Table B1 Summary Table of DO, Turbidity and SS Levels Recorded in January 2016

Sampling Date	Tidal Period	Station	Average DO Levels (mg/L)		Average Turbidity Level (NTU)	Average SS Level (mg/L)
			Bottom	Surface and Mid Depth		
2016/01/05	Mid-Ebb	DS1	6.97	7.14	1.85	3.60
		DS2	7.02	7.17	1.71	3.57
		DS3	7.06	7.06	1.56	2.23
		DS4	7.00	7.08	1.61	3.78
		DS5	6.95	7.08	1.73	3.53
		US1	6.93	7.11	2.19	3.63
		US2	7.07	7.27	1.43	2.12
		MW1	6.72	6.92	1.23	3.38
	Mid-Flood	DS1	7.06	7.24	1.23	3.23
		DS2	6.98	7.22	1.33	3.37
		DS3	6.98	7.27	1.56	4.30
		DS4	7.03	7.20	1.78	3.48
		DS5	6.95	7.20	1.48	3.60
		US1	7.08	7.17	1.51	2.70
		US2	7.06	7.29	1.71	3.68
		MW1	6.73	6.99	1.10	2.45
2016/01/12	Mid-Ebb	DS1	7.36	7.70	2.21	5.30
		DS2	7.38	7.74	2.12	4.20
		DS3	7.40	7.72	2.11	5.80
		DS4	7.41	7.66	2.10	4.63
		DS5	7.46	7.83	2.04	4.98
		US1	7.41	7.64	2.65	8.32
		US2	7.45	7.64	2.56	4.18
		MW1	7.41	7.51	1.28	3.57
	Mid-Flood	DS1	7.41	7.45	3.67	5.02
		DS2	7.41	7.45	3.50	5.43
		DS3	7.29	7.38	3.33	5.50
		DS4	7.41	7.43	2.92	5.40
		DS5	7.41	7.42	3.53	6.37
		US1	7.51	7.53	2.93	4.97
		US2	7.47	7.50	3.44	6.02
		MW1	7.16	7.26	2.65	5.25

Notes:

1. Please refer to Table C2 below for the Action and Limit Levels for dredging activities.
2. Cell shaded yellow indicated value exceeding the Action Level criteria.
3. Cell shaded red indicated value exceeding the Limit Level criteria.

Table B2 Action and Limit Levels of Water Quality for Dredging, Backfilling and Capping Activities at ESC CMPs

Parameter	Action Level	Limit Level
Dissolved Oxygen (DO) (1)	Surface and Mid-depth (2) 5%-ile of baseline data for surface and middle layer = **3.76 mg L^{-1}** and Significantly less than the reference stations mean DO (at the same tide of the same day)	Surface and Mid-depth (2) 1%-ile of baseline data for surface and middle layer = **3.11 mg L^{-1}** (3) and Significantly less than the reference stations mean DO (at the same tide of the same day)
	Bottom 5%-ile of baseline data for bottom layers = **2.96 mg L^{-1}** and Significantly less than the reference stations mean DO (at the same tide of the same day)	Bottom The average of the impact station readings are **<2 mg/L^{-1}** and Significantly less than the reference stations mean DO (at the same tide of the same day)
Depth-averaged Suspended Solids (SS) (4) (5)	95%-ile of baseline data for depth average = **37.88 mg L^{-1}** and 120% of control station's SS at the same tide of the same day	99%-ile of baseline data for depth average = **61.92 mg L^{-1}** and 130% of control station's SS at the same tide of the same day
Depth-averaged Turbidity (Tby) (4) (5)	95%-ile of baseline data = **28.14 NTU** and 120% of control station's Tby at the same tide of the same day	99%-ile of baseline data = **38.32 NTU** and 130% of control station's Tby at the same tide of the same day

Notes:

(1) For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.

(2) The Action and Limit Levels for DO for Surface & Middle layers were calculated from the combined pool of baseline surface layer data and baseline middle layer data.

(3) Given the Action Level for DO for Surface & Middle layers has already been lower than 4 mg L^{-1}, it is proposed to set the Limit Level at 3.11 mg L^{-1} which is the first percentile of the baseline data.

(4) "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.

(5) For turbidity and SS, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

Table B3 Action and Limit Levels of Water Quality for Dredging, Backfilling and Capping Activities for SB CMPs

Parameter	Action Level	Limit Level
Dissolved Oxygen (DO) (1)	Surface and Mid-depth (2) The average of the impact, WSR 45C and WSR 46 station readings are < 5%-ile of baseline data for surface and middle layer = **4.32 mg L^{-1}** and Significantly less than the reference stations mean DO (at the same tide of the same day)	Surface and Mid-depth (2) The average of the impact, WSR 45C and WSR 46 station readings are **< 4 mg L^{-1}** and Significantly less than the reference stations mean DO (at the same tide of the same day)
	Bottom The average of the impact, WSR 45C and WSR 46 station readings are < 5%-ile of baseline data for bottom layers = **3.12 mg L^{-1}** and Significantly less than the reference stations mean DO (at the same tide of the same day)	Bottom The average of the impact station, WSR 45C and WSR 46 readings are **< 2 mg L^{-1}** and Significantly less than the reference stations mean DO (at the same tide of the same day)
Depth-averaged Suspended Solids (SS) (3) (4)	The average of the impact, WSR 45C and WSR 46 station readings are > 95%-ile of baseline data for depth average = **21.60 mg L^{-1}** and 120% of control station's SS at the same tide of the same day	The average of the impact, WSR 45C and WSR 46 station readings are > 99%-ile of baseline data for depth average = **40.10 mg L^{-1}** and 130% of control station's SS at the same tide of the same day
Depth-averaged Turbidity (Tby) (3) (4)	The average of the impact, WSR 45C and WSR 46 station readings are > 95%-ile of baseline data = **25.04 NTU** and 120% of control station's Tby at the same tide of the same day	The average of the impact, WSR 45C and WSR 46 station readings are > 99%-ile of baseline data = **32.68 NTU** and 130% of control station's Tby at the same tide of the same day

Notes:

(1) For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.

(2) The Action and Limit Levels for DO for Surface & Middle layers were calculated from the combined pool of baseline surface layer data and baseline middle layer data.

(3) "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.

(4) For turbidity and SS, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

Table B4 In-situ Monitoring Results for Routine Water Quality Monitoring of SB CMP in January 2016

Sampling Period	Stations	Temp (°C)	Salinity (ppt)	Turbidity (NTU)	Dissolved Oxygen (%)	Dissolved Oxygen (mg L^{-1})	pH (mg L^{-1})
January 2016	RFF (Reference)	19.90	29.62	1.31	88.67	6.78	7.98
	IPF (Impact)	19.96	28.25	4.42	91.12	7.02	7.98
	INF (Intermediate)	20.19	27.72	5.56	92.42	7.11	7.97
	Ma Wan	19.97	30.23	0.58	90.09	6.86	7.99
	Shum Shui Kok	19.86	30.31	1.69	87.27	6.65	7.96
	Tai Mo To	19.93	28.11	1.37	90.80	7.00	7.94
	Tai Ho Bay 1	20.08	27.75	3.52	91.15	7.03	7.97
	Tai Ho Bay 2	20.74	27.58	9.39	89.98	6.86	7.91
	WQO	N/A	26.66 – 32.58#	N/A	N/A	>4	6.5-8.5

Notes:
#Not exceeding 10% of natural ambient level which is the result obtained from the Reference Station.
Cell shaded yellow / red indicate value exceeding the Action/Limit levels.
Cell shaded grey indicate value exceeding the WQO.

Table B5 Laboratory Results for Routine Water Quality Monitoring of SB CMP in January 2016

Sampling Period	Stations	As (µg/L)	Cd (µg/L)	Cr (µg/L)	Cu (µg/L)	Pb (µg/L)	Hg (µg/L)	Ni (µg/L)	Ag (µg/L)	Zn (µg/L)	NH_3 (mg/L)	TIN (mg/L)	BOD_5 (mg/L)	SS (mg/L)
January 2016	RFF	2.08	<LOR	3.29	3.90	<LOR	<LOR	1.67	<LOR	12.32	0.19	0.61	1.42	4.89
	IPF	2.09	<LOR	4.46	12.98	<LOR	<LOR	2.86	<LOR	14.39	0.20	0.74	1.39	7.08
	INF	2.07	<LOR	2.55	8.02	<LOR	<LOR	2.09	<LOR	9.43	0.17	0.74	1.45	7.92
	Ma Wan	2.29	<LOR	5.53	4.83	<LOR	<LOR	1.58	<LOR	10.74	0.20	0.57	1.14	2.30
	Shum Shui Kok	2.08	<LOR	3.38	12.92	<LOR	<LOR	1.90	<LOR	12.86	0.21	0.61	1.40	3.25
	Tai Mo To	2.10	<LOR	3.22	7.42	<LOR	<LOR	2.42	<LOR	12.01	0.27	0.87	1.15	3.28
	Tai Ho Bay 1	2.00	<LOR	5.91	10.16	<LOR	<LOR	2.26	<LOR	9.16	0.17	0.73	1.79	4.50
	Tai Ho Bay 2	1.94	<LOR	5.16	3.00	<LOR	<LOR	2.44	<LOR	15.50	0.19	0.81	1.80	3.01
												WQO of TIN: 0.5 mg/L		
													Dry Season WQO of SS : 13.5 mg/L	

Notes: Cell shaded yellow / red indicate value exceeding the Action/Limit levels.
Cell shaded grey indicate value exceeding the WQO.

Table B6 Water Column Profiling Results for SB CMP 2 in January 2016

Stations	Temp (°C)	Salinity (ppt)	Turbidity (NTU)	Dissolved Oxygen (%)	Dissolved Oxygen (mg L^{-1})	pH (mg L^{-1})	Suspended Solids (mg L^{-1})
WCP 1 (Downstream)	19.80	29.66	2.95	98.06	7.51	7.99	4.55
WCP 2 (Upstream)	19.88	29.60	2.96	98.15	7.51	7.98	4.58
WQO (Dry season)	N/A	26.67 - 32.56#	N/A	N/A	>4	6.5-8.5	13.5

Note:
#Not exceeding 10% of natural ambient level which is the result obtained from the Reference Station.
Cell shaded yellow / red indicate value exceeding the Action/Limit levels.
Cell shaded grey indicate value exceeding the WQO.