

Benjamin McPherson, P.E.
Assistant Engineer (Environmental), Division of Environmental Remediation
New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, NY 14203
November 15, 2018

Re: Letter Report – Soil Vapor Investigation Call Out # 134781 - 664 - 690 Northland Avenue – NYSDEC Site #915329 New York State Department of Conservation (NYSDEC) Standby Investigation and Remediation Services Contract (C100061)

Dear Mr. McPherson,

LiRo Engineers, Inc. (LiRo) has prepared this letter report to document the results of soil vapor and ambient air sampling performed at the 664 - 690 Northland Avenue Site (Site No. 915329) (Figure 1).

LiRo collected six (6) soil vapor samples and one (1) outdoor air/ambient sample on October 11, 2018. The samples were collected using SUMA canisters with 4 hour regulators. After sample collection was completed the canisters were transported under chain-of-custody control to the NYSDEC contract laboratory located at 10 Hazelwood Drive Suite #106, Amherst, NY 14228. Samples were submitted for analysis of volatile organic compounds (VOCs) in air using EPA Method TO-15.

Sampling Points Drilling Summary

On October 1, 2018, LiRo drilled six (6) 1-inch diameter sample holes through the surface asphalt, subbase, overburden and into the bedrock. All 6 sampling locations were drilled through recently completed asphalt parking lot within the 664, 688 and 690 Northland Avenue parcels (see Figure 2). Three (3) locations (SSVP-01 through SSVP-03) were drilled within the 664 Northland Avenue parcel, two (2) locations were drilled within the 688 Northland parcel (SSVP-04 and SSVP-05) and one (1) sample location (SSVP-06) was drilled within the 690 Northland Avenue Parcel. The parking lot at 688 and 690 Northland Avenue are contiguous. Tubing was placed in each hole and sealed with beeswax and clay. A summary of drilling field notes is provided in the table below:

Sample ID	Total Depth Below Grade (Inches)	Approximate Depth into Bedrock (Inches)	Depth Below Grade to Bottom of Tubing (Inches)
SSVP-01	31"	BNE	30"
SSVP-02	23"	1 to 2"	22"
SSVP-03	31"	BNE	20"
SSVP-04	20"	2"	14"
SSVP-05	32"	BNE	24"
SSVP-06	28"	2"	24"

Summary of Soil Vapor Sampling Point Construction

BNE = Bedrock Not Encountered.

After installation of tubing (0.25-inch outer diameter polyethylene) to depth, all sampling points were filled with clean quartz sand to approximately 3-inches below grade, packed with 1-inch of natural modeling clay (Craft SmartTM) and sealed with bee's wax (granular Country Lane Natural BeeswaxTM) to ground surface.



Approximately 2 feet of tubing was exposed at ground surface. Sample tubing was secured and covered by a traffic cone after completion of each installation.

Map coordinates for each sample, referenced to Latitude and Longitude and New York State Plane (West), are provided in Table 1.

Soil Vapor Collection Procedure

The sampling schedule was adjusted on multiple occasions due to asphalt repaying of the adjacent Northland Avenue (October 8, 2018) and due heavy precipitation events (from October 2 to 9, 2018) and a subsequently raised groundwater table. Sampling was conducted on October 11, 2018, after the local groundwater table had receded below the bottom of each soil vapor sampling point.

Prior to sampling, each sampling point was vacuum-purged of any ambient/stagnant air/vapor by drawing air into a 150-milliliter syringe attached to the sampling tubing above ground surface. After purging, sampling canisters and regulators were deployed and connected to the sampling tubing and left-in place for 4-hours. Sample containers were under the direction supervision of a LiRo Geologist during the entire duration of their deployment.

Concurrent with subsurface vapor sampling, one outdoor ambient-air sample (AA-01) was collected up gradient from the sub-slab soil vapor samples. (see Figure 2). The ambient sample was also left in-place and supervised for 4-hours.

Upon completion of the 4-hour interval, each canister was labeled with a sample identification code, date and time of sampling and delivered by LiRo under chain-of-custody control to Test America of Amherst, New York.

Soil Vapor Results

A summary of laboratory analytical results for AA-01 and SSVP-01 through SSVP-05 is provided in Table 2. The regulator valve for the canister for SSVP-06 was found to be defective upon inspection by the laboratory and consequently no sample results are reported for that location.

None of the sample results reported any VOC in exceedance of its New York State Department of Health's Air Guidance Value for any of the samples. Reported soil gas Total VOC concentrations ranged between 694 micrograms per cubic meter (μ g/m³) in the SSVP-05 sample and 4,717 μ g/m³ in the SSVP-04 sample. Total VOCs for the Ambient Air sample was 17 μ g/m³.

Should you have any questions regarding this matter please contact me anytime at 716-882-5476 ext. 417.

Sincerely,

LiRo Engineers, Inc.

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Craig Taylor Project Manager

TABLE 1SOIL VAPOR AND AMBIENT AIR SAMPLE MAP COORDINATES664 - 690 NORTHLAND AVENUENYSDEC SITE ID No. 915329, CALL OUT No. 134781

	Longitude	Latitude	NYS State Plane (West)			
Location ID	East/West	Noth/South	Easting	Northing		
AMBIENT	-78° 50' 7.123"	42° 55' 8.787"	1080797.614	1063695.020		
SSVP-01	-78° 50' 6.716"	42° 55' 9.507"	1080828.100	1063767.819		
SSVP-02	-78° 50' 5.877"	42° 55' 8.952"	1080890.342	1063711.507		
SSVP-03	-78° 50' 5.182"	42° 55' 9.460"	1080942.192	1063762.740		
SSVP-04	-78° 50' 3.613"	42° 55' 8.880"	1081058.802	1063703.714		
SSVP-05	-78° 50' 2.742"	42° 55' 9.449"	1081123.795	1063761.104		
SSVP-06	-78° 50' 1.536"	42° 55' 8.782"	1081213.299	1063693.272		

Notes:

1) NYS State Plan (West) = New York State Plane Coordinate System of 1983, West Zone (US Survey Feet).

TABLE 2 VOLATILE ORGANIC COMPOUNDS (VOCs) IN SOIL VAPOR AND AMBIENT AIR 664 - 690 NORTHLAND AVENUE NYSDEC SITE ID No. 915329, CALL OUT No. 134781

			Location, Sample ID, Sample Date and Type			and Type	
		Matrix Sub-slab	SSVP-01		SSVP-02		SSVP-03
		Vapor	SSVP-01		SSVP-02		SSVP-03
Paramatars	Unite	Concentration	10/11/2018 Sub Slob		10/11/2018 Sub Slab		10/11/2018 Sub Slab
1 1 1-TRICHLOROETHANE	ug/m ³	100 to 1000	2.6	-	2.4		6
1 1 2 2-TETRACHLOROETHANE	ug/m ³	NC	<0.55		<0.55		<0.55
1 1 2-TRICHLORO-1 2 2-TRIFLUOROETHANE	ug/m ³	NC	<0.61		<0.61		<0.61
1 1 2-TRICHLOROETHANE	ug/m ³	NC	<0.44		<0.44		<0.44
1 1-DICHLOROETHANE	ug/m ³	NC	<0.32		<0.32		<0.32
1 1-DICHLOROETHENE	ug/m ³	NC	<0.16	-	<0.16		<0.16
1 2 4-TRICHLOROBENZENE	ug/m ³	NC	<0.59		<0.59		<0.59
1 2 4-TRIMETHYLBENZENE	ug/m ³	NC	12	-	7.6		7.4
1 2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	ug/m ³	NC	<0.61		<0.61		<0.61
1,2-DICHLOROBENZENE	ug/m ³	NC	<0.48		<0.48		<0.48
1,2-DICHLOROETHANE	ug/m ³	NC	< 0.32		<0.32		<0.32
1.2-DICHLOROPROPANE	ug/m ³	NC	< 0.37		<0.37		< 0.37
1,2-DICHLOROTETRAFLUOROETHANE	ug/m ³	NC	< 0.56		< 0.56		< 0.56
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	ug/m ³	NC	6.7		2.4		3.4
1,3-DICHLOROBENZENE	ug/m ³	NC	<0.48		<0.48		<0.48
1,4-DICHLOROBENZENE	ug/m ³	NC	110	Е	95		140 E
1.4-DIOXANE (P-DIOXANE)	ug/m ³	NC	<0.72		<0.72		< 0.72
2.2.4-TRIMETHYLPENTANE	ug/m ³	NC	<0.93		<0.93		< 0.93
BENZENE	ug/m ³	NC	9.8		1		6.4
BENZYL CHLORIDE	ug/m ³	NC	< 0.83		<0.83		< 0.83
BROMODICHLOROMETHANE	ug/m ³	NC	< 0.54		<0.54		< 0.54
BROMOFORM	ug/m ³	NC	< 0.83		<0.83		< 0.83
BROMOMETHANE	ug/m ³	NC	< 0.31		< 0.31		< 0.31
CARBON TETRACHLORIDE	ug/m ³	6 to 60	<0.2		<0.2		0.24
CHLOROBENZENE	ug/m ³	NC	< 0.37		< 0.37		< 0.37
CHLOROETHANE	ug/m ³	NC	< 0.21		<0.21		<0.21
CHLOROFORM	ug/m ³	NC	5		<0.39		0.48
CHLOROMETHANE	ug/m ³	NC	1		1.7		0.74
CIS-1,2-DICHLOROETHYLENE	ug/m ³	6 to 60	< 0.16		<0.16		<0.16
CIS-1,3-DICHLOROPROPENE	ug/m ³	NC	< 0.36		< 0.36		< 0.36
CYCLOHEXANE	ug/m ³	NC	25		3.8		25
DIBROMOCHLOROMETHANE	ug/m ³	NC	<0.68		<0.68		<0.68
DICHLORODIFLUOROMETHANE	ug/m ³	NC	2.2		2.2		1.8
ETHANOL	ug/m ³	NC	28		57		26
ETHYLBENZENE	ug/m ³	NC	4.1		0.95		4
HEXACHLOROBUTADIENE	ug/m ³	NC	< 0.85		<0.85		<0.85
M,P-XYLENES	ug/m ³	NC	24		5.9		29
METHYL ETHYL KETONE (2-BUTANONE)	ug/m ³	NC	420	Е	1800	E	790 E
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	ug/m ³	NC	3.2		2.3		2.1
METHYLENE CHLORIDE	ug/m ³	100 to 1000	1.4		1.9		1.7
N-HEXANE	ug/m ³	NC	29		12		16
O-XYLENE (1,2-DIMETHYLBENZENE)	ug/m ³	NC	8		2.9		10
STYRENE	ug/m ³	NC	1.6		0.47		2.2
TERT-BUTYL ALCOHOL	ug/m ³	NC	5		9.5		1.1
TERT-BUTYL METHYL ETHER	ug/m ³	NC	<0.58		<0.58		<0.58
TETRACHLOROETHYLENE(PCE)	ug/m ³	100 to 1000	0.64		0.58		0.76
TOLUENE	ug/m ³	NC	24		2.5		18
TRANS-1,2-DICHLOROETHENE	ug/m ³	NC	<0.32		<0.32		<0.32
TRANS-1,3-DICHLOROPROPENE	ug/m ³	NC	<0.36		<0.36		<0.36
TRICHLOROETHYLENE (TCE)	ug/m ³	6 to 60	<0.19		<0.19		0.27
TRICHLOROFLUOROMETHANE	ug/m ³	NC	1.6		1.9		1.5
VINYL CHLORIDE	ug/m ³	NC	<0.1		<0.1		<0.1
TOTAL VOCs	ug/m ³	NC	725	-	2014		1094

Notes: ug/m3 - Micrograms per cubic meter NC - No Criteria <= Not Detected and less than the Laboratory Reporting Limit E = Result exceeded calibration range Bold = Value indicates "mitigation" based on Decision Matrix

TABLE 2 VOLATILE ORGANIC COMPOUNDS (VOCs) IN SOIL VAPOR AND AMBIENT AIR 664 - 690 NORTHLAND AVENUE NYSDEC SITE ID No. 915329, CALL OUT No. 134781

Indep Strikety of a strikety of				Location, Sample ID, Sample Date and Type		
NoncesNote of an analysisNote of an analysisNote of an analysisNote of an analysisNote of an analysis1.1TRUELORDETIANEaga'100 bio			Matrix Sub-slab	SSVP-04	SSVP-05	AMBIENT
Pumber Units Number Number Number Number 1.170001.0000011ANS uppl NN -435 -435 -435 1.12.2-ERERLICEONDETHANS uppl NN -435 -435 -435 1.12.2-ERERLICEONDETHANS uppl NN -428 -435 -435 1.12.2-ERERLICEONDETHANS uppl NN -420 -435 -4016 1.12.2-ERERLICEONDETHANS uppl NN -420 -435 -4027 -4350 1.2.2-ERERLICEONDETHANS uppl NN -430 -435 -4016 -4316 -4317			Vapor Concentration	SSVP-04 10/11/2018	SSVP-05 10/11/2018	AMBIENT 10/11/2018
j.j.m.combonetianseappa100 m 1000	Parameters	Units	Range	Sub-Slab	Sub-Slab	Ambient
j_2.2.TERCHI.060CHTIANEupnNC-3.5-4.5.5-4.5.5J_2.TRENCH.060CHTANEupn'NC-2.8 <td>1,1,1-TRICHLOROETHANE</td> <td>ug/m³</td> <td>100 to 1000</td> <td><28</td> <td><20</td> <td><0.44</td>	1,1,1-TRICHLOROETHANE	ug/m ³	100 to 1000	<28	<20	<0.44
j_1_J-REICHORGENTANEugmNC-99C-28-230-04.0111_J-DRCILLOROETHANEugmNC-230-370.01-042.0111_J DRCILLOROETHANEugmNC-230-451.001-452.0111_J DRCILLOROETHANEugmNC-470.01-471.01-40.1011_J DRCILLOROETHANEugmNC-471.01-40.59.0111_J TRICILLOROETHANEugmNC-471.01-40.59.0111_J TRICILLOROETHANEugmNC-471.01-40.59.0111_J DRICILOROETHANEugmNC-430.01-471.01-40.57.011_J DRICILOROETHANEugmNC-431.01-41.01.01-40.57.011_J DRICILOROETHANEugmNC-431.01-44.01-40.48.011_J DRICILOROETHANEugmNC-431.01-44.01-40.48.011_J DRICILOROETHANEugmNC-451.01-44.01-40.48.011_J DRICILOROETHANEugmNC-451.01-44.01-40.48.011_J DRICILOROETHANEugmNC-451.01-44.01-40.48.011_J DRICILOROETHANEugmNC-451.01-44.01-40.48.011_J DRICILOROETHANEugmNC-451.01-44.01-40.51.011_J DRICILOROETHANEugmNC-451.01-44.01-40.51.011_J DRICILOROETHANEugmNC-451.01-40.51.011_J DRICILOROETHANEugmNC <td>1,1,2,2-TETRACHLOROETHANE</td> <td>ug/m³</td> <td>NC</td> <td><35</td> <td><25</td> <td><0.55</td>	1,1,2,2-TETRACHLOROETHANE	ug/m ³	NC	<35	<25	<0.55
j_1_3-REGLIGROUTHANEugm2NC-38-300-30.40-30.401.3 DECLIGROUTHANEugm2NC-4015-40.2211.3 DECLIGROUTHANEugm2NC-401-720-0.1911.2 ATRICTING NONTRATEugm2NC-372-720.9311.2 DECLIGROUTHANEugm2NC-372-28-0.6111.2 DECLIGROUTHANEugm2NC-4920-0.4811.2 DECLIGROUTHANEugm2NC-4020-0.4811.2 DECLIGROUTHANEugm2NC-0.031-0.371-0.3711.2 DECLIGROUTHANEugm2NC-0.431-0.431-0.431-0.431-0.431-0.431-0.4311-0.4411-0.44111-0.44111 </td <td>1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE</td> <td>ug/m³</td> <td>NC</td> <td><39</td> <td><28</td> <td><0.61</td>	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/m ³	NC	<39	<28	<0.61
1.)DRCINOREITANEugm2NC-0000.57.20.40.250.40.1611.2.4.TRACHLOROBENZENEugm2NC-0.47.700.47.20.40.690.11.2.4.TRACHLOROBENZENEugm2NC-0.47.000.4.5.90.4.6.10.11.2.4.TRACHLOROBENZENEugm2NC-0.4500.4.6.10.1 <td>1,1,2-TRICHLOROETHANE</td> <td>ug/m³</td> <td>NC</td> <td><28</td> <td><20</td> <td><0.44</td>	1,1,2-TRICHLOROETHANE	ug/m ³	NC	<28	<20	<0.44
1.)DECINOCITIENTSupnNC-00-77.2-0.10-0.101.2.4TERICHORSORDSTEupnNC-73.73-73.7-0.10-0.9911.2.4TERICHORSORDSTEupnNC-73.73-73.7-73.9-73.911.2.0ERORSORDSTEupnNC-73.73-73.9-73.91-73.911.2.0ERORSORDSTENEupnNC-73.0-73.9 <td>1,1-DICHLOROETHANE</td> <td>ug/m³</td> <td>NC</td> <td><20</td> <td><15</td> <td>< 0.32</td>	1,1-DICHLOROETHANE	ug/m ³	NC	<20	<15	< 0.32
12.4.TRNCHINGNORNATIONEupwNC	1,1-DICHLOROETHENE	ug/m ³	NC	<10	<7.2	<0.16
12.4-TRACELONGENTYLENCIBUPNC	1,2,4-TRICHLOROBENZENE	ug/m ³	NC	<37	<27	<0.59
12-DIBRONDETHANE CHITLANE DIBRONDEDIUPNC	1,2,4-TRIMETHYLBENZENE	ug/m ³	NC	<25	<18	<0.39
12.DICLINOORITANEupmNC-30110112.DICHLORORTANEupmNC27011001000	1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	ug/m ³	NC	<39	<28	<0.61
12-DICLIORONETIANEugm²NC2015-0.2212-DICHLORONETRAFLUOROETIANEugm²NC230160013-DICHLORONETRAFLUOROETIANEugm²NC250-0.450-0.450-0.450-0.450-0.450-0.450-0.450-0.450-0.450-0.450-0.451<	1,2-DICHLOROBENZENE	ug/m ³	NC	<30	<22	<0.48
12-DICHAQOREPANEugm2NC	1,2-DICHLOROETHANE	ug/m ³	NC	<20	<15	<0.32
12-DICHLOROTETRAFLURGOTHANEugmNC-<35-<52.-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55-<0.55 <td>1,2-DICHLOROPROPANE</td> <td>ug/m³</td> <td>NC</td> <td><23</td> <td><17</td> <td><0.37</td>	1,2-DICHLOROPROPANE	ug/m ³	NC	<23	<17	<0.37
13.5.TRMETHYLENE/MESTYLENE/ugmNC<25<18<1.4.0.313.5.TRMERENEXTENEugmNC<75	1,2-DICHLOROTETRAFLUOROETHANE	ug/m ³	NC	<35	<25	<0.56
j.b.DCLIDQOBENZENEq.gm²NC<0Q-22<0.484J.4-DICLIDQOBENZENEugm²NC75.0<0.72	1,3,5-TRIMETHYLBENZENE (MESITYLENE)	ug/m ³	NC	<25	<18	<0.39
14-DICINCROBENZENCugmNC75444-04814-DICANE(POIDXANE)ugmNC4591407212.2.4-TRIMETHYLPENTANEugmNC459142.040.331BENZENCugmNC450140.25140.261BENZENCugmNC452143.0811 <td>1,3-DICHLOROBENZENE</td> <td>ug/m³</td> <td>NC</td> <td><30</td> <td><22</td> <td><0.48</td>	1,3-DICHLOROBENZENE	ug/m ³	NC	<30	<22	<0.48
j_4_DIXANE (P-DIXANE)ugm²NC-445-733-0.722,3,4 TRIMETHYLPENTANEugm²NC<994	1,4-DICHLOROBENZENE	ug/m ³	NC	75	44	<0.48
2.2.4.TRMETHYLPENTANEugm²NC<994.24.2.0.931DENZENEugm²NC<16.0	1,4-DIOXANE (P-DIOXANE)	ug/m ³	NC	<45	<33	<0.72
BENZENEugm²NC<16<12<0.26BENZYL CHLORIDEugm²NC<52	2,2,4-TRIMETHYLPENTANE	ug/m ³	NC	<59	<42	<0.93
BENZYL CHLORIDEug/m²NC<52<38<0.83BROMODICHLOROMETHANEug/m²NC<34	BENZENE	ug/m ³	NC	<16	<12	<0.26
BROMODICHLOROMETHANEugm³NC342,40,54BROMOMETHANEugm³NC<20	BENZYL CHLORIDE	ug/m ³	NC	<52	<38	<0.83
BROMORAMugm³NC-52-538-0.83BROMOMETHANEugm³NC-20<14	BROMODICHLOROMETHANE	ug/m ³	NC	<34	<24	<0.54
BROMOMETHANEugim1NC-20<1410.031CARBON TETRACHORIDEugim16 to 60<13	BROMOFORM	ug/m ³	NC	<52	<38	<0.83
CARBON TETRACHLORIDE ugm^3 6 to 60 <13 <2.2 0.43 CHI DOR DENZENE ugm^3 NC <2.3 <17 $<$ <0.37 $<<0.37$ CHILOROFITANE ugm^3 NC <2.3 $<<1.6$ <0.21 $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ $<<0.37$ <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0.37 <0	BROMOMETHANE	ug/m ³	NC	<20	<14	<0.31
CHL OROBENZENE ugm^3 NC $< < 23$ $< < < 1$ $< < 0.37$ $< < 0.37$ CHLORODETHANE ugm^3 NC $< < 33$ $< < < 0.43$ $< < < 0.437$ $< < < 0.437$ $< < < < 0.437$ $< < < < < < < < >0.412$ $< < < < < < < < < < < < < < < < < < < $	CARBON TETRACHLORIDE	ug/m ³	6 to 60	<13	<9.2	0.43
CHLOROFTHANE ugm^3 NC <13 $<$ $<>9.6$ $<<0.21$ CHLOROFORM ugm^3 NC $<<13$ $<<148$ <0.39 $<<116$ CHLOROFTHANE ugm^3 NC $<<26$ $<<19$ <1.2 $<<10.39$ $<<10.5$ CIS-13-DICHLOROFTHYLENE ugm^3 NC <23 $<<1<$	CHLOROBENZENE	ug/m ³	NC	<23	<17	<0.37
CHLOROTORM ug/m² NC <25 <18 <0.39 CHLOROMETHANE ug/m² NC <26 <19 <1.2 $<$ CHLOROMETHANE ug/m² 6 to 60 <10 <7.2 <0.16 <10 CIS-12-DICHLOROFTH/LENE ug/m² NC <23 <17 <0.06 <0.06 CYCLOHEXANE ug/m² NC <43 <31 <0.69 <0.68 DIBROMOCHLOROMETHANE ug/m² NC <43 <31 <0.68 <0.68 DICHLORODIFLUOROMETHANE ug/m² NC <43 <18 <2.4 <0.68 ETHANOL ug/m² NC <240 <170 4.2 <0.68 <0.35 <0.85 ETHANOL ug/m² NC <240 <0.85 <0.85 <0.85 <0.85 <0.85 <0.85 <0.85 <0.85 <0.85 <0.85 <0.85 <0.85 <0.85 <0.85 <0.85	CHLOROETHANE	ug/m ³	NC	<13	<9.6	<0.21
CHLORMETHANE ugm^2 NC ~ 26 <19 1.2 CIS-1,2-DICHLOROETHYLENE ugm^2 $6 to 60$ <10 <7.2 <0.16 $<$ CIS-1,2-DICHLOROPROPENE ugm^2 NC <23 <17 <0.36 $<$ CNCLOHEXANE ugm^3 NC <43 <31 <0.69 $<$ DIBROMOCHLOROMETHANE ugm^3 NC <43 <31 <0.68 $<$ DICHLORODIFLOROMETHANE ugm^3 NC <25 <18 <2.4 $<$ ETHANOL ugm^3 NC <22 <16 <0.35 $<$ HEXACHLOROBUTADIENE ugm^3 NC <22 <16 <0.35 $<$ METHYLENES ugm^3 NC <22 <16 <0.35 $<$ METHYLENC (HADRIE ugm^3 NC <22 <16 <0.35 $<$ METHYLENES ugm^3 NC <22 <16	CHLOROFORM	ug/m ³	NC	<25	<18	<0.39
CIS-1.2-DICHLOROETHYLENE ugm^3 6 to 60 <10	CHLOROMETHANE	ug/m ³	NC	<26	<19	1.2
CIS-1.3-DICHLOROPROPENE ugm^3 NC -23 $-(17)$ $-(0.36)$ CYCLOHEXANE ugm^3 NC -43 31 $-(0.68)$ D DIBROMOCHLOROMETHANE ugm^3 NC -43 -316 2 -60.68 DIBROMOCHLOROMETHANE ugm^3 NC -225 2 -18 2 -41 2 ETHANOL ugm^3 NC -226 2 -166 2 -60.85 2 ETHANOL ugm^3 NC -220 2 -166 2 -60.35 2 ETHANOL ugm^3 NC -524 2 -166 2 -60.35 2 METAYLENES ugm^3 NC -524 2 -166 2 -0.356 1.11 1 METHYLENEYLKETONE (2-BUTANONE) ugm^3 NC -552 2 -377 1.44 0 -224 0.737 1.4 0.737 0.737 1.4 0.737 0.737 0.737 0.737 0.7	CIS-1,2-DICHLOROETHYLENE	ug/m ³	6 to 60	<10	<7.2	<0.16
CYCLOHEXANE ug/m ³ NC < 43 $< < 1$ < 0.69 DIBROMOCHLOROMETHANE ug/m ³ NC < 43 $< < 31$ < 0.69 < 0.69 DIGNONOCHLOROMETHANE ug/m ³ NC < 25 $< < 18$ < 2.4 $< < 0.68$ DICHLORODIFLUOROMETHANE ug/m ³ NC < 220 $< < 16$ < 0.35 $< < 18$ ETHANOL ug/m ³ NC < 220 $< < 16$ < 0.35 < 0.85 HEXACHLOROBUTADIENE ug/m ³ NC < 222 $< < 166$ < 0.355 < 0.85 MP-XYLENES ug/m ³ NC < 222 $< < 166$ < 0.355 < 0.85 METHYL ETHYL KETONE (2-BUTANONE) ug/m ³ NC < 222 $< < 166$ < 0.355 < 0.85 METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) ug/m ³ NC < 52 < 37 < 1.4 < 0.73 NETHANE ug/m ³ NC < 52 $< < 37$ < 0.73 < 0.73 < 0.73 <t< td=""><td>CIS-1,3-DICHLOROPROPENE</td><td>ug/m³</td><td>NC</td><td><23</td><td><17</td><td><0.36</td></t<>	CIS-1,3-DICHLOROPROPENE	ug/m ³	NC	<23	<17	<0.36
DIBROMOCHLOROMETHANE ug/m ³ NC <43 $<$ <31 <0.68 DICHLORODIFLUOROMETHANE ug/m ³ NC <245 $<<$ $<<18$ $<<2.4$ $<<<16$ $<<2.4$ $<<<16$ $<<2.4$ $<<<16$ $<<<2.4$ $<<<16$ $<<<2.5$ $<<<16$ $<<<2.5$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<16$ $<<<0.55$ $<<<0.5$ $<<<0.5$ $<<<0.5$ $<<<0.5$ $<<0.5$ $<<0.5$	CYCLOHEXANE	ug/m ³	NC	<43	<31	<0.69
DICHLORODIFLUOROMETHANE ug/m ³ NC ~ 25 $<$ < 18 < 2.4 ETHANOL ug/m ³ NC < 240 $<$	DIBROMOCHLOROMETHANE	ug/m ³	NC	<43	<31	<0.68
ETHANOL ug/m² NC < 240 $< < 170$ I 4.2 ETHYLBENZENE ug/m³ NC < 22 $< < 166$ I < 0.35 I HEXACHLOROBUTADIENE ug/m³ NC < 22 $< < 166$ I < 0.35 I MP-XYLENES ug/m³ NC < 22 $< < 166$ I < 0.35 I METHYL ETHYL KETONE (2-BUTANONE) ug/m³ NC < 520 I < 0.357 I $I.1.1$ I METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) ug/m³ NC < 522 I < 0.47 I $I.4$ I METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) ug/m³ NC < 52 I < 0.47 I I.1 I METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) ug/m³ NC < 52 I < 0.42 I < 0.37 I I.1 I NHEXANE ug/m³ NC < 52 I < 0.73 I I.4 I < 0.35 I O-XYLENE (1,2-DIMETHYLBENZENE) ug/m³ <td>DICHLORODIFLUOROMETHANE</td> <td>ug/m³</td> <td>NC</td> <td><25</td> <td><18</td> <td>2.4</td>	DICHLORODIFLUOROMETHANE	ug/m ³	NC	<25	<18	2.4
ETHYLBENZENE ug/m² NC <22 <16 <0.35 HEXACHLOROBUTADIENE $ug/m³$ NC <54 <39 <0.85 $<$ M.P.XYLENES $ug/m³$ NC <22 $<<16$ <0.35 $<$ METHYL ETHYL KETONE (2-BUTANONE) $ug/m³$ NC <22 $<<16$ <0.35 $<$ METHYL ISOBUTYL KETONE (2-METHYL-2-PENTANONE) $ug/m³$ NC <52 $<<377$ $<<1.4$ $<$ METHYLENE CHLORIDE $ug/m³$ 100 to 1000 <444 $<<322$ <2.4 <1.4 $<$ N-HEXANE $ug/m³$ NC <75 <322 <1 <0.735 $<$ O-XYLENE (1,2-DIMETHYLBENZENE) $ug/m³$ NC <222 <16 <0.354 $<$ STYRENE $ug/m³$ NC <222 $<<16$ <0.344 $<$ <0.974 $<$ TERT-BUTYL ALCHOL $ug/m³$ NC <224 <0.72 $<<16$ <0.344 <0.974 $<$ TERA-CHLOROETHYLENE(PCE) $ug/m³$ NC <t< td=""><td>ETHANOL</td><td>ug/m³</td><td>NC</td><td><240</td><td><170</td><td>4.2</td></t<>	ETHANOL	ug/m ³	NC	<240	<170	4.2
HEXACHLOROBUTADIENE ug/m³ NC <44 <39 <0.85 M.P-XYLENES ug/m³ NC <22	ETHYLBENZENE	ug/m ³	NC	<22	<16	<0.35
M.P.XYLENES ug/m ³ NC <22 <16 <0.35 METHYL ETHYL KETONE (2-BUTANONE) ug/m ³ NC 4500 E 650 1.1 METHYL ETHYL KETONE (2-BUTANONE) ug/m ³ NC <52	HEXACHLOROBUTADIENE	ug/m ³	NC	<54	<39	<0.85
ME HAYL E HAYL KE TONE (2-BUTANONE) ug/m³ NC 4300 E 650 1.1 METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) ug/m³ NC <52	M,P-XYLENES	ug/m ³	NC	<22	<16	<0.35
ME HAYL ISOBOLYL KE FONE (4-ME HAYL-2-PENTANONE) ug/m³ NC <52 <57 1.4 METHYL ISOBOLYL KE FONE (4-ME HAYL-2-PENTANONE) ug/m³ 100 to 1000 <44	METHYL ETHYL KETONE (2-BUTANONE)	ug/m ³	NC	4500 E	650	1.1
ME HYLENE CHLORIDE ug/m³ 100 to 1000 <44 <32 2.4 N-HEXANE ug/m³ NC 75 <32	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	ug/m ³	NC	<52	<37	1.4
N-HEARNE ug/m² NC 15 <32 0.73 O-XYLENE (1,2-DIMETHYLBENZENE) ug/m³ NC <22	METHYLENE CHLORIDE	ug/m ³	100 to 1000	<44	<32	2.4
OCXYLENE (1,2-DIME THYLBENZENE) ug/m³ NC <22 <16 <0.35 STYRENE ug/m³ NC <22		ug/m ³	NC	/5	<32	0.73
SIYRENE ug/m³ NC <22 <15 <0.34 TERT-BUTYL ALCOHOL ug/m³ NC 67 <44	O-XYLENE (1,2-DIMETHYLBENZENE)	ug/m [°]	NC	<22	<16	<0.35
IERT-BUTYL ALCHOL ug/m³ NC 6/ <44 <0.97 TERT-BUTYL METHYL ETHER ug/m³ NC <36	STYRENE	ug/m ³	NC	<22	<15	<0.34
IERT-BUTYL METHYL ETHER ug/m³ NC <36 <26 <0.58 TETRACHLOROETHYLENE(PCE) ug/m³ 100 to 1000 <34	TERT-BUTYL ALCOHOL	ug/m	NC	6/	<44	<0.97
ITELNACHLOROGETHELENC(PCE) ug/m³ 100 to 1000 <34 <25 0.72 TOLUENE ug/m³ NC <29		ug/m	NU 1000	<30	<26	<0.58
IDDUERE ugm² NC <29 <11 0.73 TRANS-1,2-DICHLOROETHENE ug/m³ NC <20		ug/m ²	100 to 1000	<34	<25	0.72
IRANS-1,2-DICHLOROPEINEN ugm NC <20 <14 <0.32 TRANS-1,3-DICHLOROPROPENE ug/m ³ NC <23	IOLUENE	ug/m ²	NC	<29	<21	0.73
IRANS-1,3-DICHLOROPROPENE ug/m ² NC <2.5 <1/ <0.36 TRICHLOROFTHYLENE (TCE) ug/m ³ 6 to 60 <12	TRANS-1,2-DICHLOROETHENE	ug/m	NC	<20	<14	<0.32
Interlot/OFITITEINE (TEF) ug/m ⁻ 0 to 00 <12 <8.8 <0.19 TRICHLOROFLUOROMETHANE ug/m ³ NC <28	I KANS-1,3-DICHLUKUPKUPENE	ug/m	NU (NC	<12	<u>\1/</u>	<0.10
Interflorugminc <28 <20 1.4 VINYL CHLORIDE ug/m^3 NC <6.5 <4.6 <0.1 TOTAL VOCs ug/m^3 NC 4717 694 17		ug/m ⁻	0 t0 60	<12	< <u>8.8</u>	<0.19
ugm NC <0.3 <0.1 TOTAL VOCs ugm3 NC 4717 694 17		ug/m ⁻	NC	<6.5	<4.6	1.4 <0.1
		ug/m	NC	4717	694	-0.1

Notes: ug/m3 - Micrograms per cubic meter NC - No Criteria <= Not Detected and less than the Laboratory Reporting Limit E = Result exceeded calibration range Bold = Value indicates "mitigation" based on Decision Matrix



J:\17-013-0289 NYSDEC Standbv\CAD\Call-Out 134781 - 664-690 Northland\664-690 Northland SITE LOC

