

Appendix 4-4

Model Results at Indicator Points for 2012 – Dry Season

Results at Indicator Points - Normal Operation - 2012 (Dry Season)

Note: Shaded and bolded - value exceeded the WQO

(I) WSD Flushing Water Intakes and Cooling Water Intakes

ID	Indicator Point	Scenario	Mid-depth							
			Min DO	Max UIA	Max NH3-N	Max E.coli	Max SS	Max BOD5		
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)		
WSD Flushing Water Intakes										
Assessment Criteria										
WSD1	Near Butterfly Beach	without the Project (1a)	5.30	0.004	0.078	860	7.70	0.68		
		with the Project (1b)	5.31	0.004	0.078	279	7.65	0.68		
		Sensitivity Test - Higher Treatment Level (1c)	5.34	0.004	0.072	276	7.61	0.66		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.31	0.004	0.078	940	7.65	0.68		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.31	0.004	0.082	2529	7.65	0.68		
		Treated Effluent at Emergency Bypass for 12 days (6)	5.29	0.004	0.085	285	7.65	0.68		
WSD2	Near LRT Terminus	without the Project (1a)	5.30	0.004	0.075	3104	7.54	0.70		
		with the Project (1b)	5.31	0.004	0.075	2992	7.49	0.70		
		Sensitivity Test - Higher Treatment Level (1c)	5.34	0.004	0.073	2990	7.45	0.68		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.31	0.004	0.075	2992	7.51	0.70		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.31	0.004	0.077	2992	7.53	0.70		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.30	0.004	0.079	3012	7.51	0.70		
WSD3	Near Hong Kong Garden	without the Project (1a)	5.25	0.006	0.107	433	6.45	0.54		
		with the Project (1b)	5.25	0.006	0.107	138	6.42	0.53		
		Sensitivity Test - Higher Treatment Level (1c)	5.27	0.006	0.107	134	6.38	0.52		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.25	0.006	0.107	235	6.42	0.53		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.25	0.006	0.107	374	6.42	0.53		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.25	0.006	0.107	149	6.42	0.53		
WSD4	Tsuen Wan	without the Project (1a)	5.02	0.005	0.099	2556	5.83	0.56		
		with the Project (1b)	5.02	0.005	0.099	2556	5.82	0.56		
		Sensitivity Test - Higher Treatment Level (1c)	5.04	0.005	0.099	2556	5.80	0.56		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.02	0.005	0.099	2556	5.82	0.56		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.02	0.005	0.099	2556	5.82	0.56		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.02	0.005	0.099	2556	5.82	0.56		
WSD5	Tsing Yi	without the Project (1a)	5.00	0.006	0.114	5263	5.87	0.63		
		with the Project (1b)	5.00	0.006	0.114	5263	5.85	0.63		
		Sensitivity Test - Higher Treatment Level (1c)	5.01	0.006	0.113	5263	5.84	0.63		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.00	0.006	0.114	5263	5.85	0.63		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.00	0.006	0.114	5263	5.85	0.63		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.00	0.006	0.115	5263	5.85	0.63		
WSD6	Cheung Sha Wan	without the Project (1a)	3.95	0.018	0.337	14231	8.23	2.24		
		with the Project (1b)	3.95	0.018	0.337	14231	8.23	2.24		
		Sensitivity Test - Higher Treatment Level (1c)	3.95	0.018	0.337	14231	8.23	2.24		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	3.95	0.018	0.337	14231	8.23	2.24		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	3.95	0.018	0.337	14231	8.23	2.24		
		Treated Effluent at Emergency Bypass for 12 days (5)	3.95	0.018	0.337	14231	8.28	2.26		
WSD7	Kowloon South	without the Project (1a)	5.28	0.007	0.128	7303	5.51	0.79		
		with the Project (1b)	5.28	0.007	0.128	7303	5.51	0.79		
		Sensitivity Test - Higher Treatment Level (1c)	5.28	0.007	0.128	7303	5.51	0.79		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.28	0.007	0.128	7303	5.51	0.79		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.28	0.007	0.128	7303	5.51	0.79		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.27	0.007	0.129	7303	5.51	0.80		
WSD8	Yau Ma Tei	without the Project (1a)	5.29	0.007	0.119	3078	5.36	0.62		
		with the Project (1b)	5.29	0.007	0.119	3078	5.36	0.62		
		Sensitivity Test - Higher Treatment Level (1c)	5.29	0.007	0.119	3078	5.36	0.62		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.29	0.007	0.119	3078	5.36	0.62		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.29	0.007	0.119	3078	5.36	0.62		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.28	0.007	0.120	3078	5.36	0.62		
WSD9	Tai Wan	without the Project (1a)	5.53	0.009	0.152	3714	5.08	0.52		
		with the Project (1b)	5.53	0.009	0.152	3714	5.08	0.52		
		Sensitivity Test - Higher Treatment Level (1c)	5.53	0.009	0.152	3714	5.08	0.52		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.53	0.009	0.152	3714	5.08	0.52		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.53	0.009	0.152	3714	5.08	0.52		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.51	0.009	0.152	3714	5.08	0.52		
WSD10	Cha Kwo Ling	without the Project (1a)	5.81	0.011	0.195	2054	4.86	0.43		
		with the Project (1b)	5.81	0.011	0.195	2054	4.86	0.43		
		Sensitivity Test - Higher Treatment Level (1c)	5.81	0.011	0.195	2054	4.86	0.43		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.81	0.011	0.195	2054	4.86	0.43		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.81	0.011	0.195	2054	4.86	0.43		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.79	0.011	0.195	2054	4.86	0.43		

ID	Indicator Point	Scenario	Mid-depth					
			Min DO	Max UIA	Max NH3-N	Max E.coli	Max SS	Max BOD5
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
WSD11	Yau Tong	without the Project (1a)	5.84	0.010	0.179	1052	4.87	0.41
		with the Project (1b)	5.84	0.010	0.179	1052	4.87	0.41
		Sensitivity Test - Higher Treatment Level (1c)	5.84	0.010	0.179	1052	4.87	0.41
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.84	0.010	0.179	1052	4.87	0.41
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.84	0.010	0.179	1052	4.87	0.41
		Treated Effluent at Emergency Bypass for 12 days (5)	5.81	0.010	0.179	1052	4.87	0.41
WSD12	Tseung Kwan O	without the Project (1a)	6.28	0.003	0.048	1811	4.26	0.41
		with the Project (1b)	6.28	0.003	0.048	1811	4.26	0.41
		Sensitivity Test - Higher Treatment Level (1c)	6.28	0.003	0.048	1811	4.26	0.41
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.28	0.003	0.048	1811	4.26	0.41
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.28	0.003	0.048	1811	4.26	0.41
		Treated Effluent at Emergency Bypass for 12 days (5)	6.27	0.003	0.048	1811	4.26	0.41
WSD13	Siu Sai Wan	without the Project (1a)	6.19	0.004	0.064	9596	4.47	0.56
		with the Project (1b)	6.19	0.004	0.064	9596	4.47	0.56
		Sensitivity Test - Higher Treatment Level (1c)	6.19	0.004	0.064	9596	4.47	0.56
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.19	0.004	0.064	9596	4.47	0.56
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.19	0.004	0.064	9596	4.47	0.56
		Treated Effluent at Emergency Bypass for 12 days (5)	6.18	0.004	0.064	9596	4.47	0.56
WSD14	Heng Fa Chuen	without the Project (1a)	5.87	0.005	0.088	5445	4.86	0.53
		with the Project (1b)	5.87	0.005	0.088	5445	4.86	0.53
		Sensitivity Test - Higher Treatment Level (1c)	5.87	0.005	0.088	5445	4.86	0.53
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.87	0.005	0.088	5445	4.86	0.53
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.87	0.005	0.088	5445	4.86	0.53
		Treated Effluent at Emergency Bypass for 12 days (5)	5.84	0.005	0.089	5445	4.86	0.53
WSD15	Sai Wan Ho	without the Project (1a)	5.73	0.005	0.094	6847	4.99	0.56
		with the Project (1b)	5.73	0.005	0.094	6847	4.99	0.56
		Sensitivity Test - Higher Treatment Level (1c)	5.73	0.005	0.094	6847	4.99	0.56
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.73	0.005	0.094	6847	4.99	0.56
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.73	0.005	0.094	6847	4.99	0.56
		Treated Effluent at Emergency Bypass for 12 days (5)	5.71	0.005	0.094	6847	4.99	0.56
WSD16	Quarry Bay	without the Project (1a)	5.71	0.006	0.106	17881	5.11	0.70
		with the Project (1b)	5.71	0.006	0.106	17881	5.11	0.70
		Sensitivity Test - Higher Treatment Level (1c)	5.71	0.006	0.106	17881	5.11	0.70
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.71	0.006	0.106	17881	5.11	0.70
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.71	0.006	0.106	17881	5.11	0.70
		Treated Effluent at Emergency Bypass for 12 days (5)	5.70	0.006	0.107	17881	5.11	0.70
WSD17	North Point	without the Project (1a)	5.65	0.006	0.108	7106	5.13	0.66
		with the Project (1b)	5.65	0.006	0.108	7106	5.13	0.66
		Sensitivity Test - Higher Treatment Level (1c)	5.65	0.006	0.108	7106	5.13	0.66
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.65	0.006	0.108	7106	5.13	0.66
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.65	0.006	0.108	7106	5.13	0.66
		Treated Effluent at Emergency Bypass for 12 days (5)	5.64	0.006	0.109	7106	5.13	0.66
WSD18	Central Water Front	without the Project (1a)	5.19	0.010	0.182	8647	5.49	0.81
		with the Project (1b)	5.19	0.010	0.182	8647	5.49	0.81
		Sensitivity Test - Higher Treatment Level (1c)	5.20	0.010	0.182	8647	5.49	0.81
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.19	0.010	0.182	8647	5.49	0.81
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.19	0.010	0.182	8647	5.49	0.81
		Treated Effluent at Emergency Bypass for 12 days (5)	5.16	0.010	0.184	8647	5.49	0.81
WSD19	Sheung Wan	without the Project (1a)	5.17	0.011	0.188	12310	5.56	0.86
		with the Project (1b)	5.17	0.011	0.188	12310	5.56	0.86
		Sensitivity Test - Higher Treatment Level (1c)	5.18	0.011	0.188	12310	5.55	0.86
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.17	0.011	0.188	12310	5.56	0.86
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.17	0.011	0.188	12310	5.56	0.86
		Treated Effluent at Emergency Bypass for 12 days (5)	5.15	0.011	0.190	12310	5.56	0.86
WSD20	Kennedy Town	without the Project (1a)	5.18	0.009	0.173	570	5.40	0.66
		with the Project (1b)	5.19	0.009	0.173	569	5.40	0.66
		Sensitivity Test - Higher Treatment Level (1c)	5.19	0.009	0.172	569	5.39	0.66
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.19	0.009	0.173	569	5.40	0.66
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.19	0.009	0.173	569	5.40	0.66
		Treated Effluent at Emergency Bypass for 12 days (5)	5.16	0.009	0.173	569	5.40	0.66
WSD21	Ap Lei Chau	without the Project (1a)	5.82	0.003	0.061	5330	4.51	0.30
		with the Project (1b)	5.82	0.003	0.061	5330	4.51	0.30
		Sensitivity Test - Higher Treatment Level (1c)	5.83	0.003	0.060	5330	4.51	0.30
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.82	0.003	0.061	5330	4.51	0.30
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.82	0.003	0.061	5330	4.51	0.30
		Treated Effluent at Emergency Bypass for 12 days (5)	5.80	0.003	0.061	5330	4.51	0.30

ID	Indicator Point	Scenario	Mid-depth							
			Min DO	Max UIA	Max NH3-N	Max E.coli	Max SS	Max BOD5		
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)		
Cooling Water Intakes										
Assessment Criteria										
C1	CLP Black Point Power Station	without the Project (1a)	5.30	0.008	0.160	825	13.18	1.35		
		with the Project (1b)	5.32	0.008	0.160	681	13.15	1.35		
		Sensitivity Test - Higher Treatment Level (1c)	5.39	0.008	0.156	678	13.12	1.35		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.32	0.008	0.160	681	13.15	1.35		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.32	0.008	0.160	681	13.15	1.35		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.30	0.008	0.161	684	13.15	1.35		
C2	Castle Peak Power Station	without the Project (1a)	5.30	0.006	0.110	1341	10.59	0.97		
		with the Project (1b)	5.31	0.006	0.110	588	10.56	0.97		
		Sensitivity Test - Higher Treatment Level (1c)	5.34	0.005	0.106	583	10.52	0.95		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.31	0.006	0.110	732	10.56	0.97		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.31	0.006	0.110	1847	10.56	0.97		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.28	0.006	0.111	597	10.56	0.97		
C3	Castle Peak Power Station	without the Project (1a)	5.29	0.005	0.107	1318	10.33	0.94		
		with the Project (1b)	5.30	0.005	0.107	428	10.29	0.94		
		Sensitivity Test - Higher Treatment Level (1c)	5.34	0.005	0.102	423	10.25	0.93		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.30	0.005	0.107	804	10.29	0.94		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.30	0.005	0.107	2213	10.29	0.94		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.28	0.006	0.110	436	10.29	0.94		
C4	China Cement Plant	without the Project (1a)	5.30	0.005	0.105	1535	10.15	0.93		
		with the Project (1b)	5.31	0.005	0.105	322	10.11	0.93		
		Sensitivity Test - Higher Treatment Level (1c)	5.34	0.005	0.101	316	10.07	0.92		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.31	0.005	0.105	907	10.11	0.93		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.31	0.005	0.105	4079	10.11	0.93		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.29	0.006	0.116	324	10.11	0.93		
C5	Shui Wing Steel Mill	without the Project (1a)	5.30	0.005	0.105	1610	10.15	0.93		
		with the Project (1b)	5.31	0.005	0.105	315	10.12	0.93		
		Sensitivity Test - Higher Treatment Level (1c)	5.34	0.005	0.101	310	10.08	0.92		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.31	0.005	0.105	975	10.12	0.93		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.31	0.005	0.105	5282	10.12	0.93		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.29	0.006	0.119	335	10.12	0.93		
C6	Tuen Mun	without the Project (1a)	5.30	0.004	0.077	1702	7.49	0.69		
		with the Project (1b)	5.30	0.004	0.077	1629	7.45	0.69		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	0.004	0.071	1627	7.41	0.67		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.30	0.004	0.077	1667	7.46	0.69		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.30	0.004	0.080	2242	7.48	0.69		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.29	0.004	0.084	1641	7.46	0.69		
C7	Airport 1	without the Project (1a)	5.52	0.004	0.079	308	8.99	0.77		
		with the Project (1b)	5.53	0.004	0.079	263	8.95	0.77		
		Sensitivity Test - Higher Treatment Level (1c)	5.57	0.004	0.074	262	8.92	0.76		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.53	0.004	0.079	263	8.96	0.77		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.53	0.004	0.079	263	8.95	0.77		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.53	0.004	0.078	262	8.95	0.77		
C8	Airport 2	without the Project (1a)	5.81	0.003	0.058	30	8.42	0.88		
		with the Project (1b)	5.82	0.003	0.058	27	8.39	0.88		
		Sensitivity Test - Higher Treatment Level (1c)	5.87	0.003	0.056	26	8.36	0.88		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.82	0.003	0.058	27	8.39	0.88		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.82	0.003	0.058	27	8.39	0.88		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.82	0.003	0.057	27	8.39	0.88		
C9	Airport 3	without the Project (1a)	6.86	0.003	0.053	406	9.21	1.17		
		with the Project (1b)	6.87	0.003	0.053	406	9.17	1.17		
		Sensitivity Test - Higher Treatment Level (1c)	6.93	0.003	0.053	406	9.14	1.17		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.87	0.003	0.053	406	9.17	1.17		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.87	0.003	0.053	406	9.17	1.17		
		Treated Effluent at Emergency Bypass for 12 days (5)	6.87	0.003	0.053	406	9.22	1.19		
C10	Airport 4	without the Project (1a)	6.55	0.003	0.053	164	9.21	1.18		
		with the Project (1b)	6.56	0.003	0.053	164	9.18	1.18		
		Sensitivity Test - Higher Treatment Level (1c)	6.60	0.003	0.053	164	9.15	1.18		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.56	0.003	0.053	164	9.18	1.18		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.56	0.003	0.053	164	9.18	1.18		
		Treated Effluent at Emergency Bypass for 12 days (5)	6.56	0.003	0.053	164	9.23	1.20		
C11	Tsuen Wan	without the Project (1a)	5.02	0.005	0.098	1801	5.81	0.55		
		with the Project (1b)	5.02	0.005	0.098	1801	5.80	0.55		
		Sensitivity Test - Higher Treatment Level (1c)	5.04	0.005	0.097	1801	5.79	0.55		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.02	0.005	0.098	1801	5.80	0.55		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.02	0.005	0.098	1801	5.80	0.55		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.02	0.005	0.098	1801	5.80	0.55		

ID	Indicator Point	Scenario	Mid-depth					
			Min DO	Max UIA	Max NH3-N	Max <i>E.coli</i>	Max SS	Max BOD5
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
C12	MTRC Tsing Yi Station	without the Project (1a)	5.00	0.006	0.114	5263	5.87	0.63
		with the Project (1b)	5.00	0.006	0.114	5263	5.85	0.63
		Sensitivity Test - Higher Treatment Level (1c)	5.01	0.006	0.113	5263	5.84	0.63
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.00	0.006	0.114	5263	5.85	0.63
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.00	0.006	0.114	5263	5.85	0.63
		Treated Effluent at Emergency Bypass for 12 days (5)	5.00	0.006	0.115	5263	5.85	0.63
C13	Tsing Yi Power Station	without the Project (1a)	4.98	0.015	0.267	1020	5.73	1.02
		with the Project (1b)	4.98	0.015	0.267	1020	5.73	1.02
		Sensitivity Test - Higher Treatment Level (1c)	4.99	0.015	0.267	1020	5.72	1.02
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	4.98	0.015	0.267	1020	5.73	1.02
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	4.98	0.015	0.267	1020	5.73	1.02
		Treated Effluent at Emergency Bypass for 12 days (5)	4.98	0.015	0.267	1020	5.73	1.02

Remarks:

N/A: Not Available

Results at Indicator Points - Normal Operation - 2012 (Dry Season)

Note: Shaded and bolded - value exceeded the WQO

(II) Fish Culture Zones

ID	Indicator Point	Scenario	Surface Mean			90 percentile Bottom DO	90 percentile DA DO	DA Ecoli	DA UIA	DA TIN							
			DO (mg/L)	SS (mg/L)	NH4 (mg/L)												
			(mg/L)	(mg/L)	(mg/L)												
Fish Culture Zones																	
WQO (for Western Buffer WCZ)																	
F1	Ma Wan North	without the Project (1a)	5.58	5.46	0.07	5.33	5.33	29	0.004	0.34							
		with the Project (1b)	5.59	5.44	0.07	5.33	5.33	14	0.004	0.34							
		Sensitivity Test - Higher Treatment Level (1c)	5.61	5.43	0.07	5.33	5.33	14	0.004	0.34							
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.59	5.44	0.07	5.33	5.33	15	0.004	0.34							
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.59	5.44	0.07	5.33	5.33	15	0.004	0.34							
		Treated Effluent at Emergency Bypass for 12 days (5)	5.58	5.43	0.07	5.33	5.33	14	0.004	0.34							
F2	Ma Wan North	without the Project (1a)	5.60	5.35	0.07	5.33	5.33	21	0.004	0.33							
		with the Project (1b)	5.60	5.33	0.07	5.33	5.33	11	0.004	0.33							
		Sensitivity Test - Higher Treatment Level (1c)	5.63	5.32	0.07	5.33	5.33	11	0.004	0.33							
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.60	5.33	0.07	5.33	5.33	11	0.004	0.33							
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.60	5.33	0.07	5.33	5.33	11	0.004	0.33							
		Treated Effluent at Emergency Bypass for 12 days (5)	5.60	5.32	0.07	5.33	5.33	11	0.004	0.33							

DA = Depth Average

N/A = Not Available

(III) Others

ID	Indicator Point	Scenario	90 percentile DA DO	Mean Depth-averaged Results					90 percentile Bottom DO	Max. Sedimentation Rate						
				DO (mg/L)	UIA (mg/L)	TIN (mg/L)	E.coli (no./100mL)	SS (mg/L)								
				(mg/L)	(mg/L)	(mg/L)	(mg/L)	(no./100mL)								
Artificial Reefs																
WQO (for North Western WCZ)																
AR1	Airport	without the Project (1a)	5.35	5.88	0.003	0.42	47	7.46	0.65	5.34	5.49					
		with the Project (1b)	5.35	5.88	0.003	0.42	29	7.43	0.65	5.35	5.46					
		Sensitivity Test - Higher Treatment Level (1c)	5.37	5.93	0.003	0.41	28	7.40	0.64	5.36	5.43					
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.35	5.88	0.003	0.42	29	7.43	0.65	5.35	5.46					
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.35	5.88	0.003	0.42	29	7.43	0.65	5.35	5.46					
		Treated Effluent at Emergency Bypass for 12 days (5)	5.35	5.89	0.003	0.42	28	7.42	0.65	5.34	5.46					
AR2	Sha Chau and Lung Kwu Chau	without the Project (1a)	5.34	5.83	0.004	0.49	175	8.78	0.76	5.34	6.12					
		with the Project (1b)	5.34	5.84	0.004	0.49	128	8.75	0.76	5.34	6.08					
		Sensitivity Test - Higher Treatment Level (1c)	5.35	5.89	0.004	0.48	127	8.71	0.74	5.34	6.04					
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.34	5.84	0.004	0.49	129	8.75	0.76	5.34	6.08					
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.34	5.84	0.004	0.49	129	8.75	0.76	5.34	6.08					
		Treated Effluent at Emergency Bypass for 12 days (5)	5.34	5.84	0.004	0.49	128	8.74	0.75	5.34	6.07					
Gazetted Beaches																
WQO (for North Western WCZ)																
B1	Butterfly	without the Project (1a)	5.33	5.57	0.004	0.39	438	6.41	0.52	5.30	3.67					
		with the Project (1b)	5.33	5.58	0.004	0.39	222	6.38	0.52	5.31	3.64					
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.63	0.003	0.39	213	6.35	0.51	5.32	3.61					
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.58	0.004	0.39	232	6.38	0.52	5.31	3.64					
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.58	0.004	0.39	237	6.38	0.52	5.31	3.64					
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.57	0.004	0.40	229	6.38	0.53	5.31	3.65					

ID	Indicator Point	Scenario	90 percentile	Mean Depth-averaged Results						90 percentile	Max. Sedimentation Rate	
				DA DO (mg/L)	DO (mg/L)	UIA (mg/L)	TIN (mg/L)	E.coli (no./100mL)	SS (mg/L)	BOD5 (mg/L)	Bottom DO (mg/L)	(g/m ² /d)
			Bottom DO (mg/L)	(g/m ² /d)								
B2	Castle Peak	without the Project (1a)	6.11	6.72	0.003	0.32	69	8.70	1.10	5.91	0.00	
		with the Project (1b)	6.11	6.72	0.003	0.32	67	8.66	1.10	5.93	0.00	
		Sensitivity Test - Higher Treatment Level (1c)	6.15	6.77	0.003	0.31	67	8.63	1.10	6.00	0.00	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.11	6.72	0.003	0.32	67	8.67	1.10	5.92	0.00	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.11	6.72	0.003	0.32	67	8.67	1.10	5.92	0.00	
		Treated Effluent at Emergency Bypass for 12 days (5)	6.13	6.74	0.003	0.32	66	8.69	1.11	5.95	0.00	
B3	Kadoorie	without the Project (1a)	6.03	6.28	0.003	0.35	297	7.36	0.80	5.54	0.10	
		with the Project (1b)	6.03	6.29	0.003	0.35	282	7.33	0.80	5.55	0.10	
		Sensitivity Test - Higher Treatment Level (1c)	6.05	6.34	0.003	0.34	281	7.30	0.80	5.59	0.10	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.03	6.29	0.003	0.35	283	7.33	0.80	5.55	0.10	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.03	6.29	0.003	0.35	284	7.33	0.80	5.55	0.10	
		Treated Effluent at Emergency Bypass for 12 days (5)	6.03	6.29	0.003	0.35	281	7.34	0.81	5.55	0.10	
B4	Cafeteria Old	without the Project (1a)	5.33	5.81	0.003	0.37	774	6.83	0.65	5.31	0.00	
		with the Project (1b)	5.33	5.82	0.003	0.37	743	6.80	0.65	5.32	0.00	
		Sensitivity Test - Higher Treatment Level (1c)	5.34	5.87	0.003	0.37	742	6.77	0.64	5.33	0.00	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.82	0.003	0.37	746	6.81	0.65	5.32	0.00	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.82	0.003	0.37	749	6.81	0.65	5.32	0.00	
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.82	0.003	0.38	741	6.80	0.65	5.32	0.00	
B5	Cafeteria New	without the Project (1a)	5.33	5.81	0.003	0.37	774	6.83	0.65	5.31	0.00	
		with the Project (1b)	5.33	5.82	0.003	0.37	743	6.80	0.65	5.32	0.00	
		Sensitivity Test - Higher Treatment Level (1c)	5.34	5.87	0.003	0.37	742	6.77	0.64	5.33	0.00	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.82	0.003	0.37	746	6.81	0.65	5.32	0.00	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.82	0.003	0.37	749	6.81	0.65	5.32	0.00	
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.82	0.003	0.38	741	6.80	0.65	5.32	0.00	
B6	Golden Beach	without the Project (1a)	5.33	5.71	0.003	0.38	1601	6.62	0.64	5.33	0.00	
		with the Project (1b)	5.33	5.72	0.003	0.38	1555	6.59	0.64	5.33	0.00	
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.77	0.003	0.38	1554	6.56	0.63	5.33	0.00	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.72	0.003	0.38	1559	6.59	0.64	5.33	0.00	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.72	0.003	0.38	1564	6.59	0.64	5.33	0.00	
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.72	0.003	0.39	1550	6.58	0.64	5.33	0.00	
B7	Anglers'	without the Project (1a)	5.32	5.44	0.005	0.35	128	5.35	0.40	5.30	4.48	
		with the Project (1b)	5.32	5.44	0.005	0.35	107	5.33	0.40	5.31	4.45	
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.47	0.004	0.35	107	5.32	0.40	5.32	4.43	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.32	5.44	0.005	0.35	108	5.33	0.40	5.31	4.45	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.32	5.44	0.005	0.35	109	5.33	0.40	5.31	4.45	
		Treated Effluent at Emergency Bypass for 12 days (5)	5.32	5.44	0.005	0.35	107	5.32	0.40	5.31	4.45	
WQO (for Western Buffer WCZ)			≥4	N/A	≤0.021	≤0.4	≤180	N/A	N/A	≥2	N/A	
B8	Gemini	without the Project (1a)	5.32	5.44	0.005	0.35	81	5.32	0.40	5.30	4.27	
		with the Project (1b)	5.32	5.44	0.005	0.35	64	5.31	0.40	5.30	4.26	
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.46	0.004	0.34	63	5.30	0.40	5.32	4.24	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.32	5.44	0.005	0.35	65	5.31	0.40	5.30	4.26	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.32	5.44	0.005	0.35	65	5.31	0.40	5.30	4.26	
		Treated Effluent at Emergency Bypass for 12 days (5)	5.32	5.43	0.005	0.35	64	5.30	0.40	5.30	4.26	
B9	Hoi Mei Wan	without the Project (1a)	5.31	5.43	0.005	0.35	64	5.31	0.40	5.28	3.99	
		with the Project (1b)	5.31	5.44	0.005	0.35	48	5.30	0.40	5.28	3.98	
		Sensitivity Test - Higher Treatment Level (1c)	5.32	5.46	0.005	0.35	47	5.29	0.40	5.31	3.97	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.31	5.44	0.005	0.35	49	5.30	0.40	5.28	3.98	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.31	5.44	0.005	0.35	49	5.30	0.40	5.28	3.98	
		Treated Effluent at Emergency Bypass for 12 days (5)	5.31	5.43	0.005	0.35	48	5.28	0.40	5.28	3.98	
B10	Casam	without the Project (1a)	5.29	5.42	0.004	0.35	109	5.29	0.40	5.15	4.51	
		with the Project (1b)	5.30	5.43	0.004	0.35	95	5.28	0.40	5.18	4.49	
		Sensitivity Test - Higher Treatment Level (1c)	5.31	5.45	0.004	0.35	95	5.27	0.40	5.28	4.47	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.29	5.43	0.004	0.35	96	5.28	0.40	5.18	4.49	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.29	5.42	0.004	0.35	96	5.28	0.40	5.18	4.49	
		Treated Effluent at Emergency Bypass for 12 days (5)	5.29	5.42	0.004	0.35	95	5.27	0.39	5.16	4.49	

ID	Indicator Point	Scenario	90 percentile	Mean Depth-averaged Results						90 percentile	Max. Sedimentation Rate
				DA DO (mg/L)	DO (mg/L)	UIA (mg/L)	TIN (mg/L)	E.coli (no./100mL)	SS (mg/L)	BOD5 (mg/L)	Bottom DO (mg/L)
B11	Lido	without the Project (1a)	5.26	5.40	0.004	0.35	176	5.30	0.40	4.84	4.55
		with the Project (1b)	5.27	5.41	0.004	0.35	160	5.29	0.40	4.85	4.53
		Sensitivity Test - Higher Treatment Level (1c)	5.29	5.43	0.004	0.35	160	5.28	0.40	4.99	4.51
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.27	5.41	0.004	0.35	161	5.29	0.40	4.85	4.53
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.27	5.41	0.004	0.35	161	5.29	0.40	4.85	4.53
		Treated Effluent at Emergency Bypass for 12 days (5)	5.26	5.40	0.004	0.35	160	5.28	0.40	4.86	4.53
B12	Ting Kau	without the Project (1a)	5.26	5.40	0.004	0.35	176	5.30	0.40	4.84	4.55
		with the Project (1b)	5.27	5.41	0.004	0.35	160	5.29	0.40	4.85	4.53
		Sensitivity Test - Higher Treatment Level (1c)	5.29	5.43	0.004	0.35	160	5.28	0.40	4.99	4.51
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.27	5.41	0.004	0.35	161	5.29	0.40	4.85	4.53
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.27	5.41	0.004	0.35	161	5.29	0.40	4.85	4.53
		Treated Effluent at Emergency Bypass for 12 days (5)	5.26	5.40	0.004	0.35	160	5.28	0.40	4.86	4.53
B13	Approach	without the Project (1a)	5.02	5.39	0.004	0.35	301	5.32	0.42	4.80	4.56
		with the Project (1b)	5.05	5.39	0.004	0.35	277	5.31	0.42	4.81	4.54
		Sensitivity Test - Higher Treatment Level (1c)	5.22	5.42	0.004	0.35	276	5.30	0.42	4.89	4.53
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.04	5.39	0.004	0.35	278	5.31	0.42	4.81	4.54
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.04	5.39	0.004	0.35	278	5.31	0.42	4.81	4.54
		Treated Effluent at Emergency Bypass for 12 days (5)	5.07	5.39	0.004	0.35	276	5.29	0.41	4.80	4.54
B14	Tung Wan, Ma Wan	without the Project (1a)	6.83	7.09	0.003	0.25	3	6.51	0.89	6.51	0.00
		with the Project (1b)	6.83	7.10	0.003	0.25	2	6.50	0.89	6.52	0.00
		Sensitivity Test - Higher Treatment Level (1c)	6.83	7.12	0.003	0.25	2	6.48	0.89	6.68	0.00
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.83	7.10	0.003	0.25	2	6.50	0.89	6.52	0.00
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.83	7.10	0.003	0.25	2	6.50	0.89	6.52	0.00
		Treated Effluent at Emergency Bypass for 12 days (5)	6.83	7.12	0.003	0.25	2	6.51	0.90	6.61	0.00

Non - Gazetted Beaches

WQO (for North Western WCZ)			≥4	N/A	≤0.021	≤0.5	≤180	N/A	N/A	≥2	N/A
U1	Lung Kwu Upper	without the Project (1a)	5.39	5.92	0.003	0.49	115	9.73	0.90	5.27	0.00
		with the Project (1b)	5.39	5.93	0.003	0.49	73	9.69	0.90	5.27	0.00
		Sensitivity Test - Higher Treatment Level (1c)	5.43	6.00	0.003	0.48	72	9.65	0.89	5.31	0.00
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.39	5.93	0.003	0.49	73	9.69	0.90	5.27	0.00
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.39	5.93	0.003	0.49	74	9.69	0.90	5.27	0.00
		Treated Effluent at Emergency Bypass for 12 days (5)	5.39	5.93	0.003	0.50	73	9.70	0.91	5.27	0.00
U2	Lung Kwu Lower	without the Project (1a)	5.33	5.70	0.005	0.52	2240	9.07	0.88	5.32	0.00
		with the Project (1b)	5.33	5.71	0.005	0.52	2098	9.03	0.88	5.32	0.00
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.77	0.004	0.51	2094	8.99	0.86	5.33	0.00
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.71	0.005	0.52	2100	9.03	0.88	5.32	0.00
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.71	0.005	0.52	2101	9.03	0.88	5.32	0.00
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.70	0.005	0.52	2093	9.03	0.89	5.32	0.00

Marine Parks

WQO (for North Western WCZ)			≥4	N/A	≤0.021	≤0.5	N/A	N/A	N/A	≥2	N/A
MP1	Indicator Point 1 for Sha Chau and Lung Kwu Chau Marine Park	without the Project (1a)	5.34	5.78	0.004	0.49	207	8.55	0.74	5.33	6.65
		with the Project (1b)	5.34	5.79	0.004	0.49	147	8.52	0.74	5.33	6.61
		Sensitivity Test - Higher Treatment Level (1c)	5.34	5.84	0.004	0.48	146	8.48	0.72	5.34	6.57
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.34	5.79	0.004	0.49	148	8.52	0.74	5.33	6.61
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.34	5.79	0.004	0.49	147	8.52	0.74	5.33	6.61
		Treated Effluent at Emergency Bypass for 12 days (5)	5.34	5.79	0.004	0.49	146	8.51	0.73	5.33	6.60
MP2	Indicator Point 2 for Sha Chau and Lung Kwu Chau Marine Park	without the Project (1a)	5.33	5.58	0.005	0.54	1595	8.91	0.80	5.33	7.88
		with the Project (1b)	5.33	5.59	0.005	0.54	1186	8.87	0.80	5.33	7.84
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.65	0.005	0.53	1177	8.82	0.77	5.33	7.79
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.59	0.005	0.54	1190	8.87	0.80	5.33	7.84
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.59	0.005	0.54	1187	8.87	0.80	5.33	7.84
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.59	0.005	0.54	1183	8.85	0.79	5.33	7.83

ID	Indicator Point	Scenario	90 percentile	Mean Depth-averaged Results						90 percentile	Max. Sedimentation Rate		
				DA DO (mg/L)	DO (mg/L)	UIA (mg/L)	TIN (mg/L)	E.coli (no./100mL)	SS (mg/L)	BOD5 (mg/L)	Bottom DO (mg/L)	(g/m ² /d)	
MP3	Indicator Point 3 for Sha Chau and Lung Kwu Chau Marine Park	without the Project (1a)	5.33	5.72	0.005	0.56	380	9.69	0.85	5.31	7.34		
		with the Project (1b)	5.33	5.73	0.005	0.56	264	9.66	0.85	5.32	7.32		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.79	0.005	0.55	262	9.62	0.83	5.33	7.30		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.73	0.005	0.56	265	9.66	0.85	5.32	7.32		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.73	0.005	0.56	265	9.66	0.85	5.32	7.32		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.73	0.005	0.56	263	9.64	0.84	5.32	7.32		
MP4	Indicator Point 4 for Sha Chau and Lung Kwu Chau Marine Park	without the Project (1a)	5.40	6.03	0.003	0.45	63	8.55	0.74	5.39	4.68		
		with the Project (1b)	5.41	6.04	0.003	0.45	48	8.53	0.74	5.39	4.66		
		Sensitivity Test - Higher Treatment Level (1c)	5.45	6.08	0.003	0.45	47	8.50	0.74	5.42	4.65		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.41	6.04	0.003	0.45	48	8.53	0.74	5.39	4.66		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.41	6.04	0.003	0.45	48	8.53	0.74	5.39	4.66		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.40	6.04	0.003	0.45	47	8.52	0.74	5.39	4.66		
Seagrass Beds													
WQO (for Deep Bay WCZ - Inner Subzone)				≥4	N/A	≤0.021	≤0.7	N/A	N/A	N/A	≥2	N/A	
SG8	Mai Po	without the Project (1a)	1.15	2.78	0.105	3.29	3183	46.90	8.32	1.10	0.00		
		with the Project (1b)	1.15	2.79	0.105	3.29	3182	46.87	8.32	1.10	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	1.15	2.79	0.105	3.29	3182	46.83	8.32	1.10	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	1.15	2.79	0.105	3.29	3182	46.87	8.32	1.10	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	1.15	2.79	0.105	3.29	3182	46.87	8.32	1.10	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	1.17	2.80	0.105	3.29	3164	46.90	8.33	1.12	0.00		
SG2	Sha Kong Tsuen	without the Project (1a)	4.82	5.54	0.022	1.31	209	22.14	2.84	4.77	0.00		
		with the Project (1b)	4.82	5.54	0.022	1.31	209	22.10	2.84	4.77	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	4.85	5.56	0.022	1.31	209	22.06	2.84	4.79	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	4.82	5.54	0.022	1.31	209	22.10	2.84	4.77	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	4.82	5.54	0.022	1.31	209	22.10	2.84	4.77	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	4.82	5.55	0.022	1.31	207	22.11	2.85	4.77	0.00		
SG3	Ngau Hom Shek	without the Project (1a)	5.25	5.69	0.019	1.23	215	21.05	2.64	5.13	0.00		
		with the Project (1b)	5.25	5.69	0.019	1.23	215	21.02	2.64	5.13	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	5.27	5.71	0.019	1.23	215	20.98	2.63	5.24	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.25	5.69	0.019	1.23	215	21.02	2.64	5.13	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.25	5.69	0.019	1.23	215	21.02	2.64	5.13	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.26	5.70	0.019	1.23	213	21.03	2.64	5.15	0.00		
SG4	Ngau Hom Shek	without the Project (1a)	5.33	5.82	0.020	1.23	20122	21.11	3.10	5.32	0.00		
		with the Project (1b)	5.33	5.82	0.020	1.23	20120	21.07	3.10	5.32	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.84	0.020	1.22	20118	21.04	3.09	5.32	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.82	0.020	1.23	20120	21.07	3.10	5.32	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.82	0.020	1.23	20120	21.07	3.10	5.32	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.83	0.020	1.23	20079	21.09	3.10	5.32	0.00		
SG1	Sheung Pak Nai	without the Project (1a)	5.35	5.92	0.009	0.80	12205	14.39	1.84	5.34	0.00		
		with the Project (1b)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	5.37	5.97	0.009	0.79	12190	14.32	1.83	5.35	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.35	5.94	0.009	0.80	12165	14.36	1.84	5.34	0.00		
SG9	Ha Pak Nai	without the Project (1a)	5.35	5.92	0.009	0.80	12205	14.39	1.84	5.34	0.00		
		with the Project (1b)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	5.37	5.97	0.009	0.79	12190	14.32	1.83	5.35	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.35	5.94	0.009	0.80	12165	14.36	1.84	5.34	0.00		

ID	Indicator Point	Scenario	90 percentile DA DO	Mean Depth-averaged Results						90 percentile Bottom DO	Max. Sedimentation Rate		
				DO (mg/L)	UIA (mg/L)	TIN (mg/L)	E.coli (no./100mL)	SS (mg/L)	BOD5 (mg/L)				
			≥4	N/A	≤0.021	≤0.5	N/A	N/A	N/A	≥2	N/A		
WQO (for North Western WCZ)													
SG6	Yam O	without the Project (1a)	6.10	6.56	0.003	0.33	7	6.88	0.76	6.10	0.00		
		with the Project (1b)	6.10	6.57	0.003	0.33	3	6.86	0.76	6.10	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	6.11	6.61	0.003	0.32	3	6.83	0.76	6.11	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.10	6.57	0.003	0.33	3	6.86	0.76	6.10	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.10	6.57	0.003	0.33	3	6.86	0.76	6.10	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	6.10	6.59	0.003	0.33	3	6.86	0.76	6.10	0.00		
SG7	Tai Ho Wan	without the Project (1a)	5.37	5.93	0.003	0.40	20	7.15	0.64	5.36	1.17		
		with the Project (1b)	5.37	5.94	0.003	0.40	14	7.12	0.64	5.36	1.16		
		Sensitivity Test - Higher Treatment Level (1c)	5.39	5.98	0.003	0.39	14	7.10	0.64	5.37	1.15		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.37	5.94	0.003	0.40	14	7.12	0.64	5.36	1.16		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.37	5.94	0.003	0.40	14	7.12	0.64	5.36	1.16		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.37	5.94	0.003	0.40	14	7.11	0.64	5.36	1.16		
SG5	San Tau	without the Project (1a)	6.83	6.96	0.003	0.37	506	8.00	1.09	6.56	3.67		
		with the Project (1b)	6.83	6.96	0.003	0.37	505	7.98	1.09	6.57	3.65		
		Sensitivity Test - Higher Treatment Level (1c)	6.83	7.00	0.003	0.36	505	7.95	1.09	6.60	3.63		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.83	6.96	0.003	0.37	505	7.98	1.09	6.57	3.65		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.83	6.96	0.003	0.37	505	7.98	1.09	6.57	3.65		
		Treated Effluent at Emergency Bypass for 12 days (5)	6.83	6.99	0.003	0.37	504	8.00	1.10	6.60	3.65		
Chinese White Dolphins													
WQO (for North Western WCZ)			≥4	N/A	≤0.021	≤0.5	N/A	N/A	N/A	≥2	N/A		
CWD1	near North of Lung Kwu Chau	without the Project (1a)	5.33	5.61	0.005	0.56	1040	9.28	0.83	5.33	8.55		
		with the Project (1b)	5.33	5.62	0.005	0.56	759	9.24	0.82	5.33	8.52		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.67	0.005	0.55	753	9.20	0.80	5.33	8.49		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.62	0.005	0.56	761	9.24	0.82	5.33	8.52		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.62	0.005	0.56	760	9.24	0.82	5.33	8.52		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.62	0.005	0.56	757	9.22	0.81	5.33	8.52		
CWD2	North of Airport	without the Project (1a)	5.34	5.87	0.003	0.46	98	8.07	0.70	5.33	5.06		
		with the Project (1b)	5.34	5.88	0.003	0.46	67	8.03	0.70	5.33	5.03		
		Sensitivity Test - Higher Treatment Level (1c)	5.36	5.94	0.003	0.45	66	8.00	0.69	5.34	5.01		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.34	5.88	0.003	0.46	67	8.04	0.70	5.33	5.03		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.34	5.88	0.003	0.46	67	8.04	0.70	5.33	5.03		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.34	5.89	0.003	0.46	66	8.02	0.69	5.33	5.03		
CWD3	near The Brothers	without the Project (1a)	5.33	5.62	0.004	0.42	114	6.87	0.56	5.32	5.60		
		with the Project (1b)	5.33	5.63	0.004	0.42	38	6.84	0.56	5.32	5.56		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.67	0.003	0.41	36	6.81	0.55	5.33	5.52		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.62	0.004	0.42	40	6.84	0.56	5.32	5.56		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.62	0.004	0.42	39	6.84	0.56	5.32	5.56		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.62	0.004	0.42	38	6.83	0.55	5.32	5.55		
CWD4	between Sha Chau and Lung Kwu Chau Marine Park	without the Project (1a)	5.33	5.79	0.004	0.51	236	8.95	0.77	5.32	6.53		
		with the Project (1b)	5.33	5.80	0.004	0.51	171	8.91	0.77	5.33	6.50		
		Sensitivity Test - Higher Treatment Level (1c)	5.34	5.85	0.004	0.50	169	8.88	0.76	5.33	6.46		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.80	0.004	0.51	171	8.92	0.77	5.33	6.50		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.80	0.004	0.51	171	8.92	0.77	5.33	6.50		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.80	0.004	0.51	170	8.90	0.76	5.33	6.49		
Site of Special Scientific Interests													
WQO (for Deep Bay WCZ - Inner Subzone)			≥4	N/A	≤0.021	≤0.7	N/A	N/A	N/A	≥2	N/A		
S1	Tsim Bei Tsui SSSI	without the Project (1a)	3.91	4.61	0.062	2.35	5863	36.26	5.89	3.91	0.00		
		with the Project (1b)	3.91	4.61	0.062	2.35	5861	36.22	5.89	3.91	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	3.92	4.62	0.062	2.35	5860	36.19	5.88	3.91	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	3.91	4.61	0.062	2.35	5861	36.22	5.89	3.91	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	3.91	4.61	0.062	2.35	5861	36.22	5.89	3.91	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	3.91	4.61	0.062	2.35	5831	36.24	5.89	3.91	0.00		

ID	Indicator Point	Scenario	90 percentile	Mean Depth-averaged Results							90 percentile	Max. Sedimentation Rate	
				DA DO (mg/L)	DO (mg/L)	UIA (mg/L)	TIN (mg/L)	E.coli (no./100mL)	SS (mg/L)	BOD5 (mg/L)			
			Bottom DO (mg/L)	(g/m ² /d)									
S2	Pak Nai SSSI	without the Project (1a)	5.33	5.80	0.010	0.88	1000	15.82	1.77	5.29	0.00		
		with the Project (1b)	5.33	5.81	0.010	0.88	993	15.79	1.77	5.29	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	5.34	5.85	0.010	0.88	993	15.75	1.77	5.31	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.81	0.010	0.88	993	15.79	1.77	5.29	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.81	0.010	0.88	993	15.79	1.77	5.29	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.34	5.82	0.010	0.88	989	15.80	1.78	5.30	0.00		
S3	Inner Deep Bay	without the Project (1a)	3.11	4.29	0.058	2.19	3470	33.77	5.48	3.07	0.00		
		with the Project (1b)	3.11	4.29	0.058	2.19	3469	33.73	5.48	3.07	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	3.12	4.30	0.058	2.18	3468	33.70	5.48	3.09	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	3.11	4.29	0.058	2.19	3469	33.73	5.48	3.07	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	3.11	4.29	0.058	2.19	3469	33.73	5.48	3.07	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	3.11	4.30	0.058	2.19	3450	33.75	5.48	3.09	0.00		
S4	Mai Po	without the Project (1a)	1.15	2.78	0.105	3.29	3183	46.90	8.32	1.10	0.00		
		with the Project (1b)	1.15	2.79	0.105	3.29	3182	46.87	8.32	1.10	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	1.15	2.79	0.105	3.29	3182	46.83	8.32	1.10	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	1.15	2.79	0.105	3.29	3182	46.87	8.32	1.10	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	1.15	2.79	0.105	3.29	3182	46.87	8.32	1.10	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	1.17	2.80	0.105	3.29	3164	46.90	8.33	1.12	0.00		
WQO (for North Western WCZ)			≥4	N/A	≤0.021	≤0.5	N/A	N/A	N/A	≥2	N/A		
S5	Lung Kwu Chau, Tree Island and Sha Chau	without the Project (1a)	5.33	5.79	0.004	0.51	236	8.95	0.77	5.32	6.53		
		with the Project (1b)	5.33	5.80	0.004	0.51	171	8.91	0.77	5.33	6.50		
		Sensitivity Test - Higher Treatment Level (1c)	5.34	5.85	0.004	0.50	169	8.88	0.76	5.33	6.46		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.80	0.004	0.51	171	8.92	0.77	5.33	6.50		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.80	0.004	0.51	171	8.92	0.77	5.33	6.50		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.80	0.004	0.51	170	8.90	0.76	5.33	6.49		
Corals													
WQO (for North Western WCZ)			≥4	N/A	≤0.021	≤0.5	N/A	N/A	N/A	≥2	≤100		
CR1	Near Sha Chau	without the Project (1a)	5.36	5.92	0.004	0.47	114	8.65	0.75	5.35	5.16		
		with the Project (1b)	5.36	5.93	0.004	0.47	86	8.62	0.75	5.35	5.13		
		Sensitivity Test - Higher Treatment Level (1c)	5.38	5.98	0.004	0.47	85	8.59	0.74	5.36	5.10		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.36	5.93	0.004	0.47	86	8.62	0.75	5.35	5.13		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.36	5.93	0.004	0.47	86	8.62	0.75	5.35	5.13		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.36	5.93	0.004	0.47	85	8.61	0.74	5.35	5.13		
WQO (for Western Buffer WCZ)			≥4	N/A	≤0.021	≤0.4	N/A	N/A	N/A	≥2	≤100		
CR2	Tsing Lung Tau	without the Project (1a)	5.33	5.45	0.004	0.35	59	5.38	0.40	5.32	4.76		
		with the Project (1b)	5.33	5.45	0.004	0.35	39	5.37	0.40	5.32	4.73		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.47	0.004	0.35	38	5.36	0.40	5.33	4.70		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.45	0.004	0.35	40	5.37	0.40	5.32	4.73		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.45	0.004	0.35	40	5.37	0.40	5.32	4.73		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.44	0.004	0.35	39	5.36	0.40	5.32	4.73		
CR3	Sham Tseng West	without the Project (1a)	5.33	5.46	0.004	0.35	54	5.36	0.40	5.32	4.64		
		with the Project (1b)	5.33	5.46	0.004	0.35	35	5.35	0.40	5.32	4.61		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.48	0.004	0.34	34	5.34	0.40	5.33	4.59		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.46	0.004	0.35	36	5.35	0.40	5.32	4.61		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.46	0.004	0.35	36	5.35	0.40	5.32	4.61		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.45	0.004	0.35	35	5.34	0.40	5.32	4.61		
CR4	Sham Tseng East	without the Project (1a)	5.32	5.44	0.005	0.35	128	5.35	0.40	5.30	4.48		
		with the Project (1b)	5.32	5.44	0.005	0.35	107	5.33	0.40	5.31	4.45		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.47	0.004	0.35	107	5.32	0.40	5.32	4.43		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.32	5.44	0.005	0.35	108	5.33	0.40	5.31	4.45		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.32	5.44	0.005	0.35	109	5.33	0.40	5.31	4.45		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.32	5.44	0.005	0.35	107	5.32	0.40	5.31	4.45		

ID	Indicator Point	Scenario	90 percentile	Mean Depth-averaged Results						90 percentile	Max. Sedimentation Rate		
				DA DO (mg/L)	DO (mg/L)	UIA (mg/L)	TIN (mg/L)	E.coli (no./100mL)	SS (mg/L)	BOD5 (mg/L)	Bottom DO (mg/L)	(g/m ² /d)	
			Bottom DO (mg/L)	(g/m ² /d)									
CR5	Ap Lei Chau	without the Project (1a)	5.41	6.02	0.003	0.18	1358	4.19	0.21	5.38	3.68		
		with the Project (1b)	5.41	6.02	0.003	0.18	1358	4.19	0.21	5.38	3.67		
		Sensitivity Test - Higher Treatment Level (1c)	5.41	6.02	0.003	0.18	1358	4.19	0.21	5.38	3.67		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.41	6.02	0.003	0.18	1358	4.19	0.21	5.38	3.67		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.41	6.02	0.003	0.18	1358	4.19	0.21	5.38	3.67		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.41	6.01	0.003	0.18	1358	4.18	0.21	5.38	3.67		
CR6	Sandy bay	without the Project (1a)	5.33	5.78	0.004	0.24	464	4.47	0.28	5.33	3.86		
		with the Project (1b)	5.33	5.78	0.004	0.24	464	4.47	0.28	5.33	3.86		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.78	0.004	0.24	464	4.47	0.28	5.33	3.85		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.78	0.004	0.24	464	4.47	0.28	5.33	3.86		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.78	0.004	0.24	464	4.47	0.28	5.33	3.86		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.77	0.004	0.24	463	4.46	0.28	5.33	3.86		
Horseshoe Crab													
WQO (for Deep Bay WCZ - Inner Subzone)				≥4	N/A	≤0.021	≤0.7	N/A	N/A	N/A	≥2	N/A	
HC1	near Sheung Pak Nai	without the Project (1a)	5.31	5.76	0.012	0.97	1069	17.14	1.98	5.26	0.00		
		with the Project (1b)	5.31	5.77	0.012	0.97	1065	17.10	1.98	5.26	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.80	0.012	0.96	1065	17.07	1.98	5.28	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.31	5.77	0.012	0.97	1065	17.10	1.98	5.26	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.31	5.77	0.012	0.97	1065	17.10	1.98	5.26	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.32	5.77	0.012	0.97	1061	17.11	1.98	5.26	0.00		
HC2	Ha Pak Nai	without the Project (1a)	5.35	5.92	0.009	0.80	12205	14.39	1.84	5.34	0.00		
		with the Project (1b)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	5.37	5.97	0.009	0.79	12190	14.32	1.83	5.35	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.35	5.94	0.009	0.80	12165	14.36	1.84	5.34	0.00		
HC3	Ha Pak Nai	without the Project (1a)	5.35	5.92	0.009	0.80	12205	14.39	1.84	5.34	0.00		
		with the Project (1b)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	5.37	5.97	0.009	0.79	12190	14.32	1.83	5.35	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.35	5.93	0.009	0.80	12193	14.35	1.84	5.34	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.35	5.94	0.009	0.80	12165	14.36	1.84	5.34	0.00		
WQO (for Deep Bay WCZ - Outer Subzone)				≥4	N/A	≤0.021	≤0.5	N/A	N/A	N/A	≥2	N/A	
HC4	Nim Wan	without the Project (1a)	5.33	5.73	0.007	0.71	3755	12.74	1.37	5.26	0.00		
		with the Project (1b)	5.33	5.74	0.007	0.71	3725	12.71	1.37	5.26	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.79	0.007	0.71	3724	12.67	1.36	5.29	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.74	0.007	0.71	3726	12.71	1.37	5.26	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.74	0.007	0.71	3726	12.71	1.37	5.26	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.75	0.007	0.72	3717	12.71	1.37	5.27	0.00		
WQO (for North Western WCZ)				≥4	N/A	≤0.021	≤0.5	N/A	N/A	N/A	≥2	N/A	
HC5	Lung Kwu Tan	without the Project (1a)	5.33	5.68	0.004	0.52	303	8.88	0.78	5.30	0.00		
		with the Project (1b)	5.33	5.69	0.004	0.52	175	8.84	0.78	5.31	0.00		
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.75	0.004	0.51	172	8.80	0.76	5.32	0.00		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.69	0.004	0.52	176	8.84	0.78	5.31	0.00		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.69	0.004	0.52	177	8.84	0.78	5.31	0.00		
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.68	0.004	0.52	177	8.84	0.78	5.31	0.00		
HC6	San Tau	without the Project (1a)	6.83	6.98	0.003	0.36	322	8.06	1.08	6.80	0.09		
		with the Project (1b)	6.83	6.98	0.003	0.36	322	8.04	1.08	6.80	0.09		
		Sensitivity Test - Higher Treatment Level (1c)	6.83	7.02	0.003	0.36	322	8.01	1.08	6.82	0.09		
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.83	6.98	0.003	0.36	322	8.04	1.08	6.80	0.09		
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.83	6.98	0.003	0.36	322	8.04	1.08	6.80	0.09		
		Treated Effluent at Emergency Bypass for 12 days (5)	6.83	7.01	0.003	0.36	321	8.06	1.09	6.81	0.09		

ID	Indicator Point	Scenario	90 percentile	Mean Depth-averaged Results						90 percentile	Max. Sedimentation Rate
				DA DO (mg/L)	DO (mg/L)	UIA (mg/L)	TIN (mg/L)	E.coli (no./100mL)	SS (mg/L)	BOD5 (mg/L)	Bottom DO (mg/L)
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(no./100mL)	(mg/L)	(mg/L)	(mg/L)
HC7	Sha Lo Wan	without the Project (1a)	6.05	6.22	0.003	0.39	15	8.07	0.73	5.59	6.58
		with the Project (1b)	6.05	6.22	0.003	0.39	12	8.04	0.73	5.61	6.56
		Sensitivity Test - Higher Treatment Level (1c)	6.07	6.26	0.003	0.39	12	8.02	0.72	5.75	6.54
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.05	6.22	0.003	0.39	13	8.05	0.73	5.61	6.56
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.05	6.22	0.003	0.39	12	8.05	0.73	5.61	6.56
		Treated Effluent at Emergency Bypass for 12 days (5)	6.06	6.23	0.003	0.39	12	8.04	0.73	5.66	6.55
HC8	Sai Tso Wan	without the Project (1a)	6.06	6.25	0.003	0.38	17	7.86	0.70	5.81	5.69
		with the Project (1b)	6.06	6.25	0.003	0.38	14	7.85	0.70	5.83	5.68
		Sensitivity Test - Higher Treatment Level (1c)	6.07	6.29	0.003	0.37	14	7.83	0.69	6.01	5.66
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.06	6.25	0.003	0.38	14	7.85	0.70	5.83	5.68
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.06	6.25	0.003	0.38	14	7.85	0.70	5.83	5.68
		Treated Effluent at Emergency Bypass for 12 days (5)	6.07	6.26	0.003	0.38	14	7.84	0.69	5.93	5.68
HC9	Nga Ying Kok	without the Project (1a)	6.11	6.65	0.003	0.30	5	7.13	0.72	6.10	4.70
		with the Project (1b)	6.11	6.66	0.003	0.30	4	7.13	0.72	6.10	4.70
		Sensitivity Test - Higher Treatment Level (1c)	6.11	6.67	0.003	0.30	4	7.12	0.72	6.10	4.70
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.11	6.66	0.003	0.30	4	7.13	0.72	6.10	4.70
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.11	6.66	0.003	0.30	4	7.13	0.72	6.10	4.70
		Treated Effluent at Emergency Bypass for 12 days (5)	6.11	6.66	0.003	0.30	4	7.13	0.72	6.10	4.70
HC10	Nga Ying Kok, Yi O	without the Project (1a)	6.14	6.72	0.003	0.29	3	7.07	0.73	6.14	5.62
		with the Project (1b)	6.14	6.72	0.003	0.29	3	7.07	0.73	6.14	5.60
		Sensitivity Test - Higher Treatment Level (1c)	6.15	6.74	0.003	0.29	3	7.06	0.73	6.14	5.58
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.14	6.72	0.003	0.29	3	7.07	0.73	6.14	5.60
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.14	6.72	0.003	0.29	3	7.07	0.73	6.14	5.60
		Treated Effluent at Emergency Bypass for 12 days (5)	6.14	6.72	0.003	0.29	3	7.07	0.73	6.14	5.60
HC11	Nga Ying Kok, Yi O	without the Project (1a)	6.26	6.85	0.003	0.27	2	6.89	0.76	6.26	5.51
		with the Project (1b)	6.26	6.85	0.003	0.27	2	6.89	0.76	6.26	5.49
		Sensitivity Test - Higher Treatment Level (1c)	6.27	6.86	0.003	0.27	2	6.89	0.76	6.26	5.48
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.26	6.85	0.003	0.27	2	6.89	0.76	6.26	5.49
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.26	6.85	0.003	0.27	2	6.89	0.76	6.26	5.49
		Treated Effluent at Emergency Bypass for 12 days (5)	6.26	6.85	0.003	0.27	2	6.89	0.76	6.26	5.49

Mangrove Communities

WQO (for Deep Bay WCZ - Inner Subzone)

			≥4	N/A	≤0.021	≤0.7	N/A	N/A	N/A	≥2	N/A
MG2	Lut Chau	without the Project (1a)	3.26	3.99	0.075	2.71	5500	40.63	6.75	3.21	0.00
		with the Project (1b)	3.26	3.99	0.075	2.71	5499	40.59	6.75	3.21	0.00
		Sensitivity Test - Higher Treatment Level (1c)	3.26	4.00	0.075	2.71	5498	40.56	6.75	3.21	0.00
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	3.26	3.99	0.075	2.71	5499	40.60	6.75	3.21	0.00
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	3.26	3.99	0.075	2.71	5499	40.60	6.75	3.21	0.00
		Treated Effluent at Emergency Bypass for 12 days (5)	3.26	4.00	0.075	2.71	5469	40.62	6.76	3.21	0.00
MG3	Tsim Bei Tsui	without the Project (1a)	3.91	4.61	0.062	2.35	5863	36.26	5.89	3.91	0.00
		with the Project (1b)	3.91	4.61	0.062	2.35	5861	36.22	5.89	3.91	0.00
		Sensitivity Test - Higher Treatment Level (1c)	3.92	4.62	0.062	2.35	5860	36.19	5.88	3.91	0.00
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	3.91	4.61	0.062	2.35	5861	36.22	5.89	3.91	0.00
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	3.91	4.61	0.062	2.35	5861	36.22	5.89	3.91	0.00
		Treated Effluent at Emergency Bypass for 12 days (5)	3.91	4.61	0.062	2.35	5831	36.24	5.89	3.91	0.00
MG4	Sheung Pak Nai	without the Project (1a)	5.33	5.82	0.020	1.23	20122	21.11	3.10	5.32	0.00
		with the Project (1b)	5.33	5.82	0.020	1.23	20120	21.07	3.10	5.32	0.00
		Sensitivity Test - Higher Treatment Level (1c)	5.33	5.84	0.020	1.22	20118	21.04	3.09	5.32	0.00
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.33	5.82	0.020	1.23	20120	21.07	3.10	5.32	0.00
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.33	5.82	0.020	1.23	20120	21.07	3.10	5.32	0.00
		Treated Effluent at Emergency Bypass for 12 days (5)	5.33	5.83	0.020	1.23	20079	21.09	3.10	5.32	0.00

ID	Indicator Point	Scenario	90 percentile DA DO	Mean Depth-averaged Results						90 percentile Bottom DO	Max. Sedimentation Rate	
				DO (mg/L)	UIA (mg/L)	TIN (mg/L)	E.coli (no./100mL)	SS (mg/L)	BOD5 (mg/L)			
			≥4 (mg/L)	N/A (mg/L)	≤0.021 (mg/L)	≤0.5 (no./100mL)	N/A (mg/L)	N/A (mg/L)	N/A (mg/L)	≥2 (mg/L)	N/A (g/m ² /d)	
WQO (for North Western WCZ)												
MG5	Tai Ho Wan	without the Project (1a)	5.37	5.93	0.003	0.40	20	7.15	0.64	5.36	1.17	
		with the Project (1b)	5.37	5.94	0.003	0.40	14	7.12	0.64	5.36	1.16	
		Sensitivity Test - Higher Treatment Level (1c)	5.39	5.98	0.003	0.39	14	7.10	0.64	5.37	1.15	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	5.37	5.94	0.003	0.40	14	7.12	0.64	5.36	1.16	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	5.37	5.94	0.003	0.40	14	7.12	0.64	5.36	1.16	
		Treated Effluent at Emergency Bypass for 12 days (5)	5.37	5.94	0.003	0.40	14	7.11	0.64	5.36	1.16	
MG6	San Tau	without the Project (1a)	6.83	6.98	0.003	0.36	322	8.06	1.08	6.80	0.09	
		with the Project (1b)	6.83	6.98	0.003	0.36	322	8.04	1.08	6.80	0.09	
		Sensitivity Test - Higher Treatment Level (1c)	6.83	7.02	0.003	0.36	322	8.01	1.08	6.82	0.09	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.83	6.98	0.003	0.36	322	8.04	1.08	6.80	0.09	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.83	6.98	0.003	0.36	322	8.04	1.08	6.80	0.09	
		Treated Effluent at Emergency Bypass for 12 days (5)	6.83	7.01	0.003	0.36	321	8.06	1.09	6.81	0.09	
MG7	Yi O	without the Project (1a)	6.28	6.83	0.002	0.29	1	7.06	0.70	6.16	4.39	
		with the Project (1b)	6.30	6.83	0.002	0.29	1	7.05	0.70	6.17	4.38	
		Sensitivity Test - Higher Treatment Level (1c)	6.40	6.85	0.002	0.29	1	7.05	0.70	6.18	4.37	
		Untreated Effluent at Twins Outfall for 6 hrs (3a)	6.30	6.83	0.002	0.29	1	7.05	0.70	6.17	4.38	
		Untreated Effluent at Emergency Bypass for 6 hrs (3b)	6.30	6.83	0.002	0.29	1	7.05	0.70	6.17	4.38	
		Treated Effluent at Emergency Bypass for 12 days (5)	6.36	6.83	0.002	0.29	1	7.05	0.70	6.16	4.38	

Remarks:

N/A: Not Available