GEI Consultants

June 30, 2020
GEI Project 1905297

Consulting
Engineers and
Scientists

VIA EMAIL: jm@almarealty.com
fpapamichael@almarealty.com

Mr. John Mavroudis
Mr. Fotios Papamichael, P.E.
Alma Realty Corporation
31-10 37th Avenue, Suite 500
Long Island City, NY 11101

Re: Astoria Cove Additional Subsurface Sampling
26th Avenue Between 4th Street and 9th Street
Astoria, NY

Dear Messrs. Mavroudis and Papamichael:

This letter documents the scope and presents the findings and conclusions of GEI Consultants, Inc., P. C.'s (GEI) additional subsurface sampling conducted for the above-referenced Astoria Cove property (the Site). The scope of work was conducted consistent with our November 4, 2019 proposal and updates made in consultation with Alma Realty Corporation (Alma) in February 2020.

Background

Alma is proposing to develop the Site with a total of six buildings: five mixed-use buildings ranging from 6 to 32-stories and a 6-story school building. Three of the mixed-use buildings will be situated along the waterfront and the remaining three buildings will be located inland and south of 26th Avenue. It is anticipated that all the buildings will have at least one basement level. The proposed development plans are shown on **Figure 1**. The buildings will be developed in four phases; buildings 4 and 5, along with any remediation required for the school building, will be constructed in Phase 1, building 3 will be constructed in Phase 2, building 2 will be constructed in Phase 3, and building 1 and the school will be constructed in Phase 4.

The Site is currently developed with several one to two-story buildings and several vacant/abandoned foundations. The buildings on the western portion of the Site are currently occupied by several commercial tenants while the buildings on the eastern portion of the Site are vacant. A school bus company stores buses and several contractors store vehicles and equipment on-Site. The Site was formerly used for industrial purposes. The current Site plan is shown on **Figure 2**.

A Limited Phase II Environmental Site Assessment (ESA) report was prepared by G.C. Environmental, Inc. (G.C.) in December 2014. The Limited Phase II ESA was performed in the southeast corner of the Site, identified as 8-01 26th Avenue and Block 908 and a portion of Lot

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12, in the area where the proposed school building will be located. The Limited Phase II ESA was conducted to determine the location of and associated subsurface conditions related to a former underground storage tank (UST) reportedly located in this portion of the Site. A geophysical survey was performed, a total of 5 soil borings were conducted to approximately 15 feet below ground surface (ft bgs), a total of 10 soil samples were collected from the 0-2 and 13-15 ft bgs intervals, 2 groundwater samples were collected from just below the water table encountered at approximately 26 ft bgs, and 5 soil vapor samples were collected from approximately 7 ft bgs. The geophysical survey identified an anomaly that could be the UST roughly in the center of the property. No visual or olfactory impacts were noted in the soil borings and no photoionization detector (PID) readings above background were recorded.

The soil analytical results indicated that the detected concentrations of the metals chromium and mercury and the volatile organic compound (VOC) acetone exceeded the Title 6 New York Codes, Rules and Regulations (6NYCRR) Part 375 6.8 Unrestricted Use Soil Cleanup Objectives (UUSCOs). Exceedances of the UUSCOs were noted in both soil sample intervals. The groundwater analytical results indicated that the detected concentrations of the metals aluminum (total and dissolved), barium (total), beryllium (total), chromium (total), copper (total), iron (total and dissolved), lead (total), magnesium (total and dissolved), manganese (total and dissolved), nickel (total), and sodium (total and dissolved), the semivolatile organic compounds (SVOCs) benzo(a)anthracene and chrysene, and the inorganic compound chloride exceeded the NYSDEC Technical and Operations Guidance Series (TOGS) Ambient Water Quality Standards (AWQS). The soil vapor analytical results indicated that the detected concentrations of trichloroethene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA) would require mitigation according to the New York State Department of Health (NYSDOH) Soil Vapor Intrusion Guidance Decision Matrices. The detected concentrations of 1,1-dichloroethene (1,1-DCE), carbon tetrachloride, tetrachloroethene (PCE), methylene chloride, and vinyl chloride could also potentially require mitigation depending on the indoor air concentration of the associated compounds according to the NYSDOH matrices. A copy of the G.C. Limited Phase II ESA is included as **Attachment 1**.

Based on the former industrial use of the Site and the findings of the G.C. Limited Phase II ESA, GEI proposed collecting additional subsurface samples from 23 geotechnical soil boring locations to determine if the Site would be a candidate for entrance into the New York State Department of Environmental Conservation Brownfield Cleanup Program (NYSDEC BCP). GEI was also retained by Alma to perform a geotechnical investigation at the Site and the environmental and geotechnical investigations were combined to save cost and time.

Scope of Work

A total of 50 geotechnical soil borings were advanced across the Site using mud-rotary drilling techniques, including B-1 through B-11 and B-52 through B-54 in the Phase 1 development area, B-12 through B-23 in the Phase 2 development area, B24 through B-38 in the Phase 3 development area, and B41, B43, and B45 through B-51 in the Phase 4 development area. The boring locations are shown on **Figure 2**. Four borings (B-39, B-40, B-42, and B-44), located within the Phase 4 development area, were not advanced due to access restrictions related to a building occupying this portion of the Site. These four borings will be advanced at a later date once the building is demolished. Prior to advancement, all underground structures and utilities in the vicinity of each boring location were located by the selected geophysical subcontractor, Delta Geophysics. The borings were generally advanced 75 to 100 ft bgs, or approximately 10 ft into bedrock. Six of the borings (B-5, B-8, B-16, B-29, B-48, and B-53), one for each of the proposed buildings, were finished as wells to obtain depth to water readings. The borings were advanced

from February through June 2020 by the selected drilling subcontractor, Craig Geotechnical Drilling, Company, Inc.

To investigate potential environmental impacts related to the former industrial use of the Site, 23 soil samples were collected from what appeared to be the most environmentally impacted zone of the 23 borings based on visual and olfactory findings and PID screening results. The soil in all 50 borings was inspected for impacts (e.g., staining, odor and evidence of historic urban fill) and screened for volatile soil vapors using a PID. The soil boring logs for the 23 environmental borings are included as **Attachment 2**. Soil samples were analyzed for target compound list (TCL) VOCs by United States Environmental Protection Agency (USEPA) Method 8260C, SVOCs by USEPA Method 8270D, polychlorinated biphenyls (PCBs) by USEPA Method 8082A, Organic Pesticides by USEPA Method 8081B, Chlorinated Herbicides by USEPA Method 8151A and target analyte list (TAL) Metals by USEPA Method 6020B. All samples were transported under chain-of-custody (COC) procedures to Alpha Analytical, a NYSDOH Environmental Laboratory Accreditation Program (ELAP)-certified laboratory. The analytical data was compared to Title 6NYCRR Part 375 6.8 UUSCOs, Restricted Residential Use Soil Cleanup Objectives (RRUSCOs), and Commercial Use Soil Cleanup Objectives (CUSCOs). The laboratory analytical reports are included as **Attachment 3**.

Findings

Samples were collected for analysis from soil borings B-1, B-3, B-5, B-6, B-7, B-8, B-9, B-11, B-15, B-16, B-21, B-22, B-23, B-24, B-28, B-32, B-33, B-36, B-37, B-38, B-43, B-45, and B-50, which were spread across the entire Site. The soil encountered in the borings generally consisted of historic urban fill, which was encountered across the entire Site, underlain by sand, glacial till, and bedrock. The historic urban fill material contained varying amounts of brick, concrete, asphalt, glass, wood, metal, plastic, and coal, and ranged in thickness from approximately 1.5 to 23 feet where encountered. The historic urban fill material was generally thickest in the northern portion of the Site along the waterfront and in the elevated southernmost portion of the Site.

In the Phase 1 development area, historic urban fill was found at a maximum thickness of 18 feet in boring B-7, located in the elevated southern portion of the Site. Historic urban fill was encountered in 12 out of the 14 borings in this area, including B-1 through B-8, B-11, and B-52 through B-54, and was not noted in B-9 and B-10. In the Phase 2 development area, historic urban fill was found at a maximum thickness of 23 feet in boring B-23, located along the waterfront. Historic urban fill was encountered in 10 out of the 12 borings in this area, including B-12, B-13, B-15, B-16, and B-18 through B-23, and was not noted in B-14 and B17. In the Phase 3 development area, historic urban fill was found at a maximum thickness of 15 feet in boring B-34, located along the waterfront. Historic urban fill was encountered in 13 out of the 15 borings in this area, including B-24 and B-27 through B-38 and was not noted in B-25 and B-26. In the Phase 4 development area, historic urban fill was found at a maximum thickness of 12 feet in boring B-49, located along the waterfront. Historic urban fill was encountered in 5 out of the 9 borings in this area, including B-45 and B-48 through B-51 and was not noted in B-41, B-43, B-46, and B-47. Based on our experience and the non-homogenous nature of historic urban fill, it is likely that the historic urban fill layer is present across the entire Site. The lack of a historic urban fill layer observed in 10 out of the 50 borings is likely due to the limited amount of soil that is sampled at each boring location (e.g. a 1.5-inch diameter sampling spoon), and therefore, the soil does not always contain an observable amount of historic urban fill material (i.e. concrete, brick, etc.). Groundwater was encountered from approximately 10 to 20 ft bgs across the majority of the Site, and at approximately 30 ft bgs at the elevated southernmost portion of the Site.

In addition to the visual evidence of historic urban fill found throughout the Site, the soil was inspected for evidence of other environmental impacts associated with petroleum and chemical impacts and impacts due to waste and materials management activities. Visual/olfactory impacts and elevated PID readings were detected at several borings. In the Phase 1 development area, a slight petroleum-like odor (PLO) was noted in the 0-2 ft bgs interval of B-7, along with black staining in the 11-12 ft bgs interval. A slight PLO was noted in the 0-2 ft bgs interval of B-6, along with a maximum PID reading of 30.2 parts per million (ppm) in the 4-6 ft bgs interval. A slight PLO was noted in the 0-2 ft bgs interval of B-3. In the Phase 2 development area, black staining and a PLO were noted in the 1-2 ft bgs interval of B-22, along with a maximum PID reading of 363 ppm. Black staining and a slight PLO were noted in the 16-17 and 20-22 ft bgs intervals of B-23, along with a maximum PID reading of 0.9 ppm in the 0-2 ft bgs interval. A slight PLO was noted in the 0-2 ft bgs interval of B-20, along with a maximum PID reading of 1.1 ppm. An organic-like odor (OLO) was noted in the 6-10 ft bgs interval of B-21. In the Phase 3 development area black staining and a PLO were noted in the 0-2 ft bgs interval of B-28, along with a maximum PID reading of 9.5 ppm. Black staining and a PLO were noted in the 20-21 ft bgs interval of B-32, along with a maximum PID reading of 198.8 ppm. A maximum PID reading of 1.3 ppm was noted in the 0-2 ft bgs interval of B-36. Based on the visual/olfactory impacts and elevated PID readings, there appear to be petroleum-related impacts in the northeast portion of the Site in the Phase 2 development area (B-20, B-22, and B-23), on the elevated southernmost portion of the Site in the Phase 1 development area (B-3, B-6, and B-7), and along the eastern side of a former industrial building in the Phase 3 development area (B-28 and B-32). No other visual/olfactory impacts or elevated PID readings above background were noted in any of the other borings.

The analytical results for the soil samples are presented in **Table 1**. SVOCs exceeded the UUSCOs, RRUSCOs, and/or CUSCOs in 7 of the 23 environmental borings (B-15, B-21, B-22, B-23, B-28, B-45, and B-50), which are located in the Phase 2, 3, and 4 development areas. The following SVOCs exceeded CUSCOs: benzo(a)anthracene (max. of 8,100 micrograms per kilogram [µg/kg] in B-22[0-2 ft bgs] and B-23[20-22 ft bgs]), benzo(a)pyrene (max. of 7,900 µg/kg in B-22[0-2 ft bgs]), benzo(b)fluoranthene (max. of 8,800 µg/kg in B-22[0-2 ft bgs]), and dibenzo(a,h)anthracene (max. of 1,100 µg/kg in B-22[0-2 ft bgs]). The maximum concentration of benzo(a)pyrene also exceeded the Industrial Use Soil Cleanup Objectives (IUSCOs) of 1,100 µg/kg. Chrysene (max. of 6,800 µg/kg in B-23[20-22 ft bgs]) and indeno(1,2,3-cd)pyrene (max. of 5,100 µg/kg in B-22[0-2 ft bgs]) exceeded the RRUSCOs. Benzo(k)fluoranthene (max. of 2,900 µg/kg in B-23[20-22 ft bgs]) exceeded the UUSCOs.

Metals exceeded the UUSCOs in 11 of the 23 environmental borings (B-3, B-6, B-7, B-9, B-15, B-21, B-22, B-23, B-28, B-32, and B-50), located throughout the Site in all four development phase areas. The following metals exceeded the UUSCOs: arsenic (max. of 15.3 milligrams per kilogram [mg/kg] in B-50[0-2 ft bgs]), chromium (max. of 31.4 mg/kg in B-32[20-22 ft bgs]), copper (max. of 231 mg/kg in B-50[0-2 ft bgs]), lead (max. of 379 mg/kg in B-50[0-2 ft bgs]), nickel (max. of 44.1 mg/kg in B-15[0-2 ft bgs]), and zinc (max. of 285 mg/kg in B-50[0-2 ft bgs]).

Pesticides exceeded the UUSCOs in 7 of the 23 environmental borings (B-6, B-7, B-21, B-23, B-28, B-37, and B-50), located throughout the Site in all four development phase areas. The following pesticides exceeded the UUSCOs: dieldrin (max. of 5.81 µg/kg in B-23[0-2 ft bgs]), 4,4'-DDE (max. of 52.8 µg/kg in B-28[0-2 ft bgs]), 4,4'-DDD (max. of 12.3 µg/kg in B-28[0-2 ft bgs]), and 4,4'-DDT (max. of 54.1 µg/kg in B-28[0-2 ft bgs]).

VOCs exceeded the UUSCOs in 3 of the 23 environmental borings (B-7, B-23, and B-28), located in the Phase 1, 2, and 3 development areas. The following VOCs exceeded the UUSCOs: PCE (max. of 3,300 µg/kg in B-23[20-22 ft bgs]), TCE (max. of 1,300 µg/kg in B-23[20-22 ft bgs]), acetone (max. of 58 µg/kg in B-7[0-2 ft bgs]), and naphthalene (max. of 19,000 µg/kg in B-28[0-2 ft bgs]).

Total PCBs (max. of 910 µg/kg in B-15[0-2 ft bgs]) exceeded the UUSCOs in 3 of the 23 environmental borings (B-7, B-15, and B-23), located in the Phase 1 and 2 development areas.

Herbicides were not detected in any of the samples.

Summary and Conclusions

Phase 1 Development Area

Historic urban fill was encountered throughout this area of the Site and ranged in thickness from 2 feet, where encountered, to a maximum of 18 feet in the elevated southern portion of this area. Visual/olfactory impacts, including PLOs and black soil staining, along with elevated PID readings, were also encountered in the elevated southern portion of this area from the surface down to approximately 12 ft bgs. Metals exceeding UUSCOs were identified in the soil throughout this area, VOCs exceeding UUSCOs were identified in the soil in the area of the proposed school building and building 4, and PCBs exceeding UUSCOs were identified in the soil in the area of the proposed building 4. Metals (total and dissolved), SVOCs, and chloride were also detected in the groundwater at concentrations exceeding AWQS in the area of the proposed school building, and VOCs were detected in the soil vapor in this area that would require mitigation in accordance with the NYSDOH Soil Vapor Guidance.

Based on our experience and the non-homogeneous nature of historic urban fill, the soil SVOC exceedances of the RRUSCOs, CUSCOs, and IUSCOs identified in the historic urban fill of the other 3 development areas of the Site are likely present in this area as well. It is also reasonable to assume that the historic urban fill in this area is the source of the groundwater exceedances of AWQS and the elevated soil vapor impacts in the vicinity of the proposed school building. The presence of historic urban fill throughout this area, exceedances of UUSCOs in soil throughout this area, the groundwater exceedances of AWQS in the vicinity of the proposed school building, and the soil vapor impacts that would require mitigation in the vicinity of the proposed school building indicate that the Phase 1 development area is a possible candidate for entrance into the NYSDEC BCP.

If accepted into the NYSDEC BCP, further investigation will be required by the NYSDEC to fully delineate the extent of the historic urban fill, delineate the extent of the groundwater impacts identified in the vicinity of the proposed school building, and delineate the extent of the soil vapor impacts identified in the vicinity of the proposed school building.

Phase 2 Development Area

Historic urban fill was encountered throughout this area of the Site and ranged in thickness from 2 feet, where encountered, to a maximum of 23 feet in the northern portion of this area along the waterfront. Visual/olfactory impacts, including PLOs and black soil staining, along with elevated PID readings, were also encountered along the waterfront from the surface down to

approximately 22 ft bgs. SVOCs exceeding the UUSCOs, RRUSCOs, CUSCOs, and IUSCOs, and metals and PCBs exceeding UUSCOs were identified in the soil along the waterfront and in the southeast portion of this area. VOCs and pesticides exceeding UUSCOs were identified in the soil along the waterfront in this area.

The presence of historic urban fill throughout this area and exceedances of the UUSCOs, RRUSCOs, CUSCOs, and IUSCOs in soil in this area indicate that the Phase 2 development area is a possible candidate for entrance into the NYSDEC BCP.

If accepted into the NYSDEC BCP, further investigation will be required by the NYSDEC to fully delineate the extent of the historic urban fill, delineate the extent of the soil SVOC impacts, and to identify and delineate potential groundwater and soil vapor impacts.

Phase 3 Development Area

Historic urban fill was encountered throughout this area of the Site and ranged in thickness from 1.5 feet, where encountered, to a maximum of 15 feet in the northern portion of this area along the waterfront. Visual/olfactory impacts, including PLOs and black soil staining, along with elevated PID readings, were also encountered along the eastern side of a former industrial building in the central portion of this area and in the western portion of this area from the surface down to approximately 21 ft bgs. SVOCs exceeding the UUSCOs, RRUSCOs, CUSCOs, and IUSCOs and VOCs exceeding UUSCOs were identified in the soil in the southern portion of this area. Metals exceeding UUSCOs were identified in the soil in the central portion of this area and pesticides exceeding UUSCOs were identified in the soil in the southern and western portion of this area.

The presence of historic urban fill throughout this area and exceedances of the UUSCOs, RRUSCOs, CUSCOs, and IUSCOs in soil in this area indicate that the Phase 3 development area is a possible candidate for entrance into the NYSDEC BCP.

If accepted into the NYSDEC BCP, further investigation will be required by the NYSDEC to fully delineate the extent of the historic urban fill, delineate the extent of the soil SVOC impacts, and to identify and delineate potential groundwater and soil vapor impacts.

Phase 4 Development Area

Historic urban fill was encountered throughout this area of the Site and ranged in thickness from 2 feet, where encountered, to a maximum of 12 feet in the northern portion of this area along the waterfront. SVOCs exceeding the UUSCOs, RRUSCOs, CUSCOs, and IUSCOs and metals and pesticides exceeding UUSCOs were identified in the soil in the northern portion of this area. The southern and western portion of this area was not investigated at this time due to access restrictions, but further soil investigation will be conducted once the buildings occupying the area are demolished.

The presence of historic urban fill throughout this area and exceedances of the UUSCOs, RRUSCOs, CUSCOs, and IUSCOs in soil in this area indicate that the Phase 4 development area is a possible candidate for entrance into the NYSDEC BCP.

If accepted into the NYSDEC BCP, further investigation will be required by the NYSDEC to fully delineate the extent of the historic urban fill, delineate the extent of the soil SVOC impacts, and to identify and delineate potential groundwater and soil vapor impacts.

If you have any questions on this investigation, please do not hesitate to contact Gary Rozmus at (631) 479-3510 or at grozmus@geiconsultants.com.

Sincerely,

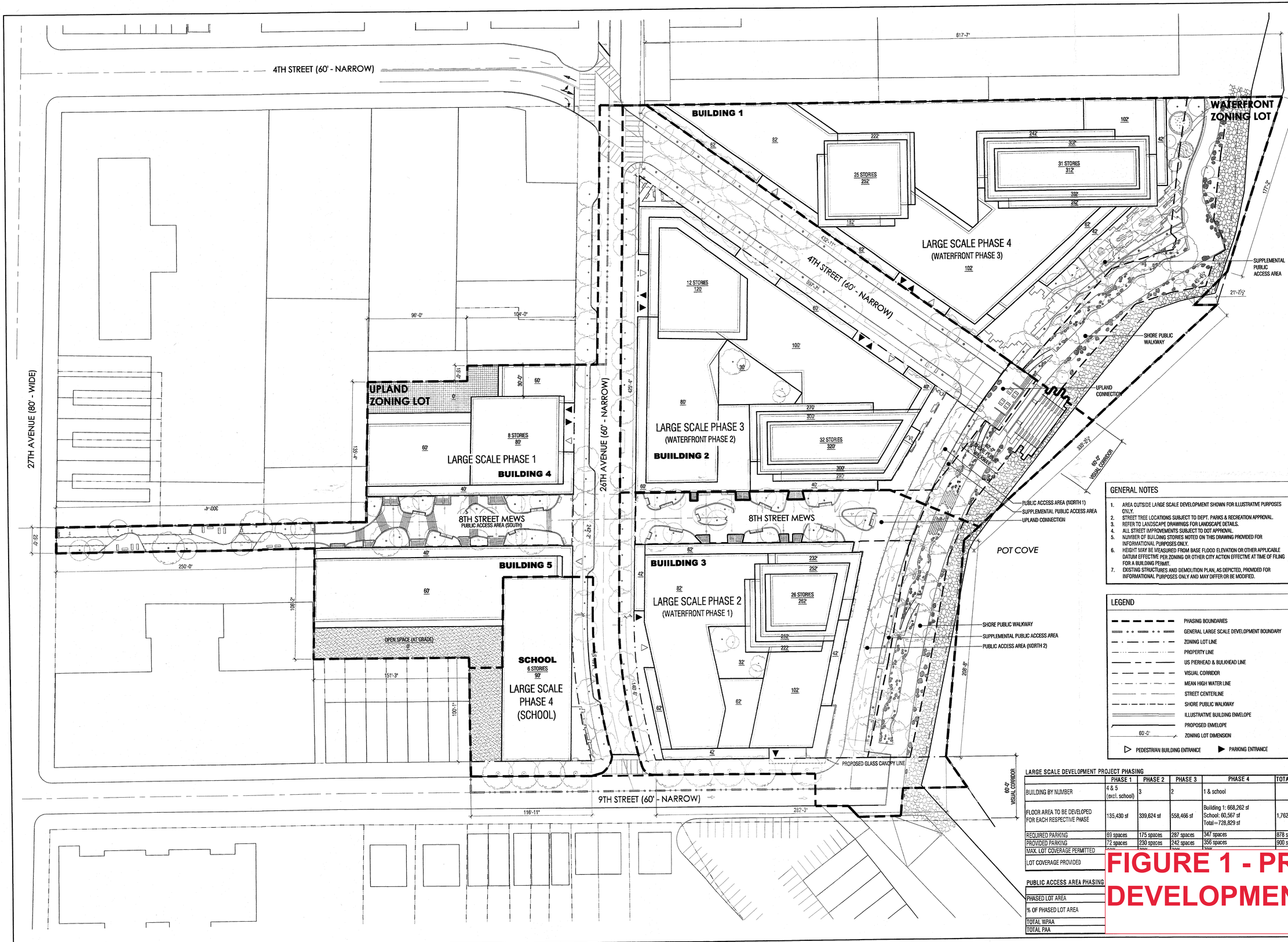
GEI CONSULTANTS, INC., P. C.

Gary A. Rozmus, P.E.
Senior Consultant

Edward Bradshaw
Senior Practice Manager

GAR/EB:gd
Attachments
I:\Tech\Environmental Projects\Astoria Cove BCP\Additional Sampling\Summary Rpt\Astoria Cove Additional Subsurface Sampling Summary Rpt.docx

Figures



GENERAL NOTES

1. AREA OUTSIDE LARGE SCALE DEVELOPMENT SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
2. STREET TREE LOCATIONS SUBJECT TO DEPT. PARKS & RECREATION APPROVAL.
3. REFER TO LANDSCAPE DRAWINGS FOR LANDSCAPE DETAILS.
4. ALL STREET IMPROVEMENTS SUBJECT TO DOT APPROVAL.
5. NUMBER OF BUILDING STORIES NOTED ON THIS DRAWING PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
6. HEIGHT MAY BE MEASURED FROM BASE FLOOD ELEVATION OR OTHER APPLICABLE DATUM EFFECTIVE PER ZONING OR OTHER CITY ACTION EFFECTIVE AT TIME OF FILING FOR A BUILDING PERMIT.
7. EXISTING STRUCTURES AND DEMOLITION PLAN, AS DEPICTED, PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND MAY DIFFER OR BE MODIFIED.

LEGEND

- PHASING BOUNDARIES
- GENERAL LARGE SCALE DEVELOPMENT BOUNDARY
- ZONING LOT LINE
- PROPERTY LINE
- US PIERHEAD & BULKHEAD LINE
- VISUAL CORRIDOR
- MEAN HIGH WATER LINE
- STREET CENTERLINE
- SHORE PUBLIC WALKWAY
- ILLUSTRATIVE BUILDING ENVELOPE
- PROPOSED ENVELOPE
- 60'-0" ZONING LOT DIMENSION
- PEDESTRIAN BUILDING ENTRANCE
- PARKING ENTRANCE

LARGE SCALE DEVELOPMENT PROJECT PHASING

	PHASE 1	PHASE 2	PHASE 3	PHASE 4	TOTAL
BUILDING BY NUMBER	4 & 5 (excl. school)	3	2	1 & school	
FLOOR AREA TO BE DEVELOPED FOR EACH RESPECTIVE PHASE	135,430 sf	339,624 sf	558,466 sf	Building 1: 668,262 sf School: 60,567 sf Total=728,829 sf	1,762,350 sf
REQUIRED PARKING	69 spaces	175 spaces	287 spaces	347 spaces	878 spaces
PROVIDED PARKING	72 spaces	230 spaces	242 spaces	356 spaces	900 spaces
MAX. LOT COVERAGE PERMITTED					
LOT COVERAGE PROVIDED					

PUBLIC ACCESS AREA PHASING

PHASED LOT AREA
% OF PHASED LOT AREA
TOTAL WPAA
TOTAL PAA

FIGURE 1 - PROPOSED DEVELOPMENT PLANS

STUDIO V

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REVISIONS

ISSUE	DATE	DESCRIPTION
	04/16/2014	ULURP FILING SET
	07/07/2014	ULURP SET

SEAL
REGISTERED ARCHITECT GERALD VALGORA 031078 STATE OF NEW YORK

KEY PLAN

TITLE
ASTORIA COVE
Astoria, New York
Zoning Approval / ULURP

PROJECT NO.
09003

SHEET TITLE
OVERALL PHASING PLAN

DATE	DRAWN BY	CHECKED BY
4/16/2014	JM	JV

25-74

1 SK BORING LOCATIONS
SCALE:1/40"=1'-0"

NOTES

ARCHITECT

ENGINEER

CONSULTANT

ALMA REALTY CORP
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NO	DATE	ISSUES

PROJECT
ASTORIA COVE,
ASTORIA, NEW YORK

SHEET TITLE
BORING LOCATIONS

FIGURE 2 - SITE PLAN WITH BORING LOCATIONS

Table

Table 1. Astoria Cove Subsurface Investigation
Soil Analytical Results
26th Avenue Between 4th and 9th Street
Astoria, NY

				Location	B-1	B-3	B-5	B-6	B-7	B-8	B-9	B-11	B-15	B-16	B-21
				Depth (ft)	0-2	0-2	15-17	4-6	0-2	15-17	0-2	0-2	0-2	16-18	0-2
				Sample Date	5/1/2020	4/27/2020	3/9/2020	4/30/2020	4/29/2020	3/3/2020	4/20/2020	5/7/2020	5/11/2020	3/2/2020	5/12/2020
Analyte	**Units**	**NYSDEC Part 375 Unrestricted Use SCOs**	**NYSDEC Part 375 Restricted Residential SCOs**	**NYSDEC Part 375 Commercial SCOs**											
Metals	mg/Kg														
Aluminum, Total		NE	NE	NE	7250	6860	8060	7360	3760	9150	6870	2180	6460	9590	4990
Antimony, Total		NE	NE	NE	<4.11	<4.21	<4.65	<4.30	0.841J	<4.75	<4.32	<4.03	2.94J	<4.33	1.74J
Arsenic, Total		13	16	16	1.15	2.7	1.58	2.95	3.63	1.06	4.43	0.676J	7.09	1.2	4.82
Barium, Total		350	400	400	37.6	58.7	66.8	72	57.1	52.9	48.2	11.2	55.2	92.4	135
Beryllium, Total		7.2	72	590	0.230J	0.261J	0.549	0.224J	0.150J	0.399J	0.242J	0.081J	0.294J	0.269J	0.205J
Cadmium, Total		2.5	4.3	9.3	<0.823	<0.842	0.503J	0.112J	<0.833	0.817J	<0.864	<0.805	0.846J	0.902	0.239J
Calcium, Total		NE	NE	NE	1940	20600	3020	10800	19200	3040	22400	1080	28400	2500	59300
Chromium, Total		30	180	1,500	13.6	18.8	22	19.4	9.69	28.7	20.8	5.89	27.8	29.5	13.6
Cobalt, Total		NE	NE	NE	7.2	6.87	10.3	8.21	4.3	13.2	7.21	2.17	6.35	11.1	5.24
Copper, Total		50	270	270	18.3	39.1	18.1	47.4	31.2	28.6	63.3	6.63	119	22.8	43.2
Iron, Total		NE	NE	NE	14400	16700	17400	15100	26500	17300	15400	4380	22200	17200	12900
Lead, Total		63	400	1,000	3.90J	64.2	4.22J	89.2	105	3.37J	73.6	6.91	106	3.28J	135
Magnesium, Total		NE	NE	NE	5180	13500	5820	7100	2740	7400	9510	1430	4560	5870	14400
Manganese, Total		1600	2,000	10,000	252	271	329	310	262	257	266	119	294	202	176
Mercury, Total		0.18	0.81	2.8	<0.078	0.081	<0.074	0.126	0.14	<0.077	<0.070	<0.070	0.151	<0.083	0.177
Nickel, Total		30	310	310	9.77	16.5	14.4	15	9.97	18.6	18.2	5.39	44.1	16.4	13.5
Potassium, Total		NE	NE	NE	1530	1250	2330	1670	679	2030	1420	262	518	3780	1130
Selenium, Total		3.9	180	1,500	<1.64	<1.68	<1.86	<1.72	<1.66	<1.90	<1.73	<1.61	0.730J	<1.73	0.674J
Silver, Total		2	180	1,500	<0.823	<0.842	<0.931	<0.860	<0.833	<0.950	<0.864	<0.805	<0.891	<0.867	<0.853
Sodium, Total		NE	NE	NE	137J	109J	128J	72.7J	82.4J	134J	120J	54.1J	90.3J	213	169J
Thallium, Total		NE	NE	NE	0.280J	<1.68	<1.86	<1.72	<1.66	<1.90	<1.73	<1.61	<1.78	<1.73	<1.71
Vanadium, Total		NE	NE	NE	23.8	28.6	28.8	27.3	15.8	31.1	24.7	5.68	22.3	36.4	30.9
Zinc, Total		109	10,000	10,000	36.8	95	55.6	102	109	56.4	70.9	13.2	89.5	51.8	136
VOCs	µg/Kg														
Methylene chloride		50	100,000	500,000	<4.7	<4.3	<5.6	<8.0	<5.5	<4.9	<5.0	<8.8	<6.2	<5.0	<5.8
1,1-Dichloroethane		270	26,000	240,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
Chloroform		370	49,000	350,000	<1.4	<1.3	1.3J	<2.4	<1.6	0.24J	<1.5	0.61J	0.18J	1.7	0.23J
Carbon tetrachloride		760	2,400	22,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
1,2-Dichloropropane		NE	NE	NE	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
Dibromochloromethane		NE	NE	NE	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
1,1,2-Trichloroethane		NE	NE	NE	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
Tetrachloroethene		1,300	19,000	150,000	1.8	<0.43	<0.56	<0.80	<0.55	<0.49	<0.50	<0.88	<0.62	<0.50	<0.58
Chlorobenzene		1,100	100,000	500,000	<0.47	<0.43	<0.56	<0.80	<0.55	<0.49	<0.50	<0.88	<0.62	<0.50	<0.58

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				Location	B-1	B-3	B-5	B-6	B-7	B-8	B-9	B-11	B-15	B-16	B-21
				Depth (ft)	0-2	0-2	15-17	4-6	0-2	15-17	0-2	0-2	0-2	16-18	0-2
				Sample Date	5/1/2020	4/27/2020	3/9/2020	4/30/2020	4/29/2020	3/3/2020	4/20/2020	5/7/2020	5/11/2020	3/2/2020	5/12/2020
Analyte	**Units**	**NYSDEC Part 375 Unrestricted Use SCOs**	**NYSDEC Part 375 Restricted Residential SCOs**	**NYSDEC Part 375 Commercial SCOs**											
Trichlorofluoromethane		NE	NE	NE	<3.7	<3.4	<4.5	<6.4	<4.4	<4.0	<4.0	<7.1	<5.0	<4.0	<4.7
1,2-Dichloroethane		20	3,100	30,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
1,1,1-Trichloroethane		680	100,000	500,000	<0.47	<0.43	<0.56	<0.80	<0.55	<0.49	<0.50	<0.88	<0.62	<0.50	<0.58
Bromodichloromethane		NE	NE	NE	<0.47	<0.43	<0.56	<0.80	<0.55	<0.49	<0.50	<0.88	<0.62	<0.50	<0.58
trans-1,3-Dichloropropene		NE	NE	NE	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
cis-1,3-Dichloropropene		NE	NE	NE	<0.47	<0.43	<0.56	<0.80	<0.55	<0.49	<0.50	<0.88	<0.62	<0.50	<0.58
1,3-Dichloropropene, Total		NE	NE	NE	<0.47	<0.43	<0.56	<0.80	<0.55	<0.49	<0.50	<0.88	<0.62	<0.50	<0.58
1,1-Dichloropropene		NE	NE	NE	<0.47	<0.43	<0.56	<0.80	<0.55	<0.49	<0.50	<0.88	<0.62	<0.50	<0.58
Bromoform		NE	NE	NE	<3.7	<3.4	<4.5	<6.4	<4.4	<4.0	<4.0	<7.1	<5.0	<4.0	<4.7
1,1,2,2-Tetrachloroethane		NE	NE	NE	<0.47	<0.43	<0.56	<0.80	<0.55	<0.49	<0.50	<0.88	<0.62	<0.50	<0.58
Benzene		60	4,800	44,000	<0.47	<0.43	<0.56	<0.80	0.48J	<0.49	0.31J	<0.88	<0.62	<0.50	0.38J
Toluene		700	100,000	500,000	0.52J	<0.86	0.63J	1.1J	<1.1	<0.99	48	<1.8	11	0.77J	<1.2
Ethylbenzene		1,000	41,000	390,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	0.62J	<1.8	<1.2	<1.0	<1.2
Chloromethane		NE	NE	NE	<3.7	<3.4	<4.5	<6.4	<4.4	<4.0	<4.0	<7.1	<5.0	<4.0	<4.7
Bromomethane		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	0.95J	<2.0	<2.3
Vinyl chloride		20	900	13,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
Chloroethane		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,1-Dichloroethene		330	100,000	500,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
trans-1,2-Dichloroethene		190	100,000	500,000	<1.4	<1.3	<1.7	<2.4	<1.6	<1.5	<1.5	<2.6	<1.9	<1.5	<1.8
Trichloroethene		470	21,000	200,000	<0.47	<0.43	<0.56	0.94	<0.55	<0.49	<0.50	<0.88	<0.62	<0.50	<0.58
1,2-Dichlorobenzene		1,100	100,000	500,000	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,3-Dichlorobenzene		2400	49,000	280,000	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,4-Dichlorobenzene		1800	13,000	130,000	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
Methyl tert butyl ether		930	100,000	500,000	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
p/m-Xylene		260	100,000	500,000	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	2.3	<3.5	<2.5	<2.0	<2.3
o-Xylene		260	100,000	500,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	0.62J	<1.8	<1.2	<1.0	<1.2
Xylenes, Total		260	100,000	500,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	2.9J	<1.8	<1.2	<1.0	<1.2
cis-1,2-Dichloroethene		250	100,000	500,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
1,2-Dichloroethene, Total		NE	NE	NE	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
Dibromomethane		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
Styrene		NE	NE	NE	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
Dichlorodifluoromethane		NE	NE	NE	<9.3	<8.6	<11.	<16.	<11.	<9.9	<10.	<18.	<12.	<10.	<12.
Acetone		50	100,000	500,000	8.4J	<8.6	<11	11J	58	<9.9	26	15J	<12	7.7J	14
Carbon disulfide		NE	NE	NE	<9.3	<8.6	<11.	<16	<11	<9.9	<10	<18	<12	<10	<12
2-Butanone		120	100,000	500,000	<9.3	<8.6	<11.	<16.	<11.	<9.9	2.2J	<18.	<12.	<10.	<12.
Vinyl acetate		NE	NE	NE	<9.3	<8.6	<11.	<16.	<11.	<9.9	<10.	<18.	<12.	<10.	<12.
4-Methyl-2-pentanone		NE	NE	NE	<9.3	<8.6	<11.	<16.	<11.	<9.9	<10.	<18.	<12.	<10.	<12.

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				Location	B-1	B-3	B-5	B-6	B-7	B-8	B-9	B-11	B-15	B-16	B-21
				Depth (ft)	0-2	0-2	15-17	4-6	0-2	15-17	0-2	0-2	0-2	16-18	0-2
				Sample Date	5/1/2020	4/27/2020	3/9/2020	4/30/2020	4/29/2020	3/3/2020	4/20/2020	5/7/2020	5/11/2020	3/2/2020	5/12/2020
Analyte	**Units**	**NYSDEC Part 375 Unrestricted Use SCOs**	**NYSDEC Part 375 Restricted Residential SCOs**	**NYSDEC Part 375 Commercial SCOs**											
1,2,3-Trichloropropane		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
2-Hexanone		NE	NE	NE	<9.3	<8.6	<11.	<16.	<11.	<9.9	<10.	<18.	<12.	<10.	<12.
Bromochloromethane		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
2,2-Dichloropropane		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,2-Dibromoethane		NE	NE	NE	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
1,3-Dichloropropane		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,1,1,2-Tetrachloroethane		NE	NE	NE	<0.47	<0.43	<0.56	<0.80	<0.55	<0.49	<0.50	<0.88	<0.62	<0.50	<0.58
Bromobenzene		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
n-Butylbenzene		12000	100,000	500,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
sec-Butylbenzene		11000	100,000	500,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
tert-Butylbenzene		5900	100,000	500,000	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
o-Chlorotoluene		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
p-Chlorotoluene		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,2-Dibromo-3-chloropropane		NE	NE	NE	<2.8	<2.6	<3.3	<4.8	<3.3	<3.0	<3.0	<5.3	<3.7	<3.0	<3.5
Hexachlorobutadiene		NE	NE	NE	<3.7	<3.4	<4.5	<6.4	<4.4	<4.0	<4.0	<7.1	<5.0	<4.0	<4.7
Isopropylbenzene		NE	NE	NE	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
p-Isopropyltoluene		NE	NE	NE	<0.93	<0.86	<1.1	<1.6	0.55J	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
Naphthalene		12000	100,000	500,000	<3.7	2.4J	<4.5	1.9J	1.1J	<4.0	2.8J	<7.1	<5.0	<4.0	4.6J
Acrylonitrile		NE	NE	NE	<3.7	<3.4	<4.5	<6.4	<4.4	<4.0	<4.0	<7.1	<5.0	<4.0	<4.7
n-Propylbenzene		3900	100,000	500,000	<0.93	<0.86	<1.1	<1.6	<1.1	<0.99	<1.0	<1.8	<1.2	<1.0	<1.2
1,2,3-Trichlorobenzene		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,2,4-Trichlorobenzene		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,3,5-Trimethylbenzene		8400	52,000	190,000	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,2,4-Trimethylbenzene		3600	52,000	190,000	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,4-Dioxane		100	13,000	130,000	<74.	<69.	<89.	<130	<88.	<79.	<80.	<140	<100	<80.	<94.
p-Diethylbenzene		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	0.35J	<3.5	<2.5	<2.0	<2.3
p-Ethyltoluene		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
1,2,4,5-Tetramethylbenzene		NE	NE	NE	<1.9	0.38J	<2.2	<3.2	<2.2	<2.0	1.6J	<3.5	<2.5	<2.0	<2.3
Ethyl ether		NE	NE	NE	<1.9	<1.7	<2.2	<3.2	<2.2	<2.0	<2.0	<3.5	<2.5	<2.0	<2.3
trans-1,4-Dichloro-2-butene		NE	NE	NE	<4.7	<4.3	<5.6	<8.0	<5.5	<4.9	<5.0	<8.8	<6.2	<5.0	<5.8
SVOCs	µg/Kg														
Acenaphthene		20000	100,000	500,000	<140	<710	<150	<150	80J	<160	<140	<140	280JD	<150	870
1,2,4-Trichlorobenzene		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Hexachlorobenzene		NE	NE	NE	<100	<540	<120	<110	<100	<120	<110	<100	<560	<110	<110
Bis(2-chloroethyl)ether		NE	NE	NE	<160	<800	<170	<160	<160	<180	<160	<150	<840	<170	<160
2-Chloronaphthalene		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
1,2-Dichlorobenzene		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180

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				Location	B-1	B-3	B-5	B-6	B-7	B-8	B-9	B-11	B-15	B-16	B-21
				Depth (ft)	0-2	0-2	15-17	4-6	0-2	15-17	0-2	0-2	0-2	16-18	0-2
				Sample Date	5/1/2020	4/27/2020	3/9/2020	4/30/2020	4/29/2020	3/3/2020	4/20/2020	5/7/2020	5/11/2020	3/2/2020	5/12/2020
Analyte	**Units**	**NYSDEC Part 375 Unrestricted Use SCOs**	**NYSDEC Part 375 Restricted Residential SCOs**	**NYSDEC Part 375 Commercial SCOs**											
1,3-Dichlorobenzene		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
1,4-Dichlorobenzene		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
3,3'-Dichlorobenzidine		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
2,4-Dinitrotoluene		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
2,6-Dinitrotoluene		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Fluoranthene		100000	100,000	500,000	28J	650D	<120	340	1400	<120	26J	230	5900D	<110	9600D
4-Chlorophenyl phenyl ether		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
4-Bromophenyl phenyl ether		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Bis(2-chloroisopropyl)ether		NE	NE	NE	<210	<1100	<230	<220	<210	<250	<220	<200	<1100	<230	<210
Bis(2-chloroethoxy)methane		NE	NE	NE	<190	<960	<210	<200	<190	<220	<200	<180	<1000	<200	<190
Hexachlorobutadiene		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Hexachlorocyclopentadiene		NE	NE	NE	<500	<2600	<550	<520	<490	<590	<520	<490	<2700	<540	<510
Hexachloroethane		NE	NE	NE	<140	<710	<150	<150	<140	<160	<140	<140	<750	<150	<140
Isophorone		NE	NE	NE	<160	<800	<170	<160	<160	<180	<160	<150	<840	<170	<160
Naphthalene		12000	100,000	500,000	<170	<890	<190	<180	68J	<200	<180	<170	220JD	<190	670
Nitrobenzene		NE	NE	NE	<160	<800	<170	<160	<160	<180	<160	<150	<840	<170	<160
NDPA/DPA		NE	NE	NE	<140	<710	<150	<150	<140	<160	<140	<140	<750	<150	<140
n-Nitrosodi-n-propylamine		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Bis(2-ethylhexyl)phthalate		NE	NE	NE	<170	620JD	<190	<180	200	<200	<180	120J	<940	<190	<180
Butyl benzyl phthalate		NE	NE	NE	<170	<890	<190	55J	<170	<200	<180	<170	<940	<190	<180
Di-n-butylphthalate		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Di-n-octylphthalate		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Diethyl phthalate		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Dimethyl phthalate		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Benzo(a)anthracene		1000	1,000	5,600	<100	370JD	<120	210	720	<120	<110	140	2600D	<110	6400
Benzo(a)pyrene		1000	1,000	1,000	<140	330JD	<150	200	680	<160	<140	130J	3000D	<150	6300
Benzo(b)fluoranthene		1000	1,000	5,600	<100	520JD	<120	290	910	<120	<110	170	3800D	<110	7200D
Benzo(k)fluoranthene		800	3,900	56,000	<100	170JD	<120	88J	270	<120	<110	60J	1200D	<110	1900
Chrysene		1000	3,900	56,000	<100	370JD	<120	210	720	<120	<110	130	2900D	<110	5200
Acenaphthylene		100000	100,000	500,000	<140	<710	<150	<150	44J	<160	<140	<140	540JD	<150	480
Anthracene		100000	100,000	500,000	<100	<540	<120	36J	220	<120	<110	37J	720D	<110	2800
Benzo(ghi)perylene		100000	100,000	500,000	<140	300JD	<150	120J	410	<160	<140	91J	1800D	<150	3500
Fluorene		30000	100,000	500,000	<170	<890	<190	<180	91J	<200	<180	<170	280JD	<190	1100
Phenanthrene		100000	100,000	500,000	<100	300JD	<120	160	960	<120	<110	160	3600D	<110	8400D
Dibenzo(a,h)anthracene		330	330	560	<100	<540	<120	30J	92J	<120	<110	20J	420JD	<110	1000
Indeno(1,2,3-cd)pyrene		500	500	5,600	<140	270JD	<150	130J	440	<160	<140	99J	2000D	<150	3900
Pyrene		100000	100,000	500,000	27J	790D	<120	310	1300	<120	22J	240	5100D	<110	9800D

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				Location	B-1	B-3	B-5	B-6	B-7	B-8	B-9	B-11	B-15	B-16	B-21
				Depth (ft)	0-2	0-2	15-17	4-6	0-2	15-17	0-2	0-2	0-2	16-18	0-2
				Sample Date	5/1/2020	4/27/2020	3/9/2020	4/30/2020	4/29/2020	3/3/2020	4/20/2020	5/7/2020	5/11/2020	3/2/2020	5/12/2020
Analyte	**Units**	**NYSDEC Part 375 Unrestricted Use SCOs**	**NYSDEC Part 375 Restricted Residential SCOs**	**NYSDEC Part 375 Commercial SCOs**											
Biphenyl		NE	NE	NE	<400	<2000	<440	<420	<390	<470	<410	<390	<2100	<430	130J
4-Chloroaniline		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
2-Nitroaniline		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
3-Nitroaniline		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
4-Nitroaniline		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Dibenzofuran		7000	59,000	350,000	<170	<890	<190	<180	46J	<200	<180	<170	160JD	<190	510
2-Methylnaphthalene		NE	NE	NE	<210	<1100	<230	<220	35J	<250	<220	36J	130JD	<230	390
1,2,4,5-Tetrachlorobenzene		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Acetophenone		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	24J
2,4,6-Trichlorophenol		NE	NE	NE	<100	<540	<120	<110	<100	<120	<110	<100	<560	<110	<110
p-Chloro-m-cresol		330	100,000	500,000	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
2-Chlorophenol		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
2,4-Dichlorophenol		NE	NE	NE	<160	<800	<170	<160	<160	<180	<160	<150	<840	<170	<160
2,4-Dimethylphenol		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
2-Nitrophenol		NE	NE	NE	<370	<1900	<410	<400	<370	<440	<390	<370	<2000	<410	<390
4-Nitrophenol		NE	NE	NE	<240	<1200	<270	<260	<240	<290	<250	<240	<1300	<260	<250
2,4-Dinitrophenol		NE	NE	NE	<830	<4300	<920	<880	<830	<990	<870	<820	<4500	<910	<860
4,6-Dinitro-o-cresol		NE	NE	NE	<450	<2300	<500	<480	<450	<530	<470	<440	<2400	<490	<460
Pentachlorophenol		800	6,700	6,700	<140	<710	<150	<150	<140	<160	<140	<140	<750	<150	<140
Phenol		330	100,000	500,000	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
2-Methylphenol		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
3-Methylphenol/4-Methylphenol		NE	NE	NE	<250	<1300	<280	<260	<250	<300	<260	<250	<1300	<270	<260
2,4,5-Trichlorophenol		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Benzoic Acid		NE	NE	NE	<560	<2900	<620	<600	<560	<660	<580	<550	<3000	<610	<580
Benzyl Alcohol		NE	NE	NE	<170	<890	<190	<180	<170	<200	<180	<170	<940	<190	<180
Carbazole		NE	NE	NE	<170	<890	<190	22J	91J	<200	<180	20J	320JD	<190	400
1,4-Dioxane		100	13,000	130,000	<26.	<130	<29.	<28.	<26.	<31.	<27.	<26.	<140	<28.	<27.
PCBs	µg/Kg														
Aroclor 1016		NE	NE	NE	<33.3	<36.4	<38.0	<36.4	<34.6	<39.2	<36.0	<34.6	<189.	<36.9	<36.3
Aroclor 1221		NE	NE	NE	<33.3	<36.4	<38.0	<36.4	<34.6	<39.2	<36.0	<34.6	<189.	<36.9	<36.3
Aroclor 1232		NE	NE	NE	<33.3	<36.4	<38.0	<36.4	<34.6	<39.2	<36.0	<34.6	<189.	<36.9	<36.3
Aroclor 1242		NE	NE	NE	<33.3	<36.4	<38.0	<36.4	<34.6	<39.2	<36.0	<34.6	<189.	<36.9	<36.3
Aroclor 1248		NE	NE	NE	<33.3	<36.4	<38.0	<36.4	<34.6	<39.2	<36.0	<34.6	<189.	<36.9	<36.3
Aroclor 1254		NE	NE	NE	<33.3	<36.4	5.41J	10.0J	77.1	<39.2	<36.0	<34.6	778D	<36.9	38.3
Aroclor 1260		NE	NE	NE	<33.3	19.5J	<38.0	15.5J	47.8	<39.2	<36.0	<34.6	132JD	<36.9	38.6
Aroclor 1262		NE	NE	NE	<33.3	<36.4	<38.0	<36.4	<34.6	<39.2	<36.0	<34.6	<189.	<36.9	<36.3
Aroclor 1268		NE	NE	NE	<33.3	<36.4	<38.0	10.1J	26.0J	<39.2	<36.0	<34.6	<189.	<36.9	<36.3

Astoria, NY

				Location	B-1	B-3	B-5	B-6	B-7	B-8	B-9	B-11	B-15	B-16	B-21
				Depth (ft)	0-2	0-2	15-17	4-6	0-2	15-17	0-2	0-2	0-2	16-18	0-2
				Sample Date	5/1/2020	4/27/2020	3/9/2020	4/30/2020	4/29/2020	3/3/2020	4/20/2020	5/7/2020	5/11/2020	3/2/2020	5/12/2020
Analyte	**Units**	**NYSDEC Part 375 Unrestricted Use SCOs**	**NYSDEC Part 375 Restricted Residential SCOs**	**NYSDEC Part 375 Commercial SCOs**											
PCBs, Total		100	1,000	1,000	<33.3	19.5J	5.41J	35.6J	151J	<39.2	<36.0	<34.6	910JD	<36.9	76.9
Herbicides	µg/Kg														
2,4-D		NE	NE	NE	<175.	<179.	<194.	<182.	<177.	<204.	<180.	<172.	<188.	<188.	<180.
2,4,5-T		NE	NE	NE	<175.	<179.	<194.	<182.	<177.	<204.	<180.	<172.	<188.	<188.	<180.
2,4,5-TP (Silvex)		3,800	100,000	500,000	<175.	<179.	<194.	<182.	<177.	<204.	<180.	<172.	<188.	<188.	<180.
Pesticides	µg/Kg														
Delta-BHC		40	100,000	500,000	<1.63	<1.71	<1.86	<1.74	<16.5	<1.92	<1.68	<1.61	<1.73	<1.77	<1.68
Lindane		100	1,300	9,200	<0.679	<0.713	<0.775	<0.723	<6.88	<0.798	<0.700	<0.673	<0.720	<0.739	<0.701
Alpha-BHC		20	480	3,400	<0.679	<0.713	<0.775	<0.723	<6.88	<0.798	<0.700	<0.673	<0.720	<0.739	<0.701
Beta-BHC		36	360	3,000	<1.63	<1.71	<1.86	<1.74	<16.5	<1.92	<1.68	<1.61	<1.73	<1.77	<1.68
Heptachlor		42	2,100	15,000	<0.815	<0.856	<0.930	<0.868	<8.25	<0.958	<0.840	<0.807	<0.864	<0.887	<0.841
Aldrin		5	97	680	<1.63	<1.71	<1.86	<1.74	<16.5	<1.92	<1.68	<1.61	<1.73	<1.77	<1.68
Heptachlor epoxide		NE	NE	NE	<3.06	<3.21	<3.49	<3.25	<31.0	<3.59	<3.15	<3.03	<3.24	<3.32	<3.15
Endrin		14	11,000	89,000	<0.679	<0.713	<0.775	<0.723	<6.88	<0.798	<0.700	<0.673	<0.720	<0.739	<0.701
Endrin aldehyde		NE	NE	NE	<2.04	<2.14	<2.32	<2.17	<20.6	<2.40	<2.10	<2.02	<2.16	<2.22	<2.10
Endrin ketone		NE	NE	NE	<1.63	<1.71	<1.86	<1.74	<16.5	<1.92	<1.68	<1.61	<1.73	<1.77	<1.68
Dieldrin		5	200	1,400	<1.02	<1.07	<1.16	2.12	<10.3	<1.20	<1.05	<1.01	<1.08	1.47	<1.05
4,4'-DDE		3.3	8,900	62,000	<1.63	<1.71	<1.86	1.08J	4.59JD	<1.92	<1.68	<1.61	<1.73	<1.77	1.87
4,4'-DDD		3.3	13,000	92,000	<1.63	<1.71	<1.86	0.672J	7.28JD	<1.92	<1.68	<1.61	<1.73	<1.77	<1.68
4,4'-DDT		3.3	7,900	47,000	<3.06	<3.21	<3.49	5.12	<31.0	<3.59	<3.15	<3.03	<3.24	<3.32	6.81
Endosulfan I		2400	24,000	200,000	<1.63	<1.71	<1.86	<1.74	<16.5	<1.92	<1.68	<1.61	<1.73	<1.77	<1.68
Endosulfan II		2400	24,000	200,000	<1.63	<1.71	<1.86	<1.74	<16.5	<1.92	<1.68	<1.61	<1.73	<1.77	<1.68
Endosulfan sulfate		2400	24,000	200,000	<0.679	<0.713	<0.775	<0.723	<6.88	<0.798	<0.700	<0.673	<0.720	<0.739	<0.701
Methoxychlor		NE	NE	NE	<3.06	<3.21	<3.49	<3.25	<31.0	<3.59	<3.15	<3.03	<3.24	<3.32	<3.15
Toxaphene		NE	NE	NE	<30.6	<32.1	<34.9	<32.5	<310.	<35.9	<31.5	<30.3	<32.4	<33.2	<31.5
cis-Chlordane		NE	NE	NE	<2.04	5.3	<2.32	2.99	<20.6	<2.40	<2.10	<2.02	<2.16	<2.22	1.53J
trans-Chlordane		NE	NE	NE	<2.04	3.53	<2.32	5.42	<20.6	<2.40	<2.10	<2.02	<2.16	<2.22	1.52J
Chlordane		94	4,200	24,000	<13.6	64.4	<15.5	<14.5	<138.	<16.0	<14.0	<13.4	<14.4	<14.8	30.5

Notes:
NYSDEC = New York State Department of Environmental Conservation
SCO = Soil Cleanup Objective
NE = Not Established
VOC = Volatile Organic Compound
SVOC = Semivolatile Organic Compound
PCB = Polychlorinated Biphenyl
mg/Kg = milligrams per kilogram

Astoria, NY

				Location	B-1	B-3	B-5	B-6	B-7	B-8	B-9	B-11	B-15	B-16	B-21
				Depth (ft)	0-2	0-2	15-17	4-6	0-2	15-17	0-2	0-2	0-2	16-18	0-2
				Sample Date	5/1/2020	4/27/2020	3/9/2020	4/30/2020	4/29/2020	3/3/2020	4/20/2020	5/7/2020	5/11/2020	3/2/2020	5/12/2020
Analyte	**Units**	**NYSDEC Part 375 Unrestricted Use SCOs**	**NYSDEC Part 375 Restricted Residential SCOs**	**NYSDEC Part 375 Commercial SCOs**											

µg/Kg = micrograms per kilogram

Gray shading indicates that the result exceeds the NYSDEC Unrestricted Use SCOs
Yellow shading indicates that the result exceeds the NYSDEC Restricted-Residential Use SCOs
Red shading indicates that the result exceeds the NYSDEC Commercial Use SCOs

Validation Qualifiers
J = The result is an estimated value.
D = The result was quantified from a diluted analysis.
< = The result was not detected above the reporting limit.

Table 1. Astoria Cove Subsurface In
Soil Analytical Results
26th Avenue Between 4th and 9th S
Astoria, NY

	B-22 0-2 5/28/2020	B-23 20-22 3/10/2020	B-24 15-17 2/28/2020	B-28 0-2 3/20/2020	B-32 20-22 4/7/2020	B-33 0-2 5/26/2020	B-36 1-3 4/3/2020	B-37 0-2 5/29/2020	B-38 5-7 3/12/2020	B-43 1-3 4/23/2020	B-45 0-2 5/19/2020	B-50 0-2 5/21/2020
Analyte												
Metals												
Aluminum, Total	6810	5780	4880	6580	13800	597	3080	4630	5370	10300	7820	13100
Antimony, Total	<4.33	0.672J	<4.64	<4.53	<4.40	0.498J	<4.47	<4.49	<4.09	<4.26	<4.33	2.88J
Arsenic, Total	4.63	7.5	<0.928	3.34	1.87	2.44	2.15	1.38	1.18	1.81	2.07	15.3
Barium, Total	50.3	50.9	29.6	92.2	230	15.7	39	26.3	24.4	101	125	228
Beryllium, Total	<0.433	0.196J	0.176J	0.462	<0.880	<0.437	0.125J	0.045J	0.245J	0.102J	<0.433	0.567
Cadmium, Total	0.675J	0.551J	0.585J	<0.905	0.686J	0.315J	<0.893	0.243J	<0.818	0.511J	0.667J	<0.872
Calcium, Total	18400	38600	2170	10600	6900	312000	58800	21100	1120	3820	29400	39300
Chromium, Total	18.9	25.6	14.5	8.74	31.4	6	6.81	9.18	12.2	22.2	16.6	26.2
Cobalt, Total	6.82	9.05	6.35	4.06	13.9	0.997J	2.27	3.71	4.41	10.5	7.73	14.4
Copper, Total	59.1	68.4	13.9	9.37	26.3	9.12	9.77	25.2	17.5	22.3	39.1	231
Iron, Total	23000	12100	10100	9670	21700	3540	8310	8410	9810	17000	17300	51200
Lead, Total	91.1	55.3	3.31J	147	8.12	21.8	3.02J	6.84	4.97	4.13J	43.6	379
Magnesium, Total	4080	5950	3290	1760	7020	2410	19200	3900	2400	5690	4410	6580
Manganese, Total	362	195	138	456	205	201	107	137	245	258	197	683
Mercury, Total	<0.083	0.070J	<0.082	0.092	<0.073	<0.082	<0.072	<0.091	<0.077	<0.069	0.063J	0.072J
Nickel, Total	14.4	19	9.37	6.64	24.5	3.16	6.6	7.9	11	15.1	12.9	28.2
Potassium, Total	647	781	1060	294	4410	183J	444	575	550	3490	2380	3490
Selenium, Total	0.796J	<1.87	<1.86	<1.81	0.616J	1.13J	0.482J	0.476J	<1.64	0.477J	<1.73	<1.74
Silver, Total	<0.865	<0.933	<0.928	<0.905	<0.880	<0.874	<0.893	<0.899	<0.818	<0.852	<0.866	<0.872
Sodium, Total	88.8J	151J	109J	49.9J	430	147J	166J	233	98.6J	107J	246	2310
Thallium, Total	<1.73	<1.87	<1.86	<1.81	<1.76	<1.75	<1.79	<1.80	<1.64	<1.70	<1.73	<1.74
Vanadium, Total	25.5	18.9	19.4	10.4	47.3	3.64	12.9	13.7	17.4	40	27	34.1
Zinc, Total	74.4	244	27.5	27.5	65.5	23	16.8	23.3	45.8	48.1	79.2	285
VOCs												
Methylene chloride	<5.3	<350	<5.3	<720	<5.3	<5.4	<7.3	<5.0	<5.7	<5.1	<5.2	<7.6
1,1-Dichloroethane	0.72J	82	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
Chloroform	0.16J	25J	0.54J	<220	0.30J	0.65J	8.5	1.4J	<1.7	0.44J	0.30J	0.48J
Carbon tetrachloride	<1.1	<70.	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
1,2-Dichloropropane	<1.1	<70.	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
Dibromochloromethane	<1.1	<70.	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
1,1,2-Trichloroethane	<1.1	<70.	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
Tetrachloroethene	<0.53	3300	<0.53	<72.	<0.53	<0.54	<0.73	<0.50	<0.57	<0.51	1.1	<0.76
Chlorobenzene	<0.53	<35.	<0.53	<72.	<0.53	<0.54	<0.73	<0.50	<0.57	<0.51	<0.52	<0.76

Astoria, NY

	B-22 0-2 5/28/2020	B-23 20-22 3/10/2020	B-24 15-17 2/28/2020	B-28 0-2 3/20/2020	B-32 20-22 4/7/2020	B-33 0-2 5/26/2020	B-36 1-3 4/3/2020	B-37 0-2 5/29/2020	B-38 5-7 3/12/2020	B-43 1-3 4/23/2020	B-45 0-2 5/19/2020	B-50 0-2 5/21/2020
Analyte												
Trichlorofluoromethane	<4.3	<280	<4.2	<570	<4.2	<4.3	<5.8	<4.0	<4.6	<4.0	<4.2	<6.1
1,2-Dichloroethane	<1.1	<70.	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
1,1,1-Trichloroethane	<0.53	210	<0.53	32J	<0.53	<0.54	<0.73	<0.50	<0.57	<0.51	<0.52	<0.76
Bromodichloromethane	<0.53	<35.	<0.53	<72.	<0.53	<0.54	0.74	<0.50	<0.57	<0.51	<0.52	<0.76
trans-1,3-Dichloropropene	<1.1	<70.	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
cis-1,3-Dichloropropene	<0.53	<35.	<0.53	<72.	<0.53	<0.54	<0.73	<0.50	<0.57	<0.51	<0.52	<0.76
1,3-Dichloropropene, Total	<0.53	<35.	<0.53	<72.	<0.53	<0.54	<0.73	<0.50	<0.57	<0.51	<0.52	<0.76
1,1-Dichloropropene	<0.53	<35.	<0.53	<72.	<0.53	<0.54	<0.73	<0.50	<0.57	<0.51	<0.52	<0.76
Bromoform	<4.3	<280	<4.2	<570	<4.2	<4.3	<5.8	<4.0	<4.6	<4.0	<4.2	<6.1
1,1,2,2-Tetrachloroethane	<0.53	<35.	<0.53	<72.	<0.53	<0.54	<0.73	<0.50	<0.57	<0.51	<0.52	<0.76
Benzene	<0.53	<35.	<0.53	<72.	<0.53	0.24J	<0.73	0.16J	<0.57	<0.51	<0.52	<0.76
Toluene	0.96J	<70	1	<140	<1.0	3.6	1.0J	0.58J	<1.1	<1.0	21	31
Ethylbenzene	<1.1	<70	<1.0	22J	<1.0	0.73J	<1.5	<1.0	<1.1	<1.0	0.26J	0.39J
Chloromethane	<4.3	<280	<4.2	<570	<4.2	<4.3	<5.8	<4.0	<4.6	<4.0	<4.2	<6.1
Bromomethane	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
Vinyl chloride	<1.1	<70.	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
Chloroethane	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,1-Dichloroethene	<1.1	160	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
trans-1,2-Dichloroethene	<1.6	<100	<1.6	<220	<1.6	<1.6	0.45J	<1.5	<1.7	<1.5	<1.6	<2.3
Trichloroethene	<0.53	1300	<0.53	<72.	<0.53	<0.54	0.33J	<0.50	<0.57	<0.51	<0.52	<0.76
1,2-Dichlorobenzene	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,3-Dichlorobenzene	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,4-Dichlorobenzene	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
Methyl tert butyl ether	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
p/m-Xylene	<2.1	<140	<2.1	<290	<2.1	1.1J	<2.9	<2.0	<2.3	<2.0	0.66J	1.4J
o-Xylene	<1.1	<70.	<1.0	<140	<1.0	0.51J	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
Xylenes, Total	<1.1	<70.	<1.0	<140	<1.0	1.6J	<1.5	<1.0	<1.1	<1.0	0.66J	1.4J
cis-1,2-Dichloroethene	<1.1	110	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
1,2-Dichloroethene, Total	<1.1	110	<1.0	<140	<1.0	<1.1	0.45J	<1.0	<1.1	<1.0	<1.0	<1.5
Dibromomethane	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
Styrene	<1.1	<70.	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
Dichlorodifluoromethane	<11.	<700	<10.	<1400	<10.	<11.	<15.	<10.	<11.	<10.	<10.	<15.
Acetone	42	<700	12	<1400	6.4J	11	44	19	<11.	<10	22	38
Carbon disulfide	<11	<700	<10.	<1400	<10	<11	<15	<10	<11.	<10	<10	10J
2-Butanone	5.0J	<700	<10.	<1400	<10.	<11.	3.4J	<10.	<11.	<10.	<10.	<15.
Vinyl acetate	<11.	<700	<10.	<1400	<10.	<11.	<15.	<10.	<11.	<10.	<10.	<15.
4-Methyl-2-pentanone	<11.	<700	<10.	<1400	<10.	<11.	<15.	<10.	<11.	<10.	<10.	<15.

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Analyte												
1,2,3-Trichloropropane	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
2-Hexanone	<11.	<700	<10.	<1400	<10.	<11.	<15.	<10.	<11.	<10.	<10.	<15.
Bromochloromethane	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
2,2-Dichloropropane	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,2-Dibromoethane	<1.1	<70.	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
1,3-Dichloropropane	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,1,1,2-Tetrachloroethane	<0.53	<35.	<0.53	<72.	<0.53	<0.54	<0.73	<0.50	<0.57	<0.51	<0.52	<0.76
Bromobenzene	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
n-Butylbenzene	<1.1	<70.	<1.0	<140	<1.0	0.22J	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
sec-Butylbenzene	<1.1	<70.	<1.0	<140	0.15J	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
tert-Butylbenzene	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
o-Chlorotoluene	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
p-Chlorotoluene	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,2-Dibromo-3-chloropropane	<3.2	<210	<3.2	<430	<3.2	<3.2	<4.4	<3.0	<3.4	<3.0	<3.1	<4.6
Hexachlorobutadiene	<4.3	<280	<4.2	<570	<4.2	<4.3	<5.8	<4.0	<4.6	<4.0	<4.2	<6.1
Isopropylbenzene	<1.1	<70.	<1.0	<140	<1.0	<1.1	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
p-Isopropyltoluene	<1.1	<70.	<1.0	<140	0.15J	0.17J	<1.5	<1.0	<1.1	<1.0	<1.0	0.30J
Naphthalene	8.3	320	<4.2	19000	3.1J	<4.3	2.3J	<4.0	<4.6	1.7J	<4.2	5.5J
Acrylonitrile	<4.3	<280	<4.2	<570	<4.2	<4.3	<5.8	<4.0	<4.6	<4.0	<4.2	<6.1
n-Propylbenzene	<1.1	<70.	<1.0	<140	<1.0	0.19J	<1.5	<1.0	<1.1	<1.0	<1.0	<1.5
1,2,3-Trichlorobenzene	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,2,4-Trichlorobenzene	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,3,5-Trimethylbenzene	<2.1	<140	<2.1	<290	<2.1	0.54J	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,2,4-Trimethylbenzene	<2.1	<140	<2.1	<290	<2.1	1.6J	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,4-Dioxane	<85.	<5600	<85.	<11000	<84.	<87.	<120	<80.	<92.	<81.	<83.	<120
p-Diethylbenzene	0.21J	<140	<2.1	46J	0.51J	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
p-Ethyltoluene	<2.1	<140	<2.1	<290	<2.1	0.45J	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
1,2,4,5-Tetramethylbenzene	0.25J	<140	<2.1	<290	0.30J	0.59J	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
Ethyl ether	<2.1	<140	<2.1	<290	<2.1	<2.2	<2.9	<2.0	<2.3	<2.0	<2.1	<3.0
trans-1,4-Dichloro-2-butene	<5.3	<350	<5.3	<720	<5.3	<5.4	<7.3	<5.0	<5.7	<5.1	<5.2	<7.6
SVOCs												
Acenaphthene	500D	1100D	<160	1100	<150	<150	<150	<150	<140	<140	67J	360
1,2,4-Trichlorobenzene	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Hexachlorobenzene	<220	<610	<120	<110	<110	<110	<110	<110	<100	<110	<110	<110
Bis(2-chloroethyl)ether	<330	<910	<180	<170	<170	<160	<170	<170	<160	<160	<170	<170
2-Chloronaphthalene	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
1,2-Dichlorobenzene	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190

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Analyte												
1,3-Dichlorobenzene	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
1,4-Dichlorobenzene	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
3,3'-Dichlorobenzidine	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
2,4-Dinitrotoluene	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
2,6-Dinitrotoluene	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Fluoranthene	13000D	14000D	<120	11000D	<110	23J	63J	<110	<100	<110	3000	2800
4-Chlorophenyl phenyl ether	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
4-Bromophenyl phenyl ether	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Bis(2-chloroisopropyl)ether	<440	<1200	<240	<220	<230	<220	<220	<230	<210	<220	<220	<220
Bis(2-chloroethoxy)methane	<400	<1100	<210	<200	<200	<200	<200	<210	<190	<200	<200	<200
Hexachlorobutadiene	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Hexachlorocyclopentadiene	<1000	<2900	<570	<540	<540	<520	<530	<540	<500	<520	<530	<530
Hexachloroethane	<300	<810	<160	<150	<150	<150	<150	<150	<140	<140	<150	<150
Isophorone	<330	<910	<180	<170	<170	<160	<170	<170	<160	<160	<170	<170
Naphthalene	240JD	980JD	<200	1300	<190	<180	<190	<190	<170	<180	140J	610
Nitrobenzene	<330	<910	<180	<170	<170	<160	<170	<170	<160	<160	<170	<170
NDPA/DPA	<300	<810	<160	<150	<150	<150	<150	<150	<140	<140	<150	<150
n-Nitrosodi-n-propylamine	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Bis(2-ethylhexyl)phthalate	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	97J
Butyl benzyl phthalate	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Di-n-butylphthalate	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Di-n-octylphthalate	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Diethyl phthalate	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Dimethyl phthalate	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Benzo(a)anthracene	8100D	8100D	<120	4000	<110	20J	37J	<110	<100	<110	1500	1100
Benzo(a)pyrene	7900D	6800D	<160	4700	<150	<150	<150	<150	<140	<140	1400	1000
Benzo(b)fluoranthene	8800D	8300D	<120	5100	<110	<110	44J	<110	<100	<110	1900	1200
Benzo(k)fluoranthene	2200D	2900D	<120	1600	<110	<110	<110	<110	<100	<110	570	400
Chrysene	6100D	6800D	<120	3800	<110	24J	63J	21J	<100	<110	1300	1000
Acenaphthylene	510D	620JD	<160	<150	<150	<150	<150	<150	<140	<140	420	140J
Anthracene	3000D	3300D	<120	2100	<110	<110	<110	<110	<100	<110	360	600
Benzo(ghi)perylene	4700D	3700D	<160	2200	<150	40J	37J	<150	<140	<140	860	650
Fluorene	780D	1300D	<200	620	<190	<180	<190	<190	<170	<180	98J	350
Phenanthrene	8600D	9600D	<120	9400D	23J	<110	34J	<110	<100	<110	1500	2900
Dibenzo(a,h)anthracene	1100D	1000D	<120	450	<110	<110	<110	<110	<100	<110	170	140
Indeno(1,2,3-cd)pyrene	5100D	4000D	<160	2500	<150	<150	<150	<150	<140	<140	960	670
Pyrene	14000D	13000D	<120	9300D	<110	23J	68J	24J	<100	<110	2800	2400

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Analyte												
Biphenyl	<840	<2300	<450	100J	<430	<420	<420	<430	<400	<410	<420	57J
4-Chloroaniline	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
2-Nitroaniline	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
3-Nitroaniline	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
4-Nitroaniline	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Dibenzofuran	290JD	680JD	<200	650	<190	<180	<190	<190	<170	<180	71J	290
2-Methylnaphthalene	230JD	700JD	<240	280	<230	<220	<220	<230	<210	<220	49J	210J
1,2,4,5-Tetrachlorobenzene	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Acetophenone	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
2,4,6-Trichlorophenol	<220	<610	<120	<110	<110	<110	<110	<110	<100	<110	<110	<110
p-Chloro-m-cresol	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
2-Chlorophenol	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
2,4-Dichlorophenol	<330	<910	<180	<170	<170	<160	<170	<170	<160	<160	<170	<170
2,4-Dimethylphenol	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
2-Nitrophenol	<800	<2200	<430	<400	<410	<390	<400	<410	<380	<390	<400	<400
4-Nitrophenol	<520	<1400	<280	<260	<270	<260	<260	<270	<240	<250	<260	<260
2,4-Dinitrophenol	<1800	<4900	<950	<900	<910	<880	<890	<920	<840	<870	<890	<900
4,6-Dinitro-o-cresol	<960	<2600	<510	<490	<490	<470	<480	<500	<450	<470	<480	<490
Pentachlorophenol	<300	<810	<160	<150	<150	<150	<150	<150	<140	<140	<150	<150
Phenol	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
2-Methylphenol	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
3-Methylphenol/4-Methylphenol	<530	<1500	<280	33J	<270	<260	<270	<270	<250	<260	<270	<270
2,4,5-Trichlorophenol	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Benzoic Acid	<1200	<3300	<640	<610	<620	<590	<600	<620	<570	<590	<600	<600
Benzyl Alcohol	<370	<1000	<200	<190	<190	<180	<190	<190	<170	<180	<180	<190
Carbazole	380D	720JD	<200	1300	<190	<180	<190	<190	<170	<180	110J	300
1,4-Dioxane	<55.	<150	<30.	<28.	<28.	<27.	<28.	<29.	<26.	<27.	<28.	<28.
PCBs												
Aroclor 1016	<37.0	<39.6	<37.6	<36.8	<37.2	<36.0	<37.5	<38.0	<34.9	<34.9	<36.0	<35.8
Aroclor 1221	<37.0	<39.6	<37.6	<36.8	<37.2	<36.0	<37.5	<38.0	<34.9	<34.9	<36.0	<35.8
Aroclor 1232	<37.0	<39.6	<37.6	<36.8	<37.2	<36.0	<37.5	<38.0	<34.9	<34.9	<36.0	<35.8
Aroclor 1242	<37.0	<39.6	<37.6	<36.8	<37.2	<36.0	<37.5	<38.0	<34.9	<34.9	<36.0	<35.8
Aroclor 1248	<37.0	<39.6	<37.6	<36.8	<37.2	<36.0	<37.5	<38.0	<34.9	<34.9	<36.0	<35.8
Aroclor 1254	<37.0	131	<37.6	<36.8	<37.2	<36.0	<37.5	<38.0	<34.9	<34.9	<36.0	<35.8
Aroclor 1260	<37.0	52.2	<37.6	<36.8	<37.2	<36.0	<37.5	<38.0	<34.9	<34.9	50.3	<35.8
Aroclor 1262	<37.0	<39.6	<37.6	<36.8	<37.2	<36.0	<37.5	<38.0	<34.9	<34.9	<36.0	<35.8
Aroclor 1268	<37.0	<39.6	<37.6	<36.8	<37.2	<36.0	<37.5	<38.0	<34.9	<34.9	<36.0	<35.8

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Analyte	B-22 0-2 5/28/2020	B-23 20-22 3/10/2020	B-24 15-17 2/28/2020	B-28 0-2 3/20/2020	B-32 20-22 4/7/2020	B-33 0-2 5/26/2020	B-36 1-3 4/3/2020	B-37 0-2 5/29/2020	B-38 5-7 3/12/2020	B-43 1-3 4/23/2020	B-45 0-2 5/19/2020	B-50 0-2 5/21/2020
PCBs, Total	<37.0	183	<37.6	<36.8	<37.2	<36.0	<37.5	<38.0	<34.9	<34.9	50.3	<35.8
Herbicides												
2,4-D	<187.	<204.	<199.	<186.	<193.	<181.	<190.	<189.	<176.	<181.	<183.	<185.
2,4,5-T	<187.	<204.	<199.	<186.	<193.	<181.	<190.	<189.	<176.	<181.	<183.	<185.
2,4,5-TP (Silvex)	<187.	<204.	<199.	<186.	<193.	<181.	<190.	<189.	<176.	<181.	<183.	<185.
Pesticides												
Delta-BHC	<1.80	<1.92	<1.82	<1.76	<1.82	<1.69	<3.52	<1.84	<1.69	<1.73	<1.73	<1.72
Lindane	<0.751	<0.800	<0.761	<0.732	<0.760	<0.705	<1.47	<0.766	<0.705	<0.722	<0.723	<0.718
Alpha-BHC	<0.751	<0.800	<0.761	<0.732	<0.760	<0.705	<1.47	<0.766	<0.705	<0.722	<0.723	<0.718
Beta-BHC	<1.80	<1.92	<1.82	<1.76	<1.82	<1.69	<3.52	<1.84	<1.69	<1.73	<1.73	<1.72
Heptachlor	<0.902	<0.960	<0.913	<0.879	<0.912	<0.846	<1.76	<0.919	<0.846	<0.867	<0.867	<0.861
Aldrin	<1.80	<1.92	<1.82	<1.76	<1.82	<1.69	<3.52	<1.84	<1.69	<1.73	<1.73	<1.72
Heptachlor epoxide	<3.38	<3.60	<3.42	<3.30	<3.42	<3.17	<6.61	<3.45	<3.17	<3.25	<3.25	<3.23
Endrin	<0.751	<0.800	<0.761	<0.732	<0.760	<0.705	<1.47	<0.766	<0.705	<0.722	<0.723	<0.718
Endrin aldehyde	<2.25	<2.40	<2.28	<2.20	<2.28	<2.12	<4.40	<2.30	<2.11	<2.17	<2.17	<2.15
Endrin ketone	<1.80	<1.92	<1.82	<1.76	<1.82	<1.69	<3.52	<1.84	<1.69	<1.73	<1.73	<1.72
Dieldrin	<1.13	5.81	<1.14	<1.10	<1.14	<1.06	<2.20	0.811J	<1.06	<1.08	<1.08	<1.08
4,4'-DDE	<1.80	0.534J	<1.82	52.8	<1.82	<1.69	<3.52	3.78	<1.69	<1.73	<1.73	<1.72
4,4'-DDD	<1.80	5.15	<1.82	12.3	<1.82	<1.69	<3.52	<1.84	<1.69	<1.73	<1.73	<1.72
4,4'-DDT	<3.38	9.4	<3.42	54.1	<3.42	<3.17	<6.61	<3.45	<3.17	<3.25	5.99	<3.23
Endosulfan I	<1.80	<1.92	<1.82	<1.76	<1.82	<1.69	<3.52	<1.84	<1.69	<1.73	<1.73	<1.72
Endosulfan II	<1.80	1.41J	<1.82	<1.76	<1.82	<1.69	<3.52	<1.84	<1.69	<1.73	<1.73	<1.72
Endosulfan sulfate	<0.751	<0.800	<0.761	<0.732	<0.760	<0.705	<1.47	<0.766	<0.705	<0.722	<0.723	<0.718
Methoxychlor	<3.38	<3.60	<3.42	<3.30	<3.42	<3.17	<6.61	<3.45	<3.17	<3.25	<3.25	<3.23
Toxaphene	<33.8	<36.0	<34.2	<33.0	<34.2	<31.7	<66.1	<34.5	<31.7	<32.5	<32.5	<32.3
cis-Chlordane	<2.25	3.8	<2.28	<2.20	<2.28	<2.12	<4.40	<2.30	<2.11	<2.17	9.59	3.7
trans-Chlordane	<2.25	2.43	<2.28	<2.20	<2.28	<2.12	<4.40	<2.30	<2.11	<2.17	10.2	<2.15
Chlordane	<15.0	34.4	<15.2	<14.6	<15.2	<14.1	<29.4	<15.3	<14.1	<14.4	<14.4	<14.4

Notes:
NYSDEC = New York State Departme
SCO = Soil Cleanup Objective
NE = Not Established
VOC = Volatile Organic Compound
SVOC = Semivolatile Organic Compo
PCB = Polychlorinated Biphenyl
mg/Kg = milligrams per kilogram

Astoria, NY

	B-22 0-2 5/28/2020	B-23 20-22 3/10/2020	B-24 15-17 2/28/2020	B-28 0-2 3/20/2020	B-32 20-22 4/7/2020	B-33 0-2 5/26/2020	B-36 1-3 4/3/2020	B-37 0-2 5/29/2020	B-38 5-7 3/12/2020	B-43 1-3 4/23/2020	B-45 0-2 5/19/2020	B-50 0-2 5/21/2020
Analyte												

µg/Kg = micrograms per kilogram

Gray shading indicates that the resu
Yellow shading indicates that the re
Red shading indicates that the result

Validation Qualifiers

J = The result is an estimated value.
D = The result was quantified from a
< = The result was not detected abo