# **Appendix C. Graphical Presentations**



## Routine Water Quality Monitoring for ESC CMP V - August 2024

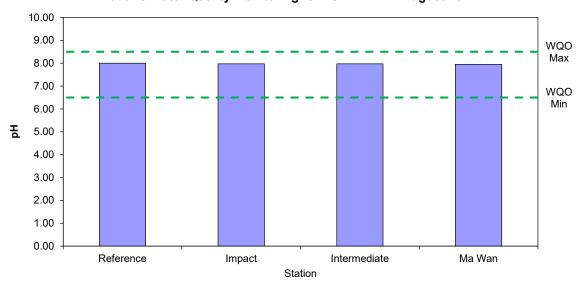
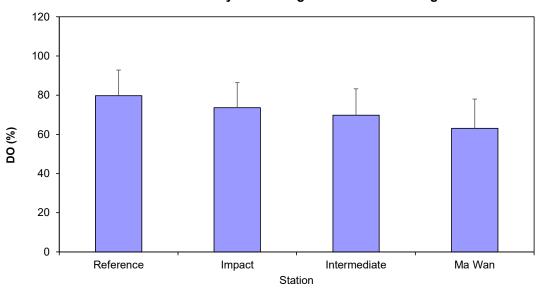


Figure 1: Level of pH recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024

## Routine Water Quality Monitoring for ESC CMP V - August 2024



Level of Dissolved Oxygen (DO) (% saturation; mean + SD) recorded during Figure 2: Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024

The mean and standard deviation (SD) for in-situ data are the mean and SD for water columns within the area.

## Routine Water Quality Monitoring for ESC CMP V - August 2024

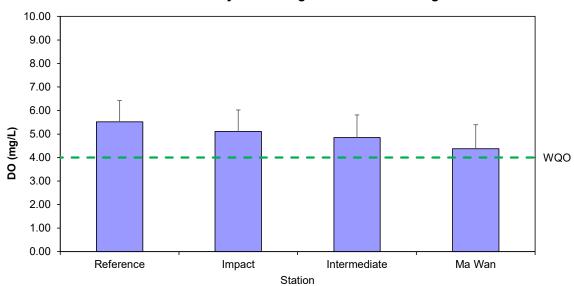


Figure 3: Concentration of Dissolved Oxygen (DO) (mg/L; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024

## Routine Water Quality Monitoring for ESC CMP V - August 2024

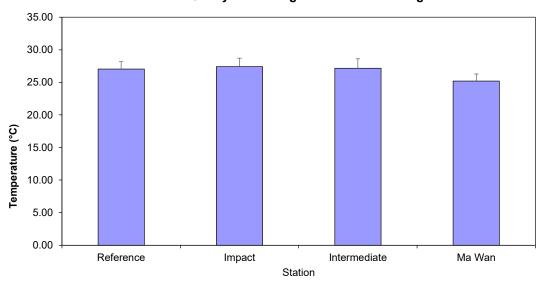


Figure 4: Level of Temperature (°C; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024

The mean and standard deviation (SD) for in-situ data are the mean and SD for water columns within the area.

## Routine Water Quality Monitoring for ESC CMP V - August 2024

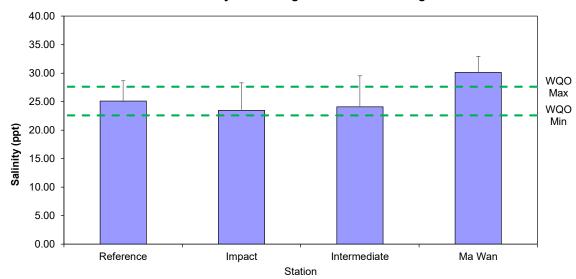


Figure 5: Level of Salinity (ppt; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024

# Routine Water Quality Monitoring for ESC CMP V - August 2024

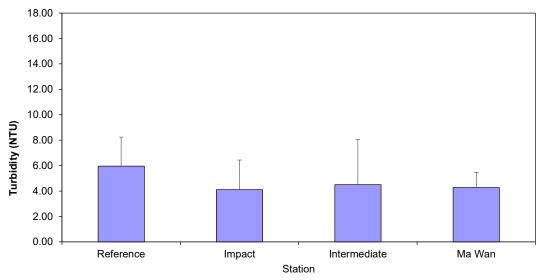


Figure 6: Level of Turbidity (NTU; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024

<sup>1</sup> The mean and standard deviation (SD) for in-situ data are the mean and SD for water columns within the area.



## Routine Water Quality Monitoring for ESC CMP V August 2024

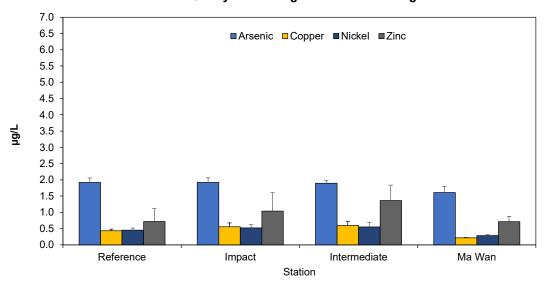
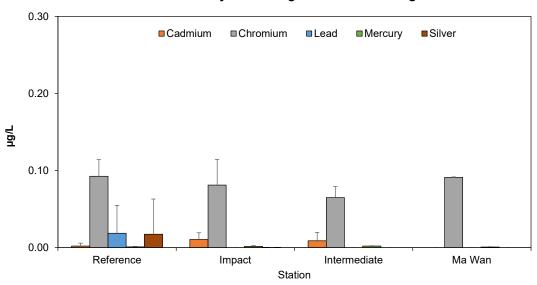


Figure 7: Concentration of Arsenic, Copper, Nickel, and Zinc ( $\mu g/L$ ; mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024

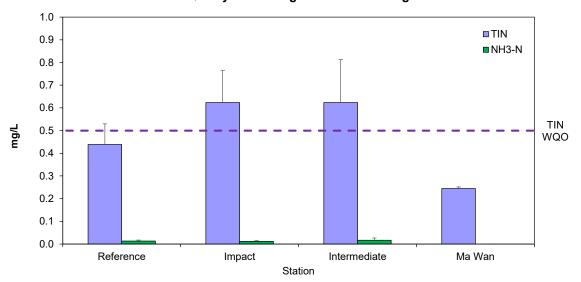
## Routine Water Quality Monitoring for ESC CMP V August 2024



Concentration of Cadmium, Chromium, Lead, Mercury and Silver, ( $\mu g/L$ ; mean + SD) in Figure 8: water samples collected from Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024



## **Routine Water Quality Monitoring for Nutrients - August 2024**



Concentration of Total Inorganic Nitrogen (TIN) and Ammonia Nitrogen (NH3-N) (mg/L; mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024 Figure 9:

# Routine Water Quality Monitoring for Biochemical Oxygen Demand (BOD5) -August 2024 1.0 0.5 0.0 Reference Impact Intermediate Ma Wan Station

Level of Biochemical Oxygen Demand (BOD5) (mg/L; mean + SD) in water samples Figure 10: collected from Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024

# Routine Water Quality Monitoring for Suspended Solids - August 2024

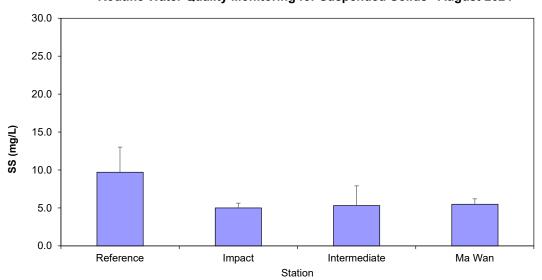


Figure 11 Concentration of Suspended Solids (SS) (mg/L; mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at ESC CMP V in August 2024

# Pit Specific Sediment Chemistry for Metal and Metalloid Contaminants at ESC CMP Vb - August 2024

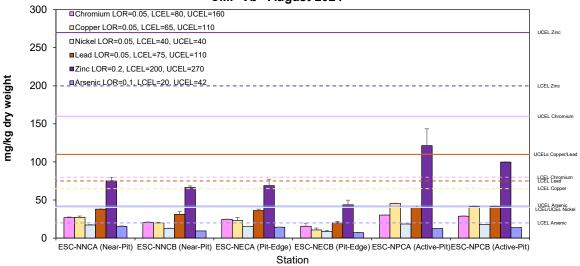


Figure 12: Concentration of Metals and Metalloid<sup>2</sup>(Cr, Cu, Ni, Pb, Zn, As; mg/kg dry weight; mean + SD) in sediment samples collected from Pit Specific Sediment Chemistry Monitoring for ESC CMP Vb in August 2024

The LCEL and UCEL of Cadmium, Mercury and Arsenic have been updated according to the standard promulgated starting from 19 January 2024. https://www.cedd.gov.hk/filemanager/eng/content\_80/PAH 2022 Chapter 4 Rev 06\_240321\_Clean.pdf



# Pit Specific Sediment Chemistry for Metal Contaminants at ESC CMP Vb - August 2024

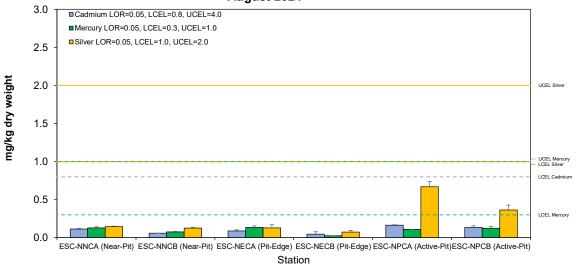


Figure 13: Concentration of Metals (Cd, Hg, Ag; mg/kg dry weight; mean + SD) in sediment samples collected from Pit Specific Sediment Chemistry Monitoring for ESC CMP Vb in August 2024

# Pit Specific Sediment Chemistry for Total Organic Carbon (TOC) at ESC CMP Vb - August 2024

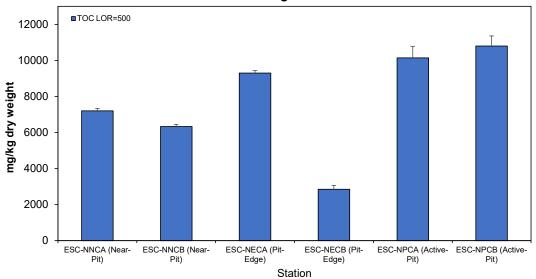


Figure 14: Concentration of Total Organic Carbon (TOC) (mg/kg dry weight; mean + SD) in sediment samples collected from Pit Specific Sediment Chemistry Monitoring for ESC CMP Vb in August 2024

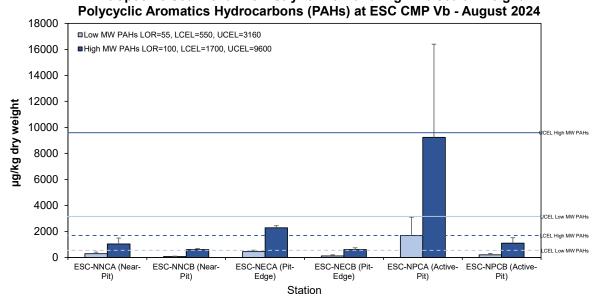


Figure 15: Concentration of Low and High Molecular Weight Polycyclic Aromatic Hydrocarbons (µg/kg dry weight; mean + SD) in sediment samples collected from Pit Specific Sediment Chemistry Monitoring for ESC CMP Vb in August 2024

Pit Specific Sediment Chemistry for Tributyltin (TBT) at ESC CMP Vb - August

# 8 7 6 3 2 1 ESC-NNCA (Near-Pit) ESC-NECB (Near-Pit) ESC-NECB (Pit-Edge) ESC-NPCA (Active-Pit)ESC-NPCB (Active-Pit) Station

Figure 16: Concentration of Tributyltin (TBT) (μg TBT/kg; mean + SD) in sediment samples collected from Pit Specific Sediment Chemistry Monitoring for ESC CMP Vb in August 2024



# Cumulative Impact Sediment Chemistry for Metal and Metalloid Contaminants at ESC CMPs - August 2024

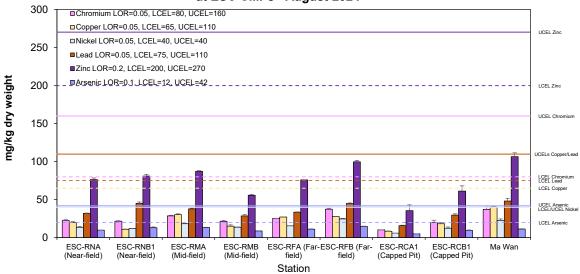


Figure 17: Concentration of Metals and Metalloid (Cr, Cu, Ni, Pb, Zn, As; mg/kg dry weight; mean + SD) in sediment samples collected from Cumulative Impact Sediment Chemistry Monitoring for ESC CMPs in August 2024

# Cumulative Impact Sediment Chemistry for Metal Contaminants at ESC CMPs - August 2024

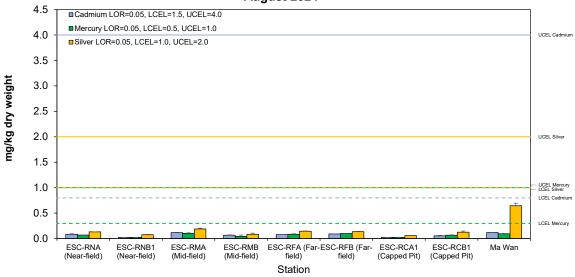


Figure 18: Concentration of Metals (Cd, Hg, Ag; mg/kg dry weight; mean + SD) in sediment samples collected from Cumulative Impact Sediment Chemistry Monitoring for ESC CMPs in August 2024



# Cumulative Impact Sediment Chemistry for Total Organic Carbon (TOC) at ESC CMPs - August 2024

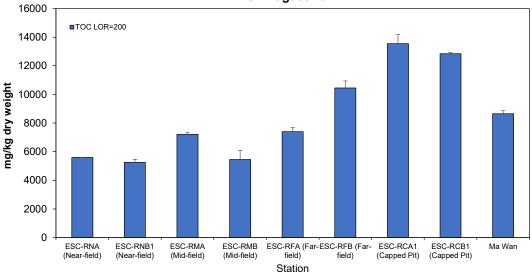


Figure 19: Concentration of Total Organic Carbon (TOC) (mg/kg dry weight; mean + SD) in sediment samples collected from Cumulative Impact Sediment Chemistry Monitoring for ESC CMPs in August 2024

**Cumulative Impact Sediment Chemistry for Low and High Molecular Weight** 

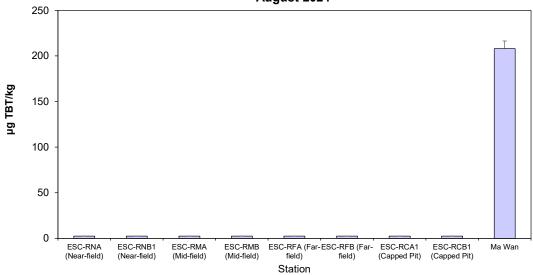
#### Polycyclic Aromatics Hydrocarbons (PAHs) at ESC CMPs - August 2024 900 □Low MW PAHs LOR=55, LCEL=550, UCEL=3160 ■ High MW PAHs LOR=100, LCEL=1700, UCEL=9600 800 700 600 µg/kg dry weight LCEL Low MW PAHs 500 400 300 200 100 0 ESC-RFA (Far-ESC-RFB (Far-ESC-RCA1 ESC-RNA ESC-RNB1 ESC-RMA ESC-RMB ESC-RCB1 (Mid-field) (Mid-field) field) (Capped Pit)

Figure 20: Concentration of Low and High Molecular Weight Polycyclic Aromatics (mg/kg dry weight; mean + SD) in sediment samples collected from Cumulative Impact Sediment Chemistry Monitoring for ESC CMPs in August 2024

Station



## Cumulative Impact Sediment Chemistry for Tributyltin (TBTs) at ESC CMPs -August 2024



Concentration of Tributyltin (TBT) ( $\mu$ g/kg dry weight; mean + SD) in sediment samples collected from Cumulative Impact Sediment Chemistry Monitoring for ESC CMPs in Figure 21: August 2024