Appendix E. Porewater Calculations for Lake Wildwood

Chemical	Units	RP1				RP2				RP2			
		CONC. SEDIMENT	Foc	Koc	CONC. POREH20	CONC. SEDIMENT	Foc	Koc	CONC. POREH20	CONC. SEDIMENT	Foc	Koc	CONC. POREH20
Sampling Year		1999				1999				2001			
1-Methylnaphthalene	ug/kg	--	--	5.92E+03	--	--	--	5.92E+03	--	580.00	0.1647	5.92E+03	0.594857
1-Methylphenanthrenes	ug/kg	--	--	8.95E+04	--	--	--	8.95E+04	--	450.00	0.1647	8.95E+04	0.030528
2,3,5-Trimethylnaphthalene	ug/kg	--	--	5.97E+04	--	--	--	5.97E+04	--	230.00	0.1647	5.97E+04	0.023392
2,6-Dimethylnaphthalene	ug/kg	--	--	1.99E+04	--	--	--	1.99E+04	--	720.00	0.1647	1.99E+04	0.219678
2-Methylnaphthalene	ug/kg	--	--	6.19E+03	--	--	--	6.19E+03	--	530.00	0.1647	6.19E+03	0.519866
Acenaphthene	ug/kg	6.64	0.1160	8.79E+03	0.00652	5.94	0.1760	8.79E+03	0.00384	380.00	0.1647	8.79E+03	0.262476
Acenaphthylene	ug/kg	9.75	0.1160	1.47E+03	0.05711	7.40	0.1760	1.47E+03	0.02858	160.00	0.1647	1.47E+03	0.659821
Anthracene	ug/kg	14.83	0.1160	2.86E+04	0.00446	11.57	0.1760	2.86E+04	0.00230	250.00	0.1647	2.86E+04	0.052996
Benzo(a)anthracene	ug/kg	92.83	0.1160	3.78E+05	0.00212	80.41	0.1760	3.78E+05	0.00121	540.00	0.1647	3.78E+05	0.008684
Benzo(a)pyrene	ug/kg	108.46	0.1160	1.01E+06	0.00093	104.64	0.1760	1.01E+06	0.00059	350.00	0.1647	1.01E+06	0.002104
Benzo(b)fluoranthene	ug/kg	143.71	0.1160	1.45E+06	0.00086	137.96	0.1760	1.45E+06	0.00054	350.00	0.1647	1.45E+06	0.001470
Benzo(e)pyrene	ug/kg	--	--	1.07E+06	--	--	--	1.07E+06	--	350.00	0.1647	1.07E+06	0.001979
Benzo(g,h,i)perylene	ug/kg	112.41	0.1160	2.49E+06	0.00039	107.57	0.1760	2.49E+06	0.00024	ND	0.1647	2.49E+06	NA
Benzo(k)fluoranthene	ug/kg	140.09	0.1160	1.53E+06	0.00079	117.34	0.1760	1.53E+06	0.00044	390.00	0.1647	1.53E+06	0.001550
Chrysene	ug/kg	168.18	0.1160	4.13E+05	0.00351	169.20	0.1760	4.13E+05	0.00233	710.00	0.1647	4.13E+05	0.010437
Dibenz(a,h)anthracene	ug/kg	25.70	0.1160	3.97E+06	0.00006	20.30	0.1760	3.97E+06	0.00003	ND	0.1647	3.97E+06	NA
Fluoranthene	ug/kg	265.93	0.1160	9.95E+04	0.02303	270.52	0.1760	9.95E+04	0.01544	860.00	0.1647	9.95E+04	0.052457
Fluorene	ug/kg	16.30	0.1160	1.37E+04	0.01025	17.28	0.1760	1.37E+04	0.00716	330.00	0.1647	1.37E+04	0.146157
Indeno(1,2,3-c,d)pyrene	ug/kg	110.32	0.1160	4.06E+06	0.00023	104.99	0.1760	4.06E+06	0.00015	ND	0.1647	4.06E+06	NA
Naphthalene	ug/kg	28.07	0.1160	1.99E+03	0.12157	14.97	0.1760	1.99E+03	0.04272	ND	0.1647	1.99E+03	NA
Perylene	ug/kg	--	--	1.07E+06	--	--	--	1.07E+06	--	--	0.1647	1.07E+06	NA
Phenanthrene	ug/kg	121.93	0.1160	3.12E+04	0.03370	140.93	0.1760	3.12E+04	0.02567	920.00	0.1647	3.12E+04	0.179099
Pyrene	ug/kg	245.70	0.1160	6.90E+04	0.03069	238.01	0.1760	6.90E+04	0.01959	1210.00	0.1647	6.90E+04	0.106437
					0.29622				0.15082				1.48567
Pesticides/PCBs													
Aldrin	ug/kg	ND	0.1160	3.67E+05	NA	ND	0.1760	3.67E+05	NA	ND	0.1647	3.67E+05	NA
Total Chlordane	ug/kg	9.85	0.1160	7.91E+05	0.00011	1.34	0.1760	7.91E+05	0.00001	ND	0.1647	7.91E+05	NA
trans-Nonachlor	ug/kg	1.57	0.1160	--	NA	0.35	0.1760	--	NA	ND	0.1647	--	NA
Dieldrin	ug/kg	1.73	0.1160	1.18E+05	0.00013	ND	0.1760	1.18E+05	NA	ND	0.1647	1.18E+05	NA
Heptachlor	ug/kg	ND	0.1160	2.22E+05	NA	ND	0.1760	2.22E+05	NA	ND	0.1647	2.22E+05	NA
Heptachlor epoxide	ug/kg	ND	0.1160	2.03E+05	NA	ND	0.1760	2.03E+05	NA	ND	0.1647	2.03E+05	NA
Hexachlorobenzene	ug/kg	1.51	0.1160	3.66E+05	0.00004	0.87	0.1760	3.66E+05	0.00001	ND	0.1647	3.66E+05	NA
Lindane	ug/kg	ND	0.1160	6.09E+03	NA	ND	0.1760	6.09E+03	NA	ND	0.1647	6.09E+03	NA
Mirex	ug/kg	ND	0.1160	5.93E+06	NA	ND	0.1760	5.93E+06	NA	ND	0.1647	5.93E+06	NA
Endrin	ug/kg	ND	0.1160	3.04E+04	NA	ND	0.1760	3.04E+04	NA	ND	0.1647	3.04E+04	NA
4,4'-DDE[1]	ug/kg	18.31	0.1160	7610000	0.00002	28.65	0.1760	7610000	0.00002	13.00	0.1647	7610000	0.000010
4,4'-DDD[1]	ug/kg	21.51	0.1160	1240000	0.00015	27.09	0.1760	1240000	0.00012	16.08	0.1647	1240000	0.000079
4,4'-DDT[1]	ug/kg	4.54	0.1160	1220000	0.00003	2.77	0.1760	1220000	0.00001	ND	0.1647	1220000	NA
Cl2 (08)	ug/kg	ND	0.1160	9.64E+04	NA	ND	0.1760	9.64E+04	NA	NA	0.1647	9.64E+04	NA
Cl3 (18)	ug/kg	ND	0.1160	1.42E+05	NA	ND	0.1760	1.42E+05	NA	NA	0.1647	1.42E+05	NA
Cl13(28)	ug/kg	0.71	0.1160	3.75E+05	0.00002	ND	0.1760	3.75E+05	0.00000	NA	0.1647	3.75E+05	NA
Cl4 (44)	ug/kg	1.53	0.1160	4.49E+05	0.00003	ND	0.1760	4.49E+05	NA	NA	0.1647	4.49E+05	NA
Cl4 (52)	ug/kg	1.14	0.1160	5.51E+05	0.00002	0.68	0.1760	5.51E+05	0.00001	NA	0.1647	5.51E+05	NA
Cl4 (66)	ug/kg	1.65	0.1160	1.24E+06	0.00001	0.68	0.1760	1.24E+06	0.00000	NA	0.1647	1.24E+06	NA
Cl4 (77)	ug/kg	ND	0.1160	1.79E+06	NA	ND	0.1760	1.79E+06	NA	NA	0.1647	1.79E+06	NA
Cl5 (101)	ug/kg	2.71	0.1160	1.87E+06	0.00001	1.82	0.1760	1.87E+06	0.00001	NA	0.1647	1.87E+06	NA
Cl5 (105)	ug/kg	0.92	0.1160	3.45E+06	0.00000	0.69	0.1760	3.45E+06	0.00000	NA	0.1647	3.45E+06	NA
Cl5 (118)	ug/kg	1.96	0.1160	4.22E+06	0.00000	1.77	0.1760	4.22E+06	0.00000	NA	0.1647	4.22E+06	NA
Cl5 (126)	ug/kg	ND	0.1160	5.93E+06	NA	ND	0.1760	5.93E+06	NA	NA	0.1647	5.93E+06	NA
CL6 (128)	ug/kg	0.93	0.1160	4.22E+06	0.00000	ND	0.1760	4.22E+06	NA	NA	0.1647	4.22E+06	NA
CL6 (138)	ug/kg	5.69	0.1160	5.18E+06	0.00001	3.79	0.1760	5.18E+06	0.00000	NA	0.1647	5.18E+06	NA
CL6 (153)	ug/kg	6.43	0.1160	6.35E+06	0.00001	2.59	0.1760	6.35E+06	0.00000	NA	0.1647	6.35E+06	NA
Cl7 (170)	ug/kg	13.81	0.1160	1.41E+07	0.00001	13.10	0.1760	1.41E+07	0.00001	NA	0.1647	1.41E+07	NA
Cl7 (180)	ug/kg	6.04	0.1160	1.72E+07	0.00000	2.86	0.1760	1.72E+07	0.00000	NA	0.1647	1.72E+07	NA
Cl7 (187)	ug/kg	2.37	0.1160	1.11E+07	0.00000	2.12	0.1760	1.11E+07	0.00000	NA	0.1647	1.11E+07	NA
C18 (195)	ug/kg	1.82	0.1160	2.70E+07	0.00000	0.70	0.1760	2.70E+07	0.00000	NA	0.1647	2.70E+07	NA
C19(206)	ug/kg	1.04	0.1160	8.97E+07	0.00000	0.91	0.1760	8.97E+07	0.00000	NA	0.1647	8.97E+07	NA
Cl10(209)	ug/kg	0.42	0.1160	1.10E+08	0.00000	0.47	0.1760	1.10E+08	0.00000	NA	0.1647	1.10E+08	NA
Total PCB[2]	ug/kg	279.87	0.1160	NA	0.00026	70.82	0.1760	NA	0.00007	NA	0.1647	NA	NA

ND = Not detected

J = Detected but below the sample-specific Method Detection Limit

NA Porewater concentrations were not calculated when sediment samples were identified as non detect (Table 4-1)

[1] 4,4-DDE, DDD, and DDT is the dominate stereoisomer therefore it was used to derive porewater concentration.

[2] Sum of 18 NS&T congeners, multiplied by 2