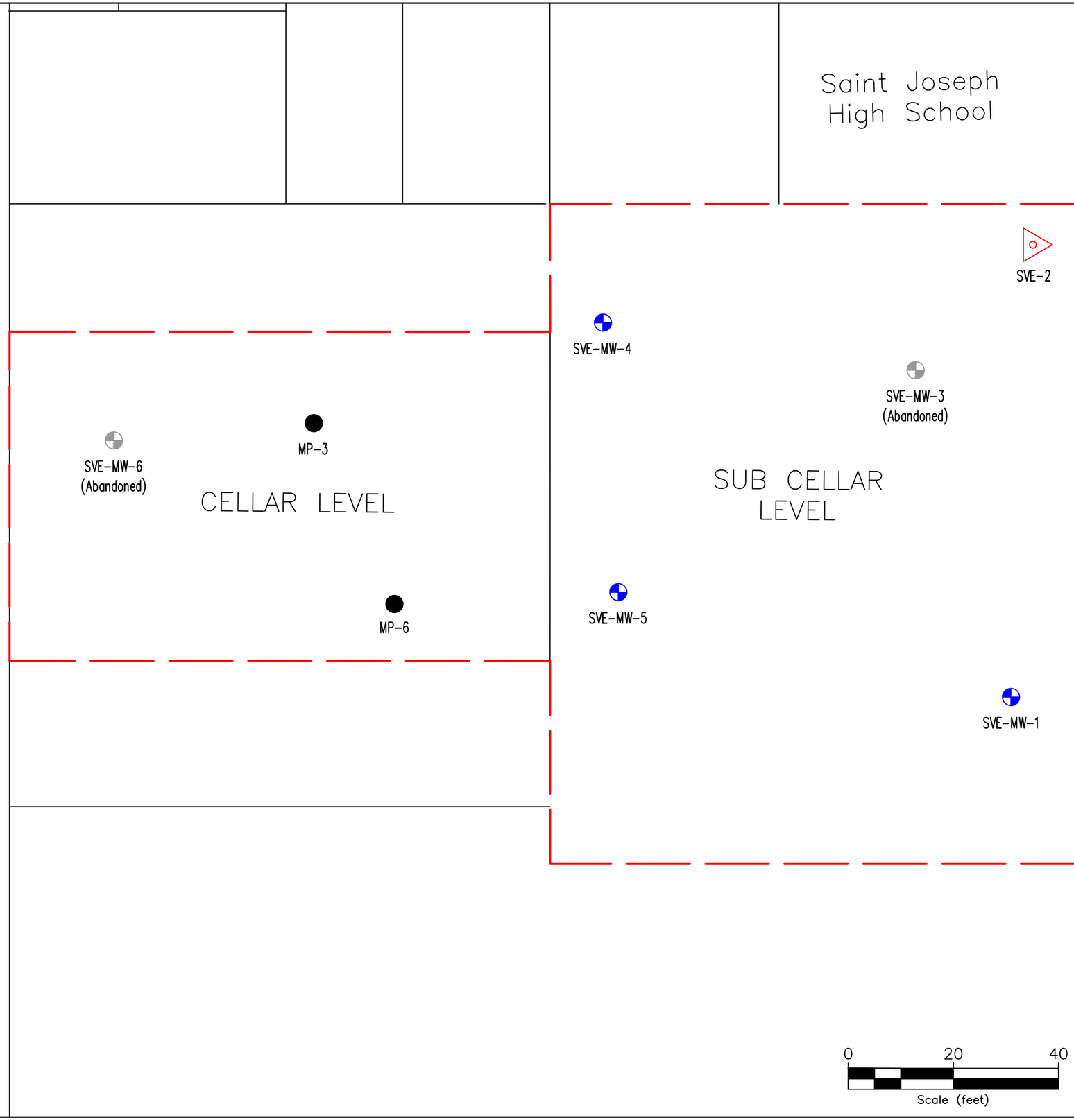
Project Number
10149-001

LEGEND

384 Site Address

Site Boundary/
Development Footprint

0 30 60
Scale (feet)



Fleming Lee Shue

Environmental Management & Consulting

158 West 29th Street, 9th Fl.
New York, NY 10001

388 Bridge Street
Brookly, NY
BCP Site # C224134

Figure 3

SVE and Groundwater Monitoring Well Locations

January 2019

Project Number
10149-001

LEGEND

- Site Boundary
- Active SVE Well
- Groundwater Monitoring Well
- Vacuum Monitoring Point

Figure 4. 2013 SVE System
Contaminant Mass Removal - PCE

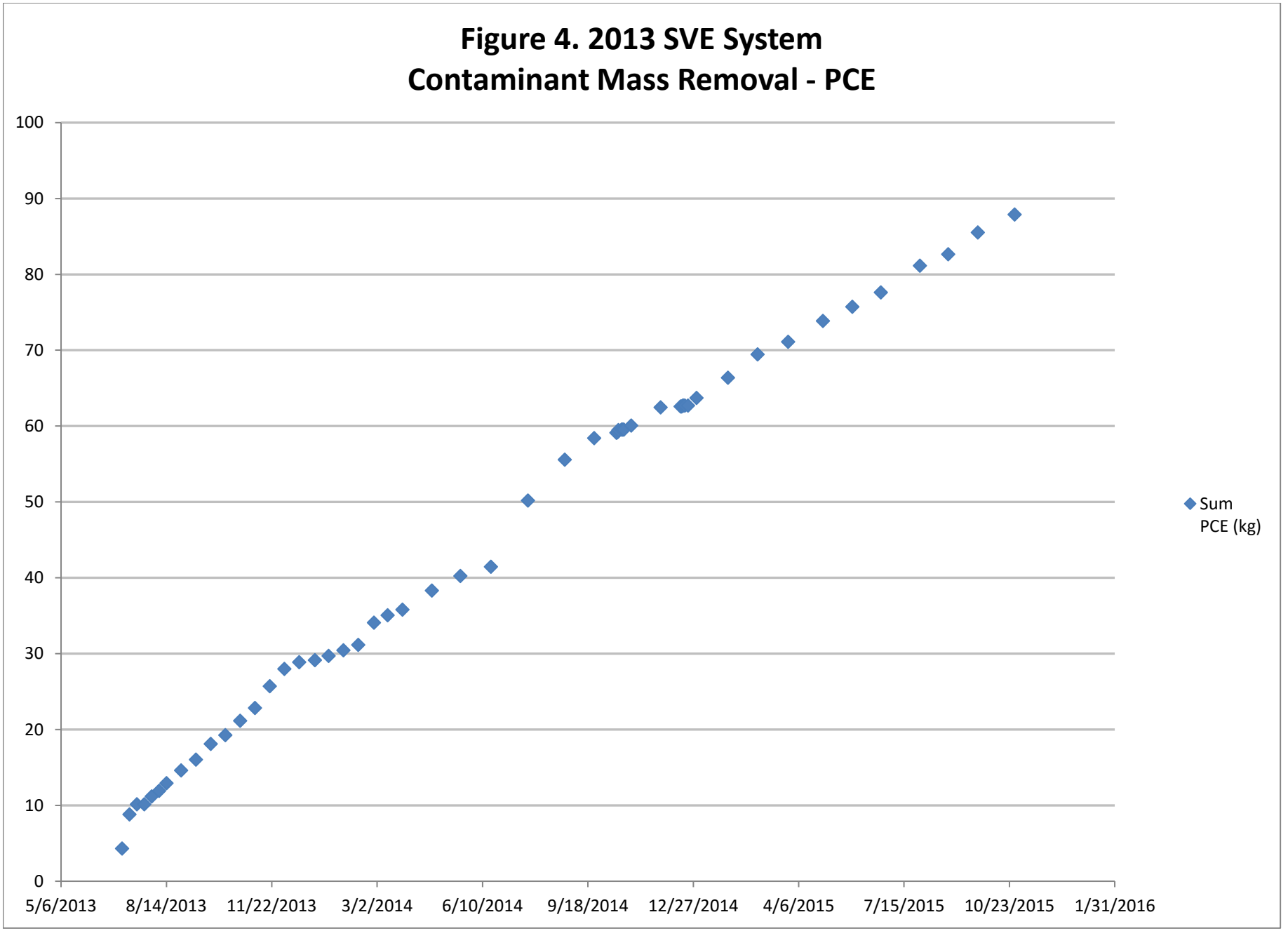


Figure 5. 2013 SVE System
Contaminant Mass Removal - TCE

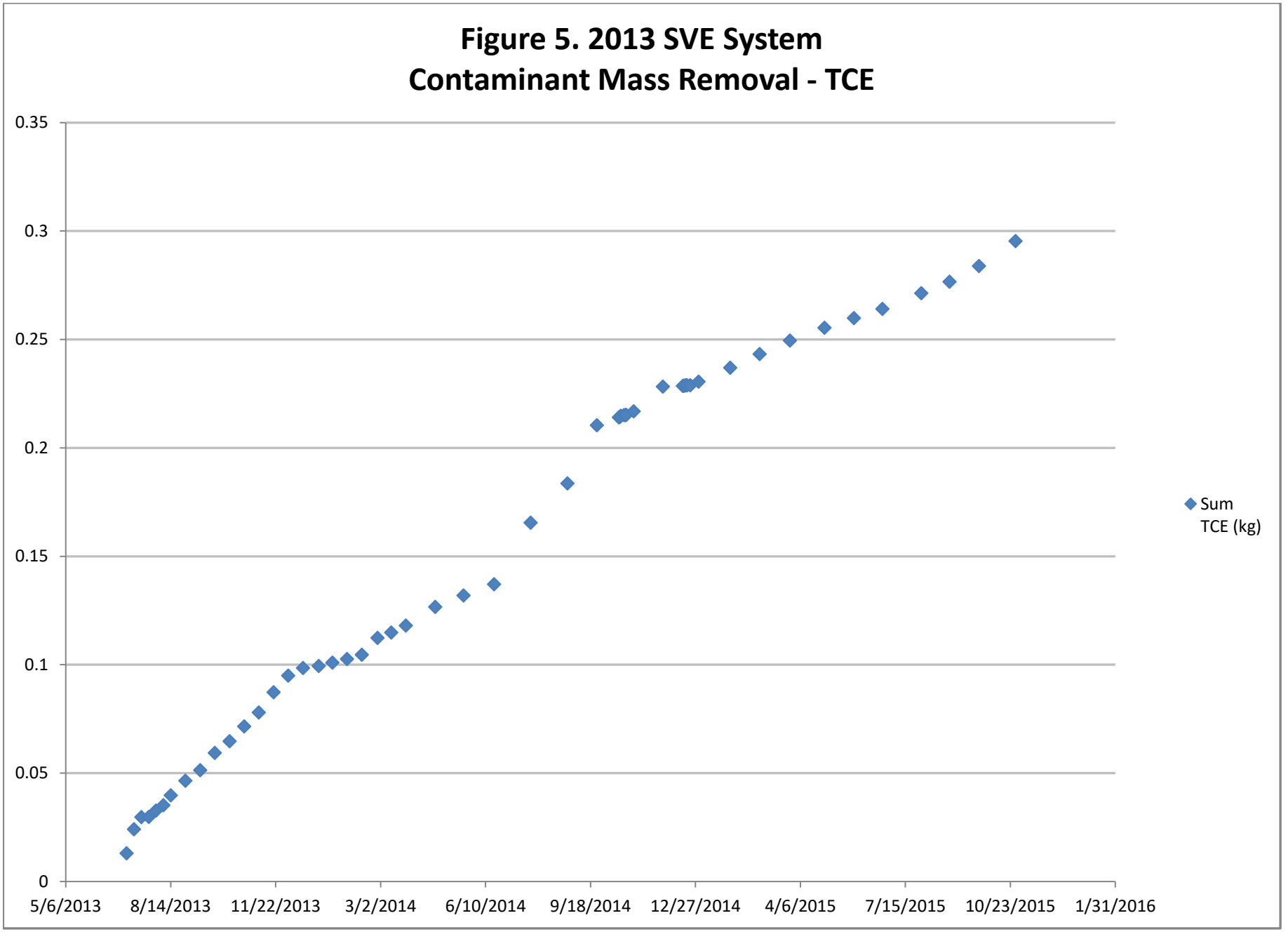


Figure 6. 2016 SVE System Contaminant Mass Removal - PCE

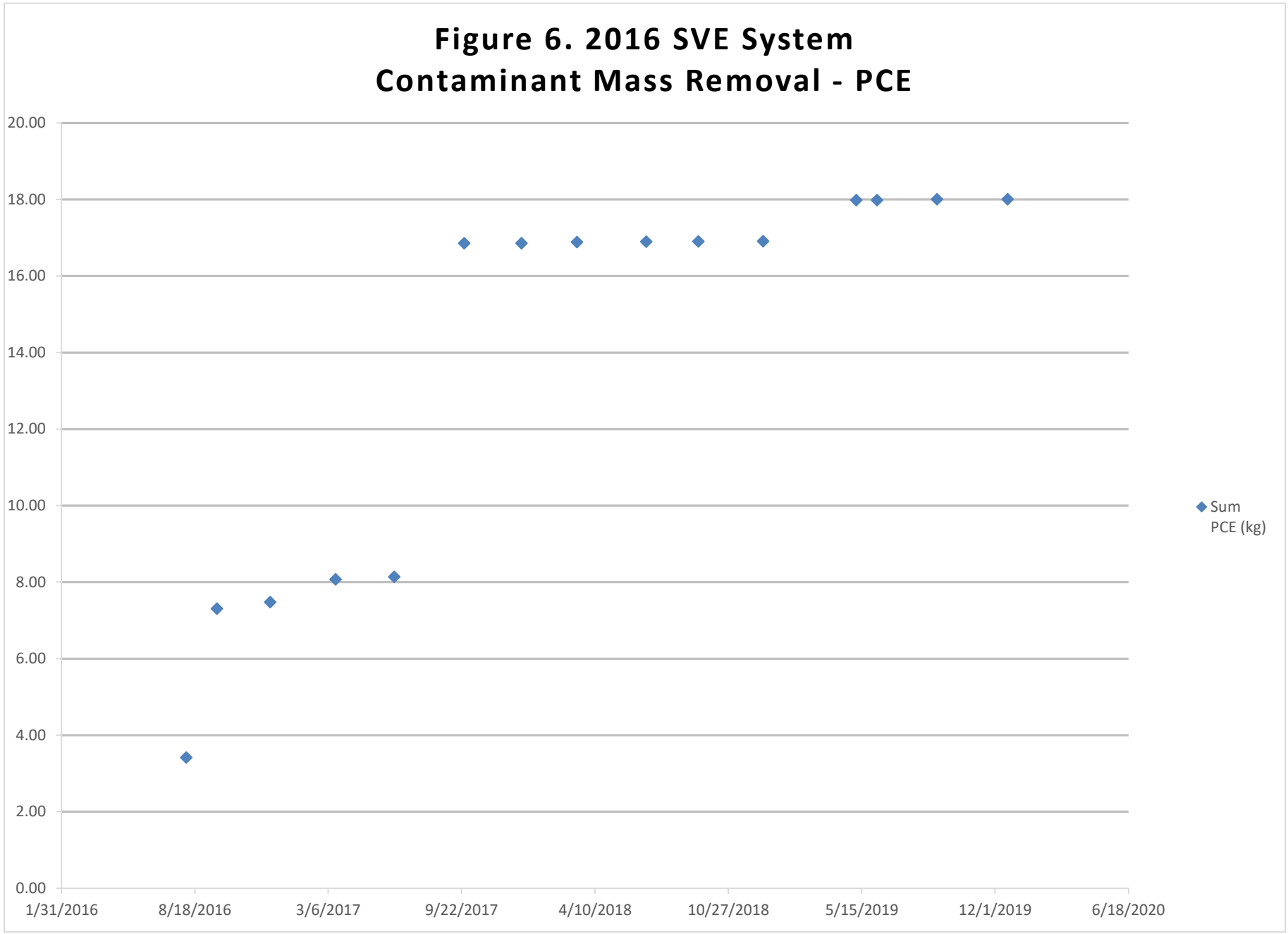
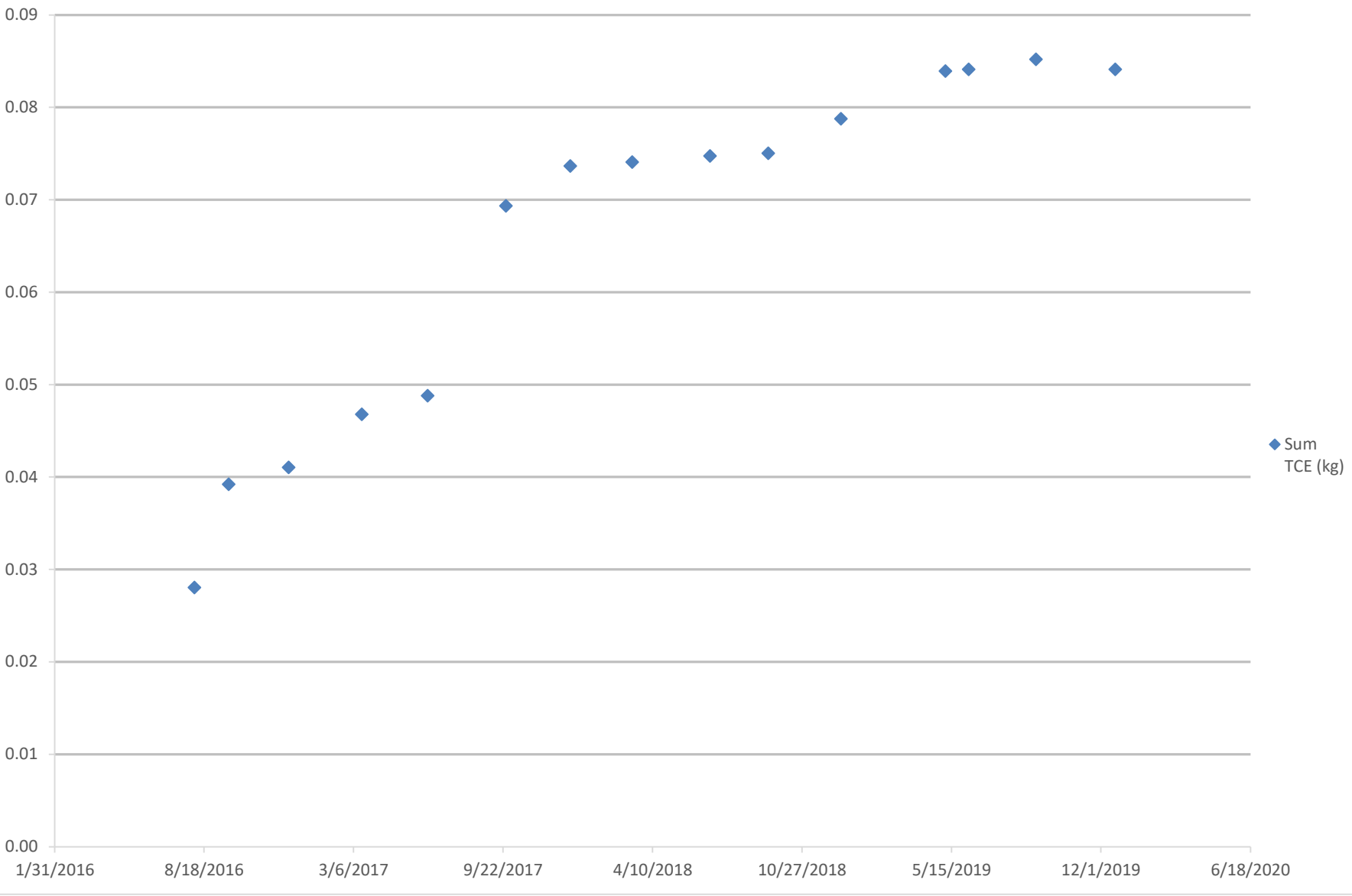


Figure 7. 2016 SVE System
Contaminant Mass Removal - TCE



APPENDIX A

Metes and Bounds

SCHEDULE "A"
ENVIRONMENTAL EASEMENT
PROPERTY DESCRIPTION

The Condominium (in the Building located at and known as The Bridge Street Condominium and by Street Number 384-394 Bridge Street, New York), designated and described as Units Parking, Commercial 1, Commercial 2, Lower 80/20, Upper 80/20 and Divisible (hereinafter called the "Unit") in the Declaration (hereinafter called "Declaration") made by the Sponsor under the Condominium Act of The State of New York (Article 9-B of the Real Property Law of the State of New York), dated March 21, 2012 and recorded June 14, 2012 in the Office of the Register, the City of New York, County of New York, in CRFN 2012000231607 establishing a plan for Condominium ownership of said Building and the land upon which the same is erected (hereinafter sometimes collectively called the "Property") and also designated and described as Tax Lot Nos. 1001-1006 Block 152, Borough of Brooklyn, on the Tax Map of the Real Property Assessment Department of the City of New York and on the Floor Plans of said Building certified by Professional Engineer, on and filed as Condominium Plan No. 3222 on June 14, 2012 in the aforesaid Register's Office.

Together with an undivided 100 percent interest in the common elements of the property described in the Declaration.

The land upon which the Building containing the Unit is erected as follows:

Legal Description of Environmental Easement Area (former Lots 37 & 118 Block 152 Joined as one)

“Being the same piece or parcel of Land conveyed to R, K, & G Associates from 1929 Realty, Inc., by deed dated June 15, 1977 recorded in Reel 926 Page 725 and also the same parcel of land conveyed to 384 Bridge Street LLC from 141 Lawrence Street LLC, by deed dated December 19, 2011 recorded as CRFN: 2012000020329 in the Office of City Register of the City of New York.”

ALL that certain plot, piece or parcel of land, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at a point on the Westerly side of Bridge Street distant 100 feet southerly from the corner formed by the intersection of the Westerly side of Bridge Street and the Southerly side of Willoughby Street;

RUNNING THENCE Westerly parallel with Willoughby Street 107 feet 6 inches;

THENCE Southerly parallel with Bridge Street 25.0 feet;

THENCE Westerly parallel with Willoughby Street I07 feet 6 inches to the Easterly side of Lawrence Street;

THENCE Southerly along the easterly side of Lawrence Street 62 feet;

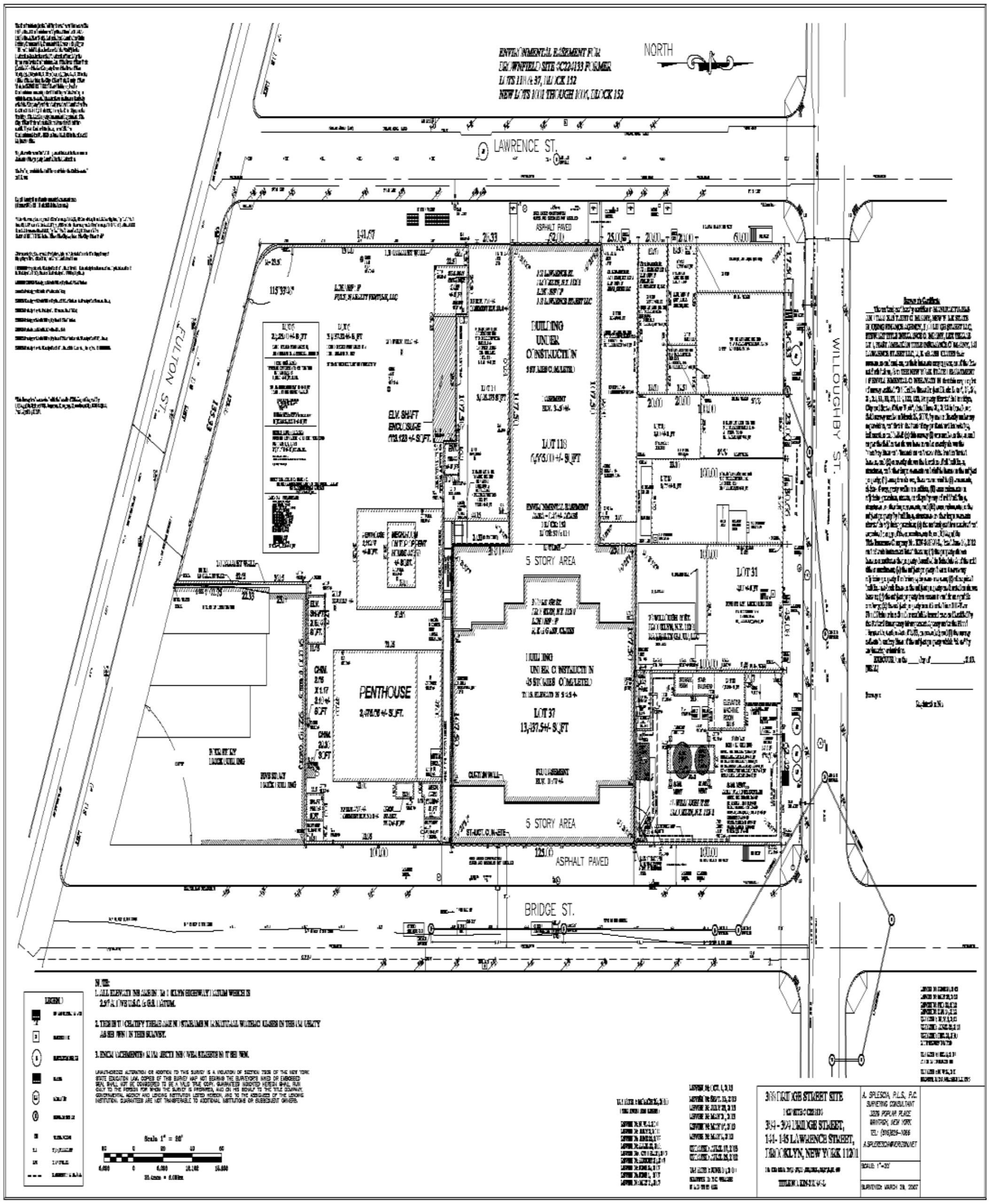
THENCE Easterly parallel with Willoughby Street 107 feet 6 inches;

THENCE Southerly parallel with Bridge Street 38.0 feet;

THENCE Easterly parallel with Willoughby Street 107 feet 6 inches to the Westerly side of Bridge Street;

THENCE Northerly along the Westerly side of Bridge Street 125.0 feet to the point or place of BEGINNING.

SURVEY


ENVIRONMENTAL EASEMENT FOR
BROWNFIELD SITE C224133 FORMER
LOTS 110 & 37, BLOCK 152
NEW LOTS 1001 THROUGH 100?, BLOCK 152
NORTH
LAWRENCE ST.
FULTON ST.
WILLOUGHBY ST.
BRIDGE ST.
ASPHALT PAVED
5 STORY AREA
PENTHOUSE
LOT 110
LOT 37
LOT 31
BUILDING UNDER CONSTRUCTION
ELEVATOR MACHINE ROOM
ELEV. SHAFT ENCLOSURE
MECHANICAL EQUIPMENT

APPENDIX B

Engineering Controls / Institutional Controls Certifications

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C224134**

Site Name 388 Bridge Street

Site Address: 384-394 Bridge Street and 141-145 Lawrence Street Zip Code: 11201
City/Town: Brooklyn
County: Kings
Site Acreage: 0.460

Reporting Period: January 03, 2019 to January 03, 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 thru 4, include documentation or evidence that documentation has been previously submitted with this certification 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? Residential, Restricted-Residential, Commercial, and Industrial	x	
7. Are all ICs/ECs in place and functioning as designed?	x	

SSDS at SJHS briefly down due to accidental cut to power cord. Repairs made and depressurization maintained. CMR documenting incident and repairs is attached.

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	x

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	x	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C224134 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
1-152-1001	384 Bridge Street, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan
- land use restriction - groundwater use restriction - soil management plan		
1-152-1002	384 Bridge Street, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan
- land use restriction - groundwater use restriction - soil management plan		
1-152-1003	384 Bridge Street, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan
- land use restriction - groundwater use restriction - soil management plan		
1-152-1004	384 Bridge Street, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan
- land use restriction - groundwater use restriction - soil management plan		
1-152-1005	384 Bridge Street, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan
- land use restriction - groundwater use restriction		

- soil management plan

1-152-1006 384 Bridge Street LLC

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

- land use restriction
- groundwater use restriction
- soil management plan

Box 4

Description of Engineering Controls

Parcel	Engineering Control
1-152-1001	Vapor Mitigation Air Sparging/Soil Vapor Extraction

- composite cover system
- sub-slab depressurization system
- soil vapor extraction system
- monitored natural attenuation of groundwater
- adjacent off-site vapor mitigation system

1-152-1002

Vapor Mitigation
Air Sparging/Soil Vapor Extraction

- composite cover system
- sub-slab depressurization system
- soil vapor extraction system
- monitored natural attenuation of groundwater
- adjacent off-site vapor mitigation system

1-152-1003

Vapor Mitigation

- composite cover system
- sub-slab depressurization system
- soil vapor extraction system
- monitored natural attenuation of groundwater
- adjacent off-site vapor mitigation system

1-152-1004

Vapor Mitigation

- composite cover system
- sub-slab depressurization system
- soil vapor extraction system
- monitored natural attenuation of groundwater
- adjacent off-site vapor mitigation system

1-152-1005

Vapor Mitigation

- composite cover system
- sub-slab depressurization system
- soil vapor extraction system
- monitored natural attenuation of groundwater
- adjacent off-site vapor mitigation system

1-152-1006

Vapor Mitigation

- composite cover system
- sub-slab depressurization system
- soil vapor extraction system
- monitored natural attenuation of groundwater
- adjacent off-site vapor mitigation system

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
x	

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is 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;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
x	

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C224134

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Roger Fortune (print name) at 277 Park Ave. NY NY 10172 (print business address)

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Roy F

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

1/29/2020
Date

IC/EC CERTIFICATIONS

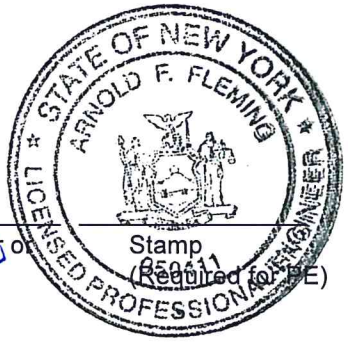
Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I ARNOLD F. FLEMING at 158 W 29th St. NY NY 10001,
print name print business address

am certifying as a Professional Engineer for the OWNER
(Owner or Remedial Party)



Arnold F. Fleming — Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE) 050411

1/28/20 — Date

APPENDIX C

Quarterly Inspection Checklists

388 Bridge Street
SVE OMM and Pressure Readings

Date	5/7/2019	**Op. Freq. (Hz)**	50	**Amb. Air Temp. (°F)**	31

Process Area	Indicator ID	Paramenter	Unit	Reading/ Status	Time
System Inlet	SP 100	Pressure (man.)	inwc	-20.47	9:30
		Air speed	fpm	---	
		Flow	cfm	---	
		Temp.	°F	---	
	VI 101	Pressure	inwc	-21	9:30
Post- Moist. Separator / Pre- Blower	VI 102	Pressure	inwc	-19.2	9:30
	F-102	Dilution Valve	---	---	
Pre- Blower / Before Heat Exchanger	PI 101	Pressure	inwc	16.9	9:30
	TI 101	Temp.	°F	117	9:30
After heat exchanger / Pre-Carbon Treatment	PI 103	Pressure	inwc	4.79	9:30
	TI 102	Temp.	°F	101	9:30
Between Carbon Units	PI 104	Pressure	inwc	3.29	9:30
Post- Carbon Treatment	PI 105	Pressure	inwc	0.66	9:30

Monitoring Point	Pressure (in. wc.)	Location	Comments
SVE Well #1	---	Sub-cellar garage	Converted to monitoring well
SVE Well #2	---	Sub-cellar garage	
SVE Well #3	---	Sub-cellar garage	Abandoned
SVE Well #4	---	Sub-cellar garage	Converted to monitoring well
SVE Well #5	---	Sub-cellar garage	Converted to monitoring well
SVE Well #6	---	Cellar workshop	Abandoned
SSDS MP #1	---	Not installed	
SSDS MP #2	---	Not installed	
SSDS MP #3	N/A	Cellar hallway	no air tight seal on monitoring point
SSDS MP #4	---	Not installed	
SSDS MP #5	---	Not installed	
SSDS MP #6	N/A	Cellar garage	no air tight seal on monitoring point

Monitoring Point	Pressure (in. wc.)	Port Location	Comments
R1	---	Behind Boiler Room	System wiring was cut by contractor and system is offline. M. Fici attempt to fix system are unsuccessful. Systematic hired to look at blower.
R2	---	Boiler Room	
R3	---	Boiler Room	
R4	---	Boiler Room	
R5	---	Workshop	
R6	---	Back Storage Room	
R7	---	Storage Room hallway	
R8	---	Storage Room entrance	
R9	---	Cafeteria area	
R10	---	East Storage room	
R11	---	East Storage room	
R12	---	Stairwell	
R13	---	Kitchen storage	

Sample ID	Flow Controller No.	Canister No.	Initial Time	Final Time	Initial/Final Vacuum
SVE inlet	FC558	A595	9:40	11:40	-29.0/-4.0
SVE midstream	FC181	A576	9:40	12:00	-30.0/-5.5
SVE outlet	FC533	M182	9:40	11:58	-29.0/-5.0

Notes

388 Bridge Street
SVE OMM and Pressure Readings

Date	6/7/2019	**Op. Freq. (Hz)**	-	**Amb. Air Temp. (°F)**	75

Process Area	Indicator ID	Paramenter	Unit	Reading/ Status	Time
System Inlet	SP 100	Pressure (man.)	inwc	-16.83	9:33
		Air speed	fpm	---	---
		Flow	cfm	---	---
		Temp.	°F	---	---
	VI 101	Pressure	inwc	-18	9:35
Post- Moist. Separator / Pre- Blower	VI 102	Pressure	inwc	-34	9:35
	F-102	Dilution Valve	---	95% closed	9:35
Pre- Blower / Before Heat Exchanger	PI 101	Pressure	inwc	28	9:35
	TI 101	Temp.	°F	132	9:35
After heat exchanger / Pre-Carbon Treatment	PI 103	Pressure	inwc	19.59	9:40
	TI 102	Temp.	°F	116	9:40
Between Carbon Units	PI 104	Pressure	inwc	12.12	9:40
Post- Carbon Treatment	PI 105	Pressure	inwc	0.8	9:40

Monitoring Point	Pressure (in. wc.)	Location	Comments
SVE Well #1	---	Sub-cellar garage	Converted to monitoring well
SVE Well #2	---	Sub-cellar garage	
SVE Well #3	---	Sub-cellar garage	Abandoned
SVE Well #4	---	Sub-cellar garage	Converted to monitoring well
SVE Well #5	---	Sub-cellar garage	Converted to monitoring well
SVE Well #6	---	Cellar workshop	Abandoned
SSDS MP #1	---	Not installed	
SSDS MP #2	---	Not installed	
SSDS MP #3		Cellar hallway	no reading taken
SSDS MP #4	---	Not installed	
SSDS MP #5	---	Not installed	
SSDS MP #6		Cellar garage	no reading taken

Monitoring Point	Pressure (in. wc.)	Port Location	Comments
R1	---	Behind Boiler Room	inaccessible
R2	---	Boiler Room	inaccessible
R3	---	Boiler Room	
R4	---	Boiler Room	
R5	---	Workshop	
R6	---	Back Storage Room	inaccessible
R7	---	Storage Room hallway	
R8	---	Storage Room entrance	
R9	---	Woodshop classrom	inaccessible (wood flooring covers point)
R10	---	East Storage room	
R11	---	East Storage room	
R12	---	Stairwell	
R13	---	Kitchen storage	

Sample ID	Flow Controller No.	Canister No.	Initial Time	Final Time	Initial/Final Vacuum
SVE INLET	FC703	A1212	10:39	12:24	-30.0 / -3.0
SVE MIDSTREAM	MC249	A1233	10:39	12:27	-30.0 / -3.0
SVE OUTLET	FC680	A523	10:39	12:00	-30.0 / -4.0

Notes

Only SVE sampling today.

388 Bridge Street
SVE OMM and Pressure Readings

Date	9/5/2019	**Op. Freq. (Hz)**	-	**Amb. Air Temp. (°F)**	68

Process Area	Indicator ID	Paramenter	Unit	Reading/ Status	Time
System Inlet	SP 100	Pressure (man.)	inwc	-11.26	11:40
		Air speed	fpm	---	11:40
		Flow	cfm	---	11:40
		Temp.	°F	---	11:40
	VI 101	Pressure	inwc	-11.93	11:40
Post- Moist. Separator / Pre- Blower	VI 102	Pressure	inwc	-26	11:40
	F-102	Dilution Valve	---	75% closed	11:40
Pre- Blower / Before Heat Exchanger	PI 101	Pressure	inwc	33.67	11:40
	TI 101	Temp.	°F	126	11:40
After heat exchanger / Pre-Carbon Treatment	PI 103	Pressure	inwc	22.11	11:40
	TI 102	Temp.	°F	113	11:40
Between Carbon Units	PI 104	Pressure	inwc	13.40	11:40
Post- Carbon Treatment	PI 105	Pressure	inwc	0.933	11:40

Monitoring Point	Pressure (in. wc.)	Location	Comments
SVE Well #1	---	Sub-cellar garage	Converted to monitoring well
SVE Well #2	-5.565	Sub-cellar garage	
SVE Well #3	---	Sub-cellar garage	Abandoned
SVE Well #4	---	Sub-cellar garage	Converted to monitoring well
SVE Well #5	---	Sub-cellar garage	Converted to monitoring well
SVE Well #6	---	Cellar workshop	Abandoned
SSDS MP #1	---	Not installed	
SSDS MP #2	---	Not installed	
SSDS MP #3	0.000	Cellar hallway	no vacuum detected
SSDS MP #4	---	Not installed	
SSDS MP #5	---	Not installed	
SSDS MP #6	0.000	Cellar garage	no vacuum detected

Monitoring Point	Pressure (in. wc.)	Port Location	Comments
R1	---	Behind Boiler Room	inaccessible
R2	-0.311	Boiler Room	
R3	-0.256	Boiler Room	
R4	-0.281	Boiler Room	
R5	-0.274	Workshop	
R6	---	Back Storage Room	inaccessible
R7	-0.117	Storage Room hallway	
R8	-0.220	Storage Room entrance	
R9	---	Woodshop classrom	inaccessible (wood flooring covers point)
R10	-0.413	East Storage room	
R11	-0.719	East Storage room	
R12	---	Stairwell	inaccessible (no key to get into panel)
R13	-1.11	Kitchen storage	

Sample ID	Flow Controller No.	Canister No.	Initial Time	Final Time	Initial/Final Vacuum
SVE INLET	FC397	A795	9:28	11:01	-30.0 / -2.0
SVE MIDSTREAM	MC104	A524	9:28	11:10	-29.5 / -3.0
SVE OUTLET	MC058	A705	9:28	11:33	-29.5 / -4.0

Notes

Alarm needs to be installed on SVE. Blower was off upon arrival due to a high discharge temperature fault.

388 Bridge Street
SVE OMM and Pressure Readings

Date 12/20/2019 **Op. Freq. (Hz)** - **Amb. Air Temp. (°F)** 25

Process Area	Indicator ID	Paramenter	Unit	Reading/ Status	Time
System Inlet	SP 100	Pressure (man.)	inwc	-51	11:40
		Air speed	fpm	---	11:40
		Flow	cfm	---	11:40
		Temp.	°F	---	11:40
	VI 101	Pressure	inwc	64	11:40
Post- Moist. Separator / Pre- Blower	VI 102	Pressure	inwc	76	11:40
	F-102	Dilution Valve	---	75% closed	11:40
Pre- Blower / Before Heat Exchanger	PI 101	Pressure	inwc	14	11:40
	TI 101	Temp.	°F	130	11:40
After heat exchanger / Pre-Carbon Treatment	PI 103	Pressure	inwc	10	11:40
	TI 102	Temp.	°F	92	11:40
Between Carbon Units	PI 104	Pressure	inwc	4.00	11:40
Post- Carbon Treatment	PI 105	Pressure	inwc	1.5	11:40

Monitoring Point	Pressure (in. wc.)	Location	Comments
SVE Well #1	---	Sub-cellar garage	Converted to monitoring well
SVE Well #2	0.000	Sub-cellar garage	no vacuum detected
SVE Well #3	---	Sub-cellar garage	Abandoned
SVE Well #4	---	Sub-cellar garage	Converted to monitoring well
SVE Well #5	---	Sub-cellar garage	Converted to monitoring well
SVE Well #6	---	Cellar workshop	Abandoned
SSDS MP #1	---	Not installed	
SSDS MP #2	---	Not installed	
SSDS MP #3	-0.774	Cellar hallway	
SSDS MP #4	---	Not installed	
SSDS MP #5	---	Not installed	
SSDS MP #6	0.000	Cellar garage	no vacuum detected

Monitoring Point	Pressure (in. wc.)	Port Location	Comments
R1	---	Behind Boiler Room	inaccessible
R2	---	Boiler Room	inaccessible
R3	-0.039	Boiler Room	
R4	-0.133	Boiler Room	
R5	---	Workshop	inaccessible
R6	---	Back Storage Room	inaccessible
R7	-0.061	Storage Room hallway	
R8	-0.058	Storage Room entrance	
R9	---	Woodshop classrom	inaccessible (wood flooring covers point)
R10	---	East Storage room	
R11	-0.012	East Storage room	
R12	-0.024	Stairwell	
R13	-3.013	Kitchen storage	

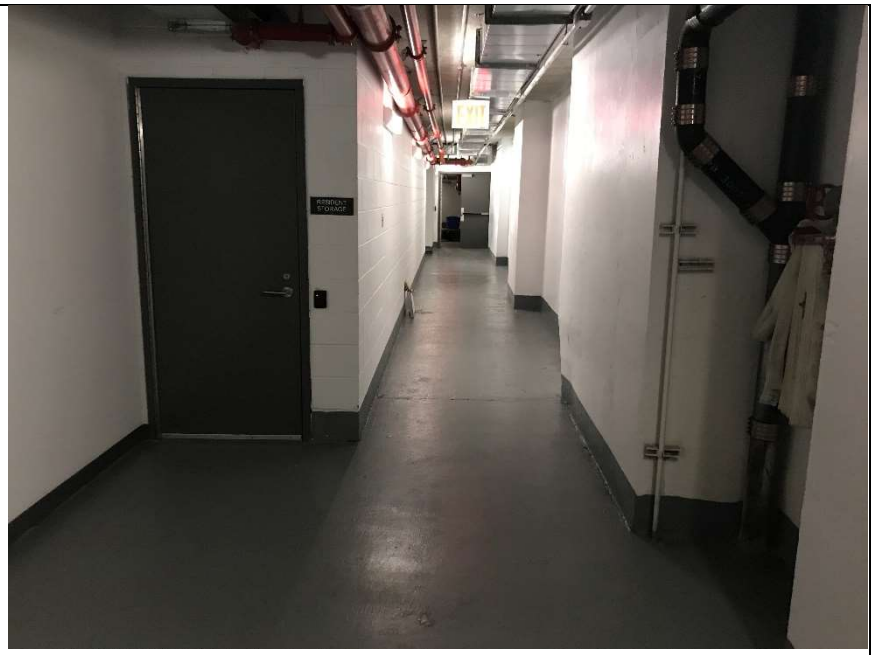
Sample ID	Flow Controller No.	Canister No.	Initial Time	Final Time	Initial Vacuum	Final Vacuum
SVE INLET	MC216	A415	10:31	12:26	30.0	-2.0
SVE MIDSTREAM	FC526	A625	10:34	12:27	-30.0	2.0
SVE OUTLET	FC118	A395	10:33	12:33	-30.0	7.0

Notes

APPENDIX D

Site Photographs

Appendix D - Photograph Log
388 Bridge Street

	
Photo 1: Cellar slab	Photo 2: Cellar hallway slab

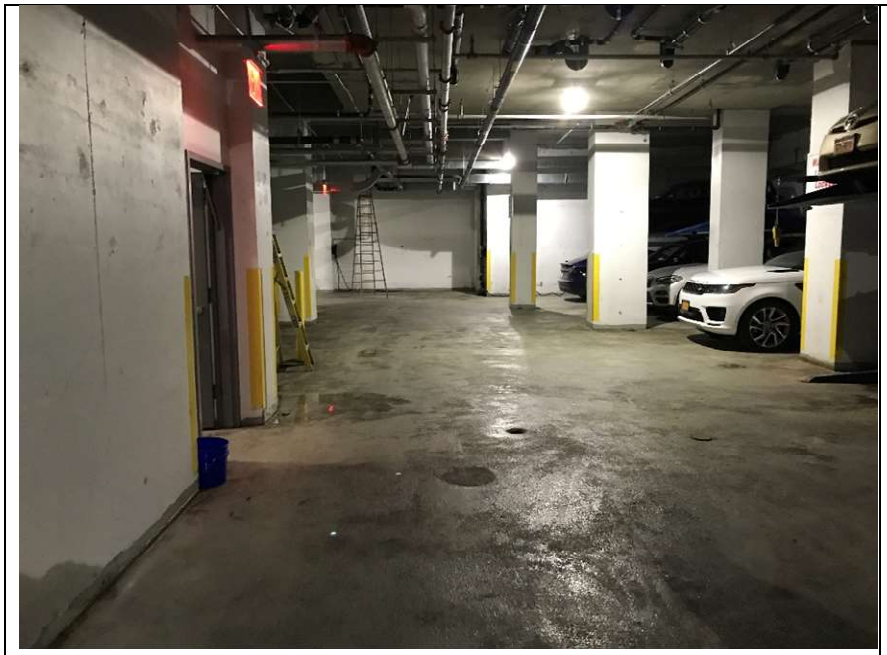


Photo 3: Sub-cellar slab

Photo 4: Sub-cellar slab

Appendix D - Photograph Log
388 Bridge Street

Photo 5: SVE manifold

Photo 6: SVE system

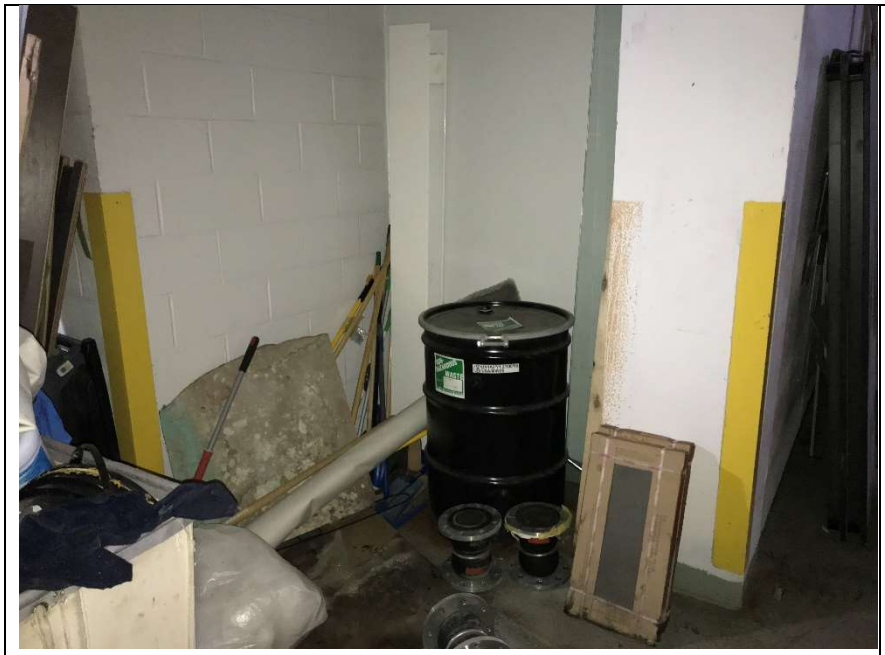


Photo 7: Groundwater sampling purge water drum

Photo 8: SJHS telemetry box

Photo 9: SJHS basement slab in boiler room

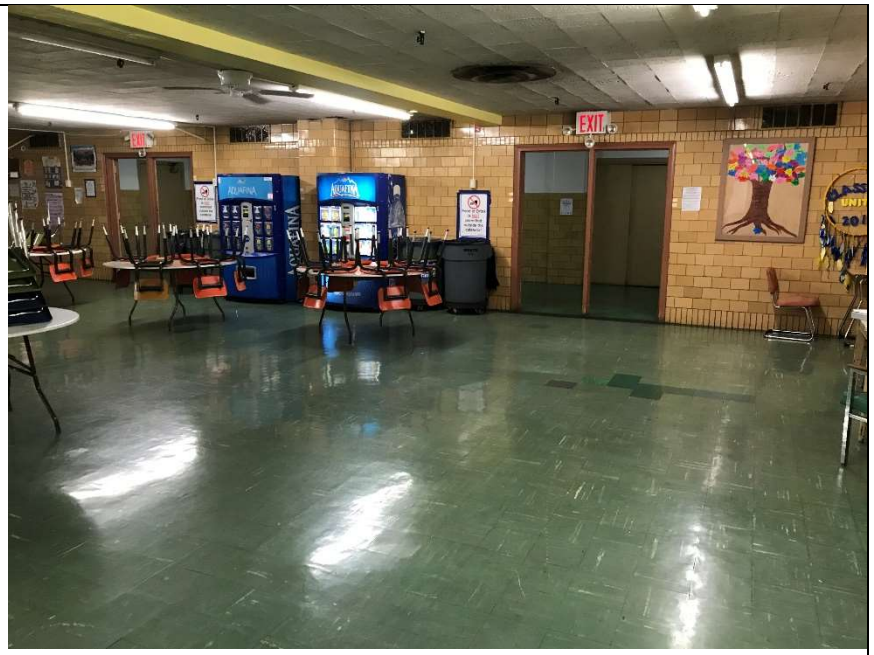


Photo 10: SJHS basement slab in cafeteria area

Photo 11: SJHS basement slab in kitchen area

Photo 12: SJHS SSDS piping and monitoring point R12 location

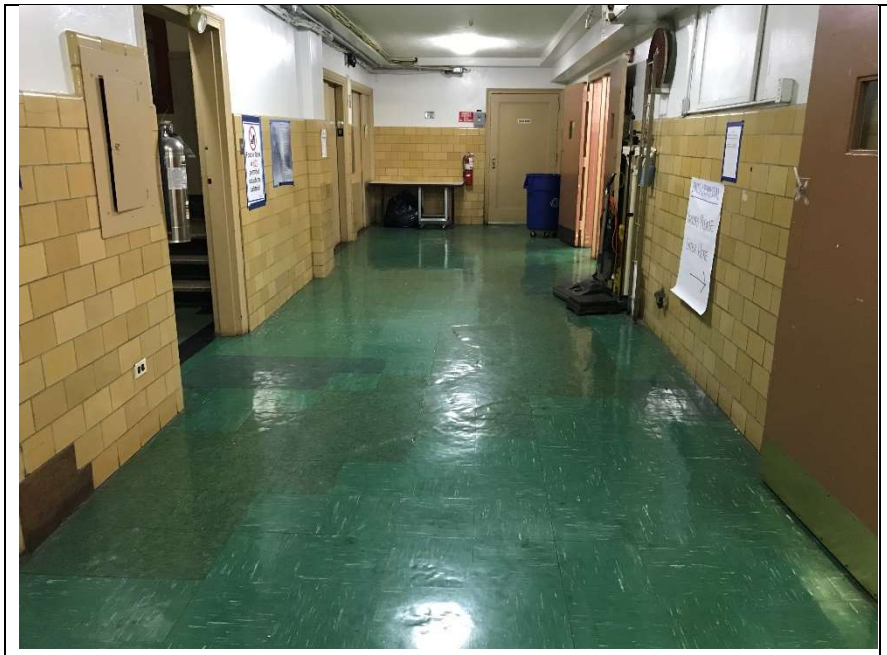


Photo 13: SJHS cellar hallway, door to boiler room on back wall

Photo 14: SJHS SSDS piping in area of monitoring point R10 (inaccessible/covered)

Appendix E

NYSDEC Approvals

Thu 7/18/2019 1:14 PM

MacCabe, Michael (DEC) <michael.maccabe@dec.ny.gov>

RE: 388 Bridge Street (C224134) Semiannual Groundwater Monitoring Report

To Mark Hutson

Cc Roger Fortune; Jennifer Coghlan; Arnold F. Fleming, P.E.

FollowUp. Start by Thursday, July 18, 2019. Due by Thursday, July 18, 2019.
You forwarded this message on 10/9/2019 10:44 AM.

Mark,

I have reviewed the July 17, 2019 Semi-Annual Groundwater Monitoring Report. Considering the data presented in the report that show relatively low and declining concentrations of site-related chlorinated VOCs in groundwater, the semi-annual groundwater sampling may be reduced to annually.

Thanks

Michael D. MacCabe, P.E.
Senior Environmental Engineer
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway, Albany, NY 12233-7016
518-402-9687 |michael.maccabe@dec.ny.gov
www.dec.ny.gov

Appendix F

Corrective Measures Report

Arnold F. Fleming, P.E.
&
Fleming Lee Shue

Environmental Management & Consulting

May 23, 2019

Michael D. MacCabe, P.E.
Senior Environmental Engineer
Division of Environmental Remediation
NYS Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, NY 12233-7016

Re: **Notification of Defective Blower at SJHS**
388 Bridge Street Site – Brooklyn, New York
BCP Site #C224134

Dear Mr. MacCabe:

Arnold F. Fleming, P.E. and Fleming-Lee Shue, Inc. (FLS) have prepared this letter to notify the New York State Department of Environmental Conservation (NYSDEC) of a defective blower at the off-site St. Joseph's High School (SJHS) located adjacent to 388 Bridge Street, BCP Site #C224134.

Background and Corrective Measures – SJHS Blower Repairs

FLS was notified by the school custodian on May 6, 2019 that the blower for the sub-slab depressurization system (SSDS) at SJHS was disconnected due to a contractor cutting the wrong electrical wire on the roof of the school. Building maintenance attempted to re-connect the system but ultimately could not get the blower operational. On May 13, 2019 FLS and Systematic Technologies (Systematic) mobilized to the Site but could not restart the blower. On May 15, 2019, Systematic returned to the Site with the proper equipment and removed the blower from the roof of the school and mobilized it to their workshop where the blower could be disassembled. The blower was repaired by Systematic on May 17, 2019 and is scheduled to be re-installed on May 23, 2019.

Once installed, FLS will follow the procedures as described in Section 4.3.1.2 – System Start-Up and Testing of the Site Management Plan (SMP). After the system is engaged

and operating at steady-state conditions, measurements will be taken to ensure the negative differential pressure beneath the building slab is greater than -0.002 in-WC as approved in the SMP. If the system cannot provide a negative differential pressure of -0.002 in-WC, the NYSDEC will be notified and the system will be redesigned to achieve the required negative differential pressure.

FLS will confirm the reinstallation via email and all of the SSDS repair activities and start-up testing will be documented in the next Periodic Review Report due in 2020.

Please contact us with any questions.

Sincerely,
Fleming-Lee Shue, Inc.

Arnold F. Fleming, P.E.
President

cc: Roger Fortune — Stahl Realty
Mark Hutson, PG — Fleming-Lee Shue