

APPENDIX 7

TABLES – SOILS AND PAINT ANALYTICAL RESULTS

TABLE 1
Concentrations of Metals in Soil
Historic (Technical 2006 Phase III) Samples

Parameter	CCME CEGG ¹	CS11506-001										CS11506-002										CS11506-003										CS11506-004			
		Sample ID ²	PAC1-SS1	PAC1-SS2	PAC1-SS3	PAC2-SS1	PAC2-SS2	PAC2-SS3	PAC3-SS1	PAC3-SS2	PAC3-SS3	PAC4-SS1	PAC4-SS2	PAC4-SS3	PAC5-SS1	PAC5-SS2	PAC5-SS3	PAC6-SS1	PAC6-SS2	PAC6-SS3	PAC7-SS1	PAC7-SS2	PAC7-SS3	PAC8-SS1	PAC8-SS2	PAC8-SS3	PAC9-SS1	PAC9-SS2	PAC9-SS3	PAC10-SS1	PAC10-SS2	PAC10-SS3	DC-1 (duplicate of PAC3-SS3)		
Sample Date ³		24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05			
MOE Table 1 ⁴		18.5	48.4	57.7	-	-	-	-	26.3	17.8	20.4	15.9	36.8	36.4	6.9	4.1	40.9	6.0	6.2	26.5	2.2	-	-	-	-	-	-	-	-	-	-	-			
% Moisture	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
pH	8-8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
Barium (Ba)	500	1	2630	4370	---	6	2	3	2	472	17	29	41	44	118	104	---	31	29	75	48	---	---	---	---	---	---	---	---	---	---	---			
Cadmium (Cd)	10	1	11	14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
Chromium (Cr)	64	45	121	55	33	9	2	3	2	17	11	7	10	12	20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4			
Cobalt (Co)	50	21	7	11	14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Copper (Cu)	63	85	153	211	155	155	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211	211			
Lead (Pb)	140	120	1200	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350		
Manganese (Mn)	6.6	0.23	0.55	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83		
Molybdenum (Mo)	10	2.5	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8			
Nickel (Ni)	50	43	19	19	19	24	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23		
Silver (Ag)	20	0.42	0.42	1.74	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Th (Th)	90	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Zinc (Zn)	200	169	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41		

Notes:
 1. Concentrations are expressed in µg/g, unless noted otherwise.
 2. Parameter Not Analyzed.
 3. "—" Guidelines/Standards are not present in the CCME CEGG or MOE Table 1.
 4. Values in light font are below criteria and laboratory analytical detection limits.
 5. Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines (CEQG), Table 1 Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health - Guidelines for Residential/Parkland Land Use and Coarse Textured Soil, Update December 2003, includes updates up to Update 7.0, September 2007.
 6. Ontario Ministry of the Environment (MOE); Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act 2004; Table 1: Full Depth Background Site Condition Standards. All other types of property uses.
 7. Ontario MOE Table 1 Standards are applicable where no CCME guideline exists. Where both CCME Guideline and MOE Standards are present, the CCME guidelines are considered applicable and the MOE Standards are provided solely for information purposes.

Checked by: AD
 Prepared by: NW

TABLE 2
Concentrations of Petroleum Hydrocarbons in Soil
Historic (Technisol 2006 Phase III) Samples

Parameter	CCME CWB ¹	CCME CEGG ²	CS11506-001					CS11506-002					CS11506-003					CS11506-004				
			Contaminated Sites																			
			PAC1-SS1	PAC1-SS2	PAC1-SS3	PAC1-SS4	PAC1-SS5	PAC1-SS6	PAC1-SS7	PAC1-SS8	PAC1-SS9	PAC1-SS10	PAC1-SS11	PAC1-SS12	PAC1-SS13	PAC1-SS14	PAC1-SS15	PAC1-SS16	PAC1-SS17	PAC1-SS18	PAC1-SS19	PAC1-SS20
Sample ID:			24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05
Sample Date:			24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05
MOE Table 1 ^{3,4}																						
Benzene	—	0.03	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.006
Toluene	—	0.37	<0.1	<0.1	<0.1	<0.1	—	—	—	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	—	0.002	<0.02	0.02	0.04	<0.02	—	—	—	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Xylenes	—	11	<0.1	<0.1	<0.1	<0.1	—	—	—	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Petroleum Hydrocarbon Fractions																						
F1 (C6-C10)	30	—	<10	<10	<10	<10	—	—	—	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C11-C15)	150	—	<40	<40	<40	<40	—	—	—	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40
F3 (C16-C24)	300	—	<40	<40	<40	<40	—	—	—	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40
F4 (C24-C50)	2800	—	<40	<40	<40	<40	—	—	—	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40

Notes:
Concentrations are expressed in µg/g, unless noted otherwise

1 Parameter Not Analyzed
2 "—" Guidelines/Standards are not present in the CCME CEGG or MOE Table 1
3 Values in light font are below criteria and laboratory analytical detection limits.

1 Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines (CEQG), Table 1: Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health - Guidelines for Residential/Parkland Land Use and Coarse Textured Soil, Update December 2003, Includes updates up to Update 7.0, September 2007.

2 Ontario Ministry of the Environment (MOE), Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act 2004; Table 1: Full Depth Background Site Condition Standards, All other types of property uses.

3 Ontario MOE Table 1 Standards are applicable where no CCME guidelines exist. Where both CCME Guidelines and MOE Standards are present, the CCME guidelines are considered applicable and the MOE Standards are provided solely for information purposes.

TABLE 3
Concentrations of Volatile Organic Compounds in Soil
Historic (Technisol 2006 Phase I/II) Samples

Contaminated Site:		CS11506-003				
Parameter	CCME CEQG ¹	Sample ID:	PAC3-SS3	PAC3-SS4	PAC4-SS3	PAC4-SS5
		Sample Date:	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05
		MOE Table 1 ^{2,3}				
1,1,1-trichloroethane	5	0.008	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	5	0.004	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	5	0.002	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	5	—	<0.1	<0.1	<0.1	<0.1
1,1,1-dichloroethylene	5	—	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	5	—	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	5	—	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	5	0.002	<0.1	<0.1	<0.1	<0.1
Chloroform	5	0.006	<0.1	<0.1	<0.1	<0.1
Cis 1,2-dichloroethylene	—	—	<0.1	<0.1	<0.1	<0.1
Cis 1,3-dichloropropene	—	—	<0.1	<0.1	<0.1	<0.1
Methylene Chloride	5	—	<0.1	<0.1	<0.1	<0.1
Tetrachloroethylene	0.2	0.002	<0.1	<0.1	<0.1	<0.1
Trans 1,2-dichloroethylene	—	—	<0.1	<0.1	<0.1	<0.1
Trans 1,3-dichloropropene	—	—	<0.1	<0.1	<0.1	<0.1
Trichloroethylene	0.01	0.004	<0.1	<0.1	<0.1	<0.1
Vinyl chloride	—	—	<0.4	<0.4	<0.4	<0.4

Notes:

Concentrations are expressed in µg/g, unless noted otherwise

"—" Guidelines/Standards are not present in the CCME CEQG or MOE Table 1

Values in light font are below criteria and laboratory analytical detection limits

Concentration of parameter is greater than the CCME CEQG soil quality guidelines for the protection of Environment and Human Health

¹ Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines (CEQG), Table 1 Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health - Guidelines for Residential/Parkland Land use and Coarse Textured Soil, Update December 2003, Includes updates up to Update 7.0, September 2007.

² Ontario Ministry of the Environment (MOE) : Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act 2004; Table 1: Full Depth Background Site Condition Standards, All other types of property uses.

³ Ontario MOE Table 1 Standards are applicable where no CCME guidelines exist. Where both CCME Guidelines and MOE Standards are present, the CCME guidelines are considered applicable and the MOE Standards are provided solely for information purposes.

Prepared by: KW

Checked by: AD

TABLE 4
Concentrations of Polycyclic Aromatic Hydrocarbons in Soil
Historic (Technisol 2006 Phase III) Samples

Contaminated Site:		CS11506-001				CS11506-003				CS11506-004					
		PAC1-SS1	PAC1-SS2	PAC1-SS3	PAC5-SS2	PAC3-SS3	PAC3-SS4	PAC4-SS3	PAC4-SS4	PAC5-SS3	PAC5-SS4	PAC5-SS5	PAC9-SS1	PAC9-SS2	DC-1 (reference PAC5-SS5)
Sample ID:	Sample Date:	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05	24-Oct-05
Parameter	CCME SQG ¹	MOE Table 1 ^{2,3}													
Acenaphthene	0.28	<0.19	<0.15	<0.15	<0.22	<0.18	<0.17	<0.36	<0.07	<0.07	<0.22	<0.17	<0.07	<0.07	<0.16
Acenaphthylene	320	<0.22	4.17	<0.25	<0.2	<0.1	<0.16	<0.3	<0.08	<0.08	<0.25	<0.19	<0.08	<0.08	<0.18
Anthracene	2.5	<0.3	<0.7	<0.3	<0.5	<0.2	<0.2	<0.4	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
Benzo(a)anthracene	—	0.6	15.5	1.5	1.5	<0.2	<0.2	0.4	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
Benzo(a)pyrene	20	0.7	2.8	17.8	1.5	<0.3	<0.2	0.5	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
Benzo(b)fluoranthene	—	0.88	5.1	<0.46	2.3	<0.3	<0.2	<0.5	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
Benzo(g,h,i)perylene	—	0.88	0.5	2.5	1.4	<0.3	<0.2	0.4	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
Chrysene	—	0.88	2.6	1.4	0.9	<0.3	<0.2	0.5	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
Dibenz(a,h)anthracene	—	0.16	<0.15	<0.1	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.2	<0.2	<0.1	<0.1	<0.2
Fluoranthene	50	1.3	4.2	37.4	3.1	<0.2	<0.2	0.7	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
Fluorene	0.25	0.12	0.27	10.6	1.1	<0.3	<0.2	0.5	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
Indeno(1,2,3-cd)pyrene	—	0.36	0.79	<0.85	<0.73	<0.3	<0.2	0.5	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
1-Methylanthracene	—	0.26	0.79	<0.85	<0.73	<0.3	<0.2	<0.2	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
2-Methylanthracene	—	0.26	0.79	<0.85	<0.73	<0.3	<0.2	<0.2	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
Naphthalene	0.013	0.09	<0.24	<0.24	<0.24	<0.24	<0.22	<0.31	<0.09	<0.09	<0.24	<0.22	<0.09	<0.09	<0.1
Phenanthrene	0.048	0.69	0.4	0.3	1.2	<0.1	<0.1	<0.4	<0.1	<0.1	<0.4	<0.2	<0.1	<0.1	<0.2
Pyrene	—	1	1.2	2.5	2.3	<0.3	<0.2	<0.2	<0.1	<0.1	<0.3	<0.2	<0.1	<0.1	<0.2
B(a)P TPE ⁴	5.3	1.253	4.349	2.34	2.34	0.59	0.464	1.089	0.232	0.232	0.886	0.59	0.232	0.232	0.484

Prepared by: KW

Checked by: AD

Notes:

Concentrations are expressed in µg/g, unless noted otherwise

“—” Guidelines are not present in the CCME CEQG or MOE Table 1

Values in light font are below criteria and laboratory analytical detection limits.

“Laboratory detection limit is greater than the applicable Guideline/Standard

“Total B(a)P TPE does not include Benzo(k)fluoranthene as analysis of this parameter was not completed

“Value” Concentration of parameter is greater than the applicable CCME CEQG Guideline or MOE Table 1 Standard

¹ Canadian Council of Ministers of the Environment (CCME) Canadian Soil Quality Guideline (SQG) for the Protection of Environmental Health - Guidelines for Polycyclic Aromatic Hydrocarbons, 2008. (The most conservative guideline between the protection environmental health (SQG) and the protection of freshwater life (SQG_L) was selected for comparison purposes for each parameter)

² Ontario Ministry of the Environment (MOE) : Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act 2004; Table 1: Full Depth Background Site Condition Standards. All other types of property uses.

³ Ontario MOE Table 1 Standards are applicable where no CCME Guidelines exist. Where both CCME Guidelines and MOE Standards are present, the CCME guidelines are considered applicable and the MOE Standards are provided solely for information purposes.

⁴ B(a)P TPE (Total Potency Equivalents) are calculated by multiplying the soil concentration of individual carcinogenic PAHs by a standardized Benzo(a)pyrene Potency Equivalence Factor (PEF) to produce a Benzo(a)pyrene relative potency concentration, and by subsequently summing the relative potency concentrations for the entire PAH mixture. B(a)P PEFs are order of magnitude estimates of carcinogenic potential and are based on the World Health Organization (WHO) IARC 1989 scheme, as follows: Benzo(a)anthracene - 0.1, Benzo(a)pyrene - 1, Benzo(b)fluoranthene - 0.1, Benzo(k)fluoranthene - 0.1, Benzo(g,h,i)perylene - 0.1, Chrysene - 0.01, Dibenz(a,h)anthracene - 1, Indeno(1,2,3-cd)pyrene - 0.1. For results where the analyzed parameter is less than the detection limit, the detection limit was used as the concentration to calculate the B(a)P TPE. This SQG is based on an incremental lifetime cancer risk (ILCR) of 1 in 100,000 (10⁻⁵).

TABLE 5
Concentrations of Metals in Soil
Historic (DST 2008 SSRA-HHSLERA) Samples

Contaminated Site:		CS11506-001																CS11506-002					
Parameter	CCME CEGG ¹	Sample ID:	CS001 SS1	CS001 SS2	CS001 SS3	CS001 SS5	CS001 SS7	CS001 SS8	CS001 SS9	CS001 SS10	CS001 SS11	CS001 SS12	CS001 SS13	CS001 SS14	CS001 SS15	CS001 SS16	CS001 SS17	CS002 SS1	CS002 SS2	CS002 SS3	CS002 SS4	CS002 SS5	
Sample Date:	MOE Table 1 ²	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	
% Moisture	6-8	28	37	-	34	64	51	27	-	38	41	-	28	-	-	-	-	-	-	-	-	-	
pH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Antimony (Sb)	20	15	2.8	0.3	6	5	2.8	15	0.5	22	11	20	1	1.5	1.1	2.9	2.8	1.3	1.1	1	1	0.8	
Arsenic (As)	12	17	0.000000	3	12	6	6	0.000000	2	0.000000	0.000000	0.000000	4	10	9	0.000000	0.000000	16	16	16	5	10	
Barium (Ba)	500	210	350	57	350	350	310	450	120	2400	2400	2400	230	240	170	240	310	70	400	400	120	54	
Beryllium (Be)	4	1.2	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.4	0.2	1.4	0.5	0.7	0.5	0.3	0.3		
Cadmium (Cd)	10	1.3	2.3	0.2	8.6	6.1	8.7	13.8	1.7	10	9.8	4.1	4.3	4.1	4.5	1.8	1.8	0.6	3.3	3.3	1.7	2.6	
Chromium (Cr)	80	71	32	12	57	49	19	29	6	100													

Notes:
Concentrations are expressed in µg/g, unless noted otherwise.
* Parameter Not Analyzed
** Guidelines/Standards are not present in the CCME CEGG or MOE Table 1
Values in light font are below criteria and laboratory analytical detection limits.

¹ Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines (CEQG), Table 1 Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health - Guidelines for Residential/Industrial Land Use and Coarse Textured Soil, Update December 2005, includes updates up to Update 7.0, September 2007.

² Ontario Ministry of the Environment (MOE), Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act 2004; Table 1: Full Depth Background Site Condition Standards, All other types of property uses.

³ Ontario MOE Table 1 Standards are applicable where no CCME guidelines exist. Where both CCME Guidelines and MOE Standards are present, the CCME guidelines are considered applicable and the MOE Standards are provided solely for information purposes.

TABLE 6
Concentrations of Petroleum Hydrocarbons in Soil
Historic (DST 2008 SSRA-HH/SLERA) Samples

Parameter	CCME CWS ¹	CCME CEQG ²	Sample ID:		CS003 SS1	CS003 SS2	CS003 SS3	CS003 SS9	CS003 DUP (duplicate of SS9)
			Sample Date:	MOE Table 1 ^{3,4}					
Benzene	—	0.03	0.002		<0.1	<0.1	<0.1	<0.1	
Ethylbenzene	—	0.082	0.002		<0.1	<0.1	<0.1	<0.1	
Toluene	—	0.37	0.002		<0.1	<0.1	<0.1	<0.1	
p-m-Xylene	—	—	—		<0.1	<0.1	<0.1	<0.1	
o-Xylene	—	—	—		<0.1	<0.1	<0.1	<0.1	
Xylenes	—	11	0.002		<0.1	<0.1	<0.1	<0.1	

Notes:

Concentrations are expressed in µg/g, unless noted otherwise

"—" Guidelines/Standards are not present in the CCME CEQG or MOE Table 1

Values in light font are below criteria and laboratory analytical detection limits.

Value: Concentration of parameter is greater than the CCME CEQG soil quality guidelines for the protection of Environment and Human Health

¹ Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines (CEQG), Table 1 Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health - Guidelines for Residential/Parkland Land use and Coarse Textured Soil, Update December 2003, Includes updates up to Update 7.0, September 2007.

² Ontario Ministry of the Environment (MOE) : Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act 2004; Table 1: Full Depth Background Site Condition Standards, All other types of property uses.

³ Ontario MOE Table 1 Standards are applicable where no CCME guidelines exist. Where both CCME Guidelines and MOE Standards are present, the CCME guidelines are considered applicable and the MOE Standards are provided solely for information purposes.

Prepared by: KW

Checked by: AD

TABLE 7

Concentrations of Polycyclic Aromatic Hydrocarbons in Soil
Historic (DST 2008 SSRA-HH/SLERA) Samples

Site Specific Risk Assessment
Gareaux Island

Contaminated Site:		CS11506-001										
Parameter	CCME SQG ¹	Sample ID:	CS001 SS1	CS001 SS2	CS001 SS5	CS001 SS6	CS001 SS7	CS001 SS8	CS001 SS10	CS001 SS13	CS001 SS11	
		Sample Date:	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07	21-Sep-07
		MOE Table 1 ^{2,3}										
Acenaphthene	0.28	0.07	<0.04	0.5	<0.04	<0.06	<0.04	<0.1	<0.06	<0.06	<0.04	
Acenaphthylene	320	0.08	0.67	3.02	0.19	0.37	0.53	0.99	0.14	<0.03	0.13	
Anthracene	2.5	0.16	0.41	3.95	0.22	0.47	0.27	0.81	0.13	0.04	0.1	
Benzo(a)anthracene	—	0.74	1.95	11.3	0.88	2.01	0.54	3.7	0.95	0.13	0.61	
Benzo(a)pyrene	20	0.49	1.53	7.94	0.73	1.70	0.55	3.25	0.73	0.1	0.54	
Benzo(b,j)fluoranthene	—	0.47	3.22	12.4	1.12	2.56	1.01	5.18	1.1	0.17	0.88	
Benzo(g,h,i)perylene	—	0.68	1.2	4.6	0.51	1.1	0.56	2.3	0.5	<0.1	0.46	
Benzo(k)fluoranthene	—	0.48	1.12	4.5	0.35	0.93	0.3	1.8	0.4	<0.06	0.30	
Chrysene	—	0.69	1.91	9.2	0.7	1.78	0.48	3.3	0.8	0.1	0.47	
Dibenzo(a,h)anthracene	—	0.16	0.41	1.5	0.14	0.3	0.15	0.6	0.1	<0.1	0.11	
Fluoranthene	50	1.1	2.95	22.6	1.38	3.71	0.63	6.82	1.72	0.27	0.87	
Fluorene	0.25	0.12	0.04	0.50	0.05	0.09	0.03	0.17	<0.03	0.06	0.02	
Indeno(1,2,3-cd)pyrene	—	0.38	1.56	5.9	0.6	1.4	0.67	2.8	0.6	<0.1	0.53	
1-Methylnaphthalene	—	0.26	<0.02	0.06	<0.02	<0.03	<0.02	<0.06	<0.03	<0.03	<0.02	
2-Methylnaphthalene	—	0.29	<0.02	0.06	<0.02	<0.03	<0.02	<0.06	<0.03	<0.03	<0.02	
Naphthalene	0.013	0.09	0.04	0.12	0.03	0.04	0.03	0.11	0.05	<0.03	0.04	
Phenanthrene	0.046	0.69	0.76	8.42	0.6	1.3	0.08	2.08	0.37	0.11	0.28	
Pyrene	—	1	2.79	18.9	1.3	3.48	0.72	6.47	1.73	0.25	0.89	
B[a]P TPE ⁴	5.3		2.7561	12.958	1.1771	2.7188	0.9624	5.254	1.148	0.248	0.8913	

Notes:

Concentrations are expressed in µg/g, unless noted otherwise

"—" Guidelines are not present in the CCME CEQG

Values in light font are below criteria and laboratory analytical detection limits.

*Laboratory detection limit is greater than the applicable Guideline/Standard

Value Concentration of parameter is greater than the applicable CCME CEQG Guideline or MOE Table 1 Standard

¹ Canadian Council of Ministers of the Environment (CCME) Canadian Soil Quality Guideline (SQG) for the Protection of Environmental Health - Guidelines for Polycyclic Aromatic Hydrocarbons, 2008. (The most conservative guideline between the protection environmental health (SQG_{EL}) and the protection of freshwater life (SQG_{FL}) was selected for comparison purposes for each parameter)

² Ontario Ministry of the Environment (MOE) : Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act 2004; Table 1: Full Depth Background Site Condition Standards, All other types of property uses.

³ Ontario MOE Table 1 Standards are applicable where no CCME guidelines exist. Where both CCME Guidelines and MOE Standards are present, the CCME guidelines are considered applicable and the MOE Standards are provided solely for information purposes.

⁴ B[a]P TPE (Total Potency Equivalents) are calculated by multiplying the soil concentration of individual carcinogenic PAHs by a standardized Benzo(a)pyrene Potency Equivalence Factor (PEF) to produce a Benzo(a)pyrene relative potency concentration, and by subsequently summing the relative potency concentrations for the entire PAH mixture. B[a]P PEFs are order of magnitude estimates of carcinogenic potential and are based on the World Health Organization (WHO/PCS 1998) scheme, as follows: Benzo(a)anthracene - 0.1, Benzo(a)pyrene - 1, Benzo (b,j)fluoranthene - 0.1, Benzo(k)fluoranthene - 0.1, Benzo(g,h,i)perylene - 0.01, Chrysene - 0.01, Dibenzo(a,h)anthracene - 1, Indeno(1,2,3-c,d)pyrene - 0.1. For results where the analyzed parameter is below the detection limit, the detection limit was used as the concentration to calculate the B[a]P TPE. This SQG is based on an incremental lifetime cancer risk (ILCR) of 1 in 100,000 (10⁻⁶).

Prepared by: KW

Checked by: AD

TABLE 8
Concentrations of Metals in Soil
2009 Supplementary Investigation Samples

Contaminated Site:		CS11506-001	CS11506-002	CS11506-003		CS11506-004	CS11506-005
Parameter	CCME CEQG ¹	GI-001-S1	GI-002-S1	GI-003-S1	GI-004-S1 (duplicate of GI-003-S1)	GI-004-S1	GI-005-S1
Sample ID:		11/08/2009	11/08/2009	11/08/2009	11/08/2009	11/08/2009	11/08/2009
Sample Date:							
MOE Table 1 ^{2,3}							
% Moisture	---	36	33	45	32	83	45
pH	6-8	5.83	4.72	3.78	3.78	3.25	3.38
Antimony (Sb)	20.0	3.4	0.2	0.5	0.9	1.7	0.6
Arsenic (As)	12	16	5	8	11	7	6
Barium (Ba)	500	800	41	51	55	29	22
Beryllium (Be)	4	0.2	0.6	<0.2	0.4	<0.2	0.4
Cadmium (Cd)	10.0	15	0.8	0.5	0.5	0.6	0.4
Chromium (Cr)	64	20	10	8	10	6	21
Chromium, Hexavalent	0.4	<0.4	<0.4	<0.4	<1	<2	<0.4
Cobalt (Co)	50	6.2	7.4	4.7	4.9	2.8	5.5
Copper (Cu)	63	85	30	35	51	37.2	30
Lead (Pb)	140	180	88	160	250	75	71
Mercury (Hg)	8.6	0.23	<0.05	0.51	0.9	0.19	0.13
Molybdenum (Mo)	10	2.3	<0.5	1.8	2.3	1.7	0.8
Nickel (Ni)	50	42	24	25	35	33.3	29
Selenium (Se)	1	1.1	1.1	1.2	1.3	3.2	1.9
Silver (Ag)	20	0.5	<0.2	0.2	0.3	<0.2	<0.2
Thallium (Tl)	1	0.09	0.12	0.18	0.16	0.1	0.09
Vanadium (V)	130	15	44	41	40	12	53
Zinc (Zn)	200	4900	270	93	91	51	55

Notes:

Concentrations are expressed in µg/g, unless noted otherwise

--- Parameter Not Analyzed

"---" Guidelines/Standards are not present in the CCME CEQG or MOE Table 1

Values in light font are below criteria and laboratory analytical detection limits.

RPD = Relative Percent Difference

nc = RPD not calculated as concentrations of parameters are less than three times the analytical detection limit

Value Concentration of parameter is greater than the CCME CEQG soil quality guidelines for the protection of Environment and Human Health

¹ Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines (CEQG), Table 1 Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health - Guidelines for Residential/Parkland Land use and Coarse Textured Soil, Update December 2003. Includes updates up to Update 7.0, September 2007.

² Ontario Ministry of the Environment (MOE) : Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act 2004; Table 1: Full Depth Background Site Condition Standards, All other types of property uses.

³ Ontario MOE Table 1 Standards are applicable where no CCME guidelines exist. Where both CCME Guidelines and MOE Standards are present, the CCME guidelines are considered applicable and the MOE Standards are provided solely for information purposes.

Prepared by: KW
Checked by: AD

TABLE 9
Concentrations of Polycyclic Aromatic Hydrocarbons in Soil
2009 Supplementary Investigation Samples

Parameter	CCME SQG ¹	Contaminated Site:	
		Sample ID:	CS11506-001
		Sample Date:	GH-001-S1
		MOE Table 1 ^{2,3}	11/08/2009
Acenaphthene	0.28	0.07	<0.02
Acenaphthylene	320	0.08	0.03
Anthracene	2.5	0.16	0.04
Benzo(a)anthracene	—	0.74	0.16
Benzo(a)pyrene	20	0.49	0.15
Benzo(b)fluoranthene	—	0.47	0.19
Benzo(g,h,i)perylene	—	0.68	0.11
Benzo(k)fluoranthene	—	0.48	0.07
Chrysene	—	0.69	0.13
Dibenzo(a,h)anthracene	—	0.16	<0.04
Fluoranthene	50	1.1	0.32
Fluorene	0.25	0.12	0.02
Indeno(1,2,3-cd)pyrene	—	0.38	0.1
1-Methylnaphthalene	—	0.26	<0.01
2-Methylnaphthalene	—	0.29	<0.01
Naphthalene	0.013	0.09	0.01
Phenanthrene	0.046	0.69	0.17
Pyrene	—	1	0.26
B[a]P TPE⁴	5.3		0.24

Prepared by: KW

Notes:

Concentrations are expressed in µg/g, unless noted otherwise

"—" Guidelines are not present in the CCME CEQG

Values in light font are below criteria and laboratory analytical detection limits.

*Laboratory detection limit is greater than the applicable Guideline/Standard

Value Concentration of parameter is greater than the applicable CCME CEQG Guideline or MOE Table 1 Standard

¹ Canadian Council of Ministers of the Environment (CCME) Canadian Soil Quality Guideline (SQG) for the Protection of Environmental Health - Guidelines for Polycyclic Aromatic Hydrocarbons, 2008. (The most conservative guideline between the protection environmental health (SQG_E) and the protection of freshwater life (SQG_{FL}) was selected for comparison purposes for each parameter)

² Ontario Ministry of the Environment (MOE) : Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act 2004, Table 1: Full Depth Background Site Condition Standards, All other types of property uses.

³ Ontario MOE Table 1 Standards are applicable where no CCME guidelines exist. Where both CCME Guidelines and MOE Standards are present, the CCME guidelines are considered applicable and the MOE Standards are provided solely for information purposes.

⁴ B[a]P TPE (Total Potency Equivalents) are calculated by multiplying the soil concentration of individual carcinogenic PAHs by a standardized Benzo(a)pyrene Potency Equivalence Factor (PEF) to produce a Benzo(a)pyrene relative potency concentration, and by subsequently summing the relative potency concentrations for the entire PAH mixture. B[a]P PEFs are order of magnitude estimates of carcinogenic potential and are based on the World Health Organization (WHO/PCS 1998) scheme, as follows: Benzo(a)anthracene - 0.1; Benzo(a)pyrene - 1; Benzo(b)fluoranthene - 0.1; Benzo(k)fluoranthene - 0.1; Benzo(g,h,i)perylene - 0.01; Chrysene - 0.01; Dibenzo(a,h)anthracene - 1; Indeno(1,2,3-cd)pyrene - 0.1. For results where the analyzed parameter is below the detection limit, the detection limit was used as the concentration to calculate the B[a]P TPE. This SQG is based on an incremental lifetime cancer risk (ILCR) of 1 in 100,000 (10⁻⁵).

Checked by: AD

TABLE 10
Concentrations of Metals in Foliage Vegetation
2009 Supplementary Investigation Samples

Contaminated Site	CS11506-001										CS11506-002				CS11506-003			
	Sample ID:																	
	GI-001-VI	GI-001-VI	GI-001-VI	GI-001-VI	GI-001-VI	GI-001-VI	GI-002-VI	GI-002-VI	GI-002-VI	GI-002-VI	GI-002-VI	GI-002-VI	GI-002-VI	GI-002-VI	GI-003-VI	GI-003-VI	GI-003-VI	
Sample Date:	RASPBERRIES	SUMAC	IRIS	FERN	PINE	SUMAC	JUNIPER	GOLDEN ROD	DOGWOOD	CEDAR	GOLDEN ROD	GOLDEN ROD	GOLDEN ROD	SUMAC	ST-JOHN'S-WORT			
Sample Date:	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009	11-August-2009			
MOE ULN ¹ Rural Foliage (Northeastern Ontario)																		
Parameter																		
% Moisture	60	72	73	70	60	57	51	77	54	61	64	61	64	61		67		
pH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Antimony	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
Asenic	2	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Barium	1050	131	269	1530	19.3	92.3	84.9	86	86	86	86	86	86	86	86	227	86	
Beryllium	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
Boron (Hot Water Soluble)	75	44	23	23	23	29	30	23	53	26	26	26	26	45	45	214	26	
Cadmium	1	0.2	0.2	0.15	0.15	0.15	0.39	0.39	0.05	0.81	0.15	0.81	0.15	0.15	0.15	0.15	0.15	
Chromium	8	0.2	0.2	0.15	0.15	0.15	0.39	0.39	0.05	0.81	0.15	0.81	0.15	0.15	0.15	0.15	0.15	
Cobalt	2	0.2	0.2	0.15	0.15	0.15	0.39	0.39	0.05	0.81	0.15	0.81	0.15	0.15	0.15	0.15	0.15	
Copper	30	0.3	0.3	0.3	0.3	0.31	0.26	0.26	0.03	0.85	0.11	0.85	0.11	0.05	0.05	0.05	0.05	
Lead	30	0.2	0.2	0.15	0.15	0.15	0.39	0.39	0.05	0.81	0.15	0.81	0.15	0.15	0.15	0.15	0.15	
Manganese	1.5	0.4	0.3	0.3	0.3	0.4	0.7	0.3	0.3	0.85	0.1	0.85	0.1	0.9	0.9	0.5	0.9	
Molybdenum	30	0.2	0.2	0.15	0.15	0.15	0.39	0.39	0.05	0.81	0.15	0.81	0.15	0.15	0.15	0.15	0.15	
Nickel	7.2	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Selenium	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	0.15	0.15	0.03	0.85	0.11	0.85	0.11	0.05	0.05	0.05	0.05	
Silver	-	<0.2	<0.2	<0.2	<0.2	<0.2	0.15	0.15	0.03	0.85	0.11	0.85	0.11	0.05	0.05	0.05	0.05	
Thallium	-	<0.2	<0.2	<0.2	<0.2	<0.2	0.15	0.15	0.03	0.85	0.11	0.85	0.11	0.05	0.05	0.05	0.05	
Vanadium	5	<0.2	<0.2	<0.2	<0.2	<0.2	0.15	0.15	0.03	0.85	0.11	0.85	0.11	0.05	0.05	0.05	0.05	
Zinc	250	134	230	134	134	189	134	134	44	134	134	134	134	45	45	134	134	

Notes:
Concentrations are expressed in µg/g, unless noted otherwise.
- Parameter Not Analyzed
- Guidelines are not present in the MOE (ULN) Table D1
Values in light font are below criteria and laboratory analytical detection limits.
Concentration of parameter is greater than the MOE Upper Limit of Normal for Rural Foliage
Ministry of Environment and Energy (MOEE) Hazardous Contaminants Branch (HCB) Pyrotoxicology Field Investigation
Manual, Ministry of the Environment, Upper Limit of Normal (ULN) contaminant guidelines, Table D1

TABLE 10
Concentrations of Metals in Foliage Vegetation
2009 Supplementary Investigation Samples

Parameter	CS11508-004					CS11508-005				
	Contaminated Site:	GI-004-VI	GI-004-VI	GI-004-VI	GI-004-VI	GI-005-VI	GI-005-VI	GI-005-VI	GI-005-VI	GI-005-VI
	Sample ID: Plant Type	JUNIPER	GOLDEN ROD	SUMAC	BLACKBERRIES	BLUESBERRIES	WHITE PINE	SUMACK	JUNIPER	
Sample Date: 11-August-2009										
MOE U.L.N ¹ Rural Foliage (Northeastern Ontario)										
% Moisture	—	46	70	48	50	62	53	43	46	
pH	—	—	—	—	—	—	—	—	—	
Aluminum	0.9	<0.1	<0.2	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1	
Antimony	2	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1	
Arsenic	—	22.5	74	20.1	64.9	160	3.3	80.9	44.2	
Barium	—	<0.1	<0.2	<0.1	<0.2	<0.2	<0.2	<0.1	<0.1	
Beryllium	—	30	13.3	83	1.5	71	20	22	23	
Boron (Hot Water Soluble)	75	0.31	0.5	0.42	0.37	0.59	0.37	0.03	0.18	
Cadmium	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Chromium	6	0.14	0.83	0.02	0.28	0.13	0.14	0.08	0.15	
Cobalt	2	0.14	0.83	0.02	0.28	0.13	0.14	0.08	0.15	
Copper	30	0.28	0.3	0.35	0.4	0.4	0.4	0.4	0.4	
Lead	30	0.28	0.3	0.35	0.4	0.4	0.4	0.4	0.4	
Manganese	1.5	0.3	1.3	0.7	1.3	0.2	<0.2	<0.1	0.2	
Nickel	30	5.9	26.9	1.8	14.3	8.8	12	10.1	17.7	
Selenium	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Silver	—	0.02	0.07	0.014	0.05	0.04	0.284	0.054	0.009	
Thallium	—	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Zinc	250	32	210	32	31	31	43	44	35	

Notes:
Concentrations are expressed in µg/g, unless noted otherwise
* Parameter Not Analyzed
* Guidelines are not present in the MOE U.L.N¹ Table D1
Values in light font are below criteria and laboratory analytical detection limits
Concentration of parameter is greater than the MOE Upper Limits of Normal for Rural Foliage
* Ministry of Environment and Energy (MOEE) Hazardous Contaminants Branch (HCB) Pyrotoxicology Field Investigation Manual, Ministry of the Environment, Upper Limit of Normal (ULN) contaminant guidelines, Table D1

Prepared by: GGG
Checked by: AD

TABLE 11
Concentrations of Metals in Grass
2009 Supplementary Investigation Samples

Contaminated Site:		CS11506-003	CS11506-004	CS11506-005
Sample ID:		GI-003-VI	GI-004-VI	GI-005-VI
Plant Type:		GRASS	GRASS	GRASS
Sample Date:		11-August-2009	11-August-2009	11-August-2009
Parameter	MOE ULN ¹ Rural Grass			
% Moisture	---	44	44	34
pH	---	-	-	-
Antimony	---	<0.1	<0.1	<0.1
Arsenic	---	<0.2	<0.2	<0.2
Barium	---	97.2	17.8	10.5
Beryllium	---	<0.1	<0.1	<0.1
Boron (Hot Water Soluble)	20	5	5	5
Cadmium	0.5	0.09	0.05	0.04
Chromium	5	<0.6	<0.6	<0.6
Cobalt	2	0.06	0.33	0.04
Copper	7	18	4	6
Lead	20	8.75	0.83	1.57
Mercury	---	-	-	-
Molybdenum	6	0.4	0.4	1.5
Nickel	5	1.8	5.8	5.1
Selenium	0.5	<0.4	<0.4	<0.4
Silver	---	<0.1	<0.1	<0.1
Thallium	---	<0.006	0.059	0.011
Vanadium	6	<0.1	<0.1	<0.1
Zinc	40	236	51	36

Prepared by: KW

Checked by: AD

Notes:
Concentrations are expressed in µg/g, unless noted otherwise

--- Parameter Not Analyzed

"-" Guidelines are not present in the MOE ULN Table D1

Values in light font are below criteria and laboratory analytical detection limits.

Concentration of parameter is greater than the MOE Upper Limit of Normal for Grass

¹ Ministry of Environment and Energy (MOEE) Hazardous Contaminants Branch (HCB) Pyrotoxicology Field Investigation Manual, Ministry of the Environment "Upper Limit of Normal" contaminant guidelines, Table D1

TABLE 12
Concentrations of Metals in Moss
2009 Supplementary Investigation Samples

Contaminated Site:		CS11506-003	CS11506-004
Sample ID:		GI-003-VI	GI-004-VI
Plant Type:		MOSS	MOSS
Sample Date:		11-August-2009	11-August-2009
Parameter	MOE ULN ² Rural Moss		
% Moisture	—	50	77
pH	—	-	-
Antimony	—	1.3	1.2
Arsenic	1	9.3	2.8
Barium	—	612	47
Beryllium	—	0.3	<0.4
Boron (Hot Water Soluble)	—	3	6
Cadmium	2	1.83	1.31
Chromium	—	29	3
Cobalt	—	8.06	1.67
Copper	8	124	76
Lead	35	3330	66.7
Molybdenum	—	1.6	1.3
Nickel	6	22.4	26.3
Selenium	0.6	1	3
Silver	—	0.6	0.8
Thallium	—	0.12	0.11
Vanadium	—	18.8	5.1
Zinc	100	684	109

Prepared by: KW
Checked by: AD

Notes:

Concentrations are expressed in µg/g, unless noted otherwise

— Parameter Not Analyzed

— Guidelines are not present in the MOE ULN Table D1

Values in light font are below criteria and laboratory analytical detection limits.

Concentration of parameter is greater than the MOE Upper Limit of Normal for Moss

¹ Ministry of Environment and Energy (MOEE) Hazardous Contaminants Branch (HCB) Pyrotoxicology Field Investigation Manual, Ministry of the Environment "Upper Limit of Normal" contaminant guidelines, Table D3

Paint sample results in excess of applicable regulations from previous investigations are as follows:

- PAC-2-LP-1 (.08 %) – 1st floor, inside lighthouse
- PAC-2-LP-3 (3.05 %) – 2nd and 3rd floor, inside lighthouse
- PAC-2-LP-4 (8.49 %) – 4th floor, inside lighthouse
- PAC-2-LP-5 (.99 %) – 4th floor, handrail outside lighthouse
- PAC-4-LP-1 (.27 %) – Exterior south wall of boathouse
- PAC-4-LP-2 (.89 %) – Exterior of red door on boathouse
- PAC-4-LP-3 (.18 %) – Exterior of north and west walls on boathouse
- PAC-4-LP-4 (.50 %) – Exterior of garage door and east wall on boathouse
- PAC-8-LP-2 (.18 %) – Exterior of east and north walls, residence building
- PAC-8-LP-3 (.36 %) – Exterior of west and south walls, residence building
- PAC-8-LP-4 (.20 %) – Walkway on west side of residence building
- PAC-8-LP-6 (.27 %) – Concrete floor in the basement

*Federal Surface Coating Regulations – 0.009% by dry weight is considered lead containing

**TABLE 4
PAINT SAMPLE
LEAD RESULTS
SUPPLEMENTAL
PHASE III ESA
GEREAUX ISLAND LIGHT STATION, GEREAX ISLAND, ON**

Parameter	Units	Sample Location								
		B.H LS-2	L.H LS-1	L.H LS-2	L.H LS-3	L.H LS-4	L.H LS-5	L.H LS-6	LS-99	L.H LS-7
Leachable Lead (Pb)	mg/L	0.28	0.16	ND	0.07	0.020	11	21	0.06	7
Schedule 4 - O.Reg 347	%	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06

Parameter	Units	Sample Location							
		R.B LS-8	R.B LS-9	R.B LS-2	R.B LS-3	R.B LS-4	R.B LS-5	R.B LS-6	R.B LS-7
Lead (Pb)	mg/L	ND	0.3	ND	ND	0.14	0.5	ND	0.05
Schedule 4 - O.Reg 347	%	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06

1. Schedule 4 of R.R.O. 1990, Reg. 347.
2. LS-99 is a field duplicate of LS-7
3. Exceedance of O.Reg 347 Criteria

**TABLE 5
PAINT SAMPLE
PCB RESULTS
SUPPLEMENTAL
PHASE III ESA
GEREAUX ISLAND LIGHT STATION, GEREAX ISLAND, ON**

Parameter	Units	Sample Location								
		B.H LS-2	L.H LS-1	L.H LS-2	L.H LS-3	L.H LS-4	L.H LS-5	L.H LS-6	LS-99	L.H LS-7
Total PCB	ug/g	0.1	0.5	ND	0.2	0.200	ND	0.1	1.7	0.09
Environment Canada PCB Regulations	mg/kg	2	2	2	2	2	2	2	2	2

Parameter	Units	Sample Location							
		R.B LS-8	R.B LS-9	R.B LS-2	R.B LS-3	R.B LS-4	R.B LS-5	R.B LS-6	R.B LS-7
Total PCB	ug/g	0.5	ND	0.5	0.4	0.7	ND	ND	3.2
Environment Canada PCB Regulations	mg/kg	2	2	2	2	2	2	2	2

1. Environment Canada's PCB Regulations
2. LS-99 is a field duplicate of LS-7
3. Exceedance of Environment Canada criteria