Table B1 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)	Surface and Mid-depth (2)			
	5%-ile of baseline data for surface and	1%-ile of baseline data for surface and			
	middle layer = 3.76 mg L ⁻¹	middle layer = 3.11 mg L^{-1} (3)			
	and	and			
	Significantly less than the reference	Significantly less than the reference			
	stations mean DO (at the same tide of	stations mean DO (at the same tide of			
	the same day)	the same day)			
	Bottom	Bottom			
	5%-ile of baseline data for bottom	The average of the impact station			
	layers = 2.96 mg L -1	readings are <2 mg/L-1			
	and	and			
	Significantly less than the reference	Significantly less than the reference			
	stations mean DO (at the same tide of the same day)	stations mean DO (at the same tide of the same day)			
Depth-averaged Suspended	95%-ile of baseline data for depth	99%-ile of baseline data for depth			
Solids (SS) (4) (5)	average = 37.88 mg L-1	average = 61.92 mg L-1			
	and				
		and			
	120% of control station's SS at the same	130% of control station's SS at the same			
	tide of the same day	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 B2 Water Column Profiling Results for ESC CMP Vd in March 2016

Stations	Temp	Salinity	Turbidity	Dissolved Oxygen		pН	Suspended Solids
	(°C)	(ppt)	(NTU)	(%)	(mg L-1)	(mg L-1)	(mg L-1)
WCP1	17.7	27.4	8.0	91.7	7.4	8.1	8.2
(Downstream)							
WCP 2	17.8	24.1	4.6	93.0	7.7	8.0	5.1
(Upstream)							
WQO (Dry season)	N/A	26.51 - 23.15#	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 B3 Action and Limit Levels of Water Quality for Dredging, Backfilling and Capping Activities for SB CMPs

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) 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 and Significantly less ts stations mean DO (the same tide of the same day) Depth-averaged Suspended Solids (SS) (3) (4) Depth-averaged Suspended Turbidity 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 > 130% of control station of the same day The average of the impact, WSR 45C and WSR 46 station readings are > 130% of control station of the same day The average of the impact, WSR 45C and WSR 46 station readings are > 130% of control station of the same day The average of the impact, WSR 45C and WSR 46 station readings are > 130% of control station of the same day The average of the impact, WSR 45C and WSR 46 station readings are > 130% of control station of the same day The average of the impact, WSR 45C and WSR 46 station readings are > 130% of control station of the same day The average of the impact, WSR 45C and WSR 46 station readings are > 130% of control station of the same day			
Significantly less than the reference stations mean DO (at the same tide of the same day) Bottom	depth ⁽²⁾ te impact, WSR 45C on readings are < 4		
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) 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 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 average of the impact, WSR 45C and WSR 46 station readings are > 95%-ile of baseline data = 25.04 NTU	than the reference O (at the same tide of		
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 and 120% 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 Significantly less to stations mean DO the stations mean DO the same day The average of the impact, WSR 45C and WSR 46 station readings are > 99%-ile of baseline data = 25.04 NTU Significantly less to stations mean DO the same day)	ne impact station, SR 46 readings are < 2		
Solids (SS) (3) (4) and WSR 46 station readings are > 95%-ile of baseline data for depth average = 21.60 mg L-1 and and 120% 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 > 99%-ile of baseline data = 25.04 NTU The average of baseline data = 25.04 NTU	Significantly less than the reference stations mean DO (at the same tide of		
120% of control station's SS at the same tide of the same day tide of the same day The average of the impact, WSR 45C and WSR 46 station readings are > and WSR 46 station 95%-ile of baseline data = 25.04 NTU 99%-ile of baseline	ne data for depth		
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 tide of the same data The average of the and WSR 45C and WSR 46 station readings are > 99%-ile of baseline			
(Tby) (3) (4) and WSR 46 station readings are > and WSR 46 station 95%-ile of baseline data = 25.04 NTU 99%-ile of baseline			
and and	The average of the impact, WSR 45C and WSR 46 station readings are > 99%-ile of baseline data = 32.68 NTU		
· · · · · · · · · · · · · · · · · · ·	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 Water Column Profiling Results for SB CMP 2 in March 2016

Stations	Temp	Salinity	Turbidity	Dissolved Oxygen pl		pН	Suspended Solids
	(°C)	(ppt)	(NTU)	(%)	(mg L-1)	(mg L-1)	(mg L-1)
WCP1	16.6	29.6	3.2	103.6	8.4	8.1	4.1
(Downstream)							
WCP 2	16.6	29.6	4.9	105.2	8.6	8.1	6.2
(Upstream)							
WQO (Dry season)	N/A	26.61 <i>-</i> 32.51#	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.