*Table B1 Action and Limit Levels of Water Quality for Dredging, Disposal and Capping Activities at ESC CMP V*

| Parameter | Action Level | Limit Level |
|---|---|---|
| Dissolved Oxygen (DO) (1) | Surface and Mid-depth (2)<br>5%-ile of baseline data for surface and middle layer = **3.76 mg L$^{-1}$**<br><br>and<br><br>Significantly less than the reference stations mean DO (at the same tide of the same day) | Surface and Mid-depth (2)<br>1%-ile of baseline data for surface and middle layer = **3.11 mg L$^{-1}$** (3)<br><br>and<br><br>Significantly less than the reference stations mean DO (at the same tide of the same day) |
| | Bottom<br>5%-ile of baseline data for bottom layers = **2.96 mg L$^{-1}$**<br><br>and<br><br>Significantly less than the reference stations mean DO (at the same tide of the same day) | Bottom<br>The average of the impact station readings are **<2 mg/L$^{-1}$**<br><br>and<br><br>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$^{-1}$**<br><br>and<br><br>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$^{-1}$**<br><br>and<br>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**<br><br>and<br><br>120% of control station's Tby at the same tide of the same day | 99%-ile of baseline data = **38.32 NTU**<br><br>and<br><br>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* ***Summary Table of DO, Turbidity and SS Levels Recorded in July 2017 for Impact Water Quality Monitoring during Dredging Operations of ESC CMP Vb***

| Sampling Date | Tidal Period | Station | Average DO Levels (mg/L) | | Average Turbidity Level (NTU) | Average SS Level (mg/L) |
|---|---|---|---|---|---|---|
| | | | Bottom | Surface and Mid Depth | | |
| 2017/07/31 | Mid-Ebb | DS1 | 3.83 | 4.67 | 7.67 | 6.75 |
| | | DS2 | 3.73 | 4.71 | 6.23 | 6.10 |
| | | DS3 | 3.97 | 4.95 | 5.18 | 5.35 |
| | | DS4 | 3.34 | 4.38 | 5.92 | 7.28 |
| | | DS5 | 3.93 | 4.75 | 5.77 | 5.72 |
| | | US1 | 3.94 | 4.83 | 7.90 | 4.88 |
| | | US2 | 4.27 | 4.89 | 4.53 | 5.08 |
| | | MW1 | 3.31 | 5.14 | 3.16 | 4.32 |
| | Mid-Flood | DS1 | 3.90 | 4.89 | 7.65 | 8.43 |
| | | DS2 | 4.24 | 5.11 | 7.23 | 9.42 |
| | | DS3 | 4.26 | 5.06 | 6.68 | 9.63 |
| | | DS4 | 4.30 | 5.38 | 6.36 | 8.47 |
| | | DS5 | 4.29 | 5.25 | 6.03 | 9.33 |
| | | US1 | 4.49 | 5.21 | 4.44 | 8.12 |
| | | US2 | 4.32 | 5.30 | 5.15 | 7.42 |
| | | MW1 | 3.08 | 4.77 | 3.47 | 4.32 |

*Table B3* ***Water Column Profiling Results for ESC CMP Vd in July 2017***

| Stations | Temp (°C) | Salinity (ppt) | Turbidity (NTU) | Dissolved Oxygen (%) | Dissolved Oxygen (mg $L^{-1}$) | pH | Suspended Solids (mg $L^{-1}$) |
|---|---|---|---|---|---|---|---|
| WCP 1 (Downstream) | 27.41 | 19.73 | 3.91 | 82.63 | 5.85 | 7.91 | 4.63 |
| WCP 2 (Upstream) | 27.94 | 16.47 | 4.56 | 85.38 | 6.10 | 7.88 | 4.78 |
| WQO (Wet season) | N/A | 18.19 – 14.88# | N/A | N/A | >4 | 6.5-8.5 | 11.0 |

**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 B4* ***In-situ Monitoring Results for Routine Water Quality Monitoring of ESC CMPs in July 2017***

| Sampling Period | Stations | Temp (°C) | Salinity (ppt) | Turbidity (NTU) | Dissolved Oxygen (%) | Dissolved Oxygen (mg $L^{-1}$) | pH (mg $L^{-1}$) |
|---|---|---|---|---|---|---|---|
| July 2017 | RFE (Reference) | 27.08 | 18.41 | 6.79 | 59.04 | 4.24 | 7.75 |
| | IPE (Impact) | 27.06 | 18.74 | 15.74 | 58.34 | 4.18 | 7.75 |
| | INE (Intermediate) | 27.06 | 19.29 | 6.75 | 64.39 | 4.60 | 7.81 |
| | Ma Wan | 27.45 | 18.94 | 2.80 | 89.45 | 6.36 | 7.97 |
| | WQO | N/A | 16.57 – 20.25# | 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 ESC CMPs in July 2017***

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| July 2017 | RFE | 2.47 | <LOR | 0.61 | 1.38 | 0.53 | <LOR | 1.96 | <LOR | 39.68 | 0.07 | 1.05 | 2.13 | 7.66 |
| | IPE | 2.83 | <LOR | 0.62 | 0.50 | 1.07 | <LOR | 2.11 | <LOR | 43.88 | 0.05 | 0.95 | 1.19 | 15.72 |
| | INE | 2.68 | <LOR | 0.67 | 0.50 | 0.50 | <LOR | 2.16 | <LOR | 38.92 | 0.06 | 0.94 | 1.43 | 8.59 |
| | Ma Wan | 2.35 | <LOR | 0.70 | 2.75 | 0.59 | <LOR | 2.13 | <LOR | 45.59 | 0.06 | 1.00 | 2.79 | 5.21 |
| | | | | | | | | | | | | WQO of TIN: 0.5 mg/L | | |
| | | | | | | | | | | | | Wet Season WQO of SS : 11.0 mg/L | | |

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