

Appendix 5-1
Additional baseline Water Quality Survey Data in
Year 2012/2013

Appendix 5-1 Results of Baseline Water Quality Sampling Between September 2012 and January 2013

Parameters	Unit	Effluent Discharge Std, mg/l *	WQO Criteria, mg/l *	Wet Season Data **												Dry Season Data ***											
				Raw Data												Range		Average		Raw Data				Range		Average	
				23/09/2012	26/09/2012	29/09/2012	2/10/2012	4/10/2012	6/10/2012	8/10/2012	10/10/2012	12/10/2012	15/10/2012	17/10/2012	19/10/2012	28/12/2012	3/1/2013	10/1/2013	17/01/2013								
				14:22	13:44	11:01	12:03	11:05	11:15	11:09	11:38	10:27	10:07	10:01	9:56	11:19	11:35	10:33	10:10	W1	W1	W1	W1				
Salinity	g/L	-		0.2	0.2	0.9	1.8	0.6	0.2	0.3	0.4	3	1.7	3.8	0.4	0.2	3.8	1.1	0.7	0.2	0.8	0.2	0.2	-0.8	0.5		
Water Flow	L/s	-		39	132	710	57	<1.0 *	15.4	25	25	140	<1.0 *	<1.0 *	10	<1.0 *	710	128	18	24	30	5	5	-30	19		
Water Depth	m	-		0.3	0.7	1.8	2.2	1.1	0.7	2	0.2	1.1	1.1	0.8	0.1	0.1	2.2	1.0	0.3	0.2	0.5	0.1	0.1	-0.5	0.3		
Temperature	*C	30 (30)		30.6	30.7	25.9	27.7	28.7	28.8	28.5	28.1	26.8	26	26.2	25.9	25.9	30.7	27.8	20.1	20	15.1	18.4	15.1	-20.1	18.4		
pH Value	-	6-10 (6-9)	6-9	7.3	7.7	7.5	7	7	8.1	8	7.2	7.2	7.2	7.1	7.2	7	8.1	7.4	7.3	7.2	7.4	7.2	7.2	-7.4	7.3		
Dissolved Oxygen	mg/L	-	4	7.2	7.4	5	6.1	7.4	7.2	7.7	8.5	6.4	4.6	4	8.2	4	8.5	6.6	4.8	8.1	7.5	8.5	4.8	-8.5	7.2		
Dissolved Oxygen - % Saturation	%	-	-	96.7	98.6	61.4	77.9	96.2	93	99	110	81.8	56.9	50.2	101	50.2	110	85.2	52.8	89	74.7	90.3	52.8	-90.3	76.7		
Turbidity	NTU	-		41	98	14	43	67	45	62	56	18	33	48	53	14	98	48	34	16	32	37	16	-37	30		
Biochemical Oxygen Demand	mg/L	20 (5-20)	5	2	8	4	4	3	3	3	3	4	3	6	4	2	8	4	6	3	6	6	3	-6	5		
Chemical Oxygen Demand	mg/L	80 (20-80)	30	15	31	16	16	19	22	17	16	19	11	19	30	11	31	19	14	10	21	18	10	-21	16		
Total Phosphorus	mg/L	5-10 (8-10)		0.4	0.6	0.4	0.5	0.5	0.4	0.6	0.5	0.4	0.4	0.6	0.6	0.4	0.6	0.5	@	@	@	@	@	@	@	@	
Reactive Phosphorus	mg/L	-		0.17	0.21	0.24	0.29	0.22	0.18	0.22	0.22	0.3	0.29	0.36	0.31	0.17	0.36	0.3	@	@	@	@	@	@	@	@	
Oil and grease	mg/L	10 (1)		<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	
Electrical Conductivity @ 25°C	µS/cm	-		402	433	1780	2720	2320	498	527	728	5250	2880	5800	633	402	5800	1998	@	@	@	@	@	@	@	@	
Suspended Solids (SS)	mg/L	30 (5-20)	20	38	101	16	32	47	52	72	52	16	24	39	54	16	101	45	32	23	29	46	23	-46	33		
Total Kjeldahl Nitrogen	mg/L	-		1.2	1.6	3.8	3.7	5.4	3.3	4.8	3.5	3.3	3.8	5.3	1.2	1.2	5.4	3.4	3.4	2.2	4	3.1	2.2	-4	3.2		
Ammonia nitrogen	mg/L	10-20 (1-2)	0.021	0.61	0.72	1.57	2.05	3.77	2.16	1.05	0.97	1.66	3.06	3.63	1.07	0.61	3.77	1.9	1.6	1.1	3.15	2.32	1.1	-3.15	2.0		
Escherichia coli (E. Coli.)	cfu / 100 mL	1000 (1000)	1000	3000	5400	4200	38000	14000	10000	18000	9000	4600	20000	19000	4200	3000	38000	12450	12000	18000	12000	4100	4100	-18000	11525		
Faecal Coliforms	cfu / 100 mL	-		5400	8100	6700	44000	22000	14000	29000	14000	5400	40000	47000	4900	4900	47000	20042	@	@	@	@	@	@	@	@	
Aluminium	mg/L	-		0.52	1.47	0.26	0.59	1.07	1.16	1.31	1.74	0.17	0.37	1.01	1.22	0.17	1.74	0.91	@	@	@	@	@	@	@	@	
Copper	mg/L	-		0.005	0.01	0.004	0.005	0.007	0.011	0.01	0.009	0.003	0.005	0.004	0.007	0.003	0.011	0.007	@	@	@	@	@	@	@	@	
Chromium	mg/L	-		<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	@	@	@	@	@	@	@	@	
Lead	mg/L	-		0.004	0.012	0.003	0.004	0.004	0.01	0.009	0.01	0.002	0.003	0.003	0.006	0.002	0.012	0.006	@	@	@	@	@	@	@	@	
Zinc	mg/L	-		0.05	0.12	0.03	0.05	0.05	0.08	0.08	0.12	0.09	0.06	0.04	0.06	0.03	0.12	0.07	@	@	@	@	@	@	@	@	
Cadmium	mg/L	0.001-0.1 (0.001)		<0.0002 *	0.0003	<0.0002 *	<0.0002 *	<0.0002 *	0.0002	0.0003	0.0003	<0.0002 *	<0.0002 *	<0.0002 *	0.0002	<0.0002 *	0.0003	0.0003	@	@	@	@	@	@	@	@	
Sulphide as S2-	mg/L	1 (0.1-0.2)		<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 *	@	@	@	@	@	@	@	@	
Nitrate as N	mg/L	20-50 (20-30) **		1.41	1.44	1.03	1.52	2.51	2.91	1.5	1.72	1.35	3.04	1.2	2.87	1.03	3.04	1.88	1.22	1.69	4.17	3.8	1.22	-4.17	2.72		
Nitrite as N	mg/L	20-50 (20-30) **		0.18	0.13	0.13	0.23	0.25	0.23	0.12	0.14	0.17	0.26	0.19	0.22	0.12	0.26	0.19	0.08	0.1	0.13	0.16	0.08	-0.16	0.12		

		Wet Season Data **															Dry Season Data ***													
Parameters	Unit	Effluent Discharge Std, mg/l *	WQO Criteria, mg/l *	Raw Data															Range		Average		Raw Data				Range		Average	
				23/09/2012	26/09/2012	29/9/2012	2/10/2012	4/10/2012	6/10/2012	8/10/2012	10/10/2012	12/10/2012	15/10/2012	17/10/2012	19/10/2012					28/12/2012	3/1/2013	10/1/2013	17/01/2013							
				W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3	W3		
Salinity	g/L	-		0.4	2.1	5.5	6.6	6.1	4.3	6.2	11	6.9	11.4	8.9	1.3	0.4	11.4	5.9	11.3	0.6	9.8	0.6	0.6	11.3	0.6	11.3	5.6			
Water Flow	L/s	-		24	490	306	370	130	37.8	87	87	290	140	230	9	9	490	183	29	7.5	100	4.5	4.5	100	4.5	4.5	35			
Water Depth	m	-		0.2	1.6	1.6	1.2	0.4	0.3	1.2	1.3	2.3	1.2	0.7	0.1	0.1	2.3	1.0	0.5	0.3	0.9	0.2	0.2	0.9	0.2	0.5	0.5			
Temperature	°C	30 (30)		32.2	28.9	26.5	26.2	26.5	26.3	27.5	27.7	25.6	26.8	26.2	24.2	24.2	32.2	27.1	18.2	17.8	15.7	16.5	15.7	18.2	16.5	15.7	17.1			
pH Value	-	6-10 (6-9)	6-9	7.1	7.7	7.4	7	7.1	7	7.3	7	7.2	7.2	7.1	7.3	7	7.7	7.2	7.3	7.1	7.6	7.2	7.1	7.6	7.2	7.1	7.6	7.3		
Dissolved Oxygen	mg/L	-	4	5.4	2.2	1.9	1.9	2.1	2.1	3.5	4.5	4.2	1.4	0.9	5.1	0.9	5.4	2.9	1.5	2.6	7.4	4.4	1.5	7.4	4.4	1.5	7.4	4.0		
Dissolved Oxygen - % Saturation	%	-	-	74.1	29.4	24.7	24.4	27.3	26.6	45.6	61	53.9	18.2	11.6	61.6	11.6	74.1	38.2	16.9	27.5	78.8	45.2	16.9	78.8	45.2	16.9	78.8	42.1		
Turbidity	NTU	-		314	19	23	40	154	94	19	10	19	100	231	733	10	733	146	52	188	72	283	52	283	149	52	283	149		
Biochemical Oxygen Demand	mg/L	20 (5-20)	5	6	<2 *	4	4	6	6	3	4	4	4	11	8	<2 *	11	5	6	8	12	9	6	12	9	6	12	9		
Chemical Oxygen Demand	mg/L	80 (20-80)	30	43	13	20	27	43	31	12	28	25	23	58	67	12	67	33	27	31	52	47	27	52	39	27	52	39		
Total Phosphorus	mg/L	5-10 (8-10)		1	0.5	0.8	0.9	1	0.8	0.5	0.4	0.5	0.9	1.2	1.5	0.4	1.5	0.8	@	@	@	@	@	@	@	@	@	@		
Reactive Phosphorus	mg/L	-		0.2	0.35	0.67	0.7	0.53	0.36	0.38	0.31	0.36	0.63	0.72	0.22	0.2	0.72	0.5	@	@	@	@	@	@	@	@	@	@		
Oil and grease	mg/L	10 (1)		<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *		
Electrical Conductivity @ 25°C	µS/cm	-		777	3910	9450	10200	7980	7290	9590	16400	9990	16900	13300	2250	777	16900	9003	@	@	@	@	@	@	@	@	@	@		
Suspended Solids (SS)	mg/L	30 (5-20)	20	259	13	19	48	139	93	17	8	11	67	226	@	8	259	82	39	165	83	265	39	265	138	39	265	138		
Total Kjeldahl Nitrogen	mg/L	-		4.4	3.3	9.4	6.8	6.9	5.6	4.9	4.4	5.1	6	7	5	3.3	9.4	5.7	9.6	4.5	9.9	4.1	4.1	9.9	7.0	4.1	9.9	7.0		
Ammonia nitrogen	mg/L	10-20 (1-2)	0.021	1.34	2.49	5.28	4.97	4.93	4.1	3.13	3.42	3	4.69	4.67	2.69	1.34	5.28	3.7	7.7	4	6.91	3.53	3.53	7.7	5.5	3.53	7.7	5.5		
Escherichia coli (E. Coli.)	cfu / 100 mL	1000 (1000)	1000	69000	11000	12000	2700	30000	15000	11000	6400	4100	11000	27000	23000	2700	69000	18517	58000	68000	34000	44000	34000	68000	51000	34000	68000	51000		
Faecal Coliforms	cfu / 100 mL	-		77000	17000	15000	2900	43000	20000	16000	8700	6800	23000	74000	32000	2900	77000	27950	@	@	@	@	@	@	@	@	@	@		
Aluminium	mg/L	-		4.51	0.27	0.5	0.88	<0.01	1.66	0.29	0.15	0.13	1.09	5.53	14.1	<0.01	14.1	2.65	@	@	@	@	@	@	@	@	@	@		
Copper	mg/L	-		0.023	0.004	0.004	0.005	<0.001	0.011	0.004	0.002	0.004	0.007	0.02	0.054	0.002	0.054	0.013	@	@	@	@	@	@	@	@	@	@		
Chromium	mg/L	-		0.01	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	0.03	<0.01 *	0.03	0.02	@	@	@	@	@	@	@	@	@	@		
Lead	mg/L	-		0.021	0.002	0.002	0.003	<0.001	0.007	0.001	<0.001	0.001	0.005	0.014	0.046	0.001	0.046	0.010	@	@	@	@	@	@	@	@	@	@		
Zinc	mg/L	-		0.25	0.03	0.04	0.04	<0.01	0.09	0.16	0.37	0.09	0.11	0.16	0.46	0.03	0.46	0.16	@	@	@	@	@	@	@	@	@	@		
Cadmium	mg/L	0.001-0.1 (0.001)		0.0002	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	0.0002	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	0.0006	<0.0002 *	0.0006	0.0003	@	@	@	@	@	@	@	@	@	@		
Sulphide as S2-	mg/L	1 (0.1-0.2)		<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 *	@	@	@	@	@	@	@	@	@	@		
Nitrate as N	mg/L	20-50 (20-30) **		1.06	1.03	0.56	0.71	1.29	1.72	1.04	1.02	1.32	1.14	0.9	1.7	0.56	1.72	1.12	0.79	1.26	1.44	2.74	0.79	2.74	1.56	0.79	2.74	1.56		
Nitrite as N	mg/L	20-50 (20-30) **		0.18	0.26	0.33	0.43	0.41	0.47	0.35	0.37	0.24	0.42	0.46	0.21	0.18	0.47	0.34	0.37	0.09	0.42	0.13	0.09	0.42	0.25	0.09	0.42	0.25		

		Wet Season Data **														Dry Season Data ***													
Parameters	Unit	Effluent Discharge Std, mg/l #	WQO Criteria, mg/l #	Raw Data														Range		Average		Raw Data				Range		Average	
				23/09/2012	26/09/2012	29/9/2012	2/10/2012	4/10/2012	6/10/2012	8/10/2012	10/10/2012	12/10/2012	15/10/2012	17/10/2012	19/10/2012														
				17:32	14:18	10:37	11:38	10:31	10:48	10:46	11:14	10:04	9:48	10:33	10:15	WY1	WY1	28/12/2012	3/1/2013	10/1/2013	17/01/2013	WY1	WY1	WY1	WY1				
Salinity	g/L	-		0.3	0.4	0.1	0.4	0.2	0.2	0.2	0.4	2.1	0.4	2.6	6.6	0.1	6.6	1.2			0.5	0.6	0.4	0.3	0.3	0.6	0.5		
Water Flow	L/s	-		<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*	<1.0*	1.5	1.5	<1.0*	1.5	1.5		
Water Depth	m	-		0.2	0.4	0.3	0.4	0.4	0.2	0.4	0.2	0.4	0.3	0.3	0.3	0.2	0.4	0.3			0.2	0.2	0.1	0.1	0.1	0.2	0.2		
Temperature	°C	30 (30)		26.9	27.8	26.9	25.2	25	26.4	25.9	24.1	26.5	24.4	25.2	24.7	24.1	27.8	25.8			18.3	15.7	16	16.7	15.7	18.3	16.7		
pH Value	-	6-10 (6-9)	6-9	7	7.5	7.6	6.9	7	6.8	7.7	7.1	7	7	6.9	6.9	6.8	7.7	7.1			7.2	7.2	7.7	7.4	7.2	7.7	7.4		
Dissolved Oxygen	mg/L	-	4	1.7	1	3.6	2.3	3.6	3.4	2.3	2.2	2.5	1.1	0.9	1.1	0.9	3.6	2.1			2.6	2.4	6.6	6	2.4	6.6	4.4		
Dissolved Oxygen - % Saturation	%	-	-	21.2	12.6	45.6	27.8	45.3	42.9	27.9	25.6	31.1	13.7	11.2	13.4	11.2	45.6	26.5			27.2	23.9	66.5	62.3	23.9	66.5	45.0		
Turbidity	NTU	-		16	20	3	5	10	7	34	34	15	13	8	9	3	34	15			4	3	24	48	3	48	20		
Biochemical Oxygen Demand	mg/L	20 (5-20)	5	<2*	<2*	2	2	<2*	<2*	<2*	2	3	<2*	<2*	3	<2*	3	2			3	<2*	38	14	<2*	38	18		
Chemical Oxygen Demand	mg/L	80 (20-80)	30	21	10	9	14	12	11	7	14	12	11	21	45	7	45	16			8	<5*	68	41	<5*	68	39		
Total Phosphorus	mg/L	5-10 (8-10)		0.8	0.2	0.2	0.3	0.2	0.2	0.2	0.6	0.3	0.3	0.3	0.4	0.2	0.8	0.3			@	@	@	@	@	@	@		
Reactive Phosphorus	mg/L	-		0.49	0.15	0.19	0.19	0.13	0.12	0.16	0.4	0.24	0.27	0.26	0.36	0.12	0.49	0.2			@	@	@	@	@	@	@		
Oil and grease	mg/L	10 (1)		<5*	<5*	<5*	<5*	<5*	<5*	<5*	<5*	<5*	<5*	<5*	<5*	<5*	<5*	<5*			<5*	<5*	<5*	<5*	<5*	<5*	<5*		
Electrical Conductivity @ 25°C	µS/cm	-		645	825	423	684	489	408	388	665	3240	729	4330	10200	388	10200	1919			@	@	@	@	@	@	@		
Suspended Solids (SS)	mg/L	30 (5-20)	20	9	3	<2*	6	4	3	8	4	8	9	4	6	<2*	9	6			4	2	20	40	2	40	17		
Total Kjeldahl Nitrogen	mg/L	-		1.4	0.9	1.3	0.4	0.6	0.6	2.9	1.5	1.9	0.6	1	1.7	0.4	2.9	1.2			0.4	0.5	15.2	7.4	0.4	15.2	5.9		
Ammonia nitrogen	mg/L	10-20 (1-2)	0.021	0.76	0.34	0.15	0.22	0.24	0.17	0.26	0.99	0.8	0.19	0.07	1.12	0.07	1.12	0.4			0.12	0.22	13.6	5	0.12	13.6	4.7		
Escherichia coli (E. Coli)	cfu / 100 mL	1000 (1000)	1000	100	1700	3400	680	100	230	540	2400	31000	100	20000	3100	100	31000	5279			160	260	1.8E+06	34000	160	1.8E+06	458605		
Faecal Coliforms	cfu / 100 mL	-		250	2300	4800	710	110	320	710	5100	39000	280	31000	3100	110	39000	7307			@	@	@	@	@	@	@		
Aluminium	mg/L	-		0.06	0.04	0.07	0.05	0.03	0.03	0.07	0.04	0.11	0.01	0.09	0.1	0.01	0.11	0.06			@	@	@	@	@	@	@		
Copper	mg/L	-		<0.001*	0.001	0.002	0.001	0.001	<0.001*	<0.001*	<0.001*	0.002	<0.001*	0.002	0.003	<0.001*	0.003	0.002			@	@	@	@	@	@	@		
Chromium	mg/L	-		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*			@	@	@	@	@	@	@		
Lead	mg/L	-		<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*			@	@	@	@	@	@	@		
Zinc	mg/L	-		0.01	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	0.02	<0.01*	0.02	0.02	<0.01*	0.02	0.02			@	@	@	@	@	@	@		
Cadmium	mg/L	0.001-0.1 (0.001)		<0.0002*	<0.0002*	<0.0002*	<0.0002*	<0.0002*	<0.0002*	<0.0002*	<0.0002*	<0.0002*	<0.0002*	<0.0002*	0.0002	<0.0002*	0.0002	0.0002			@	@	@	@	@	@	@		
Sulphide as S2-	mg/L	1 (0.1-0.2)		<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*			@	@	@	@	@	@	@		
Nitrate as N	mg/L	20-50 (20-30)**		0.02	1.11	1.45	0.07	0.52	0.77	0.56	<0.01	1.85	0.02	1.02	1.55	<0.01	1.85	0.81			0.31	0.24	0.89	2.39	0.24	2.39	0.96		
Nitrite as N	mg/L	20-50 (20-30)**		0.01	0.13	0.04	0.02	0.09	0.1	0.08	0.02	0.12	0.02	0.23	0.34	0.01	0.34	0.10			<0.01	0.01	0.1	0.13	<0.01	0.13	0.08		

		Wet Season Data **													Dry Season Data ***													
Parameters	Unit	Effluent Discharge Std, mg/l #	WQO Criteria, mg/l #	Raw Data													Range		Average		Raw Data				Range		Average	
				23/09/2012	26/09/2012	29/09/2012	2/10/2012	4/10/2012	6/10/2012	8/10/2012	10/10/2012	12/10/2012	15/10/2012	17/10/2012	19/10/2012													
				18:58	15:10	10:08	11:11	10:05	9:14	10:17	10:51	9:44	9:28	9:57	9:48													
				WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2	WY2					
Salinity	g/L	-	4	0.2	0.2	0.2	0.4	0.4	0.2	0.8	1.3	0.2	0.9	0.2	0.3	0.2	1.3	0.4	0.2	0.2	0.5	0.4	0.2	0.5				
Water Flow	L/s	-	-	<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 *	1.9	<1.0 *	<1.0 *	<1.0 *					
Water Depth	m	-	-	0.1	<0.1 *	0.3	<0.1 *	<0.1 *	<0.1 *	<0.1 *	0.1	<0.1 *	<0.1 *	<0.1 *	<0.1 *	<0.1 *	0.3	0.2	0.1	0.2	<0.1 *	<0.1 *	<0.1 *					
Temperature	°C	30 (30)	-	28.6	29.9	25.2	28.2	29.1	27.5	26.9	26.5	23.5	26.2	26.4	25.2	23.5	29.9	26.9	21.5	17.9	13.6	14.8	13.6					
pH Value	-	6-10 (6-9)	6-9	6.9	7.9	8	7.1	7.3	7.2	7.8	7.3	7.1	7.4	7.2	7.4	6.9	8	7.4	7.4	8.2	7.6	7.5	7.4					
Dissolved Oxygen	mg/L	-	4	3	2.8	3.6	4.2	5.5	5.1	4	4.4	2.5	3.8	3.3	3.6	2.5	5.5	3.8	3.5	9.5	6.9	3.4	3.4					
Dissolved Oxygen - % Saturation	%	-	-	38.5	36.6	44	53.6	70.3	65	50.8	54.9	29.6	47.8	41.1	43.8	29.6	70.3	48.0	39.5	100	66.2	33.4	33.4					
Turbidity	NTU	-	-	30	14	40	20	16	33	20	23	33	28	19	27	14	40	25	8	57	3	5	3					
Biochemical Oxygen Demand	mg/L	20 (5-20)	5	5	6	5	14	8	11	7	11	7	11	13	14	5	14	9	<2	12	4	3	<2					
Chemical Oxygen Demand	mg/L	80 (20-80)	30	35	25	20	28	36	52	25	27	42	27	32	33	20	52	32	24	73	18	30	18					
Total Phosphorus	mg/L	5-10 (6-10)	-	0.7	0.9	0.5	0.8	0.8	0.5	0.5	0.5	0.8	0.7	0.8	1.2	0.5	1.2	0.7	@	@	@	@	@					
Reactive Phosphorus	mg/L	-	-	0.37	0.43	0.28	0.62	0.52	0.23	0.23	0.28	0.44	0.49	0.62	0.68	0.23	0.68	0.4	@	@	@	@	@					
Oil and grease	mg/L	10 (1)	-	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *					
Electrical Conductivity @ 25°C	µS/cm	-	-	453	398	397	735	407	334	1430	2290	468	1570	458	506	334	2290	787	@	@	@	@	@					
Suspended Solids (SS)	mg/L	30 (5-20)	20	38	21	59	74	25	24	18	16	33	14	10	17	10	74	29	8	59	2	<2 *	<2 *					
Total Kjeldahl Nitrogen	mg/L	-	-	6.4	8.2	3.5	9.2	7.1	5.7	6.1	5.8	4.5	8.6	6.7	9.9	3.5	9.9	6.8	6.8	3.4	17	12.6	3.4					
Ammonia nitrogen	mg/L	10-20 (1-2)	0.021	3.11	2.03	3.19	5.28	5.45	2.88	3.62	3.58	2.33	6.1	4.4	5.38	2.03	6.1	3.9	4.6	0.65	16.9	10.5	0.65					
Escherichia coli (E. Coli.)	cfu / 100 mL	1000 (1000)	1000	19000	91000	53000	72000	3.7E+06	3.1E+05	78000	54000	1100	1.2E+05	48000	52000	1100	3.7E+06	383175	27000	4800	9100	220	220					
Faecal Coliforms	cfu / 100 mL	-	-	28000	97000	65000	81000	6700000	440000	110000	69000	1700	130000	98000	59000	1700	6700000	656558	@	@	@	@	@					
Aluminium	mg/L	-	-	0.65	0.16	0.9	0.12	0.19	0.31	0.17	0.15	0.29	0.18	0.09	0.16	0.09	0.9	0.28	@	@	@	@	@					
Copper	mg/L	-	-	0.012	0.003	0.009	0.002	0.004	0.003	0.002	0.003	0.004	0.003	0.002	0.002	0.002	0.012	0.004	@	@	@	@	@					
Chromium	mg/L	-	-	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	@	@	@	@	@					
Lead	mg/L	-	-	0.01	0.002	0.012	0.002	0.003	0.004	0.002	0.002	0.006	0.003	0.001	0.002	0.001	0.012	0.004	@	@	@	@	@					
Zinc	mg/L	-	-	0.07	0.03	0.09	0.02	0.02	0.03	0.03	0.04	0.06	0.03	0.02	0.02	0.02	0.09	0.04	@	@	@	@	@					
Cadmium	mg/L	0.001-0.1 (0.001)	-	<0.0002 *	<0.0002 *	0.0002	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	0.0002	0.0002	@	@	@	@	@					
Sulphide as S2-	mg/L	1 (0.1-0.2)	-	<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 *	@	@	@	@	@					
Nitrate as N	mg/L	20-50 (20-30) **	-	5.43	0.66	0.76	0.39	0.39	0.3	0.32	0.41	0.35	0.57	0.55	0.43	0.3	5.43	0.88	0.14	0.04	1.45	1.08	0.04					
Nitrite as N	mg/L	20-50 (20-30) **	-	0.65	0.11	0.06	0.1	0.1	0.04	0.07	0.1	0.04	0.11	0.1	0.09	0.04	0.65	0.13	0.03	<0.01	0.34	0.27	0.03					

Wet Season Data **															Dry Season Data ***												
Parameters	Unit	Effluent Discharge Std, mg/l *	WQO Criteria, mg/l *	Raw Data												Range		Average		Raw Data				Range		Average	
				23/09/2012	26/09/2012	29/09/2012	2/10/2012	4/10/2012	6/10/2012	8/10/2012	10/10/2012	12/10/2012	15/10/2012	17/10/2012	19/10/2012					28/12/2012	3/1/2013	10/1/2013	17/01/2013				
				18:41	14:50	9:38	10:39	9:28	9:53	9:40	10:24	9:14	8:59	9:36	9:31					10:54	10:55	9:03	9:03				
				WY3	WY3	WY3	WY3	WY3	WY3	WY3	WY3	WY3	WY3	WY3	WY3	WY3			WY3	WY3	WY3	WY3			WY3	WY3	
Salinity	g/L	-		3.3	5.7	5.1	5.2	9.1	7.1	9.2	9.1	10.2	9.1	9.8	12.4	3.3	12.4	7.9	2	2.1	0.4	0.3	0.3	-2.1	1.2		
Water Flow	L/s	-		<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 *	<1.0 *	5	3.6	<1.0 *	-5	4		
Water Depth	m	-		0.2	0.6	0.5	<0.1 *	<0.1 *	<0.1 *	<0.1 *	0.1	0.4	<0.1 *	<0.1 *	0.2	<0.1 *	-0.6	0.3	0.2	0.2	0.1	0.1	0.1	-0.2	0.2		
Temperature	°C	30 (30)		27.6	29.5	24.1	26.6	26.9	25.5	27.1	25.3	23.8	24.4	24.8	24.4	23.8	-29.5	25.8	21.1	16.8	16	16.7	16	-21.1	17.7		
pH Value	-	6-10 (6-9)	6-9	7	7.2	7.4	7.1	7.1	7.2	7.5	7.1	7.1	7.2	7.2	7.2	7	7.5	7.2	7.7	7.3	7.8	7.4	7.3	-7.8	7.6		
Dissolved Oxygen	mg/L	-	4	4.7	3.8	1.3	3.2	3.5	4.2	5.8	5.4	1.5	4.2	3.9	5.1	1.3	-5.8	3.9	10.7	7.9	5.6	6	5.6	-10.7	7.6		
Dissolved Oxygen - % Saturation	%	-	-	61.3	52.1	15.4	41.6	44.9	53	76.8	69.4	18.9	53.1	49.7	65.5	15.4	-76.8	50.1	122	82.3	56.7	62.3	56.7	-122	80.8		
Turbidity	NTU	-		190	10	19	139	26	13	18	26	23	44	14	20	10	-190	45	48	27	27	51	27	-51	38		
Biochemical Oxygen Demand	mg/L	20 (5-20)	5	3	4	6	5	2	3	7	3	8	2	2	6	2	-8	4	8	5	41	14	5	-41	17		
Chemical Oxygen Demand	mg/L	80 (20-80)	30	67	16	42	57	34	32	29	31	33	11	53	44	11	-67	37	22	18	67	39	18	-67	37		
Total Phosphorus	mg/L	5-10 (8-10)		1.6	1.1	2.8	1.8	0.8	0.7	1	0.6	1	0.8	0.6	0.7	0.6	-2.8	1.1	@	@	@	@	@	@	@		
Reactive Phosphorus	mg/L	-		0.25	0.63	1.15	0.56	0.29	0.32	0.68	0.3	0.66	0.22	0.26	0.48	0.22	-1.15	0.5	@	@	@	@	@	@	@		
Oil and grease	mg/L	10 (1)		<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	-5 *	-5 *		
Electrical Conductivity @ 25°C	µS/cm	-		5550	9890	8880	8340	8440	11100	13500	13800	15200	13700	14700	17900	5550	-17900	11750	@	@	@	@	@	@	@		
Suspended Solids (SS)	mg/L	30 (5-20)	20	266	8	67	70	51	15	6	10	24	55	15	22	6	-266	51	55	20	22	38	20	-55	34		
Total Kjeldahl Nitrogen	mg/L	-		5.7	3	3.5	2.4	2.9	2.9	4.7	2	7.3	2	1.9	3	1.9	-7.3	3.4	1.9	3.5	14.9	7	1.9	-14.9	6.8		
Ammonia nitrogen	mg/L	10-20 (1-2)	0.021	1.4	0.27	0.26	1.23	1.48	1.65	2.03	0.97	1.46	0.87	1.5	0.88	0.26	-2.03	1.2	1	2.8	11.1	5.2	1	-11.1	5.0		
Escherichia coli (E. Coli.)	cfu / 100 mL	1000 (1000)	1000	3100	22000	1400	2100	31000	29000	120	9000	70	12000	2700	10000	70	-31000	10208	6100	13000	2.0E+06	150000	6100	-2000000	542275		
Faecal Coliforms	cfu / 100 mL	-		4000	33000	3400	7800	31000	31000	6900	17000	190	16000	4600	13000	190	-33000	13991	@	@	@	@	@	@	@		
Aluminium	mg/L	-		2.93	0.07	0.86	4.01	0.5	0.15	0.24	0.18	0.18	0.36	0.25	0.1	0.07	-4.01	0.82	@	@	@	@	@	@	@		
Copper	mg/L	-		0.018	0.003	0.008	0.02	0.006	0.003	0.007	0.004	0.004	0.006	0.005	0.005	0.003	-0.02	0.007	@	@	@	@	@	@	@		
Chromium	mg/L	-		<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	-0.01 *	<0.01 *	@	@	@	@	@	@	@		
Lead	mg/L	-		0.027	<0.001 *	0.006	0.03	0.004	0.001	0.002	0.001	0.002	0.004	0.002	<0.001	<0.001 *	-0.03	0.008	@	@	@	@	@	@	@		
Zinc	mg/L	-		0.11	2.76	0.04	0.12	0.03	0.02	0.03	0.04	0.04	0.04	0.03	0.03	0.02	-2.76	0.27	@	@	@	@	@	@	@		
Cadmium	mg/L	0.001-0.1 (0.001)		0.0002	0.0002	<0.0002 *	0.0003	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	0.0002	<0.0002 *	-0.0003	0.0002	@	@	@	@	@	@	@		
Sulphide as S2-	mg/L	1 (0.1-0.2)		<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 *	@	@	@	@	@	@	@		
Nitrate as N	mg/L	20-50 (20-30) **		0.11	0.15	0.02	0.16	0.23	0.21	0.3	0.15	0.42	0.16	0.27	0.53	0.02	-0.53	0.23	1.01	1.21	0.93	2.36	0.93	-2.36	1.38		
Nitrite as N	mg/L	20-50 (20-30) **		0.08	0.05	<0.01 *	0.12	0.2	0.14	0.13	0.07	0.22	0.14	0.25	0.21	<0.01 *	-0.25	0.15	0.12	0.2	0.1	0.13	0.1	-0.2	0.14		

		Wet Season Data **														Dry Season Data ***													
Parameters	Unit	Effluent Discharge Std, mg/l *	WQO Criteria, mg/l *	Raw Data														Range		Average		Raw Data				Range		Average	
				23/09/2012	26/09/2012	29/09/2012	2/10/2012	4/10/2012	6/10/2012	8/10/2012	10/10/2012	12/10/2012	15/10/2012	17/10/2012	19/10/2012														
				16:59	14:11	10:28	11:31	10:25	10:42	10:38	11:08	10:00	9:43	10:28	10:11														
				WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4					
				28/12/2012	3/1/2013	10/1/2013	17/01/2013																						
				11:34	11:51	8:40	8:49																						
				WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4	WY4						
Salinity	g/L	-		0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2						
Water Flow	L/s	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Water Depth	m	-		0.8	1.5	0.8	0.6	0.8	0.8	0.8	0.4	0.6	0.5	0.5	0.5	0.4	1.5	0.7	0.5	0.5	0.3	0.3	0.3						
Temperature	°C	30 (30)		30.7	30.4	28.2	28.5	28.5	28.7	28.8	28.2	27.3	27.7	27.7	25.2	25.2	30.7	28.3	17.8	17.2	15.3	16.7	15.3						
pH Value	-	6-10 (6-9)	6-9	6.8	8	7.8	6.6	6.9	6.6	8.2	6.8	6.8	7.1	6.9	6.9	6.6	8.2	7.1	7.3	6.8	8.4	8.8	6.8						
Disolved Oxygen	mg/L	-	4	7.4	6.1	5.9	6.8	7.5	6.4	6.1	6.2	6.4	5.6	5.7	6.1	5.6	7.5	6.4	8.2	8.5	8.6	9.2	8.2						
Disolved Oxygen - % Saturation	%	-	-	98.6	81.2	76.2	87.3	97.2	83.1	79.4	79.3	80.6	70.9	72.6	73.9	70.9	98.6	81.7	86.9	88.2	86	94.4	86						
Turbidity	NTU	-		21	7	23	21	33	29	77	48	71	37	22	32	7	77	35	22	16	28	33	16						
Biochemical Oxygen Demand	mg/L	20 (5-20)	5	3	<2 *	3	2	2	3	3	2	3	2	2	2	<2 *	3	2	6	<2 *	7	6	<2 *						
Chemical Oxygen Demand	mg/L	80 (20-80)	30	21	15	16	15	20	20	12	22	21	11	20	24	11	24	18	16	16	55	52	16						
Total Phosphorus	mg/L	5-10 (8-10)		<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 *	@	@	@	@	@						
Reactive Phosphorus	mg/L	-		<0.01 *	<0.01 *	0.02	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	0.02	0.02	@	@	@	@	@						
Oil and grease	mg/L	10 (1)		<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *						
Electrical Conductivity @ 25°C	µS/ cm	-		286	282	288	296	317	305	296	327	320	315	339	309	282	339	307	@	@	@	@	@						
Suspended Solids (SS)	mg/L	30 (5-20)	20	13	15	22	19	32	21	80	23	126	31	17	32	13	126	36	22	12	27	28	12						
Total Kjeldahl Nitrogen	mg/L	-		0.8	1.2	1	0.8	1.1	1	0.9	1	1.1	1	0.9	0.8	1.2	1.0	0.9	0.9	0.8	2.8	2.4	0.8						
Ammonia nitrogen	mg/L	10-20 (1-2)	0.021	0.14	0.14	0.1	0.21	0.11	0.11	0.09	0.09	0.11	0.1	<0.01	0.14	0.09	0.21	0.1	0.16	0.12	0.07	0.21	0.07						
Escherichia coli (E. Coli)	cfu / 100 mL	1000 (1000)	1000	180	150	180	1200	1300	3500	290	110	180	4500	290	170	110	4500	1004	15	180	3000	100	15						
Faecal Coliforms	cfu / 100 mL	-		210	350	260	1900	1600	4300	310	440	230	4500	380	180	180	4500	1222	@	@	@	@	@						
Aluminium	mg/L	-		0.26	0.34	0.43	0.47	0.42	0.49	1.03	0.46	0.48	0.43	0.34	0.53	0.26	1.03	0.47	@	@	@	@	@						
Copper	mg/L	-		0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.002	0.003	0.002	@	@	@	@	@						
Chromium	mg/L	-	Waste discharges shall not cause the toxins in water to produce significant toxic carcinogenic, mutagenic or teratogenic effects in humans, fish or any other aquatic organisms, with due regard to biologically cumulative effects in food chain and to toxicant interactions with each other. Waste discharges shall not cause a risk to any beneficial uses of the aquatic environment	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	@	@	@	@	@						
Lead	mg/L	-		0.002	0.002	0.002	0.002	0.002	0.003	0.004	0.002	0.003	0.004	0.002	0.003	0.002	0.004	0.003	@	@	@	@	@						
Zinc	mg/L	-		0.02	0.02	0.02	0.02	0.02	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.04	0.02	@	@	@	@	@						
Cadmium	mg/L	0.001-0.1 (0.001)		<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	@	@	@	@	@						
Sulphide as S2-	mg/L	1 (0.1-0.2)		<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 *	@	@	@	@	@						
Nitrate as N	mg/L	20-50 (20-30) **		0.06	0.1	0.09	0.1	0.1	0.06	0.06	0.07	0.06	0.03	0.04	0.04	0.03	0.1	0.07	0.3	0.33	<0.01 *	<0.01 *	<0.01 *						
Nitrite as N	mg/L	20-50 (20-30) **		<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	0.01	<0.01 *	<0.01 *	<0.01 *	0.01	<0.01 *	<0.01 *	<0.01 *	0.01	0.01	<0.01 *	0.02	<0.01 *	<0.01 *	<0.01 *						

		Wet Season Data **														Dry Season Data ***													
Parameters	Unit	Effluent Discharge Std, mg/l #	WQO Criteria, mg/l #	Raw Data														Range		Average		Raw Data				Range		Average	
				23/09/2012	26/09/2012	29/09/2012	2/10/2012	4/10/2012	6/10/2012	8/10/2012	10/10/2012	12/10/2012	15/10/2012	17/10/2012	19/10/2012														
				18:08	14:24	10:42	11:43	10:40	10:53	10:51	11:19	10:09	9:52	10:38	10:20	WYS	WYS	11:44	12:02	8:32	8:41	WYS	WYS	WYS	WYS				
				WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS	WYS						
Salinity	g/L	-		0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.7	0.7	0.7	0.9	1.4	0.5	1.4	0.7	2.6	2.6	2.3	2.6	2.3	2.6	2.5				
Water Flow	L/s	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Water Depth	m	-		0.8	1	0.5	0.6	0.6	0.3	0.6	0.6	0.5	0.5	0.5	0.5	0.3	1	0.6	0.5	0.3	0.3	0.3	0.3	0.3	0.4				
Temperature	°C	30 (30)		31	30.6	27.8	28.2	28.8	28.9	29.1	28	26.3	27	27.2	24.9	24.9	31	28.2	19.4	17.5	15.4	17.2	15.4	19.4	17.4				
pH Value	-	6-10 (6-9)	6-9	7.3	7.6	7.5	7.3	7.7	8.1	8.1	7.6	7.2	7.1	7.3	7.3	7.1	8.1	7.5	6.9	7.3	7.2	7.4	6.9	7.4	7.2				
Dissolved Oxygen	mg/L	-	4	5.6	2.4	2.6	6.7	8.6	8.2	11	3.7	3.4	3.1	4	3.8	2.4	11	5.3	7.1	7.1	7.1	7	7	7.1	7.1				
Dissolved Oxygen - % Saturation	%	-	-	75.1	31.5	33.6	85.7	112	17.4	144	47	42.3	39.6	50.9	46.7	17.4	144	60.5	78.1	75.4	71.9	74	71.9	78.1	74.9				
Turbidity	NTU	-	-	36	24	26	22	33	30	55	62	32	7	28	24	7	62	32	6	3	5	7	3	7	5				
Biochemical Oxygen Demand	mg/L	20 (5-20)	5	3	2	2	3	11	10	6	2	2	<2	<2	<2	2	11	5	<2 *	2	<2 *	2	<2 *	2	2				
Chemical Oxygen Demand	mg/L	80 (20-80)	30	31	25	25	42	33	44	27	28	22	12	26	23	12	44	28	13	15	19	17	13	19	16				
Total Phosphorus	mg/L	5-10 (8-10)		0.3	0.5	0.6	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.6	0.4	@	@	@	@	@	@	@				
Reactive Phosphorus	mg/L	-		0.05	0.1	0.55	0.08	0.06	0.06	0.06	0.11	0.14	0.1	0.08	0.05	0.05	0.55	0.1	@	@	@	@	@	@	@				
Oil and grease	mg/L	10 (1)		<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *	<5 *				
Electrical Conductivity @ 25°C	µS/cm	-		914	914	993	1100	1110	1140	1130	1190	1210	1260	1590	2300	914	2300	1238	@	@	@	@	@	@	@				
Suspended Solids (SS)	mg/L	30 (5-20)	20	16	10	8	10	14	13	11	10	7	7	8	7	7	16	10	<2 *	6	6	5	<2 *	6	6				
Total Kjeldahl Nitrogen	mg/L	-		2.4	3.2	4.7	3.8	4.1	3	2.9	2.5	2.6	2.7	2.8	3.2	2.4	4.7	3.2	0.9	0.9	0.9	1	0.9	1	0.9				
Ammonia nitrogen	mg/L	10-20 (1-2)	0.021	1.23	2.32	3.07	2.98	1.83	1.15	0.96	1.47	1.83	2.28	2.46	2.35	0.96	3.07	2.0	0.16	0.13	0.12	0.1	0.1	0.16	0.1				
Escherichia coli (E. Coli.)	cfu / 100 mL	1000 (1000)	1000	370	380	100	290	360	30	130	210	70	31000	240	130	30	31000	2776	20	100	140	16	18	140	70				
Faecal Coliforms	cfu / 100 mL	-		410	670	120	370	400	40	170	270	270	70000	770	170	40	70000	6138	@	@	@	@	@	@	@				
Aluminium	mg/L	-		0.07	0.02	0.03	0.03	0.08	0.03	0.03	0.07	0.03	0.04	0.05	0.06	0.02	0.08	0.05	@	@	@	@	@	@	@				
Copper	mg/L	-		0.002	<0.001 *	<0.001 *	<0.001 *	0.003	<0.001 *	<0.001 *	0.003	0.002	0.002	<0.001 *	0.001	<0.001 *	0.003	0.002	@	@	@	@	@	@	@				
Chromium	mg/L	-		<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	@	@	@	@	@	@	@				
Lead	mg/L	-		<0.001 *	<0.001 *	<0.001 *	<0.001 *	<0.001 *	<0.001 *	<0.001 *	<0.001 *	<0.001 *	<0.001 *	<0.001 *	0.001	<0.001 *	0.001	0.001	@	@	@	@	@	@	@				
Zinc	mg/L	-		0.01	<0.01 *	<0.01 *	<0.01 *	0.01	<0.01 *	<0.01 *	0.02	<0.01 *	0.01	0.01	0.01	<0.01 *	0.02	0.01	@	@	@	@	@	@	@				
Cadmium	mg/L	0.001-0.1 (0.001)		<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	<0.0002 *	@	@	@	@	@	@	@				
Sulphide as S2-	mg/L	1 (0.1-0.2)		<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 *	@	@	@	@	@	@	@				
Nitrate as N	mg/L	20-50 (20-30) **		0.04	0.02	0.01	0.02	0.03	0.02	0.02	0.01	0.02	0.02	0.03	0.11	0.01	0.11	0.03	0.09	0.06	0.08	0.09	0.06	0.09	0.08				
Nitrite as N	mg/L	20-50 (20-30) **		0.01	<0.01 *	<0.01 *	<0.01 *	<0.01 *	<0.01 *	0.02	0.02	<0.01 *	<0.01 *	0.01	0.02	<0.01 *	0.02	0.02	0.01	0.02	<0.01 *	0.01	<0.01 *	0.02	0.01				

Remark:

* denotes that the measured concentration is below the laboratory's reporting limit

** Effluent discharge standard for *Nitrate + nitrite nitrogen*

Effluent discharge standard for Group D inland water. Values shown in blanket are the effluent discharge standards for Group C inland water

Water samplings and testings were conducted by a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd.

Water samplings and testings were conducted by a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd. Testing parameters that were identified to be in poor condition during the water sampling in September 2012 and October 2012 as well as the key WQO parameters stated in Section 5.2.2 of the EIA report, have been selected for laboratory testing during the subsequent sampling in December 2012 and January 2013.

@ Parameter not tested.