



**OFFICE OF ENVIRONMENTAL REMEDIATION**

100 Gold Street – 2<sup>nd</sup> Floor  
New York, New York 10038

**Shaminder Chawla**  
**Acting Director**  
Tel: (212) 788-8841

July 2, 2024

Mr. Scott Deyette  
Director, Remedial Bureau B  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway, 12<sup>th</sup> Floor  
Albany, New York 12233

Re: 484 East 178th Street, St. Joseph's - 1949 Bathgate Avenue  
Bronx Block 3043, Lots 10, 16, 22, 23  
OER Project Number 23TMP0776X

Dear Mr. Deyette:

Per our discussion during our briefing meeting on June 28, 2024, OER is providing you with this “P” referral package for the above project to be managed under the State cleanup program.

The Site is located at 484 East 178<sup>th</sup> Street in the Tremont section of The Bronx, and is identified as Block 3043 Lots 10, 16, 22, 23 on the New York City Tax Map. Currently the site is vacant. A Remedial Investigation was conducted, and the results are described in a Report dated February 2024. VHB Consultants collected seventeen soil samples and ten soil vapor samples.

- Tetrachloroethylene (PCE) was detected in all soil vapors at a maximum concentration of 658 µg/m<sup>3</sup>.
- Shallow bedrock prevented initial attempts at groundwater sampling.

Sampling results were previously forwarded to DEC (briefing attached).

Pursuant to Section 27-1303, paragraph 1(a) of New York State Environmental Conservation Law, we are forwarding the subsurface investigation results to the NYSDEC to determine if this property should be investigated for inclusion on the Registry of “Inactive Hazardous Waste Sites in New York State.” The basis for this referral is observed elevated concentrations of tetrachloroethene (PCE) in soil vapor.

We have informed the development team to schedule a BCP pre-application meeting. The project contacts include:

- Owner – Susan Albrecht (Association of New York Catholic Homes),  
[susan.albrecht@catholiccharitiesny.org](mailto:susan.albrecht@catholiccharitiesny.org)
- Owner – John DiBattista (Association of New York Catholic Homes),  
[john.dibattista@catholiccharitiesny.org](mailto:john.dibattista@catholiccharitiesny.org)
- Consultant – Isabel Mielczarek (VHB), [imielczarek@vhb.com](mailto:imielczarek@vhb.com)
- Consultant – George Lester (VHB), [glester@vhb.com](mailto:glester@vhb.com)

If you have any comments or questions, please contact me at [schawla@dep.nyc.gov](mailto:schawla@dep.nyc.gov) or 212-442-3007. All OER project related documents are available at: <https://a002-epic.nyc.gov/app/workspace/34136/doctrepository>

Sincerely,



Shaminder Chawla  
Acting Director

cc: J. O'Connell, NYSDEC – Region 2  
A. Singleton, OER

Briefed DEC on June 28th.  
CVOC source unknown.

OER PM: Adrian Singleton

GW not sampled. PCE elevated in all soil vapor samples.

OER Project #: 23TMP0776X, 23EH-A129X

DEC requiring "P" referral to BCP. 484 EAST 178th Street

Informed consultant to schedule BCP pre-app

June 28, 2024

DEC Briefing 1

**Issue:** Elevated PCE in soil vapor

**OER Recommendation:** Continue in OER E/VCP programs.

**Address:** 484 East 178th Street in Tremont, Bronx

**Status:** RAWP

**DEC Involvement:** NYSDEC PBS Number 2-399744



**Current Usage:** The Site is 40,102-square feet and consists of four lots (Block 3043 and Lots 10, 16, 22, and 23), which have been merged into a single lot (Lot 10). Currently, the Site is vacant and contains a ramp, staircase, and retaining walls around its elevated northeastern section. **The Site slopes from the elevated northeastern section** downward to the west and south, the elevation ranges from approximately 79 feet (NAVD 88) in the northeast to approximately 58 feet (NAVD 88) in the southwest.

**Site History:** In 1896 the Site was improved with an early iteration of "St. Joseph's Academy" on southern portions, a mixed-use building on northwestern portions and two dwellings on northeastern portions. The most recent church structure with basement for auditorium, meeting hall, cafeteria, dances, gym and school counseling was constructed by 1901 along with another rendition of the

academy/convent building. A six-story horseshoe-shaped building with a centrally located elevator was constructed on northwestern portions by 1915. The former rectory appeared by 1950. The **mixed-use commercial and residential buildings** were demolished by 1981, and the dwelling on northeastern portions was demolished circa 2012. The church was closed as of 2015 and remaining buildings on the Site were demolished in 2019 for redevelopment of the Site.

**Areas of Concern:** One **3,000-gal fuel oil aboveground** storage tank is registered to Lot 10 and municipal records reference several underground storage tanks (**USTs**; two 275-gallon on Lot 23 and one 1,000-gallon on Lot 22). It is unknown if these USTs remain on-site or have been removed. The AST was removed during demolition of the former church on site.

**Proposed Development:** The proposed future use of the Site will consist of a 100% affordable eight-story residential building. The building will have a **U-shape design with landscaped inner courtyard** and a partial basement used for building superintendent housing, community facility space, storage, and utilities. **At grade, the building will have residential, residential amenity, and community facility spaces, as well as offices and lobbies.** The proposed development will achieve a full build-out to the property boundaries with an interior courtyard.

**Excavation depth ranges from 6.5-19.5 feet** below surface grade for drainage features in the courtyard and structural footings beneath the building. Based on drilling refusal, **bedrock is expected to be 2.0-14.0 feet below surface grade** and follows the same general slope from the northeast down to the west and south as the surface grade. Excavation is not anticipated below the groundwater table. Demolition of existing the existing stair, ramp, and retaining walls will occur prior to construction.

**Stratigraphy:** The stratigraphy of the site, from the surface down, consists of **two to 14 feet of urban fill**, sand, and gravel underlain by bedrock.

#### **Environmental Findings:**

**Soil:** 17 samples from 11 borings

- **VOCs:** None detected above UUSCOs
- **SVOCs:** Several SVOCs in SB-4 and SB-5, including benzo(a)anthracene (max. 3.4 mg/kg in SB-4 (4'-6')), benzo(a)pyrene (max. 3.1 mg/kg in SB-4 (4'-6')), benzo(b)fluoranthene (max. 3.7 mg/kg in SB-4 (4'-6')), benzo(k)fluoranthene (1.4 mg/kg in SB-4 (4'-6')), chrysene (max. 3 mg/kg in SB-4 (4'-6')), dibenzo(a,h)anthracene (0.62 mg/kg in SB-4 (4'-6')), and indeno(1,2,3-cd)pyrene (max. 1.8 mg/kg in SB-4 (4'-6')).
- **Pesticides:** Several pesticides were detected above UUSCOS but below RUSCOS and RRSCOs,.
- **PCBs:** None detected above UUSCOs
- **Metals:** Several metals including mercury (0.214 mg/kg in SB-4 (4'-6')), zinc (max. 1,500 mg/kg in SB-5 (12'-14')), and copper (max. 55.3 mg/kg in SB-10 (0'-2')). Barium (max. 522 mg/kg in SB-5 (12'-14')), lead (max. 1,370 mg/kg in SB-5 (12'-14')), and arsenic (max. 93.8 mg/kg in SB-11 (6.5'-8.5')) were detected above UUSCOs.
- **PFAS:** PFAS compounds were measured in a single sample, SB-6 (0-2'). No PFAS compounds were detected above NYSDEC Guidance Values. PFOS was detected at a concentration of 0.212 ng/g, PFDS was detected at a concentration of 0.055 ng/g, and total PFOA/PFOS was detected at a concentration of 0.212 ng/g in SB-6.

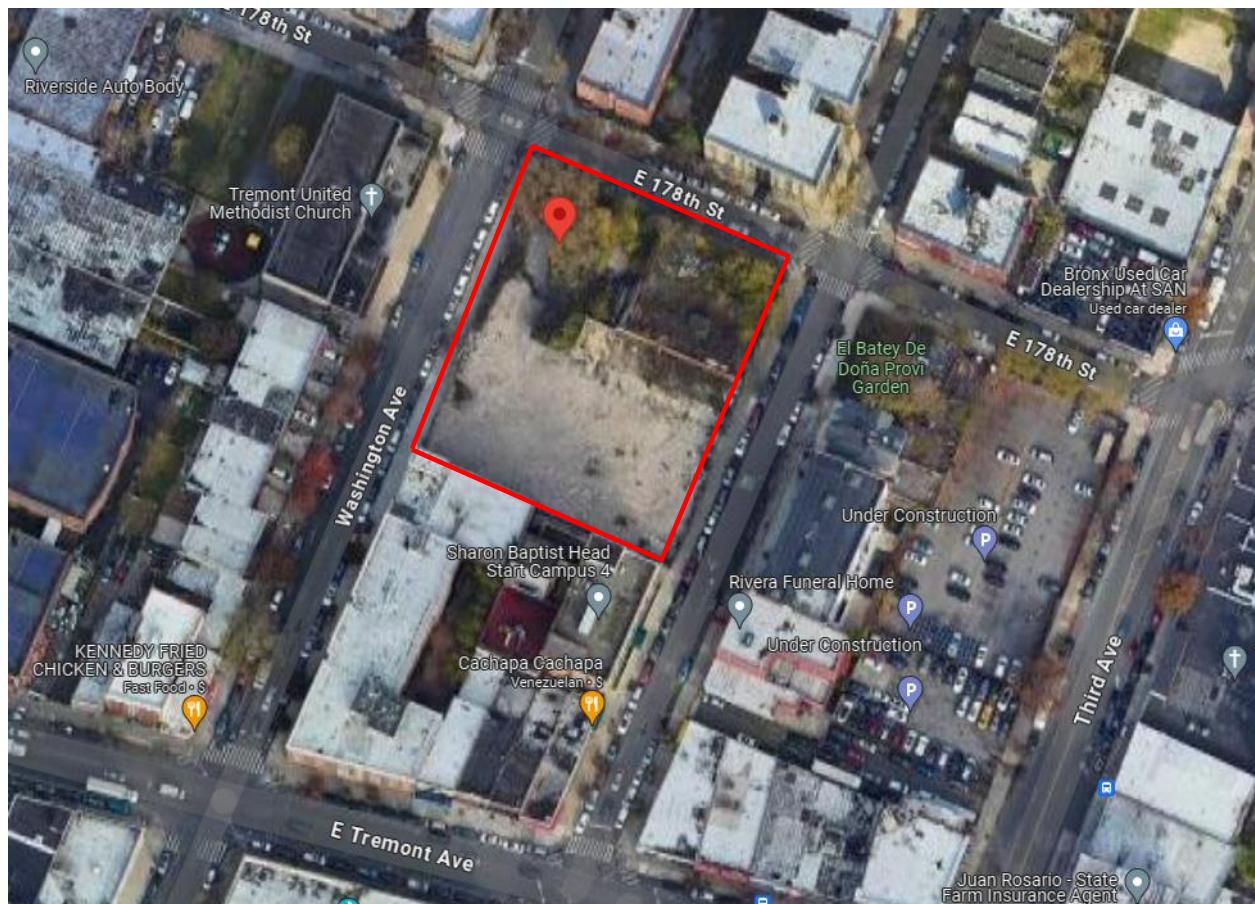
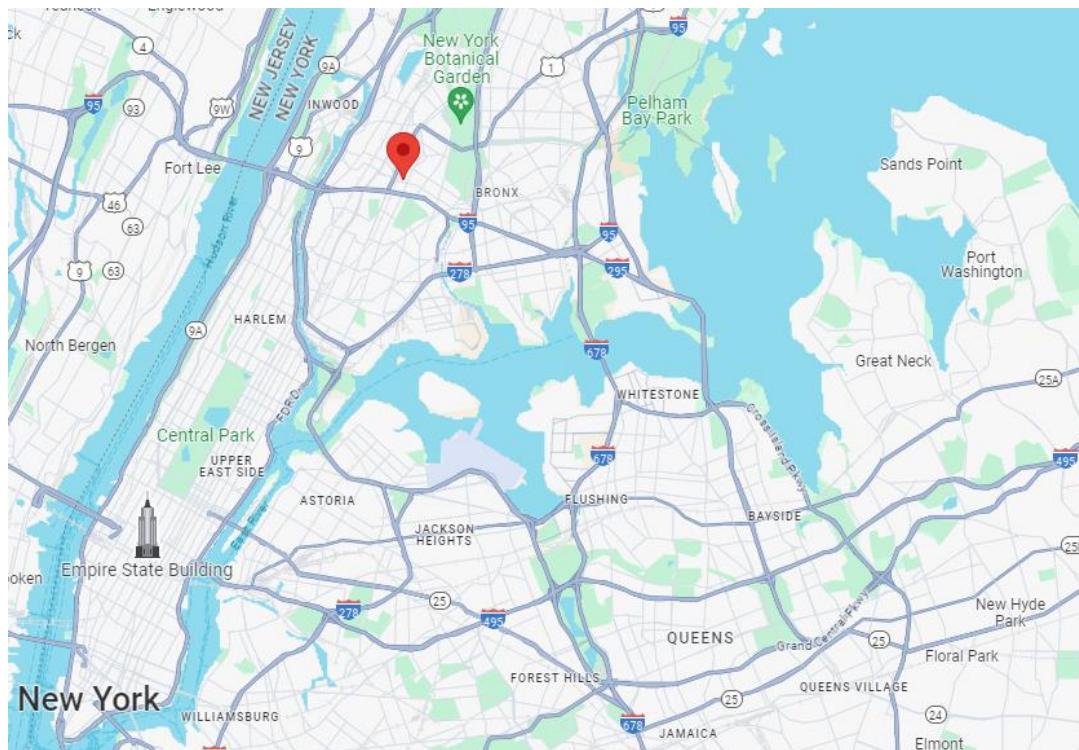
**Groundwater:** Attempted at 6 boring locations; encountered refusal at each attempt due to shallow bedrock.

Soil Vapor: 10 samples at 10 points

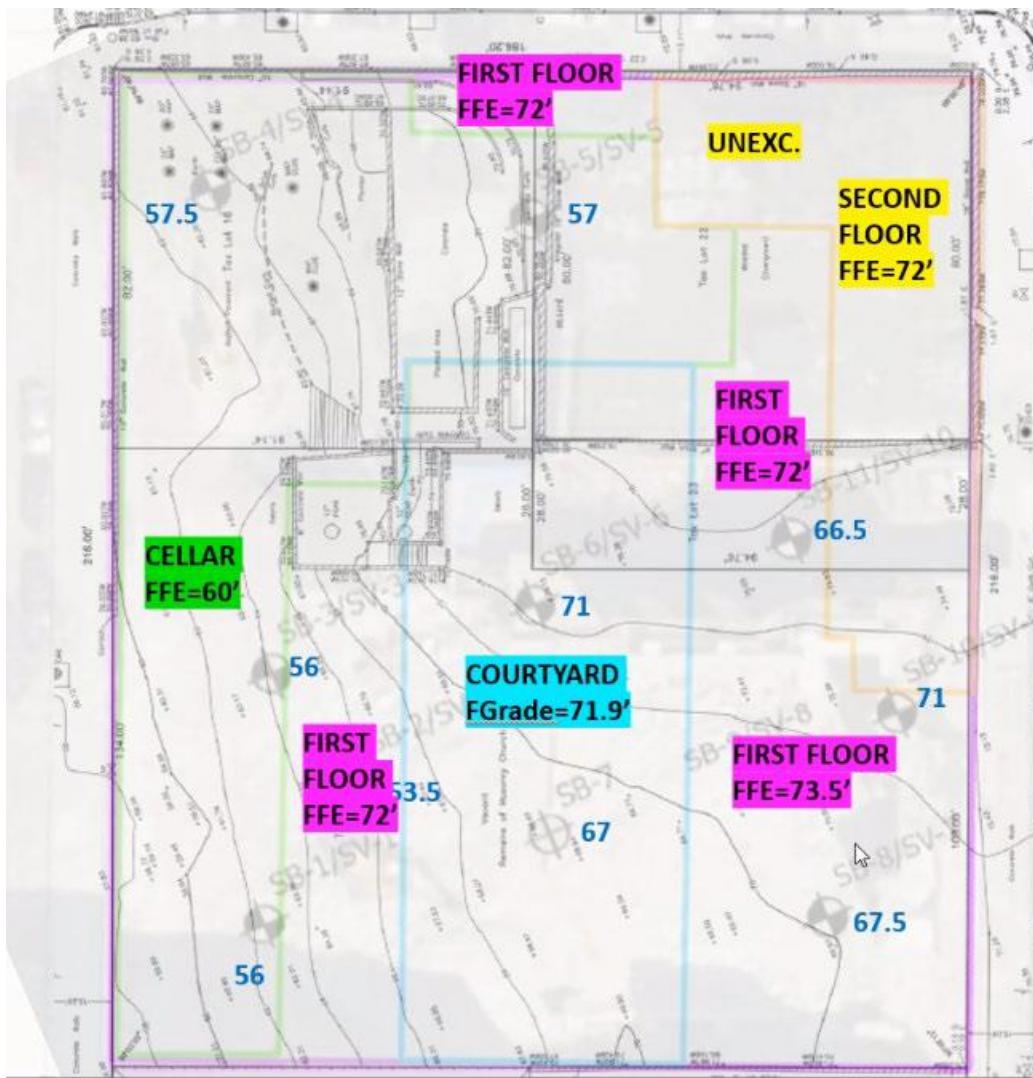
	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV9	SV10
<b>trichloroethene (TCE)</b>	ND									
<b>cis-1,2-dichloroethene (c-1,2-DCE)</b>	ND									
<b>1,1-dichloroethene (1,1-DCE)</b>	ND									
<b>carbon tetrachloride</b>	ND									
<b>tetrachloroethene (PCE)</b>	59.7	264	159	93.6	658	194	142	322	412	550
<b>1,1,1-trichloroethane (1,1,1-TCA)</b>	ND	ND	ND	2.74	ND	ND	ND	ND	ND	ND
<b>methylene chloride</b>	ND									
<b>vinyl chloride</b>	ND									
<b>benzene</b>	0.818	ND	ND	0.872	ND	ND	0.658	0.879	1.36	ND
<b>ethylbenzene</b>	0.943	3.37	2.19	4.01	7.17	2.46	2.59	4.34	5.86	5.99
<b>naphthalene</b>	Not Measured									
<b>cyclohexane</b>	ND									
<b>isooctane (2,2,4-trimethylpentane)</b>	ND									
<b>1,2,4-trimethylbenzene</b>	4.13	6.69	6.78	3.67	8.36	9.93	4.64	10.8	9.98	11.8
<b>1,3,5-trimethylbenzene</b>	ND	1.85	1.68	1.04	2.3	2.12	1.09	2.35	2.47	2.95
<b><i>o</i>-xylene</b>	1.72	5.95	4.91	2.31	10.1	4.47	3.98	6.56	8.21	9.47
<b><i>m</i>-xylene &amp; <i>p</i>-xylene</b>	4.3	15.6	10.3	6.95	27.8	11.9	9.73	17.6	22.2	25.9
<b>heptane</b>	ND	2.14	1.61	3.6	10.2	1.91	1.37	2.77	5.49	5.61
<b>n-hexane</b>	2.1	0.73	1.8	3.88	5.67	0.867	4.86	1.66	13.5	ND
<b>Toluene</b>	2.66	7.24	18.6	2.9	20.7	5.39	6.41	9.04	17.4	16.2

**Remedy**

- Track 4:
  - SVOCs 100 ppm, Lead 800 ppm, Arsenic 23 ppm, Barium 600 ppm
- Additional soil sampling in NE unexcavated portion
- Excavation:
  - Excavation varies across site due to slope (see figure below)
  - Additional excavation at SB-11 arsenic hotspot removal
  - USTs removal if encountered
- Engineering Controls:
  - Vapor Barrier
  - Composite cover (including a minimum of 2 ft of clean soil in courtyard area)
  - Active SSDS
    - SVI study to be completed upon building completion to determine whether system can be switched to passive.
- Institutional Controls:
  - Site Management Plan

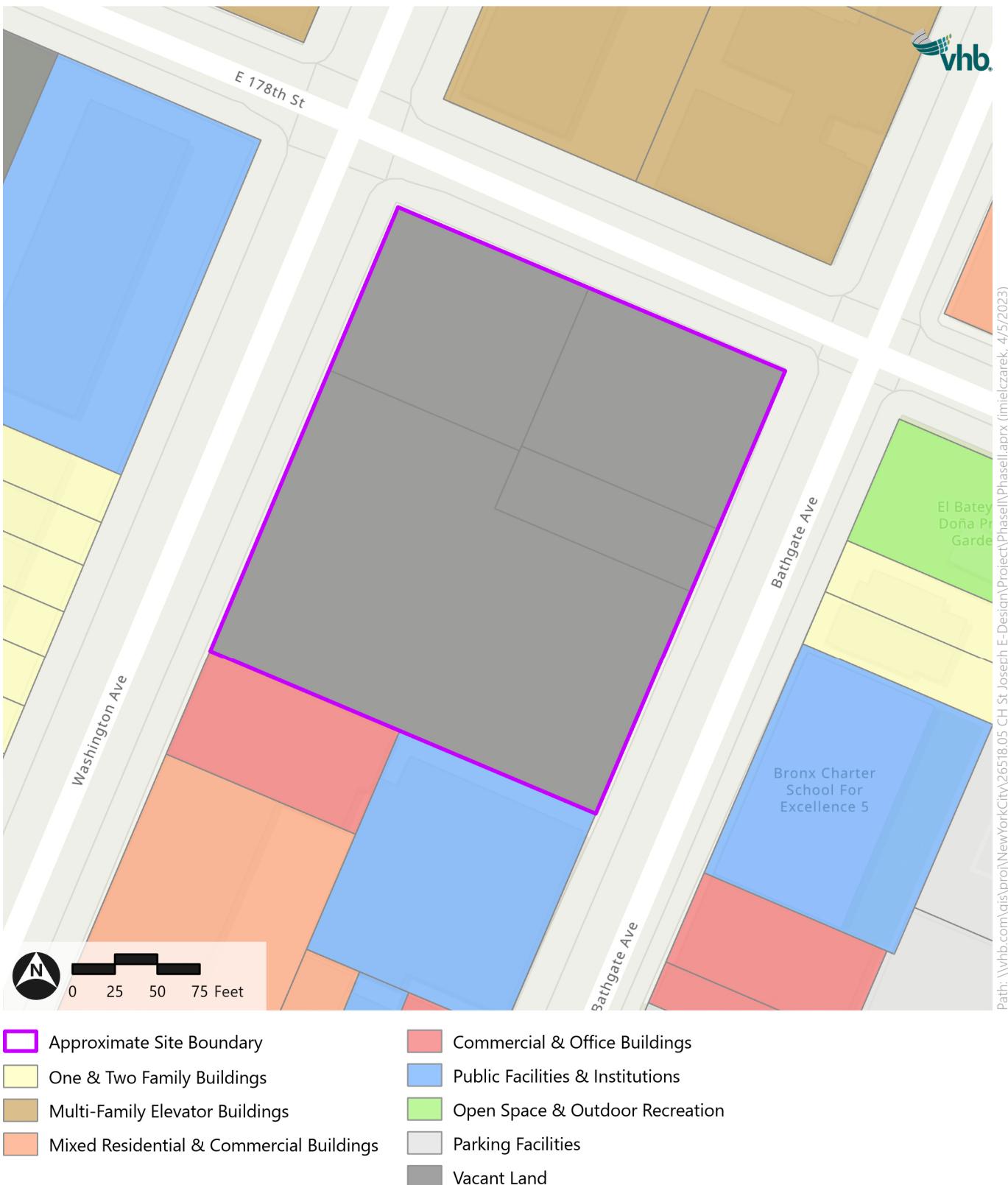


**Bedrock and slab elevations: (Blue numbers represent bedrock elevations)**



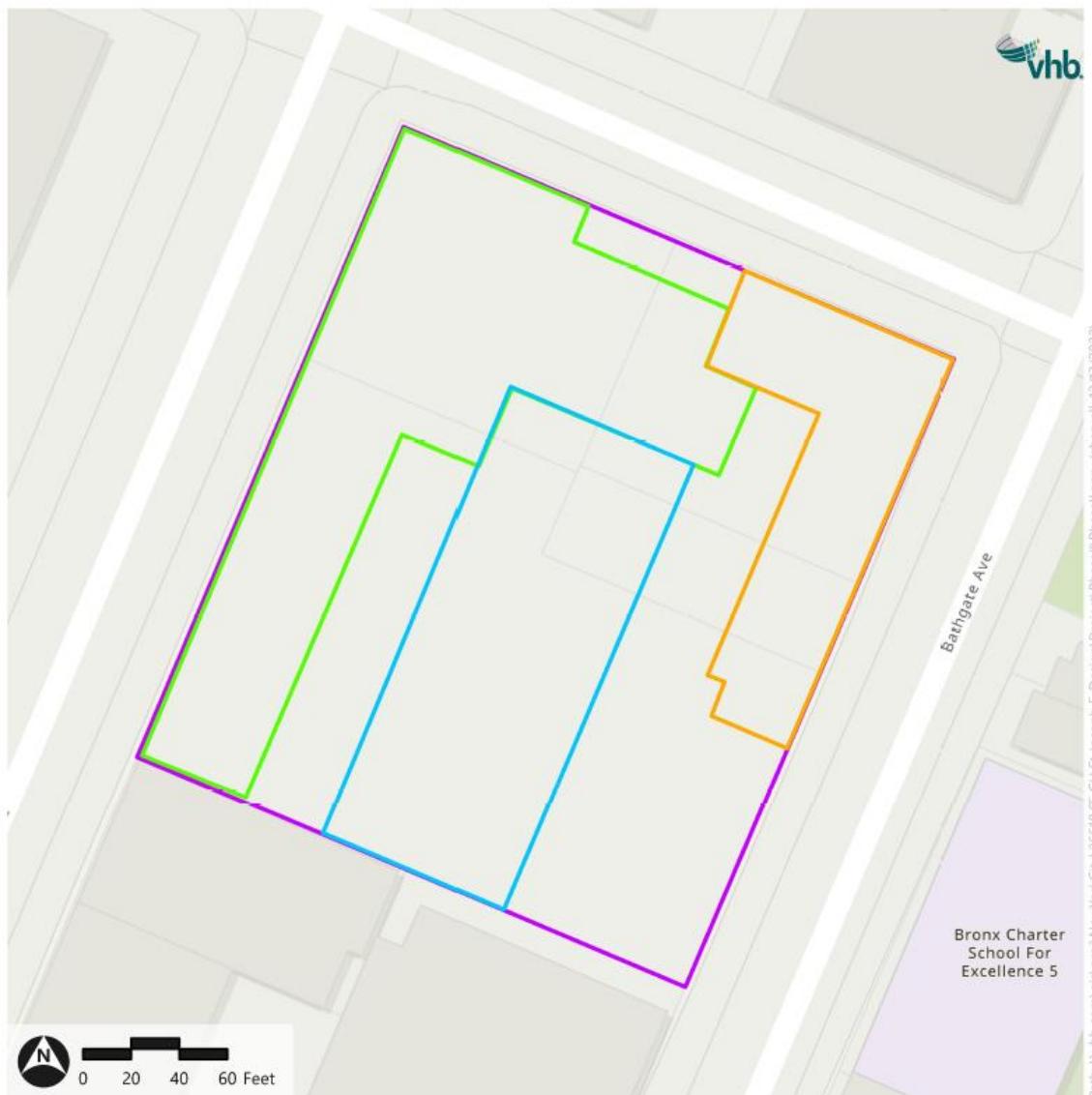
**Figure 3: Land Use Map**

St. Joseph's Apartments | 484 East 178th Street, Bronx, New York



Source: Esri Community Maps, NYC OpenData, MapPLUTO.

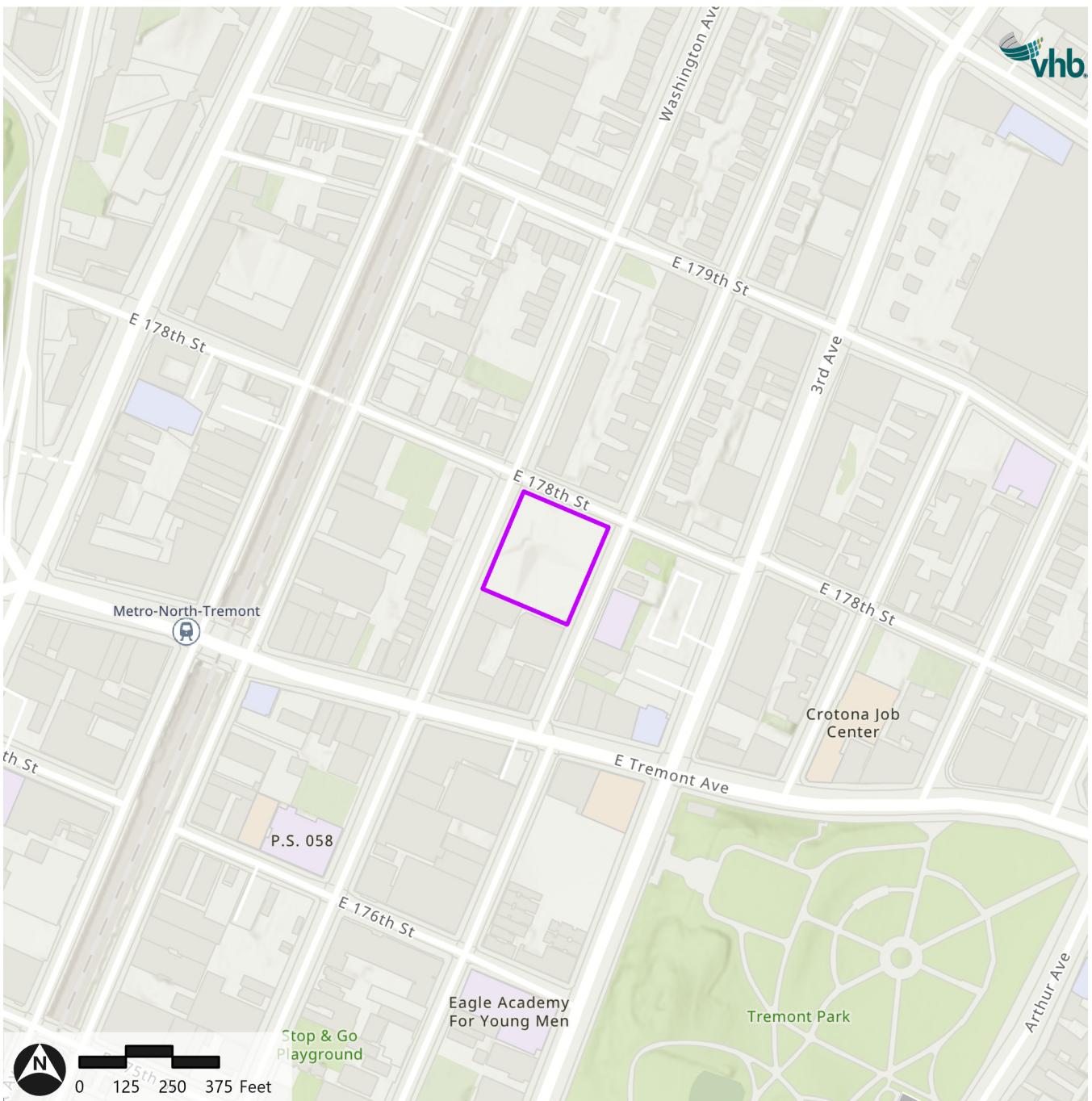
**Building Layout:**



- |   |  |
|---|--|
| <span style="color: blue;">□</span> Approximate Footprint of Interior Courtyard | <span style="color: purple;">□</span> Approximate Site Boundary    |
| <span style="color: green;">□</span> Approximate Footprint of Cellar Level      | <span style="color: orange;">□</span> Approximate Unexcavated Area |

## Figure 1: Site Location Map

St. Joseph's Apartments | 484 East 178th Street, Bronx, New York



Approximate Site Boundary

Source: Esri Community Maps Contributors, NYC OpenData.



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## Figure 4: Ground-penetrating Radar Survey

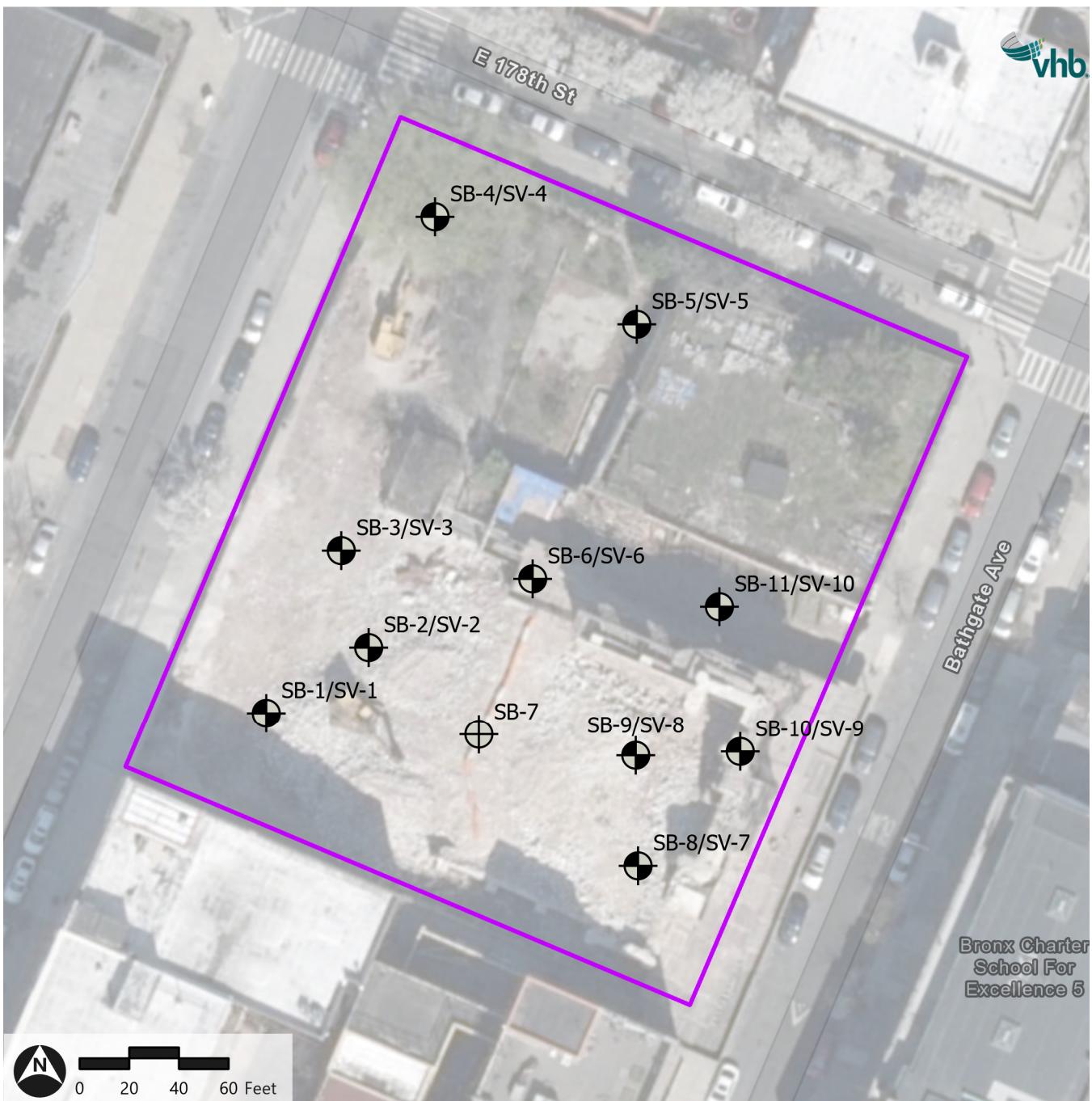
St. Joseph's Apartments | 484 East 178th Street, Bronx, New York



Source: Esri Community Maps Contributors, NYC OpenData.

## Figure 5: Location of Soil Borings and Soil Vapor Samples

St. Joseph's Apartments | 484 East 178th Street, Bronx, New York



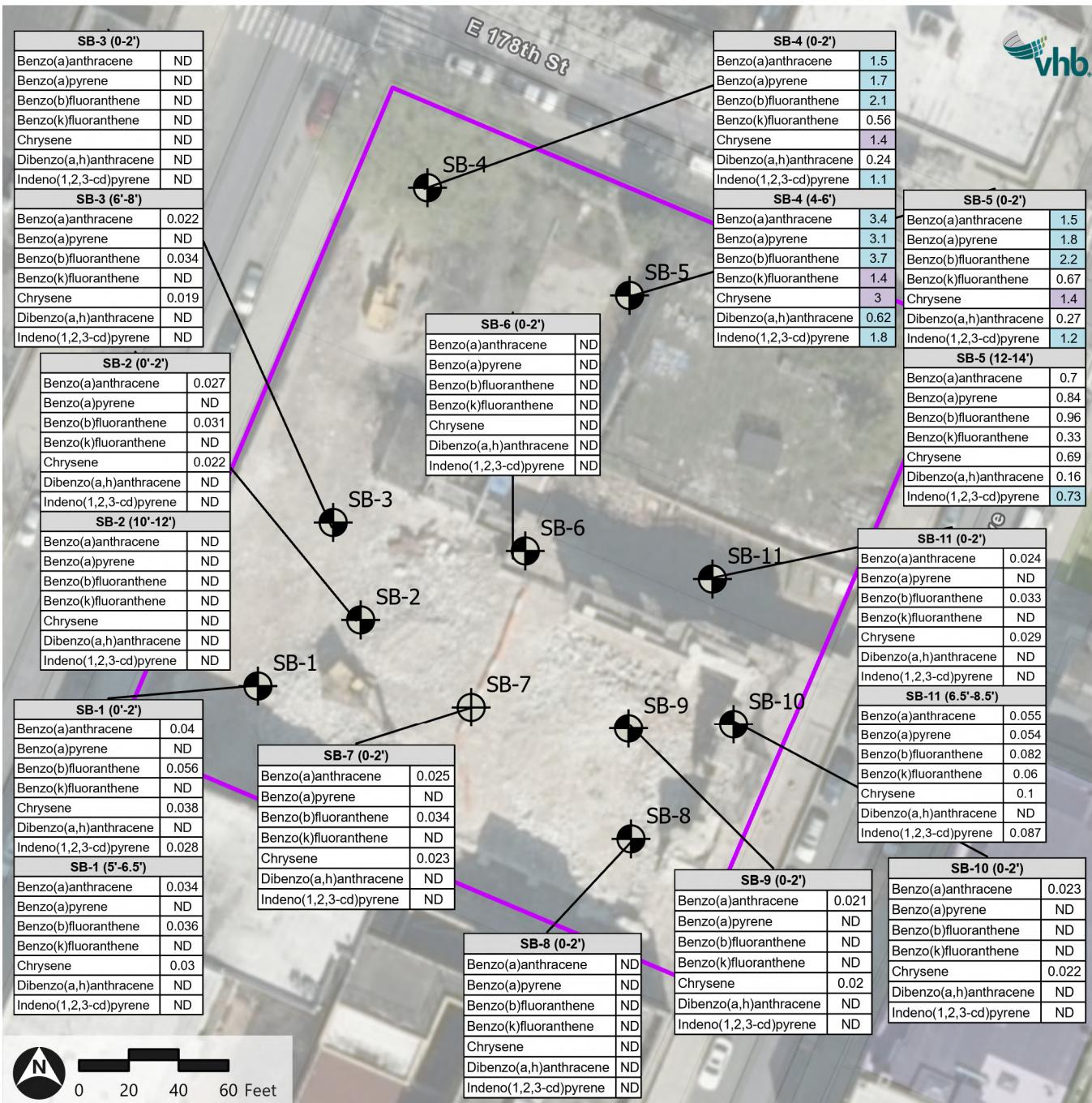
- Approximate Site Boundary
- Soil Boring and Soil Vapor Point Location
- Soil Boring Location

Source: Esri Community Maps Contributors, NYC OpenData.

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## Figure 6a: Map of Soil Chemistry Results (SVOCs)

St. Joseph's Apartments | 484 East 178th Street, Bronx, New York



Approximate Site Boundary

Soil Boring and Soil Vapor Point Location

Soil Boring Location

Source: Esri Community Maps Contributors, NYC OpenData.

Note: Only compounds exceeding 6 NYCRR Part 375 Soil Cleanup Objectives in at least one sample shown.

RRSCOs = Restricted-Residential Use Soil Cleanup Objectives

RSCOS = Residential Use Soil Cleanup Objectives

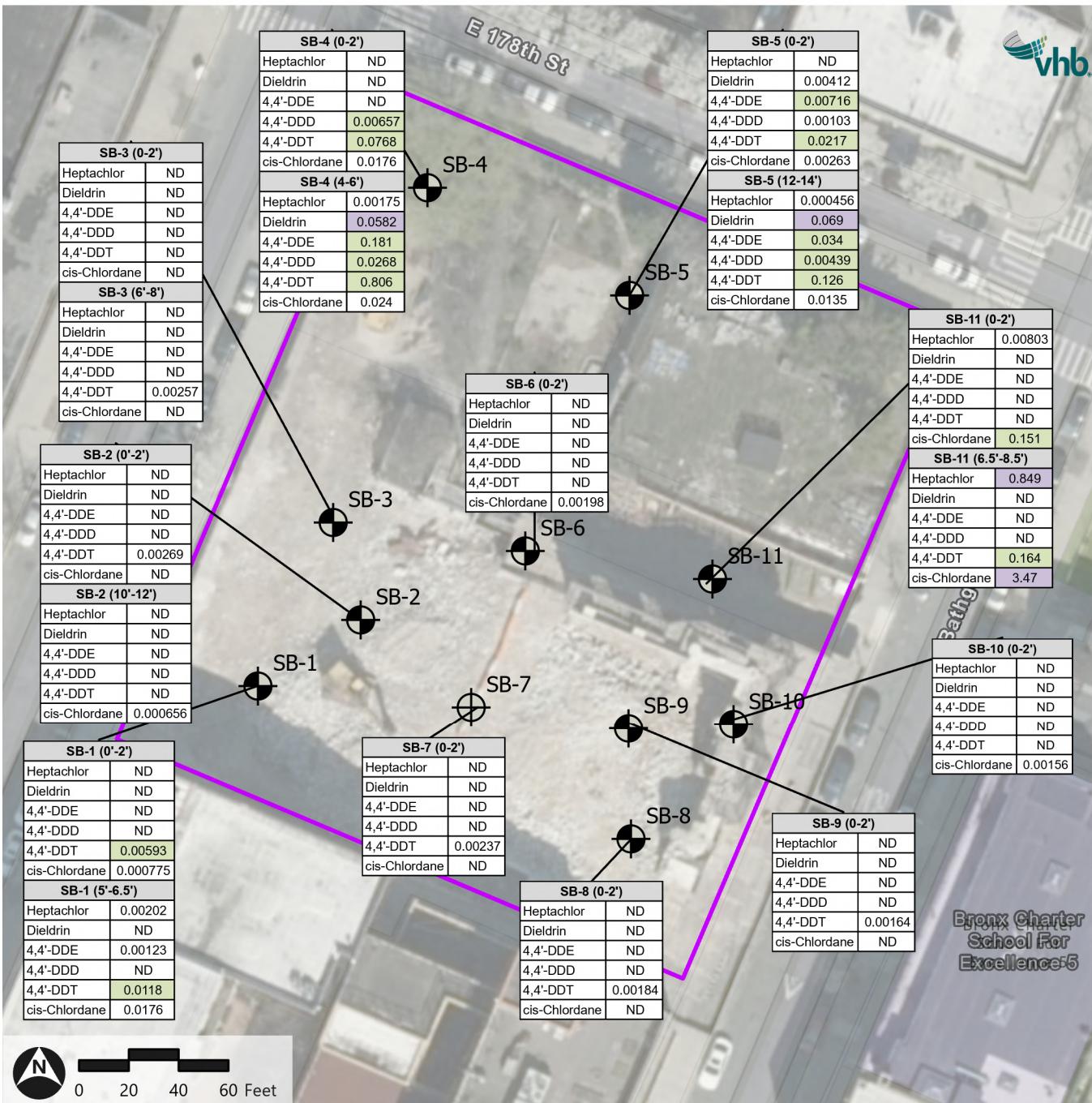
UUSCOS = Unrestricted Use Soil Cleanup Objectives

Semivolatile Organic Compound	RRSCOs	RSCOs	UUSCOS
Benzo(a)anthracene	1	1	1
Benzo(a)pyrene	1	1	1
Benzo(b)fluoranthene	1	1	1
Benzo(k)fluoranthene	3.9	1	0.8
Chrysene	3.9	1	1
Dibenz(a,h)anthracene	0.33	0.33	0.33
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5

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## Figure 6b: Map of Soil Chemistry Results (Pesticides)

St. Joseph's Apartments | 484 East 178th Street, Bronx, New York



Source: Esri Community Maps Contributors, NYC OpenData.

Note: Only compounds exceeding 6 NYCRR Part 375 Soil Cleanup Objectives in at least one sample shown.

RRSCOs = Restricted-Residential Use Soil Cleanup Objectives

RSCOs = Residential Use Soil Cleanup Objectives

UUSCOS = Unrestricted Use Soil Cleanup Objectives

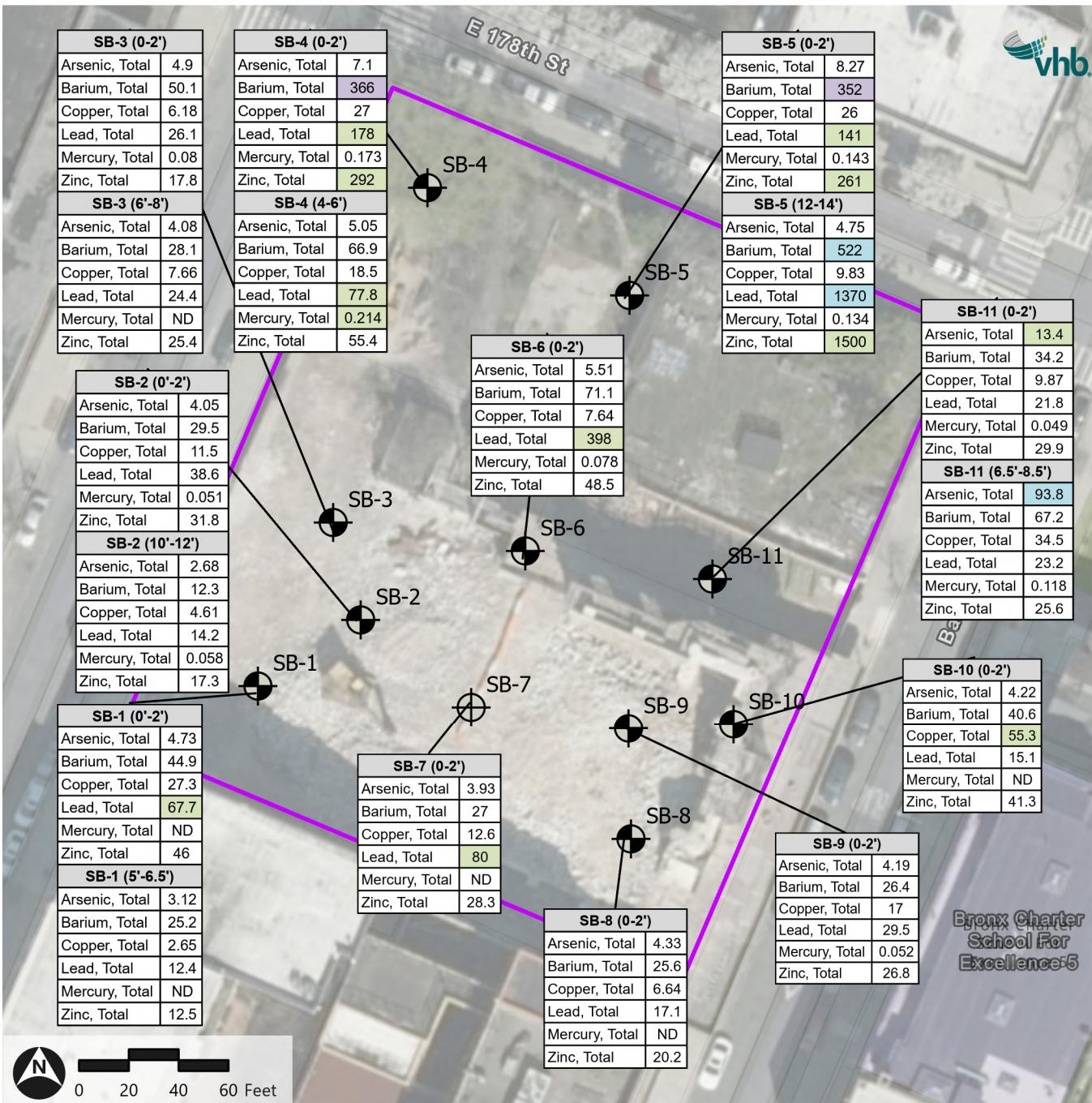
### 6 NYCRR Part 375 Soil Cleanup Objectives (mg/kg)

Pesticide	RRSCOs	RSCOs	UUSCOS
Heptachlor	2.1	0.42	0.042
Dieldrin	0.2	0.039	0.005
4,4'-DDE	8.9	1.8	0.0033
4,4'-DDD	13	2.6	0.0033
4,4'-DDT	7.9	1.7	0.0033
cis-Chlordane	4.2	0.91	0.094

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## Figure 6c: Map of Soil Chemistry Results (Metals)

St. Joseph's Apartments | 484 East 178th Street, Bronx, New York



■ Approximate Site Boundary

● Soil Boring and Soil Vapor Point Location

○ Soil Boring Location

Source: Esri Community Maps Contributors, NYC OpenData.

Note: Only compounds exceeding 6 NYCRR Part 375 Soil Cleanup Objectives in at least one sample shown.

RRSCOs = Restricted-Residential Use Soil Cleanup Objectives

RSCOs = Residential Use Soil Cleanup Objectives

UUSCOS = Unrestricted Use Soil Cleanup Objectives

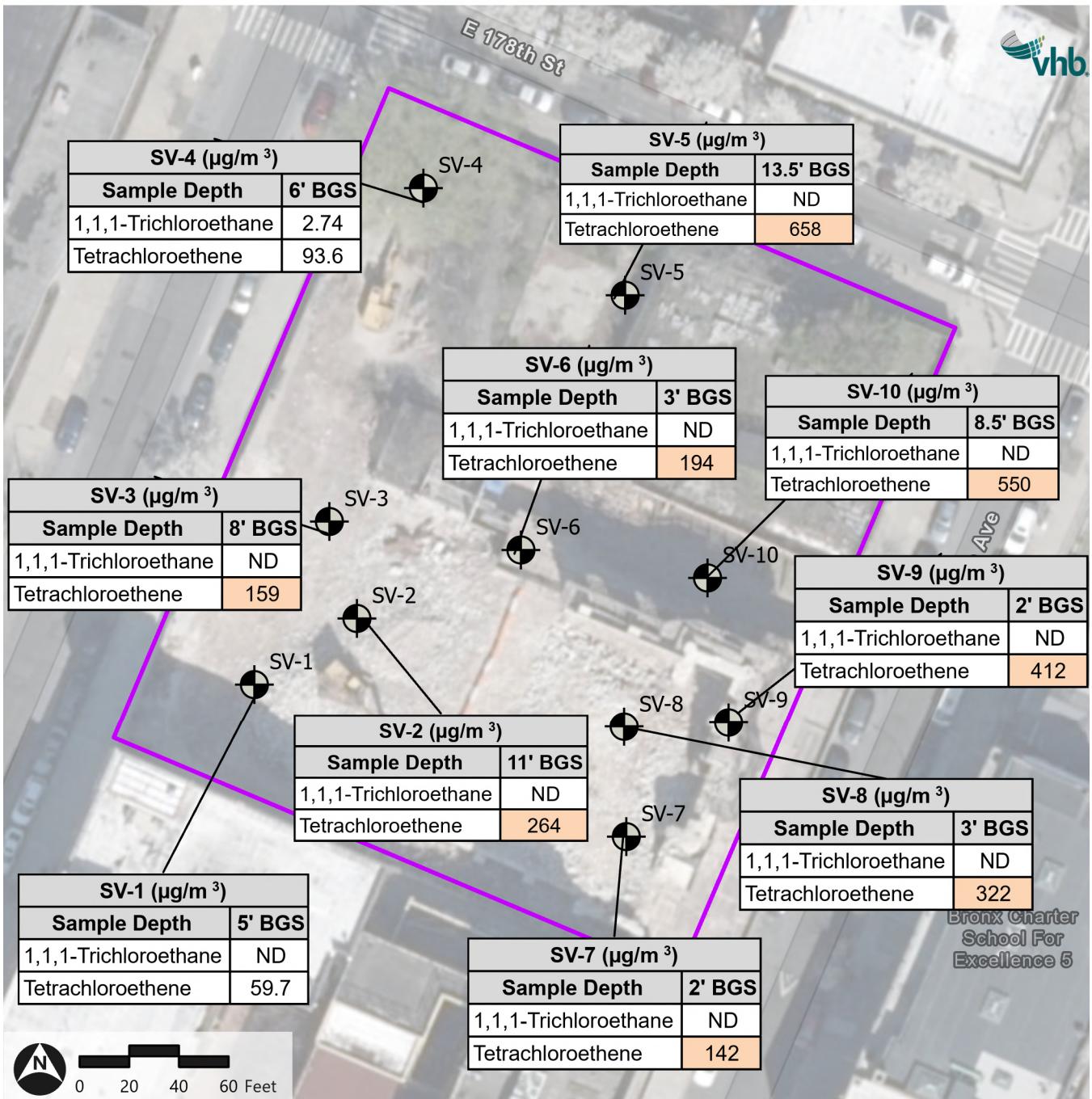
### 6 NYCRR Part 375 Soil Cleanup Objectives (mg/kg)

Metal	RRSCOs	RSCOs	UUSCOS
Arsenic, Total	16	16	13
Barium, Total	400	350	350
Copper, Total	270	270	50
Lead, Total	400	400	63
Mercury, Total	0.81	0.81	0.18
Zinc, Total	10000	2200	109

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**Figure 7: Map of Soil Vapor Chemistry Results**

St. Joseph's Apartments | 484 East 178th Street, Bronx, New York



Source: Esri Community Maps Contributors, NYC OpenData.

Note: Only compounds included in New York State Department of Health Soil Vapor/Indoor Air Matrices that were detected in at least one sample shown.  
BGS = below ground surface

New York State Department of Health Soil Vapor/Indoor Air Matrices	
Volatile Organic Compound	Guidance Value ( $\mu\text{g}/\text{m}^3$ )
1,1,1-Trichloroethane	100
Tetrachloroethene	100

## **TABLES**

**Table 1**  
**Soil Sample Analytical Results - VOCs**  
St. Joseph's Apartments  
Phase II ESI



Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Sample Location	SB-1 (0'-2')	SB-1 (5'-6.5')	SB-2 (0'-2')	SB-2 (10'-12')	SB-3 (0-2')
					Sample ID	L2316525-01	L2316525-02	L2316525-03	L2316525-04	L2316525-05
					Sample Date	3/29/2023	3/29/2023	3/29/2023	3/29/2023	3/29/2023
<b>VOCs by EPA 8260D</b>										
Methylene chloride	75-09-2	0.05	51	100	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	0.27	19	26	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	0.37	10	49	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	56-23-5	0.76	1.4	2.4	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	78-87-5				ND	ND	ND	ND	ND	ND
Dibromochloromethane	124-48-1				ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5				ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	1.3	5.5	19	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	1.1	100	100	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	75-69-4				ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	0.02	2.3	3.1	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	71-55-6	0.68	100	100	ND	ND	ND	ND	ND	ND
Bromodichloromethane	75-27-4				ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6				ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-5				ND	ND	ND	ND	ND	ND
1,3-Dichloropropene, Total	542-75-6				ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	563-58-6				ND	ND	ND	ND	ND	ND
Bromotform	75-25-2				ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5				ND	ND	ND	ND	ND	ND
Benzene	71-43-2	0.06	2.9	4.8	ND	ND	ND	ND	ND	ND
Toluene	108-88-3	0.7	100	100	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	1	30	41	ND	ND	ND	ND	ND	ND
Chloromethane	74-87-3				ND	ND	ND	ND	ND	ND
Bromomethane	74-83-9				ND	ND	ND	ND	ND	ND
Vinyl chloride	75-01-4	0.02	0.21	0.9	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3				ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	0.33	100	100	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5	0.19	100	100	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	0.47	10	21	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	1.1	100	100	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1	2.4	17	49	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	1634-04-4	0.93	62	100	ND	ND	ND	ND	ND	ND
p/m-Xylene	179601-23-1				ND	ND	ND	ND	ND	ND
o-Xylene	95-47-6				ND	ND	ND	ND	ND	ND
Xylenes, Total	1330-20-7	0.26	100	100	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	0.25	59	100	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	540-59-0				ND	ND	ND	ND	ND	ND
Dibromomethane	74-95-3				ND	ND	ND	ND	ND	ND
Styrene	100-42-5				ND	ND	0.00042	ND	ND	ND
Dichlorodifluoromethane	75-71-8				ND	ND	ND	ND	ND	ND
Acetone	67-64-1	0.05	100	100	ND	ND	ND	ND	ND	ND
Carbon disulfide	75-15-0				ND	ND	ND	ND	ND	ND
2-Butanone	78-93-3	0.12	100	100	ND	ND	ND	ND	ND	ND
Vinyl acetate	108-05-4				ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	108-10-1				ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropene	96-18-4				ND	ND	ND	ND	ND	ND
2-Hexanone	591-78-6				ND	ND	ND	ND	ND	ND
Bromochloromethane	74-97-5				ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	594-20-7				ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	106-93-4				ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	142-28-9				ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	630-20-6				ND	ND	ND	ND	ND	ND
Bromobenzene	108-86-1				ND	ND	ND	ND	ND	ND
n-Butylbenzene	104-51-8	12	100	100	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	135-98-8	11	100	100	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	98-06-6	5.9	100	100	ND	ND	ND	ND	ND	ND
o-Chlorotoluene	95-49-8				ND	ND	ND	ND	ND	ND
p-Chlorotoluene	106-43-4				ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	96-12-8				ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3				ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8				ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	99-87-6				ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	12	100	100	ND	ND	ND	ND	ND	ND
Acrylonitrile	107-13-1				ND	ND	ND	ND	ND	ND
n-Propylbenzene	103-65-1	3.9	100	100	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	87-61-6				ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	120-82-1				ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	108-67-8	8.4	47	52	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	3.6	47	52	ND	ND	ND	ND	ND	ND
1,4-Dioxane	123-91-1	0.1	9.8	13	ND	ND	ND	ND	ND	ND
p-Diethylbenzene	105-05-5				ND	ND	ND	ND	ND	ND
p-Ethyltoluene	622-96-8				ND	ND	ND	ND	ND	ND
1,2,4,5-Tetramethylbenzene	95-93-2				ND	ND	ND	ND	ND	ND
Ethyl ether	60-29-7				ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	110-57-6				ND	ND	ND	ND	ND	ND

Total VOCs

0.00042

**Screening Levels**

Unrestricted Use Soil Cleanup Objective

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds

**Notes**

1. ND < # = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - VOCs**  
St. Joseph's Apartments  
Phase II ESI



Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Sample Location	SB-3 (6'-8')	SB-4 (0-2')	SB-4 (4-6')	SB-5 (0-2')	SB-5 (12-14')
					Sample ID	L2316525-06	L2316525-07	L2316525-08	L2316525-09	L2316525-10
					Sample Date	3/29/2023	3/29/2023	3/29/2023	3/29/2023	3/29/2023
<b>VOCs by EPA 8260D</b>										
Methylene chloride	75-09-2	0.05	51	100	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	0.27	19	26	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	0.37	10	49	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	56-23-5	0.76	1.4	2.4	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	78-87-5				ND	ND	ND	ND	ND	ND
Dibromochloromethane	124-48-1				ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5				ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	1.3	5.5	19	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	1.1	100	100	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	75-69-4				ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	0.02	2.3	3.1	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	71-55-6	0.68	100	100	ND	ND	ND	ND	ND	ND
Bromodichloromethane	75-27-4				ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6				ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-5				ND	ND	ND	ND	ND	ND
1,3-Dichloropropene, Total	542-75-6				ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	563-58-6				ND	ND	ND	ND	ND	ND
Bromotform	75-25-2				ND	ND	ND	ND	ND	ND
1,1,2-Tetrachloroethane	79-34-5				ND	ND	ND	ND	ND	ND
Benzene	71-43-2	0.06	2.9	4.8	ND	ND	ND	ND	ND	ND
Toluene	108-88-3	0.7	100	100	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	1	30	41	ND	ND	ND	ND	ND	ND
Chloromethane	74-87-3				ND	ND	ND	ND	ND	ND
Bromomethane	74-83-9				ND	ND	ND	ND	ND	ND
Vinyl chloride	75-01-4	0.02	0.21	0.9	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3				ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	0.33	100	100	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5	0.19	100	100	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	0.47	10	21	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	1.1	100	100	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1	2.4	17	49	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	1634-04-4	0.93	62	100	ND	ND	ND	ND	ND	ND
p/m-Xylene	179601-23-1				ND	ND	ND	ND	ND	ND
o-Xylene	95-47-6				ND	ND	ND	ND	ND	ND
Xylenes, Total	1330-20-7	0.26	100	100	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	0.25	59	100	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	540-59-0				ND	ND	ND	ND	ND	ND
Dibromomethane	74-95-3				ND	ND	ND	ND	ND	ND
Styrene	100-42-5				0.00053	ND	0.00068	ND	ND	ND
Dichlorodifluoromethane	75-71-8				ND	ND	ND	ND	ND	ND
Acetone	67-64-1	0.05	100	100	ND	ND	ND	ND	ND	ND
Carbon disulfide	75-15-0				ND	ND	ND	ND	ND	ND
2-Butanone	78-93-3	0.12	100	100	ND	ND	ND	ND	ND	ND
Vinyl acetate	108-05-4				ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	108-10-1				ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropene	96-18-4				ND	ND	ND	ND	ND	ND
2-Hexanone	591-78-6				ND	ND	ND	ND	ND	ND
Bromochloromethane	74-97-5				ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	594-20-7				ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	106-93-4				ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	142-28-9				ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	630-20-6				ND	ND	ND	ND	ND	ND
Bromobenzene	108-86-1				ND	ND	ND	ND	ND	ND
n-Butylbenzene	104-51-8	12	100	100	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	135-98-8	11	100	100	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	98-06-6	5.9	100	100	ND	ND	ND	ND	ND	ND
o-Chlorotoluene	95-49-8				ND	ND	ND	ND	ND	ND
p-Chlorotoluene	106-43-4				ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	96-12-8				ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3				ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8				ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	99-87-6				ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	12	100	100	ND	ND	ND	ND	ND	ND
Acrylonitrile	107-13-1				ND	ND	ND	ND	ND	ND
n-Propylbenzene	103-65-1	3.9	100	100	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	87-61-6				ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	120-82-1				ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	108-67-8	8.4	47	52	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	3.6	47	52	ND	ND	ND	ND	ND	ND
1,4-Dioxane	123-91-1	0.1	9.8	13	ND	ND	ND	ND	ND	ND
p-Diethylbenzene	105-05-5				ND	ND	ND	ND	ND	ND
p-Ethyltoluene	622-96-8				ND	ND	ND	ND	ND	ND
1,2,4,5-Tetramethylbenzene	95-93-2				ND	ND	ND	ND	ND	ND
Ethyl ether	60-29-7				ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	110-57-6				ND	ND	ND	ND	ND	ND

Total VOCs

0.00053

0.00068 -

**Screening Levels**

Unrestricted Use Soil Cleanup Objective

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds

**Notes**

1. ND < # = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - VOCs**  
St. Joseph's Apartments  
Phase II ESI



Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Sample Location	SB-6 (0'-2')	SB-7 (0'-2')	SB-8 (0'-2')	SB-9 (0'-2')	SB-10 (0'-2')
					Sample ID	L2316525-16	L2316525-11	L2316525-17	L2316525-12	L2316525-13
					Sample Date	3/29/2023	3/29/2023	3/29/2023	3/29/2023	3/29/2023
<b>Sample Matrix</b>										
<b>VOCs by EPA 8260D</b>										
Methylene chloride	75-09-2	0.05	51	100		ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	0.27	19	26		ND	ND	ND	ND	ND
Chloroform	67-66-3	0.37	10	49		ND	ND	ND	ND	ND
Carbon tetrachloride	56-23-5	0.76	1.4	2.4		ND	ND	ND	ND	ND
1,2-Dichloropropane	78-87-5					ND	ND	ND	ND	ND
Dibromochloromethane	124-48-1					ND	ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5					ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	1.3	5.5	19		ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	1.1	100	100		ND	ND	ND	ND	ND
Trichlorofluoromethane	75-69-4					ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	0.02	2.3	3.1		ND	ND	ND	ND	ND
1,1,1-Trichloroethane	71-55-6	0.68	100	100		ND	ND	ND	ND	ND
Bromodichloromethane	75-27-4					ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6					ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-5					ND	ND	ND	ND	ND
1,3-Dichloropropene, Total	542-75-6					ND	ND	ND	ND	ND
1,1-Dichloropropene	563-58-6					ND	ND	ND	ND	ND
Bromotform	75-25-2					ND	ND	ND	ND	ND
1,1,2-Tetrachloroethane	79-34-5					ND	ND	ND	ND	ND
Benzene	71-43-2	0.06	2.9	4.8		ND	ND	ND	ND	ND
Toluene	108-88-3	0.7	100	100		ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	1	30	41		ND	ND	ND	ND	ND
Chloromethane	74-87-3					ND	ND	ND	ND	ND
Bromomethane	74-83-9					ND	ND	ND	ND	ND
Vinyl chloride	75-01-4	0.02	0.21	0.9		ND	ND	ND	ND	ND
Chloroethane	75-00-3					ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	0.33	100	100		ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5	0.19	100	100		ND	ND	ND	ND	ND
Trichloroethene	79-01-6	0.47	10	21		ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	1.1	100	100		ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1	2.4	17	49		ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13		ND	ND	ND	ND	ND
Methyl tert butyl ether	1634-04-4	0.93	62	100		ND	ND	ND	ND	ND
p/m-Xylene	179601-23-1					ND	ND	ND	ND	ND
o-Xylene	95-47-6					ND	ND	ND	ND	ND
Xylenes, Total	1330-20-7	0.26	100	100		ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	0.25	59	100		ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	540-59-0					ND	ND	ND	ND	ND
Dibromomethane	74-95-3					ND	ND	ND	ND	ND
Styrene	100-42-5					ND	0.00058	ND	ND	ND
Dichlorodifluoromethane	75-71-8					ND	ND	ND	ND	ND
Acetone	67-64-1	0.05	100	100		ND	ND	ND	ND	ND
Carbon disulfide	75-15-0					ND	ND	ND	ND	ND
2-Butanone	78-93-3	0.12	100	100		ND	ND	ND	ND	ND
Vinyl acetate	108-05-4					ND	ND	ND	ND	ND
4-Methyl-2-pentanone	108-10-1					ND	ND	ND	ND	ND
1,2,3-Trichloropropene	96-18-4					ND	ND	ND	ND	ND
2-Hexanone	591-78-6					ND	ND	ND	ND	ND
Bromochloromethane	74-97-5					ND	ND	ND	ND	ND
2,2-Dichloropropane	594-20-7					ND	ND	ND	ND	ND
1,2-Dibromoethane	106-93-4					ND	ND	ND	ND	ND
1,3-Dichloropropane	142-28-9					ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	630-20-6					ND	ND	ND	ND	ND
Bromobenzene	108-86-1					ND	ND	ND	ND	ND
n-Butylbenzene	104-51-8	12	100	100		ND	ND	ND	ND	ND
sec-Butylbenzene	135-98-8	11	100	100		ND	ND	ND	ND	ND
tert-Butylbenzene	98-06-6	5.9	100	100		ND	ND	ND	ND	ND
o-Chlorotoluene	95-49-8					ND	ND	ND	ND	ND
p-Chlorotoluene	106-43-4					ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	96-12-8					ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3					ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8					ND	ND	ND	ND	ND
p-Isopropyltoluene	99-87-6					ND	ND	ND	ND	ND
Naphthalene	91-20-3	12	100	100		ND	ND	ND	ND	ND
Acrylonitrile	107-13-1					ND	ND	ND	ND	ND
n-Propylbenzene	103-65-1	3.9	100	100		ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	87-61-6					ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	120-82-1					ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	108-67-8	8.4	47	52		ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	3.6	47	52		ND	ND	ND	ND	ND
1,4-Dioxane	123-91-1	0.1	9.8	13		ND	ND	ND	ND	ND
p-Diethylbenzene	105-05-5					ND	ND	ND	ND	ND
p-Ethyltoluene	622-96-8					ND	ND	ND	ND	ND
1,2,4,5-Tetramethylbenzene	95-93-2					ND	ND	ND	ND	ND
Ethyl ether	60-29-7					ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	110-57-6					ND	ND	ND	ND	ND

0.00058 -

Total VOCs

**Screening Levels**

Unrestricted Use Soil Cleanup Objective

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds

Conc. Exceed

**Table 1**  
**Soil Sample Analytical Results - VOCs**  
St. Joseph's Apartments  
Phase II ESI



Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Sample Location	SB-11 (0-2)	SB-11 (6.5'-8.5')
					Sample ID	L2316525-14	L2316525-15
					Sample Date	3/29/2023	3/29/2023
Sample Matrix							
Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Result (mg/kg)	Result (mg/kg)	
<b>VOCs by EPA 8260D</b>							
Methylene chloride	75-09-2	0.05	51	100	ND	ND	
1,1-Dichloroethane	75-34-3	0.27	19	26	ND	ND	
Chloroform	67-66-3	0.37	10	49	ND	ND	
Carbon tetrachloride	56-23-5	0.76	1.4	2.4	ND	ND	
1,2-Dichloropropane	78-87-5				ND	ND	
Dibromochloromethane	124-48-1				ND	ND	
1,1,2-Trichloroethane	79-00-5				ND	ND	
Tetrachloroethene	127-18-4	1.3	5.5	19	ND	ND	
Chlorobenzene	108-90-7	1.1	100	100	ND	ND	
Trichlorofluoromethane	75-69-4				ND	ND	
1,2-Dichloroethane	107-06-2	0.02	2.3	3.1			
1,1,1-Trichloroethane	71-55-6	0.68	100	100	ND	ND	
Bromodichloromethane	75-27-4				ND	ND	
trans-1,3-Dichloropropene	10061-02-6				ND	ND	
cis-1,3-Dichloropropene	10061-01-5				ND	ND	
1,3-Dichloropropene, Total	542-75-6				ND	ND	
1,1-Dichloropropene	563-58-6				ND	ND	
Bromotform	75-25-2				ND	ND	
1,1,2,2-Tetrachloroethane	79-34-5				ND	ND	
Benzene	71-43-2	0.06	2.9	4.8	ND	ND	
Toluene	108-88-3	0.7	100	100	ND	ND	
Ethylbenzene	100-41-4	1	30	41			
Chloromethane	74-87-3				ND	ND	
Bromomethane	74-83-9				ND	ND	
Vinyl chloride	75-01-4	0.02	0.21	0.9	ND	ND	
Chloroethane	75-00-3				ND	ND	
1,1-Dichloroethene	75-35-4	0.33	100	100	ND	ND	
trans-1,2-Dichloroethene	156-60-5	0.19	100	100	ND	ND	
Trichloroethene	79-01-6	0.47	10	21	ND	ND	
1,2-Dichlorobenzene	95-50-1	1.1	100	100	ND	ND	
1,3-Dichlorobenzene	541-73-1	2.4	17	49	ND	ND	
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	ND	ND	
Methyl tert butyl ether	1634-04-4	0.93	62	100	ND	ND	
p/m-Xylene	179601-23-1				ND	ND	
o-Xylene	95-47-6				ND	ND	
Xylenes, Total	1330-20-7	0.26	100	100	ND	ND	
cis-1,2-Dichloroethene	156-59-2	0.25	59	100	ND	ND	
1,2-Dichloroethene, Total	540-59-0				ND	ND	
Dibromomethane	74-95-3				ND	ND	
Styrene	100-42-5				ND	ND	
Dichlorodifluoromethane	75-71-8				ND	ND	
Acetone	67-64-1	0.05	100	100	ND	ND	
Carbon disulfide	75-15-0				ND	ND	
2-Butanone	78-93-3	0.12	100	100	ND	ND	
Vinyl acetate	108-05-4				ND	ND	
4-Methyl-2-pentanone	108-10-1				ND	ND	
1,2,3-Trichloropropene	96-18-4				ND	ND	
2-Hexanone	591-78-6				ND	ND	
Bromochloromethane	74-97-5				ND	ND	
2,2-Dichloropropane	594-20-7				ND	ND	
1,2-Dibromoethane	106-93-4				ND	ND	
1,3-Dichloropropane	142-28-9				ND	ND	
1,1,1,2-Tetrachloroethane	630-20-6				ND	ND	
Bromobenzene	108-86-1				ND	ND	
n-Butylbenzene	104-51-8	12	100	100	ND	ND	
sec-Butylbenzene	135-98-8	11	100	100	ND	ND	
tert-Butylbenzene	98-06-6	5.9	100	100	ND	ND	
o-Chlorotoluene	95-49-8				ND	ND	
p-Chlorotoluene	106-43-4				ND	ND	
1,2-Dibromo-3-chloropropane	96-12-8				ND	ND	
Hexachlorobutadiene	87-68-3				ND	ND	
Isopropylbenzene	98-82-8				ND	ND	
p-Isopropyltoluene	99-87-6				ND	ND	
Naphthalene	91-20-3	12	100	100	ND	0.0028	
Acrylonitrile	107-13-1				ND	ND	
n-Propylbenzene	103-65-1	3.9	100	100	ND	ND	
1,2,3-Trichlorobenzene	87-61-6				ND	ND	
1,2,4-Trichlorobenzene	120-82-1				ND	ND	
1,3,5-Trimethylbenzene	108-67-8	8.4	47	52	ND	ND	
1,2,4-Trimethylbenzene	95-63-6	3.6	47	52	ND	ND	
1,4-Dioxane	123-91-1	0.1	9.8	13	ND	ND	
p-Diethylbenzene	105-05-5				ND	ND	
p-Ethyltoluene	622-96-8				ND	ND	
1,2,4,5-Tetramethylbenzene	95-93-2				ND	0.00093	
Ethyl ether	60-29-7				ND	ND	
trans-1,4-Dichloro-2-butene	110-57-6				ND	ND	
Total VOCs				-		0.00373	

**Screening Levels**

Unrestricted Use Soil Cleanup Objective  
Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential  
Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds
Conc. Exceeds
Conc. Exceeds

**Notes**

1. ND < # = compound not detected above the laboratory reporting limit (RL), limit provided.
2. NA = Compound not analyzed.
3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - PFAAs**  
St. Joseph's Apartments  
Phase II ESI



Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Sample Location	SB-6 (0-2')
					Sample ID	L2316525-16
					Sample Date	3/29/2023
					Sample Matrix	SO
<b>PERFLUORINATED ALKYL ACIDS by EPA 1633</b>						
Perfluorobutanoic Acid (PFBA)	375-22-4					ND
Perfluoropentanoic Acid (PFPeA)	2706-90-3					ND
Perfluorobutanesulfonic Acid (PFBS)	375-73-5					ND
Perfluoroheptanoic Acid (PFHxA)	307-24-4					ND
Perfluoroheptanoic Acid (PFHpA)	375-85-9					ND
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4					ND
Perfluorooctanoic Acid (PFOA)	335-67-1					ND
1H,1H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2					ND
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8					ND
Perfluorononanoic Acid (PFNA)	375-95-1					ND
Perfluoroctanesulfonic Acid (PFOS)	1763-23-1					0.000212
Perfluorodecanoic Acid (PFDA)	335-76-2					ND
1H,1H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4					ND
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9					ND
Perfluoroundecanoic Acid (PFUnA)	2058-94-8					ND
Perfluorodecanesulfonic Acid (PFDS)	335-77-3					0.000055
Perfluoroctanesulfonamide (PFOSA)	754-91-6					ND
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6					ND
Perfluorododecanoic Acid (PFDoA)	307-55-1					ND
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8					ND
Perfluorotetradecanoic Acid (PFTeDA)	376-06-7					ND
PFOA/PFOS, Total						0.000212

**Screening Levels**

Unrestricted Use Soil Cleanup Objective

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds

**Notes**

1. ND < # = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - SVOCs**  
St. Joseph's Apartments  
Phase II ESI



Analyte	CAS	Unrestricted Use SCO	Sample Location		SB-1 (0'-2')	SB-1 (5'-6.5')	SB-2 (0'-2')	SB-2 (10'-12')	SB-3 (0-2')					
			Sample ID	L2316525-01 <th>Sample Date</th> <td>3/29/2023</td> <th>Sample Matrix</th> <td>SO</td> <th>Sample ID</th> <td>L2316525-02</td> <th>Sample Date</th> <td>3/29/2023</td> <th>Sample Matrix</th> <td>SO</td>	Sample Date	3/29/2023	Sample Matrix	SO	Sample ID	L2316525-02	Sample Date	3/29/2023	Sample Matrix	SO
			Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)					
<b>SVOCs by EPA 8270E</b>														
Acenaphthene	83-32-9	20	100	100	ND	ND	ND	ND	ND					
1,2,4-Trichlorobenzene	120-82-1				ND	ND	ND	ND	ND					
Hexachlorobenzene	118-74-1	0.33	0.33	1.2	ND	ND	ND	ND	ND					
Bis(2-chloroethyl)ether	111-44-4				ND	ND	ND	ND	ND					
2-Chloronaphthalene	91-58-7				ND	ND	ND	ND	ND					
1,2-Dichlorobenzene	95-50-1	1.1	100	100	ND	ND	ND	ND	ND					
1,3-Dichlorobenzene	541-73-1	2.4	17	49	ND	ND	ND	ND	ND					
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	ND	ND	ND	ND	ND					
3,3'-Dichlorobenzidine	91-94-1				ND	ND	ND	ND	ND					
2,4-Dinitrotoluene	121-14-2				ND	ND	ND	ND	ND					
2,6-Dinitrotoluene	606-20-2				ND	ND	ND	ND	ND					
Fluoranthene	206-44-0	100	100	100	0.089	0.057	0.034	0.037	ND					
4-Chlorophenyl phenyl ether	7005-72-3				ND	ND	ND	ND	ND					
4-Bromophenyl phenyl ether	101-55-3				ND	ND	ND	ND	ND					
Bis(2-chloroisopropyl)ether	108-60-1				ND	ND	ND	ND	ND					
Bis(2-chloroethoxy)methane	111-91-1				ND	ND	ND	ND	ND					
Hexachlorobutadiene	87-68-3				ND	ND	ND	ND	ND					
Hexachlorocyclopentadiene	77-47-4				ND	ND	ND	ND	ND					
Hexachloroethane	67-72-1				ND	ND	ND	ND	ND					
Isophorone	78-59-1				ND	ND	ND	ND	ND					
Naphthalene	91-20-3	12	100	100	ND	ND	ND	ND	ND					
Nitrobenzene	98-95-3				ND	ND	ND	ND	ND					
NDPA/DPA	86-30-6				ND	ND	ND	ND	ND					
n-Nitrosodi-n-propylamine	621-64-7				ND	ND	ND	ND	ND					
Bis(2-ethylhexyl)phthalate	117-81-7				0.15	ND	ND	ND	ND					
Butyl benzyl phthalate	85-68-7				0.085	ND	ND	ND	ND					
Di-n-butylphthalate	84-74-2				ND	ND	ND	ND	ND					
Di-n-octylphthalate	117-84-0				ND	ND	ND	ND	ND					
Diethyl phthalate	84-66-2				ND	ND	ND	ND	ND					
Dimethyl phthalate	131-11-3				ND	ND	ND	ND	ND					
Benz(a)anthracene	56-55-3	1	1	1	0.04	0.034	0.027	ND	ND					
Benz(a)pyrene	50-32-8	1	1	1	ND	ND	ND	ND	ND					
Benz(bifluoranthene	205-99-2	1	1	1	0.056	0.036	0.031	ND	ND					
Benz(k)fluoranthene	207-08-9	0.8	1	3.9	ND	ND	ND	ND	ND					
Chrysene	218-01-9	1	1	3.9	0.038	0.03	0.022	ND	ND					
Acenaphthylene	208-96-8	100	100	100	ND	ND	ND	ND	ND					
Anthracene	120-12-7	100	100	100	ND	ND	ND	ND	ND					
Benz(ghi)perylene	191-24-2	100	100	100	0.026	ND	0.024	ND	ND					
Fluorene	86-73-7	30	100	100	ND	ND	ND	ND	ND					
Phenanthrene	85-01-8	100	100	100	0.062	0.028	ND	0.029	ND					
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	0.33	ND	ND	ND	ND	ND					
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	0.5	0.028	ND	ND	ND	ND					
Pyrene	129-00-0	100	100	100	0.077	0.048	0.033	0.035	ND					
Biphenyl	92-52-4				ND	ND	ND	ND	ND					
4-Chloroaniline	106-47-8				ND	ND	ND	ND	ND					
2-Nitroaniline	88-74-4				ND	ND	ND	ND	ND					
3-Nitroaniline	99-09-2				ND	ND	ND	ND	ND					
4-Nitroaniline	100-01-6				ND	ND	ND	ND	ND					
Dibenzofuran	132-64-9	7	14	59	ND	ND	ND	ND	ND					
2-Methylnaphthalene	91-57-6				ND	ND	ND	ND	ND					
1,2,4,5-Tetrachlorobenzene	95-94-3				ND	ND	ND	ND	ND					
Acetophenone	98-66-2				ND	ND	ND	ND	ND					
2,4,6-Trichlorophenol	88-06-2				ND	ND	ND	ND	ND					
p-Chloro-m-cresol	59-50-7				ND	ND	ND	ND	ND					
2-Chlorophenol	95-57-8				ND	ND	ND	ND	ND					
2,4-Dichlorophenol	120-83-2				ND	ND	ND	ND	ND					
2,4-Dimethylphenol	105-67-9				ND	ND	ND	ND	ND					
2-Nitrophenol	88-75-5				ND	ND	ND	ND	ND					
4-Nitrophenol	100-02-7				ND	ND	ND	ND	ND					
2,4-Dinitrophenol	51-28-5				ND	ND	ND	ND	ND					
4,6-Dinitro-o-cresol	534-52-1				ND	ND	ND	ND	ND					
Pentachlorophenol	87-86-5	0.8	2.4	6.7	ND	ND	ND	ND	ND					
Phenol	108-95-2	0.33	100	100	ND	ND	ND	ND	ND					
2-Methylphenol	95-48-7	0.33	100	100	ND	ND	ND	ND	ND					
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	0.33	34	100	ND	ND	ND	ND	ND					
2,4,5-Trichlorophenol	95-95-4				ND	ND	ND	ND	ND					
Benzoic Acid	65-85-0				ND	ND	ND	ND	ND					
Benzyl Alcohol	100-51-6				ND	ND	ND	ND	ND					
Carbazole	86-74-8				ND	ND	ND	ND	ND					
1,4-Dioxane	123-91-1	0.1	9.8	13	ND	ND	ND	ND	ND					
Total SVOCs					0.651	0.233	0.171	0.101	-					

**Screening Levels**

Unrestricted Use Soil Cleanup Objective

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds

**Notes**

1. ND = ## = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - SVOCs**  
St. Joseph's Apartments  
Phase II ESI



Analyte	CAS	Unrestricted Use SCO	Sample Location		SB-3 (6'-8')	SB-4 (0-2')	SB-4 (4-6')	SB-5 (0-2')	SB-5 (12-14')	
			Sample ID	L2316525-06 <th>3/29/2023</th> <td>SO</td> <th>Sample Date</th> <td>3/29/2023</td> <td>SO</td>	3/29/2023	SO	Sample Date	3/29/2023	SO	
			Sample Matrix							
			Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Result (mg/kg)					
<b>SVOCs by EPA 8270E</b>										
Acenaphthene	83-32-9	20	100	100				0.027	0.13	0.024
1,2,4-Trichlorobenzene	120-82-1				ND	ND	ND	ND	ND	ND
Hexachlorobenzene	118-74-1	0.33	0.33	1.2	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	111-44-4				ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	91-58-7				ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	1.1	100	100	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1	2.4	17	49	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	91-94-1				ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	121-14-2				ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	606-20-2				ND	ND	ND	ND	ND	ND
Fluoranthene	206-44-0	100	100	100	0.034	2.3	4.5	2.2	1.3	
4-Chlorophenyl phenyl ether	7005-72-3				ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	101-55-3				ND	ND	ND	ND	ND	ND
Bis(2-chloroisopropyl)ether	108-60-1				ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	111-91-1				ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3				ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	77-47-4				ND	ND	ND	ND	ND	ND
Hexachloroethane	67-72-1				ND	ND	ND	ND	ND	ND
Isophorone	78-59-1				ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	12	100	100	ND	0.13	0.31	0.14	0.054	
Nitrobenzene	98-95-3				ND	ND	ND	ND	ND	ND
NDPA/DPA	86-30-6				ND	ND	ND	ND	ND	ND
n-Nitrosodi-n-propylamine	621-64-7				ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	117-81-7				ND	ND	0.52	ND	0.088	
Butyl benzyl phthalate	85-68-7				ND	ND	4.8	ND	ND	ND
Di-n-butylphthalate	84-74-2				ND	ND	ND	ND	0.034	
Di-n-octylphthalate	117-84-0				ND	ND	ND	ND	ND	ND
Diethyl phthalate	84-66-2				ND	ND	ND	ND	ND	ND
Dimethyl phthalate	131-11-3				ND	ND	ND	ND	ND	ND
Benz(a)anthracene	56-55-3	1	1	1	0.022	1.5	3.4	1.5	0.7	
Benz(a)pyrene	50-32-8	1	1	1	ND	1.7	3.1	1.8	0.84	
Benz(bifluoranthene	205-99-2	1	1	1	0.034	2.1	3.7	2.2	0.96	
Benz(k)fluoranthene	207-08-9	0.8	1	3.9	0.56	1.4	0.57	0.33		
Chrysene	218-01-9	1	1	3.9	0.019	1.4	3	1.4	0.69	
Acenaphthylene	208-96-8	100	100	100	ND	0.77	0.71	1.1	0.45	
Anthracene	120-12-7	100	100	100	ND	0.51	0.69	0.58	0.31	
Benz(ghi)perylene	191-24-2	100	100	100	ND	1.3	1.9	1.5	0.88	
Fluorene	86-73-7	30	100	100	ND	ND	0.051	0.19	0.044	
Phenanthrene	85-01-8	100	100	100	ND	0.83	0.8	1.2	0.82	
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	0.33	ND	0.24	0.62	0.27	0.16	
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	0.5	ND	1.1	1.8	1.2	0.73	
Pyrene	129-00-0	100	100	100	0.031	2.2	4	2.1	1.1	
Biphenyl	92-52-4				ND	ND	ND	ND	ND	ND
4-Chloroaniline	106-47-8				ND	ND	ND	ND	ND	ND
2-Nitroaniline	88-74-4				ND	ND	ND	ND	ND	ND
3-Nitroaniline	99-09-2				ND	ND	ND	ND	ND	ND
4-Nitroaniline	100-01-6				ND	ND	ND	ND	ND	ND
Dibenzofuran	132-64-9	7	14	59	ND	ND	0.064	ND	0.046	
2-Methylnaphthalene	91-57-6				ND	ND	0.09	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	95-94-3				ND	ND	ND	ND	ND	ND
Acetophenone	98-86-2				ND	ND	0.058	ND	ND	
2,4,6-Trichlorophenol	88-06-2				ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	59-50-7				ND	ND	ND	ND	ND	ND
2-Chlorophenol	95-57-8				ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	120-83-2				ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	105-67-9				ND	ND	ND	ND	ND	ND
2-Nitrophenol	88-75-5				ND	ND	ND	ND	ND	ND
4-Nitrophenol	100-02-7				ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	51-28-5				ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	534-52-1				ND	ND	ND	ND	ND	ND
Pentachlorophenol	87-86-5	0.8	2.4	6.7	ND	ND	0.21	ND	ND	
Phenol	108-95-2	0.33	100	100	ND	ND	0.044	ND (RL+UUSCO)	ND	
2-Methylphenol	95-48-7	0.33	100	100	ND	ND	ND (RL+UUSCO)	ND	ND (RL+UUSCO)	
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	0.33	34	100	ND	ND (RL+UUSCO)	0.05	ND (RL+UUSCO)	0.036	
2,4,5-Trichlorophenol	95-95-4				ND	ND	ND	ND	ND	ND
Benzoic Acid	65-85-0				ND	ND	0.43	ND	ND	
Benzyl Alcohol	100-51-6				ND	ND	ND	ND	ND	
Carbazole	86-74-8				ND	0.12	0.16	0.17	0.15	
1,4-Dioxane	123-91-1	0.1	9.8	13	ND	ND (RL+UUSCO)	ND	ND (RL+UUSCO)	ND	
Total SVOCs					0.14	16.76	36,434	18.35	9,746	

**Screening Levels**

Unrestricted Use Soil Cleanup Objective  
Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential  
Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds
Conc. Exceeds
Conc. Exceeds

**Notes**

1. ND = ## = compound not detected above the laboratory reporting limit (RL), limit provided.  
2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - SVOCs**  
St. Joseph's Apartments  
Phase II ESI



Analyte	CAS	Unrestricted Use SCO	Sample Location		SB-6 (0'-2')	SB-7 (0'-2')	SB-8 (0'-2')	SB-9 (0'-2')	SB-10 (0'-2')					
			Sample ID	L2316525-16 <th>Sample Date</th> <td>3/29/2023</td> <th>Sample Matrix</th> <td>SO</td> <th>Sample ID</th> <td>L2316525-17</td> <th>Sample Date</th> <td>3/29/2023</td> <th>Sample Matrix</th> <td>SO</td>	Sample Date	3/29/2023	Sample Matrix	SO	Sample ID	L2316525-17	Sample Date	3/29/2023	Sample Matrix	SO
			Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Result (mg/kg)									
<b>SVOCs by EPA 8270E</b>														
Acenaphthene	83-32-9	20	100	100	-	-	-	-	-	-				
1,2,4-Trichlorobenzene	120-82-1				ND	ND	ND	ND	ND	ND				
Hexachlorobenzene	118-74-1	0.33	0.33	1.2	ND	ND	ND	ND	ND	ND				
Bis(2-chloroethyl)ether	111-44-4				ND	ND	ND	ND	ND	ND				
2-Chloronaphthalene	91-58-7				ND	ND	ND	ND	ND	ND				
1,2-Dichlorobenzene	95-50-1	1.1	100	100	ND	ND	ND	ND	ND	ND				
1,3-Dichlorobenzene	541-73-1	2.4	17	49	ND	ND	ND	ND	ND	ND				
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	ND	ND	ND	ND	ND	ND				
3,3'-Dichlorobenzidine	91-94-1				ND	ND	ND	ND	ND	ND				
2,4-Dinitrotoluene	121-14-2				ND	ND	ND	ND	ND	ND				
2,6-Dinitrotoluene	606-20-2				ND	ND	ND	ND	ND	ND				
Fluoranthene	206-44-0	100	100	100	-	0.042	-	0.032	0.034					
4-Chlorophenyl phenyl ether	7005-72-3				ND	ND	ND	ND	ND	ND				
4-Bromophenyl phenyl ether	101-55-3				ND	ND	ND	ND	ND	ND				
Bis(2-chloroisopropyl)ether	108-60-1				ND	ND	ND	ND	ND	ND				
Bis(2-chloroethoxy)methane	111-91-1				ND	ND	ND	ND	ND	ND				
Hexachlorobutadiene	87-68-3				ND	ND	ND	ND	ND	ND				
Hexachlorocyclopentadiene	77-47-4				ND	ND	ND	ND	ND	ND				
Hexachloroethane	67-72-1				ND	ND	ND	ND	ND	ND				
Isophorone	78-59-1				ND	ND	ND	ND	ND	ND				
Naphthalene	91-20-3	12	100	100	ND	ND	ND	ND	ND	ND				
Nitrobenzene	98-95-3				ND	ND	ND	ND	ND	ND				
NDPA/DPA	86-30-6				ND	ND	ND	ND	ND	ND				
n-Nitrosodi-n-propylamine	621-64-7				ND	ND	ND	ND	ND	ND				
Bis(2-ethylhexyl)phthalate	117-81-7				ND	ND	ND	ND	ND	ND				
Butyl benzyl phthalate	85-68-7				ND	ND	ND	ND	ND	ND				
Di-n-butylphthalate	84-74-2				ND	ND	ND	ND	ND	ND				
Di-n-octylphthalate	117-84-0				ND	ND	ND	ND	ND	ND				
Diethyl phthalate	84-66-2				ND	ND	ND	ND	ND	ND				
Dimethyl phthalate	131-11-3				ND	ND	ND	ND	ND	ND				
Benz(a)anthracene	56-55-3	1	1	1	ND	0.025	ND	0.021	ND					
Benz(a)pyrene	50-32-8	1	1	1	ND	ND	ND	ND	ND	ND				
Benz(bifluoranthene	205-99-2	1	1	1	ND	0.034	ND	ND	ND					
Benz(k)fluoranthene	207-08-9	0.8	1	3.9	ND	ND	ND	ND	ND	ND				
Chrysene	218-01-9	1	1	3.9	ND	0.023	ND	0.02	ND					
Acenaphthylene	208-96-8	100	100	100	ND	0.028	ND	ND	ND					
Anthracene	120-12-7	100	100	100	ND	ND	ND	ND	ND					
Benz(ghi)perylene	191-24-2	100	100	100	ND	ND	ND	ND	ND					
Fluorene	86-73-7	30	100	100	ND	ND	ND	ND	ND					
Phenanthrene	85-01-8	100	100	100	ND	0.031	ND	ND	ND					
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	0.33	ND	ND	ND	ND	ND					
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	0.5	ND	ND	ND	ND	ND					
Pyrene	129-00-0	100	100	100	ND	0.038	ND	0.029	0.035					
Biphenyl	92-52-4				ND	ND	ND	ND	ND					
4-Chloroaniline	106-47-8				ND	ND	ND	ND	ND					
2-Nitroaniline	88-74-4				ND	ND	ND	ND	ND					
3-Nitroaniline	99-09-2				ND	ND	ND	ND	ND					
4-Nitroaniline	100-01-6				ND	ND	ND	ND	ND					
Dibenzofuran	132-64-9	7	14	59	ND	ND	ND	ND	ND					
2-Methylnaphthalene	91-57-6				ND	ND	ND	ND	ND					
1,2,4,5-Tetrachlorobenzene	95-94-3				ND	ND	ND	ND	ND					
Acetophenone	98-86-2				ND	ND	ND	ND	ND					
2,4,6-Trichlorophenol	88-06-2				ND	ND	ND	ND	ND					
p-Chloro-m-cresol	59-50-7				ND	ND	ND	ND	ND					
2-Chlorophenol	95-57-8				ND	ND	ND	ND	ND					
2,4-Dichlorophenol	120-83-2				ND	ND	ND	ND	ND					
2,4-Dimethylphenol	105-67-9				ND	ND	ND	ND	ND					
2-Nitrophenol	88-75-5				ND	ND	ND	ND	ND					
4-Nitrophenol	100-02-7				ND	ND	ND	ND	ND					
2,4-Dinitrophenol	51-28-5				ND	ND	ND	ND	ND					
4,6-Dinitro-o-cresol	534-52-1				ND	ND	ND	ND	ND					
Pentachlorophenol	87-86-5	0.8	2.4	6.7	ND	ND	ND	ND	ND					
Phenol	108-95-2	0.33	100	100	ND	ND	ND	ND	ND					
2-Methylphenol	95-48-7	0.33	100	100	ND	ND	ND	ND	ND					
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	0.33	34	100	ND	ND	ND	ND	ND					
2,4,5-Trichlorophenol	95-95-4				ND	ND	ND	ND	ND					
Benzoic Acid	65-85-0				ND	ND	ND	ND	ND					
Benzyl Alcohol	100-51-6				ND	ND	ND	ND	ND					
Carbazole	86-74-8				ND	ND	ND	ND	ND					
1,4-Dioxane	123-91-1	0.1	9.8	13	ND	ND	ND	ND	ND					
Total SVOCs					-	0.221	-	0.102	0.069					

**Screening Levels**

Unrestricted Use Soil Cleanup Objective  
Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential  
Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds
Conc. Exceeds
Conc. Exceeds

**Notes**

1. ND = ## = compound not detected above the laboratory reporting limit (RL), limit provided.
2. NA = Compound not analyzed.
3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - SVOCs**  
St. Joseph's Apartments  
Phase II ESI



Analyte	CAS	Unrestricted Use SCO	Sample Location		SB-11 (0-2)	SB-11 (6.5'-8.5')
			Sample ID	L2316525-14 <td>SB-11 (0-2)</td> <td>L2316525-15</td>	SB-11 (0-2)	L2316525-15
			Sample Date	3/29/2023	SB-11 (6.5'-8.5')	3/29/2023
Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Result (mg/kg)	Result (mg/kg)
<b>SVOCs by EPA 8270E</b>						
Acenaphthene	83-32-9	20	100	100	ND	0.13
1,2,4-Trichlorobenzene	120-82-1				ND	ND
Hexachlorobenzene	118-74-1	0.33	0.33	1.2	ND	ND
Bis(2-chloroethyl)ether	111-44-4				ND	ND
2-Chloronaphthalene	91-58-7				ND	ND
1,2-Dichlorobenzene	95-50-1	1.1	100	100	ND	ND
1,3-Dichlorobenzene	541-73-1	2.4	17	49	ND	ND
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	ND	ND
3,3'-Dichlorobenzidine	91-94-1				ND	ND
2,4-Dinitrotoluene	121-14-2				ND	ND
2,6-Dinitrotoluene	606-20-2				ND	ND
Fluoranthene	206-44-0	100	100	100	0.032	0.14
4-Chlorophenyl phenyl ether	7005-72-3				ND	ND
4-Bromophenyl phenyl ether	101-55-3				ND	ND
Bis(2-chloroisopropyl)ether	108-60-1				ND	ND
Bis(2-chloroethoxy)methane	111-91-1				ND	ND
Hexachlorobutadiene	87-68-3				ND	ND
Hexachlorocyclopentadiene	77-47-4				ND	ND
Hexachloroethane	67-72-1				ND	ND
Isophorone	78-59-1				ND	ND
Naphthalene	91-20-3	12	100	100	0.038	0.061
Nitrobenzene	98-95-3				ND	ND
NDPA/DPA	86-30-6					
n-Nitrosodi-n-propylamine	621-64-7				ND	ND
Bis(2-ethylhexyl)phthalate	117-81-7				0.074	0.2
Butyl benzyl phthalate	85-68-7				ND	ND
Di-n-butylphthalate	84-74-2				ND	ND
Di-n-octylphthalate	117-84-0				ND	ND
Diethyl phthalate	84-66-2				ND	ND
Dimethyl phthalate	131-11-3				ND	ND
Benz(a)anthracene	56-55-3	1	1	1	0.024	0.055
Benz(a)pyrene	50-32-8	1	1	1	ND	0.054
Benz(b)fluoranthene	205-99-2	1	1	1	0.033	0.082
Benz(k)fluoranthene	207-08-9	0.8	1	3.9	ND	0.06
Chrysene	218-01-9	1	1	3.9	0.029	0.1
Acenaphthylene	208-96-8	100	100	100	ND	0.095
Anthracene	120-12-7	100	100	100	ND	0.11
Benz(ghi)perylene	191-24-2	100	100	100	0.023	0.11
Fluorene	86-73-7	30	100	100	ND	0.18
Phenanthrene	85-01-8	100	100	100	0.024	0.91
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	0.33	ND	ND
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	0.5	ND	0.087
Pyrene	129-00-0	100	100	100	0.056	0.4
Biphenyl	92-52-4				ND	0.059
4-Chloroaniline	106-47-8				ND	ND
2-Nitroaniline	88-74-4				ND	ND
3-Nitroaniline	99-09-2				ND	ND
4-Nitroaniline	100-01-6				ND	ND
Dibenzofuran	132-64-9	7	14	59	ND	0.096
2-Methylnaphthalene	91-57-6				0.022	0.75
1,2,4,5-Tetrachlorobenzene	95-94-3				ND	ND
Acetophenone	98-86-2				ND	ND
2,4-Dichlorophenol	88-06-2				ND	ND
p-Chloro-m-cresol	59-50-7				ND	ND
2-Chlorophenol	95-57-8				ND	ND
2,4-Dichlorophenol	120-83-2				ND	ND
2,4-Dimethylphenol	105-67-9				ND	ND
2-Nitrophenol	88-75-5				ND	ND
4-Nitrophenol	100-02-7				ND	ND
2,4-Dinitrophenol	51-28-5				ND	ND
4,6-Dinitro-o-cresol	534-52-1				ND	ND
Pentachlorophenol	87-86-5	0.8	2.4	6.7	ND	ND
Phenol	108-95-2	0.33	100	100	ND	ND
2-Methylphenol	95-48-7	0.33	100	100	ND	ND
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	0.33	34	100	ND	ND
2,4,5-Trichlorophenol	95-95-4				ND	ND
Benzoic Acid	65-85-0				ND	ND
Benzyl Alcohol	100-51-6				ND	ND
Carbazole	86-74-8				ND	ND
1,4-Dioxane	123-91-1	0.1	9.8	13	ND	ND
Total SVOCs					0.355	3.679

**Screening Levels**

Unrestricted Use Soil Cleanup Objective

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds

**Notes**

1. ND = ## = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - Pesticides**  
St. Joseph's Apartments  
Phase II ESI



			Sample Location	SB-1 (0'-2')	SB-1 (5'-6.5')	SB-2 (0'-2')	SB-2 (10'-12')	SB-3 (0'-2')	SB-3 (6'-8')	SB-4 (0-2')	SB-4 (4-6')	SB-5 (0-2')	SB-5 (12-14')	SB-6 (0-2')
Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Result (mg/kg)									
<b>Pesticides by EPA 8081B</b>														
Delta-BHC	319-86-8	0.04	100	100	ND									
Lindane	58-89-9	0.1	0.28	1.3	ND									
Alpha-BHC	319-84-6	0.02	0.097	0.48	ND									
Beta-BHC	319-85-7	0.036	0.072	0.36	ND									
Heptachlor	76-44-8	0.042	0.42	2.1	ND	0.00202	ND	ND	ND	ND	0.00175	ND	0.000456	ND
Aldrin	309-00-2	0.005	0.019	0.097	ND									
Heptachlor epoxide	1024-57-3				ND	ND	ND	ND	ND	ND	0.00468	ND	0.00119	NP
Endrin	72-20-8	0.014	2.2	11	ND									
Endrin aldehyde	7421-93-4				ND									
Endrin ketone	53494-70-5				ND									
Dieldrin	60-57-1	0.005	0.039	0.2	ND									
4,4'-DDE	72-55-9	0.0033	1.8	8.9	ND	0.00123	ND	ND	ND	ND	0.0582	0.00412	0.069	ND
4,4'-DDD	72-54-8	0.0033	2.6	13	ND	ND	ND	ND	ND	ND	0.181	0.00716	0.034	ND
4,4'-DDT	50-29-3	0.0033	1.7	7.9	0.00593	0.0118	0.00269	ND	ND	0.00257	0.0768	0.806	0.0217	0.126
Endosulfan I	959-98-8	2.4	4.8	24	ND									
Endosulfan II	33213-65-9	2.4	4.8	24	ND									
Endosulfan sulfate	1031-07-8	2.4	4.8	24	ND									
Methoxychlor	72-43-5				ND	NP								
Toxaphene	8001-35-2				ND									
cis-Chlordane	5103-71-9	0.094	0.91	4.2	0.000775	0.0176	ND	0.000656	ND	ND	0.0176	0.024	0.00263	0.0135
trans-Chlordane	5103-74-2				0.00273	0.0187	0.000632	ND	ND	0.00105	0.0184	0.0341	0.00218	0.0202
Chlordane	57-74-9				0.0192	0.117	ND	ND	ND	ND	0.157	0.0166	0.0746	ND

**Screening Levels**

Unrestricted Use Soil Cleanup Objective

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds
Conc. Exceeds
Conc. Exceeds

**Notes**

1. ND < ## = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - Pesticides**  
 St. Joseph's Apartments  
 Phase II ESI

Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Sample Location	SB-7 (0'-2')	SB-8 (0'-2')	SB-9 (0'-2')	SB-10 (0'-2')	SB-11 (0'-2')	SB-11 (6.5'-8.5')
					Sample ID	L2316525-11	L2316525-17	L2316525-12	L2316525-13	L2316525-14	L2316525-15
					Sample Date	3/29/2023	3/29/2023	3/29/2023	3/29/2023	3/29/2023	3/29/2023
Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)
<b>Pesticides by EPA 8081B</b>											
Delta-BHC	319-86-8	0.04	100	100	ND	ND	ND	ND	ND	ND	ND
Lindane	58-89-9	0.1	0.28	1.3	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	319-84-6	0.02	0.097	0.48	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	319-85-7	0.036	0.072	0.36	ND	ND	ND	ND	ND	ND	ND
Heptachlor	76-44-8	0.042	0.42	2.1	ND	ND	ND	ND	0.00803	0.849	ND
Aldrin	309-00-2	0.005	0.019	0.097	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	1024-57-3				ND	ND	ND	ND	0.00361	0.0946	
Endrin	72-20-8	0.014	2.2	11	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	7421-93-4				ND	ND	ND	ND	ND	ND	ND
Endrin ketone	53494-70-5				ND	ND	ND	ND	ND	ND	ND
Dieldrin	60-57-1	0.005	0.039	0.2	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	72-55-9	0.0033	1.8	8.9	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	72-54-8	0.0033	2.6	13	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	50-29-3	0.0033	1.7	7.9	0.00237	0.00184	0.00164	ND	ND	0.164	
Endosulfan I	959-98-8	2.4	4.8	24	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	33213-65-9	2.4	4.8	24	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	1031-07-8	2.4	4.8	24	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	72-43-5				ND	ND	ND	ND	ND	ND	ND
Toxaphene	8001-35-2				ND	ND	ND	ND	ND	ND	ND
cis-Chlordane	5103-71-9	0.094	0.91	4.2	ND	ND	ND	0.00156	0.151	3.47	
trans-Chlordane	5103-74-2				0.000948	ND	ND	0.00138	0.216	3.54	
Chlordane	57-74-9				ND	ND	ND	0.0129	1.04	24	

#### Screening Levels

Unrestricted Use Soil Cleanup Objective

Conc. Exceeds
Conc. Exceeds
Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

#### Notes

1. ND < ## = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - PCBs**  
 St. Joseph's Apartments  
 Phase II ESI

				Sample Location	SB-1 (0'-2')	SB-1 (5'-6.5')	SB-2 (0'-2')	SB-2 (10'-12')	SB-3 (0'-2')	SB-3 (6'-8')	SB-4 (0-2')	SB-4 (4-6')	SB-5 (0-2')	SB-5 (12-14')	SB-6 (0-2')
				Sample ID	L2316525-01	L2316525-02	L2316525-03	L2316525-04	L2316525-05	L2316525-06	L2316525-07	L2316525-08	L2316525-09	L2316525-10	L2316525-16
				Sample Date	3/29/2023	3/29/2023	SO								
Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Result (mg/kg)										
<b>PCBs by EPA 8082A</b>															
Aroclor 1016	12674-11-2	0.1	1	1	ND										
Aroclor 1221	11104-28-2	0.1	1	1	ND										
Aroclor 1232	11141-16-5	0.1	1	1	ND										
Aroclor 1242	53469-21-9	0.1	1	1	ND										
Aroclor 1248	12672-29-6	0.1	1	1	0.0236	ND	0.0186	0.0119	ND	0.0179	ND	ND	ND	ND	ND
Aroclor 1254	11097-69-1	0.1	1	1	0.0252	0.0138	0.017	0.00807	ND	0.0177	ND	ND	0.0262	ND	NP
Aroclor 1260	11096-82-5	0.1	1	1	ND	ND	ND	ND	ND	ND	0.0145	0.0609	0.0171	0.0303	ND
Aroclor 1262	37324-23-5	0.1	1	1	ND										
Aroclor 1268	11100-14-4	0.1	1	1	ND	ND	ND	ND	ND	ND	0.00464	0.0362	0.00458	0.0157	ND
PCBs, Total	1336-36-3	0.1	1	1	0.0488	0.0138	0.0356	0.02	ND	0.0356	0.0191	0.0971	0.0479	0.046	ND

#### Screening Levels

Unrestricted Use Soil Cleanup Objective

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds

#### Notes

1. ND < ## = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - PCBs**  
 St. Joseph's Apartments  
 Phase II ESI

			Sample Location	SB-7 (0'-2')	SB-8 (0'-2')	SB-9 (0'-2')	SB-10 (0'-2')	SB-11 (0'-2')	SB-11 (6.5'-8.5')
Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Sample ID L2316525-11 3/29/2023 SO	Sample ID L2316525-17 3/29/2023 SO	Sample ID L2316525-12 3/29/2023 SO	Sample ID L2316525-13 3/29/2023 SO	Sample ID L2316525-14 3/29/2023 SO	Sample ID L2316525-15 3/29/2023 SO
<b>PCBs by EPA 8082A</b>									
Aroclor 1016	12674-11-2	0.1	1	1	ND	ND	ND	ND	ND
Aroclor 1221	11104-28-2	0.1	1	1	ND	ND	ND	ND	ND
Aroclor 1232	11141-16-5	0.1	1	1	ND	ND	ND	ND	ND
Aroclor 1242	53469-21-9	0.1	1	1	ND	ND	ND	ND	ND
Aroclor 1248	12672-29-6	0.1	1	1	ND	0.00773	0.014	0.00609	ND
Aroclor 1254	11097-69-1	0.1	1	1	0.00756	0.00764	0.0192	0.00507	ND
Aroclor 1260	11096-82-5	0.1	1	1	ND	ND	ND	ND	0.0115
Aroclor 1262	37324-23-5	0.1	1	1	ND	ND	ND	ND	ND
Aroclor 1268	11100-14-4	0.1	1	1	ND	ND	ND	ND	ND
PCBs, Total	1336-36-3	0.1	1	1	0.00756	0.0154	0.0332	0.0112	ND
									0.0115

#### Screening Levels

Unrestricted Use Soil Cleanup Objective

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds

#### Notes

1. ND < ## = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - Metals**  
 St. Joseph's Apartments  
 Phase II ESI

Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Sample Location	SB-1 (0'-2')	SB-1 (5'-6.5')	SB-2 (0'-2')	SB-2 (10'-12')	SB-3 (0'-2')	SB-3 (6'-8')	SB-4 (0'-2')	SB-4 (4'-6')	SB-5 (0'-2')	SB-5 (12'-14')	SB-6 (0'-2')
					Sample ID	L2316525-01	L2316525-02	L2316525-03	L2316525-04	L2316525-05	L2316525-06	L2316525-07	L2316525-08	L2316525-09	L2316525-10	L2316525-11
					Sample Date	3/29/2023	3/29/2023	SO								
Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)
<b>Metals by EPA 6010D</b>																
Aluminum, Total	7429-90-5				5580	4470	5460	2040	9590	5250	7320	7710	8030	4360	5140	
Antimony, Total	7440-36-0				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Arsenic, Total	7440-38-2	13	16	16	4.73	3.12	4.05	2.68	4.9	4.08	7.1	5.05	8.27	4.75	5.51	
Barium, Total	7440-39-3	350	350	400	44.9	25.2	29.5	12.3	50.1	28.1	366	66.9	352	522	71.1	
Beryllium, Total	7440-41-7	7.2	14	72	0.13	0.093	0.131	0.071	0.156	0.14	0.041	ND	ND	0.169	0.104	
Cadmium, Total	7440-43-9	2.5	2.5	4.3	0.115	ND	ND	ND	ND	0.498	0.121	0.304	1.88	ND	ND	
Calcium, Total	7440-70-2				222000	190000	220000	206000	195000	177000	39400	46000	11900	57000	168000	
Chromium, Total	7440-47-3				6.95	4.43	6.63	3.76	9.44	5.34	16.6	16.7	19.5	8.85	6.73	
Cobalt, Total	7440-48-4				2.48	1.19	2.32	0.992	2.62	1.74	5.23	5.64	6.12	4.33	2.24	
Copper, Total	7440-50-8	50	270	270	27.3	2.65	11.5	4.61	6.18	7.66	27	18.5	26	9.83	7.64	
Iron, Total	7439-89-6				6370	4410	6050	2760	7930	4990	11000	13100	13600	6970	6350	
Lead, Total	7439-92-1	63	400	400	67.7	12.4	38.6	14.2	26.1	24.4	178	77.8	141	1370	398	
Magnesium, Total	7439-95-4				75900	90400	73100	59800	87200	60100	7730	17000	3650	8320	85100	
Manganese, Total	7439-96-5	1600	2000	2000	151	440	159	89.3	802	120	290	250	248	132	627	
Mercury, Total	7439-97-6	0.18	0.81	0.81	ND	ND	0.051	0.058	0.08	ND	0.173	0.214	0.143	0.134	0.078	
Nickel, Total	7440-02-0	30	140	310	6.58	3.4	4.96	2.75	8.21	3.46	11.8	20.1	13.6	10.8	4.87	
Potassium, Total	7440-09-7				1190	1730	1340	1060	3530	961	919	1440	1510	530	713	
Selenium, Total	7782-49-2	3.9	36	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Silver, Total	7440-22-4	2	36	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Sodium, Total	7440-23-5				131	99.4	143	88.5	203	309	183	130	114	346	56.6	
Thallium, Total	7440-28-0				0.498	0.316	0.409	0.376	0.496	0.354	0.569	0.575	0.431	ND	ND	
Vanadium, Total	7440-62-2				9.56	5.84	9.1	3.57	12	8.45	283	20.4	27.4	20	11.7	
Zinc, Total	7440-66-6	109	2200	10000	46	12.5	31.8	17.3	17.8	25.4	292	55.4	261	1500	48.5	

Conc. Exceeds  
 Conc. Exceeds  
 Conc. Exceeds

#### Screening Levels

Unrestricted Use Soil Cleanup Objective

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

#### Notes

1. ND < ## = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Sample Analytical Results - Metals**  
 St. Joseph's Apartments  
 Phase II ESI

Analyte	CAS	Unrestricted Use SCO	Restricted Use SCO - Protection of Human Health - Residential	Restricted Use SCO - Protection of Human Health - Restricted Residential	Sample Location	SB-7 (0-2')	SB-8 (0-2')	SB-9 (0-2')	SB-10 (0-2')	SB-11 (0-2')	SB-11 (6.5'-8.5')
					Sample ID	L2316525-11	L2316525-17	L2316525-12	L2316525-13	L2316525-14	L2316525-15
					Sample Date	3/29/2023	3/29/2023	3/29/2023	3/29/2023	3/29/2023	3/29/2023
<b>Metals by EPA 6010D</b>											
Aluminum, Total	7429-90-5				Result (mg/kg)	4860	6110	5010	4880	5700	6480
Antimony, Total	7440-36-0					ND	ND	ND	ND	ND	1.69
Arsenic, Total	7440-38-2	13	16	16		3.93	4.33	4.19	4.22	13.4	93.8
Barium, Total	7440-39-3	350	350	400		27	25.6	26.4	40.6	34.2	67.2
Beryllium, Total	7440-41-7	7.2	14	72		0.078	0.057	0.1	0.071	0.031	0.254
Cadmium, Total	7440-43-9	2.5	2.5	4.3		ND	ND	ND	ND	ND	0.111
Calcium, Total	7440-70-2					162000	193000	177000	148000	27800	53400
Chromium, Total	7440-47-3					6.1	6.52	6.86	6.04	11.4	8.09
Cobalt, Total	7440-48-4					1.91	1.76	2.5	1.92	2.44	2.64
Copper, Total	7440-50-8	50	270	270		12.6	6.64	17	55.3	9.87	34.5
Iron, Total	7439-89-6					4920	5220	7880	4950	7180	4930
Lead, Total	7439-92-1	63	400	400		80	17.1	29.5	15.1	21.8	23.2
Magnesium, Total	7439-95-4					56900	65600	65500	41800	5960	8980
Manganese, Total	7439-96-5	1600	2000	2000		128	115	174	113	122	106
Mercury, Total	7439-97-6	0.18	0.81	0.81		ND	ND	0.052	ND	0.049	0.118
Nickel, Total	7440-02-0	30	140	310		4.2	3.98	5.34	4.63	7.26	7.66
Potassium, Total	7440-09-7					1090	1100	1190	778	994	1220
Selenium, Total	7782-49-2	3.9	36	180		ND	ND	ND	ND	ND	0.351
Silver, Total	7440-22-4	2	36	180		ND	ND	ND	ND	ND	0.364
Sodium, Total	7440-23-5					112	112	125	169	438	292
Thallium, Total	7440-28-0					0.424	ND	ND	ND	0.34	0.672
Vanadium, Total	7440-62-2					8.16	10.2	9.88	6.88	15.9	12.6
Zinc, Total	7440-66-6	109	2200	10000		28.3	20.2	26.8	41.3	29.9	25.6

#### Screening Levels

Unrestricted Use Soil Cleanup Objective

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Residential

Conc. Exceeds

Restricted Use Soil Cleanup Objective - Protection of Human Health - Restricted Residential

Conc. Exceeds

#### Notes

1. ND < ## = compound not detected above the laboratory reporting limit (RL), limit provided.

2. NA = Compound not analyzed.

3. mg/kg = milligram per kilogram

**Table 1**  
**Soil Vapor Sample Analytical Results Summary**



Edenwald Houses  
Limited Phase II ESA

Sample Location		NYSDOH Guidance Value (ug/m³)	SV-1	SV-2	SV-3	SV-4	SV-5
Sample ID			L2316775-01	L2316775-02	L2316775-03	L2316775-04	L2316775-05
Sample Date			3/30/2023	3/30/2023	3/30/2023	3/30/2023	3/30/2023
Sample Matrix			AS	AI	AS	AI	AS
Analyte	CAS	Result (ug/m³)	Result (ug/m³)	Result (ug/m³)	Result (ug/m³)	Result (ug/m³)	Result (ug/m³)
Dichlorodifluoromethane	75-71-8	2.14	2.12	2.17	2.15	2.24	
Chloromethane	74-87-3	0.667	ND	ND	ND	ND	
Freon-114	76-14-2	ND	ND	ND	ND	ND	
Vinyl chloride	75-01-4	6	ND	ND	ND	ND	
1,3-Butadiene	106-99-0		ND	ND	ND	ND	
Bromomethane	74-83-9		ND	ND	ND	ND	
Chloroethane	75-00-3		ND	ND	ND	ND	
Ethanol	64-17-5		ND	ND	ND	ND	
Vinyl bromide	593-60-2		ND	ND	ND	ND	
Acetone	67-64-1		13.3	20.7	27.1	23.8	30.6
Trichlorofluoromethane	75-69-4		ND	ND	ND	1.13	ND
Isopropanol	67-63-0		ND	ND	ND	ND	
1,1-Dichloroethene	75-35-4	6	ND	ND	ND	ND	
Tertiary butyl Alcohol	75-65-0		2.86	2.95	1.72	4.88	6
Methylene chloride	75-09-2	100	ND	ND	ND	ND	
3-Chloropropene	107-05-1		ND	ND	ND	ND	
Carbon disulfide	75-15-0		ND	ND	0.975	ND	ND
Freon-113	76-13-1		ND	ND	ND	ND	
trans-1,2-Dichloroethene	156-60-5		ND	ND	ND	ND	
1,1-Dichloroethane	75-34-3		ND	ND	ND	ND	
Methyl tert butyl ether	1634-04-4		ND	ND	ND	ND	
2-Butanone	78-93-3		1.83	10	18.2	22.3	ND
cis-1,2-Dichloroethene	156-59-2	6	ND	ND	ND	ND	
Ethyl Acetate	141-78-6		ND	ND	ND	ND	
Chloroform	67-66-3		ND	ND	ND	ND	
Tetrahydrofuran	109-99-9		ND	1.58	ND	5.25	ND
1,2-Dichloroethane	107-06-2		ND	ND	ND	ND	
n-Hexane	110-54-3		2.1	0.73	1.8	3.88	5.67
1,1,Trichloroethane	71-55-6	100	ND	ND	ND	2.74	ND
Benzene	71-43-2		0.818	ND	ND	0.872	ND
Carbon tetrachloride	56-23-5	6	ND	ND	ND	ND	
Cyclohexane	110-82-7		ND	ND	ND	ND	
1,2-Dichloropropane	78-87-5		ND	ND	ND	ND	
Bromodichloromethane	75-27-4		ND	ND	ND	ND	
1,4-Dioxane	123-91-1		ND	ND	ND	ND	
Trichloroethene	79-01-6	6	ND	ND	ND	ND	
2,2,4-Trimethylpentane	540-84-1		ND	ND	ND	ND	
Heptane	142-82-5		ND	2.14	1.61	3.6	10.2
cis-1,3-Dichloropropene	10061-01-5		ND	ND	ND	ND	
4-Methyl-2-pentanone	108-10-1		ND	ND	ND	ND	
trans-1,3-Dichloropropene	10061-02-6		ND	ND	ND	ND	
1,1,2-Trichloroethane	79-00-5		ND	ND	ND	ND	
Toluene	108-88-3		2.66	7.24	18.6	2.9	20.7
2-Hexanone	591-78-6		ND	1.32	2.02	2.03	ND
Dibromochloromethane	124-48-1		ND	ND	ND	ND	
1,2-Dibromoethane	106-93-4		ND	ND	ND	ND	
Tetrachloroethene	127-18-4	100	59.7	264	159	93.6	658
Chlorobenzene	108-90-7		ND	ND	ND	ND	
Ethylbenzene	100-41-4		0.943	3.37	2.19	4.01	7.17
p/m-Xylene	179601-23-1		4.3	15.6	10.3	6.95	27.8
Bromoform	75-25-2		ND	ND	ND	ND	
Styrene	100-42-5		ND	ND	1.11	ND	
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	ND	ND	
o-Xylene	95-47-6		1.72	5.95	4.91	2.31	10.1
4-Ethyltoluene	622-96-8		ND	1.65	ND	1.13	2.77
1,3,5-Trimethylbenzene	108-67-8		ND	1.85	1.68	1.04	2.3
1,2,4-Trimethylbenzene	95-63-6		4.13	6.69	6.78	3.67	8.36
Benzyl chloride	100-44-7		ND	ND	ND	ND	
1,3-Dichlorobenzene	541-73-1		ND	ND	ND	ND	
1,4-Dichlorobenzene	106-46-7		ND	ND	ND	ND	
1,2-Dichlorobenzene	95-50-1		ND	ND	ND	ND	
1,2,4-Trichlorobenzene	120-82-1		ND	ND	ND	ND	
Hexachlorobutadiene	87-68-3		ND	ND	ND	ND	
Sum of BTEX			10.441	32.16	36	17.042	65.77

**Notes:**

NA - Not Analyzed

ND < ## - Concentration not detected above the Laboratory Reporting limit

**Exceedances:**

NYSDOH Matrix A/B/C

**Table 1**  
**Soil Vapor Sample Analytical Results Summary**



Edenwald Houses  
Limited Phase II ESA

Sample Location		Sample Matrix	SV-6	SV-7	SV-8	SV-9	SV-10
Sample ID	L2316775-06		L2316775-07	L2316775-08	L2316775-09	L2316775-10	
Sample Date	3/30/2023		3/30/2023	3/30/2023	3/30/2023	3/30/2023	
Analyte	CAS		NYSDOH Guidance Value (ug/m³)	Result (ug/m³)	Result (ug/m³)	Result (ug/m³)	Result (ug/m³)
Dichlorodifluoromethane	75-71-8		2.25	2.23	2.28	2.28	2.25
Chloromethane	74-87-3		ND	ND	ND	ND	ND
Freon-114	76-14-2		ND	ND	ND	ND	ND
Vinyl chloride	75-01-4	6	ND	ND	ND	ND	ND
1,3-Butadiene	106-99-0		ND	ND	ND	ND	ND
Bromomethane	74-83-9		ND	ND	ND	ND	ND
Chloroethane	75-00-3		ND	ND	ND	ND	ND
Ethanol	64-17-5		ND	ND	ND	ND	ND
Vinyl bromide	593-60-2		ND	ND	ND	ND	ND
Acetone	67-64-1		75.3	35.9	58.9	78.9	66.5
Trichlorofluoromethane	75-69-4		1.14	1.2	1.16	ND	ND
Isopropanol	67-63-0		ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	6	ND	ND	ND	ND	ND
Tertiary butyl Alcohol	75-65-0		10	2.47	7.85	9.22	10.2
Methylene chloride	75-09-2	100	ND	ND	ND	ND	ND
3-Chloropropene	107-05-1		ND	ND	ND	ND	ND
Carbon disulfide	75-15-0		1.44	0.775	2.6	5.98	ND
Freon-113	76-13-1		ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5		ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3		ND	ND	ND	ND	ND
Methyl tert butyl ether	1634-04-4		ND	ND	ND	ND	ND
2-Butanone	78-93-3		2.98	40.4	3.19	3.83	ND
cis-1,2-Dichloroethene	156-59-2	6	ND	ND	ND	ND	ND
Ethyl Acetate	141-78-6		ND	ND	ND	ND	ND
Chloroform	67-66-3		ND	ND	ND	ND	ND
Tetrahydrofuran	109-99-9		ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2		ND	ND	ND	ND	ND
n-Hexane	110-54-3		0.867	4.86	1.66	13.5	ND
1,1-Trichloroethane	71-55-6	100	ND	ND	ND	ND	ND
Benzene	71-43-2		ND	0.658	0.879	1.36	ND
Carbon tetrachloride	56-23-5	6	ND	ND	ND	ND	ND
Cyclohexane	110-82-7		ND	ND	ND	ND	ND
1,2-Dichloropropane	78-87-5		ND	ND	ND	ND	ND
Bromodichromethane	75-27-4		ND	ND	ND	ND	ND
1,4-Dioxane	123-91-1		ND	ND	ND	ND	ND
Trichloroethene	79-01-6	6	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	540-84-1		ND	ND	ND	ND	ND
Heptane	142-82-5		1.91	1.37	2.77	5.49	5.61
cis-1,3-Dichloropropene	10061-01-5		ND	ND	ND	ND	ND
4-Methyl-2-pentanone	108-10-1		ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6		ND	ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5		ND	ND	ND	ND	ND
Toluene	108-88-3		5.39	6.41	9.04	17.4	16.2
2-Hexanone	591-78-6		ND	5	ND	ND	ND
Dibromochloromethane	124-48-1		ND	ND	ND	ND	ND
1,2-Dibromoethane	106-93-4		ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	100	194	142	322	412	550
Chlorobenzene	108-90-7		ND	ND	ND	ND	ND
Ethylbenzene	100-41-4		2.46	2.59	4.34	5.86	5.99
p/m-Xylene	179601-23-1		11.9	9.73	17.6	22.2	25.9
Bromoform	75-25-2		ND	ND	ND	ND	ND
Styrene	100-42-5		ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	ND	ND	ND
o-Xylene	95-47-6		4.47	3.98	6.56	8.21	9.47
4-Ethyltoluene	622-96-8		2.25	1.34	2.68	2.69	3.28
1,3,5-Trimethylbenzene	108-67-8		2.12	1.09	2.35	2.47	2.95
1,2,4-Trimethylbenzene	95-63-6		9.93	4.64	10.8	9.98	11.8
Benzyl chloride	100-44-7		ND	ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1		ND	ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7		ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1		ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	120-82-1		ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3		ND	ND	ND	ND	ND
Sum of BTEX			24.22	23.368	38.419	55.03	57.56

**Notes:**

NA - Not Analyzed

ND < ## - Concentration not detected above the Laboratory Reporting limit

**Exceedances:**

NYSDOH Matrix A/B/C