

Appendix 5.6

Predicted Water Quality at Sensitive Receivers in 2016

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(I) WSD Flushing Water Intakes

ID	Indicator Point	Scenario	Mid-depth							
			Maximum					DO (mg/L)		
			E.coli (no./100mL)	BOD ₅ (mg/L)	NH ₃ -N (mg/L)	UIA (mg/L)	SS (mg/L)			
Assessment Criteria			<20000	<10	<1	N/A	<10	>2		
Ref: Figure 5.1										
WSD5	Tsing Yi	without the WDII reclamation (1a)	18688	0.93	0.295	0.020	7.89	4.19		
		with the WDII Reclamation (1b)	19130	0.92	0.294	0.020	7.89	4.19		
WSD6	Cheung Sha Wan	without the WDII reclamation (1a)	10463	1.86	0.390	0.040	8.48	4.15		
		with the WDII Reclamation (1b)	10436	1.85	0.391	0.040	8.50	4.15		
WSD7	Kowloon South	without the WDII reclamation (1a)	3116	0.72	0.231	0.022	6.47	4.51		
		with the WDII Reclamation (1b)	3114	0.72	0.234	0.022	6.48	4.51		
WSD8	Yau Ma Tei	without the WDII reclamation (1a)	1620	0.63	0.235	0.024	6.44	4.40		
		with the WDII Reclamation (1b)	1610	0.62	0.235	0.024	6.45	4.39		
WSD9	Tai Wan	without the WDII reclamation (1a)	1221	0.46	0.316	0.031	5.84	4.10		
		with the WDII Reclamation (1b)	1188	0.46	0.316	0.031	5.84	4.10		
WSD10	Cha Kwo Ling	without the WDII reclamation (1a)	1418	0.44	0.493	0.049	5.55	4.25		
		with the WDII Reclamation (1b)	1421	0.44	0.495	0.049	5.59	4.25		
WSD11	Yau Tong	without the WDII reclamation (1a)	1089	0.46	0.499	0.050	5.68	4.27		
		with the WDII Reclamation (1b)	1083	0.46	0.502	0.050	5.69	4.27		
WSD12	Tseung Kwan O	without the WDII reclamation (1a)	1801	0.56	0.164	0.016	4.50	4.40		
		with the WDII Reclamation (1b)	1794	0.56	0.164	0.016	4.50	4.41		
WSD13	Siu Sai Wan	without the WDII reclamation (1a)	11393	0.41	0.184	0.018	4.81	4.05		
		with the WDII Reclamation (1b)	11396	0.41	0.185	0.018	4.82	4.05		
WSD14	Heng Fa Chuen	without the WDII reclamation (1a)	963	0.35	0.192	0.019	5.16	4.02		
		with the WDII Reclamation (1b)	962	0.35	0.194	0.019	5.19	4.02		
WSD15	Sai Wan Ho	without the WDII reclamation (1a)	5021	0.42	0.227	0.023	5.61	4.10		
		with the WDII Reclamation (1b)	4911	0.42	0.228	0.023	5.62	4.10		
WSD16	Quarry Bay	without the WDII reclamation (1a)	5515	0.50	0.221	0.022	5.69	4.11		
		with the WDII Reclamation (1b)	5545	0.51	0.225	0.022	5.73	4.11		
WSD17	North Point	without the WDII reclamation (1a)	6261	0.52	0.217	0.022	5.73	4.11		
		with the WDII Reclamation (1b)	6267	0.53	0.221	0.022	5.77	4.11		
WSD18	Central Water Front	without the WDII reclamation (1a)	1632	0.82	0.293	0.030	6.88	4.21		
		with the WDII Reclamation (1b)	1706	0.82	0.297	0.030	6.88	4.21		
WSD19	Sheung Wan	without the WDII reclamation (1a)	3577	0.96	0.368	0.037	6.86	4.28		
		with the WDII Reclamation (1b)	3592	0.95	0.369	0.037	6.86	4.28		
WSD20	Kennedy Town	without the WDII reclamation (1a)	718	0.76	0.399	0.029	6.87	4.31		
		with the WDII Reclamation (1b)	714	0.76	0.401	0.029	6.87	4.31		
Ref: Figure 5.2										
(a)	Wan Chai	without the WDII reclamation (1a)	8528	0.85	0.212	0.021	6.53	4.27		
		with the WDII Reclamation (1b)	6503	0.63	0.210	0.023	6.52	4.14		

Remarks:

N/A: Not Available

Appendix 5.6 Predicted Water Quality at Sensitive Receivers in 2016

(II) Cooling Water Intakes

ID	Indicator Point	Scenario	Mid-depth						
			Maximum					DO (mg/L)	
			E.coli (no./100mL)	BOD ₅ (mg/L)	NH ₃ -N (mg/L)	UIA (mg/L)	SS (mg/L)		
Assessment Criteria			N/A	N/A	N/A	N/A	< 40	N/A	
Ref: Figure 5.1									
C31	Admiralty Centre/Queensway Government Offices	without the WDII reclamation (1a)	6709	0.70	0.220	0.022	6.68	4.23	
		with the WDII Reclamation (1b) *	20899	1.21	0.223	0.022	6.72	4.19	
C32	MTRC New South Intake	without the WDII reclamation (1a)	16281	0.77	0.274	0.027	6.64	4.23	
		with the WDII Reclamation (1b)	16216	0.78	0.281	0.027	6.63	4.23	
Assessment Criteria			N/A	N/A	N/A	N/A	N/A	N/A	
Ref: Figure 5.1									
C12	MTRC Tsing Yi Station	without the WDII reclamation (1a)	12003	0.76	0.274	0.020	8.04	4.21	
		with the WDII Reclamation (1b)	12227	0.76	0.274	0.020	8.04	4.21	
C14	MTRC Kowloon Station	without the WDII reclamation (1a)	3929	0.68	0.221	0.021	6.33	4.27	
		with the WDII Reclamation (1b)	3924	0.67	0.222	0.021	6.31	4.27	
C15	China Hong Kong City	without the WDII reclamation (1a)	7804	1.03	0.224	0.022	6.47	4.32	
		with the WDII Reclamation (1b)	8099	1.01	0.225	0.022	6.45	4.33	
C16	Harbour City	without the WDII reclamation (1a)	2923	0.61	0.216	0.021	6.22	4.40	
		with the WDII Reclamation (1b)	2845	0.61	0.217	0.021	6.22	4.40	
C17	Ocean City	without the WDII reclamation (1a)	2923	0.61	0.216	0.021	6.22	4.40	
		with the WDII Reclamation (1b)	2845	0.61	0.217	0.021	6.22	4.40	
C18	Ocean Terminal	without the WDII reclamation (1a)	3244	0.56	0.224	0.022	6.38	4.29	
		with the WDII Reclamation (1b)	3237	0.57	0.224	0.022	6.38	4.28	
C19	Government Premises	without the WDII reclamation (1a)	8546	0.62	0.243	0.023	6.39	4.20	
		with the WDII Reclamation (1b)	12372	0.63	0.244	0.024	6.40	4.20	
C20	New World Centre	without the WDII reclamation (1a)	6114	0.52	0.243	0.024	6.05	4.12	
		with the WDII Reclamation (1b)	6312	0.52	0.244	0.024	6.04	4.12	
C21	East Rail Extension	without the WDII reclamation (1a)	8716	0.58	0.246	0.023	6.17	4.18	
		with the WDII Reclamation (1b)	8381	0.58	0.247	0.023	6.17	4.18	
C22	Daily Farm Ice Plant	without the WDII reclamation (1a)	1418	0.44	0.493	0.049	5.55	4.25	
		with the WDII Reclamation (1b)	1421	0.44	0.495	0.049	5.59	4.25	
C23	Pamela Youde Nethersole Eastern Hospital	without the WDII reclamation (1a)	3957	0.38	0.182	0.018	4.95	4.06	
		with the WDII Reclamation (1b)	3957	0.38	0.183	0.018	4.97	4.06	
C27	Sha Wan Drive	without the WDII reclamation (1a)	381	0.35	0.242	0.016	6.92	4.37	
		with the WDII Reclamation (1b)	382	0.35	0.242	0.016	6.92	4.37	
C28	Queen Mary Hospital	without the WDII reclamation (1a)	609	0.36	0.217	0.015	7.00	4.47	
		with the WDII Reclamation (1b)	612	0.36	0.217	0.015	7.00	4.47	
C29	Prince's Building Group	without the WDII reclamation (1a)	11159	0.64	0.225	0.022	6.57	4.23	
		with the WDII Reclamation (1b)	11757	0.64	0.227	0.022	6.48	4.23	
C30	HSBC & AIG Tower	without the WDII reclamation (1a)	4565	0.67	0.219	0.022	6.63	4.23	
		with the WDII Reclamation (1b)	10004	0.75	0.221	0.022	6.56	4.20	
Ref: Figure 5.2									
(1)	HKCEC extension	without the WDII reclamation (1a)	13360	0.64	0.229	0.023	6.25	4.31	
		with the WDII Reclamation (1b)	13756	0.66	0.230	0.023	6.26	4.30	
(2)	Telecom House/HKAPA /Shui On Centre	without the WDII reclamation (1a)	2072	0.60	0.225	0.024	6.67	4.21	
		with the WDII Reclamation (1b)	2354	0.52	0.212	0.021	6.29	4.41	
(3)	HKCEC Phase I	without the WDII reclamation (1a)	2296	0.52	0.210	0.021	6.27	4.40	
		with the WDII Reclamation (1b)	2354	0.52	0.212	0.021	6.29	4.41	
(4)	Wan Chai Tower/Revenue Tower/Immigration Tower	without the WDII reclamation (1a)	6462	0.71	0.217	0.021	6.34	4.38	
		with the WDII Reclamation (1b)	4879	0.62	0.219	0.021	6.33	4.37	
(5)	Great Eagle Centre/China Resources Building	without the WDII reclamation (1a)	6462	0.71	0.217	0.021	6.34	4.38	
		with the WDII Reclamation (1b)	4879	0.62	0.219	0.021	6.33	4.37	
(6)	Sun Hung Kai Centre	without the WDII reclamation (1a)	15830	1.15	0.222	0.022	6.72	4.32	
		with the WDII Reclamation (1b)	17324	1.32	0.249	0.025	7.20	4.06	
(7)	Proposed Exhibition Station **	without the WDII reclamation (1a)	-	-	-	-	-	-	
		with the WDII Reclamation (1b)	17324	1.32	0.249	0.025	7.20	4.06	
(8)	Excelsior Hotel & WTC /No. 27-63 Paterson St.	without the WDII reclamation (1a)	8528	0.85	0.212	0.021	6.53	4.27	
		with the WDII Reclamation (1b)	6503	0.63	0.210	0.023	6.52	4.14	
(9)	Windsor House	without the WDII reclamation (1a)	27789	1.11	0.219	0.021	6.58	4.24	
		with the WDII Reclamation (1b)	21070	0.81	0.218	0.021	6.37	4.06	
(10)	Proposed HKAPA Extension **	without the WDII reclamation (1a)	-	-	-	-	-	-	
		with the WDII Reclamation (1b)	6470	0.91	0.241	0.030	7.33	4.43	

Remarks:

N/A: Not Available

* Increase of pollution levels at C31 due to the new outfall extension of Culvert L under the WDII reclamation. The new outfall of Culvert L is close to C31.

** New intake proposed under the Project

Appendix 5.6 Predicted Water Quality at Sensitive Receivers in 2016

(III) Corals

ID	Indicator Point	Scenario	Depth-averaged						Bottom DO (mg/L)	10%ile DO (mg/L)	Maximum Sedimentation Rate (g/m ² /d)		
			GM <i>E.coli</i> (no./100ml)	BOD5 (mg/L)	TN (mg/L)	UIA (mg/L)	SS (mg/L)	DO (mg/L)					
Assessment Criteria			N/A	N/A	≤0.4	≤0.021	N/A	N/A	≥4	≥2	≤100		
Ref: Figure 5.1													
CR25	Junk Bay - South East	without the WDII reclamation (1a)	18	0.08	0.183	0.005	3.46	6.13	4.38	4.29	3.17		
		with the WDII Reclamation (1b)	18	0.08	0.183	0.005	3.47	6.13	4.38	4.29	3.18		
CR26	Junk Bay	without the WDII reclamation (1a)	23	0.09	0.184	0.005	3.42	6.15	4.49	4.27	3.41		
		with the WDII Reclamation (1b)	23	0.09	0.184	0.005	3.42	6.15	4.49	4.27	3.45		
CR27	Junk Bay	without the WDII reclamation (1a)	2490	0.30	0.222	0.007	3.64	6.11	4.69	4.40	3.33		
		with the WDII Reclamation (1b)	2491	0.30	0.222	0.007	3.65	6.10	4.69	4.40	3.34		
CR28	Junk Bay - Junk Island	without the WDII reclamation (1a)	6	0.08	0.175	0.005	3.42	6.16	4.46	4.26	3.22		
		with the WDII Reclamation (1b)	6	0.08	0.175	0.005	3.42	6.15	4.46	4.27	3.23		
CR44	Cape Collinson	without the WDII reclamation (1a)	85	0.09	0.182	0.005	3.53	6.12	4.38	4.32	3.47		
		with the WDII Reclamation (1b)	85	0.09	0.183	0.005	3.53	6.12	4.38	4.32	3.48		
CR52	Green Island	without the WDII reclamation (1a)	40	0.22	0.309	0.010	4.45	6.04	4.79	4.60	4.89		
		with the WDII Reclamation (1b)	40	0.22	0.309	0.010	4.45	6.04	4.79	4.60	4.91		
CR54	Sandy Bay	without the WDII reclamation (1a)	80	0.15	0.259	0.007	4.27	6.12	4.89	4.68	5.66		
		with the WDII Reclamation (1b)	80	0.15	0.259	0.007	4.27	6.12	4.89	4.68	5.66		

Remarks:

N/A: Not Available