



June 13, 2023

Ms. Marnie Chancey
New York State Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, New York 12233

RE: Site Characterization – Soil Vapor Intrusion Results
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street
Brooklyn, New York
HRP Project No. DEC1035.P2

Dear Ms. Chancey:

HRP Associates, Inc. (HRP) has prepared this letter to summarize the results of the soil vapor intrusion (SVI) investigations associated with the 473 President Street Off-Site Site Characterization (SC). The investigation activities were performed in the area surrounding three active Brownfield Cleanup Program (BCP) Sites (referred to hereinafter as “the Sites”) located on adjoining parcels in the Gowanus neighborhood of Brooklyn, New York. The Sites include 473 President Street (Site No. C224220), the President Street Portfolio (Site No. C224309) which consists of two non-contiguous parcels located at 469 President Street (E Waste Parcel) and 532 Union Street (Pontone Parcel), and 514 Union Street (Site No. C224318). The Site locations are depicted on **Figure 1**. A Site plan depicting the 473 President Street Off-Site investigation area relative to the BCP Sites is included as **Figure 2**.

The purpose of the SC is to identify potential impacts to off-site soil vapor and groundwater related to chlorinated volatile organic compound (CVOC) contamination found at the Sites. Results of groundwater and soil vapor sampling events conducted in October 2022 and January 2023 are summarized in a separate letter to the New York State Department of Environmental Conservation (NYSDEC), dated April 14, 2023. The remainder of this letter describes field activities and results from SVI sampling conducted in off-site properties. Addresses of off-site properties included in SVI investigations have been omitted from this letter to maintain the privacy of property owners. The investigation work described herein was conducted in January to March 2023. The Off-Site SC investigation is currently on-going. Additional investigation activities and findings will be documented in a future report.

Field Activities

During the 2022-2023 heating season (November 15, 2022 – March 31, 2023), HRP conducted SVI structure sampling at 14 properties (identified as Property 1 through 14) within the 473 President Street Off-Site investigation area (**Figure 2**). A total of 33 off-site properties within the investigation area were solicited for SVI structure sampling by NYSDEC and HRP. Solicitations consisted of sending access letters via certified mail, (completed by NYSDEC), and conducting telephone, email, and door-to-door solicitations (completed by HRP). SVI structure sampling was completed at each property which granted access to HRP and NYSDEC. The investigation performed at each structure included collection of air samples and the completion of a New York State Department of Health (NYSDOH) Indoor Air Quality

Questionnaire and Building Inventory, in accordance with the NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006*, HRP's SC Work Plan dated August 29, 2022, and Site-Specific Work Plan Addendum dated September 23, 2022.

At each structure, sampling consisted of the collection of one or more sub-slab soil vapor samples, one or more basement indoor air samples (or ground floor indoor air samples if constructed as slab-on-grade), and one or more first-floor samples.

For QA/QC purposes, a duplicate sub-slab soil vapor sample was collected at Property 13. Sub-slab soil vapor points were installed immediately beneath the building slab (typically 4-8 inches) using a handheld hammer drill and a half-inch drill bit. Prior to sub-slab soil vapor sampling, a leak test was performed on each vapor point using a helium tracer gas and a minimum of three tubing volumes of air were purged from each sub-slab soil vapor point. Indoor and outdoor ambient air samples were collected simultaneously with sub-slab soil vapor samples, and placed at a height corresponding to the average breathing level (i.e. approximately 5 feet above the ground surface). Outdoor ambient air samples were collected at a minimum frequency of one sample per day. All SVI structure samples were collected using 6-liter summa canisters fitted with a 24-hour regulator and analyzed for VOCs via EPA Method TO-15. Air samples (soil vapor, indoor air, and outdoor air) were submitted to Pace Analytical (Pace), an Environmental Laboratory Approval Program (ELAP) laboratory under chain of custody procedures.

Due to building conditions, sub-slab soil vapor samples were omitted during the SVI investigations at Property 2 and Property 10. At Property 2, the presence of standing water and shallow groundwater beneath the building slab prevented the collection of sub-slab soil vapor samples. A sub-slab soil vapor sample was not collected at Property 10 to avoid damaging a sub-slab geothermal heating system located under the structure. In each case, SVI structure sampling was limited to the collection of indoor and outdoor ambient air samples.

Analytical Results

Sub-slab soil vapor and indoor air analytical results were compared to the May 2017 NYSDOH Soil Vapor/Indoor Air Decision Matrices A, B, and C (Decision Matrices). The Decision Matrices provide recommended actions based on the concertation of 8 CVOCs in the indoor air in conjunction with the concentrations found in the sub-slab soil vapor samples. The 8 CVOCs included in the Decision Matrices are tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE), carbon tetrachloride, methylene chloride, and vinyl chloride. Recommended actions include "No Further Action," "Identify Source(s) and Resample or Mitigate," "Monitor" and "Mitigate."

Additionally, indoor air sampling results were compared to Air Guidance Values (AGVs) and Immediate Action Levels identified in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006*, and subsequent updates. NYSDOH provides AGVs for the CVOCs PCE, TCE, and methylene chloride, and immediate action levels for PCE and TCE.

Table 1 below summarizes recommendations for each property based on sampling data and whether CVOCs were detected in indoor air at concentrations exceeding NYSDOH AGVs or Immediate Action Levels. SVI analytical results for each property are summarized in **Table 2**, attached to the end of this letter.

Table 1 – Off-Site SVI Investigation Results

Property	NYSDOH Decision Matrix Recommendation	Indoor Air CVOC Concentrations Exceed Air Guidance Values?	Indoor Air CVOC Concentrations Exceed Immediate Action Levels?
1	Mitigate	No	No
2	Mitigate	Yes	Yes
3	Mitigate	Yes	No
4	Mitigate	Yes	No
5	No Further Action	No	No
6	No Further Action	No	No
7	Mitigate	No	No
8	No Further Action	No	No
9	No Further Action	No	No
10	No Further Action	No	No
11	Mitigate	No	No
12	No Further Action	No	No
13	No Further Action	No	No
14	Identify Source(s) and Resample or Mitigate	No	No

Note: CVOCs were not detected at concentrations exceeding AGVs at Properties 7 and 11, however mitigation is recommended by the Decision Matrices based on CVOC concentrations in sub-slab soil vapor and indoor air (see **Table 2**).

Data Validation and Usability

Data validation of the SVI structure sampling analytical results was completed by Nancy Weaver of Environmental Data Services, Inc. The Data Usability Summary Reports (DUSRs) for the analytical results indicate that no data was deemed to be unusable.

Future Activities

The NYSDEC and NYSDOH will further evaluate the SVI structure sampling results from the 2022-2023 heating season. The NYSDEC and NYSDOH may recommend continued monitoring be performed or that mitigation systems be installed in some of the properties sampled during this investigation. Based on sampling results collected to date, the NYSDEC and NYSDOH may recommend solicitation of additional properties for SVI structure sampling during the 2023-2024 heating season.

Ms. Marnie Chancey
Site Characterization – Soil Vapor Intrusion Results
473 President Street Off-Site, Site No. C224220A
473 President Street, Brooklyn, New York
June 13, 2023
Page 4 of 4

If you have any questions or require additional information, please feel free to contact HRP at (518) 877-7101.

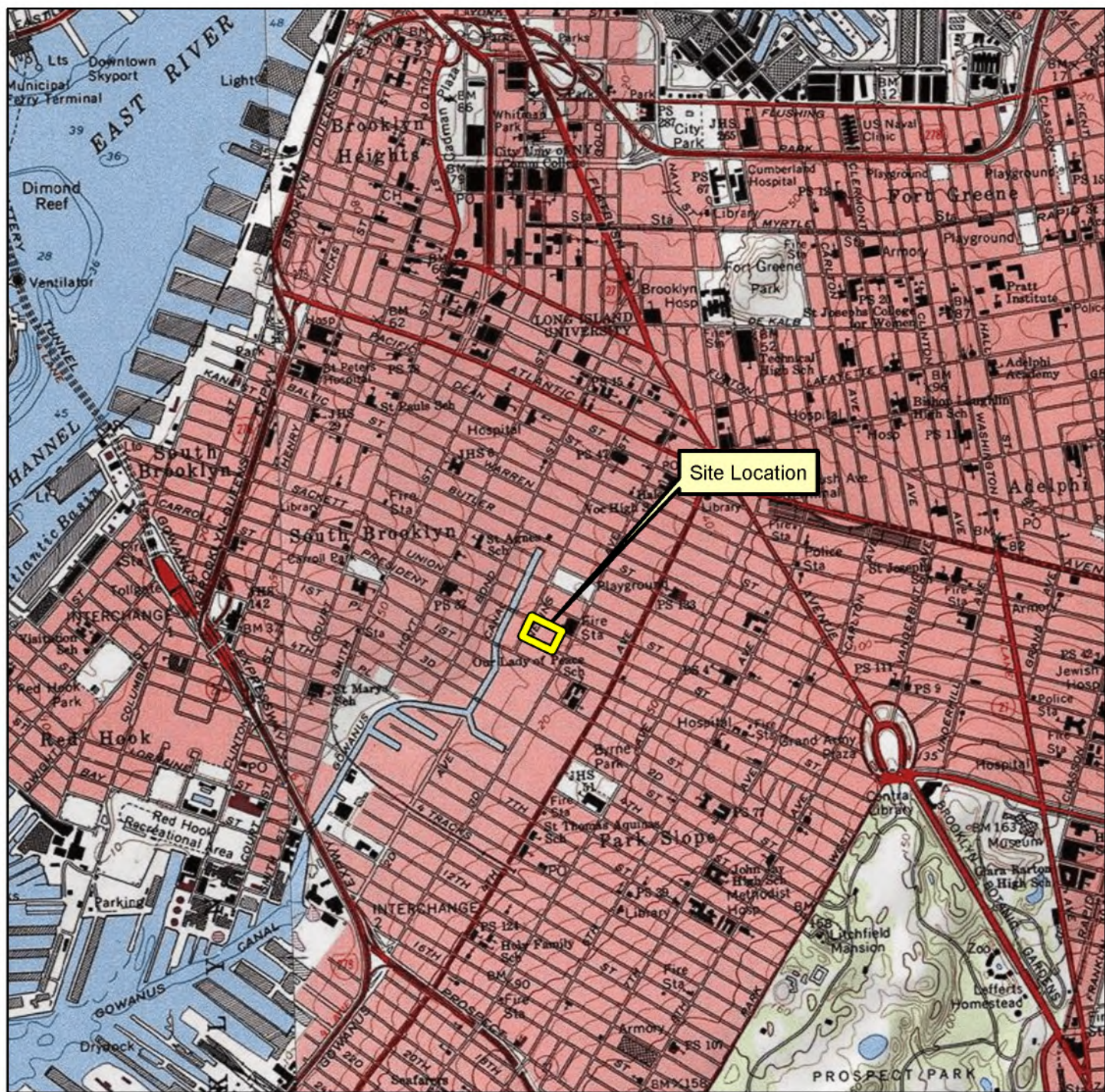
Sincerely,
HRP Associates, Inc.



Patrick Montuori, P.G.
Project Manager

Attachment:
Figures
Tables

FIGURES



0 500 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000
Feet

1:24,000

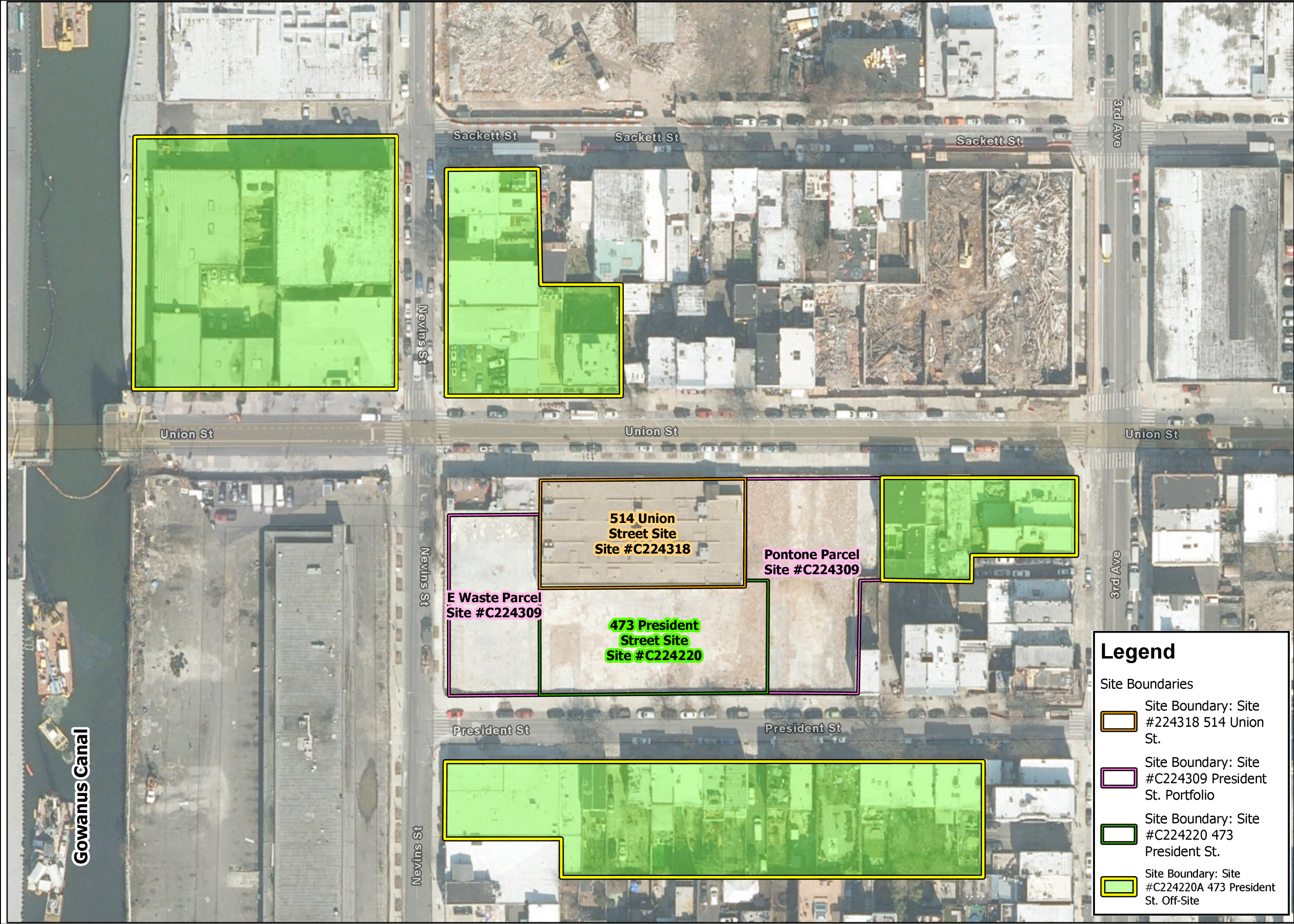


Figure 1
Site Location
473 President Street Off-Site
Site: C224220A
473 Presidents Street
Brooklyn, New York
HRP # DEC1035.P2
Scale 1" = 2,000'

USGS Quadrangle Information
 Quad ID: 40073-F8
 Name: Brooklyn, New York
 Date Rev: 1995
 Date Pub: 1999



ONE FAIRCHILD SQUARE
 SUITE 110
 CLIFTON PARK, NY 12065
 (518) 877-7101
 HRPASSOCIATES.COM



Legend

Site Boundaries

-  Site Boundary: Site #224318 514 Union St.
-  Site Boundary: Site #C224309 President St. Portfolio
-  Site Boundary: Site #C224220 473 President St.
-  Site Boundary: Site #C224220A 473 President St. Off-Site



MOVE YOUR ENVIRONMENT FORWARD

ONE FAIRCHILD SQUARE
SUITE 110
CLIFTON PARK, NY 12065
(518) 877-7101
HRPASSOCIATES.COM



North

0

40

80

Feet

	Revisions	
	No.	Date
Designed By:	PWM	
Drawn By:	CMS	
Reviewed By:	PWM	

Issue Date:	5/11/2023
Project No:	DEC1035.P2
Sheet Size:	11x17

Site Plan

473 President Street Off-Site
Site #C224220A
473 President Street
Brooklyn New York

Figure No.

2

TABLE 2

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 1							
Date Collected:	2/13-2/14/2023	2/13-2/14/2023	2/13-2/14/2023	2/13-2/14/2023	2/13-2/14/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentration	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)							
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.53 J	0.50 J	0.51 J	0.51 J	0.53 J	NP	Mitigate
1,1-Dichloroethane	1.5	< 0.2	< 0.2	< 0.2	< 0.2	NP	
1,1-Dichloroethene	0.38	< 0.2	< 0.2	< 0.2	< 0.2	No Further Action	
1,2,4-Trimethylbenzene	0.29	0.23 J	0.27	0.21 J	0.19 J	NP	
Acetone	< 4.8	12	9.7	12	7.8	NP	
Acrolein	< 2.3	1.5 J	0.77 J	1.1 J	< 2.3	NP	
Benzene	35	0.91	0.98	1	0.98	NP	
Carbon disulfide	0.31 J	< 1.6	< 1.6	< 1.6	< 1.6	NP	
Carbon tetrachloride	0.26 J	0.57	0.48	0.53	0.52	No Further Action	
Chloroethane	0.12 J	< 0.13	< 0.13	< 0.13	< 0.13	NP	
Chloroform	44	< 0.24	< 0.24	< 0.24	< 0.24	NP	
Chloromethane	0.28	1.1	1.3	1.3	1.2	NP	
cis-1,2-Dichloroethene	53	1.1	0.67	0.19 J	< 0.2	Mitigate	
Cyclohexane	11	< 0.17	0.14 J	0.15 J	0.13 J	NP	
Dichlorodifluoromethane	3.4	2.7	2.6	2.7	2.8	NP	
Ethanol	19	24	19	150 D	15	NP	
Ethyl Acetate	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	NP	
Ethylbenzene	0.45	0.20 J	0.20 J	0.21 J	0.17 J	NP	
Heptane	1.6	0.23	0.28	0.34	0.3	NP	
Isopropyl Alcohol	100	100	63	17	26	NP	
m,p-Xylene	1	0.32 J	0.47	0.51	0.45	NP	
Methylene chloride	< 1.7	< 1.7	0.91 J	< 1.7	< 1.7	No Further Action	
Methyltertbutyl ether	92	< 0.18	< 0.18	< 0.18	< 0.18	NP	
Naphthalene	< 0.26	0.21 J	< 0.26	0.23 J	< 0.26	NP	
o-Xylene	0.27	0.21 J	0.22	0.21 J	0.21 J	NP	
Propene	5.5	< 3.4	< 3.4	< 3.4	< 3.4	NP	
Styrene	0.48	< 0.21	< 0.21	< 0.21	< 0.21	NP	
Tetrachloroethene	180	16	6	3.2	0.39	Mitigate	
Tetrahydrofuran	1.5 J	< 1.5	< 1.5	< 1.5	< 1.5	NP	
Toluene	1.1	0.64	0.82	0.89	0.83	NP	
trans-1,2-Dichloroethene	2.6	0.19 J	< 0.2	< 0.2	< 0.2	NP	
Trichloroethene	63	0.76	0.35	0.23 J	< 0.27	Mitigate	
Trichlorofluoromethane	1.2	1.4	1.3	1.3	1.4	NP	
Vinyl chloride	8.6	0.24	0.13	< 0.13	< 0.13	Mitigate	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 2						
Date Collected:	2/15-2/16/2023	2/15-2/16/2023	2/15-2/16/2023	2/15-2/16/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Basement Indoor Air Concentrations	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)						
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.48 J	0.52 J	0.67 J	0.52 J	NP	Mitigate
1,1-Dichloroethene	1.7	2.0	0.33	< 0.2	Identify Sources and Resample/Mitigate	
1,2,4-Trimethylbenzene	< 0.25	0.27	0.75	0.84	NP	
1,3,5-trimethyl-benzene	< 0.25	< 0.25	0.22 J	0.27	NP	
1,4-Dichlorobenzene	< 0.3	< 0.3	0.20 J	< 0.3	NP	
1-Ethyl-4-methyl-benzene	< 0.25	< 0.25	0.17 J	0.21 J	NP	
2-Butanone (MEK)	< 5.9	1.7 J	< 5.9	< 5.9	NP	
2-Hexanone (Methyl butyl ketone/MBK)	0.28	< 0.2	< 0.2	< 0.2	NP	
Acetone	13	< 4.8	23	22	NP	
Acrolein	1.4 J	1.4 J	1.4 J	0.86 J	NP	
Benzene	0.66	1.3	2.1	2.6	NP	
Carbon isulfide	< 1.6	1.3 J	< 1.6	< 1.6	NP	
Carbon tetrachloride	0.56	0.56	0.55	0.38	No Further Action	
Chloroethane	< 0.13	0.13	< 0.13	0.13 J	NP	
Chloroform	1.0	0.64	0.48	< 0.24	NP	
Chloromethane	0.33	0.61	1.2	1.6	NP	
cis-1,2-Dichloroethene	230	130	43	0.16 J	Mitigate	
Cyclohexane	0.50	0.51	0.59	0.84	NP	
Dichlorodifluoromethane	2.6	2.5	3.2	3.9	NP	
Ethanol	7.4	14	63	47	NP	
Ethylbenzene	< 0.22	0.30	0.83	0.99	NP	
Heptane	0.23	0.34	1.1	1.1	NP	
Isopropyl Alcohol	6.4	3.6 J	9.2	8.8	NP	
m,p-Xylene	< 0.43	0.86	2.3	2.9	NP	
Methylene chloride	3.7	< 1.7	< 1.7	< 1.7	No Further Action	
Naphthalene	< 0.26	< 0.26	0.62	0.27	NP	
o-Xylene	< 0.22	0.55	0.90	1.1	NP	
Styrene	< 0.21	< 0.21	0.26	0.16 J	NP	
Tetrachloroethene	65	38	14	2.6	Mitigate	
Tetrahydrofuran	< 1.5	0.43 J	0.45 J	0.47 J	NP	
Toluene	0.32	1.5	3.8	5.1	NP	
trans-1,2-Dichloroethene	1.4	0.86	0.33	< 0.2	NP	
Trichloroethene	900	530	170	0.55	Mitigate	
Trichlorofluoromethane	1.4	1.5	1.6	1.6	NP	
Vinyl chloride	2.5	1.5	0.59	< 0.13	Mitigate	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration
Sub-slab soil vapor samples not collected due to presence of water immediately below slab.

Property 3						
Date Collected:	2/13-2/14/2023	2/13-2/14/2023	2/13-2/14/2023	2/13-2/14/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentration	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)						
1,1,1-Trichloroethane	0.34	< 0.27	< 0.27	< 0.27	No Further Action	Mitigate
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.8	0.52 J	0.54 J	0.53 J	NP	
1,2,4-Trimethylbenzene	0.51	0.61	0.43	0.19 J	NP	
1,3,5-trimethyl-benzene	0.21 J	0.18 J	0.14 J	< 0.25	NP	
2-Butanone (MEK)	5.3 J	< 5.9	1.8 J	< 5.9	NP	
Acetone	< 5.7	19	20	7.8	NP	
Acrolein	1.9 J	< 2.3	1.5 J	< 2.3	NP	
Benzene	1.1	1.1	1.1	0.98	NP	
Carbon isulfide	0.25 J	< 1.6	< 1.6	< 1.6	NP	
Carbon tetrachloride	0.97	0.53	0.49	0.52	No Further Action	
Chloroform	31	0.28	< 0.24	< 0.24	NP	
Chloromethane	0.28	1.4	1.4	1.2	NP	
cis-1,2-Dichloroethene	1	0.51	0.20	< 0.2	No Further Action	
Cyclohexane	< 0.21	0.23	0.24	0.13 J	NP	
Dichlorodifluoromethane	3	2.6	3.4	2.8	NP	
Ethanol	53	35	39	15	NP	
Ethyl Acetate	< 2.2	1.3 J	1.2 J	< 1.8	NP	
Ethylbenzene	0.57	1.2	0.99	0.17 J	NP	
Heptane	27	0.46	0.48	0.3	NP	
Isopropyl Alcohol	310	14	23	26	NP	
m,p-Xylene	1.4	4.4	3.5	0.45	NP	
Methyl isobutyl ketone (MIBK)	< 0.25	< 0.2	0.34	< 0.2	NP	
Naphthalene	< 0.31	0.29	< 0.26	< 0.26	NP	
o-Xylene	0.64	1.3	1.1	0.21 J	NP	
Propene	< 4.1	< 3.4	< 3.4	< 3.4	NP	
Styrene	0.37	2.3	2.3	< 0.21	NP	
Tetrachloroethene	100	2.5	0.79	0.39	No Further Action	
Tetrahydrofuran	1.4 J	< 1.5	< 1.5	< 1.5	NP	
Toluene	2.1	4.6	4.3	0.83	NP	
Trichloroethene	110	3.5	1.1	< 0.27	Mitigate	
Trichlorofluoromethane	1.4	1.3	1.4	1.4	NP	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 4								
Date Collected:	1/24-1/25/2023	1/24-1/25/2023	1/19-1/20/2023	1/19-1/20/2023	1/19-1/20/2023	1/24-1/25/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentrations	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentration	Outdoor Air Concentration		
Volatile Organic Compounds (µg/m3)								
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.51 J	0.61 J	0.54 J	0.48 J	0.62 J	0.54 J	NP	Mitigate
1,1-Dichloroethane	0.51	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NP	
1,1-Dichloroethene	0.25	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	No Further Action	
1,2,4-Trimethylbenzene	0.63	0.32	0.82	1	1.1	0.23 J	NP	
1,2-Dichloroethane	0.20 J	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NP	
1,2-Dichloropropane	0.54	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	NP	
1,3 Butadiene	< 0.11	< 0.11	0.14	0.13	0.17	< 0.11	NP	
1,3,5-trimethyl-benzene	0.15 J	< 0.25	0.17 J	0.19 J	< 0.25	< 0.25	NP	
1,3-Dichlorobenzene	< 0.3	< 0.3	< 0.3	< 0.3	0.51	< 0.3	NP	
1-Ethyl-4-methyl-benzene	< 0.25	< 0.25	0.15 J	0.17 J	< 0.25	< 0.25	NP	
2-Butanone (MEK)	6.7	1.6 J	< 5.9	< 5.9	< 5.9	< 5.9	NP	
2-Hexanone (Methyl butyl ketone/MBK)	1.4	< 0.2	0.16 J	0.29	< 0.2	< 0.2	NP	
Acetone	35	18	20	16	12	7.4	NP	
Acrolein	< 2.3	< 2.3	0.75 J	< 2.3	< 2.3	< 2.3	NP	
Benzene	0.98	1.2	1	1	0.98	1.2	NP	
Carbon disulfide	1.5 J	< 1.6	< 1.6	4.7	0.21 J	< 1.6	NP	
Carbon tetrachloride	0.45	< 0.31	0.30 J	0.43	0.36	< 0.31	No Further Action	
Chloroform	6	0.55	< 0.24	< 0.24	0.26	< 0.24	NP	
Chloromethane	0.5	1.1	1.1	0.83	0.97	1.3	NP	
cis-1,2-Dichloroethene	17	1.1	< 0.2	< 0.2	< 0.2	< 0.2	Mitigate	
Cyclohexane	0.4	0.35	0.65	0.48	0.19	0.18	NP	
Dichlorodifluoromethane	2.9	2.8	2	1.6	1.8	3	NP	
Ethanol	78	91	82	77	46	23	NP	
Ethyl Acetate	6.2	< 1.8	6.7	3.9	< 1.8	1.3 J	NP	
Ethylbenzene	1.2	0.39	0.63	0.59	0.31	0.32	NP	
Heptane	1.7	0.42	0.5	0.41	0.34	0.4	NP	
Hexane	8.1	1.1 J	5.1 J	2.1 J	0.99 J	< 7	NP	
Isopropyl Alcohol	290 D	35	110	110	5.1	60	NP	
m,p-Xylene	1.3	1	2.4	2.2	1	0.68	NP	
Methyl isobutyl ketone (MIBK)	0.41	< 0.2	0.14 J	0.14 J	0.16 J	< 0.2	NP	
Methylene chloride	< 1.7	< 1.7	0.83 J	< 1.7	< 1.7	< 1.7	No Further Action	
Methyltertbutyl ether	0.2	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	NP	
Naphthalene	0.25 J	< 0.26	0.24 J	< 0.26	< 0.26	< 0.26	NP	
o-Xylene	0.58	0.37	0.79	0.71	0.4	0.29	NP	
Styrene	0.37	0.13 J	0.19 J	< 0.21	< 0.21	< 0.21	NP	
Tetrachloroethene	360	5.8	0.33 J	0.31 J	0.30 J	< 0.34	Monitor	
Tetrahydrofuran	0.95 J	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	NP	
Toluene	8	27	44	23	2.1	2.8	NP	
trans-1,2-Dichloroethene	1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NP	
Trichloroethene	46	3.1	< 0.27	< 0.27	< 0.27	< 0.27	Mitigate	
Trichlorofluoromethane	1.4	1.4	1.6	1.2	1.4	1.3	NP	
Vinyl acetate	< 1.8	< 1.8	1.1 J	< 1.8	< 1.8	< 1.8	NP	

Legend:		
50		= Parameter requires specific action
25		= Parameter detected above the laboratory reporting limit
< 10		= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration
Sub-slab soil vapor and basement indoor air samples not collected concurrently with first floor samples.

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 5						
Date Collected:	1/23-1/24/2023	1/23-1/24/2023	1/23-1/24/2023	1/23-1/24/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentrations	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)						
1,1,1-Trichloroethane	0.5	< 0.27	< 0.27	< 0.27	No Further Action	No Further Action
1,2,4-Trimethylbenzene	< 0.25	0.75	0.91	0.12 J	NP	
1,2-Dichlorobenzene	0.26 J	< 0.3	< 0.3	< 0.3	NP	
1,3,5-trimethyl-benzene	< 0.25	0.26	0.33	< 0.25	NP	
1-Ethyl-4-methyl-benzene	< 0.25	0.17 J	0.22 J	< 0.25	NP	
Acetone	20	37	44	6.1	NP	
Benzene	0.72	1.2	1.2	0.82	NP	
Carbon disulfide	1.9	< 1.6	< 1.6	< 1.6	NP	
Carbon tetrachloride	< 0.31	< 0.31	0.47	0.55	No Further Action	
Chloroform	12	0.24 J	0.32	< 0.24	NP	
Chloromethane	0.26	1.2	1.2	1.2	NP	
Cyclohexane	0.31	0.38	0.33	< 0.17	NP	
Dichlorodifluoromethane	2.6	9.4	2.9	2.8	NP	
Ethanol	20	99	160	9.7	NP	
Ethylbenzene	0.16 J	1.4	2	< 0.22	NP	
Heptane	0.3	0.91	1.7	0.21	NP	
Hexane	1.6 J	< 7	< 7	< 7	NP	
Isopropyl Alcohol	1.5 J	7.3	12	6.8	NP	
m,p-Xylene	< 0.43	6	8.8	0.30 J	NP	
Methylene chloride	0.87 J	< 1.7	< 1.7	< 1.7	No Further Action	
Naphthalene	< 0.26	0.34	< 0.26	< 0.26	NP	
o-Xylene	0.12 J	1.9	2.7	0.13 J	NP	
Propene	6	< 3.4	< 3.4	< 3.4	NP	
Styrene	0.12 J	0.29	0.42	< 0.21	NP	
Tetrachloroethene	1.8	0.26 J	< 0.34	< 0.34	No Further Action	
Tetrahydrofuran	< 1.5	0.71 J	0.47 J	< 1.5	NP	
Toluene	0.42	17	14	1.4	NP	
trans-1,2-Dichloroethene	< 0.2	0.44	0.56	< 0.2	NP	
Trichlorofluoromethane	1.4	1.5	1.3	1.3	NP	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 6						
Date Collected:	1/23-1/24/2023	1/23-1/24/2023	1/23-1/24/2023	1/23-1/24/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentrations	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)						
1,1,1-Trichloroethane	1.3	< 0.27	< 0.27	< 0.27	No Further Action	No Further Action
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.57 J	0.52 J	0.66 J	0.62 J	NP	
1,2,4-Trimethylbenzene	0.24 J	0.12 J	1.2	0.12 J	NP	
1,2-Dichlorobenzene	0.72	< 0.3	< 0.3	< 0.3	NP	
1,3,5-trimethyl-benzene	< 0.25	< 0.25	0.34	< 0.25	NP	
1,4-Dichlorobenzene	0.72	< 0.3	< 0.3	< 0.3	NP	
1-Ethyl-4-methyl-benzene	< 0.25	< 0.25	0.26	< 0.25	NP	
Acetone	8.8	6.1	15	6.1	NP	
Acrolein	0.73 J	< 2.3	0.64 J	< 2.3	NP	
Benzene	0.29	0.85	1	0.82	NP	
Carbon disulfide	0.27 J	< 1.6	< 1.6	< 1.6	NP	
Carbon tetrachloride	0.30 J	0.53	0.55	0.55	No Further Action	
Chloroform	5.3	< 0.24	0.73	< 0.24	NP	
Chloromethane	0.52	1.2	1.2	1.2	NP	
Cyclohexane	0.18	< 0.17	0.19	< 0.17	NP	
Dichlorodifluoromethane	2.8	2.7	2.8	2.8	NP	
Ethanol	46	19	130 D	9.7	NP	
Ethyl Acetate	< 1.8	< 1.8	1.3 J	< 1.8	NP	
Ethylbenzene	0.22	< 0.22	0.47	< 0.22	NP	
Heptane	0.39	0.23	1.9	0.21	NP	
Hexane	1.2 J	< 7	< 7	< 7	NP	
Isopropyl Alcohol	16	5.9	5.8	6.8	NP	
m,p-Xylene	0.47	0.30 J	1.8	0.30 J	NP	
Methyl isobutyl ketone (MIBK)	0.32	< 0.2	< 0.2	< 0.2	NP	
Methylene chloride	< 1.7	0.81 J	< 1.7	< 1.7	No Further Action	
Naphthalene	0.28	< 0.26	< 0.26	< 0.26	NP	
o-Xylene	0.26	0.13 J	0.79	0.13 J	NP	
Propene	1.5 J	< 3.4	< 3.4	< 3.4	NP	
Styrene	0.24	< 0.21	0.24	< 0.21	NP	
Tetrachloroethene	3.7	< 0.34	< 0.34	< 0.34	No Further Action	
Tetrahydrofuran	0.50 J	0.34 J	< 1.5	< 1.5	NP	
Toluene	0.95	0.69	1.2	1.4	NP	
Trichlorofluoromethane	1.3	1.4	1.4	1.3	NP	
Vinyl acetate	1.1 J	< 1.8	< 1.8	< 1.8	NP	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 7						
Date Collected:	1/19-1/20/2023	1/19-1/20/2023	1/19-1/20/2023	1/19-1/20/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentrations	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentration		
Volatile Organic Compounds (µg/m3)						
1,1,1-Trichloroethane	2.4	< 0.27	< 0.27	< 0.27	No Further Action	Mitigate
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.71 J	0.90 J	0.93 J	0.64 J	NP	
1,1-Dichloroethane	0.25	< 0.2	< 0.2	< 0.2	NP	
1,2,4-Trimethylbenzene	0.91	0.55	0.56	0.35	NP	
1,2-Dichloroethane	< 0.2	0.21	< 0.2	< 0.2	NP	
1,2-Dichloropropane	< 0.23	0.26	< 0.23	< 0.23	NP	
1,3 Butadiene	0.31	0.21	0.18	0.16	NP	
1,3,5-trimethyl-benzene	0.27	0.21 J	0.15 J	< 0.25	NP	
1,4-Dichlorobenzene	< 0.3	0.24 J	0.22 J	< 0.3	NP	
1,4-Dioxane	< 1.8	0.42 J	< 1.8	< 1.8	NP	
1-Ethyl-4-methyl-benzene	0.25	0.17 J	< 0.25	< 0.25	NP	
2-Butanone (MEK)	3.7 J	9.9	3.1 J	< 5.9	NP	
2-Hexanone (Methyl butyl ketone/MBK)	1.1	0.72	< 0.2	0.23	NP	
Acetone	4.1 J	32	24	12	NP	
Acrolein	< 2.3	1.8 J	1.2 J	< 2.3	NP	
Benzene	0.57	1.3	1.1	0.81	NP	
Bromodichloromethane	< 0.34	0.29 J	< 0.34	< 0.34	NP	
Bromomethane	< 0.19	0.15 J	0.14 J	< 0.19	NP	
Carbon disulfide	1.3 J	0.24 J	< 1.6	< 1.6	NP	
Carbon tetrachloride	< 0.31	0.75	0.74	< 0.31	No Further Action	
Chlorobenzene	< 0.23	0.17 J	< 0.23	< 0.23	NP	
Chloroethane	< 0.13	0.14	< 0.13	< 0.13	NP	
Chloroform	16	0.68	0.63	< 0.24	NP	
Chloromethane	0.3	1.4	1.7	0.84	NP	
cis-1,2-Dichloroethene	2.4	< 0.2	< 0.2	< 0.2	No Further Action	
Cyclohexane	0.94	0.42	0.32	0.13 J	NP	
Dichlorodifluoromethane	2.1	2	2.5	1.3	NP	
Ethanol	2.8 J	59	110	4.5	NP	
Ethyl Acetate	< 1.8	7.1	1.4 J	< 1.8	NP	
Ethylbenzene	0.37	0.4	0.34	0.26	NP	
Heptane	1	1.2	1.5	0.25	NP	
Hexane	26	1.3 J	1.0 J	< 7	NP	
Isopropyl Alcohol	< 4.9	3.5 J	3.7 J	2.3 J	NP	
m,p-Xylene	1.1	1.1	1.1	0.66	NP	
Methyl isobutyl ketone (MIBK)	< 0.2	0.9	< 0.2	< 0.2	NP	
Naphthalene	0.48	< 0.26	0.26 J	< 0.26	NP	
o-Xylene	0.48	0.46	0.4	0.28	NP	
Propene	7.3	< 3.4	< 3.4	< 3.4	NP	
Styrene	0.44	0.23	0.20 J	< 0.21	NP	
Tetrachloroethene	650	2.1	1	0.28 J	No Further Action	
Tetrahydrofuran	0.45 J	17	4.7	< 1.5	NP	
Toluene	1.8	3.5	2	5.1	NP	
trans-1,2-Dichloroethene	0.16 J	< 0.2	< 0.2	< 0.2	NP	
Trichloroethene	67	0.29	< 0.27	< 0.27	Mitigate	
Trichlorofluoromethane	2.5	1.7	2.5	1.6	NP	
Vinyl acetate	< 1.8	2.7	1.4 J	1.1 J	NP	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 8						
Date Collected:	1/24-1/25/2023	1/24-1/25/2023	1/24-1/25/2023	1/24-1/25/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentrations	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)						
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.64 J	0.54 J	0.58 J	0.59 J	NP	No Further Action
1,2,4-Trimethylbenzene	0.46	0.35	0.35	0.18 J	NP	
1,3,5-Trimethyl-benzene	0.13 J	< 0.25	< 0.25	< 0.25	NP	
2-Butanone (MEK)	< 5.9	< 5.9	1.7 J	< 5.9	NP	
Acetone	6.9	7.8	25	8	NP	
Acrolein	< 2.3	< 2.3	2.6	< 2.3	NP	
Benzene	1.1	0.84	1.6	0.97	NP	
Carbon disulfide	0.52 J	0.81 J	0.19 J	< 1.6	NP	
Carbon tetrachloride	0.33	0.52	< 0.31	< 0.31	No Further Action	
Chloroethane	< 0.13	0.13 J	< 0.13	< 0.13	NP	
Chloroform	3.5	0.83	1.3	< 0.24	NP	
Chloromethane	0.46	1.5	1.2	1.2	NP	
Cyclohexane	< 0.17	0.12 J	0.16 J	0.12 J	NP	
Dichlorodifluoromethane	3	2.9	3	3.1	NP	
Ethanol	22	40	330 D	17	NP	
Ethyl Acetate	< 1.8	< 1.8	1.9	< 1.8	NP	
Ethylbenzene	0.29	0.22	0.23	0.14 J	NP	
Heptane	0.24	0.28	0.58	0.24	NP	
Hexane	6.8 J	< 7	< 7	< 7	NP	
Isopropyl Alcohol	19	2.9 J	8.7	6.1	NP	
m,p-Xylene	0.74	0.65	0.57	0.38 J	NP	
Methyl isobutyl ketone (MIBK)	< 0.2	1	< 0.2	< 0.2	NP	
Methylene chloride	2.4	< 1.7	< 1.7	< 1.7	No Further Action	
Naphthalene	0.23 J	< 0.26	< 0.26	< 0.26	NP	
o-Xylene	0.33	0.26	0.23	0.13 J	NP	
Propene	4.8	< 3.4	< 3.4	< 3.4	NP	
Styrene	0.3	< 0.21	0.15 J	< 0.21	NP	
Tetrachloroethene	5.2	0.94	0.91	< 0.34	No Further Action	
Tetrahydrofuran	< 1.5	0.30 J	1.2 J	< 1.5	NP	
Toluene	1.5	0.83	1.2	0.83	NP	
Trichloroethene	28	< 0.27	< 0.27	< 0.27	No Further Action	
Trichlorofluoromethane	1.5	1.3	1.4	1.4	NP	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 9						
Date Collected:	2/13-2/14/2023	2/13-2/14/2023	2/13-2/14/2023	2/13-2/14/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentration	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)						
1,1,1-Trichloroethane	0.23 J	< 0.27	< 0.27	< 0.27	No Further Action	No Further Action
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.51 J	0.52 J	0.54 J	0.52 J	NP	
1,2,4-Trimethylbenzene	0.40	0.24 J	0.20 J	0.18 J	NP	
2-Butanone (MEK)	1.7 J	1.8 J	< 5.9	< 5.9	NP	
Acetone	4.7 J	54	16	8.2	NP	
Acrolein	< 2.3	1.7 J	1.8 J	< 2.3	NP	
Benzene	0.30	0.97	1.1	0.88	NP	
Bromoform	< 0.52	< 0.52	0.36 J	0.38 J	NP	
Carbon isulfide	1.6	< 1.6	< 1.6	< 1.6	NP	
Carbon tetrachloride	0.31 J	0.55	0.55	0.47	No Further Action	
Chloroform	6.4	1.4	0.23 J	< 0.24	NP	
Chloromethane	0.15 J	1.4	1.3	1.3	NP	
Cyclohexane	0.28	0.15 J	0.18	0.14 J	NP	
Dichlorodifluoromethane	2.9	2.6	3.2	2.8	NP	
Ethanol	6.1	57	80	33	NP	
Ethyl Acetate	< 1.8	< 1.8	2.2	< 1.8	NP	
Ethylbenzene	0.27	0.19 J	0.19 J	0.18 J	NP	
Heptane	0.31	0.51	0.39	0.35	NP	
Isopropyl Alcohol	12	13	63	110	NP	
m,p-Xylene	0.57	0.51	0.49	0.45	NP	
Methyl isobutyl ketone (MIBK)	< 0.2	0.23	0.17 J	< 0.2	NP	
Naphthalene	0.56	0.20 J	< 0.26	< 0.26	NP	
o-Xylene	0.30	0.20 J	0.22	0.16 J	NP	
Propene	2.0 J	< 3.4	< 3.4	< 3.4	NP	
Styrene	0.52	< 0.21	< 0.21	< 0.21	NP	
Tetrachloroethene	7.3	0.96	0.42	0.30 J	No Further Action	
Tetrahydrofuran	1.4 J	< 1.5	< 1.5	< 1.5	NP	
Toluene	0.84	0.89	1.1	0.90	NP	
Trichloroethene	4.2	< 0.27	< 0.27	< 0.27	No Further Action	
Trichlorofluoromethane	1.3	1.3	1.3	1.3	NP	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 10					
Date Collected:	1/24-1/25/2023	1/24-1/25/2023	1/24-1/25/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	First Floor Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)					
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.81 J	0.54 J	0.59 J	NP	No Further Action
1,2,4-Trimethylbenzene	1.3	1.1	0.18 J	NP	
1,3,5-trimethyl-benzene	0.37	0.34	< 0.25	NP	
1-Ethyl-4-methyl-benzene	0.23 J	0.20 J	< 0.25	NP	
2-Butanone (MEK)	12	12	< 5.9	NP	
Acetone	1900	2000	8	NP	
Acrolein	1.1 J	< 2.3	< 2.3	NP	
Benzene	1.6	1.1	0.97	NP	
Carbon disulfdie	20	< 1.6	< 1.6	NP	
Carbon tetrachloride	0.6	0.54	< 0.31	No Further Action	
Chloroethane	0.12 J	< 0.13	< 0.13	NP	
Chloroform	0.24	< 0.24	< 0.24	NP	
Chloromethane	2.7	1.8	1.2	NP	
cis-1,2-dichloroethene	0.19 J	< 0.2	< 0.2	No Further Action	
Cyclohexane	0.74	0.79	0.12 J	NP	
dichloroifluoromethane	3.2	3.2	3.1	NP	
Ethanol	160	160	17	NP	
Ethyl Acetate	9.1	7	< 1.8	NP	
Ethylbenzene	2.1	2.3	0.14 J	NP	
Heptane	2.5	2.6	0.24	NP	
Hexane	3.2 J	4.3 J	< 7	NP	
Isopropyl Alcohol	890	1100	6.1	NP	
m,p-Xylene	8.8	9.4	0.38 J	NP	
Methyl isobutyl ketone (MIBK)	1.7	< 0.2	< 0.2	NP	
Methylene chloride	1.1 J	0.84 J	< 1.7	No Further Action	
Naphthalene	0.66	0.36	< 0.26	NP	
o-Xylene	2.9	2.9	0.13 J	NP	
Styrene	0.33	0.23	< 0.21	NP	
Tetrachloroethene	2.1	1.3	< 0.34	No Further Action	
Tetrahyrofuran	1.0 J	0.42 J	< 1.5	NP	
Toluene	71	90	0.83	NP	
Trichloroethene	0.92	0.51	< 0.27	No Further Action	
Trichlorofluoromethane	1.3	1.4	1.4	NP	
Vinyl acetate	2.8	< 1.8	< 1.8	NP	

Legend:		
50	=	Parameter requires specific action
25	=	Parameter detected above the laboratory reporting limit
< 10	=	Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration
No sub-slab soil vapor samples collected. Building is heated by sub-slab geothermal system.

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 11							
Date Collected:	1/24-1/25/2023	1/24-1/25/2023	1/24-1/25/2023	1/24-1/25/2023	1/24-1/25/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentrations	Basement Indoor Air Concentrations Boiler Room	Basement Indoor Air Concentration Living Room	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)							
1,1,1-Trichloroethane	0.37	< 0.27	< 0.27	< 0.27	< 0.27	No Further Action	Mitigate
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.55 J	0.66 J	0.62 J	0.60 J	0.59 J	NP	
1,2,4-Trichlorobenzene	< 0.37	< 0.37	0.45	< 0.37	< 0.37	NP	
1,2,4-Trimethylbenzene	13	0.88	0.58	0.54	0.18 J	NP	
1,2-Dichloroethane	< 0.2	0.28	0.25	0.26	< 0.2	NP	
1,3,5-trimethyl-benzene	3.4	0.24 J	0.15 J	0.13 J	< 0.25	NP	
1-Ethyl-4-methyl-benzene	1.2	0.16 J	< 0.25	< 0.25	< 0.25	NP	
2-Butanone (MEK)	7.1	1.8 J	2.2 J	1.9 J	< 5.9	NP	
2-Hexanone (Methyl butyl ketone/MBK)	1.7	< 0.2	< 0.2	< 0.2	< 0.2	NP	
Acetone	35	290	260	250	8	NP	
Acrolein	0.79 J	< 2.3	1.1 J	0.62 J	< 2.3	NP	
Benzene	1.9	0.91	1	1	0.97	NP	
Bromodichloromethane	< 0.34	0.78	< 0.34	< 0.34	< 0.34	NP	
Carbon disulfide	1.6	0.19 J	0.50 J	0.39 J	< 1.6	NP	
Carbon tetrachloride	0.31 J	0.38	< 0.31	< 0.31	< 0.31	No Further Action	
Chloroethane	0.31	< 0.13	< 0.13	< 0.13	< 0.13	NP	
Chloroform	9.5	6.4	1.7	2.1	< 0.24	NP	
Chloromethane	0.28	1.3	1.4	1.4	1.2	NP	
cis-1,2-dichloroethene	< 0.2	0.17 J	< 0.2	< 0.2	< 0.2	No Further Action	
Cyclohexane	1.3	0.26	0.38	0.34	0.12 J	NP	
dichloroifluoromethane	3.1	3.8	2.9	2.9	3.1	NP	
Ethanol	58	170	260	370	17	NP	
Ethyl Acetate	< 1.8	3.9	2.4	2.6	< 1.8	NP	
Ethylbenzene	0.36	1.3	0.61	0.6	0.14 J	NP	
Heptane	2.8	2.8	1.2	1.2	0.24	NP	
Hexane	13	1.0 J	1.1 J	1.0 J	< 7	NP	
Isopropyl Alcohol	4.9	210	190	170	6.1	NP	
m,p-Xylene	0.88	5.2	2	2.1	0.38 J	NP	
Methyl isobutyl ketone (MIBK)	1	0.63	0.63	0.66	< 0.2	NP	
Naphthalene	2.1	1.6	0.66	1.1	< 0.26	NP	
o-Xylene	0.41	1.7	0.68	0.74	0.13 J	NP	
Propene	7.4	17	< 3.4	< 3.4	< 3.4	NP	
Styrene	0.39	0.35	0.41	0.33	< 0.21	NP	
Tetrachloroethene	14	3.2	0.89	0.92	< 0.34	No Further Action	
Tetrahyrofuran	0.55 J	0.37 J	0.50 J	0.60 J	< 1.5	NP	
Toluene	3	12	11	11	0.83	NP	
trans-1,2-dichloroethene	0.26	< 0.2	0.28	< 0.2	< 0.2	NP	
Trichloroethene	29	1.3	1.6	1.4	< 0.27	Mitigate	
Trichlorofluoromethane	1.4	1.4	1.4	1.4	1.4	NP	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 12						
Date Collected:	2/13-2/14/2023	2/13-2/14/2023	2/13-2/14/2023	2/13-2/14/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentration	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)						
1,1,1-Trichloroethane	0.36	< 0.27	< 0.27	< 0.27	No Further Action	No Further Action
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.55 J	0.58 J	0.54 J	0.52 J	NP	
1,2,4-Trimethylbenzene	0.58	0.24 J	0.30	0.18 J	NP	
1,3,5-trimethyl-benzene	0.17	< 0.25	< 0.25	< 0.25	NP	
1-Ethyl-4-methyl-benzene	0.12 J	< 0.25	< 0.25	< 0.25	NP	
2-Butanone (MEK)	3.7	< 5.9	< 5.9	< 5.9	NP	
2-Hexanone (Methyl butyl ketone/MBK)	0.65	< 0.2	< 0.2	< 0.2	NP	
Acetone	26	14	26	8.2	NP	
Acrolein	0.81 J	1.1 J	1.2 J	< 2.3	NP	
Benzene	1.1	0.93	1.1	0.88	NP	
Bromoform	< 0.31	< 0.52	< 0.52	0.38 J	NP	
Carbon isulfide	1.3	< 1.6	< 1.6	< 1.6	NP	
Carbon tetrachloride	0.31	0.60	0.45	0.47	No Further Action	
Chloroethane	0.17	< 0.13	< 0.13	< 0.13	NP	
Chloroform	4.9	< 0.24	< 0.24	< 0.24	NP	
Chloromethane	0.47	1.4	1.4	1.3	NP	
Cyclohexane	0.36	0.19	0.32	0.14 J	NP	
Dichlorodifluoromethane	2.9	2.7	2.7	2.8	NP	
Ethanol	48	21	41	33	NP	
Ethyl Acetate	< 1.1	< 1.8	1.9	< 1.8	NP	
Ethylbenzene	0.37	0.31	0.36	0.18 J	NP	
Heptane	0.56	0.42	0.71	0.35	NP	
Isopropyl Alcohol	230	38	140	110	NP	
m,p-Xylene	0.91	0.81	1.0	0.45	NP	
Methyl isobutyl ketone (MIBK)	< 0.12	< 0.2	0.14 J	< 0.2	NP	
Methylene chloride	< 1	< 1.7	1.1 J	< 1.7	No Further Action	
Methyltertbutyl ether	< 0.11	< 0.18	< 0.18	< 0.18	NP	
Naphthalene	0.23	< 0.26	< 0.26	< 0.26	NP	
o-Xylene	0.42	0.27	0.39	0.16 J	NP	
Propene	2.5	< 3.4	< 3.4	< 3.4	NP	
Styrene	0.79	< 0.21	< 0.21	< 0.21	NP	
Tetrachloroethene	11	0.36	0.36	0.30 J	No Further Action	
Tetrahydrofuran	1.5	< 1.5	< 1.5	< 1.5	NP	
Toluene	1.8	0.89	1.2	0.90	NP	
trans-1,2-Dichloroethene	< 0.12	< 0.2	< 0.2	< 0.2	NP	
Trichloroethene	0.7	< 0.27	< 0.27	< 0.27	No Further Action	
Trichlorofluoromethane	1.5	1.4	1.4	1.3	NP	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method etection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 13							
Date Collected:	1/24-1/25/2023	1/24-1/25/2023	1/24-1/25/2023	1/24-1/25/2023	1/24-1/25/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentration	Sub-Slab Soil Vapor Duplicate	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)							
1,1,1-Trichloroethane	1.1	0.92	< 0.27	< 0.27	< 0.27	No Further Action	No Further Action
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.53 J	0.55 J	0.58 J	0.66 J	0.59 J	NP	
1,2,4-Trimethylbenzene	0.73	0.63	1.3	0.18 J	0.18 J	NP	
1,2-Dichlorobenzene	0.22 J	0.19 J	< 0.3	< 0.3	< 0.3	NP	
1,3 Butadiene	< 0.11	< 0.11	< 0.11	0.51	< 0.11	NP	
1,3,5-trimethyl-benzene	0.27	0.25	0.18 J	< 0.25	< 0.25	NP	
1-Ethyl-4-methyl-benzene	0.19 J	< 0.25	0.22 J	< 0.25	< 0.25	NP	
2-Butanone (MEK)	3.4 J	3.1 J	< 5.9	< 5.9	< 5.9	NP	
Acetone	110	100	8.9	23	8	NP	
Acrolein	0.70 J	0.74 J	< 2.3	1.2 J	< 2.3	NP	
Benzene	2	1.3	1	1.3	0.97	NP	
Bromoichloromethane	0.31 J	0.28 J	< 0.34	< 0.34	< 0.34	NP	
Carbon disulfide	1.1 J	0.81 J	< 1.6	< 1.6	< 1.6	NP	
Carbon tetrachloride	0.27 J	0.4	< 0.31	0.57	< 0.31	No Further Action	
Chloroform	27	24	0.29	1.3	< 0.24	NP	
Chloromethane	0.53	0.6	1.3	1.4	1.2	NP	
Cyclohexane	0.63	0.55	< 0.17	0.13 J	0.12 J	NP	
Dichloroifluoromethane	2.5	2.7	3.1	3	3.1	NP	
Ethanol	87	76	33	81	17	NP	
Ethylbenzene	0.82	0.79	0.88	0.20 J	0.14 J	NP	
Heptane	0.91	0.84	0.27	0.64	0.24	NP	
Hexane	9.2	8.3	< 7	< 7	< 7	NP	
Isopropyl Alcohol	6.3	5.8	8.9	3.0 J	6.1	NP	
m,p-Xylene	2	2	2.5	0.46	0.38 J	NP	
Methyl isobutyl ketone (MIBK)	0.46	0.44	0.28	< 0.2	< 0.2	NP	
Naphthalene	0.42	0.21 J	0.84	0.46	< 0.26	NP	
o-Xylene	1.2	1.2	1.4	0.21 J	0.13 J	NP	
Propene	5.8	5.4	< 3.4	< 3.4	< 3.4	NP	
Styrene	0.34	0.32	0.20 J	0.15 J	< 0.21	NP	
Tetrachloroethene	40	36	0.58	0.31 J	< 0.34	No Further Action	
Tetrahyrofuran	0.58 J	0.45 J	< 1.5	0.39 J	< 1.5	NP	
Toluene	2.1	1.9	1.2	0.9	0.83	NP	
Trichloroethene	2.2	2.1	< 0.27	< 0.27	< 0.27	No Further Action	
Trichlorofluoromethane	1.4	1.4	1.4	1.4	1.4	NP	
Vinyl acetate	< 1.8	< 1.8	< 1.8	1.1 J	< 1.8	NP	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method detection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard Not Promulgated
J = Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration

Table 2
Off-Site Soil Vapor Intrusion Investigations
Soil Vapor/Air Laboratory Analytical Results (Detections Only)
473 President Street Off-Site
NYSDEC Site No. C224220A
473 President Street, Brooklyn NY

Property 14						
Date Collected:	3/30-3/31/2023	3/30-3/31/2023	3/30-3/31/2023	3/30-3/31/2023	NYSDOH May 2017 Matrix Recommendations	Final Action Recommended
Sample Locations	Sub-Slab Soil Vapor Concentration	Basement Indoor Air Concentrations	First Floor Indoor Air Concentrations	Outdoor Air Concentrations		
Volatile Organic Compounds (µg/m3)						
Acetone	33	49	60	9.7	NP	Identify Sources & Resample
Benzene	7.4	0.7	0.78	0.63	NP	
1,3-Butadiene	1.5	<0.065	<0.065	<0.065	NP	
2-Butanone (MEK)	8.4	1.5	4.9	<1.1	NP	
Carbon Disulfide	1.1	<0.10	<0.10	<0.10	NP	
Carbon Tetrachloride	<1.0	0.52	0.5	0.49	No further action	
Chloroform	<0.93	0.2	0.2	<0.16	NP	
Chloromethane	0.74	1.2	1.1	1.2	NP	
Cyclohexane	<0.42	0.56	0.63	0.26	NP	
Dichlorodifluoromethane (Freon 12)	1.5	2.9	2.9	2.8	NP	
Ethanol	90	130	140	23	NP	
Ethyl Acetate	<3.6	9.8	8.3	<0.64	NP	
Ethylbenzene	0.92	0.74	1	0.33	NP	
4-Ethyltoluene	<0.60	0.21	0.2	0.11	NP	
Heptane	1.3	4.9	5.2	0.87	NP	
Hexane	<3.7	0.94	0.83	0.65	NP	
2-Hexanone (MBK)	0.59	<0.071	<0.071	<0.071	NP	
Isopropanol	640	110	5.5	2.2	NP	
Methylene Chloride	<3.2	3.6	3.3	<0.56	No further action	
4-Methyl-2-pentanone (MIBK)	0.67	<0.076	<0.076	<0.076	NP	
Naphthalene	<0.79	0.23	0.18	<0.14	NP	
Propene	9.8	<0.53	<0.53	<0.53	NP	
Styrene	0.87	0.81	1.1	<0.078	NP	
Tetrachloroethylene	<1.0	0.28	0.32	0.31	No further action	
Tetrahydrofuran	3.8	0.47	0.24	<0.17	NP	
Toluene	8.1	3.4	3	1.9	NP	
Trichloroethylene	<0.72	1.3	1.2	<0.13	Identify Sources & Resample	
Trichlorofluoromethane (Freon 11)	<1.3	1.3	1.3	1.3	NP	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<1.7	0.52	0.51	0.52	NP	
1,2,4-Trimethylbenzene	2.9	1.5	1.5	0.38	NP	
1,3,5-Trimethylbenzene	0.59	0.43	0.43	0.12	NP	
Vinyl Acetate	6.1	<0.66	<0.66	<0.66	NP	
m&p-Xylene	2.8	2.3	3.3	1	NP	
o-Xylene	1.1	0.87	1.2	0.39	NP	

Legend:	
50	= Parameter requires specific action
25	= Parameter detected above the laboratory reporting limit
< 10	= Parameter not detected above the reporting limit or method etection limit (reporting limit shown)

Notes:
All concentrations in micrograms per cubic meter (µg/m³)
Recommendations based on NYSDOH Soil Vapor/Indoor Air Matrices (May 2017)
NP = Standard not promulgated
J=Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration