

APPENDIX 25

WATER CHEMISTRY AND CONSTITUENT CONCENTRATIONS

These tables have been sourced from the Peer Review Team Report (final), dated May 6, 2009 (PRT 2009) and were confirmed to remain valid as of January 2010. The CRD is conducting additional due diligence to confirm this data.

Table 1: Clover Point Wastewater Constituent Concentrations
(PRT 2009)

Constituent	Average (mg/L)		Std Deviation (mg/L)	
	DWF	WWF	DWF	WWF
TSS	159	149	52.6	92.8
VSS	142	139	43.8	44.1
BOD tot	205	157	58.6	59.3
BOD diss	74.0	54.8	34.2	23.9
TKN tot	38.6	27.6	5.8	6.8
TKN diss	30.8	21.4	4.3	4.9
NH3-N tot	25.4	21.2	3.5	4.6
NH3-N diss	na	14.8	na	4.5
Alk-as CaCO3	144	151	37.1	28.8
P tot	5.71	3.64	1.34	1.15
P diss	na	2.08	na	0.82

^a Constituent concentration data obtained between August 21 and September 6 2008 for the DWFs, and between January 4 and February 16, 2008 for WWFs

Table 2: Macaulay Point Wastewater Constituent Concentrations
(PRT 2009)

Constituent	Average (mg/L)		Std Deviation (mg/L)	
	DWF	WWF	DWF	WWF
TSS	194	186	52.3	113
VSS	166	175	52.1	101
BOD tot	239	160	64.2	42.5
BOD diss	82.8	53.8	40.7	20.1
TKN tot	47.1	42.0	6.49	9.68
TKN diss	36.4	33.8	4.82	6.75
NH3-N tot	32.0	33.3.28	4.32	6.15
NH3-N diss	na	27.1	Na	7.04
Alk-as CaCO3	174	245	20.0	63.0
P tot	6.97	4.33	1.22	1.30
P diss	na	2	na	0.91

^a Constituent concentration data obtained between August 21 and September 6 2008 for the DWFs, and between January 4 and February 16, 2008 for WWFs

Table 3: Constituent Mass Loading Rates at Macaulay and Clover Points
(PRT 2009)

Constituent	Macaulay Point (kg/d)		Clover Point (kg/d)	
	DWF	WWF	DWF	WWF
TSS	7820	9780	8470	8760
VSS	6690	9210	7570	8170
BOD tot	9630	8420	10930	9230
BOD diss	3340	2830	3940	3220
TKN tot	1900	2210	2060	1622
Alk-as CaCO ₃	7010	12890	7680	8880

^a Constituent concentration data obtained between August 21 and September 6 2008 for the DWFs, and between January 4 and February 16, 2008 for WWFs