

Table 8 : Results of soil chemical analyses - Lloyd Street area

Parameters	CCME Criteria ⁽¹⁾	MOEE Criteria ⁽²⁾	TP-02-170	TP-02-171	TP-02-172	TP-02-173	TP-02-174	TP-02-175		
			Residential/ Parkland							
			GS1	GS1	GS1	GS2	GS1	GS1		
			0.00-0.30	0.00-0.85	0.00-0.20	0.60-1.70	0.00-1.50	0.00-0.40		
pH	pH	pH Units								
		--	5.0-11.0	-	-	-	-	-		
Elec. Cond.	Electric Conductivity	mS/cm								
		--	0.7	-	-	-	-	-		
		ug/g								
Metals	Antimony	--	13							
	Arsenic	12	20	0.9	2.2	2.7	3.6	2.9	2.1	
	Barium	500	750	138	146	134	269	151	100	
	Beryllium	--	1.2	0.4	0.3	0.3	0.3	0.3	0.3	
	Cadmium	10	12	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
	Chromium	64	750	25	20	19	14	18	17	
	Chromium (6+)	0.4	8	< 1	< 1	< 1	< 1	< 1	< 1	
	Cobalt	--	40	7	6	6	4	5	4	
	Copper	63	225	26	27	22	44	23	16	
	Lead	140	200	58	206	128	299	135	94	
	Mercury	6.6	10	0.10	0.54	0.58	0.44	0.48	0.51	
	Molybdenum	--	40	< 3	< 3	< 3	< 3	< 3	< 3	
	Nickel	50	150	16	11	12	9	11	10	
	Selenium	--	10	< 0.2	< 0.2	< 0.2	0.3	0.3	< 0.2	
	Silver	--	20	< 1	< 1	< 1	< 1	< 1	< 1	
	Vanadium	130	200	32	25	25	17	21	19	
Zinc	200	600	66	70	69	105	81	56		
Boron (HWS)	--	1.5	< 0.2	< 0.2	< 0.2	0.2	< 0.2	< 0.2		
BTEX	Benzene	0.5	5.3	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	
	Toluene	0.8	34	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	
	Ethylbenzene	1.2	290	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	
	m-xp-Xylenes	1	34	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	
o-Xylene	1	34	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02		
PH	CCME F1(C6-C10)	260	--	< 10	< 10	< 10	< 10	< 10	< 10	
	CCMEF2(C10-C16)	900	--	11	< 10	< 10	< 10	< 10	< 10	
	CCMEF3(C16-C34)	800	--	400	< 10	24	220	56	16	
	CCMEF4(C34-C50)	5600	--	330	< 10	< 10	78	14	< 10	
TPH	TPH-Heavy Oils	--	1000	720	< 100	< 100	240	< 100	< 100	
	TPH-Gas+Diesel	--	--	160	< 10	14	120	30	< 10	
	TPH-Gas	--	1000	< 10	< 10	< 10	< 10	< 10	< 10	
	TPH-Diesel	--	1000	160	< 10	14	120	30	< 10	
PCBs	--	5								
PAHs	Naphthalene	0.6	40	DF=10	nd	nd	DF=10	DF=4	nd	
	2-Methylnaphthalene	--	280	nd	nd	nd	1.4	nd	nd	
	1-Methylnaphthalene	--	280	nd	nd	nd	*0.9	nd	nd	
	Acenaphthylene	--	100	2.40	0.28	0.49	*0.6	*0.19	0.12	
	Acenaphthene	--	1000	nd	nd	nd	2.2	*0.14	nd	
	Fluorene	--	350	*0.28	nd	nd	3.8	0.22	nd	
	Phenanthrene	--	40	2.36	0.22	0.26	27.9	2.39	0.20	
	Anthracene	--	28	1.13	0.12	0.17	8.7	0.65	0.06	
	Fluoranthene	--	40	6.50	0.84	1.24	28.8	4.00	0.55	
	Pyrene	--	250	6.19	0.85	1.26	21.0	3.26	0.48	
	Benzo(a)anthracene	--	40	3.33	0.49	0.75	13.4	1.89	0.23	
	Chrysene	--	12	3.34	0.53	0.81	12.3	1.90	0.29	
	Benzo(k)fluoranthene	--	12	5.48	0.89	1.32	13.5	2.10	0.39	
	Benzo(k)fluoranthene	--	12	2.10	0.30	0.52	5.4	0.90	0.14	
	Benzo(a)pyrene	0.7	1.2	4.74	0.70	1.07	11.7	1.75	0.30	
	Indeno(1,2,3-cd)pyrene	--	12	3.86	0.52	0.82	6.1	1.15	0.23	
	Dibenzo(a,h)anthracene	--	1.2	0.83	0.10	0.16	*0.7	0.31	0.05	
	Benzo(ghi)perylene	--	40	3.70	0.48	0.76	4.7	0.99	0.24	
Phenolic compounds	Phenol	--	40				DF=10			
	2-Chlorophenol	--	10				nd			
	o-Cresol	--	--				nd			
	m-Cresol & p-Cresol	--	--				nd			
	2-Nitrophenol	--	--				nd			
	2,4-Dimethylphenol	--	140				nd			
	2,4-dichlorophenol	--	10				nd			
	4-Chloro-3-Methylphenol	--	--				nd			
	2,4,6-Trichlorophenol	--	10				nd			
	2,4,5-Trichlorophenol	--	10				nd			
	2,4-Dinitrophenol	--	4.1				nd			
	4-Nitrophenol	--	--				nd			
	2-Methyl-4,6-Dinitrophenol	--	--				nd			
	Pentachlorophenol	7.6	5				nd			

- Notes:
- 45 Exceeding CCME Criteria
 - 56 Exceeding MOEE criteria
 - Not analysed
 - No criteria for this parameter

(1) CCME Soil criteria for residential/parkland land use

(2) MOEE Table B Surface soil and groundwater criteria for residential/parkland land use for a non potable groundwater condition (coarse textured soil with pH between 5,0 and 11,0)