# DRAFT

# VAPOR INTRUSION ASSESSMENT REPORT

FORMER EL PUENTE
98-116 SOUTH 4TH STREET
BROOKLYN, NEW YORK
NYSDEC SITE No. 224260

EXCEL PROJECT NO. 18597

TECHNICAL REPORT AND APPENDICES

April 2019

PREPARED FOR:

RLBK Property, LLC
130 East 59th Street
New York, New York 11020

PREPARED BY:


EXCEL Environmental Resources, Inc.

111 North Center Drive
North Brunswick, New Jersey 08902
Phone (732) 545-9525 Fax (732) 545-9425

*visit our website at www.excelenv.com*

**VAPOR INTRUSION ASSESSMENT REPORT**
**Former El Puente**
**98-116 South 4th Street**
**Brooklyn, New York**

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# 1.0 INTRODUCTION

On behalf of RLBK Property, LLC, (RLBK) Excel Environmental Resources, Inc. (Excel) has prepared this Vapor Intrusion Assessment (VIA) Report for the property located at 98-116 South 4th Street Brooklyn, Kings County, NY (herein referred to as the subject property or Site). The subject property location is shown on the United States Geological Survey (USGS) 7.5-minute Topographical Map for the Brooklyn Quadrangle provided as Figure 1.

## 1.1 Overview of Project History

In response to a New York State Department of Environmental Conservation (NYSDEC) letter received by RLBK in September 2017 regarding historic environmental investigations conducted at the Property, Excel filed a Freedom of Information Law (FOIL) request with the NYSDEC. The FOIL request was submitted for all environmental files relating to the Property.

The NYSDEC provided several documents regarding historic investigation work conducted at the Property by a potential developer, El Puente, in preparation for what was then proposed redevelopment as a school.

Review of historic reports provided through a FOIL request to the NYSDEC indicates the following:

- Through the mid 1990's, Ecosystems Strategies, Inc. conducted Phase I and Phase II investigations at the Property on behalf of a proposed redeveloper/purchaser, El Puente;
- El Puente entered into a Voluntary Cleanup Agreement (VCA) with the NYSDEC and eventually conducted additional soil and groundwater investigations the results of which were presented to the NYSDEC in their March 1999 Summary Report of Supplemental Subsurface Investigative Services;
- Minor impacts to soil were identified beneath the floor slab at Building No. 3;
- Impacts to groundwater were also identified at the site but, the identification of impacts upgradient of the site is indicative of a regional groundwater issue or an upgradient/offsite source;
- El Puente eventually received approval of their Revised Workplan for Site Closure Activities but evidently decided not to proceed with purchase and redevelopment of the Property;
- Due to lack of activity, the NYSDEC terminated El Puente's VCA in their letter dated December 8, 2003; and
- In April of 2006 Don Carlo Environmental submitted a Phase II Subsurface Investigation and Tank Closure Report to the NYSDEC documenting removal of four (4) tanks from the former basement of Building No. 3.

RLBK Property, LLC, a subsidiary of Meadow Partners, acquired the Property out of foreclosure in 2014. RLBK Property has received Certificates of Occupancy from the City and all three buildings are occupied.

In the short-term the NYSDEC has requested that RLBK conduct a Vapor Intrusion Investigation to assess the potential contribution of documented dissolved-phase chlorinated solvent impacts to groundwater to indoor air quality at the three buildings located at the Property.

## 1.2 Report Objectives

As outlined in the NYSDEC-approved VIA Workplan dated October 9, 2018, this VIA Report is intended to present the findings of the vapor intrusion assessment conducted to assess the potential contribution of documented dissolved-phase chlorinated solvent impacts to groundwater to indoor air quality at the three buildings located at the above referenced site.

## 1.3 Report Organization

This VIA Report is presented in one volume containing the text for Chapters 1.0 through 6.0 and associated summary tables, and figures. The report appendices, labeled alphabetically in order of first reference in the text, are provided in the same volume.

The remaining Chapters of this Report are organized as follows:

| | |
|---|---|
| Chapter 2.0 | Site Environmental Setting |
| Chapter 3.0 | Investigation Procedures |
| Chapter 4.0 | Investigation Results |
| Chapter 5.0 | Investigation Conclusions and Recommendations |
| Chapter 6.0 | References |

# 2.0 SITE ENVIRONMENTAL SETTING

This Chapter summarizes the environmental setting at the subject property, including a description of the Site and an overview of the regional and site-specific geology and hydrogeology at the subject property.

## 2.1 Site Description

The subject property as defined in this Report as the rectangular shaped property located at 98- 116 South 4th Street in the Borough of Brooklyn, Kings County, New York as shown on the Site Location map provided as Figure 1. The subject property is identified as Tax Identification Number: Block 2443, Lot 13.

Occupying almost the entirety of the subject property are three structures: to the east is 104 South 4th Street which is a one-story building currently operated as a bar/restaurant identified as Building No. 1; the central building, 100 South 4th Street, is a seven-story residential building identified as Building No. 2, and the western-most structure 98 South 4th Street identified as Building No. 3, is a one-story commercial building. No basements have been identified in any of the three buildings.

## 2.2 Regional Geology

According to the Surficial Geologic Map of New York, Lower Hudson Sheet, 1989, the surficial geologic material underlying the Site is classified as till. Till deposits consist of variable textured (i.e. clay, silt-clay, and boulder-clay). The till is usually poorly sorted, relatively impermeable, variable clast content, ranging from abundant, well rounded, diverse lithology in valley till to relatively angular, more limited lithology in uplands till and tends to be sandy in areas underlain by gneiss or sandstone. Thickness is variable from one to fifty meters bgs.

According to the Bedrock Geologic Map of New York, Lower Hudson Sheet, 1970, the bedrock geologic material underlying the Site is characterized as glacial and alluvial Quarternary deposits although the underlying bedrock geology is listed as “unknown”.

According to the United States Department of Agriculture Natural Resource Conservation Service Web Soil Survey, soils at the Site are classified as Urban Land with till substratum. Land surface for this soil unit generally slopes between 0 to 8 percent.

According to the USGS 7.5-minute topographic map, Brooklyn Quadrangle, 1995, the East River lies approximately ¼ mile to the west of the Site. Elevation in the vicinity of the site is approximately 50 feet above sea level.

# 3.0 INVESTIGATION PROCEDURES

This Chapter outlines the work scope, methods, and procedures utilized during implementation of the Vapor Intrusion Assessment conducted by Excel at the subject property. The investigation activities are based on the NYSDEC-approved VIA Workplan dated October 9, 2018.

All field investigation procedures were conducted in accordance with applicable provisions of the NYSDEC's DER-10, Technical Guidance for Site Investigation and Remediation, May 2010 and NYSDOH's Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 (VI Guidance).

## 3.1 Pre-Sampling Building Inspection and Preparation

In accordance with The VI Guidance and the NYSDEC-approved VI Assessment Workplan, a pre-sampling inspection was conducted prior to the sampling event to identify and minimize conditions that may interfere with the proposed testing. The inspection evaluated the type of structure, floor layout, air flows and physical conditions of the building(s) being studied. This information, along with information on sources of potential indoor air contamination, was identified on the NYSDOH building inventory form. Completed forms are provided in Appendix A.

Each ground-floor room being tested was inspected, the presence and description of odors and photoionization detector (PID) readings was noted and used to help evaluate potential sources effecting indoor air quality. This includes taking readings near products stored or used in the building, the following was recorded:

- Historic and current storage and uses of volatile chemicals for each business;
- Heating or air conditioning systems;
- Sketch of floor plans showing sampling locations, chemical storage areas, doorways, stairways, sumps, drains etc.; and
- Sketch of outdoor areas, weather conditions, pertinent observations such as spills, staining, and odors, and measurements of temperature and barometric pressure.

A field sampling log sheet was also used to document sample identification, date and time of samples, sample methods, soil vapor purge volumes, and other field sampling observations. As recommended in the VI Guidance Document, all soil gas, sub-slab soil gas, indoor air, and ambient air outdoor samples were collected within the same time frame.

## 3.2 Sub-Slab Soil Vapor Sampling

As discussed with the NYSDEC at the March 27, 2018 meeting and as detailed in the VIA Workplan, four sub-slab soil gas samples were collected during the investigation as follows:

- Building No. 1: One sub-slab soil gas sample;

- Building No. 2: Two sub-slab soil gas samples, one on each side of the building; and
- Building No. 3: One sub-slab soil gas sample.

### 3.2.1 Sample Probe Installation

All four sub-slab sampling probes were constructed in the same manner at all sampling locations to minimize possible discrepancies. Temporary probes were utilized, as per the VI Guidance the following construction protocol were followed:

- Temporary probes were constructed with inert tubing (e.g., polyethylene, stainless steel, nylon, Teflon®, etc.) of the appropriate size (typically 1/8 inch to ¼ inch diameter), and of laboratory or food grade quality;
- Tubing did not extend further than 2 inches into the sub-slab material; and
- The temporary implant was sealed to the surface with non-VOC-containing and non-shrinking product.

Photographs of the typical sub-slab sampling point are provided in Appendix B.

### 3.2.2 Sample Collection

Samples were collected in accordance with the VI Guidance, to obtain representative samples that meet the data quality objectives, sub-slab vapor samples were collected in the following manner:

- Leak Check:
  - After installation of the probe through the slab, a sampling vapor-shroud was placed over the probe and sampling area;
  - A Helium meter was connected to the shroud to measure the Helium level within the shroud;
  - Helium was then introduced into the shroud until the Helium level within the shroud reached between 10% and 20%;
  - The Helium meter was connected to the sub-slab probe and the Helium level beneath the slab was measured to document a proper seal between the probe and slab.
- Once a proper seal was documented one to three volumes (i.e., the volume of the sample probe and tube) was purged prior to collecting the samples;
- Flow rates for both purging and collecting did not exceed 0.2 liters per minute to minimize the potential for ambient air infiltration during sampling; and
- Sub-slab samples were collected over an 8-hour period using a 6-liter Summa® canister.

As mentioned previously, in accordance with The VI Guidance, a pre-sampling inspection was performed prior to the sampling event to identify and minimize conditions that may interfere with the proposed testing.

### 3.3 Indoor Air Sampling

As discussed with the NYSDEC at the March 27, 2018 meeting and as detailed in the VIA Workplan, the following indoor air sampling was conducted:

- Building No. 1: One 8-hour indoor air sample was collected from the single commercial tenant space;
- Building No. 2: Eight 24-hour indoor air samples were collected, one from each of the residential tenant spaces located on the ground floor; and
- Building No. 3: Three 8-hour indoor air samples were collected, one from each commercial tenant space.

In total, 12 indoor air samples were collected for the Vapor Intrusion Assessment. In accordance with the VI Guidance, samples were collected during the heating season which is generally November 15th through March 31st. To obtain representative samples that meet the data quality objectives, indoor air samples were collected in the following manner:

- Flow rates for both purging and collecting did not exceed 0.2 liters per minute to minimize ambient air infiltration during sampling;
- Commercial indoor air samples were collected over an 8-hour period using a 6-liter Summa® canister; and
- Residential indoor air samples were collected over a 24-hour period using a 6-liter Summa® canister.

As mentioned previously, in accordance with The VI Guidance, a pre-sampling inspection was performed prior to the sampling event to identify and minimize conditions that may interfere with the proposed testing. Completed forms are provided in Appendix A and photographs of a typical indoor air sample location are provided in Appendix B.

### 3.4 Ambient Air Sampling

An outdoor ambient air sample was collected simultaneously with sub-slab and indoor air samples to evaluate the potential influence, if any, of outdoor air on indoor air quality and to identify potential outdoor air interferences associated with infiltration of outdoor air into the sampling apparatus while the sub-slab samples are collected. As shown on Figure 2 the following ambient air sampling was conducted:

- AA-1: One 24-hour ambient air sample was collected from the yard area behind Building No. 2.

To obtain a representative sample that meets the data quality objectives, the ambient air sample was collected in a manner consistent with those proposed for the indoor air samples. The following actions were taken to document conditions during outdoor air sampling and ultimately to aid in the interpretation of the sampling results:

- An outdoor plot sketch was drawn that includes the building site, area streets, outdoor air sampling locations, the location of potential interferences (e.g., gasoline stations, factories, etc.), compass orientation (north), and paved areas;
- Weather conditions (e.g., precipitation and outdoor temperature) were reported; and
- Any pertinent observations, such as odors, readings from field instrumentation, and significant activities in the vicinity (e.g., operation of heavy equipment or dry cleaners) were recorded.

Following sample collection, the Summa canisters were recovered and shipped to a New York-certified laboratory, Alpha Analytical Laboratories in Westborough, Massachusetts, for analysis using USEPA Method TO-15.

As mentioned previously, in accordance with The VI Guidance, a pre-sampling inspection was performed prior to the sampling event to identify and minimize conditions that may interfere with the proposed testing. Completed forms are provided in Appendix A and photographs of the ambient air sample location are provided in Appendix B.

## 3.5 Quality Assurance/Quality Control

In accordance with NYSDEC Guidance and Regulations, and as outlined in the Vapor Intrusion Assessment Workplan dated October 9, 2018 and submitted to the NYSDEC for review, QA/QC procedures were utilized during implementation of the Vapor Intrusion Assessment activities to ensure accurate and reliable data were generated.

### 3.5.1 Data Usability Evaluation

Upon receipt of the Category B laboratory data deliverables which are provided in Appendix C, Stone Environmental, Inc. of Montpelier, Vermont (Stone) acted as the third-party validator. Stone was responsible for the preparation of a Data Usability Summary Report (DUSR) in accordance with "Appendix 2B" of DER-10 Technical Guidance for Site Investigation and Remediation.

Data evaluation was performed by the third-party data validator using the most current methods and quality control criteria from the USEPA's Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review, and Contract Laboratory Program, National Functional Guidelines for Inorganic Data Review. The data review guidance was used only to the extent that it is applicable to the SW-846 methods; SW-846 methodologies were followed primarily and given preference over CLP when differences occur. Also, results of blanks, surrogate spikes, MS/MSDs, and laboratory control samples were reviewed/evaluated by the third-party data validator.

All sample analytical data for each sample matrix were evaluated. The third party data validation expert also evaluated the overall completeness of the data package. Completeness checks were administered on all data. The reviewer determined whether all required items are present and request copies of missing deliverables.

### 3.6 Data Reliability and Validation

Stone has completed a data usability and quality assurance (QA) evaluation of all of the air analytical data reports. For each data set generated, Stone prepared a DUSR, which are provided in Appendix D.

This DUSR is based on reviews of the laboratory SDG case narratives and the QA evaluations of all the quality control (QC) data;

- Sample integrity, holding times, completeness and custody
- method blanks, other blanks,
- instrument tunings, calibration verifications,
- spike recoveries, replicate analyses,
- and other noted laboratory controls.

The review focused on whether these data were within the protocol required limits and specifications. SDG case narratives provide a limited summary of QC outliers identified by the laboratory and laboratory qualifications as they apply to the results. Data review and evaluations were performed on all of the submitted data for volatiles in air in accordance EPA Region II's Standard Operating Procedures (SOPs) for validating organic analyses and NYSDEC's Technical Guidance for Site Investigation and Remediation (DRAFT DER-10, Nov. 2009) "Appendix 2B" Guidance for Data Deliverables and Development of Data Usability Summary Reports. "EPA's National Functional Guidelines for Organic Data Review" (EPA 540/R-99/008, October 1999) were also considered during the evaluation, and professional judgment was applied as necessary and appropriate.

The data evaluation process evaluated data on a technical basis for chemical analyses conducted under the contract laboratory program (CLP) or other well-defined methods. Contract compliance is evaluated only in specific situations. Issues pertaining to contractual compliance are noted where applicable. It is assumed that the data package is presented in accordance with the CLP (CLP-like or SW-846) requirements. It is also assumed that the data packages represent the best efforts of the laboratory and have already been subjected to adequate and sufficient quality review prior to submission for evaluation. In instances where SW-846 or other specific methods have been used for the analyses, the effort is modified to acknowledge the differences in methodology while maintaining the goals and quality objectives of the CLP.

Overall, Stone's detailed evaluation indicates that the laboratory analytical data are usable, valid, and can be utilized for decision-making purposes.

# 4.0 INVESTIGATION RESULTS

This section summarizes the findings of the vapor intrusion assessment conducted at the Site. VI sampling was conducted in accordance with the New York State Department of Health (NYSDOH) Guidance for Evaluating Vapor Intrusion in the State of New York dated October 2006.

The NYSDOH has developed two decision matrices to use as tools in assessing sub-slab soil vapor and indoor air analytical results as detailed in the "New York State Department of Environmental Conservation Decision Matricies from Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2016."

- **Soil Vapor/Indoor Air Matrix 1** - Was developed for TCE but Carbon Tetrachloride (CT) and Vinyl Chloride (VC) were added later totaling three compounds to be assessed using Matrix 1;

- **Soil Vapor/Indoor Air Matrix 2** - Was developed for Tetrachloroethene (PCE) but 1,1-Dichloroethene (1,1-DCE), cis-1,2-Dichloroethene (c-1,1-DCE), and 1,1,1-Trichloroethane (1,1,1-TCA) were added later totaling four compounds to be assessed using Matrix 2.

The analytical results presented below focus only on those seven compounds of concern to be assessed in the two NYSDOH/NYSDEC Decision Matricies.

## 4.1 Sub-Slab Soil Gas Sampling

Sub-slab soil gas sampling was conducted to investigate the air quality beneath the concrete slab(s) in the three separate buildings located at the Subject Property. As mentioned previously, prior to sub-slab soil gas sampling the following was recorded: historic and current storage and uses of volatile chemicals for each business, use of heating or air conditioning systems, sketch of floor plans showing sampling locations, chemical storage areas, doorways, stairways, sumps, drains etc., sketch of outdoor areas, weather conditions, pertinent observations such as spills, staining, and odors, and measurements of temperature and barometric pressure. A field sampling log sheet was used to document sample identification, date and time of samples, sample depths, sample methods, soil vapor purge volumes, and other field sampling observations.

### 4.1.1 Building No. 1

On March 12, 2019, one sub-slab soil gas sample, SS1-1, was collected beneath Building No. 1 at the location shown on Figure 2, and as detailed in Section 3.0 of this Report. As shown in Table 1 and on Figure 2, the lab reported the following compounds of concern in the sub-slab soil vapor:

Sample SS1-1

- PCE was reported at a concentration of 36.8 micrograms per cubic meter ($ug/m^3$);

- The lab reported all other compounds of concern as Not Detected.

### 4.1.2 Building No. 2

On March 12, 2019, two sub-slab soil gas samples, SS2-1 and SS2-2, were collected beneath Building No. 2 at the locations shown on Figure 2, and as detailed in Section 3.0 of this Report. As shown in Table 2 and on Figure 2, the lab reported the following compounds of concern in the sub-slab soil vapor:

Sample SS2-1:

- TCE was reported at a concentration of 336 ug/$m^3$;
- PCE was reported at a concentration of 67.8 ug/$m^3$; and
- The lab reported all other compounds of concern as Not Detected.

Sample SS2-2:

- TCE was reported at a concentration of 45.8 ug/$m^3$;
- PCE was reported at a concentration of 16.3 ug/$m^3$; and
- The lab reported all other compounds of concern as Not Detected.

### 4.1.3 Building No. 3

On March 12, 2019, one sub-slab soil gas sample, SS3-1, was collected beneath Building No. 3 at the location shown on Figure 2, and as detailed in Section 3.0 of this Report. As shown in Table 3 and on Figure 2, the lab reported the following compounds of concern in the sub-slab soil vapor:

Sample SS3-1

- TCE was reported at a concentration of 42.2 ug/$m^3$;
- PCE was reported at a concentration of 28.5 ug/$m^3$;
- c-1,2-DCE was reported at a concentration of 3.43 ug/$m^3$;
- 1,1,1-TCA was reported at a concentration of 1.81 ug/$m^3$; and
- The lab reported all other compounds of concern as Not Detected.

## 4.2 Indoor Air Sampling

Concurrent with collection of sub-slab soil gas samples on March 12, 2019, indoor air samples were also collected from individual spaces within the three separate buildings located at the Subject Property. As mentioned previously, prior to indoor air sampling the following was recorded: historic and current storage and uses of volatile chemicals for each business, use of heating or air conditioning systems, sketch of floor plans showing sampling locations, chemical storage areas, doorways, stairways, sumps, drains etc., sketch of outdoor areas, weather conditions, pertinent observations such as spills, staining, and odors, and measurements of temperature and barometric pressure. A field sampling log

sheet was used to document sample identification, date and time of samples, sample methods, and other field sampling observations.

### 4.2.1 Building No. 1

On March 12, 2019, one indoor air sample, IA1-1, was collected from within the single commercial tenant space of Building No. 1 at the location shown on Figure 2, and as detailed in Section 3.0 of this Report. As shown in Table 1 and on Figure 2, the lab reported the following compounds of concern in the indoor air sample collected within Building No. 1:

Sample IA1-1

- CT was reported at a concentration of 0.51 ug/$m^3$;
- TCE was reported at a concentration of 0.532 ug/$m^3$;
- PCE was reported at a concentration of 1.67 ug/$m^3$; and
- The lab reported all other compounds of concern as Not Detected.

Note that the lab reported all compounds below the immediate action level for all parameters analyzed.

### 4.2.2 Building No. 2

On March 12, 2019, eight indoor air samples, IA2-1 through IA2-8, were collected from within each residential tenant space of Building No. 2 at the locations shown on Figure 2, and as detailed in Section 3.0 of this Report. As shown in Table 2 and on Figure 2, the lab reported the greatest concentrations of the compounds of concern in the following indoor air samples collected within Building No. 2:

Sample IA2-5

- CT was reported at a concentration of 0.547 ug/$m^3$.

Sample IA2-8

- TCE was reported at a concentration of 2.15 ug/$m^3$;
- PCE was reported at a concentration of 2.64 ug/$m^3$; and
- c-1,2-DCE was reported at a concentration of 0.119 ug/$m^3$.

Note that the lab reported all compounds below the immediate action level for all parameters analyzed.

### 4.2.3 Building No. 3

On March 12, 2019, three indoor air samples, IA3-1 through IA3-3, were collected from within each commercial tenant space of Building No. 3 at the locations shown on Figure 2, and as detailed in Section 3.0 of this Report. As shown in Table 3 and on Figure 2, the

lab reported the greatest concentrations of the compounds of concern in the following indoor air sample collected within Building No. 3:

Sample IA3-1

- CT was reported at a concentration of 0.428 ug/$m^3$;
- TCE was reported at a concentration of 3.98 ug/$m^3$;
- PCE was reported at a concentration of 4.43 ug/$m^3$;
- c-1,2-DCE was reported at a concentration of 0.174 ug/$m^3$; and
- 1,1,1-TCA was reported at a concentration of 0.12 ug/$m^3$.

Note that the lab reported all compounds below the immediate action level for all parameters analyzed.

### 4.3 Ambient Air Sampling

An ambient air sample was collected to investigate the contribution of the local ambient air to the indoor air samples collected in the three separate buildings located at the Subject Property. As mentioned previously, prior to ambient air sampling the following was recorded: sketch of outdoor areas, weather conditions, pertinent observations such as spills, staining, and odors, and measurements of temperature and barometric pressure. A field sampling log sheet was used to document sample identification, date and time of samples, sample methods, and other field sampling observations.

On March 12, 2019, one ambient air sample, AA-1, was collected from behind building No. 3 at the location shown on Figure 2, and as detailed in Section 3.0 of this Report. As shown in Tables 1 through 3 and on Figure 2, the lab reported the following compounds of concern in the ambient air:

Sample AA-1

- CT was reported at a concentration of 0.371 ug/$m^3$.

# 5.0 INVESTIGATION CONCLUSIONS AND RECOMMENDATIONS

This section presents the conclusions and recommendations of the vapor intrusion assessment conducted at the Site. VI sampling was conducted in accordance with the New York State Department of Health (NYSDOH) Guidance for Evaluating Vapor Intrusion in the State of New York dated October 2006.

As mentioned previously, the NYSDOH has developed two decision matrices to use as tools in assessing sub-slab soil vapor and indoor air analytical results as detailed in the "New York State Department of Environmental Conservation Decision Matricies from Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2016."

- **Soil Vapor/Indoor Air Matrix 1** - Was developed for TCE but Carbon Tetrachloride (CT) and Vinyl Chloride (VC) were added later totaling three compounds to be assessed using Matrix 1;

- **Soil Vapor/Indoor Air Matrix 2** - Was developed for Tetrachloroethene (PCE) but 1,1-Dichloroethene (1,1-DCE), cis-1,2-Dichloroethene (c-1,1-DCE), and 1,1,1-Trichloroethane (1,1,1-TCA) were added later totaling four compounds to be assessed using Matrix 2.

## 5.1 Conclusions

The following actions presented below were determined by using the applicable decision Matrix and comparing the greatest concentration reported in indoor air with the greatest concentration of sub-slab soil vapor at each building, taking into consideration the contribution of ambient air.

### 5.1.1 Building No. 1

Carbon Tetrachloride was reported at a concentration of 0.51 ug/$m^3$ in the indoor air and at a concentration of 0.371 ug/$m^3$ in the ambient air, CT was Not Detected in the sub-slab indicating that the source of CT in the indoor air is the local ambient air quality.

Trichloroethene was reported at a concentration of 0.532 ug/$m^3$ in the indoor air but the lab reported that TCE was Not Detected in either the sub-slab or ambient air.

Tetrachloroethene was reported at a concentration of 1.67 ug/$m^3$ in the indoor air and at a concentration of 36.8 in the sub-slab, the lab reported that PCE was Not Detected in the ambient air indicating that the source of PCE in the indoor air is likely the sub-slab soil vapor.

Note that the lab reported all compounds below the immediate action level for all parameters analyzed.

***Review of the New York State Department of Environmental Conservation Decision Matricies from Guidance for Evaluating Soil Vapor Intrusion in the State of New York***

***indicates that, based on the concentration of TCE reported in the indoor air and in the sub-slab, the property owner shall take reasonable and practical actions to identify source(s) and reduce exposures at Building No. 1.***

### 5.1.2 Building No. 2

Carbon Tetrachloride was reported at a concentration of 0.547 ug/$m^3$ in the indoor air and at a concentration of 0.371 ug/$m^3$ in the ambient air, CT was Not Detected in the sub-slab indicating that the source of CT in the indoor air is the local ambient air quality.

Trichloroethene was reported at a concentration of 2.64 ug/$m^3$ in the indoor air and at a concentration of 336 ug/$m^3$ in the sub-slab but the lab reported that TCE was Not Detected in ambient air indicating that the source of TCE in the indoor air is the sub-slab soil vapor.

Tetrachloroethene was reported at a concentration of 1.67 ug/$m^3$ in the indoor air and at a concentration of 67.8 in the sub-slab, the lab reported that PCE was Not Detected in the ambient air indicating that the source of PCE in the indoor air is the sub-slab soil vapor.

Cis-1,2-Dichloroethene was reported at a concentration of 0.119 ug/$m^3$ in the indoor air but the lab reported that c-1,2-DCE was Not Detected in the sub-slab or ambient air.

Note that the lab reported all compounds below the immediate action level for all parameters analyzed.

***Review of the New York State Department of Environmental Conservation Decision Matricies from Guidance for Evaluating Soil Vapor Intrusion in the State of New York indicates that, based on the concentration of TCE reported in the indoor air and in the sub-slab, the property owner shall mitigate at Building No. 2.***

### 5.1.3 Building No. 3

Carbon Tetrachloride was reported at a concentration of 0.428 ug/$m^3$ in the indoor air and at a concentration of 0.371 ug/$m^3$ in the ambient air, CT was Not Detected in the sub-slab indicating that the source of CT in the indoor air is the local ambient air quality.

Trichloroethene was reported at a concentration of 0.3.98 ug/$m^3$ in the indoor air and at a concentration of 42.2 ug/$m^3$ in the sub-slab but the lab reported that TCE was Not Detected in the ambient air indicating that the source of TCE in the indoor air is the sub-slab soil vapor.

Tetrachloroethene was reported at a concentration of 4.43 ug/$m^3$ in the indoor air and at a concentration of 28.5 in the sub-slab, the lab reported that PCE was Not Detected in the ambient air indicating that the source of PCE in the indoor air is the sub-slab soil vapor.

Cis-1,2-Dichloroethene was reported at a concentration of 0.174 ug/$m^3$ in the indoor air and at a concentration of 3.43 ug/$m^3$ in the sub-slab but the lab reported that c-1,2-DCE

was Not Detected in the ambient air indicating that the source of c-1,2-DCE in the indoor air is the sub-slab soil vapor.

1,1,1-Trichloroethane was reported at a concentration of 0.12 ug/$m^3$ in the indoor air and at a concentration of 1.81 ug/$m^3$ in the sub-slab but the lab reported that 1,1,1-TCA was Not Detected in the ambient air indicating that the source of 1,1,1-TCA in the indoor air is the sub-slab soil vapor.

***Review of the New York State Department of Environmental Conservation Decision Matricies from Guidance for Evaluating Soil Vapor Intrusion in the State of New York indicates that, based on the concentration of TCE reported in the indoor air and in the sub-slab, the property owner shall mitigate at Building No. 3.***

## 5.2 Recommendations

Based on the findings summarized above, the following actions are warranted:

- Building No. 1 - take reasonable and practical actions to identify source(s) and reduce exposures;
- Building No. 2 – Mitigate; and
- Building No. 3 – Mitigate.

The following steps will be taken:

### 5.2.1 Reduce Exposure

The most effective mitigation methods involve sealing infiltration points and actively manipulating the pressure differential between the building's interior and exterior. RLBK has contracted with Obar Systems of Newfoundland, New Jersey (Obar) to inspect each building, identify potential points of soil gas infiltration and to maximize the HVAC systems effectiveness in keeping soil gas from entering the buildings.

### 5.2.2 Diagnostic Testing

The property owner has also contracted with Obar to conduct diagnostic testing of the subsurface beneath Building No. 2 and 3. The purpose of diagnostics is to obtain the necessary information needed to design a Sub-Slab Depressurization System (SSDS) capable of depressurizing the sub slab soils to a predefined sub slab pressure differential requirement.

The diagnostic survey includes a visual investigation of the building to examine physical routes of soil gas entry and a series of mechanical tests to determine the volume of air and applied vacuum needed to influence the slab areas of concern.

### 5.2.3 Depressurization System Design

Upon completion of the visual investigation and diagnostic testing a report will be generated providing the results of the diagnostic tests and the design of the mitigation system. The design will include a drawing showing all relevant suction point, fan, and pipe locations. Fan selection is made by comparing the diagnostic data to the flow rate and vacuum of blowers used specifically for mitigation systems.

The Sub-Slab Depressurization System Design will be provided to the NYSDEC/NYSDOH in an Interim Remedial Measures Report for review and approval.

## 6.0 REFERENCES

New York State Department of Environmental Conservation, Division of Environmental Remediation, DER-10 Technical Guidance for Site Investigation and Remediation, May 2010.

New York State Department of Health, October 2006. Guidance for Evaluating Vapor Intrusion in the State of New York.

Caldwell, D.H. and others, 1989, New York State Geological Survey, Surficial Geologic Map of New York – Lower Hudson Sheet.

United States Geological Survey (USGS), 1997, 7.5 Minute Map of the Mohegan Lake, New York Quadrangle.

# TABLES

**TABLE 1**
**BUILDING No 1**
**SUMMARY OF SUB-SLAB, INDOOR AIR, AND AMBIENT AIR ANALYTICAL RESULTS**
Former El Puente
98-116 South 4th Street
Brooklyn, New York

| Sample ID | SS1-1 | IA1-1 | IA1-1 | AA-1 |
|---|---|---|---|---|
| Sampling Date | 3/12/2019 | 3/12/2019 | 3/12/2019 | 3/13/2019 |
| Lab Sample ID | L1909884-16 | L1909884-15 | L1909884-15 R1 | L1909884-04 |
| Sample Type | Soil Vapor | Air | Air | Air |
| Units | ug/m3 | ug/m3 | ug/m3 | ug/m3 |
| | Results | Results | Results | Results |
| **Volatile Organics in Air** | | | | |
| Dichlorodifluoromethane | 1.44 | 1.35 | - | 1.62 |
| Chloromethane | ND | 1.03 | - | 1.06 |
| Ethanol | 10 | 1850 E | 2130 | 16.2 |
| Acetone | 20 | 13.3 | - | 5.32 |
| Trichlorofluoromethane | 1.26 | 3.64 | - | 1.17 |
| Isopropanol | ND | 52.8 | - | ND |
| Tertiary butyl Alcohol | 2.29 | ND | - | ND |
| Carbon disulfide | 0.666 | ND | - | ND |
| 2-Butanone | 17.7 | ND | - | ND |
| cis-1,2-Dichloroethene | ND | - | - | - |
| Ethyl Acetate | ND | 3.89 | - | ND |
| Chloroform | 3.99 | 3.51 | - | ND |
| Tetrahydrofuran | ND | 1.65 | - | ND |
| n-Hexane | ND | ND | - | ND |
| 1,1,1-Trichloroethane | ND | - | - | - |
| Benzene | ND | ND | - | ND |
| Trichloroethene | ND | - | - | - |
| Heptane | ND | ND | - | ND |
| Toluene | 6.75 | 0.825 | - | 0.757 |
| 2-Hexanone | 8.4 | ND | - | ND |
| Tetrachloroethene | 36.8 | - | - | - |
| Ethylbenzene | 1.17 | ND | - | ND |
| p/m-Xylene | 5.13 | ND | - | ND |
| o-Xylene | 1.79 | ND | - | ND |
| 1,2,4-Trimethylbenzene | 1.78 | ND | - | ND |
| **Volatile Organics in Air by SIM** | | | | |
| cis-1,2-Dichloroethene | - | ND | - | ND |
| 1,1,1-Trichloroethane | - | ND | - | ND |
| Carbon tetrachloride | - | 0.51 | - | 0.371 |
| Trichloroethene | - | 0.532 | - | ND |
| Tetrachloroethene | - | 1.67 | - | ND |
| 1,2-Dichloroethene (total) | - | ND | - | ND |

**Notes:**
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
ND - Not Detected
NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

**TABLE 2**
**BUIDLING No. 2**
**SUMMARY OF SUB-SLAB, INDOOR AIR, AND AMBIENT AIR ANALYTICAL RESULTS**
Former El Puente
98-116 South 4th Street
Brooklyn, New York

| Sample ID | SS2-1 | SS2-2 | IA2-1 | IA2-2 | IA2-3 | IA2-4 | IA2-5 | IA2-6 | IA2-7 | IA2-8 | AA-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sampling Date | 3/12/2019 | 3/12/2019 | 3/13/2019 | 3/13/2019 | 3/13/2019 | 3/13/2019 | 3/13/2019 | 3/13/2019 | 3/13/2019 | 3/13/2019 | 3/13/2019 |
| Lab Sample ID | L1909884-13 | L1909884-17 | L1909884-03 | L1909884-09 | L1909884-08 | L1909884-05 | L1909884-06 | L1909884-10 | L1909884-07 | L1909884-11 | L1909884-04 |
| Sample Type | Soil Vapor | Soil Vapor | Air | Air | Air | Air | Air | Air | Air | Air | Air |
| Units | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 |
| | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results |
| **Volatile Organics in Air** | | | | | | | | | | | |
| Dichlorodifluoromethane | 1.75 | 1.33 | 1.4 | 1.67 | 1.72 | 2.29 | 2.07 | 1.67 | 1.76 | 1.51 | 1.62 |
| Chloromethane | ND | ND | 1.13 | 0.96 | 0.892 | 0.964 | 1.59 | 1.05 | 1.01 | 1.08 | 1.06 |
| Ethanol | 12.7 | 76.3 | 96.9 | 146 | 313 | 38.1 | 484 | 83.1 | 73.1 | 754 | 16.2 |
| Acetone | 14 | 93.1 | 14.5 | 11.4 | 8.22 | 11.9 | 12 | 10.3 | 6.53 | 16.3 | 5.32 |
| Trichlorofluoromethane | 1.65 | 1.53 | 1.77 | ND | ND | ND | ND | 1.52 | 1.15 | 1.14 | 1.17 |
| Isopropanol | ND | 6.78 | 5.73 | 1.99 | 11.1 | 1.24 | 3.54 | 4.28 | 1.99 | 11.9 | ND |
| Tertiary butyl Alcohol | 1.54 | 2.57 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon disulfide | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone | 10.6 | 15.5 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| cis-1,2-Dichloroethene | ND | ND | - | - | - | - | - | - | - | - | - |
| Ethyl Acetate | ND | ND | 12.1 | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroform | 13 | ND | ND | ND | ND | ND | 3.86 | ND | ND | 3.71 | ND |
| Tetrahydrofuran | ND | 2.09 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| n-Hexane | 0.814 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | ND | ND | - | - | - | - | - | - | - | - | - |
| Benzene | ND | 1.19 | ND | ND | ND | ND | 0.789 | ND | ND | ND | ND |
| Trichloroethene | 336 | 45.8 | - | - | - | - | - | - | - | - | - |
| Heptane | ND | 1.17 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Toluene | 4.52 | 9.23 | 0.837 | 1.11 | ND | 0.825 | 1.78 | 0.855 | 1.12 | 1.3 | 0.757 |
| 2-Hexanone | 5.2 | 1.46 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Tetrachloroethene | 67.8 | 16.3 | - | - | - | - | - | - | - | - | - |
| Ethylbenzene | 1.15 | 2.04 | ND | ND | ND | ND | ND | ND | ND | 7.86 | ND |
| p/m-Xylene | 5.13 | 7.82 | ND | ND | ND | ND | ND | ND | ND | 33.6 | ND |
| o-Xylene | 1.3 | 2.97 | ND | ND | ND | ND | ND | ND | ND | 8.43 | ND |
| 1,2,4-Trimethylbenzene | 1.27 | 1.67 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Volatile Organics in Air by SIM** | | | | | | | | | | | |
| cis-1,2-Dichloroethene | - | - | ND | ND | ND | ND | 0.107 | ND | ND | 0.119 | ND |
| 1,1,1-Trichloroethane | - | - | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon tetrachloride | - | - | 0.541 | 0.434 | 0.44 | 0.415 | 0.547 | 0.415 | 0.39 | 0.516 | 0.371 |
| Trichloroethene | - | - | 0.107 | ND | 0.107 | ND | 1.54 | ND | ND | 2.15 | ND |
| Tetrachloroethene | - | - | 0.597 | 0.149 | 0.604 | 0.156 | 1.55 | 0.149 | 0.231 | 2.64 | ND |
| 1,2-Dichloroethene (total) | - | - | ND | ND | ND | ND | 0.107 | ND | ND | 0.119 | ND |

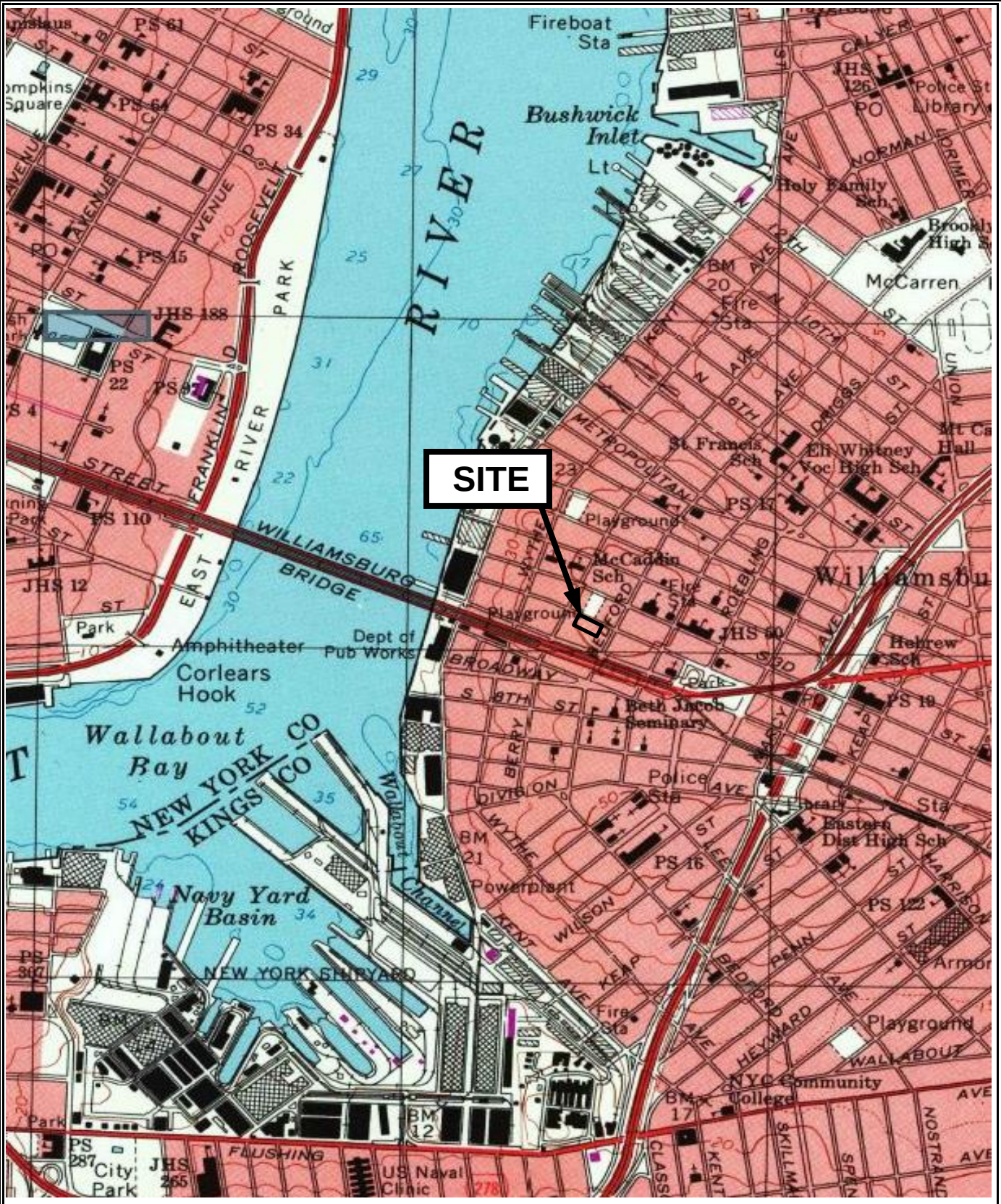
**Notes:**
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
ND - Not Detected
NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

**TABLE 3**
**BUILDING No. 3**
**SUMMARY OF SUB-SLAB, INDOOR AIR, AND AMBIENT AIR ANALYTICAL RESULTS**
Former El Puente
98-116 South 4th Street
Brooklyn, New York

| Sample ID | SS3-1 | IA3-1 | IA3-2 | IA3-3 | AA-1 |
|---|---|---|---|---|---|
| Sampling Date | 3/12/2019 | 3/12/2019 | 3/12/2019 | 3/12/2019 | 3/13/2019 |
| Lab Sample ID | L1909884-11 | L1909884-02 | L1909884-12 | L1909884-14 | L1909884-04 |
| Sample Type | Soil Vapor | Air | Air | Air | Air |
| Units | ug/m3 | ug/m3 | ug/m3 | ug/m3 | ug/m3 |
| | Results | Results | Results | Results | Results |
| **Volatile Organics in Air** | | | | | |
| Dichlorodifluoromethane | 1.18 | 1.6 | 1.58 | 1.36 | 1.62 |
| Chloromethane | ND | 1.06 | 0.958 | 0.884 | 1.06 |
| Ethanol | 29.4 | 68.6 | 71.6 | 192 | 16.2 |
| Acetone | 5.53 | 9.1 | 13.1 | 17.7 | 5.32 |
| Trichlorofluoromethane | ND | 1.15 | ND | 1.16 | 1.17 |
| Isopropanol | 2.26 | 25.3 | 2.11 | 7.89 | ND |
| Tertiary butyl Alcohol | ND | ND | ND | ND | ND |
| Carbon disulfide | ND | ND | ND | ND | ND |
| 2-Butanone | 7.64 | ND | 3.1 | ND | ND |
| cis-1,2-Dichloroethene | 3.43 | - | - | - | - |
| Ethyl Acetate | ND | ND | ND | ND | ND |
| Chloroform | 4.26 | 1.79 | ND | ND | ND |
| Tetrahydrofuran | ND | ND | 4.42 | ND | ND |
| n-Hexane | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 1.81 | - | - | - | - |
| Benzene | ND | ND | ND | ND | ND |
| Trichloroethene | 42.2 | - | - | - | - |
| Heptane | 1.09 | ND | ND | ND | ND |
| Toluene | 9.72 | ND | 1.18 | 2 | 0.757 |
| 2-Hexanone | 2.77 | ND | ND | ND | ND |
| Tetrachloroethene | 28.5 | - | - | - | - |
| Ethylbenzene | 2.14 | ND | ND | ND | ND |
| p/m-Xylene | 7.99 | ND | ND | 1.9 | ND |
| o-Xylene | 2.91 | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 1.5 | ND | ND | ND | ND |
| **Volatile Organics in Air by SIM** | | | | | |
| cis-1,2-Dichloroethene | - | 0.174 | 0.119 | ND | ND |
| 1,1,1-Trichloroethane | - | 0.12 | ND | ND | ND |
| Carbon tetrachloride | - | 0.428 | 0.415 | 0.421 | 0.371 |
| Trichloroethene | - | 3.98 | 0.94 | 0.613 | ND |
| Tetrachloroethene | - | 4.43 | 1.74 | 2.22 | ND |
| 1,2-Dichloroethene (total) | - | 0.174 | 0.119 | ND | ND |

**Notes:**
E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
ND - Not Detected
NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

**FIGURES**




**SOURCE:**

UNITED STATES GEOLOGICAL SURVEY
7.5 MINUTES SERIES (TOPOGRAPHIC)
BROOKLYN, N.Y. (1995)
BROOKLYN QUADRANGLE

**EXCEL ENVIRONMENTAL RESOURCES, INC.**

FORMER EL PUENTE
BROOKLYN, NEW YORK

FIGURE 1
SITE LOCATION MAP

| | | |
|---|---|---|
| Drawn by: MS | Scale: 1:24,000 | Date: 5/3/18 |
| Checked by: EM | Revision: | Project #: 18597 |

SOUTH 4TH STREET

| IA2–8 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.516 | ND | Ambient* |
| TCE | 2.15 | 336 | Mitigate |
| PCE | 2.64 | 67.8 | NFA |

| IA2–7 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.39 | ND | Ambient* |
| TCE | ND | 336 | Mitigate |
| PCE | 0.231 | 67.8 | NFA |

| CT | ND |
|---|---|
| TCE | 336 |
| PCE | 67.8 |

SS2–1

IA2–6

| IA2–6 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.415 | ND | Ambient* |
| TCE | ND | 336 | Mitigate |
| PCE | 0.149 | 67.8 | NFA |

BUILDING 3

APT #13

APT #12

IA2–8

IA2–7

BUILDING 2

BUILDING 1

| IA3–1 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.428 | ND | Ambient* |
| TCE | 3.98 | 42.2 | Mitigate |
| PCE | 4.43 | 28.5 | Reduce |

| IA3–2 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.415 | ND | Ambient* |
| TCE | 0.94 | 42.2 | Monitor |
| PCE | 1.74 | 28.5 | NFA |

| IA3–3 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.421 | ND | Ambient* |
| TCE | 0.613 | 42.2 | Monitor |
| PCE | 2.22 | 28.5 | NFA |

| CT | ND |
|---|---|
| TCE | 42.2 |
| PCE | 28.5 |

| CT | ND |
|---|---|
| TCE | 45.8 |
| PCE | 16.3 |

SS2–2

APT #8

APT #7

APT #6

APT #5

APT #4

IA2–5

IA2–4

IA2–3

IA2–2

IA2–1

| CT | ND |
|---|---|
| TCE | ND |
| PCE | 36.8 |

IA3–3

IA3–2

IA3–1

SS3–1

AA–1

IA1–1

SS1–1

| AA–1 | AA |
|---|---|
| CT | 0.371 |
| TCE | ND |
| PCE | ND |

| IA2–3 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.44 | ND | Ambient* |
| TCE | 0.107 | 336 | Mitigate |
| PCE | 0.604 | 67.8 | NFA |

| IA1–1 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.51 | ND | Ambient* |
| TCE | 0.532 | ND | Reduce |
| PCE | 1.67 | 36.8 | NFA |

| IA2–5 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.547 | ND | Ambient* |
| TCE | 1.54 | 336 | Mitigate |
| PCE | 1.55 | 67.8 | NFA |

| IA2–2 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.434 | ND | Ambient* |
| TCE | ND | 336 | Mitigate |
| PCE | 0.149 | 67.8 | NFA |

| IA2–4 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.415 | ND | Ambient* |
| TCE | ND | 336 | Mitigate |
| PCE | 0.156 | 67.8 | NFA |

| IA2–1 | IA | SS | ACTION |
|---|---|---|---|
| CT | 0.541 | ND | Ambient* |
| TCE | 0.107 | 336 | Mitigate |
| PCE | 0.597 | 67.8 | NFA |

## LEGEND:

| | |
|---|---|
| | PROPERTY BOUNDARY |
| | EXISTING BUILDING |
| | INTERIOR WALLS |
| ● SS1–1 | SUB–SLAB SOIL GAS SAMPLE LOCATION |
| ▲ IA1–1 | INDOOR AIR SAMPLE LOCATION |
| ■ AA–1 | AMBIENT AIR SAMPLE LOCATION |
| IA | INDOOR AIR |
| SS | SUB–SLAB |
| AA | AMBIENT AIR |
| CT | CARBON TETRACHLORIDE |
| TCE | TRICHLOROETHENE |
| PCE | TETRACHLOROETHENE |
| ND | NOT DETECTED ABOVE THE METHOD DETECTION LIMIT |
| NFA | NO FURTHER ACTION |
| Ambient* | THE COMPOUND WAS REPORTED IN THE AMBIENT AIR SAMPLE AND RESULTS FROM REGIONAL AIR QUALITY |

NOTE:
CONCENTRATIONS REPORTED IN MICROGRAMS PER CUBIC METER (ug/M$^3$)

DRAFT

0 20' 40'

EXCEL Environmental Resources, Inc.

*Solving Environmental Problems & Creating Redevelopment Opportunities*

PROJECT : FORMER EL PUENTE BROOKLYN, NEW YORK

DESCRIPTION : FIGURE 2
GENERALIZED SITE PLAN SHOWING SAMPLE LOCATIONS AND ANALYTICAL RESULTS

| | | | |
|---|---|---|---|
| DRAWN BY : RC | SCALE : 1"=20' | DATE : 4/10/19 |
| CHECKED BY : EM | REVISION : | PROJECT # 18597 |