

Table B1 **Summary Table of DO, Turbidity and SS Levels Recorded in February 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		
2016/02/22	Mid-Ebb	DS1	7.97	8.02	4.85	7.32
		DS2	7.97	8.01	4.49	6.95
		DS3	7.98	8.00	5.22	6.30
		DS4	8.00	8.00	4.19	7.68
		DS5	8.04	8.04	4.40	6.60
		US1	7.92	7.99	4.19	6.32
		US2	7.92	7.98	4.40	6.87
	Mid-Flood	MW1	7.46	7.51	3.64	5.23
		DS1	7.93	7.95	10.65	9.65
		DS2	7.97	7.97	7.66	12.35
		DS3	7.84	7.92	5.10	8.32
		DS4	7.91	7.95	4.64	8.18
		DS5	7.93	7.95	5.46	4.03
		US1	8.01	8.03	6.24	8.25
		US2	7.99	8.01	6.47	6.03
		MW1	7.62	7.66	2.67	7.00

Notes:

1. Please refer to Table B2 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⁾	<u>Surface and Mid-depth</u> ⁽²⁾ 5%-ile of baseline data for surface and middle layer = 3.76 mg L⁻¹	<u>Surface and Mid-depth</u> ⁽²⁾ 1%-ile of baseline data for surface and middle layer = 3.11 mg L⁻¹ ⁽³⁾
	and	and
	Significantly less than the reference stations mean DO (at the same tide of the same day)	Significantly less than the reference stations mean DO (at the same tide of the same day)
	<u>Bottom</u> 5%-ile of baseline data for bottom layers = 2.96 mg L⁻¹	<u>Bottom</u> The average of the impact station readings are <2 mg/L⁻¹
	and	and
	Significantly less than the reference stations mean DO (at the same tide of the same day)	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	99%-ile of baseline data for depth average = 61.92 mg L⁻¹
	and	and
	120% of control station's SS at the same tide of the same day	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	99%-ile of baseline data = 38.32 NTU
	and	and
	120% of control station's Tby at the same tide of the same day	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 *Monitoring Results for Water Quality Monitoring during Capping of ESC on 17 February 2016*

Sampling Period	Stations	Temp (°C)	Salinity (ppt)	Turbidity (NTU)	Dissolved Oxygen (%)	(mg L ⁻¹)	pH (mg L ⁻¹)	SS (mg L ⁻¹)
February 2016	RFF (Reference)	15.89	30.24	1.71	95.66	7.87	8.04	4.17
	IPF (Impact)	15.81	29.76	2.09	96.66	7.99	8.06	4.66
	INF	15.98	30.99	1.67	94.38	7.72	8.06	3.91
	(Intermediate)							
	Ma Wan	15.86	30.19	1.05	96.88	7.98	8.03	5.20
	WQO	N/A	27.22-33.27*	N/A	N/A	>4	6.5-8.5	13.5

Notes:

Not exceeding 2°C of change of the results from the Reference Station.

#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 B4 *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⁾	<u>Surface and Mid-depth</u> ⁽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	<u>Surface and Mid-depth</u> ⁽²⁾ The average of the impact, WSR 45C and WSR 46 station readings are < 4 mg L⁻¹
	and	and
	Significantly less than the reference stations mean DO (at the same tide of the same day)	Significantly less than the reference stations mean DO (at the same tide of the same day)
	<u>Bottom</u> 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	<u>Bottom</u> The average of the impact station, WSR 45C and WSR 46 readings are < 2 mg L⁻¹
	and	and
	Significantly less than the reference stations mean DO (at the same tide of the same day)	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	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	and
	120% of control station's SS at the same tide of the same day	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	The average of the impact, WSR 45C and WSR 46 station readings are > 99%-ile of baseline data = 32.68 NTU
	and	and
	120% of control station's Tby at the same tide of the same day	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 B5 *In-situ Monitoring Results for Routine Water Quality Monitoring of SB CMP in February 2016*

Sampling Period	Stations	Temp (°C)	Salinity (ppt)	Turbidity (NTU)	Dissolved Oxygen		pH
					(%)	(mg L ⁻¹)	(mg L ⁻¹)
February 2016	RFF (Reference)	15.89	31.03	1.79	92.63	7.59	8.09
	IPF (Impact)	15.65	30.50	12.02	94.91	7.83	7.99
	INF (Intermediate)	15.62	30.03	5.58	93.67	7.76	7.97
	Ma Wan	15.90	31.05	1.46	92.85	7.60	8.05
	Shum Shui Kok	15.81	31.08	3.10	92.39	7.58	8.03
	Tai Mo To	15.67	30.20	2.20	95.16	7.87	8.08
	Tai Ho Bay 1	15.87	30.25	6.10	90.89	7.48	7.98
	Tai Ho Bay 2	15.94	28.34	3.88	89.18	7.42	7.90
	WQO	N/A	25.75 – 31.48 [#]	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 B6 *Laboratory Results for Routine Water Quality Monitoring of SB CMP in February 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)
February 2016	RFF	2.22	<LOR	<LOR	3.10	<LOR	<LOR	<LOR	<LOR	4.98	0.13	0.37	1.17	5.15
	IPF	2.05	<LOR	<LOR	4.25	<LOR	<LOR	<LOR	<LOR	5.01	0.13	0.43	1.54	11.58
	INF	2.14	<LOR	<LOR	5.60	<LOR	<LOR	<LOR	<LOR	4.80	0.13	0.46	1.17	7.77
	Ma Wan	2.25	<LOR	<LOR	2.01	<LOR	<LOR	<LOR	<LOR	1.47	0.12	0.35	1.43	5.20
	Shum Shui Kok	1.92	<LOR	<LOR	2.06	<LOR	<LOR	<LOR	<LOR	7.95	0.12	0.41	2.25	5.13
	Tai Mo To	2.22	<LOR	<LOR	2.29	<LOR	<LOR	<LOR	<LOR	4.11	0.12	0.40	1.79	5.34
	Tai Ho Bay 1	2.15	<LOR	<LOR	5.60	<LOR	<LOR	<LOR	<LOR	4.96	0.15	0.48	2.29	9.08
	Tai Ho Bay 2	1.88	<LOR	<LOR	2.11	<LOR	<LOR	<LOR	<LOR	3.83	0.15	0.51	1.79	3.63

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 B7 *Water Column Profiling Results for SB CMP 2 in February 2016*

Stations	Temp (°C)	Salinity (ppt)	Turbidity (NTU)	Dissolved Oxygen		pH	Suspended Solids
				(%)	(mg L ⁻¹)	(mg L ⁻¹)	(mg L ⁻¹)
WCP 1 (Downstream)	15.76	26.41	15.99	88.83	7.50	8.00	17.33
WCP 2 (Upstream)	15.82	26.74	14.38	85.70	7.22	7.94	14.28
WQO (Dry season)	N/A	23.92 - 29.41 [#]	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.

Table B8 **Monitoring Results for Water Quality Monitoring during Capping of SB CMP**
11 February 2016

Sampling Period	Stations	Temp	Salinity	Turbidity	Dissolved Oxygen	pH	SS	NH3	TIN	BOD ₅	
		(°C)	(ppt)	(NTU)	(%)	(mg L ⁻¹)	(mg L ⁻¹)	(mg L ⁻¹)	(mg L ⁻¹)	(mg L ⁻¹)	(mg L ⁻¹)
February 2016	RFF (Reference)	15.76	28.62	14.99	96.85	8.07	7.98	15.36	0.19	0.57	0.98
	IPF (Impact)	15.80	28.29	8.31	97.33	8.12	7.99	13.02	0.19	0.56	1.00
	INF (Intermediate)	15.76	28.23	9.46	97.18	8.12	8.00	21.47	0.17	0.48	0.83
	Ma Wan	15.82	29.31	8.34	94.62	7.84	7.99	14.77	0.17	0.49	1.37
	Sham Shui Kok	15.85	29.41	20.92	94.69	7.84	7.97	14.70	0.18	0.55	0.97
	Tai Mo To	15.93	29.58	6.67	95.10	7.85	7.97	14.80	0.17	0.53	0.90
	Tai Ho Bay 1	15.80	28.80	17.33	96.46	8.02	7.97	9.63	0.20	0.56	1.70
	Tai Ho Bay 2	15.84	29.34	21.01	94.64	7.84	7.98	8.25	0.14	0.47	1.10
	WQO	N/A	25.75-31.48*	N/A	N/A	>4	6.5-8.5	13.5	N/A	0.50	N/A

Notes:

Not exceeding 2°C of change of the results from the Reference Station.

#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.