

APPENDIX I

DATA TABLES

**31 TONAWANDA STREET
SITE NO. C915299**

**2014 PANAMERICAN ENVIRONMENTAL
PHASE II ENVIRONMENTAL
SITE ASSESSMENT REPORT**

TABLE 1 - 31 TONAWANDA STREET - PHASE 2 ESA SOIL SAMPLE ANALYTICAL RESULTS SUMMARY							
Sampling Program	PEI - Phase 2 ESA SOIL BORING SAMPLING PROGRAM						
Sample Number	BH 5	BH 5-3N	BH 7	BH 8	NYSDEC	NYSDEC	NYSDEC
Sample Date	4/11/2014	9/9/2014	4/11/2014	4/11/2014	PART 375	PART 375	PART 375
Sample depth (bgs)	9' - 12'	11' - 12'	9' - 12'	5' - 8'	Residential	Restrict Res	Commercial
Compounds	ppm	ppm	ppm	ppm	(a)	(b)	(c)
Metals							
Mercury	1.2	NA	0.51	0.04	0.81	1	2.8
Arsenic	12.10	NA	11.5	8.5	16	16	16
Barium	340.0	NA	137	34.4	350	400	400
Beryllium	ND	NA	0.84	ND	14	72	590
Cadmium	2.40	NA	ND	0.94	2.5	4.3	9.3
Chromium	28.5	NA	28.8	202 (a)(b)	36	180	1500
Copper	911 (a)(b)(c)	NA	747 (a)(b)(c)	9550 (a)(b)(c)	270	270	270
Lead	876 (a)(b)	NA	263	130	400	400	1000
Manganese	200	NA	502	7780 (a)(b)	2000	2000	10000
Nickel	20.9	NA	36.3	14.3	140	310	310
Selenium	ND	NA	ND	5.8	36	180	1500
Silver	ND	NA	ND	ND	36	180	1500
Zinc	1410	NA	202	518	2200	10000	10000
PCBS							
PCBS	ND	NA	ND	ND	1	1	1
Pesticides							
4,4-DDT	0.009	NA	ND	ND	1.7	N	47.0
4,4-DDD	0.005	NA	ND	ND	2.6	13	92.0
4,4-DDE	0.01	NA	ND	ND	1.8	8.9	62.0
Endrin Aldehyde	0.021	NA	ND	ND	N/A	N/A	N/A
alpha-BHC	0.009	NA	ND	ND	0.097	0.48	3.4
beta BHC	0.009	NA	ND	ND	0.072	0.36	3
delta BHC	0.021	NA	ND	ND	100	100	500
Endosulfan I	0.005	NA	ND	ND	4.8	24	200
Endosulfan II	0.009	NA	ND	ND	4.8	24	200
Endosulfan Sulfate	0.01	NA	ND	ND	4.8	24	200
Endrin	0.007	NA	ND	ND	2.2	11	89.00
Endrin Ketone	0.011	NA	ND	ND	N/A	N/A	N/A
cis-Chlordane	0.014	NA	ND	ND	N/A	N/A	N/A
Dieldrin	0.011	NA	ND	ND	0.039	0.2	1.40
gamma-BHC	0.013	NA	ND	ND	0.28	1.3	9.20
Heptachlor	0.026	NA	ND	ND	0.42	2.1	15.00
Heptachlor-Chlordane	0.009	NA	ND	ND	N/A	N/A	N/A
VOCs							
cis-1,2-Dichloroethene	880 (a)(b)(c)	0.026	ND	0.023	59	100	500
1,1,2,2-Tetrachloroethane	ND	0.041	ND	ND	NA	NA	NA
1,1,2-Trichloroethane	ND	0.037	ND	ND	NA	NA	NA
1,2,4-Trimethylbenzene	ND	0.048	ND	ND	47	52	190
1,3,5-Trimethylbenzene	ND	0.041	ND	ND	47	52	190
1,4-dioxane	ND	1.08	ND	ND	9.8	13	130
2-Butanone	ND	0.1	ND	ND	NA	NA	NA
Acetone	ND	0.4	ND	ND	100	100	500
Isopropylbenzene	ND	0.014	ND	ND	NA	NA	NA
m,p-Xylene	ND	0.026	ND	ND	100	100	500
Methylcyclohexane	ND	0.022	ND	ND	NA	NA	NA
Naphthalene	ND	0.098	ND	ND	100	100	500
n-Butylbenzene	ND	0.035	ND	ND	NA	NA	NA
o-Xylene	ND	0.03	ND	ND	100	100	500
Trichloroethene	6960 (a)(b)(c)	0.17	ND	0.17	10	21	200
SVOCs							
Acenaphthene	6.2	39.2	ND	ND	100	100	500
Acenaphthylene	ND	12.8	ND	ND	100	100	500
Anthracene	ND	60.7	ND	ND	100	100	500
Benzo(a)anthracene	6.02 (a)(b)(c)	48.9 (a)(b)(c)	ND	ND	1	1	5.6
Benzo (a) pyrene	ND	47.4 (a)(b)(c)	ND	ND	1	1	1
Benzo(b)fluoranthene	5.7 (a)(b)(c)	24.2 (a)(b)(c)	ND	ND	1	1	5.6
Benzo (g,h,i) perylene	ND	19.5	ND	ND	100	100	500
Benzo (k) fluoranthene	ND	25.3 (a)(b)	ND	ND	1	3.9	56
Chrysene	7.74 (a)(b)	53.2 (a)(b)	ND	ND	1	3.9	56
Fluoranthene	11	83.1	ND	0.45	100	100	500
Fluorene	ND	36	ND	ND	100	100	500
Indeno (1,2,3-cd) pyrene	ND	16.6 (a)(b)(c)	ND	ND	0.5	0.5	5.6
Phenanthrene	17.1	142 (a)(b)	ND	0.34	100	100	500
Pyrene	15	137 (a)(b)	ND	0.36	100	100	500

ND - Non-Detect NA - Not Available or Not analyzed for

Shaded Value - Exceeds Part 375 SCOs

**2015 PANAMERICAN ENVIRONMENTAL
LIMITED SUB-SLAB SOIL/
SUBSURFACE ASSESSMENT REPORT**

TABLE 2 - 31 TONAWANDA STREET - FLOOR BORING SAMPLES - ANALYTICAL RESULTS SUMMARY REV 3-19-15

Sampling Program	PEI - PHASE 2 ESA SOIL BORING SAMPLING PROGRAM					
Sample/Boring Number	C-1	C-3	C-4	NYSDEC	NYSDEC	NYSDEC
Sample Date	3/5/2015	3/5/2015	3/5/2015	PART 375	PART 375	PART 375
Sample depth (bgs)	8' - 12'	6' - 8'	6' - 8'	Residential	Restrict Res	Commercial
Compounds	ppm	ppm	ppm	(a)	(b)	(c)
VOCs						
cis-1,2-Dichloroethene	72.8 (a)	1.5	0.6	59	100	500
1,1-Dichloroethane	31.5 (a)(b)	0.3	0.9	19	26	240
1,1-Dichloroethene	17.7	ND	ND	100	100	500
1,1,1 -Trichloroethane	670 (a)(b)(c)	4.3	8	100	100	500
Tetrachloroethene	ND	0.3	ND	5.5	19	150
Trichloroethene	15.1 (a)	1630 (a)(b)(c)	244 (a)(b)(c)	10	21	200

ND - Non-Detect NA - Not Available or Not analyzed for

Shaded Value - Exceeds Part 375 SCOs

**2019 BE3
REMEDIAL INVESTIGATION REPORT**

TABLE 2
31 TONAWANDA STREET - RI SOIL BORING SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification					Date Sampled: 8/16/18					PART 375 Soil Cleanup Objectives			
	BH-1 (0-3')	BH-1 (13.5 - 15')	BH-2 (19- 20') Native	BH-3S (12 -13.5')	BH-4 (0 -1') Surface	BH-4 (11.5 - 12')	BH-5 (0-2') Surface	BH-5 (4 - 6')	BD-6 (0 - 2') Surface	BH-6 (4 - 6')	Unrestricted Use	Residential	Restricted Residential	Protection of Groundwater
METALS														
Arsenic	3.9	4.21	1.33	6.61	7.18	11.5	7.45	4.16	6.01	8.96	13	16	16	16
Barium	20.8	74.2	26.4	102	158	93.9	180	61.8	88.6	269	350	350	400	820
Beryllium	0.058	0.52	0.138	0.544	0.556	0.59	0.499	0.134	0.476	0.394	7.2	14	72	47
Cadmium	0.509	0.68	0.361	0.997	1.18	0.72	1.23	1.61	0.805	2.55	2.5	2.5	4.3	7.5
Chromium	9.9	16	6.5	21.6	17.9	13.9	18.2	7.14	18.4	28.1	30	36	180	NA
Copper	121	28.2	14	150	66.8	29.8	102	141	34.4	1480	50	270	270	1720
Lead	59.5	68.3	7.19	120	245	46.3	309	190	134	346	63	400	400	450
Manganese	198	221	306	238	624	213	516	246	438	175	1600	2,000	2,000	2,000
Total Mercury	0.08	0.46	0.01	0.56	0.69	0.38	0.43	0.21	0.13 J	1.34	0.18	0.81	0.81	0.73
Nickel	6.94	20.3	8.08	19.2	15.7	40.9	16.3	9.83	14.1	16.3	30	140	310	130
Selenium	0.337	0.731	0.411	1.22	1.12	0.746	0.888	0.697	0.576 J	1.16	3.9	36	180	4
Silver	0.168	0.266	ND	0.628	0.395	ND	0.546	0.171	0.21 J	0.58	2	36	180	8.3
Zinc	119	85.9	83.5	219	248	950	286	1180	155	1350	109	2200	10,000	2480
Cyanide	0.0004 J	ND	ND	ND	ND	0.71 J	ND	0.001 J	ND	ND	27	27	27	40
PCBs														
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	1	1	3.2
PCB-1260	0.035 J	ND	ND	ND	ND	ND	ND	0.068 J	ND	ND	0.1	1	1	3.2
PESTICIDES														
4,4-DDT	0.033 J	ND	ND	ND	ND	ND	ND	0.006	0.005	0.003 J	0.0033	1.7	7.9	136
4,4-DDE	ND	ND	ND	ND	ND	ND	ND	ND	0.004 J	ND	0.0033	1.8	8.9	17
4,4-DDD	ND	ND	ND	0.005 J	ND	ND	ND	0.005 J	0.004 J	ND	0.0033	2.6	13	14
alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002 J	0.02	0.097	0.48	0.02
beta-BHC	0.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.036	0.072	0.36	0.09
Endosulfan 11	ND	ND	ND	ND	ND	ND	ND	0.004 J	ND	ND	2.4	4.8	24	102
Endosulfan Sulfate	0.076 J	ND	ND	ND	ND	ND	0.002 J	ND	ND	0.007 J	2.4	4.8	24	1000
Endrin	0.019 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014	2.2	11	0.06
Endrin Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Dieldrin	0.112 J	ND	ND	ND	ND	ND	0.005 J	0.002 J	ND	ND	0.005	0.039	0.2	0.1
SEMIVOLATILE ORGANIC COMPOUNDS														
Acenaphthene	1.2 J	ND	0.438	1.46 J	1.23	ND	ND	ND	ND	ND	20	100	100	98
Acenaphthylene	ND	ND	0.31	0.595 J	0.398 J	ND	ND	ND	ND	ND	100	100	100	107
Anthracene	2.25	0.73 J	ND	1.76 J	2.8	ND	0.303 J	0.229 J	ND	ND	100	100	100	1000
Benz(a)anthracene	7.17	1.45 J	ND	2.58 J	5.7	ND	1.08	0.756 J	0.588	0.28 J	1	1	1	1
Benzo(a)pyrene	6.37	0.908 J	ND	1.68 J	4.87	ND	0.997	0.669 J	0.541	0.24 J	1	1	1	22
Benzo(b)fluoranthene	6.76	0.663 J	ND	1.14 J	5.02	ND	1.04	0.656 J	0.627	0.35 J	1	1	1	1.7
Benzo(g,h,i)perylene	4.25	0.354 J	ND	0.908 J	2.98	ND	0.682	0.536 J	0.384	0.22 J	100	100	100	1000
Benzo(k)fluoranthene	5.41	0.762 J	ND	1.02 J	3.03	ND	0.702	0.482 J	0.399	0.22 J	0.8	1	3.9	1.7
Chrysene	8.83	1.3 J	ND	2.88 J	5.93	0.27 J	1.18	0.841 J	0.689	0.409 J	1	1	3.9	1
Dibenz(a,h)anthracene	1.56 J	ND	ND	ND	1.06	ND	0.246 J	ND	ND	ND	0.33	0.33	0.33	1000
Fluoranthene	18.8	2.29 J	ND	4.36 J	13.5	0.478	2.32	1.45 J	1.2	0.498 J	100	100	100	1000
Fluorene	1.06 J	0.283 J	0.23 J	1.14 J	1.18	ND	ND	0.35 J	ND	ND	30	100	100	386
Indeno(1,2,3-cd)pyrene	4.89	0.458 J	ND	0.829 J	3.51	ND	0.765	0.507 J	0.423	0.21 J	0.5	0.5	0.5	8.2
Naphthalene	0.88 J	ND	2.7	0.701 J	0.44 J	0.38 J	ND	46 J	ND	0.212 J	12	100	100	12
Phenanthrene	15.1	1.4 J	0.58	5.11 J	10.6	0.587	1.19	1.4 J	0.56	0.58	100	100	100	1000
Pyrene	16	2 J	ND	7.75 J	11.4	0.427 J	1.99	1.3 J	1.0	0.49	100	100	100	1000
TiCs	33.4 J	18.5 J	4 J	47.1 J	26.4 J	24.6 J	3 J	178 J	8.8 J	48 J	NA	NA	NA	NA
VOLATILE ORGANIC COMPOUNDS														
Acetone	ND	ND	ND	0.25 J	NA	0.062	NA	NA	NA	0.38 J	0.05	100	100	0.05
Toluene	ND	ND	ND	0.015	NA	ND	NA	8.06	NA	0.219 J	0.7	100	100	0.7
1,1,1-Trichloroethane	0.007	ND	ND	ND	NA	ND	NA	ND	NA	0.101 J	0.68	100	100	0.68
1,1-Dichloroethane	ND	ND	ND	ND	NA	ND	NA	ND	NA	0.192 J	0.27	19	26	0.27
1,1-Dichloroethene	ND	ND	ND	ND	NA	ND	NA	ND	NA	0.007 J	0.33	100	100	0.33
1,2-Dichloroethane	ND	ND	ND	ND	NA	ND	NA	ND	NA	0.014	0.02	2.3	3.1	0.02
Benzene	ND	ND	0.082 J	ND	NA	ND	NA	ND	NA	0.007 J	0.06	2.9	4.8	0.06
cis-1,2-Dichloroethene	0.004 J	152.0	0.36	0.004 J	NA	ND	NA	ND	NA	0.417 J	0.25	59	100	0.25
Ethylbenzene	ND	ND	0.18	0.005 J	NA	ND	NA	168	NA	0.051 J	1	30	41	1
m,p-Xylene	ND	ND	ND	0.017 J	NA	0.005 J	NA	595	NA	0.172 J	0.26	100	100	1.6
Methylene chloride	ND	ND	ND	0.018 J	NA	ND	NA	ND	NA	0.02 J	0.05	51	100	0.05
n-Propylbenzene	ND	ND	ND	ND	NA	ND	NA	11.5	NA	0.01 J	3.9	100	100	3.9
sec-Butylbenzene	ND	ND	ND	ND	NA	ND	NA	8.5	NA	0.007 J	11	100	100	11
Tetrachloroethene	ND	ND	ND	ND	NA	ND	NA	ND	NA	0.019 J	1.3	5.5	19	1.3
Trichloroethene	0.206	ND	ND	ND	NA	ND	NA	ND	NA	0.16 J	0.47	10	21	0.47
trans-1,2-Dichloroethene	ND	2.3 J	ND	ND	NA	ND	NA	ND	NA	ND	0.19	100	100	0.19
Vinyl chloride	ND	30.7	0.2	ND	NA	ND	NA	ND	NA	0.086 J	0.02	0.21	0.9	0.02
1,2,4-Trimethylbenzene	ND	ND	ND	0.008 J	NA	ND	NA	91.4	NA	0.097 J	3.6	47	52	3.6
1,3,5- Trimethylbenzene	ND	ND	ND	0.006 J	NA	ND	NA	44.3	NA	0.041 J	8.4	47	52	8.4
TiCs	0.09 J	ND	0.35 J	1.16 J	NA	6.91 J	NA	1790 J	NA	18.1 J	NA	NA	NA	NA

ND - Non-Detect NA - Not Applicable All Data is Validated J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

>/- to Residential/Restricted-Residential SCO and Unrestricted Use SCO

All values in ppm

>Unrestricted Use SCO but <Residential/Restricted-Residential SCO. VOCs Only: >Unrestricted Use/Protection of GW SCOs but <Residential/Restricted-Residential SCO

>Unrestricted Use & Residential SCO but <Restricted-Residential SCO

Table 3
31 Tonawanda Street Building
Sub Slab Vapor Ambient Air Analytical Results
EPA Air Method Toxic Organics -15 (TO-15)

Sample Date	Sample Identification												NYSDOH Minimum Action Levels ^a	
	8/21/18	8/21/18	8/21/18	8/21/18	8/21/18	8/21/18	8/21/18	8/21/18	8/21/18	8/21/18	8/21/18	8/21/18	Sub Slab Vapor Concentration	Indoor Air Concentration
TO-15 Contaminants	IA-01 Indoor	SS-01 Sub Slab	IA-02 Indoor	SS-02 Sub Slab	SS-03 Sub Slab	IA-03 Indoor	SS-06 Sub Slab	IA-04 Indoor	SS-04 Sub Slab	SS-05 Sub Slab	IA-05 (1) Indoor	OA-01 Outdoor		
VOLATILE ORGANIC COMPOUNDS^b														
1,1,1-Trichloroethane	2.8	78 J	9.2	350 J	290 J	5	68 J	34	59	16	1700	ND	100	3
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	8.2	ND	2.9	ND	6	0.2
1,2,4-Trimethylbenzene	1.4	9.9 J	2.4	9.3 J	8.6 J	1.4	2.5 J	1.4	5.5 J	4.7 J	7.3 J	0.69		
1,3,5-Trimethylbenzene	ND	3.4	0.88	3.3 J	3 J	0.59	0.79 J	ND	2.7 J	2.1 J	3.4 J	ND		
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2,2,4-Trimethylpentane	0.61	0.79	1.4	1.8	3.5 J	1.7	1.4	0.89	0.51	1.7	0.51	ND		
4-Ethyltoluene	ND	2.5 J	ND	2.4 J	2.2 J	ND	ND	ND	1.4 J	1.1 J	1.8 J	ND		
Acetone	19	910	17	1200 J	140 J	12	140	17	170	49	77	20		
Benzene	1.6	4.8 J	2.3	4.6 J	ND	1.7	2 J	0.93	4.6	1.6	0.99	0.54		
Carbon disulfide	ND	17	ND	18 J	31 J	ND	2.7	ND	27	1.3	ND	ND		
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	0.2
Chloroethane	ND	ND	ND	ND	ND	0.68	0.34	0.7	7.7	ND	0.63	ND		
Chloroform	ND	1.3	ND	1.8 J	1.9 J	ND	ND	ND	2.4	ND	1.4	ND		
Chloromethane	0.89	0.35	0.81	0.54 J	0.62 J	ND	0.6	ND	1.7	ND	2.1	0.66		
cis-1,2-Dichloroethene	ND	ND	ND	0.79 J	ND	ND	0.71	ND	0.75	ND	5.5	ND	6	0.2
Cyclohexane	0.62	280	0.79	390 J	560 J	0.45	65	ND	68	9.6	1.4	ND		
Ethyl acetate	0.43	7.4	ND	5.3 J	11 J	ND	2.5	ND	3.9	1.5	5	ND		
Ethylbenzene	0.91	11 J	2.3	7.9 J	8.2 J	1.7	2.3 J	0.78	1.1 J	1.3 J	0.82 J	ND		
Freon 11	9.6	4.5	4.3	3.5 J	2.4 J	2.3	1.6	1.8	2	2.2	1.7	1.1		
Freon 113	ND	ND	ND	ND	J	ND	ND	ND	ND	ND	ND	ND		
Freon 12	1.9	2	2.1	2.4 J	J	2.3	2	2	ND	1.8	1.9	1.9		
Heptane	1.3	72 J	2	39 J	J	1.8	7.4 J	1.3	23	4.7 J	3.6 J	0.57		
Hexane	5	89	6.6	150 J	510	3.7	19	2.2	41	16	2.5	0.7		
Isopropyl alcohol	19	51 J	6.1	650 J	J	2.7	16 J	3.1	19	13 J	25 J	6.6		
m&p-Xylene	3	22 J	8.4	17 J	J	6.5	5.3 J	2.7	2.7 J	4 J	1.9 J	0.61		
Methyl Ethyl Ketone	2.4	69	2.9	110 J	J	1.9	14	1.4	10	3.1	6.4	1.1		
Methylene chloride	ND	3.5	0.63	2.6 J	J	ND	1.3	0.69	3.4	1.6	4.7	ND	100	3
o-Xylene	1.3	7.6 J	2.6	5.8 J	J	2	1.9 J	1.1	1.1 J	1.4 J	0.91 J	ND		
Tetrachloroethylene	ND	2500 J	ND	2900 J	2100 J	ND	390 J	ND	3.9 J	2.1 J	1 J	ND	100	3
Toluene	57	430 J	38	640 J	790 J	15	63 J	7.9	59 J	24 J	21 J	3.2		
Trichloroethene	49	150 J	9	620 J	650 J	4.4	40 J	20	81	83	230	1.3	6	0.2
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	0.2

Results and Action levels are presented in micrograms per meters cubed (ug/m³).

All data has been validated

N/A - Not Applicable ND - Non-detect (1) - Sample from Sub Floor Crawlspace

J - Analyte positively identified; the associated numerical value is approximate concentration of the analyte in the sample.

^aNew York State Department of Health (NYSDOH), Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 and subsequent updates (select matrix compounds).

^bCompounds with detected concentrations

NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, May 2017 Decision Matrices Notes:

NO FURTHER ACTION:

Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub -slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures

IDENTIFY SOURCE(S) AND RESAMPLE OR MITIGATE:

The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample.

Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers capped or by storing VOC-containing products in places where people do not spend much time, such as a garage or shed).

Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

MONITOR:

Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub-slab vapor have changed.

Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed.

The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions.

Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE:

Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions.

TABLE 5
31 TONAWANDA STREET - RI GW SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification					Date Sampled: 9/24/18	Sampled 2/4/19	NYSDEC
	MW-1	MW-2	MW-3	MW-4	MW-5	SBH-3 (2)	TOGS 1.1.1. GA (1)	
METALS								
Arsenic	ND	ND	ND	ND	0.02	NA	25	
Barium	0.05 J	ND	0.26	0.11	0.06 J	NA	1000	
Beryllium	ND	ND	ND	ND	ND	NA	3	
Chromium	ND	5.0 J	ND	ND	ND	NA	50	
Copper	ND	20.2	ND	0.01	0.01 J	NA	200	
Cyanide	ND	ND	ND	ND	ND	NA	200	
Lead	ND	6.2 J	ND	ND	ND	NA	25	
Manganese	7.23	547	0.62	0.65 J	1.15	NA	300	
Nickel	ND	ND	ND	ND	ND	NA	100	
Total Mercury	ND	ND	ND	ND	ND	NA	0.7	
Zinc	0.05 J	38.9 J	ND	0.97	ND	NA	2000	
Selenium	ND	ND	ND	ND	ND	NA	10	
PCBs								
PCB 1254	ND	ND	ND	ND	ND	NA	0.09	
PCB-1260	1.81 J	1.22 J	ND	ND	ND	NA	0.09	
PESTICIDES								
Aldrin	0.057 J	ND	ND	ND	0.12	NA	ND	
alpha-BHC	ND	ND	ND	ND	0.08 J	NA	NA	
beta-BHC	ND	ND	ND	ND	ND	NA	NA	
Dieldrin	ND	ND	ND	ND	0.07 J	NA	0.004	
Endrin	ND	ND	ND	ND	0.13 J	NA	ND	
Heptachlor	ND	ND	0.104 J	ND	0.1 J	NA	0.04	
Heptachlor Epoxide	ND	ND	ND	ND	0.16 J	NA	0.03	
trans-Chlordane	ND	ND	ND	ND	0.06 J	NA	NA	
SEMIVOLATILE ORGANIC COMPOUNDS								
Bis (2-ethylhexyl) phthalate	ND	ND	49.2	ND	ND	NA	5	
Volatile Organic Compounds								
Acetone	12.9 J	5.13 J	ND	5.94 J	17.5	ND	50	
1,1,1-Trichloroethane	ND	1.21 J	188000 J	ND	ND	51.1	5	
1,1-Dichloroethane	ND	ND	75700	1.63 J	3.52	42	5	
1,1-Dichloroethene	ND	ND	2510 J	ND	ND	3.13 J	5	
cis-1,2-Dichloroethene	ND	2.1 J	37500	5.26	ND	369	5	
1,2,4-Trimethylbenzene	ND	ND	ND	ND	3.03	ND	5	
1,3,5-Trimethylbenzene	ND	ND	ND	ND	1.15 J	ND	5	
1,4-Dioxane	ND	ND	ND	ND	49.4	ND	1	
Trichloroethene	ND	ND	ND	4.32	1.69 J	194	5	
trans-1,2-Dichloroethene						3.5 J	5	
Vinyl chloride	ND	ND	5080	1.69 J	ND	147	2	
Carbon disulfide	ND	3.45	ND	ND	ND	ND	NA	
TICs	ND	ND	ND	ND	518 J	NA	NA	
Field Parameters								
Turbidity (NTU)	69.4	10.2	2.3	13.2	17.3	NA	NA	
pH	6.81	6.95	6.28	6.98	6.64	NA	NA	
Dissolved Oxygen	0	0	0	0	0	NA	NA	
Temp (degrees C)	15.82	14.74	15.93	17.87	16.71	NA	NA	
Conductivity	3.65	8.44	1.47	1.12	2.75	NA	NA	

All values in ppb

N/A - Not Applicable ND - Non-detect

All Data is Validated

(1) - TOGs 1.1.1. GA - Technical and Operational Guidance Series (1.1.1) Source of Drinking Water (Groundwater)

(2) - Groundwater sample from Crawl Space SBH-3 boring

Exceeds TOGs Guidance Value

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

TABLE 10
31 TONAWANDA STREET - CRAWL SPACE SOIL BORING SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification						Date Sampled: 2/4/19				PART 375 Soil Cleanup Objectives		
	SBH-1 (2-4')	SBH-1 (8')	SBH-1 (16')	SBH-3 (10 -11')	SBH-4 (8')	SBH-4 (10')	SBH-4 (12')	SBH-5 (4')	SBH-5 (8')	SBH-5 (12')	Unrestricted Use	Residential	Restricted Residential
VOLATILE ORGANIC COMPOUNDS													
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	100	100
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	100	100
1,1,1-Trichloroethane	ND	0.075	ND	0.29	37 J	ND	ND	0.18	4.23	667	0.68	100	100
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND			0.27	19	26
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	0.079 J	17.9	0.33	100	100
1,1-Dichloroethane	ND	ND	ND	0.075	ND	ND	ND	0.035 J	1.79	246	0.02	2.3	3.1
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06	2.9	4.8
cis-1,2-Dichloroethene	ND	ND	0.012	0.46	35.4 J	1970	1.29	ND	1.47	221	0.25	59	100
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	30	41
m,p-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	100	100
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	51	100
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	100	100
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	100	100
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	5.5	19
Trichloroethene	3.26	2.56	0.009	3.89	1660	7340	0.72	3.65	11.5	474	0.47	10	21
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	0.03	ND	0.19	7.12	0.19	100	100
Vinyl chloride	ND	ND	0.039	ND	ND	ND	0.034	ND	ND	4.02 J	0.02	0.21	0.9
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	47	52
1,3,5- Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.4	47	52

ND - Non-Detect NA - Not Applicable

All Data is Validated

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

>/= to Residential/Restricted-Residential SCO and Unrestricted Use SCO

All values in ppm

>Unrestricted Use SCO but <Residential/Restricted-Residential SCO

>Unrestricted Use & Residential SCO but <Restricted-Residential SCO

**57-71 TONAWANDA STREET
SITE NO. C915024**

**1989 CRA
SITE INVESTIGATION REPORT**

TABLE 4
TCL VOLATILES DETECTED IN SOIL SAMPLES
(Reported in ppm)

	<i>SS1</i>	<i>SS2</i>	<i>SS3</i>	<i>SS4</i>	<i>SS5</i>	<i>SS6</i>	<i>MW1</i>	<i>MW2</i>
Ethylbenzene(0.25)*	ND	ND	ND	0.47/ND	ND	ND	ND	ND
Methylene Chloride (0.25)	ND	ND	ND	ND/ND	ND	ND	ND	0.61
Trichlorethylene (0.25)	ND	ND	0.32	0.35/ND	ND	ND	ND	15
Toluene (0.25)	ND	ND	ND	0.46/ND	0.29	0.47	ND	ND
Styrene (0.25)	ND	ND	ND	5.6/ND	ND	ND	ND	ND
o-Xylene (0.25)	ND	ND	ND	0.84/1.13	ND	ND	ND	ND
m/p-Xylene (0.25)	ND	ND	ND	0.50/0.47	ND	ND	ND	ND

Note: All other TCL Volatile parameters were not detected in any of the samples.

* Detection Limit in ppm.

TABLE 5

TCL VOLATILES DETECTED IN GROUNDWATER SAMPLES
(Reported in ppb)

	<i>MW1-89</i>	<i>MW2-89</i>
Vinyl Chloride (10)*	99/100	350
Ethylbenzene (5.0)	9.1/11	ND
1,1-Dichloroethane (5.0)	41/40	39
1,1-Dichloroethylene (5.0)	ND/ND	15
1,2-Dichloroethylene (5.0)	ND/ND	12
1,1,1-Trichloroethane (5.0)	22/23	22
Trichloroethylene (5.0)	ND/ND	310
Benzene (5.0)	60/63	76

Note: All other TCL Volatile parameters were not detected in any of the samples.

* Detection Limit in ppb.

**1992 NYSDEC
PHASE II INVESTIGATION REPORT**

Table 4-4
INORGANIC ELEMENTS FOUND IN GROUNDWATER

Analyte	Range ($\mu\text{g/L}$)	NYSDEC Class GA Groundwater Standard or Guidance Value ($\mu\text{g/L}$)	Samples Exceeding Standard	
			Sample Number	Concentration ($\mu\text{g/L}$)
Aluminum	ND - 845	NA	--	--
Arsenic	ND - 2.4**	25	--	--
Barium	44.5 - 60.4***	1,000	--	--
Calcium	76,800 - 129,000	NA	--	--
Iron	489 - 2,130	300	GW-1 GW-2 GW-3	2,130 489 638
Lead	3.1 - 4.5	25	--	--
Magnesium	11,700 - 53,100	35,000*	GW-1 GW-3	53,100 35,900
Manganese	123 - 299	300	--	--
Potassium	3,650 - 11,600**	NA	--	--
Sodium	47,200 - 516,000	20,000	GW-1 GW-2 GW-3	516,000 47,200 173,000
Zinc	71.3 - 447	30	GW-1 GW-2 GW-3	447 94.4 71.3
Cyanide	ND - 27,900	100	GW-1	27,900
02[UZ]YP6080:D3264/6304/20				

*Guidance value.

**Analyte present in sample. Reported value may be biased low.

***Analyte present in sample. Quantitation may not be accurate.

Key:

NA = No standard.

ND = Not detected in concentrations significantly higher than in blank.

Source: Ecology and Environment Engineering, P.C. 1991.

Table 4-5
ORGANIC COMPOUNDS FOUND IN GROUNDWATER

Compound	Range ($\mu\text{g/L}$)	NYSDEC Class GA Groundwater Standard ($\mu\text{g/L}$)	Samples Exceeding Standard	
			Sample Number	Concentration ($\mu\text{g/L}$)
Volatiles*				
1,1-Dichloroethane	ND - 53	5	GW-2	53
Total-1,2-Dichloroethene	ND - 340	5**	GW-2	340
1,1,1-Trichloroethane	ND - 370	5	GW-2	370
Trichloroethene	ND - 640	5	GW-2	640
Semivolatiles				
Phenol	ND - 16	1	GW-3	16
Pesticides/PCBs				
Delta BHC	ND - 0.073	NA	--	--

02[UZ]YP6080:D3264/6305/19

*Volatile results for GW-1 and GW-3 are considered as estimates due to surrogate recoveries and/or internal standard problems indicating matrix interferences.

**Groundwater Standard given is for trans-1,2-dichloroethene, although the reported results are for total-1,2-dichloroethene.

Key:

NA = No state standard or guidance value listed.

ND = Not found at or above detection limit.

Source: Ecology and Environment Engineering, P.C. 1991.

Table 4-6
INORGANIC ELEMENTS FOUND IN SURFACE WATER

Analyte	Range ($\mu\text{g/L}$)	NYSDEC Standard ($\mu\text{g/L}$)	Samples Exceeding Standard	
			Sample Number	Concentration ($\mu\text{g/L}$)
Barium	60.1 - 64.3*	NA		
Calcium	169,000 - 176,000	NA		
Iron	582 - 1,130	300	SW-1	784
			SW-2	1,130
			SW-3	582
Lead	7.5 - 15.0	90		
Magnesium	23,200 - 23,800	NA		
Manganese	54.2 - 62.5	NA		
Potassium	3,680 - 3,850*	NA		
Sodium	56,000 - 58,100	NA		
Zinc	35.1 - 54.6	30	SW-1	54.6
			SW-2	45.9
			SW-3	35.1

02[UZ]YP6080:D3264/6306/25

Note: NYSDEC Class B ambient water standards are used. Lead standard calculated based on a hardness of 1,390 mg/L (ppm).

*Inorganic analyte present. Quantitation may not be accurate.

Key:

NA = No standard.
ND = Not detected.

Source: Ecology and Environment Engineering, P.C. 1991.

Table 4-7
INORGANIC ELEMENTS FOUND IN SEDIMENTS

Element	Range (mg/kg)	Common Range for Eastern U.S. Soils (mg/kg)*	Samples Exceeding Common Range	
			Sample Number	Concentration (mg/kg)
Aluminum	1,480 - 10,800	7,000 - >100,000	--	
Arsenic	[2.7]*** - 11.0***	<0.1 - 73	--	
Barium	[23.1] - 238	10 - 1,500	--	
Cadmium	4.5 - 10.6	0.01 - 0.70**	SED-1 SED-2 SED-3	10.6 4.5 4.5
Calcium	9,470 - 136,000	100 - 280,000	--	
Chromium	16.8*** - 76.7***	1 - 1,000	--	
Cobalt	ND - [8.0]	<0.1 - 70	--	
Copper	192 - 390	<1 - 700	--	
Iron	13,300 - 25,800	100 - >100,000	--	
Lead	502 - 9,890	<10 - 300	SED-1 SED-2 SED-3	615 502 9,890
Magnesium	1,840 - 12,400	50 - 50,000	--	
Manganese	109 - 536	<2 - 7,000	--	
Mercury	ND - 1.8	0.01 - 3.4	--	
Nickel	23.1 - 42.9	<5 - 700	--	
Potassium	[161] - [1,280]	50 - 37,000	--	
Selenium	ND - [1.2]***	<0.1 - 3.9	--	
Sodium	ND - [1,340]	<500 - 50,000	--	
Vanadium	[6.0]*** - 32.4***	<7 - 300	--	
Zinc	824 - 918	<5 - 2,900	--	

02[UZ]YP6080:D3264/6307/23

*Shacklette and Boerngen, 1984, "Elemental Concentrations in Soils and Other Surficial Materials of the Conterminous United States," USGE Professional Paper 1270.

**W.L. Lindsay, 1979, Chemical Equilibria in Soils, John Wiley and Sons.

***Analyte present. Reported value may be biased low. Actual value expected to be higher.

Key:

[] = Analyte present below CRDL but above IDL. Quantitation may not be accurate.

ND = Not detected.

Source: Ecology and Environment Engineering, P.C. 1991.

Table 4-8
ORGANIC COMPOUNDS FOUND IN SEDIMENTS

Compound	Sample Number	Concentration ($\mu\text{g/kg}$)
Volatiles		
Total-1,2-Dichloroethene	SED-3	13
Trichloroethene	SED-3	17
Tetrachloroethane	SED-3	85
Semivolatiles		
Total PAHs	SED-1	360,000
	SED-3	6,600
02[UZ]YP6080:D3264/4606/35		

Source: Ecology and Environment Engineering, P.C.
1991.

Table 4-9

INORGANIC ELEMENTS FOUND IN SUBSURFACE SOILS

Analyte	Range (mg/kg)	Common Range for Eastern U.S. Soils (mg/kg)*	Samples Exceeding Common Range	
			Sample Number	Concentration (mg/kg)
Aluminum	5,310 - 10,800	7,000 - >100,000	--	--
Antimony	ND - 12.3**	<1 - 8.8	--	--
Arsenic	2.1** - 37.1**	<0.1 - 73	--	--
Barium	62.0 - 185	10 - 1,500	--	--
Beryllium	ND - 0.53	<1 - 7	--	--
Cadmium	2.2 - 7.0	0.01 - 0.70***	SB-1A	7.0
			SB-1B	6.2
			SB-1C	2.5
			SB-1D	2.5
			SB-2A	2.5
			SB-2B	2.6
			SB-2C	3.5
			SB-3A	3.7
			SB-3B	2.9
			SB-3C	3.9
			SB-3D	3.1
			SB-4A	5.7
			SB-4B	3.5
			SB-4C	2.2
			SB-4D	2.7
Calcium	2,010 - 125,000	100 - 280,000	--	--
Chromium	12.6** - 304**	1 - 1,000	--	--
Cobalt	ND - 15.5	<0.1 - 70	--	--
Copper	14.1 - 269	<1 - 700	--	--
Iron	15,100 - 41,700	100 - >100,000	--	--
Lead	9.1 - 456	<10 - 300	SB-2A	380
			SB-2C	431
			SB-3A	456
			SB-4A	391
Magnesium	3,060 - 21,300	50 - 50,000	--	--
Manganese	139 - 15,900	<2 - 7,000	SB-1A	15,900
			SB-3A	9,750
Mercury	ND - 1.2	0.01 - 3.4	--	--
Nickel	9.0 - 36.6	<5 - 700	--	--
Potassium	484 - 2,380	50 - 37,000	--	--
Selenium	ND - 0.30**	<0.1 - 3.9	--	--
Silver	ND - 2.1	0.01 - 5	--	--

02[UZ]YP6080:D3264/6308/25

Key at end of table.

Table 4-9 (Cont.)

Analyte	Range (mg/kg)	Common Range for Eastern U.S. Soils (mg/kg)*	Samples Exceeding Common Range	
			Sample Number	Concentration (mg/kg)
Sodium	271 - 539	<500 - 50,000	--	--
Vanadium	14.3** - 140**	<7 - 300	--	--
Zinc	60.2 - 718	<5 - 2,900	--	--
Cyanide	ND - 89.5	NA	--	--

02[UZ]YP6080:D3264/6308/25

*Shacklette and Boerngen, 1984, "Elemental Concentrations in Soils and Other Surficial Materials of the Conterminous United States," USGE Professional Paper 1270.

**Analyte present. Reported value may be biased low. Actual value expected to be higher.

***W.L. Lindsay, 1979, Chemical Equilibria in Soils, John Wiley and Sons.

Key:

NA = No standard.

ND = Not detected.

Source: Ecology and Environment Engineering, P.C. 1991.

Table 4-10
ORGANIC COMPOUNDS FOUND IN SUBSURFACE SOILS

Compound	Sample Number	Concentration ($\mu\text{g/kg}$)
Volatiles		
Chloroethane	SB-2B	54
1,1-Dichloroethene	SB-2A	9
	SB-2B	16
1,1-Dichloroethane	SB-2A	160
	SB-2B	630
	SB-2C	1,100*
Total 1,2-Dichloroethene	SB-2B	150
	SB-4B	10
	SB-4C	40
	SB-4D	120
1,2-Dichloroethane	SB-2A	7
1,1,1-Trichloroethane	SB-2A	500
	SB-2B	800
Trichloroethene	SB-1A	14**
	SB-1B	19**
	SB-2A	8
	SB-2B	530
	SB-3A	11**
	SB-3B	6
	SB-4A	80
	SB-4B	81
	SB-4C	220
	SB-4D	460
Toluene	SB-3A	15**
Ethylbenzene	SB-2A	36
	SB-2B	38
	SB-2C	40
Total Xylenes	SB-2A	720
	SB-2B	250
	SB-2C	220
Semivolatiles		
Total PAHs	SB-1A	34,000
	SB-1B	30,000
	SB-2A	15,000
	SB-2B	21,000
	SB-2C	23,000
	SB-3A	3,900
	SB-3B	29,000
	SB-4A	9,400

02[UZ]YP6080:D3264/4914/35

*Value considered estimated since it is above the calibration range. Dilution analysis was not run.

**Value considered estimated due to poor surrogate recoveries and/or internal standard areas. Matrix effect was indicated.

Source: Ecology and Environment Engineering, P.C. 1991.

Table 4-11
ORGANIC ANALYSES SUMMARY

Compound	Sample Number	Concentration ($\mu\text{g/L}$ or $\mu\text{g/kg}$)
Volatiles		
Trichloroethene	GW-2	640
	SED-3	17
	SB-1A	14*
	SB-1B	19*
	SB-2A	8
	SB-2B	530
	SB-3A	11*
	SB-3B	6
	SB-4A	80
	SB-4B	81
	SB-4C	220
	SB-4D	460
Total 1,2-dichloroethene	GW-2	340
	SED-3	13
	SB-2B	150
	SB-4B	10
	SB-4C	40
	SB-4D	120
1,1-Dichloroethane	GW-2	53
	SB-2A	160
	SB-2B	630
	SB-2C	1,100**
1,1,1-Trichloroethane	GW-2	370
	SB-2A	500
	SB-2B	800
Tetrachloroethene	SED-3	85
Chloroethane	SB-2B	54
1,1-Dichloroethene	SB-2A	9
	SB-2B	16
1,2-Dichloroethane	SB-2A	7
Toluene	SB-3A	15
Ethylbenzene	SB-2A	36
	SB-2B	38
	SB-2C	40
Total xylenes	SB-2A	720
	SB-2B	250
	SB-2C	220
Semivolatiles		
Phenol	GW-3	16
Total PAHs	SED-1	360,000
	SED-3	6,600
	SB-1A	34,000
	SB-1B	30,000

02[UZ]YP6080:D3264/4917/35

Key at end of table.

Table 4-11 (Cont.)

Compound	Sample Number	Concentration ($\mu\text{g/L}$ or $\mu\text{g/kg}$)
	SB-2A	15,000
	SB-2B	21,000
	SB-2C	23,000
	SB-3A	3,900
	SB-3B	29,000
	SB-4A	9,500
Pesticides/PCBs		
Delta BHC	GW-2	0.073
02[UZ]YP6080:D3264/4917/35		

*Value considered estimated due to poor surrogate recoveries and/or internal standard areas. Matrix effect was indicated.

**Value considered estimated since it is above the calibration range. Dilution analysis was not run.

Source: Ecology and Environment Engineering, P.C.
1991.

**2020 BE3
REMEDIAL INVESTIGATION REPORT**

TABLE 1

Pg 1 of 2

57-71 TONAWANDA STREET - RI SOIL BORING/TEST PIT SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification										PART 375 Soil Cleanup Objectives		
	BH-01 (1-4')	BH-01 (6-8')	BH-02 (1-2')	BH-03 (1-4')	BH-04 (1-3')	BH-05 (1-4')	BH-06 (1-4')	BH-08 (1-3')	BH-08 (10-12')	BH-10 (1-2')	Unrestricted Use	Residential	Restricted Residential
Sample Date	12/17/2019	12/17/2019	12/18/2019	12/18/2019	12/17/2019	12/18/2019	12/18/2019	12/17/2019	12/17/2019	12/18/2019			
METALS													
Arsenic	2.56	3.10	6.18	3.22	14.4	9.25	4.78	16.80	1.28	6.98	13	16	16
Barium	188.00	95.0	57.70	30.00	87.9	65.00	59.40	89.6	156	114	350	350	400
Beryllium	2.14	0.590	0.77	0.27	1.13	0.41	0.38	0.718	1.17	1.05	7.2	14	72
Cadmium	4.49	1.80	0.76	1.21	1.36	2.14	1.03	1.76	1.33	1.71	2.5	2.5	4.3
Chromium	82.10	17.3	25.90	12.20	17.6	35.70	14.60	29.9	32.4	37	30	36	180
Copper	86.90	14.3	55.40	92.70	23.2	1090.00	151.00	129	16.9	190	50	270	270
Lead	97.20	9.46	71.30	1390.00	160	273.00	161.00	152	9.76	185	63	400	400
Manganese	15000.00	465	1430.00	483.00	594	2150.00	661.00	578	1010	6360	1600	2,000	2,000
Total Mercury	0.04	0.01	0.28	0.07	0.167	0.22	0.05	0.128	0.0212	0.856	0.18	0.81	0.81
Nickel	44.10	19.4	13.50	11.60	8.49	27.40	11.10	17.8	32.0	14.2	30	140	310
Selenium	3.51	ND	1.00	ND	1.59	0.93	ND	1.49	2.93	1.05	3.9	36	180
Silver	4.75	0.50	0.39	0.53	0.53	1.20	0.48	0.80	ND	1.41	2	36	180
Zinc	287.00	57.3	270.00	157.00	1810	394.00	218.00	1350	72.0	956	109	2200	10,000
Cyanide	ND	0.704	101.00	4.30	188	ND	ND	26.1	ND	19.2	27	27	27
PCBs													
PCB-1254	ND	ND	ND	ND	ND	ND	0.034	ND	ND	ND	0.1	1	1
PCB-1260	ND	ND	ND	0.031	ND	ND	ND	ND	ND	ND	0.1	1	1
PESTICIDES													
4,4-DDT	ND	ND	ND	0.006	0.004	0.010	0.007	0.009 J	ND	ND	0.0033	1.7	7.9
4,4-DDD	ND	ND	ND	ND	0.007	0.011	ND	0.007 J	ND	ND	0.0033	2.6	13
4,4-DDE	ND	ND	ND	ND	ND	0.002	ND	ND	ND	ND	0.0033	1.8	8.9
delta-BHC	ND	ND	ND	ND	0.003 J	ND	ND	ND	ND	ND	0.04	100	100
Endosulfan II	ND	ND	0.003	ND	0.002	0.002	ND	ND	ND	ND	2.4	4.8	24
Endosulfan Sulfate	ND	ND	0.004	0.003	0.004	0.014	0.002	0.0011 J	ND	0.001	2.4	4.8	24
Lindane	ND	ND	ND	ND	ND	ND	ND	0.003	ND	ND	0.1	0.28	1.3
Endrin	ND	ND	ND	0.002	ND	0.003	ND	0.004	ND	ND	0.014	2.2	11
SEMIVOLATILE ORGANIC COMPOUNDS													
Acenaphthene	ND	ND	ND	1.83	ND	3.61	ND	0.525	ND	ND	20	100	100
Acenaphthylene	ND	ND	0.48	ND	0.204	ND	ND	0.833	ND	ND	100	100	100
Anthracene	ND	ND	0.69	0.76	0.291	8.9	0.31	2.28	ND	0.32	100	100	100
Benz(a)anthracene	0.152	ND	2.65	2.58	1.27	16.6	1.05	6.09 J	ND	1.68	1	1	1
Benzo(a)pyrene	ND	ND	2.11	2.25	1.01	12.5	0.97	4.71 J	ND	1.19	1	1	1
Benzo(b)fluoranthene	ND	ND	2.45	2.44	0.978	10.9	1.08	5.74 J	ND	1.42	1	1	1
Benzo(g,h,i)perylene	ND	ND	1.27	1.32	0.702	6.23	0.71	2.89	ND	0.71	100	100	100
Benzo(k)fluoranthene	ND	ND	1.46	1.43	1.116	10.1	0.6	3.29	ND	0.92	0.8	1	3.9
Chrysene	ND	ND	2.6	2.17	1.34	13.9	1.05	5.74 J	ND	1.53	1	1	3.9
Dibenz(a,h)anthracene	ND	ND	0.59	0.41	ND	1.85	ND	0.704 J	ND	0.24	0.33	0.33	0.33
Fluoranthene	0.367	ND	6.46	5.01	2.4	37	2.38	16.6	ND	2.73	100	100	100
Fluorene	ND	ND	0.24	0.2	ND	4.02	ND	1.08	ND	ND	30	100	100
Indeno(1,2,3-cd)pyrene	ND	ND	1.96	1.55	0.761	7.71	0.71	3.35 J	ND	0.89	0.5	0.5	0.5
Naphthalene	ND	ND	0.73	0.23	1.117	1.71	ND	0.828	ND	0.79	12	100	100
Phenanthrene	0.358	ND	5.05	2.57	1.94	36.2	1.44	9.85	ND	1.68	100	100	100
Pyrene	0.234	ND	4.27	3.32	1.84	25.1	1.55	12.1	ND	2.2	100	100	100
VOLATILE ORGANIC COMPOUNDS													
Acetone	ND	ND	ND	ND	ND	ND	ND	0.016	0.03	ND	0.05	100	100
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	100	100
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	30	41
m,p-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75	0.26	100	100
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	51	100
cis-1,2-Dichloroethene	ND	0.022	66.1	0.038	8.39	ND	ND	ND	ND	4.6	0.25	59	100
Trichloroethene	0.01	0.008	189	0.077	1.36	0.089	0.004	ND	ND	8.12	0.47	10	21
trans-1,2-Dichloroethene	ND	ND	ND	0.043	ND	0.043	0.007	ND	ND	0.44	0.19	100	100
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	0.21	0.9
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	47	52
1,3,5- Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.4	47	52

ND - Non-Detect NA - Not Applicable

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

>= to Residential/Restricted-Residential SCO and Unrestricted Use SCO

All values in ppm

>Unrestricted Use SCO but <Residential/Restricted-Residential SCO.

Data Validation is Complete

>Unrestricted Use & Residential SCO but <Restricted-Residential SCO

TABLE 1

Pg 2 of 2

57-71 TONAWANDA STREET - RI SOIL BORING/TEST PIT SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification								PART 375 Soil Cleanup Objectives		
	BH-11 (1-4')	BH-11 (6-8')	BH-12 (1-2')	BH-13 (1-2')	TP-14 (8-9')	TP-16 (1-3')	TP-17 (3-4')	MW-4 Soil Sample (12-13')	Unrestricted Use	Residential	Restricted Residential
	12/19/2019	12/19/2019	12/19/2019	12/18/2019	1/8/2020	1/8/2020	1/8/2020	1/14/2020			
METALS											
Arsenic	4.1	5.15	5.17	3.45	2.97	2.55	3.55	NA	13	16	16
Barium	248	132	130	17.9	33.8	44.4	171	NA	350	350	400
Beryllium	0.246	0.972	1.61	0.173	ND	0.181	0.897	NA	7.2	14	72
Cadmium	2.07	1.6	3.01	0.698	0.467	0.248	0.523	NA	2.5	2.5	4.3
Chromium	27.5	26.9	63	10.4	5.82	7.95	25.1	NA	30	36	180
Copper	84.4	21.6	179	345	297	21.8	23.3	NA	50	270	270
Lead	825	9.7	863	165	52.5	74.5	11.7	NA	63	400	400
Manganese	832	555	8640	187	133	175	520	NA	1600	2,000	2,000
Total Mercury	0.217	0.0178	0.239	0.023	0.0638	0.0332	0.0145	NA	0.18	0.81	0.81
Nickel	18.1	31.5	12	11.6	7.02	8.43	28.8	NA	30	140	310
Selenium	0.646	0.994	ND	ND	1.94	1.08	0.673	NA	3.9	36	180
Silver	1.22	0.727	3.22	ND	ND	ND	ND	NA	2	36	180
Zinc	1660	83.6	4240	0.86	92.4	129	64.5	NA	109	2200	10,000
Cyanide	ND	ND	10.3	ND	ND	ND	ND	NA	27	27	27
PCBs											
PCB-1254	ND	ND	0.0486	ND	ND	ND	ND	NA	0.1	1	1
PCB-1260	ND	ND	ND	ND	ND	ND	ND	NA	0.1	1	1
PESTICIDES											
4,4-DDT	ND	ND	0.007 J	ND	0.004	0.004	ND	NA	0.0033	1.7	7.9
4,4-DDD	ND	ND	ND	ND	ND	ND	ND	NA	0.0033	2.6	13
4,4-DDE	0.003	ND	0.002	ND	ND	ND	ND	NA	0.0033	1.8	8.9
delta-BHC	ND	ND	ND	ND	ND	ND	ND	NA	0.04	100	100
Endosulfan II	ND	ND	0.003	ND	ND	ND	ND	NA	2.4	4.8	24
Endosulfan Sulfate	ND	ND	ND	0.002	0.003	0.004	ND	NA	2.4	4.8	24
Lindane	0.005	ND	ND	ND	0.005	ND	ND	NA	0.1	0.28	1.3
Endrin	ND	ND	ND	ND	ND	ND	ND	NA	0.014	2.2	11
SEMIVOLATILE ORGANIC COMPOUNDS											
Acenaphthene	1.92	ND	ND	ND	ND	ND	ND	NA	20	100	100
Acenaphthylene	ND	ND	ND	ND	0.23 J	0.5 J	ND	NA	100	100	100
Anthracene	8.25	0.72	0.55	ND	0.31 J	0.96 J	ND	NA	100	100	100
Benz(a)anthracene	27.9	3.34	2.67	2.46	0.71 J	1.95 J	ND	NA	1	1	1
Benzo(a)pyrene	23.3	2.84	2.42	2.48	0.94 J	1.6 J	ND	NA	1	1	1
Benzo(b)fluoranthene	25.7	2.94	2.59	3.26	0.87 J	1.63 J	ND	NA	1	1	1
Benzo(g,h,i)perylene	13.4	1.98	1.61	ND	0.73 J	1.05 J	ND	NA	100	100	100
Benzo(k)fluoranthene	13.4	1.83	1.48	ND	0.7 J	1.28 J	ND	NA	0.8	1	3.9
Chrysene	23.3	2.7	2.22	2.67	0.77 J	1.78 J	ND	NA	1	1	3.9
Dibenz(a,h)anthracene	4.6	0.61	0.43	ND	0.22 J	0.36 J	ND	NA	0.33	0.33	0.33
Fluoranthene	58.4	7.17	5.56	5.53	1.4 J	4.55 J	ND	NA	100	100	100
Fluorene	2.2	ND	ND	ND	ND	0.27 J	ND	NA	30	100	100
Indeno(1,2,3-cd)pyrene	16.7	2.64	2.14	ND	0.59 J	0.9 J	ND	NA	0.5	0.5	0.5
Naphthalene	ND	ND	ND	ND	ND	ND	ND	NA	12	100	100
Phenanthrene	29.6	3.24	2.39	2.57	0.65 J	2.94 J	ND	NA	100	100	100
Pyrene	41.5	4.81	3.75 J	4	1.1 J	3.12 J	ND	NA	100	100	100
VOLATILE ORGANIC COMPOUNDS											
Acetone	0.015	ND	ND	0.022	ND	ND	ND	ND	0.05	100	100
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	0.7	100	100
Ethylbenzene	ND	ND	0.58 J	ND	ND	ND	ND	ND	1	30	41
m,p-Xylene	0.003	ND	0.11 J	ND	ND	ND	ND	ND	0.26	100	100
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	0.05	51	100
cis-1,2-Dichloroethene	ND	ND	ND	0.004	ND	ND	ND	ND	0.25	59	100
Trichloroethene	ND	ND	ND	0.014	ND	ND	0.038	36.1	0.47	10	21
trans-1,2-Dichloroethene	0.005	ND	ND	0.01	0.003	0.003	ND	ND	0.19	100	100
1,2,4-Trimethylbenzene	0.003	ND	0.13 J	ND	ND	ND	ND	ND	3.6	47	52
1,3,5- Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	8.4	47	52

ND - Non-Detect NA - Not Applicable

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

>= to Residential/Restricted-Residential SCO and Unrestricted Use SCO All values in ppm

>Unrestricted Use SCO but <Residential/Restricted-Residential SCO.

>Unrestricted Use & Residential SCO but <Restricted-Residential SCO

Data Validation is Complete

TABLE 2
57-71 TONAWANDA STREET - RI SURFACE SOIL SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants						PART 375 Soil Cleanup Objectives		
	SS-01 (1) (0-0.5')	SS-02 (1) (0-0.5')	SS-03 (1) (0-0.5')	SS-04 (1) (0-0.5')	SS-05 (1) (0-0.5')	Unrestricted Use	Residential	Restricted Residential
	12/18/2019	12/18/2019	12/18/2019	12/19/2019	12/19/2019			
METALS								
Arsenic	10	2.61	5.02	6.21	5.81	13	16	16
Barium	140	33.5	157	69	112	350	350	400
Beryllium	0.647	ND	ND	0.463	0.758	7.2	14	72
Cadmium	1.99	0.83	5.26	1.76	2.22	2.5	2.5	4.3
Chromium	22.5	16.1	68.3	32.6	22.9	30	36	180
Copper	73.3	41.4	243	343	105	50	270	270
Lead	353	50.5	442	244	350	63	400	400
Manganese	337	551	808	464	786	1600	2,000	2,000
Total Mercury	0.206	0.0222	0.104	0.178	0.142	0.18	0.81	0.81
Nickel	22.7	15.5	61.9	17.2	23.9	30	140	310
Selenium	0.727	ND	6.1	0.683	0.984	3.9	36	180
Silver	0.472	0.387	2.27	0.798	1.4	2	36	180
Zinc	322	469	1100	473	342	109	2200	10,000
Cyanide	ND	ND	0.952	ND	ND	27	27	27
PCBs								
PCB-1254	ND	ND	ND	ND	ND	0.1	1	1
PCB-1260	ND	ND	ND	ND	0.0381 J	0.1	1	1
PESTICIDES								
4,4-DDT	0.007	0.003	ND	0.004	0.008 J	0.0033	1.7	7.9
4,4-DDD	0.002	0.002	ND	0.007	0.003 J	0.0033	2.6	13
4,4-DDE	0.005	ND	ND	ND	0.006 J	0.0033	1.8	8.9
Dieldrin	0.002	ND	ND	ND	ND	0.005	0.039	0.2
delta-BHC	ND	0.002	ND	0.004	ND	0.04	100	100
Endosulfan II	ND	ND	ND	ND	ND	2.4	4.8	24
Endosulfan Sulfate	ND	0.005	0.006	0.012	ND	2.4	4.8	24
Lindane	0.002	0.002	0.009	0.002	0.003	0.1	0.28	1.3
Endrin	ND	ND	ND	0.003	ND	0.014	2.2	11
SEMIVOLATILE ORGANIC COMPOUNDS								
Acenaphthene	ND	ND	ND	ND	ND	20	100	100
Acenaphthylene	ND	ND	ND	ND	0.27	100	100	100
Anthracene	ND	1.27	2.07	1.74	1.87	100	100	100
Benz(a)anthracene	0.33	6.71 J	14.8 J	9.56	1.79	1	1	1
Benzo(a)pyrene	0.31	8.35 J	16.8 J	10.9	1.69	1	1	1
Benzo(b)fluoranthene	0.37	9.97 J	21.3 J	12.5	1.75	1	1	1
Benzo(g,h,i)perylene	ND	6.52 J	13.6 J	9.22	1.06	100	100	100
Benzo(k)fluoranthene	ND	4.24 J	11.3 J	7.49	0.997	0.8	1	3.9
Chrysene	0.32	7.31 J	17.6 J	10.4	1.6	1	1	3.9
Dibenz(a,h)anthracene	ND	1.99 J	4.32 J	2.61	0.36	0.33	0.33	0.33
Fluoranthene	0.63	15.6 J	36.3 J	21.2	3.51	100	100	100
Fluorene	ND	ND	ND	ND	ND	30	100	100
Indeno(1,2,3-cd)pyrene	ND	7.98 J	14.3 J	11.3	1.45	0.5	0.5	0.5
Naphthalene	ND	ND	ND	ND	0.3	12	100	100
Phenanthrene	0.32	6.35 J	11.9 J	7.7	1.94	100	100	100
Pyrene	0.39	10.7 J	0.78 J	14.7	2.4	100	100	100

ND - Non-Detect NA - Not Applicable All data in ppm Data Validation is complete
 >/= to Residential/Restricted-Residential SCO and Unrestricted Use SCO All values in ppm
 >Unrestricted Use SCO but <Residential/Restricted-Residential SCO.
 >Unrestricted Use & Residential SCO but <Restricted-Residential SCO

(1) SS-01 - Surface soil sample collected with shovel

TABLE 5
57-71 TONAWANDA STREET - RI GROUNDWATER SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	MW-1	MW-2	MW-3	MW-4	MW-5	NYSDEC TOGS 1.1.1. GA
Sample Date	1/22/2020	1/22/2020	1/22/2020	1/23/2020	1/23/2020	
DISSOLVED METALS						
Arsenic	ND	ND	ND	24.3	12.6	25
Barium	66.5	144	175	ND	ND	1000
Beryllium	ND	ND	ND	ND	ND	3
Chromium	ND	ND	ND	ND	ND	50
Copper	ND	ND	ND	ND	ND	200
Cyanide	ND	ND	ND	ND	ND	200
Lead	7	ND	42.7	ND	ND	25
Manganese	31.6	694	2690	321	365	300
Nickel	ND	ND	ND	ND	ND	100
Total Mercury	ND	ND	ND	ND	0.14	0.7
Zinc	256	ND	ND	ND	ND	2000
Selenium	ND	15.4	18.3	16.3	ND	10
PCBs						
PCBs	ND	ND	ND	ND	ND	NA
PESTICIDES						
Dieldrin	ND	ND	ND	ND	ND	0.004
Heptachlor	ND	ND	ND	ND	ND	0.04
Heptachlor Epoxide	ND	ND	ND	ND	ND	0.03
SEMIVOLATILE ORGANIC COMPOUNDS						
SVOCs	ND	ND	ND	ND	ND	NA
Volatile Organic Compounds						
Acetone	17.4	408	157	409	9.73	50
1,1,1-Trichloroethane	1	14.7	ND	ND	ND	5
1,1-Dichloroethane	ND	57	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	2.58	55.4	ND	ND	ND	5
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	5
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	5
1,4-Dioxane	0.149	52.1	1.36	0.473	ND	1
Trichloroethene	13	22.5	1.27	7370	1.28	5
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	5
Vinyl chloride	ND	35.3	ND	ND	ND	2
Well Development Field Parameters						
Turbidity (NTU)	11.0	19.5	13.2	27.5	ND	NA
pH	7.53	7.28	6.75	7.16	ND	NA
Dissolved Oxygen	6.31	7.25	1.45	4.33	ND	NA
Temp (degrees C)	6.01	8.29	8.53	9.36	ND	NA
Conductivity	1.08	0.92	2.23	5.84	ND	NA

All values in ppb

"J" = Result estimated between the quantitation limit and half the quantitation limit.

L = Laboratory Control Sample recovery outside accepted QC limits.

N/A - Not Applicable ND - Non-detect

(1) - TOGs 1.1.1 GA - Technical and Operational Guidance Series (1.1.1) Source of Drinking Water (Groundwater)

Exceeds TOGs Guidance Value

TABLE 9
57-71 TONAWANDA BUILDING - SUB SLAB VAPOR ANALYTICAL RESULTS SUMMARY
EPA Air Method Toxic Organics -15 (TO-15)

Contaminants	Sample Identification						NYSDOH (1)
	SSV-01	SSV-02	SSV-03	SSV-04	SSV-05	SSV-06	Sub Slab Vapor Concentration
	Sub Slab	Sub Slab	Sub Slab	Sub Slab	Sub Slab	Sub Slab	Decision Matrix - Min Action Level
	3/5/2020	3/5/2020	3/5/2020	3/5/2020	3/5/2020	3/5/2020	ug/m3
Volatile Organic Compounds (2)							
1,1,1-Trichloroethane	ND	ND	0.65	25	ND	15	100
1,1,2-Trichloroethane	ND	ND	0.93	ND	ND	ND	
1,1-Dichloroethane	ND	ND	ND	1.3	ND	ND	6
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	
2,2,4-trimethylpentane	ND	ND	ND	ND	ND	ND	
1,2-Dichloropropane	ND	ND	ND	7.2	ND	ND	
1,3-butadiene	ND	ND	ND	7.1	ND	ND	
1,4-Dioxane	ND	ND	ND	ND	ND	2.7	
4-ethyltoluene	ND	ND	ND	ND	ND	ND	
Acetone	8.8	31	15	31	17	110	
Benzene	0.8	5.8	1.8	2.6	26	2.10	
Carbon disulfide	ND	2.1	1.3	0.3	1.7	17	
Carbon tetrachloride	ND	2.8	ND	ND	ND	ND	6
Chloroethane	ND	ND	ND	ND	ND	ND	
Chloroform	ND	ND	8.0	3.7	14	ND	
Chloromethane	ND	ND	ND	ND	ND	ND	
cis-1,2-Dichloroethene	ND	ND	4.0	38	ND	1.0	6
Cyclohexane	1.5	17	8.3	10	ND	14	
Ethyl acetate	ND	1.7	ND	0.54	ND	ND	
Ethylbenzene	ND	ND	ND	ND	ND	ND	
Freon 11	1.3	1.1	1.2	1.1	1.1	1.2	
Freon 12	2.6	2.6	2.5	2.4	2.3	2.5	
Heptane	ND	16	23	ND	420	11	
Hexane	2.5	19	41	12	720	13	
Isopropyl alcohol	5.1 J	5.9 J	ND	2.6 J	ND	8.4 J	
m&p-Xylene	ND	0.74	0.43	0.61	2.4	0.5	
Methyl Ethyl Ketone	0.65	2.7	2.4	3.0	ND	6	
Methylene chloride	0.9	4.7	3.2	3	3.5	4.6	100
Propylene	ND	ND	ND	6.7	ND	ND	
o-Xylene	ND	ND	ND	ND	ND	ND	
Styrene	ND	ND	ND	ND	ND	ND	
Tetrachloroethylene	ND	ND	ND	1.2	1.8	0.68	100
Toluene	1.4	7.5	2.9	5	18	3.4	
trans-1,2-Dichloroethene	ND	ND	ND	4	ND	0.9	
Trichloroethene (TCE)	5.7	5.2	7400 (3)	4700 (3)	19000 (3)	93 (3)	6
Vinyl chloride	ND	ND	ND	ND	ND	ND	6

N/A - Not Applicable ND - Non-detect

Data Validation has been completed

(1) New York State Department of Health (NYSDOH), Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 and subsequent updates (select matrix compounds).

(2) Compounds with detected concentrations in ug/m3

(3) - The values noted for TCE in the sub slab vapor samples would automatically require mitigation (DOH Matrices) no matter what indoor air values are received once building enclosed.

See Soil Vapor/Indoor Air Matrix A (May 2017) NYSDOH Guidance titled "Evaluating Soil Vapor Intrusion in the State of New York", October 2006 (and subsequent updates)

TABLE 10
57-71 TONAWANDA STREET - RI BUILDING SUB-SLAB SOIL SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification						PART 375 Soil Cleanup Objectives		
	SSB-1 Sub-Slab (0-4')	SSB-2 Sub-Slab (6-8')	SSB-2 Sub-Slab (9-16')	SSB-3 Sub-Slab (10-11')	SSB-4 Sub-Slab (10-12')	SSB-5 Sub-Slab (6-7')	Unrestricted Use	Residential	Restricted Residential
	3/18/2020	3/18/2020	3/18/2020	3/19/2020	3/19/2020	3/19/2020			
METALS									
Arsenic	17.3	NA	NA	NA	NA	NA	13	16	16
Barium	132	NA	NA	NA	NA	NA	350	350	400
Beryllium	ND	NA	NA	NA	NA	NA	7.2	14	72
Cadmium	2.52	NA	NA	NA	NA	NA	2.5	2.5	4.3
Chromium	20.7	NA	NA	NA	NA	NA	30	36	180
Copper	3390	NA	NA	NA	NA	NA	50	270	270
Lead	2240	NA	NA	NA	NA	NA	63	400	400
Manganese	518	NA	NA	NA	NA	NA	1600	2,000	2,000
Total Mercury	0.34	NA	NA	NA	NA	NA	0.18	0.81	0.81
Nickel	36.7	NA	NA	NA	NA	NA	30	140	310
Selenium	2.98	NA	NA	NA	NA	NA	3.9	36	180
Zinc	4940	NA	NA	NA	NA	NA	109	2200	10,000
Cyanide	NA	NA	NA	NA	NA	NA	27	27	27
PCBs									
PCB-1254	ND	NA	NA	NA	NA	NA	0.1	1	1
PCB-1260	ND	NA	NA	NA	NA	NA	0.1	1	1
PESTICIDES									
4,4-DDT	ND	NA	NA	NA	NA	NA	0.0033	1.7	7.9
4,4-DDE	ND	NA	NA	NA	NA	NA	0.0033	1.8	8.9
Endosulfan Sulfate	0.002	NA	NA	NA	NA	NA	2.4	4.8	24
Endrin	ND	NA	NA	NA	NA	NA	0.014	2.2	11
SEMIVOLATILE ORGANIC COMPOUNDS									
Acenaphthene	ND	NA	NA	NA	NA	NA	20	100	100
Acenaphthylene	ND	NA	NA	NA	NA	NA	100	100	100
Anthracene	0.27	NA	NA	NA	NA	NA	100	100	100
Benz(a)anthracene	0.83	NA	NA	NA	NA	NA	1	1	1
Benzo(a)pyrene	0.79	NA	NA	NA	NA	NA	1	1	1
Benzo(b)fluoranthene	0.73	NA	NA	NA	NA	NA	1	1	1
Benzo(g,h,i)perylene	0.59	NA	NA	NA	NA	NA	100	100	100
Benzo(k)fluoranthene	0.65	NA	NA	NA	NA	NA	0.8	1	3.9
Chrysene	0.95	NA	NA	NA	NA	NA	1	1	3.9
Dibenz(a,h)anthracene	ND	NA	NA	NA	NA	NA	0.33	0.33	0.33
Fluoranthene	1.9	NA	NA	NA	NA	NA	100	100	100
Fluorene	ND	NA	NA	NA	NA	NA	30	100	100
Indeno(1,2,3-cd)pyrene	0.48	NA	NA	NA	NA	NA	0.5	0.5	0.5
Naphthalene	0.25	NA	NA	NA	NA	NA	12	100	100
Phenanthrene	1.7	NA	NA	NA	NA	NA	100	100	100
Pyrene	1.7	NA	NA	NA	NA	NA	100	100	100
VOLATILE ORGANIC COMPOUNDS									
Acetone	ND	ND	ND	ND	ND	ND	0.05	100	100
Toluene	ND	ND	ND	ND	ND	ND	0.7	100	100
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	0.044	0.25	59	100
Ethylbenzene	ND	ND	ND	ND	ND	ND	1	30	41
m,p-Xylene	ND	ND	ND	ND	ND	ND	0.26	100	100
Methylene chloride	ND	ND	ND	ND	ND	ND	0.05	51	100
Trichloroethene	1.7	0.8	4.57	4.85	1980	0.63	0.47	10	21
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	3.6	47	52
1,3,5- Trimethylbenzene	ND	ND	ND	ND	ND	ND	8.4	47	52

ND - Non-Detect NA - Not Applicable

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

>= to Residential/Restricted-Residential SCO and Unrestricted Use SCO

>Unrestricted Use SCO but <Residential/Restricted-Residential SCO.

>Unrestricted Use & Residential SCO but <Restricted-Residential SCO

**68 TONAWANDA STREET
SITE NO. C915316**

**2018 BE3
REMEDIAL INVESTIGATION REPORT**

TABLE 1
68 TONAWANDA STREET - PHASE 2 ESA SOIL SAMPLE ANALYTICAL RESULTS SUMMARY

Sampling Program	PEI - Phase 2 ESA SOIL BORING SAMPLING PROGRAM												
Sample Number	BH 3	BH 4	BH 9	BH 1A	BH 2A	BH 4A	BH 5A	BH 6A	BH 8A	BH 9A	NYSDEC	NYSDEC	NYSDEC
Sample Date	3/5/2014	3/5/2014	3/5/2014	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	PART 375	PART 375	PART 375
Sample depth (bgs)	0' - 2'	5' - 6'	3' - 4'	1' - 4'	1' - 3'	1' - 6'	1' - 6'	0' - 3'	0' - 4'	6' - 8'	Unrestricted	Residential	Restrict Res
Compounds	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Metals													
Mercury	0.2	0.03	0.3	0.09	0.31	0.14	0.38	0.052	ND	0.207	0.18	0.81	1
Arsenic	6.70	3.7	13.8	4.83	10.3	6.93	25.7	14.7	1.27	9.89	13	16	16
Barium	78.3	85	58.9	42.3	138	48.2	94.4	528	ND	82.4	350	350	400
Beryllium	ND	ND	ND	0.26	0.57	NA	0.67	ND	ND	1.55	7.2	14	72
Cadmium	ND	ND	ND	0.627	1.14	1.23	6	11.7	0.356	1.07	2.5	2.5	4.3
Chromium	85.7	13.4	17.6	7.57	14.8	17.1	15.1	191	161	12	30	36	180
Copper	1960.0	690	829	40.2	67.4	35.5	139	455	161	224	50	270	270
Lead (Axial)	221.0	65.7	88.6	80.8	428	183	189	355	4.93	117	63	400	400
Manganese	448	140	285	110	261	430	318	2090	297	371	1600	2000	2000
Nickel	45.9	16	14.4	8.31	15.2	9.64	27.6	153	71.7	9.02	30	140	310
Selenium	ND	ND	ND	2.5	3.96	5.75	6.59	26.8	ND	3.75	3.9	36	180
Silver	ND	ND	ND	0.66	1.1	ND	3.22	ND	ND	ND	2	36	180
Zinc	228	296	149	96	165	193	1450	3960	112	118	109	2200	10000
Total Cyanide	NA	NA	NA	ND	ND	0.548	ND	ND	ND	ND	27	27	27
PCBS													
PCB-1248	0.3	ND	ND	0.1	ND	ND	0.566	ND	ND	ND	0.1	1	1
PCB-1260	0.3	ND	ND	0.1	ND	5.52	ND	0.698	ND	ND	0.1	1	1
Pesticides													
4,4-DDT	ND	ND	ND	0.016	ND	0.48	0.045	0.049	ND	ND	0.0033	1.7	7.9
Aldrin	ND	ND	ND	0.005	ND	ND	0.004	ND	ND	ND	0.005	0.019	0.097
alpha-BHC	ND	ND	ND	0.003	ND	ND	ND	ND	ND	ND	0.02	0.097	0.48
beta BHC	ND	ND	ND	ND	ND	ND	ND	0.008	ND	ND	0.036	0.072	0.36
delta BHC	ND	ND	ND	0.004	ND	ND	ND	0.029	ND	ND	0.04	100	100
Endosulfan I	ND	ND	ND	0.004	ND	ND	ND	ND	ND	ND	2.4	4.8	24
Endosulfan II	ND	ND	ND	ND	ND	0.033	0.014	0.014	ND	ND	2.4	4.8	24
Endosulfan Sulfate	ND	ND	ND	0.019	ND	0.086	0.049	0.05	ND	0.007	2.4	4.8	24
Lindane	ND	ND	ND	0.014	ND	ND	ND	0.007	ND	0.01	0.1	0.28	1.3
Dieldrin	ND	ND	ND	0.007	ND	0.037	0.009	0.01	ND	0.004	0.005	0.039	0.2
Endrin	ND	ND	ND	0.009	ND	0.4	0.036	0.005	ND	ND	0.014	2.2	11
VOCs													
Acetone	ND	ND	ND	0.9	1.19	0.114	ND	ND	ND	ND	0.05	100	100
Naphthalene	ND	ND	ND	0.02	0.96	0.092	ND	ND	ND	ND	12	100	100
m, p Xylene	ND	ND	ND	ND	ND	0.00766	ND	ND	ND	ND	0.26	100	100
n-Butylbenzene	ND	0.5	ND	ND	ND	ND	ND	ND	ND	0.398	12	NA	ND
n-propylbenzene	ND	0.2	ND	ND	ND	ND	ND	ND	ND	0.14	3.9	100	100
Toluene	ND	ND	ND	ND	ND	0.0108	ND	ND	ND	ND	0.7	100	100
Sec-Butylbenzene	ND	0.2	ND	ND	ND	ND	ND	ND	ND	0.19	11	100	100
1,2,4 Trimethylbenzene	ND	1.7	ND	ND	ND	ND	ND	ND	ND	0.428	3.6	47	52
1,3,5 Trimethylbenzene	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND	8.4	47	52
TICs (Total)	0.03	66.9	128.4	ND	ND	ND	ND	ND	ND	35.9	NA	N/A	N/A
SVOCs													
Anthracene	ND	ND	ND	5.3	2.00	ND	ND	ND	ND	ND	100	100	100
Benzo(a)anthracene	1.3	ND	ND	16.2	ND	ND	1.13	0.371	ND	0.419	1	1	1
Benzo(a)pyrene	1.4	ND	ND	18.9	ND	ND	0.782	0.317	ND	0.368	1	1	1
Benzo(b)fluoranthene	1.1	ND	ND	19.9	ND	ND	0.885	0.399	ND	0.417	1	1	1
Benzo(g,h,i)perylene	1	ND	ND	13.5	ND	ND	0.544	0.403	ND	ND	100	100	100
Benzo(k)fluoranthene	1.1	ND	ND	9.9	ND	ND	0.555	ND	ND	ND	0.8	1	3.9
Chrysene	1.4	ND	ND	17.5	ND	ND	1.07	0.385	ND	0.42	1	1	3.9
Fluoranthene	2.8	ND	ND	47.4	3.34	ND	2.49	0.711	ND	0.752	100	100	100
Fluorene	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	30	100	100
Indeno(1,2,3-cd)pyrene	1.1	ND	ND	ND	ND	ND	0.554	0.402	ND	ND	0.5	0.5	0.5
Phenanthrene	1.9	4.4	ND	23.2	5.00	ND	1.2	ND	ND	0.792	100	100	100
Pyrene	2.4	ND	ND	38.4	2.5	ND	1.71	0.483	ND	0.641	100	100	100
TICs (Total)	17.9	167.5	515	ND	ND	ND	ND	ND	ND	ND	NA	N/A	N/A

ND - Non-Detect NA - Not Applicable

TICs - Tentitively Identified Compounds

>/= to Residential/Restricted-Residential SCO and Unrestricted Use SCO

>Unrestricted Use SCO but <Residential/Restricted-Residential SCO

>Unrestricted Use & Residential SCO but <Restricted-Residential SCO

TABLE 3
68 TONAWANDA STREET - RI SOIL BORING SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification							Date Sampled: 2/7/18			PART 375 Soil Cleanup Objectives		
	RI BH-1 (4-6') Fill	RI BH-1 (8-12') Native	RI BH-2 (0-4') Fill	RI BH-3 (1 4') Fill	RI BH-4 (2 5') Fill	RI BH-4 (6-8') Native	RI BH-4D (2-5') Fill	RI BH-5 (1-4') Fill	RI BH-6 (1-4') Fill	RI BH-7 (2-6') Fill	Unrestricted Use	Residential	Restricted Residential
METALS													
Arsenic	ND	3.47	ND	10.9	48.4	4.39	34.5	1.81	27.7	31.9	13	16	16
Barium	43.2	80	27.1	75	166	135	177	75.7	53.5	158	350	350	400
Beryllium	0.388	0.499	0.214	0.676	0.743	0.842	0.782	0.563	0.546	0.434	7.2	14	72
Cadmium	0.441	0.217	0.144	0.201	4.37 J	0.154	2.49 J	0.371	1.17	2.03	2.5	2.5	4.3
Chromium	15.2	15.7	6.27	8.74	23.5 J	24.5	39.3 J	13.7	11.4	16.2	30	36	180
Copper	14	12.4	1.99	120	161	17.6	133	16.7	131	1540	50	270	270
Lead	40.6	14.2	25.1	259	1030 J	9.06	1470 J	47.9	95.4	307	63	400	400
Manganese	329	527	232	127	502 J	452	780 J	382	312	441	1600	2,000	2,000
Total Mercury	0.019	0.011	0.019	0.264	ND	0.016	ND	0.091	0.083	0.255	0.18	0.81	0.81
Nickel	9.94	17.5	5.05	16.2	24.7	26.3	27.3	11.8	39.5	21.4	30	140	310
Selenium	ND	ND	ND	1.51	ND	ND	ND	ND	2.77	ND	3.9	36	180
Silver	0.481	0.447	0.356	0.651	1.37 J	0.729	J	0.614	2.93	1.24	2	36	180
Zinc	57.1	48.3	38.4	97.4	866	62.9	789	98	462	783	109	2200	10,000
PCBs													
PCB-1254	0.057 J	ND	NA	NA	ND	ND	ND	NA	NA	NA	0.1	1	1
PCB-1260	ND	ND	NA	NA	0.046 J	ND	0.0513 J	NA	NA	NA	0.1	1	1
SEMIVOLATILE ORGANIC COMPOUNDS													
Acenaphthene	ND	ND	NA	NA	ND	ND	1.07 J	NA	NA	NA	20	100	100
Acenaphthylene	ND	ND	NA	NA	1.03	ND	1.12 J	NA	NA	NA	100	100	100
Anthracene	ND	ND	NA	NA	1.55	ND	3.43	NA	NA	NA	100	100	100
Benz(a)anthracene	ND	ND	NA	NA	4.29	ND	9.48	NA	NA	NA	1	1	1
Benzo(a)pyrene	ND	ND	NA	NA	3.9	ND	8.24	NA	NA	NA	1	1	1
Benzo(b)fluoranthene	ND	ND	NA	NA	4.24	ND	7.87	NA	NA	NA	1	1	1
Benzo(g,h,i)perylene	ND	ND	NA	NA	2.71	ND	5.6	NA	NA	NA	100	100	100
Benzo(k)fluoranthene	ND	ND	NA	NA	2.99	ND	6.34	NA	NA	NA	0.8	1	3.9
Chrysene	ND	ND	NA	NA	4.46	ND	9.37	NA	NA	NA	1	1	3.9
Dibenz(a,h)anthracene	ND	ND	NA	NA	0.833 J	ND	1.81	NA	NA	NA	0.33	0.33	0.33
Fluoranthene	0.842	ND	NA	NA	8.69	ND	21.5	NA	NA	NA	100	100	100
Fluorene	ND	ND	NA	NA	ND	ND	1.29 J	NA	NA	NA	30	100	100
Indeno(1,2,3-cd)pyrene	ND	ND	NA	NA	3.01	ND	6.14	NA	NA	NA	0.5	0.5	0.5
Phenanthrene	ND	ND	NA	NA	5.74	ND	17	NA	NA	NA	100	100	100
Pyrene	ND	ND	NA	NA	7.56	ND	17.7	NA	NA	NA	100	100	100
TICs	26.5 J	1.38 J	NA	NA	21.1 J	4.16 J	46.2 J	NA	NA	NA	NA	NA	NA
Volatile Organic Compounds													
Acetone	NA	0.504	NA	NA	NA	NA	NA	NA	NA	NA	0.05	100	100
Toluene	NA	0.00456	NA	NA	NA	NA	NA	NA	NA	NA	0.7	100	100
1,2,4-Trimethylbenzene	NA	0.00448	NA	NA	NA	NA	NA	NA	NA	NA	3.6	47	52
1,3,5- Trimethylbenzene	NA	0.00564	NA	NA	NA	NA	NA	NA	NA	NA	8.4	47	52
TICs	NA	5.03 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

ND - Non-Detect NA - Not Applicable All Data is Validated J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

	>= to Residential/Restricted-Residential SCO and Unrestricted Use SCO
	>Unrestricted Use SCO but <Residential/Restricted-Residential SCO
	>Unrestricted Use & Residential SCO but <Restricted-Residential SCO

TABLE 3

68 TONAWANDA STREET - RI SOIL BORING SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification							Date Sampled: 2/7/18	PART 375 Soil Cleanup Objectives		
	RI BH-8 (2-4') Fill	RI BH-9 (1-4') Fill	RI BH-10 (3-4') Fill	RI BH-11 (2-4') Fill	RI BH-12 (2-4') Fill	RI BH-12 (4.5') Fill	RI BH-13 (3-4.5') Fill	RI BH-14 (2-4') Fill	Unrestricted Use	Residential	Restricted Residential
METALS											
Arsenic	4.46	4.13	2.74	8.39	31.7	NA	8.08	6.28	13	16	16
Barium	65.4	34	29.7	111	130	NA	88.6	101	350	350	400
Beryllium	0.519	0.307	0.192	1.61	0.758	NA	0.436	0.476	7.2	14	72
Cadmium	0.236	0.276	0.34	1.1	1.48	NA	0.905	0.44	2.5	2.5	4.3
Chromium	13.2	7.11	7.73	17.7	21.6	NA	16.9	15.8	30	36	180
Copper	16.4	60.8	37.1	241	83.5	NA	44.2	77.4	50	270	270
Lead	37.8	66.3	47.7	107	207	NA	134	129	63	400	400
Manganese	410	409	204	954	498	NA	404	396	1600	2,000	2,000
Total Mercury	0.123	0.109	0.093	3	0.799	NA	0.415	0.098	0.18	0.81	0.81
Nickel	12.7	8.23	7.1	18.1	19.6	NA	14.2	13.3	30	140	310
Selenium	ND	ND	ND	ND	0.864	NA	ND	ND	3.9	36	180
Silver	0.538	0.481	0.378	0.82	0.704	NA	0.811	0.611	2	36	180
Zinc	70	54.4	72.3	243	345	NA	161	155	109	2200	10,000
PCBs											
PCB-1254	ND	NA	NA	NA	NA	NA	NA	NA	0.1	1	1
PCB-1260	0.698	NA	NA	NA	NA	NA	NA	NA	0.1	1	1
SEMIVOLATILE ORGANIC COMPOUNDS											
Benz(a)anthracene	0.21	NA	NA	NA	NA	NA	NA	NA	1	1	1
Chrysene	0.206	NA	NA	NA	NA	NA	NA	NA	1	1	3.9
Fluoranthene	0.317	NA	NA	NA	NA	NA	NA	NA	100	100	100
Phenanthrene	0.192	NA	NA	NA	NA	NA	NA	NA	100	100	100
Pyrene	0.271	NA	NA	NA	NA	NA	NA	NA	100	100	100
TICs	9.2 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Volatile Organic Compounds											
TICs	NA	NA	NA	NA	NA	1.96 J	NA	NA	NA	NA	NA

ND - Non-Detect NA - Not Applicable All Data is Validated J - The analyte was positively identified; value is the approximate concentration of the analyte in the sample.

>= to Residential/Restricted-Residential SCO and Unrestricted Use SCO

>Unrestricted Use SCO but <Residential/Restricted-Residential SCO

>Unrestricted Use & Residential SCO but <Restricted-Residential SCO

TABLE 4
68 TONAWANDA STREET - RI TEST PIT SOIL SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification									Date Sampled: 2/13/18			PART 375 Soil Cleanup Objectives		
	TP-4 (4-5') Fill	TP-4D (4-5') Fill	TP-5 (1-4') Fill	TP-5 (4-5') Fill	TP-6 (4-5') Fill	TP-1 (2-4') Fill	TP-2 (2-4') Fill	TP-2 (6') Native	TP-3 (2-4') Fill	Unrestricted Use	Residential	Restricted Residential			
METALS															
Arsenic	7.53 J	3.9 J	10.9	NA	NA	7.93	5.35	1.39	2.77	13	16	16			
Barium	72	75.4	82.9	NA	NA	404	109	112	72.2	350	350	400			
Beryllium	0.477	0.52	0.574	NA	NA	0.521	0.75	0.621	0.484	7.2	14	72			
Cadmium	1 J	0.708 J	0.737	NA	NA	0.923	0.977	0.387	0.422	2.5	2.5	4.3			
Chromium	16 J	12.9 J	8.52	NA	NA	14.6	16.5	20	10.6	30	36	180			
Copper	93.9	94.4	1090	NA	NA	82.5	320	13.5	16.5	50	270	270			
Lead	178 J	143 J	395	NA	NA	140	106	8.3	92.1	63	400	400			
Manganese	356	349	141	NA	NA	338	431	400	268	1600	2,000	2,000			
Total Mercury	0.223 J	0.338 J	0.724	NA	NA	0.135	0.281	0.0139	0.107	0.18	0.81	0.81			
Nickel	15.9	13.5	11.8	NA	NA	16.6	18.9	21.4	11.5	30	140	310			
Silver	1.05	ND	0.97	NA	NA	1.09	ND	0.576	0.733	2	36	180			
Zinc	199 J	168 J	395	NA	NA	248	290	54.7	117	109	2200	10,000			
PCBs															
PCB-1248	ND	ND	NA	NA	NA	ND	0.17 J	ND	5.6 J	0.1	1	1			
PCB-1260	ND	ND	NA	NA	NA	ND	0.0745 J	ND	ND	0.1	1	1			
SEMIVOLATILE ORGANIC COMPOUNDS															
Acenaphthene	ND	0.17 J	NA	NA	2.95	NA	0.187	ND	ND	20	100	100			
Anthracene	ND	0.308 J	NA	NA	0.508	NA	0.348	ND	ND	100	100	100			
Benz(a)anthracene	0.552	1.22	NA	NA	0.414	NA	1.31	ND	0.347	1	1	1			
Benzo(a)pyrene	0.499	1.13	NA	NA	0.424	NA	1.18	ND	0.288	1	1	1			
Benzo(b)fluoranthene	0	1.01	NA	NA	0.356	NA	1.14	ND	0.336	1	1	1			
Benzo(g,h,i)perylene	0.341	0.728	NA	NA	ND	NA	0.805	ND	0.225	100	100	100			
Benzo(k)fluoranthene	0.434	0.74	NA	NA	ND	NA	0.934	ND	0.213	0.8	1	3.9			
Chrysene	0.547	1.27	NA	NA	0.401	NA	1.27	ND	0.365	1	1	3.9			
Dibenz(a,h)anthracene	ND	ND	NA	NA	ND	NA	0.201	ND	ND	0.33	0.33	0.33			
Fluoranthene	0.965	2.14	NA	NA	0.638	NA	2.59	ND	0.72	100	100	100			
Fluorene	ND	ND	NA	NA	3.85	NA	ND	ND	ND	30	100	100			
Indeno(1,2,3-cd)pyrene	0.369	0.88	NA	NA	0.351	NA	0.939	ND	0.236	0.5	0.5	0.5			
Phenanthrene	0.459	1.19	NA	NA	10.4	NA	1.23	ND	0.351	100	100	100			
Pyrene	0.868 J	2.25 J	NA	NA	0.878	NA	2.14	ND	0.59	100	100	100			
TICs	1.4 J	7.26 J	NA	NA	305 J	NA	6.85 J	0.25 J	5.65 J	NA	NA	NA			
Volatile Organic Compounds															
Acetone	NA	NA	NA	0.0338	0.0501	NA	NA	NA	NA	0.05	100	100			
n-Propylbenzene	NA	NA	NA	ND	0.0182	NA	NA	NA	NA	3.9	100	100			
sec-Butylbenzene	NA	NA	NA	ND	0.0408	NA	NA	NA	NA	11	100	100			
1,2,4-Trimethylbenzene	NA	NA	NA	ND	0.0364	NA	NA	NA	NA	3.6	47	52			
Xylene (mixed)	NA	NA	NA	ND	0.00468	NA	NA	NA	NA	0.26	100	100			
TICs	NA	NA	NA	6.54 J	7.37 J	NA	NA	NA	NA	NA	NA	NA			

ND - Non-Detect NA - Not Applicable All Data is Validated J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

>= to Residential/Restricted-Residential SCO and Unrestricted Use SCO

>Unrestricted Use SCO but <Residential/Restricted-Residential SCO

>Unrestricted Use & Residential SCO but <Restricted-Residential SCO

TABLE 5
68 TONAWANDA STREET - RI GW SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification (results in ppm)					NYSDEC TOGS 1.1.1. GA (1)
	MW-1	MW-2	MW-3	MW-3B (2)	MW-4	
Sample Date	2/23/18	2/23/2018	2/23/2018	7/6/2018	2/23/2018	
METALS						
Arsenic	8.3	ND	7.9	ND	ND	25
Barium	50.6	106	156	ND	ND	1000
Beryllium	ND	ND	ND	ND	ND	3
Chromium	ND	ND	447	18.7	ND	50
Copper	ND	ND	22.8	16.9 J	ND	200
Manganese	363	585	232	ND	456	300
Total Mercury	ND	0.23	ND	ND	ND	0.7
Selenium	14.1	ND	33.3	ND	ND	10
PCBs						
PCB-1260	ND	ND	0.24 J	N/A	ND	0.09
SEMIVOLATILE ORGANIC COMPOUNDS						
2-Methylnapthalene	ND	ND	21.6	N/A	ND	NA
Acenaphthene	ND	ND	15.7	N/A	ND	20
Fluorene	ND	ND	6.21	N/A	ND	50
Naphthalene	ND	ND	118	N/A	ND	10
TICs	151 J	79.7 J	437 J	N/A	73 J	NA
Volatile Organic Compounds						
Acetone	25.5 J	34.1 J	148 B	N/A	94.6 B	50
1,2,4-Trimethylbenzene	ND	ND	2.62	N/A	ND	5
Carbon disulfide	ND	1.68	ND	N/A	ND	NA
TICs	ND	16.4 J	43.8 J	N/A	ND	NA
Field Parameters						
Turbidity (NTU)	47.7	6.2	800	721	93.1	NA
pH	7.18	6.4	10.36	10.13	7.22	NA
Dissolved Oxygen	0	15.75	0	0	0.74	NA
Temp (degrees C)	10.64	11.71	9.73	16.04	11.48	NA
Conductivity	1.32	3.65	5.13	5.27	3.37	NA

N/A - Not Applicable ND - Non-detect

All Data is Validated

(1) - TOGS 1.1.1 GA - Technical and Operational Guidance Series (1.1.1) Source of Drinking Water (Groundwater)

(2) - Field filtered metals sample

Exceeds TOGS GA Guidance Value

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

B - Derected in Trip Blank

TABLE 7
68 TONAWANDA BUILDING - SUB SLAB VAPOR & AMBIENT AIR ANALYTICAL RESULTS SUMMARY
EPA Air Method Toxic Organics -15 (TO-15)

Contaminants	Sample Identification											NYSDOH (1)	NYSDOH (1)
	SS-01	IA-01	SS-02	IA-01	SS-03	IA-02	SS-04	IA-02	SS-05	IA-02	OA-01	Sub Slab Vapor Concentration	Indoor Air Concentration
	Sub Slab	Indoor	Sub Slab	Indoor	Sub Slab	Indoor	Sub Slab	Indoor	Sub Slab	Indoor	Outdoor	Decision Matrix - Min Action Level	Min Action Level
	2/20/2018	2/20/2018	2/20/2018	2/20/2018	2/20/2018	2/20/2018	2/20/2018	2/20/2018	2/20/2018	2/20/2018	2/20/2018	ug/m3	ug/m3
Volatile Organic Compounds (2)													
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100	3
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	0.2
1,2,4-Trimethylbenzene	0.88	0.79	1.5	0.79	1.4	8.0	1.0	8.0	1.1	8.0	ND		
1,3,5-Trimethylbenzene	0.64	ND	1.1	ND	0.93	2.20	0.74	2.20	ND	2.20	ND		
2,2,4-trimethylpentane	ND	1.8	7.8	1.8	1.8	1.1	2.9	1.1	ND	1.1	ND		
4-ethyltoluene	ND	ND	0.54	ND	ND	1.90	ND	1.90	ND	1.90	ND		
Acetone	19	24	48	24	30	66	460	66	48	66	6.7		
Benzene	5.2	0.57	8.6	0.57	6.1	1.50	4.1	1.50	69	1.50	0.48		
Carbon disulfide	4.1	ND	5.8	ND	11	ND	170	ND	23	ND	ND		
Carbon tetrachloride	ND	0.31	ND	0.31	ND	0.4	ND	0.4	ND	0.4	0.44	6	0.2
Chloroethane	1.5	ND	2.3	ND	0.90	ND	1.6	ND	1.0	ND	ND		
Chloroform	ND	ND	3.0	ND	ND	ND	ND	ND	ND	ND	ND		
Chloromethane	ND	0.52	0.81	0.52	0.35	1.0	0.58	1.0	ND	1.0	0.68		
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	0.2
Cyclohexane	3900	2.7	180	2.7	24	0.89	21	0.89	2500	0.89	3.80		
Ethyl acetate	2.7	ND	ND	ND	3.9	0.72	ND	0.72	ND	0.72	0.61		
Ethylbenzene	0.82	ND	ND	ND	0.78	4.90	ND	4.90	ND	4.90	ND		
Freon 11	1.8	1.1	2.0	1.1	1.0	1.40	1.5	1.40	110	1.40	1.00		
Freon 12	1.7	1.3	1.7	1.3	1.9	2.70	1.8	2.70	76	2.70	1.50		
Heptane	2000	1.9	100	1.9	35	2.50	230	2.50	1400	2.50	2.70		
Hexane	5100	4.7	92	4.7	46	2.40	170	2.40	1500	2.40	3.00		
Isopropyl alcohol	ND	ND	3.9	ND	ND	ND	ND	ND	ND	ND	ND		
m&p-Xylene	2.6	1.1	2.7	1.1	2.5	20	2	20	8	20	0.61		
Methyl Ethyl Ketone	2.1	1.5	3.8	1.5	5.7	34	16	34	3	34	1.30		
Methylene chloride	21	2.5	19	2.5	21	5.50	23	5.50	2.6	5.50	2.80	100	3
o-Xylene	ND	0.52	ND	0.52	1.1	8.0	ND	8.0	ND	8.0	ND		
Styrene	ND	ND	ND	ND	0.43	1.20	ND	1.20	ND	1.20	ND		
Tetrachloroethylene	ND	ND	ND	ND	ND	1.40	ND	1.40	5.4	1.40	ND	100	3
Toluene	42	14	15	14	54	130	58	130	92	130	4.60		
Trichloroethene	2.1	0.21	2.4	0.21	5.8	0.38	2.6	0.38	6.1	0.38	0.32	6	0.2
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	0.2

N/A - Not Applicable ND - Non-detect

Red values are above Air Guideline Derived by NYSDOH in Table 3.1 of NYSDOH Guidance titled "Evaluating Soil Vapor Intrusion in the State of New York", October 2006 (and subsequent updates).

J indicates an estimated value

(1) New York State Department of Health (NYSDOH), Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 and subsequent updates (select matrix compounds).

(2) Compounds with detected concentrations

NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, May 2017 Decision Matrices Notes:

NO FURTHER ACTION:

Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures

IDENTIFY SOURCE(S) AND RESAMPLE OR MITIGATE:

The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub slab vapor sample.

Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers capped or by storing VOC containing products in places where people do not spend much time, such as a garage or shed).

Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

MONITOR:

Monitoring, including sub slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub slab vapor have changed.

Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed.

The type and frequency of monitoring is determined on a site specific and building specific basis, taking into account applicable environmental data and building operating conditions.

Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE:

Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building specific basis, taking into account building construction and operating conditions.

Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

**150 TONAWANDA STREET
SITE NO. C915299**

**2016 PANAMERICAN ENVIRONMENTAL
PHASE II ENVIRONMENTAL
SITE ASSESSMENT REPORT**

TABLE 1 - 120 (150) TONAWANDA STREET (CSX) - PHASE 2 ESA SOIL SAMPLE ANALYTICAL RESULTS SUMMARY								
Sampling Program	PEI - Phase 2 ESA SOIL TEST PIT SAMPLING PROGRAM							
Sample Number	TP1 SS1	TP2 S1	TP4 SS2	TP5 S2	TP7 S3	TP7 SS3	NYSDEC	NYSDEC
Sample Date	1/4/2016	1/4/2016	1/4/2016	1/4/2016	1/4/2016	1/4/2016	PART 375	PART 375
Sample depth (bgs)	2-3 Ft	2"	5-6 Ft	2"	2"	5-6 Ft	Restrict Res	Commercial
Compounds	ppm	ppm	ppm	ppm	ppm	ppm	(a)	(b)
Metals								
Mercury	0.47	0.48	0.083	0.238	0.553	0.109	1	2.8
Aluminum	7570	9010	7100	6530	9080	5510	NA	NA
Arsenic	69 (a)(b)	18.1 (a)(b)	24.9 (a)(b)	4.7	5.9	21.1 (a)(b)	16	16
Barium	132.0	137	76.6	86.7	190	141	400	400
Beryllium	0.60	0.43	0.41	ND	ND	0.51	72	590
Cadmium	2.23	0.99	0.89	0.93	1.16	1.29	4.3	9.3
Chromium	27.7	42.9	15.4	16.2	74.8	27	180	1500
Cyanide	0.4	0.17	0.33	0.38	0.23	0.3	27	27
Calcium	23600	27200	52100	54500	36000	19500	NA	NA
Copper	181	51.3	55.2	47.2	339 (a)(b)	94.5	270	270
Lead	347	500 (a)	157	210	639 (a)	205	400	1000
Manganese	676	367	362	282	501	747	2000	10000
Nickel	42.4	38.4	15.4	20.4	43	22.7	310	310
Selenium	3.6	ND	ND	ND	ND	2.1	180	1500
Silver	ND	ND	ND	ND	ND	ND	180	1500
Zinc	595	307	227	184	450	575	10000	10000
PCBS								
Aroclor 1260	0.18	ND	0.43	0.59	0.84	ND	1	1
Pesticides								
4,4-DDT	0.027	0.062	0.033	0.058	ND	ND	7.9	47.0
4,4-DDE	ND	0.074	ND	0.034	ND	ND	8.9	62.0
Dieldrin	ND	ND	ND	0.059	ND	ND	0.2	1.40
VOCs								
1,2,4-Trimethylbenzene	0.015	NA	ND	NA	NA	ND	52	190
1,3,5-Trimethylbenzene	0.009	NA	ND	NA	NA	ND	52	190
Acetone	0.093	NA	0.012	NA	NA	ND	100	500
SVOCs								
Acenaphthene	4.8	ND	ND	ND	ND	ND	100	500
Acenaphthylene	2.1	ND	3.5	ND	ND	ND	100	500
Anthracene	4.5	ND	3.3	ND	0.82	1.8	100	500
Benzo(a)anthracene	5.9 (a)(b)	0.44	10 (a)(b)	4.1 (a)	1.8 (a)	2.5 (a)	1	5.6
Benzo (a) pyrene	5.1 (a)(b)	0.59	9.7 (a)(b)	4.1 (a)(b)	1.5 (a)(b)	2.0 (a)(b)	1	1
Benzo(b)fluoranthene	8.1 (a)(b)	0.73	15 (a)(b)	5.8 (a)(b)	2.4 (a)	3 (a)	1	5.6
Benzo (g,h,i) perylene	3.8	ND	4.1	2.4	0.7	0.79	100	500
Benzo (k) fluoranthene	2.9	ND	5.5 (a)	2	0.78	1.1	3.9	56
Chrysene	6.5 (a)	0.45	11 (a)	3.9 (a)	1.8	2.4	3.9	56
Fluoranthene	13	0.66	20	8.6	3.6	5	100	500
Fluorene	5.7	ND	ND	ND	ND	0.8	100	500
Indeno (1,2,3-cd) pyrene	4.6 (a)	0.44	5.4 (a)	2.5 (a)	0.77 (a)	0.96 (a)	0.5	5.6
Naphthalene	14	ND	4.4	ND	ND	0.53	100	500
Phenanthrene	14	ND	8.6	3.5	3	5.2	100	500
Pyrene	11	0.6	16	7.5	3.1	4.1	100	500

ND - Non-Detect NA - Not Available or Not analyzed for

Shaded Value - Exceeds Part 375 SCOs

**2019 BE3
REMEDIAL INVESTIGATION REPORT**

TABLE 1
150 TONAWANDA STREET - RI SOIL BORING SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification						Date Sampled: 8/15/18			PART 375 Soil Cleanup Objectives			
	BH-1 (6-7')	BH-2 (0 -1') Surface	BH-2 (8 -10') Native	BH-3 (4 - 6')	BH-4 (0 -1') Surface	BH-4 (2.8 -4') Native	BH-5 (2 - 4')	BH-6 (0-1') Surface	BH-6 (5.5 -8') Native	Unrestricted Use	Residential	Restricted Residential	Protection of Groundwater
METALS													
Arsenic	8.17	4.23	5.18	6.92	15.10	3.38	3.96 J	6.37	3.51	13	16	16	16
Barium	116	96.8	119.0	107.0	82.3	129.0	64.2	68.9	94.6	350	350	400	820
Beryllium	0.877	0.703	0.840	0.990	0.670	1.090	0.580	0.580	0.960	7.2	14	72	47
Cadmium	0.361	0.541	0.401	0.960	1.11	0.380	0.54 J	0.670	0.380	2.5	2.5	4.3	7.5
Chromium	20.6	15.8	20.9	33.9	14.5	25.9	24.7 J	11.2	23.9	30	36	180	NA
Copper	28.3	22.9	21.0	96.5	141.0	18.7	54.2 J	30.3	19.1	50	270	270	1720
Lead	36.6	27.7	12.0	119.0	271.0	12.5	23.1 J	134.0	8.2	63	400	400	450
Manganese	325	197	395	479	477	329	1560 J	680	366	1600	2,000	2,000	2,000
Total Mercury	0.042	0.36	0.03	0.13	0.24	0.04	0.05	0.32	0.02	0.18	0.81	0.81	0.73
Nickel	21.4	17.3	22.3	27.3	21.7	27.3	20 J	9.42	23.4	30	140	310	130
Selenium	ND	ND	ND	ND	1.1	ND	ND	ND	ND	3.9	36	180	4
Silver	0.487	0.84	1.26	1.79	2.98	1.69	1.98	1.09	1.37	2	36	180	8.3
Tot Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	27	27	27	40
Zinc	115	78.7	61.3	144	199	73.1 J	71.3	128	60.1	109	2200	10,000	2,480
PCBs													
PCB-1254	ND	ND	ND	ND	ND	ND	ND	0.14 J	ND	0.1	1	1	3.2
PCB-1260	0.021 J	0.04 J	ND	0.04 J	ND	ND	ND	ND	ND	0.1	1	1	3.2
PESTICIDES													
4,4-DDT	0.005	ND	ND	ND	ND	ND	ND	0.032	ND	0.0033	1.7	7.9	136
4,4-DDE	ND	0.005 J	ND	ND	ND	ND	ND	0.009 J	ND	0.0033	1.8	8.9	17
4,4-DDD	ND	ND	ND	ND	ND	ND	ND	0.01 J	ND	0.0033	2.6	13	14
beta-BHC	ND	ND	ND	ND	ND	ND	ND	0.007 J	ND	0.036	0.072	0.36	0.09
Delta-BHC	ND	ND	ND	ND	0.004	ND	ND	0.004	ND	0.04	100	100	0.25
Endosulfan Sulfate	0.002 J	0.003 J	ND	0.005 J	ND	ND	ND	0.007 J	ND	2.4	4.8	24	1000
Endrin	0.004 J	ND	ND	0.004 J	ND	ND	ND	0.01 J	ND	0.014	2.2	11	0.06
Endrin Ketone	0.004	ND	ND	ND	0.008 J	ND	ND	0.014	ND	NA	NA	NA	NA
Dieldrin	ND	0.002 J	ND	ND	ND	ND	ND	0.009 J	ND	0.005	0.039	0.2	0.1
Aldin	ND	ND	ND	ND	ND	ND	ND	0.01 J	ND	0.005	0.019	0.097	0.19
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.042	0.42	2.1	0.38
SEMIVOLATILE ORGANIC COMPOUNDS													
Acenaphthene	0.311 J	0.4	ND	0.177 J	0.93	ND	ND	0.36	ND	20	100	100	98
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	0.32	ND	100	100	100	107
Anthracene	0.389	1.22	ND	0.566	0.67	ND	ND	0.97	ND	100	100	100	1000
Benz(a)anthracene	1.140	4.02	0.185 J	1.16	1.3	ND	0.393	2.56	ND	1	1	1	1
Benzo(a)pyrene	0.981	3.89	ND	0.89	1.03	ND	0.355	2.08	ND	1	1	1	22
Benzo(b)fluoranthene	1.170	4.36	ND	0.865	1.38	ND	1.08	2.26	ND	1	1	1	1.7
Benzo(g,h,i)perylene	0.732	2.93	ND	0.589	0.708	ND	0.73	1.34	ND	100	100	100	1000
Benzo(k)fluoranthene	0.735	2.28	ND	0.779	1.01	ND	0.321	1.4	ND	0.8	1	3.9	1.7
Chrysene	1.240	4.32	0.216 J	1.19	1.45	ND	0.773	2.56	ND	1	1	3.9	1
Dibenz(a,h)anthracene	0.209 J	0.61	ND	0.202 J	0.266 J	ND	0.255 J	0.36	ND	0.33	0.33	0.33	1000
Fluoranthene	2.34	9.02	0.303	2.48	1.76	ND	0.642	5.85	ND	100	100	100	1000
Fluorene	ND	0.38	ND	0.25 J	ND	ND	ND	0.326	ND	30	100	100	386
Naphthalene	0.281 J	0.18	ND	0.182 J	1.19	ND	ND	0.34	ND	12	100	100	12
Indeno(1,2,3-cd)pyrene	0.705	2.73	ND	0.601	0.736	ND	0.715	1.35	ND	0.5	0.5	0.5	8.2
Phenanthrene	1.440	4.79	0.42	1.94	1.23	ND	0.247 J	3.92	ND	100	100	100	1000
Pyrene	1.890	7.61	0.33 J	1.97	1.52	ND	0.499	5.02	ND	100	100	100	1000
TICs	21 J	20.2 J	ND	5.0 J	28.9 J	4.1 J	4.7 J	19.7 J	ND	NA	NA	NA	NA
Volatile Organic Compounds													
Acetone	ND	NA	ND	0.013 J	NA	0.04	ND	NA	ND	0.05	100	100	0.05
cis-1,2-Dichloroethene	0.004 J	NA	ND	ND	NA	ND	ND	NA	ND	0.25	59	100	0.25
m,p-Xylene	0.005 J	NA	ND	ND	NA	ND	ND	NA	ND	0.26	100	100	1.6
Toluene	0.006 J	NA	ND	ND	NA	ND	ND	NA	ND	0.7	100	100	0.7
TICs	ND	NA	ND	ND	NA	ND	ND	NA	ND	NA	NA	NA	NA

ND - Non-Detect NA - Not Applicable All Data is Validated J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

>= to Residential/Restricted-Residential SCO and Unrestricted Use SCO

All values in ppm

>Unrestricted Use SCO but <Residential/Restricted-Residential SCO

>Unrestricted Use & Residential SCO but <Restricted-Residential SCO

TABLE 4
150 TONAWANDA STREET - RI GW SAMPLE ANALYTICAL RESULTS SUMMARY

Contaminants	Sample Identification			Date Sampled: 9/21/18	NYSDEC
	MW-1	MW-2	MW-3	MW-4	TOGS 1.1.1. GA (1)
METALS					
Arsenic	ND	ND	ND	ND	25
Barium	ND	ND	ND	ND	1000
Beryllium	ND	ND	ND	ND	3
Chromium	ND	ND	ND	ND	50
Copper	15 J	14.4 J	18 J	20 J	200
Cyanide	ND	ND	ND	ND	200
Manganese	196	405	258	1400	300
Nickel	ND	ND	ND	60	100
Total Mercury	ND	ND	ND	ND	0.7
Zinc	ND	ND	72	100	2000
Selenium	ND	ND	ND	ND	10
PCBs					
PCB 1254	ND	ND	0.065 J	ND	0.09
PCB-1260	ND	ND	0.134 J	ND	0.09
PESTICIDES					
Aldrin	ND	ND	ND	0.127 J	ND
alpha-BHC	ND	ND	ND	0.111	NA
beta-BHC	ND	ND	ND	ND	NA
Endrin	0.11 J	ND	ND	0.172	ND
Heptachlor	ND	0.065	ND	0.141 J	0.04
Heptachlor Epoxide	0.178 J	ND	ND	0.11 J	0.03
trans-Chlordane	0.056 J	ND	ND	ND	NA
SEMIVOLATILE ORGANIC COMPOUNDS					
SVOCs	ND	ND	ND	ND	NA
Volatile Organic Compounds					
Acetone	ND	ND	ND	0.006	50
Carbon disulfide	ND	1.44 J	ND	0.003	NA
TICs	ND	ND	ND	ND	NA
Field Parameters					
Turbidity (NTU)	1.0	6.4	18	19	NA
pH	6.97	6.71	6.84	6.2	NA
Dissolved Oxygen	1.98	0	1.32	0	NA
Temp (degrees C)	19.79	17.08	17.93	15.8	NA
Conductivity	2.11	2.23	3.03	4.15	NA

All values in ppb

N/A - Not Applicable ND - Non-detect

All Data is Validated

(1) - TOGs 1.1.1 GA - Technical and Operational Guidance Series (1.1.1) Source of Drinking Water (Groundwater)

Exceeds TOGs Guidance Value

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

**1660 NIAGARA STREET
SITE NO. C915311**

**2016 LABELLA ASSOCIATES
PHASE II ENVIRONMENTAL
SITE ASSESSMENT REPORT**

Table 1
Buffalo Niagara Riverkeeper, 1660 Niagara Street, Buffalo, New York
Phase II Environmental Site Assessment
Summary of Test Pit Analytical Results
Project #2151177
(Detected Compounds Only)

Sample ID	TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP8	CP-51 Soil Cleanup Levels	Unrestricted Use Soil Cleanup Objectives	Commercial Use Soil Cleanup Objectives
Depth	2-4 ft. bgs	4-6 ft. bgs	7-9 ft. bgs	2-4 ft. bgs	2-4 ft. bgs	1-3 ft. bgs	2-4 ft. bgs	2-4 ft. bgs			
Sample Date	11/18/2015	11/18/2015	11/18/2015	11/18/2015	11/18/2015	11/18/2015	11/18/2015	11/18/2015			
Volatile Organic Compounds (ug/kg)											
2-Butanone	NA	<	9.2 J	<	NA	NA	NA	NA	NL	NL	NL
Acetone	NA	<	62.2	8.3 J	NA	NA	NA	NA	NL	50	500,000
Chloroform	NA	<	<	1.8 J	NA	NA	NA	NA	NL	370	350,000
Cyclohexane	NA	<	16.8	<	NA	NA	NA	NA	NL	NL	NL
Isopropylbenzene	NA	<	4.4 J	<	NA	NA	NA	NA	2,300	NL	NL
Methylene Chloride	NA	50	14.8 B	4.3 JB	NA	NA	NA	NA	NL	50	500,000
Methylcyclohexane	NA	<	63.9	<	NA	NA	NA	NA	NL	NL	NL
m/p Xylene	NA	<	11.6 J	4.1 J	NA	NA	NA	NA	*260	*260	*500,000
o-Xylene	NA	<	6.7	4.5 J	NA	NA	NA	NA	*260	*260	*500,000
n-propylbenzene	NA	<	5.7 J	<	NA	NA	NA	NA	3,900	3,900	500,000
tert-Butylbenzene	NA	<	4.8 J	<	NA	NA	NA	NA	5,900	5,900	500,000
sec-Butylbenzene	NA	<	8.7	<	NA	NA	NA	NA	11,000	11,000	500,000
Toluene	NA	<	3.5 J	2.7 J	NA	NA	NA	NA	700	700	500,000
Tetrachloroethene	NA	<	<	2.7 J	NA	NA	NA	NA	NL	1,300	150,000
Trichloroethene	NA	<	<	4.1 J	NA	NA	NA	NA	NL	470	200,000
1,2,4-Trimethylbenzene	NA	<	18.5	4.9 J	NA	NA	NA	NA	3,600	3,600	190,000
1,3,5-Trimethylbenzene	NA	<	5.4 J	2.8 J	NA	NA	NA	NA	8,400	8,400	190,000
Semi-Volatile Organic Compounds (ug/kg)											
Dimethylphthalate	NA	790	810	1,300	NA	NA	NA	NA	NL	NL	NL
RCRA Metals (mg/kg)											
Arsenic	8.65	5	8.5	174	4.1	10.2	16.5	7	NA	13	16
Barium	98.3	59.2	95.8	261	41.7	65.6	56.2	375	NA	350	400
Cadmium	0.58	0.3 J	0.9	1.7	0.23 J	0.64	0.52	1.31	NA	2.5	9.3
Chromium	14.7	11.3	15.5	25.7	6.04	11.5	10.7	21.3	NA	**1/30	**400/1,500
Lead	208	56.1	123	1,070	134	224	139	549	NA	63	1,000
Mercury	0.41	0.3	2.5	4.9	0.6	0.37	0.23	0.42	NA	0.18	2.8
Silver	1.67	1.7	3	6.9	0.8	2.53	2.21	2.16	NA	2	1,500

NYSDEC Part 375 Industrial and Commercial Soil Cleanup Objectives (December 2006)

NYSDEC Commissioner Policy (CP)-51 Soil Cleanup Guidance (October 2010)

NYSDEC Division Technical and Administrative Guidance Memorandum HWR-92-4060, Eastern USA Background Concentrations for Soil

NL = Not listed

NA = Not applicable

ft. bgs = feet below the ground surface

ug/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

< = Indicates the analyte was analyzed for, but not detected.

* Indicates a mixed Xylene Soil Cleanup Level

** Hexavalent/trivalent chromium results

J = Indicates an estimated value.

B = Indicates the analyte was found in the trip blank as well as the sample

No detectable compounds were identified during PCB analysis

Bold = Analyte detected above Part 375 Unrestricted Use SCOs

Yellow = Analyte detected above Part 375 Commercial SCOs

Underlined = Analyte detected above CP-51

Table 2
Buffalo Niagara Riverkeeper, 1660 Niagara Street, Buffalo, New York
Phase II Environmental Site Assessment
Summary of Soil Boring Analytical Results
(Detected Compounds Only)

Sample ID	SB1	SB2	SB3	SB4	*SB5A	*SB6	SB7	SB8	CP-51 Soil Cleanup Levels	Unrestricted Use Soil Cleanup Objectives	Commercial Use Soil Cleanup Objectives
Depth	9-10 ft. bgs	2-4 ft. bgs	2-4 ft. bgs	12-14 ft. bgs	9-10 ft. bgs	4-8 ft. bgs	2-4 ft. bgs	18-20 ft. bgs			
Sample Date	12/8/2015	12/9/2015	12/10/2015	12/11/2015	12/12/2015	12/13/2015	12/14/2015	12/15/2015			
Volatile Organic Compounds (ug/kg)											
Acetone	140	38.8	10.2 J	260	<	<	72.1	12.3 J	NL	50	500,000
Benzene	<	<	<	<	19,100	1,200	<	<	60	60	44,000
Carbon Disulfide	1.9 J	2.6 J	<	1.6 J	<	2.2 J	<	<	NL	NL	NL
cis-1,2-Dichloroethene	<	<	<	<	<	<	<	10.4	NL	250	500,000
Cyclohexane	<	<	<	<	<	920	<	<	NL	NL	NL
Ethylbenzene	<	<	<	<	36,100	780	<	<	1,000	1,000	390,000
Isopropylbenzene	<	<	<	<	9,600	730	<	<	2,300	NL	NL
Methylene Chloride	<	<	<	<	<	<	2.1 JQ	<	NL	50	500,000
Methylenecyclohexane	<	<	1.9 J	<	26,400	7,000	<	<	NL	NL	NL
Naphthalene	<	<	<	<	34,000	850	1.4 J	<	12,000	NL	NL
n-propylbenzene	<	<	<	<	44,100	2,700	<	<	3,900	3,900	500,000
n-Butylbenzene	<	<	<	<	13,600	840	<	<	12,000	12,000	NL
2-Butanone	45.8	8.6 J	<	67.1	<	<	15.2 J	<	NL	NL	NL
m/p-Xylenes	<	<	<	<	93,300	2,800	<	<	*260	**260	**500,000
o-Xylene	<	<	<	<	14,100	290 J	<	<	*260	**260	**500,000
p-Isopropyltoluene	<	<	<	<	2,100 J	29.4	<	<	10,000	NL	NL
sec-Butylbenzene	<	<	<	<	5,000 J	310 J	<	<	11,000	11,000	500,000
Toluene	<	<	<	<	45,100	470 J	<	<	700	700	500,000
1,3,5-Trimethylbenzene	<	<	<	<	12,400	720	<	<	8,400	8,400	190,000
1,2,4-Trimethylbenzene	<	<	<	<	42,700	2,100	1.4 J	<	3,600	3,600	190,000
Vinyl Chloride	<	<	<	<	<	<	<	2.1 J	NL	20	13,000
Tetrachloroethene	<	1.3 J	<	<	<	<	<	<	NL	1,300	200,000
Semi-Volatile Organic Compounds (ug/kg)											
Phenol	120 J	87.4 J	97.9 J	<	<	<	<	<	NL	330	500,000
2-Methylnaphthalene	<	80 J	160 J	<	210 J	<	<	<	NL	NL	NL
Anthracene	<	81.5 J	<	<	<	<	<	<	100,000	100,000	500,000
Pyrene	<	310 J	<	<	<	<	<	<	100,000	100,000	500,000
Benzo[a]anthracene	<	190 J	<	<	<	<	<	<	1,000	1,000	5,600
Benzo[a]pyrene	<	160 J	<	<	<	<	<	<	1,000	1,000	1,000
Benzo[b]fluoranthene	<	200 J	<	<	<	<	<	<	1,000	1,000	5,600
Benzo[g,h,i]pyrene	<	100 J	<	<	<	<	<	<	100,000	100,000	500,000
Chrysene	<	170 J	<	<	<	<	<	<	1,000	1,000	56,000
Indeno[1,2,3-cd]pyrene	<	95.9 J	<	<	<	<	<	<	500	500	5,600
Fluoranthene	<	430	<	<	<	<	<	<	100,000	100,000	500,000
Naphthalene	<	<	99.6 J	<	600	<	<	<	12,000	12,000	500,000
Phenanthrene	<	340 J	130 J	<	120 J	<	110 J	<	100,000	100,000	500,000
Dimethylphthalate	610	410	640	500	630	500	460	420	NL	NL	NL
RCRA Metals (mg/kg)											
Arsenic	3.29	27.3	65.7	4.27	31	3.66	17	2.18	NA	13	16
Barium	61.9	33.3	80.3	101	54.7	128	30.8	29.8	NA	350	400
Cadmium	0.18 J	28	0.44	0.26 J	>	0.3 J	11	0.33	NA	2.5	9.3
Chromium	12.1	23.6	21.2	18.2	440	51.4	20	7.81	NA	***1/30	***400/1,500
Lead	121	423	33	127	49.8	44.2	243	9.09	NA	63	1,000
Mercury	0.33	0.25	0.07	0.65	0.12	0.07	0.1	0.01 J	NA	0.18	2.8
Silver	2.02	20.6	3.15	2.07	2.97	2.41	16.4	0.77	NA	2	1,500

NYSDC Part 375 Industrial and Commercial Soil Cleanup Objectives (December 2006)

NYSDC Commissioner Policy (CP)-51 Soil Cleanup Guidance (October 2010)

NYSDC Division Technical and Administrative Guidance Memorandum HWR-92-4060, Eastern USA Background Concentrations for Soil

NL = Not listed

NA = Not Applicable

ft. bgs = feet below the ground surface

ug/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

< = Indicates the analyte was analyzed for, but not detected.

*SB5A and SB6 VOC results generated from a secondary dilution factor.

** indicates a mixed Xylene Soil Cleanup Level

*** Hexavalent/trivalent chromium results

J = Indicates an estimated value.

No detectable compounds were identified during PCB analysis

Bold = Analyte detected above Part 375 Unrestricted Use SCOs

Yellow = Analyte detected above Part 375 Commercial SCOs

Underlined = Analyte detected above CP-51

Table 3
Buffalo Niagara Riverkeeper, 1660 Niagara Street, Buffalo, New York
Phase II Environmental Site Assessment
Summary of Groundwater Analytical Results
(Detected Compounds Only)

Sample ID	TPMW1	TPMW2	TPMW3	TOGS*
Sample Date	12/11/2015	12/11/2015	12/11/2015	
Volatile Organic Compounds (ug/L)				
Acetone	150	31.4	44	50
Benzene	<	<	4.7 J	1
Carbon Disulfide	0.3 J	0.33 J	<	NL
cis-1,2-Dichloroethene	0.48 J	6.1	190	5
trans-1,2-Dichloroethene	<	<	2.9 J	5
1,1-Dichlororethene	<	<	0.54 J	5
Vinyl Chloride	<	0.58 J	33.5	2
RCRA Metals (ug/L)				
Aresnic	<	6.53 J	<	25
Barium	39.2 J	313	783	1,000
Cadmium	<	<	<	5
Chromium	<	4.94 J	8.92	50
Lead	<	23.6	7.33	25
Mecury	<	0.19 J	0.706	0.7
Selenium	14	11.2	<	10
Silver	<	<	<	50

*Division of Technical and Operational Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (Class GA).

No detectable compounds were identified during SVOC analysis.

NL = Not listed

ug/L = micrograms per liter

< = Indicates the analyte was analyzed for, but not detected.

J = Indicates an estimated value

Yellow = Analyte detected above NYSDEC Groundwater Standards

**2018 LABELLA ASSOCIATES
DRAFT REMEDIAL INVESTIGATION REPORT**

Table 10
1660 Niagara Street Site
1660 Niagara Street, Buffalo, New York
Remedial Investigation
Supplemental Surface Soil/Fill Sample Results
(Detected Analytes Only)

Sample ID	SPSS-1	SPSS-1	SPSS-2	SPSS-2	Protection of Ecological Resources SCOs	Restricted Residential Use SCOs	Commercial Use SCOs
Depth (inches)	0-2	2-12	0-2	2-12			
Sample Date	1/17/2019	1/17/2019	1/17/2019	1/17/2019			
Volatile Organic Compounds (µg/kg)							
cis-1,2-Dichloroethene	NA	0.72	NA	0.67	NL	59,000	NL
Trichloroethene	NA	0.23	NA	<	200	21,000	200,000
Semi-Volatile Organic Compounds (µg/kg)							
Acenaphthene	57	150	88	27	20,000	100,000	500,000
Acenaphthylene	280	440	150	66	NL	100,000	500,000
Anthracene	210	520	350	77	NL	100,000	500,000
Benzo(a)anthracene	490	740	970	330	NL	1,000	5,600
Benzo(b)fluoranthene	900	1,100	1,600	530	NL	1,000	5,600
Benzo(k)fluoranthene	270	320	470	140	NL	3,900	56,000
Benzo(g,h,i)perylene	550	1,100	830	280	NL	100,000	100,000
Benzo(a)pyrene	620	940	1,000	340	2,600	1,000	1,000
Butylbenzylphthalate	2,600	1,300	3,500	130	NL	NL	NL
Carbazole	110	70	210	41	NL	NL	NL
Chrysene	620	740	1,100	360	NL	3,900	56,000
Dibenzo(a,h)anthracene	110	220	220	76	NL	330	560
Dibenzofuran	56	54	95	77	NL	NL	NL
Di-n-butylphthalate	350	91	370	200	NL	NL	NL
bis(2-Ethylhexyl)phthalate	860	930	900	230	NL	NL	NL
Fluoranthene	1,000	1,400	2,100	590	NL	100,000	500,000
Fluorene	88	150	100	34	30,000	100,000	500,000
Indeno(1,2,3-cd)pyrene	500	1,100	860	280	NL	500	5,600
2-Methylnaphthalene	140	100	180	280	NL	NL	NL
Naphthalene	130	64	180	160	NL	100,000	500,000
Pentachlorophenol	<	260	<	<	NL	NL	6,700
Phenanthrene	750	860	1,300	410	NL	100,000	500,000
Phenol	260	75	310	<	NL	NL	500,000
Pyrene	1,200	1,200	1,700	520	NL	100,000	500,000
Biphenyl	<	<	<	48	NL	NL	NL
Acetophenone	500	170	650	30	NL	NL	NL
3-Methylphenol/4-Methylphenol	47	<	58	<	NL	NL	NL
Benzaldehyde	730	120	870	62	NL	NL	NL
Metals (mg/kg)							
Aluminum	8,000	6,340	11,800	15,000	NL	NL	NL
Antimony	6.07	1.26	4.32	1.40	NL	NL	NL
Arsenic	9.87	4.67	16.1	12	13	16	16
Barium	260	100	267	183	433	400	400
Beryllium	1.19	0.632	1.47	2.27	10	72	590
Cadmium	7.55	1.54	4.8	1.20	4.0	4.3	9.3
Calcium	47,500	171,000	54,500	86,600	NL	NL	NL
Hexavalent chromium	48.6	16.2	238	12.1	1	110	*400/1,500
Trivalent chromium					41	180	*400/1,500
Cobalt	7.26	4.2	11.4	4	NL	NL	NL
Copper	143	47.2	205	98	50	270	270
Iron	42,600	15,100	35,900	9,500	NL	NL	NL
Lead	739	170	907	145	63	400	1,000
Magnesium	9,780	9,700	10,500	8,040	NL	NL	NL
Manganese	672	421	1,260	1,380	1,600	2,000	10,000
Mercury	0.192	0.137	1.07	1.05	0.18	0.81	2.8
Nickel	33.2	14.1	39.6	10.0	30	310	310
Potassium	977	752	1,170	1,280	NL	NL	NL
Selenium	2.79	1.05	3.33	1.46	3.9	180	1,500
Silver	<	<	0.383	0.618	2	180	1,500
Sodium	381	250	508	680	NL	NL	NL
Vanadium	11.3	10.7	13.8	8.60	NL	NL	NL
Zinc	993	412	718	376	109	10,000	100,000

Restricted Residential Use SCOs = NYSDEC Part 375 Restricted Residential Use Soil Cleanup Objectives (SCOs), Table 375-6.8(b) (December 2006)

Protection of Ecological Resources SCOs = Protection of Ecological Resources SCOs, Table 375-6.8(b) (December 2006)

Commercial Use SCOs = NYSDEC Part 375 Commercial Use SCOs, Table 375-6.8(b) (December 2006)

< = Not Detected

NL = Not listed

NA = Not analyzed

µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

Concentrations in gray exceed the NYSDEC Part 375 Restricted Residential Use SCOs

Concentrations in **bold** exceed the Protection of Ecological Resources SCOs

Concentrations underlined exceed the NYSDEC Part 375 Commercial Use SCOs

**FORMER BUFFALO GAS LIGHT/
IROQUOIS GAS CORPORATION
SITE NO. 915351**

**2022 GEI CONSULTANTS
DRAFT SITE CHARACTERIZATION REPORT**

Table 5A. Land Subsurface Soil Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description							Former Buffalo Gas Light Area						Lower Scajaquada Creek Area																					
													MW-BGL-1/16-20		MW-BGL-DUP		MW-BGL-3/17-19	MW-LSC-1/13-15		MW-LSC-1/22-24		MW-LSC-2/18-20		MW-LSC-3/11-12		MW-LSC-3/22-24		MW-LSC-4/20-22		MW-LSC-4/24-28		MW-LSC-5 (18-22)		MW-LSC-5 (26-30)
							Sample Name	16	16	17	13	22	18	11	22	20	11	22	20	11	22	20	11	22	20	11	22	20	11	22	20	11	22	20
							Start Depth	20	20	19	15	24	20	12	24	22	28	22	30															
							End Depth	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft															
Depth Unit	11/11/2021	11/11/2021	11/9/2021	11/3/2021	11/3/2021	11/4/2021	11/8/2021	11/8/2021	11/5/2021	11/5/2021	1/4/2022	1/4/2022																						
Sample Date																																		
Parent Sample																																		

Table 5A. Land Subsurface Soil Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Notes:

Depths are measured from ground surface
mg/kg = milligrams/kilogram or parts per million (ppm)
% = Percent
ug/kg = micrograms per kilogram

PAH = Polycyclic Aromatic Hydrocarbon

PCB = Polychlorinated Biphenyl
SVOC = Semi-Volatile Organic Compound
VOC = Volatile Organic Compound

CAS No. = Chemical Abstracts Service Number
ND = Not Detected
NE = Not Established

6 NYCRR = New York State Register and Official Compilation of Codes, Rules and Regulations of the State of New York

Comparison of detected results are performed against one or more of the following NYCRR, Chapter IV, Part 375-6 Soil Cleanup Objectives (SCO)s: Unrestricted Use, Restricted-Residential, Protection of Ecological Resources

Bolding indicates a detected result concentration
Shading and bolding indicates that the detected concentration is above the NYSDOH guidance it was compared to.
Samples collected entirely below 15' bgs are not compared to Table 375-6.8(b) or CP-51 SSCOs.

Validation Qualifiers:

J = The result is an estimated value.
R = The result is rejected.
U = The result was not detected above the reporting limit.
UJ = The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

1,4-Dioxane - Rejected Data

Due to the extremely low calibration response factor for 1,4-dioxane under Method 8260C, this compound is typically rejected during validation as it does not meet the minimal criteria set for accurate quantitation. Non-detect results for 1,4-dioxane are rejected as the presence or absence of the compound cannot be verified. Positive results are estimated due to the high variability inherent in the quantitation when using an extremely low response factor.

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Former Buffalo Gas Light Area				Lower Scajaquada Creek Area					
					MW-BGL-1		MW-BGL-3		MW-LSC-1		MW-LSC-2		DUP	
					1/19/2022		1/19/2022		1/18/2022		1/18/2022		1/18/2022	
					Parent Sample								MW-LSC-2	
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
VOCs (8260C)	ug/L													
Acetone		67-64-1	50*	NE	5	U	3.2	J	5	UJ	12	UJ	50	UJ
Benzene		71-43-2	1	NE	0.5	U	0.73		0.5	U	540	J	990	J
Bromochloromethane		74-97-5	5	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
Bromodichloromethane		75-27-4	50*	NE	0.5	U	0.5	U	0.5	U	1.2	U	5	U
Bromoform		75-25-2	50*	NE	2	U	2	U	2	UJ	5	UJ	20	UJ
Bromomethane		74-83-9	5	NE	2.5	UJ	2.5	UJ	2.5	UJ	6.2	UJ	25	UJ
Carbon disulfide		75-15-0	60*	NE	5	U	5	U	5	U	12	U	50	U
Carbon tetrachloride		56-23-5	5	NE	0.5	U	0.5	U	0.5	U	1.2	U	5	U
Chlorobenzene		108-90-7	5	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
Chloroethane		75-00-3	5	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
Chloroform (Trichloromethane)		67-66-3	7	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
Chloromethane		74-87-3	5	NE	2.5	U	2.5	U	2.5	UJ	6.2	UJ	25	U
Cyclohexane		110-82-7	NE	NE	10	U	0.66	J	10	U	25	U	100	U
1,2-Dibromo-3-chloropropane		96-12-8	0.04	NE	2.5	U	2.5	U	2.5	UJ	6.2	UJ	25	UJ
Dibromochloromethane		124-48-1	50*	NE	0.5	U	0.5	U	0.5	U	1.2	U	5	U
1,2-Dibromoethane (EDB)		106-93-4	0.0006	NE	2	U	2	U	2	U	5	U	20	U
1,2-Dichlorobenzene (o-DCB)		95-50-1	3	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
1,3-Dichlorobenzene (m-DCB)		541-73-1	3	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
1,4-Dichlorobenzene (p-DCB)		106-46-7	3	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
Dichlorodifluoromethane (Freon 12)		75-71-8	5	NE	5	UJ	5	UJ	5	UJ	12	UJ	50	UJ
1,1-Dichloroethane		75-34-3	5	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
1,2-Dichloroethane		107-06-2	0.6	NE	0.5	U	0.5	U	0.5	U	1.2	U	5	U
1,1-Dichloroethene		75-35-4	5	NE	0.5	U	0.5	U	0.5	U	1.2	U	5	U
cis-1,2-Dichloroethene		156-59-2	5	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
trans-1,2-Dichloroethene		156-60-5	5	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
1,2-Dichloropropane		78-87-5	1	NE	1	U	1	U	1	U	2.5	U	10	U
cis-1,3-Dichloropropene		10061-01-5	0.4	NE	0.5	U	0.5	U	0.5	U	1.2	U	5	U
trans-1,3-Dichloropropene		10061-02-6	0.4	NE	0.5	U	0.5	U	0.5	U	1.2	U	5	U
Ethylbenzene		100-41-4	5	NE	2.5	U	2.1	J	2.5	U	1000		990	
2-Hexanone		591-78-6	50*	NE	5	U	5	U	5	UJ	12	UJ	50	UJ
Isopropylbenzene		98-82-8	5	NE	2.5	U	2.5	U	2.5	U	26		28	
Methyl acetate		79-20-9	NE	NE	2	U	2	U	2	U	5	U	20	U
Methyl ethyl ketone (2-Butanone)		78-93-3	50*	NE	5	U	5	U	5	U	12	U	50	U
Methyl tert-butyl ether (MTBE)		1634-04-4	10*	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	NE	5	U	5	U	5	U	12	U	50	UJ
Methylcyclohexane		108-87-2	NE	NE	10	U	10	U	10	UJ	25	UJ	100	UJ
Methylene chloride		75-09-2	5	NE	2.5	U	2.5	U	2.5	UJ	6.2	UJ	25	UJ

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Former Buffalo Gas Light Area				Lower Scajaquada Creek Area					
					MW-BGL-1		MW-BGL-3		MW-LSC-1		MW-LSC-2		DUP	
					1/19/2022		1/19/2022		1/18/2022		1/18/2022		1/18/2022	
					Parent Sample								MW-LSC-2	
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
Styrene		100-42-5	5	NE	2.5	U	2.5	U	2.5	U	7.1		25	U
1,1,2,2-Tetrachloroethane		79-34-5	5	NE	0.5	U	0.5	U	0.5	U	1.2	U	5	UJ
Tetrachloroethene (PCE)		127-18-4	5	NE	0.5	U	0.5	U	0.5	U	1.2	U	5	U
Toluene		108-88-3	5	NE	2.5	U	2.5	U	2.5	U	560	J	420	J
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	5	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
1,2,3-Trichlorobenzene		87-61-6	5	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	UJ
1,2,4-Trichlorobenzene		120-82-1	5	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	UJ
1,1,1-Trichloroethane (TCA)		71-55-6	5	NE	2.5	U	2.5	U	2.5	U	6.2	U	25	U
1,1,2-Trichloroethane		79-00-5	1	NE	1.5	U	1.5	U	1.5	U	3.8	U	15	U
Trichloroethene (TCE)		79-01-6	5	NE	0.5	U	0.5	U	0.5	U	1.2	U	5	U
Trichlorofluoromethane (Freon 11)		75-69-4	5	NE	2.5	U	2.5	U	2.5	UJ	6.2	UJ	25	UJ
Vinyl chloride		75-01-4	2	NE	1	U	1	U	1	U	0.52	J	10	U
o-Xylene		95-47-6	5	NE	2.5	U	0.74	J	2.5	U	240		220	
m/p-Xylene		179601-23-1	5	NE	2.5	U	1.2	J	2.5	U	500		420	
SVOCs (8270D or DSIM)	ug/L													
Acenaphthene		83-32-9	20*	NE	0.1	U	0.96		0.1	U	58		59	
Acenaphthylene		208-96-8	NE	NE	0.02	J	0.58		0.1	U	230		220	
Acetophenone		98-86-2	NE	NE	5	U	5	U	5	U	2.6	J	2.6	J
Anthracene		120-12-7	50*	NE	0.1	U	0.18		0.1	U	13		12	
Atrazine		1912-24-9	7.5	NE	10	U	10	U	10	U	10	U	10	U
Benzaldehyde		100-52-7	NE	NE	5	U	5	U	5	U	5	U	5	U
Benzo(a)anthracene		56-55-3	0.002*	NE	0.02	J	0.04	J	0.1	U	0.78	J	0.49	J
Benzo(b)fluoranthene		205-99-2	0.002*	NE	0.01	J	0.02	J	0.1	U	0.39		0.21	
Benzo(k)fluoranthene		207-08-9	0.002*	NE	0.1	U	0.1	U	0.1	U	0.1		0.06	J
Benzo(g,h,i)perylene		191-24-2	NE	NE	0.1	U	0.02	J	0.1	U	0.24		0.12	
Benzo(a)pyrene		50-32-8	ND	NE	0.1	U	0.02	J	0.1	U	0.59	J	0.29	J
Biphenyl (1,1-Biphenyl)		92-52-4	5	NE	2	U	2	U	2	U	54		53	
Bis(2-chloroethoxy)methane		111-91-1	5	NE	5	U	5	U	5	U	5	U	5	U
Bis(2-chloroethyl)ether		111-44-4	1	NE	2	U	2	U	2	U	2	U	2	U
2,2-oxybis(1-Chloropropane)		108-60-1	5	NE	2	U	2	U	2	U	2	U	2	U
Bis(2-ethylhexyl)phthalate		117-81-7	5	NE	3	U	3	U	3	U	3	U	3	U
4-Bromophenyl phenyl ether		101-55-3	NE	NE	2	U	2	U	2	U	2	U	2	U
Butyl benzyl phthalate		85-68-7	50*	NE	5	U	5	U	5	UJ	5	UJ	5	UJ
Caprolactam		105-60-2	NE	NE	10	U	10	U	10	U	10	U	10	U
Carbazole		86-74-8	NE	NE	2	U	0.76	J	2	UJ	2.4	J	2.5	J
4-Chloro-3-methylphenol		59-50-7	NE	NE	2	U	2	U	2	U	2	U	2	U
4-Chloroaniline		106-47-8	5	NE	5	U	5	U	5	UJ	5	UJ	5	UJ
2-Chloronaphthalene		91-58-7	10*	NE	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Former Buffalo Gas Light Area				Lower Scajaquada Creek Area					
					MW-BGL-1		MW-BGL-3		MW-LSC-1		MW-LSC-2		DUP	
					1/19/2022		1/19/2022		1/18/2022		1/18/2022		1/18/2022	
					Parent Sample								MW-LSC-2	
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
2-Chlorophenol		95-57-8	NE	NE	2	U	2	U	2	U	2	U	2	U
4-Chlorophenyl phenyl ether		7005-72-3	NE	NE	2	U	2	U	2	U	2	U	2	U
Chrysene		218-01-9	0.002*	NE	0.1	U	0.02	J	0.1	U	0.56	J	0.34	J
Dibenz(a,h)anthracene		53-70-3	NE	NE	0.1	U	0.1	U	0.1	U	0.05	J	0.03	J
Dibenzofuran		132-64-9	NE	NE	2	U	2	U	2	U	8.4		8.2	
3,3-Dichlorobenzidine		91-94-1	5	NE	5	U	5	U	5	UJ	5	UJ	5	UJ
2,4-Dichlorophenol		120-83-2	5	NE	5	U	5	U	5	U	5	U	5	U
Diethyl phthalate		84-66-2	50*	NE	5	U	5	U	5	U	5	U	5	U
Dimethyl phthalate		131-11-3	50*	NE	5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol		105-67-9	50*	NE	5	U	5	U	5	UJ	5	UJ	5	UJ
Di-n-butyl phthalate		84-74-2	50	NE	5	U	5	U	5	U	5	U	5	U
4,6-Dinitro-2-methylphenol		534-52-1	NE	NE	10	U	10	U	10	U	10	U	10	U
2,4-Dinitrophenol		51-28-5	10*	NE	20	U	20	U	20	U	20	U	20	U
2,4-Dinitrotoluene		121-14-2	5	NE	5	U	5	U	5	U	5	U	5	U
2,6-Dinitrotoluene		606-20-2	5	NE	5	U	5	U	5	U	5	U	5	U
Di-n-octyl phthalate		117-84-0	50*	NE	5	U	5	U	5	U	5	U	5	U
1,4-Dioxane		123-91-1	NE	0.35	0.144	U	0.285		0.15	U	0.0798	J	0.065	J
Fluoranthene		206-44-0	50*	NE	0.1	U	0.18	J	0.1	U	4.5		4.1	
Fluorene		86-73-7	50*	NE	0.1	U	0.79		0.1	U	45		44	
Hexachlorobenzene		118-74-1	0.04	NE	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,3-Hexachlorobutadiene (C-46)		87-68-3	0.5	NE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene		77-47-4	5	NE	20	U	20	U	20	U	20	U	20	U
Hexachloroethane		67-72-1	5	NE	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	NE	0.1	U	0.02	J	0.1	U	0.24		0.13	
Isophorone		78-59-1	50*	NE	5	U	5	U	5	U	5	U	5	U
2-Methylnaphthalene		91-57-6	NE	NE	0.1	U	4.9		0.1	U	960		960	
2-Methylphenol (o-Cresol)		95-48-7	1	NE	5	U	0.81	J	5	U	0.73	J	0.74	J
3,4-Methylphenol (m,p-Cresol)		108394/106445	NE	NE	5	U	1.4	J	5	U	1.2	J	1.1	J
Naphthalene		91-20-3	10*	NE	0.1	U	15		0.1	U	3,900		3,800	
2-Nitroaniline		88-74-4	5	NE	5	U	5	U	5	U	5	U	5	U
3-Nitroaniline		99-09-2	5	NE	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline		100-01-6	5	NE	5	U	5	U	5	U	5	U	5	U
Nitrobenzene		98-95-3	0.4	NE	2	U	2	U	2	UJ	2	UJ	2	UJ
2-Nitrophenol		88-75-5	NE	NE	10	U	10	U	10	UJ	10	UJ	10	UJ
4-Nitrophenol		100-02-7	NE	NE	10	U	10	U	10	U	10	U	10	U
N-Nitrosodiphenylamine (NDFA)		86-30-6	50*	NE	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	NE	5	U	5	U	5	U	5	U	5	U
Pentachlorophenol		87-86-5	1	NE	0.8	UJ	0.8	UJ	0.8	U	0.17	J	0.16	J

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Former Buffalo Gas Light Area				Lower Scajaquada Creek Area					
					MW-BGL-1		MW-BGL-3		MW-LSC-1		MW-LSC-2		DUP	
					1/19/2022		1/19/2022		1/18/2022		1/18/2022		1/18/2022	
					Parent Sample								MW-LSC-2	
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
Phenanthrene		85-01-8	50*	NE	0.1	U	1		0.1	U	64		61	
Phenol		108-95-2	1	NE	5	U	5	U	5	U	3.3	J	4.4	J
Pyrene		129-00-0	50*	NE	0.03	J	0.23		0.1	U	8.2		7.3	
1,2,4,5-Tetrachlorobenzene		95-94-3	5	NE	10	U	10	U	10	U	10	U	10	U
2,3,4,6-Tetrachlorophenol		58-90-2	NE	NE	5	U	5	U	5	U	5	U	5	U
2,4,5-Trichlorophenol		95-95-4	NE	NE	5	U	5	U	5	U	5	U	5	U
2,4,6-Trichlorophenol		88-06-2	NE	NE	5	U	5	U	5	U	5	U	5	U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	NE	0.08		24		ND		5,286		5,169	
CYANIDES (9012B)	mg/L													
Total Cyanide		57-12-5	0.2	NE	0.005	UJ	2.57	J	0.005	U	0.005	U	0.002	J
METALS (6020B/7470A)	mg/L													
Aluminum		7429-90-5	NE	NE	0.106		0.0736		0.01	U	0.0373	J	0.0262	J
Antimony		7440-36-0	0.003	NE	0.004	U	0.00107	J	0.004	U	0.004	U	0.004	U
Arsenic		7440-38-2	0.025	NE	0.00143		0.01161		0.00064		0.00074		0.00071	
Barium		7440-39-3	1	NE	0.03388	J	0.1054	J	0.03948		0.324		0.4215	
Beryllium		7440-41-7	0.003*	NE	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Cadmium		7440-43-9	0.005	NE	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Calcium		7440-70-2	NE	NE	306		989		106		164		159	
Chromium		7440-47-3	0.05	NE	0.00083	J	0.00093	J	0.001	U	0.001	U	0.001	U
Cobalt		7440-48-4	NE	NE	0.00335	J	0.00112	J	0.00046	J	0.0005	U	0.0005	U
Copper		7440-50-8	0.2	NE	0.00227		0.00238		0.00176		0.001	U	0.001	U
Iron		7439-89-6	0.3	NE	0.13	J	1.57		0.0648	J	3.97		3.62	
Lead		7439-92-1	0.025	NE	0.00036	J	0.00111		0.001	U	0.001	U	0.001	U
Magnesium		7439-95-4	35*	NE	1,070		41.3		58.1		37.8		37.5	
Manganese		7439-96-5	0.3	NE	0.1111	J	0.4066		0.3172		0.2505		0.2419	
Mercury		7439-97-6	0.0007	NE	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Nickel		7440-02-0	0.1	NE	0.00441	J	0.00159	J	0.00245		0.002	U	0.002	U
Potassium		7440-09-7	NE	NE	57.5		45.1		6.52		11.6		11	
Selenium		7782-49-2	0.01	NE	0.005	U	0.005	U	0.00199	J	0.005	U	0.005	U
Silver		7440-22-4	0.05	NE	0.0004	U	0.0004	U	0.0004	U	0.0004	U	0.0004	U
Sodium		7440-23-5	20	NE	465		1,860		216		968		969	
Thallium		7440-28-0	0.0005*	NE	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Vanadium		7440-62-2	NE	NE	0.00299	J	0.00235	J	0.0017	J	0.005	U	0.005	U
Zinc		7440-66-6	2*	NE	0.01032	U	0.01	U	0.01	U	0.01	U	0.01	U
PESTICIDES (8081B)	ug/L													
Aldrin		309-00-2	ND	NE	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ
alpha-BHC (Hexachlorocyclohexane)		319-84-6	0.01	NE	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ
beta-BHC (beta-Hexachlorocyclohexane)		319-85-7	0.04	NE	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Former Buffalo Gas Light Area				Lower Scajaquada Creek Area					
					MW-BGL-1		MW-BGL-3		MW-LSC-1		MW-LSC-2		DUP	
					1/19/2022		1/19/2022		1/18/2022		1/18/2022		1/18/2022	
					Parent Sample								MW-LSC-2	
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane)		58-89-9	0.05	NE	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ
delta-BHC (delta-Hexachlorocyclohexane)		319-86-8	0.04	NE	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ
Chlordane (Technical)		12789-03-6	NE	NE	0.143	UJ	0.143	UJ	0.143	UJ	0.143	UJ	0.143	UJ
alpha-chlordane		5103-71-9	NE	NE	0.014	UJ	0.014	UJ	0.014	U	0.014	U	0.014	U
gamma-Chlordane		5103-74-2	NE	NE	0.014	UJ	0.014	UJ	0.014	U	0.014	U	0.014	U
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	50	NE										
4,4'-DDT (p,p'-DDT)		50-29-3	0.2	NE	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ
4,4'-DDE (p,p'-DDE)		72-55-9	0.2	NE	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ
4,4'-DDD (p,p'-DDD)		72-54-8	0.3	NE	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ
Dieldrin		60-57-1	0.004	NE	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ
alpha-Endosulfan (I)		959-98-8	NE	NE	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ
beta-Endosulfan (II)		33213-65-9	NE	NE	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ
Endosulfan sulfate		1031-07-8	NE	NE	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ
Endrin		72-20-8	ND	NE	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ
Endrin aldehyde		7421-93-4	5	NE	0.029	U	0.029	U	0.029	U	0.029	U	0.029	U
Endrin ketone		53494-70-5	5	NE	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ	0.029	UJ
Heptachlor		76-44-8	0.04	NE	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ
Heptachlor epoxide		1024-57-3	0.03	NE	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ	0.014	UJ
Methoxychlor		72-43-5	35	NE	0.143	UJ	0.143	UJ	0.143	UJ	0.143	UJ	0.143	UJ
2,4,5-TP (Silvex)		93-72-1	0.26	NE										
Toxaphene		8001-35-2	0.06	NE	0.143	UJ	0.143	UJ	0.143	UJ	0.143	UJ	0.143	UJ
HERBICIDES (8151A)	ug/L													
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	50	NE	10	U	10	U	10	U	10	U	10	U
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)		93-76-5	35	NE	2	U	2	U	2	UJ	2	UJ	2	UJ
2,4,5-TP (Silvex)		93-72-1	0.26	NE	2	U	2	U	2	U	2	U	2	U
PCBs (8082A)	ug/L													
Aroclor 1016		12674-11-2	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ
Aroclor 1221		11104-28-2	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ
Aroclor 1232		11141-16-5	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ
Aroclor 1242		53469-21-9	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ
Aroclor 1248		12672-29-6	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ
Aroclor 1254		11097-69-1	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ
Aroclor 1260		11096-82-5	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ
Aroclor 1262		37324-23-5	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ
Aroclor 1268		11100-14-4	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ
Total PCBs (Lab calculated)		1336-36-3	0.09	NE	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ	0.071	UJ
PFAS (LCMSMS-ID)	ng/L													

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Former Buffalo Gas Light Area				Lower Scajaquada Creek Area					
					MW-BGL-1		MW-BGL-3		MW-LSC-1		MW-LSC-2		DUP	
					1/19/2022		1/19/2022		1/18/2022		1/18/2022		1/18/2022	
					Parent Sample								MW-LSC-2	
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		2991-50-6	NE	NE	1.9	U	2.02	U	1.78	U	1.79	U		
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		2355-31-9	NE	NE	1.9	U	2.02	U	1.78	U	1.79	U		
Perfluorobutanesulfonic acid (PFBS)		375-73-5	NE	NE	1.9	U	1.6	J	1.78	U	1.31	J		
Perfluorobutanoic acid (PFBA)		375-22-4	NE	NE	1.9	U	2.02	U	1.78	U	15.6			
Perfluorodecanesulfonic acid (PFDS)		335-77-3	NE	NE	1.9	UJ	2.02	UJ	1.78	UJ	1.79	UJ		
Perfluorodecanoic acid (PFDA)		335-76-2	NE	NE	1.9	U	2.02	U	1.78	U	1.79	U		
Perfluorododecanoic acid (PFDoA)		307-55-1	NE	NE	1.9	U	2.02	U	1.78	U	1.79	U		
Perfluoroheptanesulfonic acid (PFHpS)		375-92-8	NE	NE	1.9	U	2.02	U	1.78	U	1.79	U		
Perfluoroheptanoic acid (PFHpA)		375-85-9	NE	NE	0.668	J	5.66	J	1.78	U	9.74			
Perfluorohexanoic acid (PFHxA)		307-24-4	NE	NE	1.69	J	3.39		1.78	U	17.9			
Perfluorooctanesulfonamide (FOSA)		754-91-6	NE	NE	1.9	U	2.02	U	1.78	U	1.79	U		
Perfluoropentanoic Acid (PFPeA)		2706-90-3	NE	NE	1.97	J	31.9		1.78	U	34.8			
Perfluorotetradecanoic acid (PFTA/PFTeDA)		376-06-7	NE	NE	1.9	U	2.02	U	1.78	U	1.79	U		
Perfluorotridecanoic acid (PFTriA/PFTTrDA)		72629-94-8	NE	NE	1.9	U	0.391	J	1.78	U	1.79	U		
Perfluoroundecanoic acid (PFUnA)		2058-94-8	NE	NE	1.9	U	2.02	U	1.78	U	1.79	U		
Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)		39108-34-4	NE	NE	1.9	UJ	2.02	UJ	1.78	UJ	1.79	UJ		
Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)		27619-97-2	NE	NE	1.9	U	2.02	U	1.78	U	1.44	J		
Perfluorohexanesulfonic acid (PFHxS)		355-46-4	NE	NE	1.9	U	2.02	U	1.78	U	2.1			
Perfluorononanoic Acid (PFNA)		375-95-1	NE	NE	1.9	U	2.02	U	1.78	U	1.79	U		
Perfluorooctanesulfonic acid (PFOS)		1763-23-1	NE	10	1.9	U	2.02	U	1.78	U	1.56	J		
Perfluorooctanoic Acid (PFOA)		335-67-1	NE	10	1.4	J	2.1		1.78	U	6.65			
Total PFAS (ND=0)		TPFAS_ND0	NE	NE	5.728		45.041		ND		91.1			

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Lower Scajaquada Creek Area									
					MW-LSC-3		MW-LSC-4		MW-LSC-5		DUP		BSA-MH-WATER	
					1/18/2022		1/19/2022		1/19/2022		1/19/2022		11/18/2021	
					Parent Sample						MW-LSC-5			
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
VOCs (8260C)	ug/L													
Acetone		67-64-1	50*	NE	5	UJ	120	U	25	U			50	U
Benzene		71-43-2	1	NE	4.5		560		420				130	
Bromochloromethane		74-97-5	5	NE	2.5	U	62	U	12	U			25	U
Bromodichloromethane		75-27-4	50*	NE	0.5	U	12	U	2.5	U			5	U
Bromoform		75-25-2	50*	NE	2	UJ	50	U	10	U			20	U
Bromomethane		74-83-9	5	NE	2.5	UJ	62	UJ	12	UJ			25	UJ
Carbon disulfide		75-15-0	60*	NE	5	U	120	U	25	U			50	U
Carbon tetrachloride		56-23-5	5	NE	0.5	U	12	U	2.5	U			5	U
Chlorobenzene		108-90-7	5	NE	2.5	U	62	U	12	U			25	U
Chloroethane		75-00-3	5	NE	2.5	U	62	U	12	U			60	J
Chloroform (Trichloromethane)		67-66-3	7	NE	2.5	U	62	U	12	U			25	U
Chloromethane		74-87-3	5	NE	2.5	UJ	62	U	12	U			25	U
Cyclohexane		110-82-7	NE	NE	10	U	250	U	50	U			100	U
1,2-Dibromo-3-chloropropane		96-12-8	0.04	NE	2.5	UJ	62	U	12	U			25	U
Dibromochloromethane		124-48-1	50*	NE	0.5	U	12	U	2.5	U			5	U
1,2-Dibromoethane (EDB)		106-93-4	0.0006	NE	2	U	50	U	10	U			20	U
1,2-Dichlorobenzene (o-DCB)		95-50-1	3	NE	2.5	U	62	U	12	U			25	U
1,3-Dichlorobenzene (m-DCB)		541-73-1	3	NE	2.5	U	62	U	12	U			25	U
1,4-Dichlorobenzene (p-DCB)		106-46-7	3	NE	2.5	U	62	U	12	U			25	U
Dichlorodifluoromethane (Freon 12)		75-71-8	5	NE	5	UJ	120	UJ	25	UJ			50	U
1,1-Dichloroethane		75-34-3	5	NE	2.5	U	62	U	12	U			140	
1,2-Dichloroethane		107-06-2	0.6	NE	0.5	U	12	U	2.5	U			5	U
1,1-Dichloroethene		75-35-4	5	NE	0.5	U	12	U	2.5	U			8.8	
cis-1,2-Dichloroethene		156-59-2	5	NE	2.5	U	62	U	12	U			1,700	
trans-1,2-Dichloroethene		156-60-5	5	NE	2.5	U	62	U	12	U			25	U
1,2-Dichloropropane		78-87-5	1	NE	1	U	25	U	5	U			10	U
cis-1,3-Dichloropropene		10061-01-5	0.4	NE	0.5	U	12	U	2.5	U			5	U
trans-1,3-Dichloropropene		10061-02-6	0.4	NE	0.5	U	12	U	2.5	U			5	U
Ethylbenzene		100-41-4	5	NE	13		3,300		400				180	
2-Hexanone		591-78-6	50*	NE	5	UJ	120	U	25	U			50	UJ
Isopropylbenzene		98-82-8	5	NE	0.76	J	64		64				25	U
Methyl acetate		79-20-9	NE	NE	2	U	50	U	10	U			20	UJ
Methyl ethyl ketone (2-Butanone)		78-93-3	50*	NE	5	U	120	U	25	U			50	U
Methyl tert-butyl ether (MTBE)		1634-04-4	10*	NE	2.5	U	62	U	12	U			25	U
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	NE	5	U	120	U	25	U			50	U
Methylcyclohexane		108-87-2	NE	NE	10	UJ	250	U	50	U			100	U
Methylene chloride		75-09-2	5	NE	2.5	UJ	62	U	12	U			25	U

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Lower Scajaquada Creek Area									
					MW-LSC-3		MW-LSC-4		MW-LSC-5		DUP		BSA-MH-WATER	
					1/18/2022		1/19/2022		1/19/2022		1/19/2022		11/18/2021	
					Parent Sample						MW-LSC-5			
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
Styrene		100-42-5	5	NE	2.5	U	30	J	12	U			25	U
1,1,2,2-Tetrachloroethane		79-34-5	5	NE	0.5	U	12	U	2.5	U			5	U
Tetrachloroethene (PCE)		127-18-4	5	NE	0.5	U	12	U	2.5	U			5	U
Toluene		108-88-3	5	NE	2.2	J	700		5.7	J			66	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	5	NE	2.5	U	62	U	12	U			25	U
1,2,3-Trichlorobenzene		87-61-6	5	NE	2.5	U	62	U	12	U			25	UJ
1,2,4-Trichlorobenzene		120-82-1	5	NE	2.5	U	62	U	12	U			25	U
1,1,1-Trichloroethane (TCA)		71-55-6	5	NE	2.5	U	62	U	12	U			53	
1,1,2-Trichloroethane		79-00-5	1	NE	1.5	U	38	U	7.5	U			15	U
Trichloroethene (TCE)		79-01-6	5	NE	0.5	U	12	U	2.5	U			5	U
Trichlorofluoromethane (Freon 11)		75-69-4	5	NE	2.5	UJ	62	U	12	U			25	U
Vinyl chloride		75-01-4	2	NE	1	U	3.8	J	0.81	J			280	
o-Xylene		95-47-6	5	NE	6.2		740		140				47	
m/p-Xylene		179601-23-1	5	NE	7.8		1,400		72				68	
SVOCs (8270D or DSIM)	ug/L													
Acenaphthene		83-32-9	20*	NE	4.9		7.9		150				4.6	
Acenaphthylene		208-96-8	NE	NE	1		23		60				0.2	
Acetophenone		98-86-2	NE	NE	5	U	5	U	5	U			5	U
Anthracene		120-12-7	50*	NE	0.45		2.8		9.6				1.3	
Atrazine		1912-24-9	7.5	NE	10	U	10	U	10	U			10	U
Benzaldehyde		100-52-7	NE	NE	5	U	5	U	5	R			5	U
Benzo(a)anthracene		56-55-3	0.002*	NE	0.05	J	1.1	J	4	U			0.17	
Benzo(b)fluoranthene		205-99-2	0.002*	NE	0.02	J	0.46	J	4	U			0.32	
Benzo(k)fluoranthene		207-08-9	0.002*	NE	0.01	J	2.5	U	4	U			0.09	J
Benzo(g,h,i)perylene		191-24-2	NE	NE	0.1	U	2.5	U	4	U			0.19	
Benzo(a)pyrene		50-32-8	ND	NE	0.02	J	0.74	J	4	U			0.13	
Biphenyl (1,1-Biphenyl)		92-52-4	5	NE	0.53	J	72		36	J			5.3	
Bis(2-chloroethoxy)methane		111-91-1	5	NE	5	U	5	U	5	U			5	U
Bis(2-chloroethyl)ether		111-44-4	1	NE	2	U	2	U	2	U			2	U
2,2-oxybis(1-Chloropropane)		108-60-1	5	NE	2	U	2	U	2	U			2	U
Bis(2-ethylhexyl)phthalate		117-81-7	5	NE	3	U	3	U	3	U			1.8	J
4-Bromophenyl phenyl ether		101-55-3	NE	NE	2	U	2	U	2	U			2	U
Butyl benzyl phthalate		85-68-7	50*	NE	5	UJ	5	U	5	U			5	U
Caprolactam		105-60-2	NE	NE	10	U	10	U	10	U			10	U
Carbazole		86-74-8	NE	NE	2	UJ	7.9		3.6				0.68	J
4-Chloro-3-methylphenol		59-50-7	NE	NE	2	U	2	U	2	U			2	U
4-Chloroaniline		106-47-8	5	NE	5	UJ	5	U	5	U			5	U
2-Chloronaphthalene		91-58-7	10*	NE	0.2	U	5	U	8	U			0.2	U

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Lower Scajaquada Creek Area									
					MW-LSC-3		MW-LSC-4		MW-LSC-5		DUP		BSA-MH-WATER	
					1/18/2022		1/19/2022		1/19/2022		1/19/2022		11/18/2021	
					Parent Sample						MW-LSC-5			
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
2-Chlorophenol		95-57-8	NE	NE	2	U	2	U	2	U			2	U
4-Chlorophenyl phenyl ether		7005-72-3	NE	NE	2	U	2	U	2	U			2	U
Chrysene		218-01-9	0.002*	NE	0.02	J	0.59	J	4	U			0.25	
Dibenz(a,h)anthracene		53-70-3	NE	NE	0.1	U	2.5	U	4	U			0.04	J
Dibenzofuran		132-64-9	NE	NE	2	U	13		8.3				2	U
3,3-Dichlorobenzidine		91-94-1	5	NE	5	UJ	5	U	5	UJ			5	U
2,4-Dichlorophenol		120-83-2	5	NE	5	U	5	U	5	U			5	U
Diethyl phthalate		84-66-2	50*	NE	5	U	5	U	5	U			5	U
Dimethyl phthalate		131-11-3	50*	NE	5	U	5	U	5	U			5	U
2,4-Dimethylphenol		105-67-9	50*	NE	5	UJ	5	U	5	U			5	U
Di-n-butyl phthalate		84-74-2	50	NE	5	U	5	U	5	U			5	U
4,6-Dinitro-2-methylphenol		534-52-1	NE	NE	10	U	10	U	10	U			10	U
2,4-Dinitrophenol		51-28-5	10*	NE	20	U	20	U	20	U			20	U
2,4-Dinitrotoluene		121-14-2	5	NE	5	U	5	U	5	U			5	U
2,6-Dinitrotoluene		606-20-2	5	NE	5	U	5	U	5	U			5	U
Di-n-octyl phthalate		117-84-0	50*	NE	5	U	5	U	5	U			5	U
1,4-Dioxane		123-91-1	NE	0.35	0.0785	J	0.343		4.23				12,200	
Fluoranthene		206-44-0	50*	NE	0.31		2.5	U	4	U			1	
Fluorene		86-73-7	50*	NE	2.1		7.5		41				6	
Hexachlorobenzene		118-74-1	0.04	NE	0.8	U	20	U	32	U			0.8	U
1,3-Hexachlorobutadiene (C-46)		87-68-3	0.5	NE	0.5	U	12	U	20	U			0.5	U
Hexachlorocyclopentadiene		77-47-4	5	NE	20	U	20	U	20	U			20	U
Hexachloroethane		67-72-1	5	NE	0.8	U	20	U	32	U			0.13	J
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	NE	0.1	U	2.5	U	4	U			0.21	
Isophorone		78-59-1	50*	NE	5	U	5	U	5	U			5	U
2-Methylnaphthalene		91-57-6	NE	NE	7.8		140		620				0.09	J
2-Methylphenol (o-Cresol)		95-48-7	1	NE	5	U	3.5	J	5	U			5	U
3,4-Methylphenol (m,p-Cresol)		108394/106445	NE	NE	5	U	2.8	J	0.83	J			5	U
Naphthalene		91-20-3	10*	NE	39		930		1,700				0.08	J
2-Nitroaniline		88-74-4	5	NE	5	U	5	U	5	U			5	U
3-Nitroaniline		99-09-2	5	NE	5	U	5	U	5	U			5	U
4-Nitroaniline		100-01-6	5	NE	5	U	5	U	5	U			5	U
Nitrobenzene		98-95-3	0.4	NE	2	UJ	2	U	2	U			2	U
2-Nitrophenol		88-75-5	NE	NE	10	UJ	10	U	10	U			10	U
4-Nitrophenol		100-02-7	NE	NE	10	U	10	U	10	U			10	U
N-Nitrosodiphenylamine (NDFA)		86-30-6	50*	NE	2	U	2	U	2	U			2	U
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	NE	5	U	5	U	5	U			5	U
Pentachlorophenol		87-86-5	1	NE	0.8	U	20	UJ	32	UJ			0.8	U

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Lower Scajaquada Creek Area									
					MW-LSC-3		MW-LSC-4		MW-LSC-5		DUP		BSA-MH-WATER	
					1/18/2022		1/19/2022		1/19/2022		1/19/2022		11/18/2021	
					Parent Sample						MW-LSC-5			
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
Phenanthrene		85-01-8	50*	NE	1.9		13		49				7	
Phenol		108-95-2	1	NE	5	U	5		0.7	J			8.6	
Pyrene		129-00-0	50*	NE	0.39		3.8		4				1.3	
1,2,4,5-Tetrachlorobenzene		95-94-3	5	NE	10	U	10	U	10	U			10	U
2,3,4,6-Tetrachlorophenol		58-90-2	NE	NE	5	U	5	U	5	U			5	U
2,4,5-Trichlorophenol		95-95-4	NE	NE	5	U	5	U	5	U			5	U
2,4,6-Trichlorophenol		88-06-2	NE	NE	5	U	5	U	5	U			5	U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	NE	58		1,131		2,634				23	
CYANIDES (9012B)	mg/L													
Total Cyanide		57-12-5	0.2	NE	0.004	J	0.004	J	0.004	J			0.002	J
METALS (6020B/7470A)	mg/L													
Aluminum		7429-90-5	NE	NE	0.0296	J	0.114		0.03				2.59	
Antimony		7440-36-0	0.003	NE	0.004	U	0.004	U	0.00046	J			0.00331	J
Arsenic		7440-38-2	0.025	NE	0.00306		0.00027	J	0.0007				0.00217	
Barium		7440-39-3	1	NE	0.2552		0.1568		0.2859				0.1282	
Beryllium		7440-41-7	0.003*	NE	0.0005	U	0.0005	U	0.0005	U			0.00013	J
Cadmium		7440-43-9	0.005	NE	0.0002	U	0.0002	U	0.0002	U			8.00E-05	J
Calcium		7440-70-2	NE	NE	260		114		193				99.7	
Chromium		7440-47-3	0.05	NE	0.00034	J	0.00045	J	0.00027	J			0.00568	
Cobalt		7440-48-4	NE	NE	0.00184	J	0.00016	J	0.0002	J			0.00197	
Copper		7440-50-8	0.2	NE	0.001	U	0.001	U	0.001	U			0.01747	
Iron		7439-89-6	0.3	NE	11.3		0.239	J	0.854				4.21	
Lead		7439-92-1	0.025	NE	0.001	U	0.001	U	0.001	U			0.02769	
Magnesium		7439-95-4	35*	NE	52.7		22.8		59.9				20.8	
Manganese		7439-96-5	0.3	NE	0.4426		0.1539		0.6083				0.2258	
Mercury		7439-97-6	0.0007	NE	0.0002	U	0.0002	U	0.0002	U			0.0002	U
Nickel		7440-02-0	0.1	NE	0.00099	J	0.002	U	0.002	U			0.0057	
Potassium		7440-09-7	NE	NE	8		4.79		3.89				7.5	
Selenium		7782-49-2	0.01	NE	0.005	U	0.005	U	0.005	U			0.005	U
Silver		7440-22-4	0.05	NE	0.0004	U	0.0004	U	0.0004	U			0.00017	J
Sodium		7440-23-5	20	NE	380		182		332				157	
Thallium		7440-28-0	0.0005*	NE	0.001	U	0.001	U	0.001	U			0.001	U
Vanadium		7440-62-2	NE	NE	0.005	U	0.00184	J	0.005	U			0.00564	
Zinc		7440-66-6	2*	NE	0.01	U	0.0114	U	0.01	U			0.07793	
PESTICIDES (8081B)	ug/L													
Aldrin		309-00-2	ND	NE	0.014	UJ	0.714	U	0.014	UJ			0.014	U
alpha-BHC (Hexachlorocyclohexane)		319-84-6	0.01	NE	0.014	UJ	0.714	U	0.014	UJ			0.014	U
beta-BHC (beta-Hexachlorocyclohexane)		319-85-7	0.04	NE	0.014	U	0.714	U	0.014	U			0.014	U

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Lower Scajaquada Creek Area									
					MW-LSC-3		MW-LSC-4		MW-LSC-5		DUP		BSA-MH-WATER	
					1/18/2022		1/19/2022		1/19/2022		1/19/2022		11/18/2021	
					Parent Sample						MW-LSC-5			
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance										
gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane)		58-89-9	0.05	NE	0.014	UJ	0.714	U	0.014	UJ			0.014	U
delta-BHC (delta-Hexachlorocyclohexane)		319-86-8	0.04	NE	0.014	UJ	0.714	U	0.014	UJ			0.014	U
Chlordane (Technical)		12789-03-6	NE	NE	0.143	UJ	7.14	U	0.143	UJ			0.143	U
alpha-chlordane		5103-71-9	NE	NE	0.014	U	0.714	U	0.014	UJ			0.014	U
gamma-Chlordane		5103-74-2	NE	NE	0.014	U	0.714	U	0.014	UJ			0.014	U
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	50	NE										
4,4'-DDT (p,p'-DDT)		50-29-3	0.2	NE	0.029	UJ	1.43	U	0.029	UJ			0.029	U
4,4'-DDE (p,p'-DDE)		72-55-9	0.2	NE	0.029	UJ	1.43	U	0.029	UJ			0.029	U
4,4'-DDD (p,p'-DDD)		72-54-8	0.3	NE	0.029	UJ	1.43	U	0.029	UJ			0.029	U
Dieldrin		60-57-1	0.004	NE	0.029	UJ	1.43	U	0.029	UJ			0.029	U
alpha-Endosulfan (I)		959-98-8	NE	NE	0.014	UJ	0.714	U	0.014	UJ			0.014	U
beta-Endosulfan (II)		33213-65-9	NE	NE	0.029	UJ	1.43	U	0.029	UJ			0.029	U
Endosulfan sulfate		1031-07-8	NE	NE	0.029	UJ	1.43	U	0.029	UJ			0.029	U
Endrin		72-20-8	ND	NE	0.029	UJ	1.43	U	0.029	UJ			0.029	U
Endrin aldehyde		7421-93-4	5	NE	0.029	U	1.43	U	0.029	U			0.029	U
Endrin ketone		53494-70-5	5	NE	0.029	UJ	1.43	U	0.029	UJ			0.029	U
Heptachlor		76-44-8	0.04	NE	0.014	UJ	0.714	U	0.014	UJ			0.014	U
Heptachlor epoxide		1024-57-3	0.03	NE	0.014	UJ	0.714	U	0.014	UJ			0.014	U
Methoxychlor		72-43-5	35	NE	0.143	UJ	7.14	UJ	0.143	UJ			0.143	U
2,4,5-TP (Silvex)		93-72-1	0.26	NE										
Toxaphene		8001-35-2	0.06	NE	0.143	UJ	7.14	UJ	0.143	UJ			0.143	U
HERBICIDES (8151A)	ug/L													
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	50	NE	10	U	10	U	10	U			10	U
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)		93-76-5	35	NE	2	UJ	2	UJ	2	UJ			2	U
2,4,5-TP (Silvex)		93-72-1	0.26	NE	2	U	2	U	2	U			2	U
PCBs (8082A)	ug/L													
Aroclor 1016		12674-11-2	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ			0.071	U
Aroclor 1221		11104-28-2	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ			0.071	U
Aroclor 1232		11141-16-5	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ			0.071	U
Aroclor 1242		53469-21-9	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ			0.071	U
Aroclor 1248		12672-29-6	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ			0.071	U
Aroclor 1254		11097-69-1	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ			0.066	J
Aroclor 1260		11096-82-5	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ			0.071	U
Aroclor 1262		37324-23-5	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ			0.071	U
Aroclor 1268		11100-14-4	NE	NE	0.071	UJ	0.071	UJ	0.071	UJ			0.071	U
Total PCBs (Lab calculated)		1336-36-3	0.09	NE	0.071	UJ	0.071	UJ	0.071	UJ			0.066	J
PFAS (LCMSMS-ID)	ng/L													

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description					Lower Scajaquada Creek Area									
					MW-LSC-3		MW-LSC-4		MW-LSC-5		DUP		BSA-MH-WATER	
					Sample Name		Sample Date		1/18/2022		1/19/2022		1/19/2022	
					Parent Sample									
Analyte	Units	CAS No. or Identifier	NY AWQS	NYSDEC Interim Guidance							MW-LSC-5			
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		2991-50-6	NE	NE	1.86	U	10	U	1.84	U	1.79	U	2.46	U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)		2355-31-9	NE	NE	1.86	U	10	U	1.84	U	1.79	U	2.46	U
Perfluorobutanesulfonic acid (PFBS)		375-73-5	NE	NE	1.63	J	1.92	J	1.43	J	1.32	J	2.32	J
Perfluorobutanoic acid (PFBA)		375-22-4	NE	NE	7.46		5.92	J	7.8	J	14.6	J	11.8	
Perfluorodecanesulfonic acid (PFDS)		335-77-3	NE	NE	1.86	UJ	10	UJ	1.84	UJ	1.79	UJ	2.46	U
Perfluorodecanoic acid (PFDA)		335-76-2	NE	NE	1.86	U	10	U	1.84	U	1.79	U	0.566	J
Perfluorododecanoic acid (PFDoA)		307-55-1	NE	NE	1.86	U	10	U	1.84	U	1.79	U	2.46	U
Perfluoroheptanesulfonic acid (PFHpS)		375-92-8	NE	NE	1.86	U	10	U	1.84	U	1.79	U	2.46	U
Perfluoroheptanoic acid (PFHpA)		375-85-9	NE	NE	4.24		5.4	J	6.18	J	10	J	2.58	
Perfluorohexanoic acid (PFHxA)		307-24-4	NE	NE	8.77		13.6		16.6		17.9		5	
Perfluorooctanesulfonamide (FOSA)		754-91-6	NE	NE	1.86	U	10	U	1.84	U	1.79	U	2.46	U
Perfluoropentanoic Acid (PFPeA)		2706-90-3	NE	NE	16.8		25.1		30.3		36		10.4	
Perfluorotetradecanoic acid (PFTA/PFTeDA)		376-06-7	NE	NE	1.86	U	10	U	1.84	U	1.79	U	0.462	J
Perfluorotridecanoic acid (PFTriA/PFTrDA)		72629-94-8	NE	NE	1.86	U	10	U	1.84	U	1.79	U	2.46	U
Perfluoroundecanoic acid (PFUnA)		2058-94-8	NE	NE	1.86	U	10	U	1.84	U	1.79	U	2.46	U
Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)		39108-34-4	NE	NE	1.86	UJ	10	UJ	1.84	UJ	1.79	UJ	2.46	U
Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)		27619-97-2	NE	NE	1.86	U	14.6		29.6	J	1.58	J	1.91	J
Perfluorohexanesulfonic acid (PFHxS)		355-46-4	NE	NE	2.23		4.52	J	5.77		2.2		1.52	J
Perfluorononanoic Acid (PFNA)		375-95-1	NE	NE	0.305	J	1.74	J	1.44	J	1.79	U	0.718	J
Perfluorooctanesulfonic acid (PFOS)		1763-23-1	NE	10	2.06	J	18		8.3	J	1.46	J	5.33	
Perfluorooctanoic Acid (PFOA)		335-67-1	NE	10	3.38		4.86	J	4.88		6.76		3.17	
Total PFAS (ND=0)		TPFAS_ND0	NE	NE	46.875		95.66		112.3		91.82		45.776	

Table 5B. Groundwater Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Notes:

mg/L = milligrams/liter
ng/L = nanogram per liter (ppt)
ug/L = micrograms per liter or parts per billion (ppb)

PAH = Polycyclic Aromatic Hydrocarbon
PCB = Polychlorinated Biphenyl
SVOC = Semi-Volatile Organic Compound
VOC = Volatile Organic Compound

CAS No. = Chemical Abstracts Service Number
ND = Not Detected
NE = Not Established

NYS AWQS = New York State Ambient Water Quality Standards and Guidance Values for GA groundwater
* indicates the value is a guidance value and not a standard
NYSDEC Interim Groundwater Screening Levels based on NYSDEC guidance as follows:
- February 2019 (1,4-dioxane)
- June 2021 (PFAS)
Bolding indicates a detected result concentration
Shading and bolding indicates that the detected concentration is above the NYSDOH guidance it was compared to

Validation Qualifiers:

J = The result is an estimated value.
R = The result is rejected.
U = The result was not detected above the reporting limit.
UJ = The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results											
				SED-BGL-1/0-0.5		SED-LSC-1/0-0.5		SED-LSC-2/0-0.5		SED-LSC-3/0-0.5		SED-LSC-DUP/0-0.5		SED-LSC-4/0-0.5	
				0		0		0		0		0		0	
				0.5		0.5		0.5		0.5		0.5		0.5	
				ft		ft		ft		ft		ft		ft	
				11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021	
				SED-LSC-3/0-0.5											
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B												
VOCs (SW 8260C)	ug/kg														
Acetone		67-64-1	NE	930	U	3,300	UJ	150	J	4,000	UJ	1,800	UJ	2,500	J
Benzene		71-43-2	1900	46	U	170	UJ	1.2	UJ	200	UJ	34	J	250	UJ
Bromochloromethane		74-97-5	NE	190	U	660	UJ	4.8	UJ	810	UJ	360	UJ	1000	UJ
Bromodichloromethane		75-27-4	NE	46	U	170	UJ	1.2	UJ	200	UJ	89	UJ	250	UJ
Bromoform		75-25-2	NE	370	U	1,300	UJ	9.6	UJ	1,600	UJ	710	UJ	2,000	UJ
Bromomethane		74-83-9	NE	190	U	660	UJ	4.8	UJ	810	UJ	360	UJ	1000	UJ
Carbon disulfide		75-15-0	NE	930	UJ	3,300	UJ	24	UJ	4,000	UJ	1,800	UJ	5,000	UJ
Carbon tetrachloride		56-23-5	9600	93	UJ	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
Chlorobenzene		108-90-7	1700	46	U	170	UJ	1.2	UJ	200	UJ	89	UJ	250	UJ
Chloroethane		75-00-3	NE	190	U	660	UJ	4.8	UJ	810	UJ	360	UJ	1000	UJ
Chloroform (Trichloromethane)		67-66-3	NE	140	U	66	J	3.6	UJ	610	UJ	270	UJ	760	UJ
Chloromethane		74-87-3	NE	370	U	1,300	UJ	9.6	UJ	1,600	UJ	710	UJ	2,000	UJ
Cyclohexane		110-82-7	NE	930	U	3,300	UJ	24	UJ	4,000	UJ	1,800	UJ	5,000	UJ
1,2-Dibromo-3-chloropropane		96-12-8	NE	280	U	1000	UJ	7.2	UJ	1,200	UJ	540	UJ	1,500	UJ
Dibromochloromethane		124-48-1	NE	93	U	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
1,2-Dibromoethane (EDB)		106-93-4	NE	93	U	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
1,2-Dichlorobenzene (o-DCB)		95-50-1	2500	190	U	660	UJ	4.8	UJ	810	UJ	360	UJ	1000	UJ
1,3-Dichlorobenzene (m-DCB)		541-73-1	7100	190	U	660	UJ	4.8	UJ	810	UJ	360	UJ	1000	UJ
1,4-Dichlorobenzene (p-DCB)		106-46-7	3300	190	U	660	UJ	4.8	UJ	810	UJ	360	UJ	1000	UJ
Dichlorodifluoromethane (Freon 12)		75-71-8	NE	930	U	3,300	UJ	24	UJ	4,000	UJ	1,800	UJ	5,000	UJ
1,1-Dichloroethane		75-34-3	NE	93	U	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
1,2-Dichloroethane		107-06-2	NE	93	U	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
1,1-Dichloroethene		75-35-4	4700	93	U	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
cis-1,2-Dichloroethene		156-59-2	NE	93	U	330	UJ	1.2	J	400	UJ	180	UJ	500	UJ
trans-1,2-Dichloroethene		156-60-5	11000	140	U	500	UJ	3.6	UJ	610	UJ	270	UJ	760	UJ
1,2-Dichloropropane		78-87-5	NE	93	U	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
cis-1,3-Dichloropropene		10061-01-5	NE	46	U	170	UJ	1.2	UJ	200	UJ	89	UJ	250	UJ
trans-1,3-Dichloropropene		10061-02-6	NE	93	U	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
1,4-Dioxane		123-91-1	NE		R		R		R		R		R		R
Ethylbenzene		100-41-4	3700	93	U	330	UJ	0.68	J	5,300	J	3,000	J	500	UJ
2-Hexanone		591-78-6	NE	930	U	3,300	UJ	24	UJ	4,000	UJ	1,800	UJ	5,000	UJ
Isopropylbenzene		98-82-8	1800	93	U	330	UJ	0.41	J	560	J	280	J	500	UJ
Methyl acetate		79-20-9	NE	800		2,900	J	9.6	UJ	2,200	J	1000	J	15,000	J
Methyl ethyl ketone (2-Butanone)		78-93-3	NE	930	U	3,300	UJ	33	J	4,000	UJ	1,800	UJ	5,000	UJ

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results											
				SED-BGL-1/0-0.5		SED-LSC-1/0-0.5		SED-LSC-2/0-0.5		SED-LSC-3/0-0.5		SED-LSC-DUP/0-0.5		SED-LSC-4/0-0.5	
				0		0		0		0		0		0	
				0.5		0.5		0.5		0.5		0.5		0.5	
				ft		ft		ft		ft		ft		ft	
				11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021	
				SED-LSC-3/0-0.5											
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B												
Methyl tert-butyl ether (MTBE)		1634-04-4	NE	190	U	660	UJ	4.8	UJ	810	UJ	360	UJ	1000	UJ
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	930	U	3,300	UJ	24	UJ	4,000	UJ	1,800	UJ	5,000	UJ
Methylcyclohexane		108-87-2	NE	370	UJ	1,300	UJ	9.6	UJ	1,600	UJ	710	UJ	2,000	UJ
Methylene chloride		75-09-2	NE	460	U	1,700	UJ	12	UJ	2,000	UJ	890	UJ	2,500	UJ
Styrene		100-42-5	NE	93	U	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
1,1,2,2-Tetrachloroethane		79-34-5	5400	46	U	170	UJ	1.2	UJ	200	UJ	89	UJ	250	UJ
Tetrachloroethene (PCE)		127-18-4	57000	46	U	170	UJ	1.2	UJ	200	UJ	89	UJ	250	UJ
Toluene		108-88-3	4500	93	U	330	UJ	2.4	UJ	220	J	140	J	500	UJ
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	NE	370	UJ	1,300	UJ	9.6	UJ	1,600	UJ	710	UJ	2,000	UJ
1,2,3-Trichlorobenzene		87-61-6	2800	190	U	660	UJ	4.8	UJ	810	UJ	360	UJ	1000	UJ
1,2,4-Trichlorobenzene		120-82-1	55000	190	U	660	UJ	4.8	UJ	810	UJ	360	UJ	1000	UJ
1,1,1-Trichloroethane (TCA)		71-55-6	3500	46	UJ	170	UJ	1.2	UJ	200	UJ	89	UJ	250	UJ
1,1,2-Trichloroethane		79-00-5	3500	93	U	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
Trichloroethene (TCE)		79-01-6	8600	46	U	170	UJ	1.2	UJ	200	UJ	89	UJ	250	UJ
Trichlorofluoromethane (Freon 11)		75-69-4	NE	370	U	1,300	UJ	9.6	UJ	1,600	UJ	710	UJ	2,000	UJ
Vinyl chloride		75-01-4	NE	93	U	330	UJ	2.4	UJ	400	UJ	180	UJ	500	UJ
o-Xylene		95-47-6	7200	93	U	330	UJ	1.4	J	1,600	J	870	J	500	UJ
m/p-Xylene		179601-23-1	4200	190	U	660	UJ	4.8	UJ	2,500	J	1,400	J	1000	UJ
SVOCs (SW 8270D)	ug/kg														
Acenaphthene		83-32-9	NE	120	J	3,200	J	4,500	J	520,000	J	390,000	J	4,700	UJ
Acenaphthylene		208-96-8	NE	570	J	6,100	J	8,700	J	130,000	J	96,000	J	4,700	UJ
Acetophenone		98-86-2	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Anthracene		120-12-7	NE	300	J	5,500	J	6,100	J	390,000	J	310,000	J	3,600	UJ
Atrazine		1912-24-9	NE	890	U	1,600	UJ	1,400	UJ	28,000	UJ	6,900	UJ	4,700	UJ
Benzaldehyde		100-52-7	NE	1,500	U	2,700	UJ	2,300	UJ	46,000	UJ	11,000	UJ	7,800	UJ
Benzo(a)anthracene		56-55-3	NE	1000		10,000	J	17,000	J	250,000	J	220,000	J	1,200	J
Benzo(b)fluoranthene		205-99-2	NE	1,100		9,300	J	15,000	J	150,000	J	130,000	J	1,900	J
Benzo(k)fluoranthene		207-08-9	NE	320	J	2,800	J	4,200	J	40,000	J	32,000	J	3,600	UJ
Benzo(g,h,i)perylene		191-24-2	NE	580	J	6,400	J	9,000	J	95,000	J	82,000	J	1,100	J
Benzo(a)pyrene		50-32-8	NE	1,100		11,000	J	19,000	J	210,000	J	180,000	J	4,700	UJ
Biphenyl (1,1-Biphenyl)		92-52-4	NE	2,500	U	4,600	UJ	4,000	UJ	210,000	J	160,000	J	14,000	UJ
Bis(2-chloroethoxy)methane		111-91-1	NE	1,200	U	2,200	UJ	1,900	UJ	38,000	UJ	9,300	UJ	6,400	UJ
Bis(2-chloroethyl)ether		111-44-4	NE	1000	U	1,800	UJ	1,600	UJ	32,000	UJ	7,800	UJ	5,300	UJ
2,2-oxybis(1-Chloropropane)		108-60-1	NE	1,300	UJ	2,400	UJ	2,100	UJ	42,000	UJ	10,000	UJ	7,100	UJ
Bis(2-ethylhexyl)phthalate		117-81-7	360000	1,100	UJ	2,400	J	3,200	J	35,000	UJ	4,100	J	5,900	UJ
4-Bromophenyl phenyl ether		101-55-3	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results											
				SED-BGL-1/0-0.5		SED-LSC-1/0-0.5		SED-LSC-2/0-0.5		SED-LSC-3/0-0.5		SED-LSC-DUP/0-0.5		SED-LSC-4/0-0.5	
				0		0		0		0		0		0	
				0.5		0.5		0.5		0.5		0.5		0.5	
				ft		ft		ft		ft		ft		ft	
				11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021	
				SED-LSC-3/0-0.5											
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B												
Butyl benzyl phthalate		85-68-7	NE	1,100	UJ	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Caprolactam		105-60-2	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Carbazole		86-74-8	NE	1,100	U	240	J	230	J	35,000	UJ	1,900	J	5,900	UJ
4-Chloro-3-methylphenol		59-50-7	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
4-Chloroaniline		106-47-8	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
2-Chloronaphthalene		91-58-7	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
2-Chlorophenol		95-57-8	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
4-Chlorophenyl phenyl ether		7005-72-3	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Chrysene		218-01-9	NE	980		9,400	J	14,000	J	200,000	J	160,000	J	1,500	J
Dibenz(a,h)anthracene		53-70-3	NE	670	U	1,400	J	1,900	J	23,000	J	20,000	J	3,600	UJ
Dibenzofuran		132-64-9	NE	1,100	U	2,000	UJ	1,800	UJ	69,000	J	44,000	J	5,900	UJ
3,3-Dichlorobenzidine		91-94-1	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
2,4-Dichlorophenol		120-83-2	NE	1000	U	1,800	UJ	1,600	UJ	32,000	UJ	7,800	UJ	5,300	UJ
Diethyl phthalate		84-66-2	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Dimethyl phthalate		131-11-3	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
2,4-Dimethylphenol		105-67-9	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Di-n-butyl phthalate		84-74-2	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
4,6-Dinitro-2-methylphenol		534-52-1	NE	2,900	UJ	5,300	UJ	4,600	UJ	92,000	UJ	22,000	UJ	15,000	UJ
2,4-Dinitrophenol		51-28-5	NE	5,400	UJ	9,800	UJ	8,400	UJ	170,000	UJ	41,000	UJ	28,000	UJ
2,4-Dinitrotoluene		121-14-2	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
2,6-Dinitrotoluene		606-20-2	NE	1,100	UJ	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Di-n-octyl phthalate		117-84-0	NE	1,100	UJ	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Fluoranthene		206-44-0	NE	1,300		13,000	J	17,000	J	400,000	J	340,000	J	2,700	J
Fluorene		86-73-7	NE	140	J	2,700	J	3,400	J	320,000	J	250,000	J	5,900	UJ
Hexachlorobenzene		118-74-1	NE	670	U	1,200	UJ	1000	UJ	21,000	UJ	5,200	UJ	3,600	UJ
1,3-Hexachlorobutadiene (C-46)		87-68-3	12000	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Hexachlorocyclopentadiene		77-47-4	8100	3,200	U	5,800	UJ	5,000	UJ	100,000	UJ	25,000	UJ	17,000	UJ
Hexachloroethane		67-72-1	NE	890	U	1,600	UJ	1,400	UJ	28,000	UJ	6,900	UJ	4,700	UJ
Indeno(1,2,3-cd)pyrene		193-39-5	NE	510	J	5,600	J	7,900	J	81,000	J	67,000	J	1000	J
Isophorone		78-59-1	NE	1000	U	1,800	UJ	1,600	UJ	32,000	UJ	7,800	UJ	5,300	UJ
2-Methylnaphthalene		91-57-6	NE	1,300	U	600	J	750	J	1,200,000	J	960,000	J	7,100	UJ
2-Methylphenol (o-Cresol)		95-48-7	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
3,4-Methylphenol (m,p-Cresol)		108394/106445	NE	1,600	U	2,900	UJ	2,500	UJ	51,000	UJ	12,000	UJ	8,500	UJ
Naphthalene		91-20-3	NE	1,100	U	400	J	530	J	880,000	J	640,000	J	5,900	UJ
2-Nitroaniline		88-74-4	NE	1,100	UJ	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
3-Nitroaniline		99-09-2	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results											
				SED-BGL-1/0-0.5		SED-LSC-1/0-0.5		SED-LSC-2/0-0.5		SED-LSC-3/0-0.5		SED-LSC-DUP/0-0.5		SED-LSC-4/0-0.5	
				0		0		0		0		0		0	
				0.5		0.5		0.5		0.5		0.5		0.5	
				ft		ft		ft		ft		ft		ft	
				11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021	
				SED-LSC-3/0-0.5											
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B												
4-Nitroaniline		100-01-6	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Nitrobenzene		98-95-3	NE	1000	U	1,800	UJ	1,600	UJ	32,000	UJ	7,800	UJ	5,300	UJ
2-Nitrophenol		88-75-5	NE	2,400	UJ	4,400	UJ	3,800	UJ	76,000	UJ	19,000	UJ	13,000	UJ
4-Nitrophenol		100-02-7	NE	1,600	U	2,800	UJ	2,500	UJ	49,000	UJ	12,000	UJ	8,300	UJ
N-Nitrosodiphenylamine (NDFA)		86-30-6	NE	890	U	1,600	UJ	1,400	UJ	28,000	UJ	6,900	UJ	4,700	UJ
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Pentachlorophenol		87-86-5	19000	890	U	1,600	UJ	1,400	UJ	28,000	UJ	6,900	UJ	4,700	UJ
Phenanthrene		85-01-8	NE	590	J	14,000	J	13,000	J	1,200,000	J	1,100,000	J	990	J
Phenol		108-95-2	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
Pyrene		129-00-0	NE	2,000		24,000	J	32,000	J	760,000	J	660,000	J	3,100	J
1,2,4,5-Tetrachlorobenzene		95-94-3	14000	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
2,3,4,6-Tetrachlorophenol		58-90-2	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
2,4,5-Trichlorophenol		95-95-4	NE	1,100	U	2,000	UJ	1,800	UJ	35,000	UJ	8,600	UJ	5,900	UJ
2,4,6-Trichlorophenol		88-06-2	NE	670	U	1,200	UJ	1000	UJ	21,000	UJ	5,200	UJ	3,600	UJ
Total PAH (16) (ND=0)		TPAH16_ND0	35000	10,610		124,800		173,230		5,649,000		4,677,000		13,490	
Total PAH (17) (ND=0)		TPAH17_ND0	35000	10,610		125,400		173,980		6,849,000		5,637,000		13,490	
PCBs (SW 8082A)	ug/kg														
Aroclor 1016		12674-11-2	NE	76.5	U	140	UJ	124	UJ	232	UJ	112	UJ	587	UJ
Aroclor 1221		11104-28-2	NE	76.5	U	140	UJ	124	UJ	232	UJ	112	UJ	587	UJ
Aroclor 1232		11141-16-5	NE	76.5	U	140	UJ	124	UJ	232	UJ	112	UJ	587	UJ
Aroclor 1242		53469-21-9	NE	76.5	U	140	UJ	124	UJ	232	UJ	112	UJ	587	UJ
Aroclor 1248		12672-29-6	NE	90.1		472	J	421	J	475	J	250	J	628	J
Aroclor 1254		11097-69-1	NE	76.5	U	294	J	327	J	487	J	122	J	350	J
Aroclor 1260		11096-82-5	NE	36.4	J	182	J	408	J	144	J	75.4	J	249	J
Aroclor 1262		37324-23-5	NE	76.5	U	140	UJ	124	UJ	232	UJ	112	UJ	587	UJ
Aroclor 1268		11100-14-4	NE	76.5	U	140	UJ	124	UJ	232	UJ	112	UJ	587	UJ
Total PCBs (Lab calculated)		1336-36-3	1000	186	J	948	J	1,160	J	1,110	J	447	J	1,230	J
PESTICIDES (SW 8081B)	ug/kg														
Aldrin		309-00-2	NE	10.9	R	6.61	UJ	6.16	UJ	112	UJ	55.2	UJ	30.6	R
alpha-BHC (Hexachlorocyclohexane)		319-84-6	NE	4.54	R	2.75	UJ	2.56	UJ	46.5	UJ	23	UJ	12.8	R
beta-BHC (beta-Hexachlorocyclohexane)		319-85-7	NE	10.9	R	6.61	UJ	6.16	UJ	112	UJ	55.2	UJ	30.6	R
gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane)		58-89-9	78	4.54	R	2.75	UJ	2.56	UJ	46.5	UJ	23	UJ	12.8	R
delta-BHC (delta-Hexachlorocyclohexane)		319-86-8	NE	10.9	R	6.61	UJ	6.16	UJ	112	UJ	55.2	UJ	30.6	R
Chlordane (Technical)		12789-03-6	NE	90.9	R	55.1	UJ	51.3	UJ	930	UJ	460	UJ	255	R
alpha-chlordane		5103-71-9	NE	13.6	R	8.26	UJ	7.7	UJ	140	UJ	69	UJ	38.3	R
gamma-Chlordane		5103-74-2	NE	13.6	R	8.26	UJ	7.7	UJ	140	UJ	69	UJ	38.3	R

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results											
				SED-BGL-1/0-0.5		SED-LSC-1/0-0.5		SED-LSC-2/0-0.5		SED-LSC-3/0-0.5		SED-LSC-DUP/0-0.5		SED-LSC-4/0-0.5	
				0		0		0		0		0		0	
				0.5		0.5		0.5		0.5		0.5		0.5	
				ft		ft		ft		ft		ft		ft	
				11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021	
				SED-LSC-3/0-0.5											
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B												
4,4'-DDT (p,p'-DDT)		50-29-3	48000	20.4	R	19.3	J	11.5	UJ	209	UJ	103	UJ	57.5	R
4,4'-DDE (p,p'-DDE)		72-55-9	NE	10.9	R	12	J	6.16	UJ	112	UJ	55.2	UJ	30.6	R
4,4'-DDD (p,p'-DDD)		72-54-8	NE	10.9	R	10.4	J	6.16	UJ	112	UJ	55.2	UJ	30.6	R
Dieldrin		60-57-1	780	6.82	R	4.13	UJ	3.85	UJ	69.8	UJ	34.5	UJ	19.2	R
alpha-Endosulfan (I)		959-98-8	NE	10.9	R	6.61	UJ	6.16	UJ	112	UJ	55.2	UJ	30.6	R
beta-Endosulfan (II)		33213-65-9	NE	10.9	R	6.61	UJ	6.16	UJ	112	UJ	55.2	UJ	30.6	R
Endosulfan sulfate		1031-07-8	NE	4.54	R	2.75	UJ	2.56	UJ	46.5	UJ	23	UJ	12.8	R
Endrin		72-20-8	220	4.54	R	2.75	UJ	2.56	UJ	46.5	UJ	23	UJ	12.8	R
Endrin aldehyde		7421-93-4	NE	13.6	R	8.26	UJ	7.7	UJ	140	UJ	69	UJ	38.3	R
Endrin ketone		53494-70-5	NE	10.9	R	6.61	UJ	6.16	UJ	112	UJ	55.2	UJ	30.6	R
Heptachlor		76-44-8	10000	5.45	R	3.3	UJ	3.08	UJ	55.8	UJ	27.6	UJ	15.3	R
Heptachlor epoxide		1024-57-3	2100	20.4	R	12.4	UJ	11.5	UJ	209	UJ	103	UJ	57.5	R
Methoxychlor		72-43-5	NE	20.4	R	12.4	UJ	11.5	UJ	209	UJ	103	UJ	57.5	R
Toxaphene		8001-35-2	250	204	R	124	UJ	115	UJ	2,090	UJ	1,030	UJ	575	R
HERBICIDES (SW 8151A)	ug/kg														
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	NE	379	U	721	UJ	628	UJ	1,150	UJ	573	UJ	1,090	UJ
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)		93-76-5	NE	379	U	721	UJ	628	UJ	1,150	UJ	573	UJ	1,090	UJ
2,4,5-TP (Silvex)		93-72-1	NE	379	U	721	UJ	628	UJ	1,150	UJ	573	UJ	1,090	UJ
CYANIDES (SW 9012B)	mg/kg														
Total Cyanide		57-12-5	NE	2.2	UJ	4.3	UJ	3.5	UJ	6.5	UJ	3.3	UJ	6.4	UJ
METALS (SW 6010D)	mg/kg														
Aluminum		7429-90-5	NE	5,920		10,200	J	11,500	J	14,100	J	40,500	J	19,100	J
Antimony		7440-36-0	NE	8.96	U	16.7	UJ	15	UJ	26.4	UJ	13.7	UJ	24.9	UJ
Arsenic		7440-38-2	33	5.77	J	8.44	J	9.96	J	12	J	11.4	J	15.6	J
Barium		7440-39-3	NE	68		141	J	174	J	175	J	287	J	196	J
Beryllium		7440-41-7	NE	0.896	U	1.67	UJ	1.5	UJ	2.64	UJ	2.06	J	2.49	UJ
Cadmium		7440-43-9	5	0.968	J	2.95	J	4.64	J	3.65	J	1.43	J	4.24	J
Calcium		7440-70-2	NE	211,000		82,500	J	92,900	J	137,000	J	96,200	J	111,000	J
Chromium		7440-47-3	110	33.6	J	58.3	J	67.4	J	81.9	J	62.3	J	85	J
Cobalt		7440-48-4	NE	4.46		8.87	J	9.63	J	14.4	J	36.6	J	15.8	J
Copper		7440-50-8	150	43	J	173	J	229	J	200	J	54.7	J	231	J
Iron		7439-89-6	NE	30,600		25,300	J	28,200	J	40,800	J	77,000	J	46,800	J
Lead		7439-92-1	130	40.6	J	208	J	277	J	326	J	25	J	310	J
Magnesium		7439-95-4	NE	12,400		13,800	J	13,000	J	28,800	J	30,400	J	22,400	J
Manganese		7439-96-5	NE	3,040		294	J	373	J	556	J	1,330	J	603	J
Mercury (SW 7471B)		7439-97-6	1	0.146	U	0.311	J	0.395	J	0.388	J	0.218	UJ	0.384	J

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results											
				SED-BGL-1/0-0.5		SED-LSC-1/0-0.5		SED-LSC-2/0-0.5		SED-LSC-3/0-0.5		SED-LSC-DUP/0-0.5		SED-LSC-4/0-0.5	
				0		0		0		0		0		0	
				0.5		0.5		0.5		0.5		0.5		0.5	
				ft		ft		ft		ft		ft		ft	
				11/11/2021		11/11/2021		11/11/2021		11/11/2021		11/11/2021 SED-LSC-3/0-0.5		11/11/2021	
										</					

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results							
				SED-LSC-5/0-0.5		SED-LSC-6/0-0.5		SED-LSC-7/0-0.5		SED-LSC-8/0-0.5	
				0		0		0		0	
				0.5		0.5		0.5		0.5	
				ft		ft		ft		ft	
				11/11/2021		11/3/2021		11/3/2021		11/3/2021	
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B								
VOCs (SW 8260C)	ug/kg										
Acetone		67-64-1	NE	170	J	48	J	26	J	120	J
Benzene		71-43-2	1900	1.3	J	0.9	UJ	0.44	UJ	5.5	J
Bromochloromethane		74-97-5	NE	3.7	UJ	3.6	UJ	1.7	UJ	3.2	UJ
Bromodichloromethane		75-27-4	NE	0.94	UJ	0.9	UJ	0.44	UJ	0.81	UJ
Bromoform		75-25-2	NE	7.5	UJ	7.2	UJ	3.5	UJ	6.5	UJ
Bromomethane		74-83-9	NE	3.7	UJ	3.6	UJ	1.7	UJ	3.2	UJ
Carbon disulfide		75-15-0	NE	19	UJ	18	UJ	8.7	UJ	16	UJ
Carbon tetrachloride		56-23-5	9600	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
Chlorobenzene		108-90-7	1700	0.94	UJ	0.9	UJ	0.44	UJ	0.81	UJ
Chloroethane		75-00-3	NE	3.7	UJ	3.6	UJ	1.7	UJ	3.2	UJ
Chloroform (Trichloromethane)		67-66-3	NE	2.8	UJ	2.7	UJ	1.3	UJ	2.4	UJ
Chloromethane		74-87-3	NE	7.5	UJ	7.2	UJ	3.5	UJ	6.5	UJ
Cyclohexane		110-82-7	NE	19	UJ	18	UJ	8.7	UJ	1	J
1,2-Dibromo-3-chloropropane		96-12-8	NE	5.6	UJ	5.4	UJ	2.6	UJ	4.9	UJ
Dibromochloromethane		124-48-1	NE	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
1,2-Dibromoethane (EDB)		106-93-4	NE	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
1,2-Dichlorobenzene (o-DCB)		95-50-1	2500	3.7	UJ	3.6	UJ	1.7	UJ	3.2	UJ
1,3-Dichlorobenzene (m-DCB)		541-73-1	7100	3.7	UJ	3.6	UJ	1.7	UJ	3.2	UJ
1,4-Dichlorobenzene (p-DCB)		106-46-7	3300	3.7	UJ	3.6	UJ	1.7	UJ	3.2	UJ
Dichlorodifluoromethane (Freon 12)		75-71-8	NE	19	UJ	18	UJ	8.7	UJ	16	UJ
1,1-Dichloroethane		75-34-3	NE	1.9	UJ	0.6	J	0.87	UJ	1.6	UJ
1,2-Dichloroethane		107-06-2	NE	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
1,1-Dichloroethene		75-35-4	4700	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
cis-1,2-Dichloroethene		156-59-2	NE	0.48	J	4.4	J	0.3	J	0.72	J
trans-1,2-Dichloroethene		156-60-5	11000	2.8	UJ	2.7	UJ	1.3	UJ	2.4	UJ
1,2-Dichloropropane		78-87-5	NE	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
cis-1,3-Dichloropropene		10061-01-5	NE	0.94	UJ	0.9	UJ	0.44	UJ	0.81	UJ
trans-1,3-Dichloropropene		10061-02-6	NE	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
1,4-Dioxane		123-91-1	NE		R		R		R		R
Ethylbenzene		100-41-4	3700	1.9	UJ	0.36	J	0.87	UJ	20	J
2-Hexanone		591-78-6	NE	19	UJ	18	UJ	8.7	UJ	16	UJ
Isopropylbenzene		98-82-8	1800	1.9	UJ	1.8	UJ	0.87	UJ	13	J
Methyl acetate		79-20-9	NE	7.5	UJ	7.2	UJ	3.5	UJ	6.5	UJ
Methyl ethyl ketone (2-Butanone)		78-93-3	NE	32	J	18	UJ	8.7	UJ	13	J

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results							
				SED-LSC-5/0-0.5		SED-LSC-6/0-0.5		SED-LSC-7/0-0.5		SED-LSC-8/0-0.5	
				0		0		0		0	
				0.5		0.5		0.5		0.5	
				ft		ft		ft		ft	
				11/11/2021		11/3/2021		11/3/2021		11/3/2021	
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B								
Methyl tert-butyl ether (MTBE)		1634-04-4	NE	3.7	UJ	3.6	UJ	1.7	UJ	3.2	UJ
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	19	UJ	18	UJ	8.7	UJ	16	UJ
Methylcyclohexane		108-87-2	NE	7.5	UJ	7.2	UJ	3.5	UJ	2.5	J
Methylene chloride		75-09-2	NE	9.4	UJ	9	UJ	4.4	UJ	8.1	UJ
Styrene		100-42-5	NE	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
1,1,2,2-Tetrachloroethane		79-34-5	5400	0.94	UJ	0.9	UJ	0.44	UJ	0.81	UJ
Tetrachloroethene (PCE)		127-18-4	57000	0.94	UJ	0.9	UJ	0.44	UJ	0.81	UJ
Toluene		108-88-3	4500	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	NE	7.5	UJ	7.2	UJ	3.5	UJ	6.5	UJ
1,2,3-Trichlorobenzene		87-61-6	2800	3.7	UJ	3.6	UJ	1.7	UJ	3.2	UJ
1,2,4-Trichlorobenzene		120-82-1	55000	3.7	UJ	3.6	UJ	1.7	UJ	3.2	UJ
1,1,1-Trichloroethane (TCA)		71-55-6	3500	0.94	UJ	0.9	UJ	0.44	UJ	0.81	UJ
1,1,2-Trichloroethane		79-00-5	3500	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
Trichloroethene (TCE)		79-01-6	8600	0.94	UJ	0.9	UJ	0.44	UJ	0.81	UJ
Trichlorofluoromethane (Freon 11)		75-69-4	NE	7.5	UJ	7.2	UJ	3.5	UJ	6.5	UJ
Vinyl chloride		75-01-4	NE	1.9	UJ	1.8	UJ	0.87	UJ	1.6	UJ
o-Xylene		95-47-6	7200	1.9	UJ	1.8	UJ	0.87	UJ	6.2	J
m/p-Xylene		179601-23-1	4200	3.7	UJ	3.6	UJ	1.7	UJ	2.2	J
SVOCs (SW 8270D)	ug/kg										
Acenaphthene		83-32-9	NE	3,200	UJ	2,000	UJ	160	J	2,600	J
Acenaphthylene		208-96-8	NE	3,200	UJ	2,000	UJ	320	J	4,400	J
Acetophenone		98-86-2	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Anthracene		120-12-7	NE	2,400	UJ	1,500	UJ	810	U	8,300	J
Atrazine		1912-24-9	NE	3,200	UJ	2,000	UJ	1,100	UJ	1,700	UJ
Benzaldehyde		100-52-7	NE	5,300	UJ	3,200	UJ	1,800	U	2,800	UJ
Benzo(a)anthracene		56-55-3	NE	1000	J	960	J	760	J	11,000	J
Benzo(b)fluoranthene		205-99-2	NE	1,600	J	1,500	J	1,200		8,800	J
Benzo(k)fluoranthene		207-08-9	NE	2,400	UJ	430	J	370	J	3,000	J
Benzo(g,h,i)perylene		191-24-2	NE	900	J	960	J	800	J	6,000	J
Benzo(a)pyrene		50-32-8	NE	1,100	J	1,200	J	1,100		11,000	J
Biphenyl (1,1-Biphenyl)		92-52-4	NE	9,100	UJ	5,600	UJ	3,100	U	600	J
Bis(2-chloroethoxy)methane		111-91-1	NE	4,300	UJ	2,600	UJ	1,500	U	2,300	UJ
Bis(2-chloroethyl)ether		111-44-4	NE	3,600	UJ	2,200	UJ	1,200	U	1,900	UJ
2,2-oxybis(1-Chloropropane)		108-60-1	NE	4,800	UJ	3,000	UJ	1,600	UJ	2,500	UJ
Bis(2-ethylhexyl)phthalate		117-81-7	360000	4,000	UJ	2,500	UJ	1,400	U	1000	J
4-Bromophenyl phenyl ether		101-55-3	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results							
				SED-LSC-5/0-0.5		SED-LSC-6/0-0.5		SED-LSC-7/0-0.5		SED-LSC-8/0-0.5	
				0		0		0		0	
				0.5		0.5		0.5		0.5	
				ft		ft		ft		ft	
				11/11/2021		11/3/2021		11/3/2021		11/3/2021	
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B								
Butyl benzyl phthalate		85-68-7	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Caprolactam		105-60-2	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Carbazole		86-74-8	NE	4,000	UJ	2,500	UJ	1,400	U	330	J
4-Chloro-3-methylphenol		59-50-7	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
4-Chloroaniline		106-47-8	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
2-Chloronaphthalene		91-58-7	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
2-Chlorophenol		95-57-8	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
4-Chlorophenyl phenyl ether		7005-72-3	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Chrysene		218-01-9	NE	1,200	J	1,100	J	880		9,200	J
Dibenz(a,h)anthracene		53-70-3	NE	2,400	UJ	1,500	UJ	160	J	1,200	J
Dibenzofuran		132-64-9	NE	4,000	UJ	2,500	UJ	1,400	U	510	J
3,3-Dichlorobenzidine		91-94-1	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
2,4-Dichlorophenol		120-83-2	NE	3,600	UJ	2,200	UJ	1,200	U	1,900	UJ
Diethyl phthalate		84-66-2	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Dimethyl phthalate		131-11-3	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
2,4-Dimethylphenol		105-67-9	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Di-n-butyl phthalate		84-74-2	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
4,6-Dinitro-2-methylphenol		534-52-1	NE	10,000	UJ	6,400	UJ	3,500	U	5,500	UJ
2,4-Dinitrophenol		51-28-5	NE	19,000	UJ	12,000	UJ	6,500	U	10,000	UJ
2,4-Dinitrotoluene		121-14-2	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
2,6-Dinitrotoluene		606-20-2	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Di-n-octyl phthalate		117-84-0	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Fluoranthene		206-44-0	NE	2,200	J	1,900	J	1,500		17,000	J
Fluorene		86-73-7	NE	4,000	UJ	2,500	UJ	1,400	U	3,400	J
Hexachlorobenzene		118-74-1	NE	2,400	UJ	1,500	UJ	810	U	1,300	UJ
1,3-Hexachlorobutadiene (C-46)		87-68-3	12000	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Hexachlorocyclopentadiene		77-47-4	8100	11,000	UJ	7,000	UJ	3,900	U	6,100	UJ
Hexachloroethane		67-72-1	NE	3,200	UJ	2,000	UJ	1,100	U	1,700	UJ
Indeno(1,2,3-cd)pyrene		193-39-5	NE	850	J	1,400	J	930	J	5,200	J
Isophorone		78-59-1	NE	3,600	UJ	2,200	UJ	1,200	U	1,900	UJ
2-Methylnaphthalene		91-57-6	NE	4,800	UJ	3,000	UJ	1,600	U	620	J
2-Methylphenol (o-Cresol)		95-48-7	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
3,4-Methylphenol (m,p-Cresol)		108394/106445	NE	5,800	UJ	3,500	UJ	2,000	U	3,000	UJ
Naphthalene		91-20-3	NE	4,000	UJ	2,500	UJ	1,400	U	900	J
2-Nitroaniline		88-74-4	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
3-Nitroaniline		99-09-2	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results							
				SED-LSC-5/0-0.5		SED-LSC-6/0-0.5		SED-LSC-7/0-0.5		SED-LSC-8/0-0.5	
				0		0		0		0	
				0.5		0.5		0.5		0.5	
				ft		ft		ft		ft	
				11/11/2021		11/3/2021		11/3/2021		11/3/2021	
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B								
4-Nitroaniline		100-01-6	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Nitrobenzene		98-95-3	NE	3,600	UJ	2,200	UJ	1,200	U	1,900	UJ
2-Nitrophenol		88-75-5	NE	8,600	UJ	5,300	UJ	2,900	U	4,600	UJ
4-Nitrophenol		100-02-7	NE	5,600	UJ	3,400	UJ	1,900	U	3,000	UJ
N-Nitrosodiphenylamine (NDFA)		86-30-6	NE	3,200	UJ	2,000	UJ	1,100	U	1,700	UJ
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Pentachlorophenol		87-86-5	19000	3,200	UJ	2,000	UJ	1,100	U	1,700	UJ
Phenanthrene		85-01-8	NE	1000	J	890	J	740	J	28,000	J
Phenol		108-95-2	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
Pyrene		129-00-0	NE	2,500	J	2,300	J	1,600		31,000	J
1,2,4,5-Tetrachlorobenzene		95-94-3	14000	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
2,3,4,6-Tetrachlorophenol		58-90-2	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
2,4,5-Trichlorophenol		95-95-4	NE	4,000	UJ	2,500	UJ	1,400	U	2,100	UJ
2,4,6-Trichlorophenol		88-06-2	NE	2,400	UJ	1,500	UJ	810	U	1,300	UJ
Total PAH (16) (ND=0)		TPAH16_ND0	35000	12,350		12,640		10,520		151,000	
Total PAH (17) (ND=0)		TPAH17_ND0	35000	12,350		12,640		10,520		151,620	
PCBs (SW 8082A)	ug/kg										
Aroclor 1016		12674-11-2	NE	134	UJ	485	UJ	246	U	43.3	UJ
Aroclor 1221		11104-28-2	NE	134	UJ	485	UJ	246	U	43.3	UJ
Aroclor 1232		11141-16-5	NE	134	UJ	485	UJ	246	U	43.3	UJ
Aroclor 1242		53469-21-9	NE	134	UJ	485	UJ	246	U	43.3	UJ
Aroclor 1248		12672-29-6	NE	313	J	195	J	153	J	47.9	J
Aroclor 1254		11097-69-1	NE	181	J	126	J	84.4	J	24	J
Aroclor 1260		11096-82-5	NE	131	J	485	UJ	55.6	J	15.7	J
Aroclor 1262		37324-23-5	NE	134	UJ	485	UJ	246	U	43.3	UJ
Aroclor 1268		11100-14-4	NE	134	UJ	485	UJ	246	U	43.3	UJ
Total PCBs (Lab calculated)		1336-36-3	1000	625	J	321	J	293	J	87.6	J
PESTICIDES (SW 8081B)	ug/kg										
Aldrin		309-00-2	NE	19.2	R	115	UJ	68.7	U	101	UJ
alpha-BHC (Hexachlorocyclohexane)		319-84-6	NE	8.02	R	47.8	UJ	28.6	U	42.2	UJ
beta-BHC (beta-Hexachlorocyclohexane)		319-85-7	NE	19.2	R	115	UJ	68.7	U	101	UJ
gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane)		58-89-9	78	8.02	R	47.8	UJ	28.6	U	42.2	UJ
delta-BHC (delta-Hexachlorocyclohexane)		319-86-8	NE	19.2	R	115	UJ	68.7	U	101	UJ
Chlordane (Technical)		12789-03-6	NE	160	R	955	UJ	572	U	845	UJ
alpha-chlordane		5103-71-9	NE	24	R	143	UJ	85.8	U	127	UJ
gamma-Chlordane		5103-74-2	NE	24	R	143	UJ	85.8	U	127	UJ

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results							
				SED-LSC-5/0-0.5		SED-LSC-6/0-0.5		SED-LSC-7/0-0.5		SED-LSC-8/0-0.5	
				0		0		0		0	
				0.5		0.5		0.5		0.5	
				ft		ft		ft		ft	
				11/11/2021		11/3/2021		11/3/2021		11/3/2021	
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B								
4,4'-DDT (p,p'-DDT)		50-29-3	48000	36.1	R	215	UJ	129	U	190	UJ
4,4'-DDE (p,p'-DDE)		72-55-9	NE	19.2	R	115	UJ	68.7	U	101	UJ
4,4'-DDD (p,p'-DDD)		72-54-8	NE	19.2	R	115	UJ	68.7	U	101	UJ
Dieldrin		60-57-1	780	12	R	71.6	UJ	42.9	U	63.4	UJ
alpha-Endosulfan (I)		959-98-8	NE	19.2	R	115	UJ	68.7	U	101	UJ
beta-Endosulfan (II)		33213-65-9	NE	19.2	R	115	UJ	68.7	U	101	UJ
Endosulfan sulfate		1031-07-8	NE	8.02	R	47.8	UJ	28.6	U	42.2	UJ
Endrin		72-20-8	220	8.02	R	47.8	UJ	28.6	U	42.2	UJ
Endrin aldehyde		7421-93-4	NE	24	R	143	UJ	85.8	UJ	127	UJ
Endrin ketone		53494-70-5	NE	19.2	R	115	UJ	68.7	U	101	UJ
Heptachlor		76-44-8	10000	9.62	R	57.3	UJ	34.3	U	50.7	UJ
Heptachlor epoxide		1024-57-3	2100	36.1	R	215	UJ	129	U	190	UJ
Methoxychlor		72-43-5	NE	36.1	R	215	UJ	129	U	190	UJ
Toxaphene		8001-35-2	250	361	R	2,150	UJ	1,290	U	1,900	UJ
HERBICIDES (SW 8151A)	ug/kg										
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	NE	665	UJ	858	UJ	479	U	708	UJ
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)		93-76-5	NE	665	UJ	858	UJ	479	U	708	UJ
2,4,5-TP (Silvex)		93-72-1	NE	665	UJ	858	UJ	479	U	708	UJ
CYANIDES (SW 9012B)	mg/kg										
Total Cyanide		57-12-5	NE	3.8	UJ	5.2	UJ	2.6	UJ	4.3	UJ
METALS (SW 6010D)	mg/kg										
Aluminum		7429-90-5	NE	10,400	J	9,290	J	5,750		11,200	J
Antimony		7440-36-0	NE	15.8	UJ	20.4	UJ	11.2	U	17	UJ
Arsenic		7440-38-2	33	6.33	J	9.08	J	5.66		7.44	J
Barium		7440-39-3	NE	148	J	128	J	77.9		136	J
Beryllium		7440-41-7	NE	1.58	UJ	0.489	J	0.334	J	0.612	J
Cadmium		7440-43-9	5	1.17	J	1.96	J	1.18	J	2.45	J
Calcium		7440-70-2	NE	316,000	J	81,800	J	92,800		75,500	J
Chromium		7440-47-3	110	31.1	J	44	J	28.2		54.6	J
Cobalt		7440-48-4	NE	4.94	J	7.86	J	5.49		8.98	J
Copper		7440-50-8	150	81.1	J	152	J	84.2	J	151	J
Iron		7439-89-6	NE	16,300	J	25,800	J	17,300	J	26,400	J
Lead		7439-92-1	130	95	J	199	J	101	J	179	J
Magnesium		7439-95-4	NE	70,200	J	9,850	J	6,730		13,000	J
Manganese		7439-96-5	NE	2,230	J	348	J	236	J	379	J
Mercury (SW 7471B)		7439-97-6	1	0.256	UJ	0.261	J	0.156	J	0.342	J

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description Sample Name Start Depth End Depth Depth Unit Sample Date Parent Sample				Scajaquada Creek Shallow Sediment Boring Sample Analytical Results							
				SED-LSC-5/0-0.5		SED-LSC-6/0-0.5		SED-LSC-7/0-0.5		SED-LSC-8/0-0.5	
				0		0		0		0	
				0.5		0.5		0.5		0.5	
				ft		ft		ft		ft	
				11/11/2021		11/3/2021		11/3/2021		11/3/2021	
Analyte	Units	CAS No. or Identifier	Freshwater Sediment Guidance Values Class B								
Nickel		7440-02-0	49	14.2	J	23.3	J	16.3		27.9	J
Potassium		7440-09-7	NE	1,680	J	1,460	J	774		1,510	J
Selenium		7782-49-2	NE	6.33	UJ	1.63	J	1.36	J	1.84	J
Silver		7440-22-4	2.2	3.16	UJ	4.07	UJ	2.23	U	3.4	UJ
Sodium		7440-23-5	NE	1,530	J	654	J	599	J	802	J
Thallium		7440-28-0	NE	2.5	J	8.15	UJ	4.46	U	6.8	UJ
Vanadium		7440-62-2	NE	15.3	J	23	J	16		26.3	J
Zinc		7440-66-6	460	304	J	589	J	324	J	645	J
VPH/EPH	mg/kg										
C5-C8 Aliphatics (MAVPH)		ALIPH5-8	NE	37.5	UJ	30	UJ	15.4	UJ	30.4	UJ
C5-C8 Aliphatics, Adjusted (MAVPH)		ALIPH5-8ADJ	NE	37.5	UJ	30	UJ	15.4	UJ	30.4	UJ
C9-C12 Aliphatics (MAVPH)		ALIPH9-12	NE	37.5	UJ	30	UJ	15.4	UJ	30.4	UJ
C9-C12 Aliphatics, Adjusted (MAVPH)		ALIPH9-12ADJ	NE	37.5	UJ	30	UJ	15.4	UJ	30.4	UJ
C9-C10 Aromatics (MAVPH)		AROM9-10	NE	37.5	UJ	30	UJ	15.4	UJ	30.4	UJ
Total EPH Fractions (NJ EPH R3)		TEPH	NE	303	J	526	J	177	U	269	UJ
GENERAL CHEMISTRY	mg/kg										
Ammonia (SM 4500-NH3 BH)		7664-41-7	NE	53	J	84	J	29	J	85	J
Percent Solids (SM 2540G)	%	SOLIDS	NE	24.5	J	19		34.2		22.8	
Sulfide (SW 9030B)		18496-25-8	NE	10,000	J	5,200	J	2,200	J	4,800	J
TOTAL ORGANIC CARBON	%										
Total Organic Carbon (SW 9060A)		TOC	NE	11.2	J	4.67	J	7.95		7.96	J

Table 5C. Creek Shallow Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Notes:

Sample depth is upper 0.5 feet of surface sediment
mg/kg = milligrams/kilogram or parts per million (ppm)
% = Percent
ug/kg = micrograms per kilogram

PAH = Polycyclic Aromatic Hydrocarbon
PCB = Polychlorinated Biphenyl
SVOC = Semi-Volatile Organic Compound
VOC = Volatile Organic Compound

CAS No. = Chemical Abstracts Service Number
ND = Not Detected
NE = Not Established

Bolding indicates a detected result concentration
Shading and bolding indicate that the detected concentration is above the maximum range of sediment guidance values

Validation Qualifiers:

J = The result is an estimated value.
JN = The analyte is presumptively present at an approximated quantity.
R = The result is rejected.
U = The result was not detected above the reporting limit.
UJ = The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

1,4-Dioxane - Rejected Data

Due to the extremely low calibration response factor for 1,4-dioxane under Method 8260C, this compound is typically rejected during validation as it does not meet the minimal criteria set for accurate quantitation. Non-detect results for 1,4-dioxane are rejected as the presence or absence of the compound cannot be verified. Positive results are estimated due to the high variability inherent in the quantitation when using an extremely low response factor.

Table 5D. Creek Deeper Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description							Creek Deeper Sediment Boring Sample Analytical Results																	
							SED-BGL-1/12-14		SED-LSC-1/11-15		SED-LSC-2/14-16		SED-LSC-3/13-16		SED-LSC-4/14-16		SED-LSC-5/14-16		SED-LSC-6/12-19.5		SED-LSC-7/12-18		SED-LSC-8/6.8-15	
							Sample Name		Sample Name		Sample Name		Sample Name		Sample Name		Sample Name		Sample Name		Sample Name		Sample Name	
							Start Depth		End Depth		Depth Unit		Depth Unit		Depth Unit		Depth Unit		Depth Unit		Depth Unit		Depth Unit	
							Interval (ft)		below Top of Sediment		Sample Date		Sample Date		Sample Date		Sample Date		Sample Date		Sample Date		Sample Date	
Analyte	Units	CAS No. or Identifier	375-6.8(a) Unrestricted SCO	375-6.8(b) Protection of Ecological Resources SCO	Freshwater Sediment Guidance Values Class B	NY CP-51 RESTRICTED USE ECO SSCO																		
VOCs (SW 8260C)	ug/kg																							
Acetone		67-64-1	50	2200	NE	NE	9.4	UJ	3,000	U	1,300	U	2,000	U	5	J	12		920	U	37	J	40	J
Benzene		71-43-2	60	70000	1900	NE	0.47	U	11000		12000		46000		43		3200		460		350	J	550	
Bromochloromethane		74-97-5	NE	NE	NE	NE	1.9	U	590	U	270	U	400	U	1.7	U	2.5	U	180	U	4	UJ	2.5	UJ
Bromodichloromethane		75-27-4	NE	NE	NE	NE	0.47	U	150	UJ	67	UJ	100	U	0.42	U	0.62	U	46	U	0.99	UJ	0.63	UJ
Bromoform		75-25-2	NE	NE	NE	NE	3.8	U	1,200	U	530	U	810	U	3.3	U	5	U		U	7.9	UJ	5	UJ
Bromomethane		74-83-9	NE	NE	NE	NE	1.9	U	590	U	270	U	400	U	1.7	U	2.5	UJ	180	U	4	UJ	2.5	UJ
Carbon disulfide		75-15-0	NE	NE	NE	NE	9.4	U	3,000	UJ	1,300	UJ	2,000	UJ	8.4	UJ	12	UJ	920	U	20	UJ	13	UJ
Carbon tetrachloride		56-23-5	760	NE	9600	NE	0.94	U	300	U	130	U	200	U	0.84	U	1.2	U	92	U	2	UJ	1.3	UJ
Chlorobenzene		108-90-7	1100	40000	1700	NE	0.47	U	150	U	67	U	100	U	0.42	U	0.62	U	46	U	0.99	UJ	0.63	UJ
Chloroethane		75-00-3	NE	NE	NE	NE	1.9	UJ	590	U	270	U	400	U	1.7	U	2.5	UJ	180	U	4	UJ	50	J
Chloroform (Trichloromethane)		67-66-3	370	12000	NE	NE	1.4	U	440	U	200	U	300	U	1.2	U	1.9	U	140	U	3	UJ	1.9	UJ
Chloromethane		74-87-3	NE	NE	NE	NE	3.8	U	1,200	U	530	U	810	U	3.3	U	5	U	370	U	7.9	UJ	5	UJ
Cyclohexane		110-82-7	NE	NE	NE	NE	9.4	U	3,000	U	1,300	U	2,000	U	8.4	U	1.2	J	56	J	1.2	J	2.8	J
1,2-Dibromo-3-chloropropane		96-12-8	NE	NE	NE	NE	2.8	UJ	890	U	400	U	610	U	2.5	U	3.8	U	280	U	6	UJ	3.8	UJ
Dibromochloromethane		124-48-1	NE	NE	NE	10000	0.94	U	300	U	130	U	200	U	0.84	U	1.2	U	92	U	2	UJ	1.3	UJ
1,2-Dibromoethane (EDB)		106-93-4	NE	NE	NE	NE	0.94	U	300	U	130	U	200	U	0.84	U	1.2	U	92	U	2	UJ	1.3	UJ
1,2-Dichlorobenzene (o-DCB)		95-50-1	1100	NE	2500	NE	1.9	U	590	U	270	U	69	J	1.7	U	0.3	J	180	U	4	UJ	0.2	J
1,3-Dichlorobenzene (m-DCB)		541-73-1	2400	NE	7100	NE	1.9	U	590	U	270	U	400	U	1.7	U	2.5	U	180	U	4	UJ	2.5	UJ
1,4-Dichlorobenzene (p-DCB)		106-46-7	1800	20000	3300	NE	1.9	U	590	U	270	U	150	J	1.7	U	0.34	J	180	U	4	UJ	2.5	UJ
Dichlorodifluoromethane (Freon 12)		75-71-8	NE	NE	NE	NE	9.4	U	3,000	U	1,300	U	2,000	UJ	8.4	U	12	UJ	920	U	20	UJ	13	UJ
1,1-Dichloroethane		75-34-3	270	NE	NE	NE	0.94	U	300	U	130	U	200	U	0.84	U	1.2	U	92	U	2	UJ	1.3	UJ
1,2-Dichloroethane		107-06-2	20	10000	NE	NE	0.94	U	300	U	130	U	200	U	1.1		1.2	U	92	U	2	UJ	1.3	UJ
1,1-Dichloroethene		75-35-4	330	NE	4700	NE	0.94	U	300	U	130	U	200	U	0.84	U	1.2	U	92	U	2	UJ	1.3	UJ
cis-1,2-Dichloroethene		156-59-2	250	NE	NE	NE	0.94	U	300	U	130	U	200	U	0.5	J	5.2		1,900		1.7	J	0.64	J
trans-1,2-Dichloroethene		156-60-5	190	NE	11000	NE	1.4	U	440	U	200	U	300	U	1.2	U	1.9	U	300		3	UJ	0.18	J
1,2-Dichloropropane		78-87-5	NE	NE	NE	700000	0.94	U	300	U	130	U	200	U	0.84	U	1.2	U	92	U	2	UJ	1.3	UJ
cis-1,3-Dichloropropene		10061-01-5	NE	NE	NE	NE	0.47	U	150	U	67	U	100	U	0.42	U	0.62	U	46	U	0.99	UJ	0.63	UJ
trans-1,3-Dichloropropene		10061-02-6	NE	NE	NE	NE	0.94	U	300	U	130	U	200	U	0.84	U	1.2	U	92	U	2	UJ	1.3	UJ
1,4-Dioxane		123-91-1	100	100	NE	NE		R		R		R		R		R		R		R		R		R
Ethylbenzene		100-41-4	1000	NE	3700	NE	0.22	J	110000		76000		13000		120		12000		17000		700		5900	
2-Hexanone		591-78-6	NE	NE	NE	NE	9.4	UJ	3,000	U	1,300	U	2,000	U	8.4	U	12	U	920	U	20	UJ	13	UJ
Isopropylbenzene		98-82-8	NE	NE	1800	NE	0.94	U	12000		5300		6400	J	9.7		660		1900		250	J	710	
Methyl acetate		79-20-9	NE	NE	NE	NE	3.8	UJ	1,400	J	530	U	700	J	3.3	U	5	U	500		61	J	360	J
Methyl ethyl ketone (2-Butanone)		78-93-3	120	100000	NE	NE	9.4	UJ	3,000	U	1,300	U	480	J	8.4	U	12	U	920	U	8.4	J	13	UJ
Methyl tert-butyl ether (MTBE)		1634-04-4	930	NE	NE	NE	1.9	U	590	U	270	U	400	U	1.7	U	2.5	U	180	U	4	UJ	2.5	UJ
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	NE	NE	NE	9.4	UJ	3,000	U	1,300	U	2,000	U	8.4	U	12	U	920	U	20	UJ	13	UJ
Methylcyclohexane		108-87-2	NE	NE	NE	NE	3.8	U	190	J	530	U	310	J	3.3	U	4.2	J	170	J	5.8	J	94	J
Methylene chloride		75-09-2	50	12000	NE	NE	4.7	U	1,500	U	670	U	1000	UJ	4.2	U	6.2	U	460	U	9.9	UJ	6.3	UJ
Styrene		100-42-5	NE	NE	NE	300000	0.94	U	260	J	180		170	J	2		3.7	J	360		2	J	0.63	J
1,1,2,2-Tetrachloroethane		79-34-5	NE	NE	5400	NE	0.47	U	150	U	67	U	100	U	0.42	U	0.62	U	46	U	0.99	UJ	0.63	UJ
Tetrachloroethene (PCE)		127-18-4	1300	2000	57000	NE	0.47	U	150	U	67	U	100	U	0.42	U	0.62	U	46	U	0.99	UJ	0.63	UJ
Toluene		108-88-3	700	36000	4500	NE	0.94	U	630		1,400		360		15		76		1,500		140	J	100	

Table 5D. Creek Deeper Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description							Creek Deeper Sediment Boring Sample Analytical Results																	
							SED-BGL-1/12-14		SED-LSC-1/11-15		SED-LSC-2/14-16		SED-LSC-3/13-16		SED-LSC-4/14-16		SED-LSC-5/14-16		SED-LSC-6/12-19.5		SED-LSC-7/12-18		SED-LSC-8/6.8-15	
							562.2		563.1		560.1		561.1		560.0		560.0		561.2		561.8		566.6	
							560.2		559.1		558.1		558.1		550.0		550.0		553.7		553.8		558.4	
							Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft	
Sample Name							1.0 to 3.0		4.5 to 8.5		8.0 to 10.0		5.2 to 8.2		4.7 to 6.7		5.2 to 7.2		3.5 to 11.0		4.0 to 12.0		0 to 8.2	
Start Depth							11/10/2021		11/9/2021		11/9/2021		11/9/2021		11/10/2021		11/10/2021		11/3/2021		11/3/2021		11/3/2021	
End Depth																								
Depth Unit																								
Sample Depth Interval (ft) below Top of Sediment																								
Sample Date																								
Analyte	Units	CAS No. or Identifier	375-6.8(a) Unrestricted SCO	375-6.8(b) Protection of Ecological Resources SCO	Freshwater Sediment Guidance Values Class B	NY CP-51 RESTRICTED USE ECO SSCO																		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	NE	NE	NE	NE	3.8	U	1,200	U	530	U	810	U	3.3	U	5	U	370	U	7.9	UJ	5	UJ
1,2,3-Trichlorobenzene		87-61-6	NE	NE	2800	20000	1.9	U	590	U	270	U	400	U	1.7	U	2.5	U	180	U	4	UJ	2.5	UJ
1,2,4-Trichlorobenzene		120-82-1	NE	NE	55000	20000	1.9	U	590	U	270	U	400	U	1.7	U	2.5	U	180	U	4	UJ	2.5	UJ
1,1,1-Trichloroethane (TCA)		71-55-6	680	NE	3500	NE	0.47	U	150	U	67	U	100	U	0.42	U	0.62	U	46	U	0.99	UJ	0.63	UJ
1,1,2-Trichloroethane		79-00-5	NE	NE	3500	NE	0.94	U	300	U	130	U	200	U	0.84	U	1.2	U	92	U	2	UJ	1.3	UJ
Trichloroethene (TCE)		79-01-6	470	2000	8600	NE	0.47	U	150	U	67	U	100	U	0.42	U	0.44	J	79		0.62	J	0.63	UJ
Trichlorofluoromethane (Freon 11)		75-69-4	NE	NE	NE	NE	3.8	UJ	1,200	U	530	U	810	UJ	3.3	U	5	U	370	U	7.9	UJ	5	UJ
Vinyl chloride		75-01-4	20	NE	NE	NE	0.94	UJ	300	U	130	U	200	U	0.81	J	2.9		620		1.4	J	0.88	J
o-Xylene		95-47-6	260	NE	7200	NE	0.94	U	25000		14000		4,400	J	32		2,500		4,100		720	J	1,600	
m/p-Xylene		179601-23-1	260	260	NE	NE	1.9	U	29,000		36,000		1,700		63		4,400		8,400		1,100	J	1,100	
Total BTEX (ND=0)		TBTEx_ND0	NE	NE	NE	NE	0.22		175,630		139,400		65,460		273		22,176		31,460		3,010		9,250	
SVOCs (SW 8270D)	ug/kg																							
Acenaphthene		83-32-9	20000	20000	NE	NE	160	U	37,000		20,000		110,000		320		1,700		25,000		3,300		5,400	J
Acenaphthylene		208-96-8	100000	NE	NE	NE	160	U	3,000		2,800		3,700		150	J	110	J	5,200		360		650	J
Acetophenone		98-86-2	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ
Anthracene		120-12-7	100000	NE	NE	NE	120	U	17,000		12,000		45,000		200		740		17,000		1,700		3,000	J
Atrazine		1912-24-9	NE	NE	NE	NE	160	U	2,600	U	1,700	U	2,400	U	170	U	180	U	1,700	U	160	U	190	UJ
Benzaldehyde		100-52-7	NE	NE	NE	NE	270	U	4,200	U	2,700	U	4,000	U	280	U	290	U	2,800	U	270	U	310	UJ
Benzo(a)anthracene		56-55-3	1000	NE	NE	NE	28	J	8,900		5,500		20,000		130		380		9,400		950		2,100	J
Benzo(b)fluoranthene		205-99-2	1000	NE	NE	NE	120	U	5,500		3,000		12,000		80	J	230		5,800		590		1,400	J
Benzo(k)fluoranthene		207-08-9	800	NE	NE	NE	120	U	1,200	J	900	J	3,000		130	U	77	J	1,800		150		460	J
Benzo(g,h,i)perylene		191-24-2	100000	NE	NE	NE	160	U	3,600		2,500		8,700		49	J	150	J	3,600		380		890	J
Benzo(a)pyrene		50-32-8	1000	2600	NE	NE	160	U	8,000		4,600		16,000		100	J	340		8,400		820		1,800	J
Biphenyl (1,1-Biphenyl)		92-52-4	NE	NE	NE	60000	460	U	11,000		6,400		31,000		140	J	470	J	8,000		880		1,300	J
Bis(2-chloroethoxy)methane		111-91-1	NE	NE	NE	NE	220	U	3,500	U	2,200	U	3,200	U	230	U	240	U	2,300	U	220	U	260	UJ
Bis(2-chloroethyl)ether		111-44-4	NE	NE	NE	NE	180	U	2,900	U	1,900	U	2,700	U	190	U	200	U	1,900	U	180	U	210	UJ
2,2-oxybis(1-Chloropropane)		108-60-1	NE	NE	NE	NE	240	UJ	3,900	UJ	2,500	UJ	3,600	UJ	260	U	260	UJ	2,600	UJ	240	UJ	280	UJ
Bis(2-ethylhexyl)phthalate		117-81-7	NE	NE	14	239000	200	U	3,200	UJ	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ
4-Bromophenyl phenyl ether		101-55-3	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ
Butyl benzyl phthalate		85-68-7	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ
Caprolactam		105-60-2	NE	NE	NE	NE	200	U	3,200	U	2,100	UJ	3,000	UJ	220	U	220	U	2,200	UJ	200	U	240	UJ
Carbazole		86-74-8	NE	NE	NE	NE	200	U	3,200	U	2,100	U	1000	J	220	U	220	U	2,200	U	200	U	96	J
4-Chloro-3-methylphenol		59-50-7	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ
4-Chloroaniline		106-47-8	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	UJ	220	U	2,200	UJ	200	UJ	240	UJ
2-Chloronaphthalene		91-58-7	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ
2-Chlorophenol		95-57-8	NE	NE	NE	800	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ
4-Chlorophenyl phenyl ether		7005-72-3	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ
Chrysene		218-01-9	1000	NE	NE	NE	22	J	7,200		4,200		16,000		96	J	310		7,300		780		1,800	J
Dibenz(a,h)anthracene		53-70-3	330	NE	NE	NE	120	U	720	J	480	J	2,000		130	U	32	J	740	J	90	J	220	J
Dibenzofuran		132-64-9	7000	NE	NE	NE	200	U	2,600	J	1,400	J	7,300		39	J	140	J	2,200		320		490	J
3,3-Dichlorobenzidine		91-94-1	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ
2,4-Dichlorophenol		120-83-2	NE	NE	NE	20000	180	U	2,900	U	1,900	U	2,700	U	190	U	200	U	1,900	U	180	U	210	UJ
Diethyl phthalate		84-66-2	NE	NE	NE	100000	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ
Dimethyl phthalate		131-11-3	NE	NE	NE	200000	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ

Table 5D. Creek Deeper Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description							Creek Deeper Sediment Boring Sample Analytical Results																			
							SED-BGL-1/12-14		SED-LSC-1/11-15		SED-LSC-2/14-16		SED-LSC-3/13-16		SED-LSC-4/14-16		SED-LSC-5/14-16		SED-LSC-6/12-19.5		SED-LSC-7/12-18		SED-LSC-8/6.8-15			
							562.2		563.1		560.1		561.1		560.0		560.0		561.2		561.8		566.6			
							560.2		559.1		558.1		558.1		550.0		550.0		553.7		553.8		558.4			
							Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft			
Sample Name							1.0 to 3.0		4.5 to 8.5		8.0 to 10.0		5.2 to 8.2		4.7 to 6.7		5.2 to 7.2		3.5 to 11.0		4.0 to 12.0		0 to 8.2			
Start Depth							11/10/2021		11/9/2021		11/9/2021		11/9/2021		11/10/2021		11/10/2021		11/3/2021		11/3/2021		11/3/2021			
End Depth																										
Depth Unit																										
Sample Depth Interval (ft) below Top of Sediment																										
Sample Date																										
Analyte	Units	CAS No. or Identifier	375-6.8(a) Unrestricted SCO	375-6.8(b) Protection of Ecological Resources SCO	Freshwater Sediment Guidance Values Class B	NY CP-51 RESTRICTED USE ECO SSCO																				
2,4-Dimethylphenol		105-67-9	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
Di-n-butyl phthalate		84-74-2	NE	NE	NE	14	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
4,6-Dinitro-2-methylphenol		534-52-1	NE	NE	NE	NE	520	U	8,400	UJ	5,400	R	7,800	R	560	U	570	U	5,600	U	530	U	620	UJ		
2,4-Dinitrophenol		51-28-5	NE	NE	NE	20000	970	U	15,000	UJ	10,000	U	14,000	U	1000	U	1000	U	10,000	U	970	U	1,100	UJ		
2,4-Dinitrotoluene		121-14-2	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
2,6-Dinitrotoluene		606-20-2	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
Di-n-octyl phthalate		117-84-0	NE	NE	NE	NE	200	UJ	3,200	UJ	2,100	U	3,000	U	220	U	220	UJ	2,200	U	200	U	240	UJ		
Fluoranthene		206-44-0	100000	NE	NE	NE	35	J	16,000		9,000		42,000		210		680		17,000		1,600		3,500	J		
Fluorene		86-73-7	30000	30000	NE	NE	200	U	15,000		9,800		35,000		190	J	640		13,000		1,300		2,400	J		
Hexachlorobenzene		118-74-1	330	NE	NE	NE	120	U	1,900	U	1,200	U	1,800	U	130	U	130	U	1,300	U	120	U	140	UJ		
1,3-Hexachlorobutadiene (C-46)		87-68-3	NE	NE	12000	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
Hexachlorocyclopentadiene		77-47-4	NE	NE	8100	10000	580	U	9,200	U	5,900	UJ	8,600	UJ	620	U	630	U	6,200	U	580	U	680	UJ		
Hexachloroethane		67-72-1	NE	NE	NE	NE	160	U	2,600	U	1,700	U	2,400	U	170	U	180	U	1,700	U	160	U	190	UJ		
Indeno(1,2,3-cd)pyrene		193-39-5	500	NE	NE	NE	160	U	2,900		1,800		7,600		40	J	120	J	3,200		330		830	J		
Isophorone		78-59-1	NE	NE	NE	NE	180	U	2,900	U	1,900	U	2,700	U	190	U	200	U	1,900	U	180	U	210	UJ		
2-Methylnaphthalene		91-57-6	NE	NE	NE	NE	240	U	95,000		50,000		280,000		1000		3,400		42,000		3,600		6,900	J		
2-Methylphenol (o-Cresol)		95-48-7	330	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
3,4-Methylphenol (m,p-Cresol)		08394/10644	NE	NE	NE	NE	290	U	4,600	U	3,000	U	4,300	U	310	U	320	U	3,100	U	290	U	340	UJ		
Naphthalene		91-20-3	12000	NE	NE	NE	200	U	110,000		80,000		450,000		2,200		6,400		69,000		4,900		8,900	J		
2-Nitroaniline		88-74-4	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
3-Nitroaniline		99-09-2	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
4-Nitroaniline		100-01-6	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
Nitrobenzene		98-95-3	NE	NE	NE	40000	180	U	2,900	U	1,900	U	2,700	U	190	U	200	U	1,900	U	180	U	210	UJ		
2-Nitrophenol		88-75-5	NE	NE	NE	7000	440	U	7,000	UJ	4,500	U	6,500	U	460	U	470	U	4,700	U	440	U	510	UJ		
4-Nitrophenol		100-02-7	NE	NE	NE	7000	280	U	4,500	U	2,900	UJ	4,200	UJ	300	U	310	U	3,000	UJ	280	U	330	UJ		
N-Nitrosodiphenylamine (NDFA)		86-30-6	NE	NE	NE	20000	160	U	2,600	U	1,700	U	2,400	U	170	U	180	U	1,700	U	160	U	190	UJ		
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
Pentachlorophenol		87-86-5	800	800	19000	NE	160	U	2,600	U	1,700	U	2,400	U	170	U	180	U	1,700	U	160	U	190	UJ		
Phenanthrene		85-01-8	100000	NE	NE	NE	120	U	59,000		42,000		150,000		750		2,600		60,000		5,000		7,900	J		
Phenol		108-95-2	330	30000	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
Pyrene		129-00-0	100000	NE	NE	NE	58	J	32,000		24,000		83,000		440		1,400		34,000		3,000		5,500	J		
1,2,4,5-Tetrachlorobenzene		95-94-3	NE	NE	14000	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
2,3,4,6-Tetrachlorophenol		58-90-2	NE	NE	NE	NE	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
2,4,5-Trichlorophenol		95-95-4	NE	NE	NE	4000	200	U	3,200	U	2,100	U	3,000	U	220	U	220	U	2,200	U	200	U	240	UJ		
2,4,6-Trichlorophenol		88-06-2	NE	NE	NE	NE	120	U	1,900	U	1,200	U	1,800	U	130	U	130	U	1,300	U	120	U	140	UJ		
Total PAH (16) (ND=0)		TPAH16_ND0	NE	NE	35000	NE	143		327020		222580		1004000		4,955		15,909		280440		25,250		46750			
Total PAH (17) (ND=0)		TPAH17_ND0	NE	NE	35000	NE	143		422020		272580		1284000		5,955		19,309		322440		28,850		53650			
CYANIDES (SW 9012B)	mg/kg																									
Total Cyanide		57-12-5	27	NE	NE	NE	1.2	U	0.73	J	1.2	UJ	4.6	J	1.2	UJ	1.2	U	1.2	UJ	1.1	UJ	1.3	UJ		
PESTICIDES (SW 8081B)	ug/kg																									
Aldrin		309-00-2	5	140	NE	NE	1.94	R	3	R	1.96	U	2.9	R	1.98	U	2.1	R	2.07	UJ	1.86	R	10.8	UJ		
alpha-BHC (Hexachlorocyclohexane)		319-84-6	20	40	NE	NE	0.807	R	1.25	R	0.819	U	1.21	R	0.825	U	0.876	R	0.863	UJ	0.773	R	4.51	UJ		
beta-BHC (beta-Hexachlorocyclohexane)		319-85-7	36	600	NE	NE	1.94	R	3	R	1.96	U	2.9	R	1.98	U	2.1	R	2.07	UJ	1.86	R	10.8	UJ		
gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane)		58-89-9	100	6000	78	NE	0.807	R	1.25	R	0.819	U	1.21	R	0.825	U	0.876	R	0.863	UJ	0.773	R	4.51	UJ		

Table 5D. Creek Deeper Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description							Creek Deeper Sediment Boring Sample Analytical Results																	
							SED-BGL-1/12-14		SED-LSC-1/11-15		SED-LSC-2/14-16		SED-LSC-3/13-16		SED-LSC-4/14-16		SED-LSC-5/14-16		SED-LSC-6/12-19.5		SED-LSC-7/12-18		SED-LSC-8/6.8-15	
							562.2		563.1		560.1		561.1		560.0		560.0		561.2		561.8		566.6	
							560.2		559.1		558.1		558.1		550.0		550.0		553.7		553.8		558.4	
							Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft	
Sample Name							1.0 to 3.0		4.5 to 8.5		8.0 to 10.0		5.2 to 8.2		4.7 to 6.7		5.2 to 7.2		3.5 to 11.0		4.0 to 12.0		0 to 8.2	
Start Depth							11/10/2021		11/9/2021		11/9/2021		11/9/2021		11/10/2021		11/10/2021		11/3/2021		11/3/2021		11/3/2021	
End Depth																								
Depth Unit																								
Sample Depth Interval (ft) below Top of Sediment																								
Sample Date																								
Analyte	Units	CAS No. or Identifier	375-6.8(a) Unrestricted SCO	375-6.8(b) Protection of Ecological Resources SCO	Freshwater Sediment Guidance Values Class B	NY CP-51 RESTRICTED USE ECO SSCO																		
delta-BHC (delta-Hexachlorocyclohexane)		319-86-8	40	40	NE	NE	1.94	R	3	R	1.96	U	2.9	R	1.98	U	2.1	R	2.07	UJ	1.86	R	10.8	UJ
Chlordane (Technical)		12789-03-6	NE	NE	NE	NE	16.1	R	25	R	16.4	U	24.2	R	16.5	U	17.5	R	17.2	UJ	15.5	R	90.1	UJ
alpha-chlordane		5103-71-9	94	1300	NE	NE	2.42	R	3.74	R	2.46	U	3.63	R	2.48	U	2.63	R	2.59	UJ	2.32	R	13.5	UJ
gamma-Chlordane		5103-74-2	NE	NE	NE	NE	2.42	R	3.74	R	2.46	U	3.63	R	2.48	U	2.63	R	2.59	UJ	2.32	R	13.5	UJ
4,4'-DDT (p,p'-DDT)		50-29-3	3.3	3.3	48000	NE	3.63	R	5.62	R	3.68	U	5.44	R	3.71	U	3.94	R	6.51	J	3.48	R	20.3	UJ
4,4'-DDE (p,p'-DDE)		72-55-9	3.3	3.3	NE	NE	1.94	R	3	R	1.96	U	2.9	R	1.98	U	2.1	R	2.07	UJ	1.86	R	10.8	UJ
4,4'-DDD (p,p'-DDD)		72-54-8	3.3	3.3	NE	NE	1.94	R	3	R	1.96	U	5.96	J	1.98	U	2.1	R	8.81	J	1.86	R	10.8	UJ
Dieldrin		60-57-1	5	6	780	NE	1.21	R	1.87	R	1.23	U	1.81	R	1.24	U	1.31	R	1.29	UJ	1.16	R	6.76	UJ
alpha-Endosulfan (I)		959-98-8	2400	NE	NE	NE	1.94	R	3	R	1.96	U	2.9	R	1.98	U	2.1	R	2.07	UJ	1.86	R	10.8	UJ
beta-Endosulfan (II)		33213-65-9	2400	NE	NE	NE	1.94	R	3	R	1.96	U	2.9	R	1.98	U	2.1	R	2.07	UJ	1.86	R	10.8	UJ
Endosulfan sulfate		1031-07-8	2400	NE	NE	NE	0.807	R	1.25	R	0.819	U	1.21	R	0.825	U	0.876	R	0.863	UJ	0.773	R	4.51	UJ
Endrin		72-20-8	14	14	220	NE	0.807	R	1.25	R	0.819	U	1.21	R	0.825	U	0.876	R	0.863	UJ	0.773	R	4.51	UJ
Endrin aldehyde		7421-93-4	NE	NE	NE	NE	2.42	R	3.74	R	2.46	U	3.63	R	2.48	UJ	2.63	R	2.59	UJ	2.32	R	13.5	UJ
Endrin ketone		53494-70-5	NE	NE	NE	NE	1.94	R	3	R	1.96	U	2.9	R	1.98	U	2.1	R	2.07	UJ	1.86	R	10.8	UJ
Heptachlor		76-44-8	42	140	10000	NE	0.969	R	1.5	R	0.982	U	1.45	R	0.99	U	1.05	R	1.04	UJ	0.928	R	5.41	UJ
Heptachlor epoxide		1024-57-3	NE	NE	2100	NE	3.63	R	5.62	R	3.68	U	5.44	R	3.71	U	3.94	R	3.88	UJ	3.48	R	20.3	UJ
Methoxychlor		72-43-5	NE	NE	NE	1200	3.63	R	5.62	R	3.68	U	5.44	R	3.71	U	3.94	R	3.88	UJ	3.48	R	20.3	UJ
Toxaphene		8001-35-2	NE	NE	250	NE	36.3	R	56.2	R	36.8	U	54.4	R	37.1	U	39.4	R	38.8	UJ	34.8	R	203	UJ
HERBICIDES (SW 8151A)	ug/kg																							
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	NE	NE	NE	NE	200	U	323	U	209	U	302	U	216	U	217	U	215	U	203	UJ	234	UJ
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)		93-76-5	NE	NE	NE	NE	200	U	323	U	209	U	302	U	216	U	217	U	215	U	203	UJ	234	UJ
2,4,5-TP (Silvex)		93-72-1	3800	NE	NE	NE	200	U	323	U	209	U	302	U	216	U	217	U	215	U	203	UJ	234	UJ
PCBs (SW 8082A)	ug/kg																							
Aroclor 1016		12674-11-2	NE	NE	NE	NE	38.6	U	61.8	UJ	42.3	UJ	59.2	UJ	43.4	U	44.2	U	42.8	UJ	39	UJ	46.2	UJ
Aroclor 1221		11104-28-2	NE	NE	NE	NE	38.6	U	61.8	UJ	42.3	UJ	59.2	UJ	43.4	U	44.2	U	42.8	UJ	39	UJ	46.2	UJ
Aroclor 1232		11141-16-5	NE	NE	NE	NE	38.6	U	61.8	UJ	42.3	UJ	59.2	UJ	43.4	U	44.2	U	42.8	UJ	39	UJ	46.2	UJ
Aroclor 1242		53469-21-9	NE	NE	NE	NE	38.6	U	61.8	UJ	42.3	UJ	59.2	UJ	43.4	U	44.2	U	42.8	UJ	39	UJ	362	J
Aroclor 1248		12672-29-6	NE	NE	NE	NE	38.6	U	61.8	UJ	42.3	UJ	59.2	UJ	43.4	U	44.2	U	42.8	UJ	39	UJ	46.2	UJ
Aroclor 1254		11097-69-1	NE	NE	NE	NE	38.6	U	61.8	UJ	42.3	UJ	780	J	43.4	U	44.2	U	77.5	J	16.6	J	46.2	UJ
Aroclor 1260		11096-82-5	NE	NE	NE	NE	38.6	U	61.8	UJ	42.3	UJ	206	J	43.4	U	44.2	U	42.8	UJ	39	UJ	46.2	UJ
Aroclor 1262		37324-23-5	NE	NE	NE	NE	38.6	U	61.8	UJ	42.3	UJ	59.2	UJ	43.4	U	44.2	U	42.8	UJ	39	UJ	46.2	UJ
Aroclor 1268		11100-14-4	NE	NE	NE	NE	38.6	U	61.8	UJ	42.3	UJ	59.2	UJ	43.4	U	44.2	U	42.8	UJ	39	UJ	46.2	UJ
Total PCBs (Lab calculated)		1336-36-3	100	1000	1000	NE	38.6	U	61.8	UJ	42.3	UJ	986	J	43.4	U	44.2	U	77.5	J	16.6	J	362	J
METALS (SW 6010D)	mg/kg																							
Aluminum		7429-90-5	NE	NE	NE	10000	8,840		10,800		6,870		6,850		8,800		8,190		15,800	J	2,410		4,620	
Antimony		7440-36-0	NE	NE	NE	12	4.75	U	7.37	U	4.88	U	7.08	U	5.15	U	5.14	U	5.08	U	4.63	U	5.6	U
Arsenic		7440-38-2	13	13	33	NE	3.15	J	9.49		6.85		11.4		1.77	J	2.14	J	3.29	J	3.47		4.69	
Barium		7440-39-3	350	433	NE	NE	95		159		74.4		134		102		88.3		145		32.9		57.5	
Beryllium		7440-41-7	7.2	10	NE	NE	0.475		0.737	U	0.488	U	0.708	U	0.36	J	0.514	U	2.18		0.111	J	0.324	J
Cadmium		7440-43-9	2.5	4	5	NE	0.104	J	1.81	J	0.556	J	3.66	J	0.69	J	0.144	J	0.386	J	0.528	J	0.996	J
Calcium		7440-70-2	NE	NE	NE	10000	97,100		37,800		80,600		25,800		81,500		66,800		141,000		121,000		75,800	
Chromium		7440-47-3	30	41	110	NE	14.5		20.3		11.6		35		14.5		14.1		8.76		5.81		13.9	
Cobalt		7440-48-4	NE	NE	NE	20	9.83		9.39		7.47		13.5		8.17		8.1		2	J	2.52		4.74	
Copper		7440-50-8	50	50	150	NE	17.7		133		14.4		235		21.4		65		73.9		29.8		90.6	

Table 5D. Creek Deeper Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Task Description							Creek Deeper Sediment Boring Sample Analytical Results																	
							SED-BGL-1/12-14		SED-LSC-1/11-15		SED-LSC-2/14-16		SED-LSC-3/13-16		SED-LSC-4/14-16		SED-LSC-5/14-16		SED-LSC-6/12-19.5		SED-LSC-7/12-18		SED-LSC-8/6.8-15	
							Sample Name		Start Depth		End Depth		Depth Unit		Sample Depth Interval (ft) below Top of Sediment		Sample Date							
							Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft		Elevation ft			
							11/10/2021		11/9/2021		11/9/2021		11/9/2021		11/10/2021		11/10/2021		11/3/2021		11/3/2021		11/3/2021	
Analyte	Units	CAS No. or Identifier	375-6.8(a) Unrestricted SCO	375-6.8(b) Protection of Ecological Resources SCO	Freshwater Sediment Guidance Values Class B	NY CP-51 RESTRICTED USE ECO SSCO																		
Iron		7439-89-6	NE	NE	NE	NE	19,500		26,400		13,600		37,800		16,900		17,600		6,760		7,540	J	17,100	J
Lead		7439-92-1	63	63	130	NE	17		291		13.8		392		15.5		22	J	58.4		34		98.8	
Magnesium		7439-95-4	NE	NE	NE	NE	21,000		8,830		19,800		5,840		18,300		21,000		21,800	J	39,000		21,700	
Manganese		7439-96-5	1600	1600	NE	NE	467		247		373		404		451		444		2,100		383		428	
Mercury (SW 7471B)		7439-97-6	0.18	0.1800	1	NE	0.089	U	1.11		0.081	U	0.669		0.085	U	0.092	U	0.243		0.079	U	0.207	
Nickel		7440-02-0	30	30	49	NE	18.3		22.2		15.8		31.6		17.7		17.4		4.58		5.22		9.9	
Potassium		7440-09-7	NE	NE	NE	NE	1,750		991		1,200		746		1,570		1,710		1,120		384		644	
Selenium		7782-49-2	3.9	3.9	NE	NE	0.37	J	2.95	U	1.95	U	2.83	U	2.06	U	0.854	J	2.21		0.287	J	0.571	J
Silver		7440-22-4	2	2	2.2	NE	0.95	U	0.752	J	0.976	U	1.09	J	1.03	U	1.03	U	1.02	U	0.927	U	1.12	U
Sodium		7440-23-5	NE	NE	NE	NE	663	J	339		238		332	J	254		300	J	543		368		671	
Thallium		7440-28-0	NE	NE	NE	5	1.9	U	2.95	UJ	1.95	U	2.83	UJ	2.06	U	2.06	U	2.03	U	1.85	U	2.24	U
Vanadium		7440-62-2	NE	NE	NE	39	20.6		23.8		15.6		24.5		19.7		18.8		3.9		8.08		16	
Zinc		7440-66-6	109	109	460	NE	62.6		547		57.2		598		57.8		78.2		91.2		86.1		194	
GENERAL CHEMISTRY (SM 2540G)	%																							
Percent Solids		SOLIDS	NE	NE	NE	NE	81.6		51.4		77.8		54.9		75.8		74.9		76.6		81.2		69.7	
TOTAL ORGANIC CARBON (SW 9060A)	%																							
Total Organic Carbon		TOC	NE	NE	NE	NE	0.01	U	8		3.57		3.86		3.83		3.7		3.53		3.77		4.17	

Table 5D. Creek Deeper Sediment Boring Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

Notes:

Sample ID contains sample depth below the measuring point on barge; sample elevation interval provided for sample depth
mg/kg = milligrams/kilogram or parts per million (ppm)
% = Percent
ug/kg = micrograms per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
PAH = Polycyclic Aromatic Hydrocarbon
PCB = Polychlorinated Biphenyl
SVOC = Semi-Volatile Organic Compound
VOC = Volatile Organic Compound

CAS No. = Chemical Abstracts Service Number
ND = Not Detected
NE = Not Established

Bolding indicates a detected result concentration
Shading and bolding indicates that the detected concentration is above the Guidance it was compared to
6 NYCRR = New York State Register and Official Compilation of Codes, Rules and Regulations of the State of New York

Comparison of detected results are performed against one or more of the following NYCRR, Chapter IV, Part 375-6
Soil Cleanup Objectives (SCO)s: Unrestricted Use, Restricted-Residential, Protection of Ecological Resources

⁽¹⁾ Source: NYSDEC CP-51 Soil Cleanup Guidance as presented in Tables 1 through 3 dated October 2010 applying to the Inactive Hazardous Waste Disposal Site Remedial Program

Validation Qualifiers:

J = The result is an estimated value.
JN = The analyte is presumptively present at an approximated quantity.
U = The result was not detected above the reporting limit.
UJ = The results was not detected at or above the reporting limit shown and the reporting limit is estimated.
R = The results were rejected by laboratory (see **1,4-Dioxane, Pesticides Group**)

1,4-Dioxane - Rejected Data

Due to the extremely low calibration response factor for 1,4-dioxane under Method 8260C, this compound is typically rejected during validation as it does not meet the minimal criteria set for accurate quantitation. Non-detect results for 1,4-dioxane are rejected as the presence or absence of the compound cannot be verified. Positive results are estimated due to the high variability inherent in the quantitation when using an extremely low response factor.

Pesticides (SW 8081B) - Rejected Data

The pesticide nondetect results in sample SED-BGL-1/12-14, SED-LSC-1/11-15, SED-LSC-3/13-16, SED-LSC-5/14-16, and SED-LSC-7/12-18 were rejected (R) due to surrogate recovery less than 10%. These results should not be used for decision-making purposes.

Table 5E. Vault Debris Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

		Sample Name	BSA-VAULT-DEBRIS	
		Sample Date	11/18/2021	
Analyte	Units	CAS No.		
VOCs (SW 8260C)	ug/kg			
Acetone		67-64-1	810	U
Benzene		71-43-2	1,800	
Bromochloromethane		74-97-5	160	U
Bromodichloromethane		75-27-4	41	U
Bromoform		75-25-2	320	U
Bromomethane		74-83-9	160	U
Carbon disulfide		75-15-0	430	J
Carbon tetrachloride		56-23-5	81	U
Chlorobenzene		108-90-7	41	U
Chloroethane		75-00-3	160	
Chloroform (Trichloromethane)		67-66-3	120	U
Chloromethane		74-87-3	320	U
Cyclohexane		110-82-7	63	J
1,2-Dibromo-3-chloropropane		96-12-8	240	U
Dibromochloromethane		124-48-1	81	U
1,2-Dibromoethane (EDB)		106-93-4	81	U
1,2-Dichlorobenzene (o-DCB)		95-50-1	160	U
1,3-Dichlorobenzene (m-DCB)		541-73-1	160	U
1,4-Dichlorobenzene (p-DCB)		106-46-7	160	U
Dichlorodifluoromethane (Freon 12)		75-71-8	810	U
1,1-Dichloroethane		75-34-3	280	
1,2-Dichloroethane		107-06-2	81	U
1,1-Dichloroethene		75-35-4	23	J
cis-1,2-Dichloroethene		156-59-2	2,200	
trans-1,2-Dichloroethene		156-60-5	14	J
1,2-Dichloropropane		78-87-5	81	U
cis-1,3-Dichloropropene		10061-01-5	41	U
trans-1,3-Dichloropropene		10061-02-6	81	U
1,4-Dioxane		123-91-1		R
Ethylbenzene		100-41-4	62,000	
2-Hexanone		591-78-6	810	U
Isopropylbenzene		98-82-8	5,900	
Methyl acetate		79-20-9	470	
Methyl ethyl ketone (2-Butanone)		78-93-3	810	U
Methyl tert-butyl ether (MTBE)		1634-04-4	160	U
4-Methyl-2-pentanone (MIBK)		108-10-1	810	U
Methylcyclohexane		108-87-2	240	J
Methylene chloride		75-09-2	410	U
Styrene		100-42-5	260	
1,1,2,2-Tetrachloroethane		79-34-5	41	U
Tetrachloroethene (PCE)		127-18-4	41	U
Toluene		108-88-3	2,900	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	320	U
1,2,3-Trichlorobenzene		87-61-6	160	U
1,2,4-Trichlorobenzene		120-82-1	160	U

Table 5E. Vault Debris Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

		Sample Name	BSA-VAULT-DEBRIS	
		Sample Date	11/18/2021	
Analyte	Units	CAS No.		
1,1,1-Trichloroethane (TCA)		71-55-6	440	
1,1,2-Trichloroethane		79-00-5	81	U
Trichloroethene (TCE)		79-01-6	61	
Trichlorofluoromethane (Freon 11)		75-69-4	320	U
Vinyl chloride		75-01-4	450	
o-Xylene		95-47-6	16,000	
m/p-Xylene		179601-23-1	17,000	
SVOCs (SW 8270D)	ug/kg			
Acenaphthene		83-32-9	58	J
Acenaphthylene		208-96-8	53	J
Acetophenone		98-86-2	240	U
Anthracene		120-12-7	140	
Atrazine		1912-24-9	190	U
Benzaldehyde		100-52-7	320	U
Benzo(a)anthracene		56-55-3	400	
Benzo(b)fluoranthene		205-99-2	480	
Benzo(k)fluoranthene		207-08-9	130	J
Benzo(g,h,i)perylene		191-24-2	220	
Benzo(a)pyrene		50-32-8	330	
Biphenyl (1,1-Biphenyl)		92-52-4	550	U
Bis(2-chloroethoxy)methane		111-91-1	260	U
Bis(2-chloroethyl)ether		111-44-4	220	U
2,2-oxybis(1-Chloropropane)		108-60-1	290	U
Bis(2-ethylhexyl)phthalate		117-81-7	240	U
4-Bromophenyl phenyl ether		101-55-3	240	U
Butyl benzyl phthalate		85-68-7	160	J
Caprolactam		105-60-2	240	U
Carbazole		86-74-8	46	J
4-Chloro-3-methylphenol		59-50-7	240	U
4-Chloroaniline		106-47-8	240	U
2-Chloronaphthalene		91-58-7	240	U
2-Chlorophenol		95-57-8	240	U
4-Chlorophenyl phenyl ether		7005-72-3	240	U
Chrysene		218-01-9	410	
Dibenz(a,h)anthracene		53-70-3	61	J
Dibenzofuran		132-64-9	33	J
3,3-Dichlorobenzidine		91-94-1	240	U
2,4-Dichlorophenol		120-83-2	220	U
Diethyl phthalate		84-66-2	240	U
Dimethyl phthalate		131-11-3	240	U
2,4-Dimethylphenol		105-67-9	240	U
Di-n-butyl phthalate		84-74-2	240	U
4,6-Dinitro-2-methylphenol		534-52-1	620	U
2,4-Dinitrophenol		51-28-5	1,200	U
2,4-Dinitrotoluene		121-14-2	240	U
2,6-Dinitrotoluene		606-20-2	240	U

Table 5E. Vault Debris Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

		Sample Name	BSA-VAULT-DEBRIS	
		Sample Date	11/18/2021	
Analyte	Units	CAS No.		
Di-n-octyl phthalate		117-84-0	240	U
Fluoranthene		206-44-0	780	
Fluorene		86-73-7	75	J
Hexachlorobenzene		118-74-1	140	U
1,3-Hexachlorobutadiene (C-46)		87-68-3	240	U
Hexachlorocyclopentadiene		77-47-4	680	U
Hexachloroethane		67-72-1	190	U
Indeno(1,2,3-cd)pyrene		193-39-5	250	
Isophorone		78-59-1	220	U
2-Methylnaphthalene		91-57-6	290	U
2-Methylnaphthalene		91-57-6	290	U
2-Methylphenol (o-Cresol)		95-48-7	240	U
3,4-Methylphenol (m,p-Cresol)		108394/106445	340	U
Naphthalene		91-20-3	30	J
2-Nitroaniline		88-74-4	240	U
3-Nitroaniline		99-09-2	240	U
4-Nitroaniline		100-01-6	240	U
Nitrobenzene		98-95-3	220	U
2-Nitrophenol		88-75-5	520	U
4-Nitrophenol		100-02-7	340	U
N-Nitrosodiphenylamine (NDFA)		86-30-6	190	U
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	240	U
Pentachlorophenol		87-86-5	190	U
Phenanthrene		85-01-8	450	
Phenol		108-95-2	240	U
Pyrene		129-00-0	660	
1,2,4,5-Tetrachlorobenzene		95-94-3	240	U
2,3,4,6-Tetrachlorophenol		58-90-2	240	U
2,4,5-Trichlorophenol		95-95-4	240	U
2,4,6-Trichlorophenol		88-06-2	140	U
PCB Aroclors (8082A)	ug/kg			
Aroclor 1016		12674-11-2	45.7	U
Aroclor 1221		11104-28-2	45.7	U
Aroclor 1232		11141-16-5	45.7	U
Aroclor 1242		53469-21-9	45.7	U
Aroclor 1248		12672-29-6	45.7	U
Aroclor 1254		11097-69-1	102	J
Aroclor 1260		11096-82-5	33.3	J
Aroclor 1262		37324-23-5	45.7	U
Aroclor 1268		11100-14-4	45.7	U
Total PCBs (Lab calculated)		1336-36-3	135	J
PESTICIDES (SW 8081B)	ug/kg			
Aldrin		309-00-2	21.8	U
alpha-BHC (Hexachlorocyclohexane)		319-84-6	9.09	U
beta-BHC (beta-Hexachlorocyclohexane)		319-85-7	21.8	U
gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane)		58-89-9	9.09	U

Table 5E. Vault Debris Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

		Sample Name	BSA-VAULT-DEBRIS	
		Sample Date	11/18/2021	
Analyte	Units	CAS No.		
delta-BHC (delta-Hexachlorocyclohexane)		319-86-8	21.8	U
Chlordane (Technical)		12789-03-6	182	U
alpha-chlordane		5103-71-9	27.3	U
gamma-Chlordane		5103-74-2	27.3	U
4,4'-DDT (p,p'-DDT)		50-29-3	40.9	U
4,4'-DDE (p,p'-DDE)		72-55-9	21.8	U
4,4'-DDD (p,p'-DDD)		72-54-8	13.8	J
Dieldrin		60-57-1	13.6	U
alpha-Endosulfan (I)		959-98-8	21.8	U
beta-Endosulfan (II)		33213-65-9	21.8	U
Endosulfan sulfate		1031-07-8	9.09	U
Endrin		72-20-8	9.09	U
Endrin aldehyde		7421-93-4	27.3	U
Endrin ketone		53494-70-5	21.8	U
Heptachlor		76-44-8	10.9	U
Heptachlor epoxide		1024-57-3	40.9	U
Methoxychlor		72-43-5	40.9	U
Toxaphene		8001-35-2	409	U
HERBICIDES (SW 8151A)	ug/kg			
2,4-D (2,4-Dichlorophenoxyacetic acid)		94-75-7	237	U
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)		93-76-5	237	U
2,4,5-TP (Silvex)		93-72-1	237	U
METALS (SW 6010D)	mg/kg			
Aluminum		7429-90-5	3,370	
Antimony		7440-36-0	3.82	J
Arsenic		7440-38-2	5.35	
Barium		7440-39-3	64.8	
Beryllium		7440-41-7	0.305	J
Cadmium		7440-43-9	1.72	
Calcium		7440-70-2	98,000	
Chromium		7440-47-3	81.6	
Cobalt		7440-48-4	4.71	
Copper		7440-50-8	131	
Iron		7439-89-6	29,200	
Lead		7439-92-1	833	
Magnesium		7439-95-4	21,300	
Manganese		7439-96-5	550	
Mercury		7439-97-6	0.092	U
Nickel		7440-02-0	19.9	
Potassium		7440-09-7	342	
Selenium		7782-49-2	0.588	J
Silver		7440-22-4	1.13	U
Sodium		7440-23-5	271	
Thallium		7440-28-0	0.768	J
Vanadium		7440-62-2	12	
Zinc		7440-66-6	600	

Table 5E. Vault Debris Sample Analytical Results
Site Characterization Report
Former Buffalo Gaslight Iroquois Gas Corp. Site
Buffalo, New York

		Sample Name	BSA-VAULT-DEBRIS	
		Sample Date	11/18/2021	
Analyte	Units	CAS No.		
CYANIDES (SW 9012B)	mg/kg			
Total Cyanide		57-12-5	4.9	
VPH/EPH				
C5-C8 Aliphatics (MAVPH)	mg/kg	ALIPH5-8	8.46	U
C5-C8 Aliphatics, Adjusted (MAVPH)	mg/kg	ALIPH5-8ADJ	8.46	U
C9-C12 Aliphatics (MAVPH)	mg/kg	ALIPH9-12	11.9	
C9-C12 Aliphatics, Adjusted (MAVPH)	mg/kg	ALIPH9-12ADJ	9.86	
C9-C10 Aromatics (MAVPH)	mg/kg	AROM9-10	8.46	U
Total EPH Fractions (NJ EPH R3)	mg/kg	TEPH	6,440	
GENERAL CHEMISTRY				
Ammonia (SM 4500-NH3 BH)	mg/kg	7664-41-7	18	
Percent Solids (SM 2540G)	%	SOLIDS	69.5	
Sulfide (SW 9030B)	mg/kg	18496-25-8	2,400	
TOTAL ORGANIC CARBON (SW 9060A)				
Total Organic Carbon	%	TOC	9.73	

Notes:

mg/kg = milligrams/kilogram or parts per million (ppm)

% = Percent

ug/kg = micrograms per kilogram

PAH = Polycyclic Aromatic Hydrocarbon

PCB = Polychlorinated Biphenyl

SVOC = Semi-Volatile Organic Compound

VOC = Volatile Organic Compound

CAS No. = Chemical Abstracts Service Number

Bolding indicates a detected result concentration

Validation Qualifiers:

J = The result is an estimated value.

R = The result is rejected.

U = The result was not detected above the reporting limit.

1,4-Dioxane - Rejected Data:

Due to the extremely low calibration response factor for 1,4-dioxane under Method 8260C, this compound is typically rejected during validation as it does not meet the minimal criteria set for accurate quantitation. Non-detect results for 1,4-dioxane are rejected as the presence or absence of the compound cannot be verified. Positive results are estimated due to the high variability inherent in the quantitation when using an extremely low response factor.