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 = $3.11 \text{ mg L}^{-1}$ (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	<u>Bottom</u>				
	5%-ile of baseline data for bottom	The average of the impact station				
	layers = <b>2.96 mg</b> 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 = <b>61.92 mg</b> L <sup>-1</sup>				
	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 = <b>28.14 NTU</b>	99%-ile of baseline data = <b>38.32 NTU</b>				
,	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 April 2016

Stations	Temp	Salinity	Turbidity	Dissolved Oxygen		pН	Suspended Solids	
	(°C)	(ppt)	(NTU)	(%)	(mg L-1)	(mg L-1)	(mg L-1)	
WCP 1								
(Downstream)	19.97	23.14	9.08	104.67	8.31	8.14	8.30	
WCP 2								
(Upstream)	20.03	22.78	7.19	103.42	8.22	8.10	6.85	
WQO (Wet season)	N/A	20.66 - 25.06#	N/A	N/A	>4	6.5-8.5	11.1	

## 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 In-situ Monitoring Results for Routine Water Quality Monitoring of ESC Vd in April 2016

Sampling	Stations	Temp	Salinity	Turbidity	Dissolve	pН	
Period	Stations	(°C)	(ppt)	(NTU)	(%)	(mg L-1)	(mg L-1)
April 2016	RFF (Reference)	19.43	24.01	14.94	106.72	8.51	8.15
	IPF (Impact)	19.10	25.77	4.48	103.86	8.25	8.12
	INF (Intermediate)	19.05	25.88	4.33	102.46	8.14	8.12
	Ma Wan	18.51	29.40	4.47	106.10	8.34	8.16
	WOO	N/A	21.61 -	N/A	N/A	>4	6.5-8.5
	WQO	IN/A	26.41#	IN/A			0.5-6.5

## Notes:

Cell shaded yellow / red indicate value exceeding the  $\mbox{\it Action/Limit}$  levels.

Cell shaded grey indicate value exceeding the WQO.

Table B4 Laboratory Results for Routine Water Quality Monitoring of ESC Vd in April 2016

Sampling	Stations	As	Cd	Cr	Cu	Pb	Hg	Ni	Ag	Zn	NH <sub>3</sub>	TIN	BOD <sub>5</sub>	SS
Period	Stations	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
April	RFF	2.17	<lor< td=""><td><lor< td=""><td>2.33</td><td><lor< td=""><td><lor< td=""><td><lor< td=""><td><lor< td=""><td>5.99</td><td>0.22</td><td>0.75</td><td>2.93</td><td>18.79</td></lor<></td></lor<></td></lor<></td></lor<></td></lor<></td></lor<>	<lor< td=""><td>2.33</td><td><lor< td=""><td><lor< td=""><td><lor< td=""><td><lor< td=""><td>5.99</td><td>0.22</td><td>0.75</td><td>2.93</td><td>18.79</td></lor<></td></lor<></td></lor<></td></lor<></td></lor<>	2.33	<lor< td=""><td><lor< td=""><td><lor< td=""><td><lor< td=""><td>5.99</td><td>0.22</td><td>0.75</td><td>2.93</td><td>18.79</td></lor<></td></lor<></td></lor<></td></lor<>	<lor< td=""><td><lor< td=""><td><lor< td=""><td>5.99</td><td>0.22</td><td>0.75</td><td>2.93</td><td>18.79</td></lor<></td></lor<></td></lor<>	<lor< td=""><td><lor< td=""><td>5.99</td><td>0.22</td><td>0.75</td><td>2.93</td><td>18.79</td></lor<></td></lor<>	<lor< td=""><td>5.99</td><td>0.22</td><td>0.75</td><td>2.93</td><td>18.79</td></lor<>	5.99	0.22	0.75	2.93	18.79
2016	IPF	2.30	<lor< td=""><td><lor< td=""><td>6.07</td><td><lor< td=""><td><lor< td=""><td>1.03</td><td><lor< td=""><td>13.40</td><td>0.23</td><td>0.70</td><td>1.50</td><td>8.08</td></lor<></td></lor<></td></lor<></td></lor<></td></lor<>	<lor< td=""><td>6.07</td><td><lor< td=""><td><lor< td=""><td>1.03</td><td><lor< td=""><td>13.40</td><td>0.23</td><td>0.70</td><td>1.50</td><td>8.08</td></lor<></td></lor<></td></lor<></td></lor<>	6.07	<lor< td=""><td><lor< td=""><td>1.03</td><td><lor< td=""><td>13.40</td><td>0.23</td><td>0.70</td><td>1.50</td><td>8.08</td></lor<></td></lor<></td></lor<>	<lor< td=""><td>1.03</td><td><lor< td=""><td>13.40</td><td>0.23</td><td>0.70</td><td>1.50</td><td>8.08</td></lor<></td></lor<>	1.03	<lor< td=""><td>13.40</td><td>0.23</td><td>0.70</td><td>1.50</td><td>8.08</td></lor<>	13.40	0.23	0.70	1.50	8.08
	INF	2.51	<lor< td=""><td><lor< td=""><td>5.71</td><td><lor< td=""><td><lor< td=""><td><lor< td=""><td><lor< td=""><td>11.21</td><td>0.25</td><td>0.69</td><td>2.12</td><td>7.63</td></lor<></td></lor<></td></lor<></td></lor<></td></lor<></td></lor<>	<lor< td=""><td>5.71</td><td><lor< td=""><td><lor< td=""><td><lor< td=""><td><lor< td=""><td>11.21</td><td>0.25</td><td>0.69</td><td>2.12</td><td>7.63</td></lor<></td></lor<></td></lor<></td></lor<></td></lor<>	5.71	<lor< td=""><td><lor< td=""><td><lor< td=""><td><lor< td=""><td>11.21</td><td>0.25</td><td>0.69</td><td>2.12</td><td>7.63</td></lor<></td></lor<></td></lor<></td></lor<>	<lor< td=""><td><lor< td=""><td><lor< td=""><td>11.21</td><td>0.25</td><td>0.69</td><td>2.12</td><td>7.63</td></lor<></td></lor<></td></lor<>	<lor< td=""><td><lor< td=""><td>11.21</td><td>0.25</td><td>0.69</td><td>2.12</td><td>7.63</td></lor<></td></lor<>	<lor< td=""><td>11.21</td><td>0.25</td><td>0.69</td><td>2.12</td><td>7.63</td></lor<>	11.21	0.25	0.69	2.12	7.63
	Ma Wan	2.22	<lor< td=""><td><lor< td=""><td>5.83</td><td><lor< td=""><td><lor< td=""><td><lor< td=""><td><lor< td=""><td>7.86</td><td>0.14</td><td>0.34</td><td>4.01</td><td>8.54</td></lor<></td></lor<></td></lor<></td></lor<></td></lor<></td></lor<>	<lor< td=""><td>5.83</td><td><lor< td=""><td><lor< td=""><td><lor< td=""><td><lor< td=""><td>7.86</td><td>0.14</td><td>0.34</td><td>4.01</td><td>8.54</td></lor<></td></lor<></td></lor<></td></lor<></td></lor<>	5.83	<lor< td=""><td><lor< td=""><td><lor< td=""><td><lor< td=""><td>7.86</td><td>0.14</td><td>0.34</td><td>4.01</td><td>8.54</td></lor<></td></lor<></td></lor<></td></lor<>	<lor< td=""><td><lor< td=""><td><lor< td=""><td>7.86</td><td>0.14</td><td>0.34</td><td>4.01</td><td>8.54</td></lor<></td></lor<></td></lor<>	<lor< td=""><td><lor< td=""><td>7.86</td><td>0.14</td><td>0.34</td><td>4.01</td><td>8.54</td></lor<></td></lor<>	<lor< td=""><td>7.86</td><td>0.14</td><td>0.34</td><td>4.01</td><td>8.54</td></lor<>	7.86	0.14	0.34	4.01	8.54

WQO of TIN: 0.5 mg/L

Wet Season WQO of SS : 11.1 mg/L

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

 $<sup>{}^\</sup>sharp Not$  exceeding 10% of natural ambient level which is the result obtained from the Reference Station.