





# Contract No. 13/WSD/17

## Design, Build and Operate First Stage of Tseung Kwan O **Desalination Plant**

# Monthly EM&A Report No.35 (Period from 1 January to 31 January 2023)

### Document No.

ASCL	/	200168078	/	MEMAR35	/	С
Publisher		Project Code		Sequential No.		Revision Index

	Prepared by:	Reviewed and Certified by:
Name	Howard CHAN	Jacky LEUNG
Position	Environmental Team Member	Environmental Team Leader
Signature	Loward	
Date:	20 February 2023	20 February 2023



Water Supplies Department New Works Branch Consultants Management Division 6/F Sha Tin Government Offices 1 Sheung Wo Che Road Sha Tin New Territories

Our reference:

Your reference:

HKWSD202/50/108624

Date:

20 February 2023

Attention: Mr Sam Hui/ Mr H L Lai

BY EMAIL & POST (email: wl\_hui@wsd.gov.hk/ jack\_hl\_lai@wsd.gov.hk)

Dear Sirs

Agreement No. CE 5/2019 (EP) Independent Environmental Checker for First Stage of Tseung Kwan O Desalination Plant – Investigation Verification of Monthly EM&A Report No.35 (January 2023)

We refer to emails of 14, 15 and 20 February 2023 attaching Monthly EM&A Report No. 35 (January 2023) for the captioned project prepared by the ET.

We have no further comment and hereby verify the captioned report in accordance with Clause 3.5 of the Environmental Permit no. EP-503/2015/A and Further Environmental Permit no. FEP-01/503/2015/A.

Should you have any queries regarding the above, please do not hesitate to contact the undersigned on 2618 2831.

Yours faithfully ANEWR CONSULTING LIMITED

Louis Kwan

Independent Environmental Checker

KSYL/lsmt

Email: info@anewr.com Web: www.anewr.com Contract No. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Monthly EM&A Report No.35





### **REVISION HISTORY**

REV.	DESCRIPTION OF MODIFICATION	DATE
A.	First Issue for Comments	14/02/2023
В	Updated Landfill Gas Monitoring Results	15/02/2023
C.	Revised according to IEC and SOR's comment	20/02/2023

Contract No. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Monthly EM&A Report No.35





-	_								
- 11	-1	റ	TA 1	п	וייו	D.I	TA I	и	rc
			1.0			M. I	IV		-

Execu	tive Summary		1
1.	Basic Contract Inform	mation	8
2.	Noise		14
3.	Water Quality		18
4.	Waste		26
5.	Landfill Gas Monitor	ing	27
6.	Ecology		32
7.	Summary of Exceeda	ance, Complaints, Notification of Summons and Prosecutions	33
8.	EM&A Site Inspectio	n	35
9.	Future Key Issues		36
10.	Conclusions and Rec	ommendations	39
$A_{]}$	ppendix A	Master Programme	
$A_{]}$	ppendix B	Overview of Desalination Plant in Tseung Kwan O	
$A_{]}$	ppendix C	Summary of Implementation Status of Environmental Mitigation	
$A_{]}$	ppendix D	Impact Monitoring Schedule	
$A_{]}$	ppendix E	Event/Action Plan	
$A_{]}$	ppendix F	Water Quality and Landfill Gas Equipment Calibration Certificate	
$A_{]}$	ppendix G	Water Quality and Landfill Gas Monitoring Data	
$A_{]}$	ppendix H	Waste Flow Table	
$A_{]}$	ppendix I	Site Inspection Proforma	
$A_1$	ppendix J	Complaint Log	
$A_{]}$	ppendix K	Exceedance Report(s)	





### **EXECUTIVE SUMMARY**

#### **INTRODUCTION**

- A1. The Project, Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant (TKODP), is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO) and is currently governed by a Further Environmental Permit (EP No. FEP 01/503/2015/A) for the construction and operation of the Contract.
- A2. In accordance with the Environmental Monitoring and Audit (EM&A) Manual for the Contract, EM&A works for marine water quality, noise, waste management and ecology should be carried out by Environmental Team (ET), Acuity Sustainability Consulting Limited (ASCL), during the construction phase of the Contract.
- A3. This is the 35<sup>th</sup> Monthly EM&A Report, prepared by ASCL, for the Contract summarizing the monitoring results and audit findings of the EM&A programme at and around Tseung Kwan O Area 137 (TKO 137) during the reporting period from 1 January to 31 January 2023.
- A4. The EM&A programme for this contract has covered environmental monitoring on construction noise level at selected NSRs and Contractor's environmental performance auditing in the aspects of construction dust, construction noise, water quality, waste management, Landscape and Visual and Ecology.

### SUMMARY OF MAIN WORKS UNDERTAKEN & KEY MITIGATION MEASURES IMPLEMENTED

A5. Key activities carried out in this reporting period for the Contract included the followings:

### Administration Building

- Installation of Aluminium Window, curtain wall, balustrade, the subframe of glass wall, Aluminium Louvre, tiling works, timber door subframe
- Construction of interior finishes at 2/F, 3/F, and 4/F and staircase at 1st floor
- Floor finishes at 1/F open area and Roof
- Erection of block wall
- Installation of building services, lifting and electrical switchboard

#### Chemical building

- installation of louvre
- Underground utility construction work
- Installation of building services and mechanical equipment

### Main Electrical & Central Chiller Plant Building

- Construction of Check Water Meter Cabinet and Plinths for Genset
- Installation metal and timber Doors
- Installation of chillers, building services, electrical switchboard





#### ActiDAFF

- Metal railing installation
- R/F tile laying works
- Underground utility construction work
- Erection and dismantling of scaffolding, installation of mechanical equipment and piping, bubble test

### Product Water Storage Tank Building

- Tile laying works
- Installation of Design for Manufacturing and Assembly on East & West Sides
- Resin Injection work & Water Test for 4 Water Tanks
- Installation of Cat Ladders in Water Tanks
- Underground utility construction work
- Installation of building services, mechanical equipment and steel pipe

### **OSCG** Building

- Installation of Design for Manufacturing and Assembly Panel
- Resin Injection work & water test for Brine Tank
- Construction of External staircases
- Underground utility construction work
- Installation of building services and mechanical equipment, lifting of tanks

#### **Reverse Osmosis Building**

- Installation of Design for Manufacturing and Assembly Panels at East & West Sides
- Installation of window, hand railings and Louvres
- Construction of Staircases
- Underground utility construction
- Installation of building services, electrical switchboard, mechanical equipment, steel pipe and Glass Reinforced Plastics (GRP) pipe

### Post Treatment Building

- installation of louvre
- Installation of Design for Manufacturing and Assembly Panels
- Underground utility construction

### Inspection corridor

- Formwork Erection and Steel fixing works for segments 1-7
- construction of stair tower No. 1

### CO<sub>2</sub> Tanks

Installation of pipes

#### **Outfall Shaft**

Rock material back fill

#### Intake shaft

• Shafts backfill rock and excavation and lateral support (ELS) removal





#### **Combined Shaft**

- Installation of louvre and window
- Underground utility construction
- Staircases and internal finishing, puddle pipe installation, stop log wall construction
- Waterproofing works
- Installation of mechanical equipment and pipes, stoplogs and band screens

### Pump room

• internal finishing, waterproofing; E&M installation

#### **Elevated Walkway**

Lift shaft construction

#### Slope works

- Excavation at slope toe and access erection, soil anchor and grouting construction Other
- 132 kV temporary emergency vehicular access (eva) Construction
- Permanent road construction at Zone A, B, C
- Construction of parapet on top slab of backwash tank
- A6. The major environmental impacts brought by the above construction works include:
  - Construction dust and noise generation from construction works, excavation works, rock cutting works and pipe piling driving works;
  - Waste generation from the construction activities; and
  - Impact on water quality from marine construction works and inland construction works.
- A7. The key environmental mitigation measures implemented for the Contract in this reporting period associated with the above construction works include:
  - Dust suppression by regular wetting and water spraying for construction works;
  - Reduction of noise from equipment and machinery on-site and regular inspection to machinery and plants/vehicles on-site to ensure proper functioning;
  - Deployment of temporary silt curtain in the area where marine construction works were conducted and deployment of water sedimentation tanks for treatment of wastewater at inland and marine areas before discharge; and
  - Sorting and storage of general refuse and construction waste; and





#### SUMMARY OF EXCEEDANCE & INVESTIGATION & FOLLOW-UP

- A8. No noise monitoring was conducted during the reporting period since there are no Contract -related construction activities undertaken within a radius of 300m from the monitoring locations. No exceedance of the action Level was recorded during the reporting period.
- A9. The EM&A works for water quality were conducted during the reporting period in accordance with the EM&A Manual.
- A10. Sixty-three (63) of the general water quality monitoring results of Suspended Solids (SS) obtained had exceeded the Action Level. Forty-six (46) of the general water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Level.
- A11. Investigation on the reason of exceedance has been carried out, where the exceedances of SS on 3, 7, 10, 12, 14, 17, 19, 21, 27 and 31 January 2023 were concluded to be unrelated to the Contract as detailed in the Incident Reports on Action Level or Limit Level Non-compliance along with supporting materials in **Appendix K**.
- A12. In this reporting period, 30 times of landfill gas monitoring were conducted at TKO Area 137 (Ch0+750 Ch0+780). No action or limit level exceedance was recorded during the reporting period.
- A13. Joint site inspections of the construction work by ET and IEC were carried out on 3, 10, 17, 27 and 31 January 2023 to audit the mitigation measures implementation status. Observations and recommendations were recorded in the site inspection checklists and provided to the contractors together with the appropriate follow-up actions where necessary.

#### **COMPLAINT HANDLING AND PROSECUTION**

A14. No environmental complaint, notification of summons and prosecution was received in the reporting period.

#### **REPORTING CHANGE**

A15. There was no change to be reported that may affect the on-going EM&A programme.





#### SUMMARY OF UPCOMING KEY ISSUES AND KEY MITIGATION MEASURES

A16. Key activities anticipated in the next reporting period for the Contract will include the followings:

### **Administration Building**

- Installation of Aluminium Window, curtain wall, balustrade, the subframe of glass wall, Aluminium Louvre, tiling works, timber door subframe
- Construction of interior finishes at 2/F, 3/F, and 4/F and staircase at 1st floor
- Floor finishes at 1/F open area and Roof
- Erection of block wall
- Installation of building services, lifting and electrical switchboard

#### Chemical building

- installation of louvre
- Underground utility construction work
- Installation of building services and mechanical equipment

### Main Electrical & Central Chiller Plant Building

- Construction of Check Water Meter Cabinet and Plinths for Genset
- Installation metal and timber Doors
- Installation of chillers, building services, electrical switchboard

#### ActiDAFF

- Metal railing installation
- R/F tile laying works
- Underground utility construction work
- Erection and dismantling of scaffolding, installation of mechanical equipment and piping, bubble test

### Product Water Storage Tank Building

- tile laying works
- Installation of Design for Manufacturing and Assembly on East & West Sides
- Resin Injection work & Water Test for 4 Water Tanks
- Installation of Cat Ladders in Water Tanks
- Underground utility construction work
- Installation of building services, mechanical equipment and steel pipe

#### **OSCG** Building

- Installation of Design for Manufacturing and Assembly Panel
- Resin Injection work & water test for Brine Tank
- Construction of External staircases
- Underground utility construction work
- Installation of building services and mechanical equipment, lifting of tanks

#### **Reverse Osmosis Building**

• Installation of Design for Manufacturing and Assembly Panels at East & West Sides





- Installation of window, hand railings and Louvres
- Construction of Staircases
- Underground utility construction
- Installation of building services, electrical switchboard, mechanical equipment, steel pipe and Glass Reinforced Plastics (GRP) pipe

### Post Treatment Building

- installation of louvre
- Installation of Design for Manufacturing and Assembly Panels
- Underground utility construction

### Inspection corridor

- Formwork Erection and Steel fixing works for segments 1-7
- construction of stair tower No. 1

#### CO<sub>2</sub> Tanks

Installation of pipes

#### **Outfall Shaft**

- Dredging for diffuser pipe
- GRP Diffuser pipe installation
- Rock material back fill

#### Intake shaft

• Shafts backfill rock and excavation and lateral support (ELS) removal

#### Combined Shaft

- Installation of louvre and window
- Underground utility construction
- Staircases and internal finishing, puddle pipe installation, stop log wall construction
- Waterproofing works
- Installation of mechanical equipment and pipes, stoplogs and band screens

### Pump room

• internal finishing, waterproofing, E&M installation

#### **Elevated Walkway**

• Lift shaft construction

### Slope works

- Excavation at slope toe and access erection, soil anchor and grouting construction Other
- 132 kV temporary emergency vehicular access (eva) Construction
- Permanent road construction at Zone A, B, C
- Construction of parapet on top slab of backwash tank





- A17. The major environmental impacts brought by the above construction works will include:
  - Construction dust and noise generation from excavation and construction works;
  - Waste generation from construction activities; and
  - Impact on water quality from marine construction works and inland construction works.
- A18. The key environmental mitigation measures for the Contract in the coming reporting period associated with the above construction works will include:
  - Reduction of noise from equipment and machinery on-site;
  - Dust suppression by regular wetting and water spraying for construction works and at main haul road;
  - Sorting and storage of general refuse and construction waste; and
  - Deployment of temporary silt curtain in the area where marine construction works were conducted and deployment of water sedimentation tanks for treatment of wastewater at inland and marine areas before discharge.





### 1. Basic Contract Information

#### BACKGROUND

- 1.1. The Acciona Agua, S.A. Trading, Jardine Engineering Corporation, Limited and China State Construction Engineering (Hong Kong) Limited as AJC Joint Venture (AJCJV) is contracted to carry out the Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant (DPTKO) under Contract No. 13/WSD/17 (the Contract).
- 1.2. Acuity Sustainability Consulting Limited (ASCL) is commissioned by AJCJV to undertake the Environmental Team (ET) services as required and/or implied, both explicitly and implicitly, in the Environmental Permit (EP), Environmental Impact Assessment Report (EIA Report) (Register No. AEIAR-192/2015) and Environmental Monitoring and Audit Manual (EM&A Manual) for the Contract; and to carry out the Environmental Monitoring and Audit (EM&A) programme in fulfillment of the EIA Report's EM&A requirements and Contract No. 13/WSD/17 Specification requirements.
- 1.3. Pursuant to the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection granted the Environmental Permit (No. EP-01/503/2015) and Variation of Environmental Permit (No. EP-01/503/2015/A) to Water Supplies Department (WSD); and granted the Further Environmental Permit (No. FEP-01/503/2015/A) to AJCJV for the Contract.

#### THE REPORTING SCOPE

1.4. This is the 35<sup>th</sup> Monthly EM&A Report for the Contract which summarizes the key findings of the EM&A programme during the reporting period from 1 January to 31 January 2023.

#### **CONTRACT ORGANIZATION**

1.5. The Contract Organization structure for Construction Phase is presented in **Figure 1.1**.

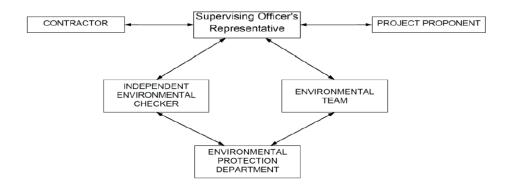


Figure 1.1 Contract Organization Chart

1.6. Contact details of the key personnel are presented in **Table 1.1** below:





**Table 1.1** Contact Details of Key Personnel

Party	Position	Name	Telephone no.
Contract Proponent (Water Supplies Department)	SE/CM2	Benny Lam	2634-3573
Supervising Officer	Project Manager	Christina Ko	2608-7302
(Binnies Hong Kong Limited)	Chief Resident Engineer	Roger Wu	6343-1002
The Jardine Engineering Corporation, Limited, China	Project Manager	Stephen Yeung	2807-4665
State Construction Engineering (Hong Kong) Limited and Acciona Agua, S.A. Trading	Environmental Monitoring Manager	Brian Kam	9456-9541
Acuity Sustainability Consulting Limited	Environmental Team Leader	Jacky Leung	2698-6833
ANewR Consulting Limited	Independent Environmental Checker (IEC)	Louis Kwan	2618-2831

#### **SUMMARY OF CONSTRUCTION WORKS**

- 1.7. Details of the major construction activities undertaken in this reporting period are shown as below. The master programme is presented in **Appendix A**.
- 1.8. Key activities carried out in this reporting period for the Contract included the followings:

### Administration Building

- Installation of Aluminium Window, curtain wall, balustrade, the subframe of glass wall, Aluminium Louvre, tiling works, timber door subframe
- Construction of interior finishes at 2/F, 3/F, and 4/F and staircase at 1st floor
- Floor finishes at 1/F open area and Roof
- Erection of block wall
- Installation of building services, lifting and electrical switchboard

### Chemical building

- installation of louvre
- Underground utility construction work
- Installation of building services and mechanical equipment

### Main Electrical & Central Chiller Plant Building

• Construction of Check Water Meter Cabinet and Plinths for Genset





- Installation metal and timber Doors
- Installation of chillers, building services, electrical switchboard

#### ActiDAFF

- Metal railing installation
- R/F tile laying works
- Underground utility construction work
- Erection and dismantling of scaffolding, installation of mechanical equipment and piping, bubble test

### **Product Water Storage Tank Building**

- tile laying works
- Installation of Design for Manufacturing and Assembly on East & West Sides
- Resin Injection work & Water Test for 4 Water Tanks
- Installation of Cat Ladders in Water Tanks
- Underground utility construction work
- Installation of building services, mechanical equipment and steel pipe

### **OSCG** Building

- Installation of Design for Manufacturing and Assembly Panel
- Resin Injection work & water test for Brine Tank
- Construction of External staircases
- Underground utility construction work
- Installation of building services and mechanical equipment, lifting of tanks

### Reverse Osmosis Building

- Installation of Design for Manufacturing and Assembly Panels at East & West Sides
- Installation of window, hand railings and Louvres
- Construction of Staircases
- Underground utility construction
- Installation of building services, electrical switchboard, mechanical equipment, steel pipe and Glass Reinforced Plastics (GRP) pipe

### Post Treatment Building

- installation of louvre
- Installation of Design for Manufacturing and Assembly Panels
- Underground utility construction

### Inspection corridor

- Formwork Erection and Steel fixing works for segments 1-7
- construction of stair tower No. 1

#### CO<sub>2</sub> Tanks

• Installation of pipes

#### **Outfall Shaft**

Rock material back fill

#### Intake shaft

Shafts backfill rock and excavation and lateral support (ELS) removal





#### **Combined Shaft**

- Installation of louvre and window
- Underground utility construction
- Staircases and internal finishing, puddle pipe installation, stop log wall construction
- Waterproofing works
- Installation of mechanical equipment and pipes, stoplogs and band screens

#### Pump room

• internal finishing, waterproofing, E&M installation

### Elevated Walkway

• Lift shaft construction

#### Slope works

- Excavation at slope toe and access erection, soil anchor and grouting construction Other
- 132 kV temporary emergency vehicular access (eva) Construction
- Permanent road construction at Zone A, B, C
- Construction of parapet on top slab of backwash tank
- 1.9. A summary of the valid permits, licences, and/or notifications on environmental protection for this Contract is presented in **Table 1.2**.

Table 1.2 Summary of the Status of Valid Environmental Licence, Notification, Permit and Documentations

Dameit / Licanosa	Valid 1	Period	Chahua	Remark			
Permit/ Licences	From	То	Status	Kemark			
<b>Environmental Permit</b>	Environmental Permit						
EP-503/2015/A	Throughout	the Contract	Valid	-			
FEP - 01/503/2015/A	Throughout	the Contract	Valid	-			
	Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation (Form NA)						
451539	Throughout	the Contract	Valid	-			
Billing Account for Dis	posal of Const	ruction Waste					
7036276	Throughout the Contract		Valid	-			
Chemical Waste Produ	Chemical Waste Producer Registration						
5213-839-A2987-01	Throughout the Contract		Valid	-			
Wastewater Discharge Licence (Land and Marine works)							
WT00035775-2020	23/08/2021	31/07/2025	Valid	-			





Downit / Liganges	Valid Period		Chahus	Remark
Permit/ Licences	From	То	Status	Remark
Marine Dumping Permits				
EP/MD/23-053	07/12/2022	30/03/2023	Valid	-
Construction Noise Permit				
GW-RE1338-22	22/12/2022	21/06/2023	Valid	-

1.10. The status for all environmental aspects is presented in **Table 1.3**.

Table 1.3 Summary of Status for Key Environmental Aspects under the EM&A Manual

Parameters	Status
Water Quality	
Baseline Monitoring under EM&A Manual	The baseline water quality monitoring was conducted between 12 May 2020 to 6 Jun 2020.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4
Impact Monitoring	On-going
<b>Waste Management</b>	
Mitigation Measures in Waste Management Plan	On-going
Landfill Gas	
Regular Monitoring when construction works are within the 250 m Consultation Zone	On-going
Environmental Audit	
Site Inspection covering Measures of Air Quality, Noise Impact, Water Quality, Waste, Ecological Quality, Fisheries, Landscape and Visual	On-going

1.11. Other than the EM&A work by ET, environmental briefings, trainings, and regular environmental management meetings were conducted, in order to enhance environmental awareness and closely monitor the environmental performance of the contractors.

Contract No. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Monthly EM&A Report No.35





1.12. The EM&A programme has been implemented in accordance with the recommendations presented in the approved EIA Report and the EM&A Manual. A summary of implementation status of the environmental mitigation measures for the construction phase of the Contract during the reporting period is provided in **Appendix C**.





### 2. Noise

### MONITORING REQUIREMENTS

- 2.1. To ensure no adverse noise impact, noise monitoring is recommended to be carried out within 300m radius from the nearby noise sensitive receivers (NSRs), during construction phase. The NSRs selected as monitoring station are (i) NSR4 Creative Secondary School, (ii) NSR24 PLK Laws Foundation College, and (iii) NSR31 School of Continuing and Professional Studies CUHK respectively.
- 2.2. Construction noise level were measured in terms of the A-weighted equivalent continuous sound pressure level (LAeq). Leq 30min was used as the monitoring parameter for the time period between 0700 and 1900 on normal weekdays. Construction works would follow stipulations of the valid Construction Noise Permits if works had to be conducted during restricted hours or public holidays. **Table 2.1** summarizes the monitoring parameters, frequency, and duration of the impact noise monitoring.

 Table 2.1
 Noise Monitoring Parameters, Time, Frequency and Duration

Time	Duration	Interval	Parameters
Daytime: 0700-1900	Day time: 0700-1900 (during normal weekdays)	Continuously in $L_{\text{eq }5\text{min}}/L_{\text{eq }30\text{min}}$ (average of 6 consecutive $L_{\text{eq }5\text{min}}$ )	$\begin{array}{c} L_{eq~30min} \\ L_{10~30min} ~\&~ L_{90~30min} \end{array}$

#### **MONITORING LOCATIONS**

- 2.3. The monitoring locations were normally made at a point 1m from the exterior of the NSRs building façade and be at a position 1.2m above the ground. A correction of +3dB(A) should be made to the free-field measurements.
- 2.4. According to the environmental findings detailed in the EIA report and Baseline Monitoring Report, the designated locations for the construction noise monitoring are listed in **Table 2.2** below.

Table 2.2 Noise Sensitive Receivers

NSR ID	Noise Sensitive Receivers	Monitoring Location	Position
NSR 4	Creative Secondary School	Roof Floor	1 m from facade
NSR 24	PLK Laws Foundation College	Pedestrian Road on Ground Floor	Free-field
NSR 31	School of Continuing and Professional Studies - CUHK	Roof Floor	1 m from facade

2.5. Three noise monitoring locations for impact monitoring at the nearby sensitive receivers are shown in **Figure 2.1-2.3**.





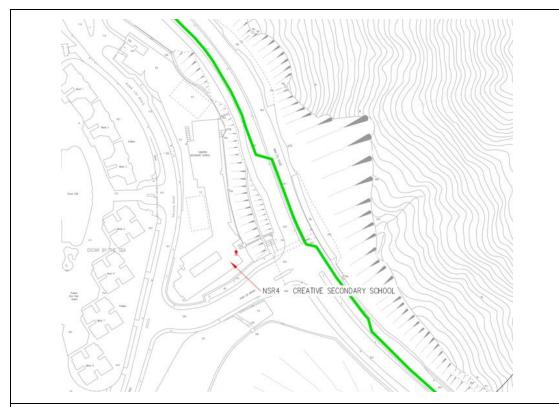


Figure 2.1 NSR4 Creative Secondary School

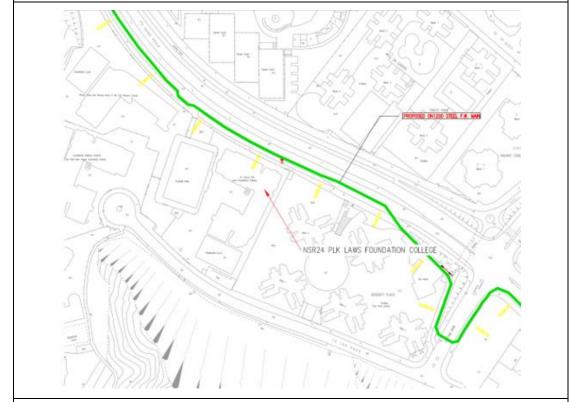
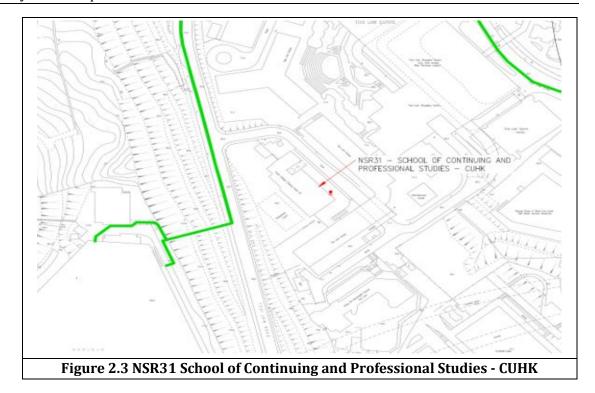


Figure 2.2 NSR24 PLK Laws Foundation College







#### **IMPACT MONITORING METHODOLOGY**

- 2.6. Integrated sound level meter will be used for the noise monitoring. The meter will be in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications. Immediately prior to and following each noise measurement the accuracy of the sound level meter will be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements will be accepted as valid only if the calibration levels before and after the noise measurements agree to within 1.0 dB(A).
- 2.7. Noise measurements were not made in the presence of fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

### **ACTION AND LIMIT LEVELS**

2.8. The Action/Limit Levels are in line with the criteria of Practice Note for Professional Persons (ProPECC PN 2/93) "Noise from Construction Activities – Non-statutory Controls" and Technical Memorandum on Environmental Impact Assessment Process issued by HKSAR Environmental Protection Department ["EPD"] under the Environmental Impact Assessment Ordinance, Cap 499, S.16 are presented in **Table 2.3**.





Table 2.3 Action and Limit Levels for Noise per EM&A Manual

Time Period	Action	Limit (dB(A))
0700-1900 on normal	When one documented complaint is received from any	• 70 dB(A) for school and
weekdays	one of the noise sensitive receivers	• 65 dB(A) during examination period

Note: Limits specified in the GW-TM and IND-TM for construction and operation noise, respectively.

2.9. If exceedances were found during noise monitoring, the actions in accordance with the Event and Action Plan shall be carried out according to **Appendix E.** 

#### MONITORING RESULTS AND OBSERVATIONS

2.10. Referring to EM&A Manual Section 4.1.2, the impact noise monitoring should be carried out when there are Contract-related construction activities undertaken within a radius of 300m from the monitoring stations. No monitoring station was located within a radius of 300m of the Contract site as shown in **Figure 2.4**, no impact noise monitoring was conducted in the reporting period.

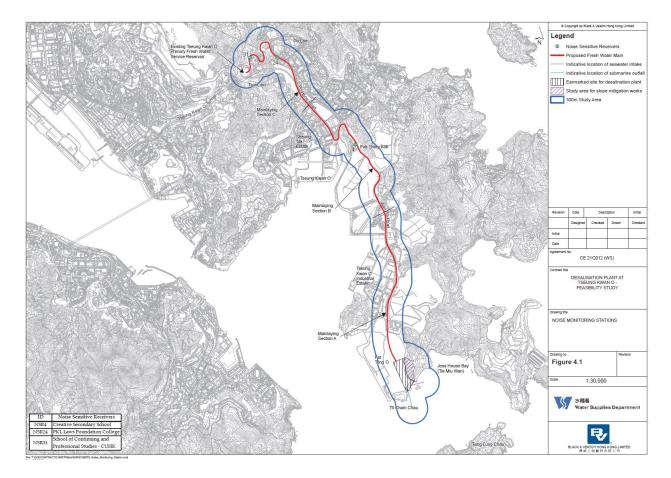


Figure 2.4 Site Layout Plan with Noise Sensitive Receivers and Desalination Plant





### 3. WATER QUALITY

- 3.1. In accordance with the recommendations of the EIA, water quality monitoring is required during dredging for the submarine pipelines and, during operation phase. The following Section provides details of the water quality monitoring to be undertaken by the Environmental Team (ET) to verify the distance of sediment and brine plume dispersion and to identify whether the potential exists for any indirect impacts to occur to ecological sensitive receivers.
- 3.2. The water quality monitoring programme will be carried out to allow any deteriorating water quality to be readily detected and timely action taken to rectify the situation.
- 3.3. Water quality monitoring for the Contract can be divided into the following stages:
  - Dredging activities during construction phase;
  - · Discharge of effluent from main disinfection during construction phase;

### WATER QUALITY PARAMETERS

3.4. The parameters that have been selected for measurement in situ and in the laboratory are those that were either determined in the EIA to be those with the most potential to be affected by the construction works or are a standard check on water quality conditions. Parameters to be measured in the impact monitoring are listed in **Table 3.1**.

 Table 3.1
 Parameters measured in the Impact Marine Water Quality Monitoring

Parameters	Unit	Abbreviation
In-situ measurements		
Dissolved oxygen	mg/L	DO
Temperature	оС	-
рН	-	-
Turbidity	NTU	-
Salinity	0/00	-
Total Residual Chlorine NOTE1	mg/L	TRC
Laboratory measurements		
Suspended Solids	mg/L	SS
Iron-Soluble	mg/L	Fe
Anti-scalant as Reactive Phosphorus	mg/L	PO4 as P-

NOTE 1: Monitoring of Total Residual Chlorine will be conducted when cleaning and sterilization of the new freshwater main is carried out.

3.5. In addition to the water quality parameters, other relevant data were also being measured and recorded in Water Quality Monitoring Logs, including the location of the sampling stations, water depth, time, weather conditions, sea conditions, tidal stage, current direction and velocity, special phenomena and work activities undertaken around the monitoring and works area that may influence the monitoring results.





#### **MONITORING EQUIPMENT**

3.6. For water quality monitoring, the following equipment were used:

**Dissolved Oxygen and Temperature Measuring Equipment** - The instrument was a portable, weatherproof dissolved oxygen measuring instrument complete with cable, sensor, comprehensive operation manuals, and was operable from a DC power source. It was capable of measuring: dissolved oxygen levels in the range of 0 - 20 mg/L and 0 - 200% saturation; and a temperature of 0 - 45 degrees Celsius. It has a membrane electrode with automatic temperature compensation complete with a cable of not less than 35 m in length. Sufficient stocks of spare electrodes and cables were available for replacement where necessary (e.g. YSI model 59 DO meter, YSI 5739 probe, YSI 5795A submersible stirrer with reel and cable or an approved similar instrument).

**Turbidity Measurement Equipment** - The instrument was a portable, weatherproof turbidity-measuring unit complete with cable, sensor and comprehensive operation manuals. The equipment was operated from a DC power source, it has a photoelectric sensor capable of measuring turbidity between 0 - 1000 NTU and complete with a cable with at least 35 m in length (for example Hach 2100P or an approved similar instrument).

**Salinity Measurement Instrument** - A portable salinometer capable of measuring salinity in the range of 0 - 40 ppt was provided for measuring salinity of the water at each monitoring location.

**Water Depth Gauge** – A portable, battery-operated echo sounder (for example Seafarer 700 or a similar approved instrument) was used for the determination of water depth at each designated monitoring station. This unit will preferably be affixed to the bottom of the work boat if the same vessel is to be used throughout the monitoring programme. The echo sounder was suitably calibrated.

**Positioning Device** – A Global Positioning System (GPS) was used during monitoring to allow accurate recording of the position of the monitoring vessel before taking measurements. The Differential GPS, or equivalent instrument, was suitably calibrated at appropriate checkpoint (e.g. Quarry Bay Survey Nail) to verify that the monitoring station is at the correct position before the water quality monitoring commence.

**Water Sampling Equipment** - A water sampler, consisting of a PVC or glass cylinder of not less than two litres, which can be effectively sealed with cups at both ends, was used. The water sampler has a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is at the selected water depth.

#### **SAMPLING / TESTING PROTOCOLS**

3.7. All in situ monitoring instruments were checked, calibrated, and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use, and subsequently re-calibrated at monthly intervals throughout the stages of the water quality monitoring. Responses of sensors and electrodes were checked with certified standard solutions before each use.





3.8. **Table 3.2** summarizes the equipment used in the water quality monitoring program. The copies of the calibration certification of multi-parameter water quality system are shown in the **Appendix F**.

**Table 3.2 Water Quality Monitoring Equipment** 

Model & Make	Serial Number	Calibration Date	Qty.			
Water Sampler						
Kahlsico Water Sampler 13SWB20	-	-	1			
Multi-parameter Water Quality System						
HORIBA U-53	S2A98W8H	30 December 2022	2			
YSI ProDSS	22C106561	17 January 2023	2			

3.9. On-site calibration of field equipment was following the "Guide to On-Site Test Methods for the Analysis of Waters", BS 1427: 2009. Sufficient stocks of spare parts were maintained for replacements when necessary. Backup monitoring equipment was made available so that monitoring can proceed uninterrupted even when equipment is under maintenance, calibration etc.

#### LABORATORY MEASUREMENT AND ANALYSIS

- 3.10. Sufficient volume of each water sample was collected for carrying out the laboratory analyses. Using chain of custody forms, collected water samples were transferred to a HOKLAS accredited laboratory (Acumen Laboratory and Testing Limit HOKLAS 241) for immediate processing. The determination work was start within the next working day after collection of the water samples. Analytical methodology and sample preservation of other parameters were based on the latest edition of Standard Methods for the Examination of Waste and Wastewater published by APHA, AWWA and WPCF and methods by USEPA, or suitable method in accordance with requirements of HOKLAS or another internationally accredited scheme. The QA/QC details were in accordance with requirements of HOKLAS or another internationally accredited scheme.
- 3.11. Parameters for laboratory measurements, standard methods and detection limits are presented in **Table 3.3**.

Table 3.3 Laboratory measurements, standard methods, and corresponding detection limits of marine water quality monitoring

Parameters	Standard Methods	Detection Limit	Reporting Limit	Precision
Dissolved oxygen	Instrumental, CTD	0.1	-	±25%
Temperature	Instrumental, CTD	0.1	-	±25%
рН	Instrumental, CTD	0.1	1	±25%
Turbidity	Instrumental, CTD	0.1	-	±25%
Salinity	Instrumental, CTD	0.1	-	±25%
Suspended Solids	APHA 23rd Ed 2540D	1.0	2.5	±17%





#### **MONITORING LOCATION**

3.12. The Impact water quality monitoring locations are in accordance with the EM&A Manual and detailed in **Table 3.4** below. A schedule for water quality monitoring was prepared by the ET and submitted to IEC and EPD prior to the commencement of the monitoring.

Table 3.4 Location of Impact Water Quality Monitoring Stations

Station	Easting	Northing	Description
CE	843550	815243	Upstream control station at ebb tide
CF	846843	810193	Upstream control station at flood tide
WSR1	846864	812014	Ecological sensitive receiver at Tung Lung Chau
WSR2	847645	812993	Fisheries sensitive receiver at Tung Lung Chau
WSR3	848023	813262	Ecological sensitive receiver at Tung Lung Chau
WSR4	847886	814154	Ecological sensitive receiver at Tai Miu Wan
WSR16	845039	815287	Ecological sensitive receiver at Fat Tong Chau
WSR33	847159	814488	Ecological sensitive receiver at Tai Miu Wan
WSR36	846878	814081	Ecological sensitive receiver at Kwun Tsai
WSR37	846655	813810	Ecological sensitive receiver at Tit Cham Chau
NF1	846542	813614	Edge of mixing zone, ~ 200m west of outfall diffuser
NF2	846942	813614	Edge of mixing zone, ~ 200m east of outfall diffuser
NF3	846742	813414	Edge of mixing zone, $\sim 200 m$ south of outfall diffuser

3.13. WSR1 to WSR37 were identified in accordance with Annex 14 of the EIAO-TM as well as Clause 3.4.4.2 of the Environmental Impact Assessment Study Brief for Desalination Plant at Tseung Kwan 0 (No. ESB-266/2013). WSR1 to WSR3 are sited near the Tung Lung Chau Fish Culture Zone; WSR16 and WSR36 are sited near the coral assemblages along the coastlines of Fat Tong Chau and Kwun Tsai respectively; WSR 4 and WSR33 are sited near the Coastal Protection Area and coral assemblages in waters of Tai Miu Wan; WSR37 is sited near the fisheries resource including spawning and nursery grounds at the coastal water of Tit Cham Chau.





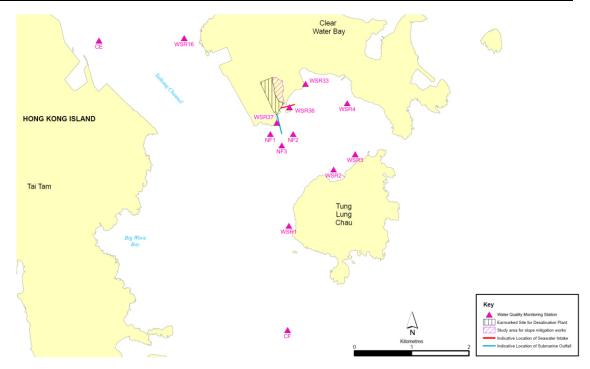


Figure 3.1 Impact water quality monitoring locations under EM&A Manual

#### **SAMPLING FREQUENCY**

3.14. Impact water quality monitoring were carried out three days per week during the construction phase after the commencement of marine construction works and dredging activities. Monitoring at each station was undertaken at both mid-ebb and mid-flood tides on the same day. The tidal range selected for the impact monitoring was at least 0.5 m for both flood and ebb tides as far as practicable. The interval between two sets of monitoring was not less than 36 hours. The monitoring frequency would be increased in the case of exceedances of Action/Limit Levels if considered necessary by ET. Monitoring frequency would be maintained as far as practicable.

#### **SAMPLING DEPTHS & REPLICATION**

3.15. During impact water quality monitoring, each station was sampled, and measurements/ water samples was taken at three depths, 1 m below the sea surface, mid-depth, and 1 m above the seabed. For in situ measurements, duplicate readings were made at each water depth at each station. Duplicate water samples were collected at each water depth at each station. All water quality monitoring results were summarized in **Appendix G**.

#### ACTION AND LIMIT LEVELS

3.16. The Action and Limit Levels have been set based on the derivation criteria specified in the EM&A Manual. The Action/Limit Levels have been derived and are presented in **Table 3.5**.





Table 3.5 Derived Action and Limit Levels for Water Quality

Parameters	Action	Limit
Construction Ph	nase Impact Monitoring	
DO in mg/L	Surface and Middle	Surface and Middle
	7.30 mg L <sup>-1</sup>	4 mg L-1
	<u>Bottom</u>	<u>Bottom</u>
	7.31 mg L <sup>-1</sup>	2 mg L <sup>-1</sup>
	Tung Lung Chau Fish Culture Zone	Tung Lung Chau Fish Culture Zone
	5.1 mgL <sup>-1</sup> or level at control	5.0 mgL <sup>-1</sup> or level at control
	station (Whichever the lower)	station (Whichever the lower)
SS in mg/L	5.00 mg L-1 or 20% exceedance of	6.00 mg L-1 or 30% exceedance of
(Depth-	value at any impact station	value at any impact station
averaged)	compared with corresponding	compared with corresponding
	data from control station	data from control station
Turbidity in	2.41 NTU or 20% exceedance of	2.84 NTU or 30% exceedance of
NTU (Depth-	value at any impact station	value at any impact station
averaged)	compared with corresponding	compared with corresponding
	data from control station	data from control station

#### Notes:

#### MONITORING RESULTS AND OBSERVATIONS

- 3.17. General water quality monitoring at the ten monitoring stations (CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36 and WSR37) were 3, 5, 7, 10, 12, 14, 17, 19, 21, 27 and 31 January 2023.
- 3.18. Sixty-three (63) of the general water quality monitoring results of SS obtained had exceeded the Action Level. Forty-six (46) of the general water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Level.
- 3.19. Investigation on the reason of exceedance has been carried out, where the exceedances of SS on 3, 7, 10, 12, 14, 17, 19, 21, 27 and 31 January 2023 were concluded to be unrelated to the Contract as detailed in the Incident Reports on Action Level or Limit Level Noncompliance along with supporting materials in **Appendix K**.
- 3.20. Monitoring results of 6 key parameters: Salinity, DO, turbidity, SS, pH, and temperature in this reporting, are summarized in **Table 3.6** and **Table 3.7**, and detailed results are presented in **Appendix L.**

i. "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.

ii.For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.

iii.For Turbidity, SS, iron and Salinity, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.





Table 3.6 Summary of Impact Water Quality Monitoring Results (Mid-Flood)

		Parameters						
Locati	ons	Salinity (ppt)		d Oxygen g/L) Bottom	- рН	Turbidity (NTU)	Suspended Solids (mg/L)	Temp.(°C)
	Avg.	32.2	8.7	8.7	8.2	2.5	3.2	21.1
CE	Min.	30.7	8.1	8.1	8.1	2.3	2.5	20.3
CE	Max.	33.3	9.3	9.2	8.4	3.0	9.0	22.8
	Avg.	31.9	8.6	8.6	8.2	2.9	3.5	21.1
CF	Min.	30.7	8.1	8.2	8.1	2.5	2.5	20.0
CI	Max.	32.7	9.2	9.1	8.4	3.7	9.0	22.6
	Avg.	32.0	8.8	8.9	8.3	2.1	3.6	21.1
WSR1	Min.	30.8	8.3	8.4	8.1	1.7	2.5	20.3
WSKI	Max.	32.8	9.6	9.4	8.4	2.5	9.0	22.2
	Avg.	32.1	9.0	9.0	8.3	2.0	3.6	21.1
WSR2	Min.	30.8	8.3	8.4	8.1	1.3	2.5	19.9
WSIXZ	Max.	33.5	9.6	9.5	8.4	2.5	8.0	22.6
	Avg.	32.1	8.8	8.8	8.2	2.3	3.6	20.9
WSR3	Min.	30.8	8.4	8.5	8.1	1.8	2.5	20.9
WSKS	Max.	33.1	9.3	9.3	8.4	2.6	9.0	22.3
	Avg.	31.9	8.6	8.7	8.2	2.0	4.0	21.0
WSR4	Min.	30.7	8.3	8.3	8.1	1.8	2.5	20.2
WSK4	Max.	33.3	9.0	9.1	8.3	2.6	18.0	22.6
	Avg.	32.1	8.8	8.8	8.3	2.2	4.0	21.2
WSR16	Min.	30.7	8.3	8.3	8.1	1.7	2.5	20.3
WSKIO	Max.	32.8	9.4	9.5	8.4	2.5	14.0	22.2
	Avg.	32.1	8.8	8.8	8.3	2.3	3.8	20.9
WSR33	Min.	30.7	8.2	8.3	8.1	1.7	2.5	20.3
WSKSS	Max.	33.2	9.4	9.3	8.5	2.5	9.0	22.1
	Avg.	32.1	8.8	8.8	8.3	2.3	3.8	20.9
WSR36	Min.	30.7	8.2	8.3	8.1	1.7	2.5	20.3
WORSO	Max.	33.2	9.4	9.3	8.5	2.5	9.0	22.1
	Avg.	32.1	8.9	8.9	8.3	2.2	3.1	21.0
WSR37	Min.	30.7	8.3	8.3	8.1	1.8	2.5	20.3
WORU/	Max.	33.0	9.4	9.3	8.4	2.5	7.0	22.1
	IVI dX.	33.0	7.4	7.3	0.4	2.5	7.0	44.1

### Notes:

i. "Avg", "Min" and "Max" is the average, minimum and maximum respectively of the data from measurements conducted under mid-flood and mid-ebb tides at three water depths, except that of DO where the data for "Surface & Middle" and "Bottom" are calculated separately.

ii. Measurement data of Suspending Solids would be rounding to 2.5mg/L if the value was less than 2.5mg/L to facilitate data analysing.





Table 3.7 Summary of Impact Water Quality Monitoring Results (Mid-Ebb)

		Parameters						
Locati	ons	Salinity (ppt)	Dissolved (mg Surface & Middle		рН	Turbidity (NTU)	Suspended Solids (mg/L)	Temp.(°C)
	Avg.	32.0	8.8	8.8	8.2	2.9	3.4	21.1
CE	Min.	30.8	8.2	8.4	8.1	2.4	2.5	20.4
	Max.	32.9	9.4	9.4	8.3	3.5	8.0	22.5
	Avg.	32.2	8.9	8.9	8.3	2.5	3.3	21.0
CF	Min.	31.2	8.2	8.3	8.1	2.2	2.5	19.9
	Max.	33.5	9.5	9.3	8.4	3.0	8.0	22.4
	Avg.	32.2	8.8	8.9	8.3	2.2	3.2	21.0
WSR1	Min.	30.8	8.3	8.2	8.2	1.8	2.5	20.0
	Max.	33.4	9.3	9.3	8.4	2.6	7.0	22.4
	Avg.	32.3	8.9	8.8	8.2	2.0	4.0	21.1
WSR2	Min.	30.9	8.2	8.3	8.1	1.5	2.5	20.3
	Max.	33.5	9.5	9.4	8.4	2.6	11.0	22.6
	Avg.	32.1	8.7	8.7	8.2	2.1	3.5	21.0
WSR3	Min.	31.2	8.3	8.2	8.1	1.8	2.5	19.9
	Max.	33.6	9.5	9.4	8.3	2.6	8.0	22.4
	Avg.	32.1	8.9	8.9	8.2	2.1	3.7	20.9
WSR4	Min.	31.2	8.4	8.4	8.0	1.6	2.5	19.9
	Max.	33.2	9.3	9.2	8.4	2.6	9.0	22.4
	Avg.	32.1	8.8	8.8	8.2	2.2	3.5	21.1
WSR16	Min.	31.5	8.3	8.2	8.1	1.8	2.5	20.0
	Max.	32.9	9.5	9.6	8.4	2.5	8.0	22.3
	Avg.	32.4	8.9	8.9	8.2	2.1	3.6	20.9
WSR33	Min.	31.6	8.3	8.3	8.1	1.5	2.5	19.9
	Max.	33.3	9.6	9.6	8.4	2.6	12.0	22.5
	Avg.	32.2	8.7	8.7	8.3	2.1	3.8	21.0
WSR36	Min.	30.9	8.3	8.3	8.1	1.8	2.5	20.4
	Max.	33.2	9.3	9.3	8.4	2.6	13.0	22.3
	Avg.	32.1	8.8	8.8	8.3	2.1	3.2	21.0
WSR37	Min.	31.0	8.3	8.3	8.1	1.7	2.5	20.4
	Max.	32.9	9.6	9.6	8.4	2.5	7.0	22.2

#### Notes:

i. "Avg", "Min" and "Max" is the average, minimum and maximum respectively of the data from measurements conducted under mid-flood and mid-ebb tides at three water depths, except that of DO where the data for "Surface & Middle" and "Bottom" are calculated separately.

ii. Measurement data of Suspending Solids would be rounding to 2.5mg/L if the value was less than 2.5mg/L to facilitate data analysing.





### 4. WASTE

4.1. The waste generated from this Contract includes inert construction and demolition (C&D) materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/cardboard packaging waste. Steel materials generated from the Contract are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Contract, the quantities of different types of waste generated in the reporting month are summarized in **Table 4.1**. Details of cumulative waste management data are presented as a waste flow table in **Appendix H**.

Table 4.1 Quantities of Waste Generated from the Contract during the reporting period

	Actu	al Quantities	of Inert C&D	Materials Ge	enerated Moi	nthly	Actual	Quantities o	f C&D Wastes	s Generated M	Ionthly
Reporting Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / cardboard packaging	Plastics (1)	Chemical Waste	Others, e.g., general refuse
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
January 2023	3383.820	0.000	0.000	0.000	3383.820	0.000	0.000	0.000	0.000	0.000	143.690

Notes: (1) Plastics refer to plastic bottles / containers, plastic sheets / foam from packaging material





### 5. LANDFILL GAS MONITORING

### MONITORING REQUIREMENT

5.1. In accordance with Section 11 of the EM&A Manual, monitoring of landfill gas is required for construction works within the 250m Consultation Zone. Part of the desalination plant and the indicative area of natural slope mitigation works fall within the SENT Landfill Extension Consultation Zone; and part of the 1,200 mm diameter fresh water mains along Wan Po Road falls within the SENT Landfill and SENT Landfill Extension Consultation Zones, TKO Stage II/III Restored Landfill and TKO Stage I Restored Landfill Consultation Zones.

#### MONITORING PROGRAMME

5.2. Since part of the desalination plant (Wan Po Road and MIC compound/Basketball Court) and the indicative area of natural slope mitigation works fall within the SENT Landfill Extension Consultation Zone in this contract (Figure 5.1), landfill gas monitoring would be required for Wan Po Road and MIC compound/Basketball Court (Figure 5.2) if excavations were conducted at more than 300mm deep. Although SENT Landfill Extension has commenced operation since November 2021, no excavation works were conducted at MIC compound/Basketball Court. Hence no landfill gas monitoring would be scheduled for MIC compound/Basketball Court at the current stage.

#### **MONITORING LOCATION**

- 5.3. Monitoring of oxygen, methane, carbon dioxide and barometric pressure would be performed for excavations at 1m depth or more within the consultation Zone.
- 5.4. During construction of works within the consultation zones, excavations of 1m depth or more was monitored:
  - At the ground surface before excavation commences;
  - Immediately before any worker enters the excavation;
  - At the beginning of each working day for the entire period the excavation remains open; and
  - Periodically through the working day whilst workers are in the excavation.
- 5.5. For excavations between 300mm and 1m deep, measurements were carried out:
  - Directly after the excavation has been completed; and
  - Periodically whilst the excavation remains open.
- 5.6. The area required to be monitored for landfill gas in the reporting period is shown in **Figure 5.1**.





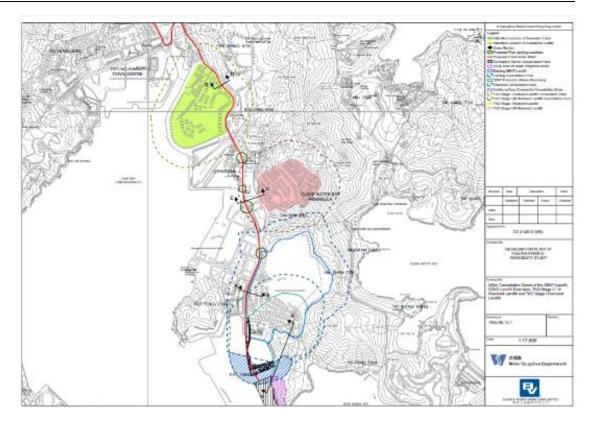


Figure 5.1 Overview of the SENT Extension Consultation Zone and the Contract Site Area

#### **MONITORING PARAMETERS**

5.7. The landfill gas monitoring parameters and the action and limit level are summarized in **Table 5.1**.

Table 5.1 Action and Limit Level for Landfill Gas Monitoring Equipment

Parameters	Action Level	Limit Level
Oxygen (O <sub>2</sub> )	<19% 02	<19% 02
Methane (CH <sub>4</sub> )	>10% LEL	>20% LEL
Carbon Dioxide (CO <sub>2</sub> )	>0.5% CO <sub>2</sub>	>1.5% CO <sub>2</sub>

### **MONITORING EQUIPMENT**

- 5.8. Landfill Gas monitoring was carried out using intrinsically-safe, portable multi-gas monitoring instruments. The gas monitoring equipment is:
  - Complying with the Landfill Gas Hazard Assessment Guidance Note as intrinsically safe;
  - Capable of continuous barometric pressure and gas pressure measurements;
  - Normally operated in diffusion mode unless required for spot sampling, when it should be capable of operating by means of an aspirator or pump;
  - Having low battery, fault and over range indication incorporated;
  - Capable of storing monitoring data, and shall be capable of being downloaded directly;
  - Measure in the following ranges:





methane	0-100% Lower Explosion Limit (LEL) and 0-100% v/v;
oxygen	0-25% v/v;
carbon dioxide	0-5% v/v; and
barometric pressure	mBar (absolute)

• alarm (both audibly and visually) in the event that the concentrations of the following are exceeded:

methane	>10% LEL;
oxygen	<19%
carbon dioxide	>0.5% by volume
barometric pressure	mBar (absolute)

5.9. Monitoring equipment used in the reporting period are summarized in **Table 5.2**. The Landfill Gas monitoring equipment calibration certificate is presented in **Appendix N**.

Table 5.2 Landfill Gas Monitoring Equipment

Equipment	Brand and Model	Calibration Expiry Date
Portable Gas Detector	GMI PS500 - 25492809/21	1 September 2023





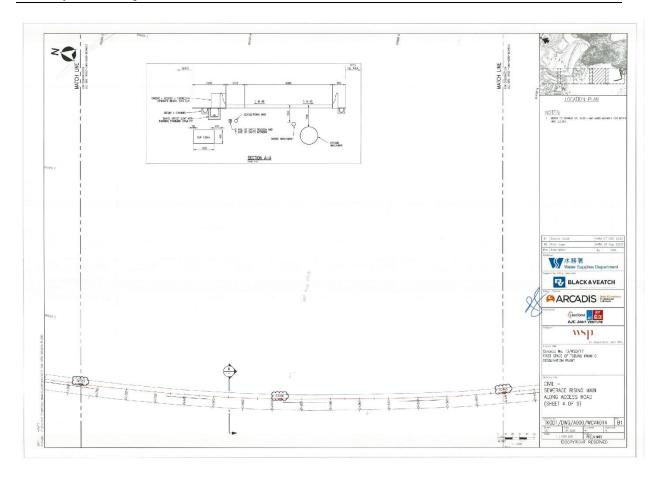


Figure 5.2 Location Map for Landfill Gas Monitoring at TKO Area 137 (-0+440 - -0+760)







Figure 5.3 Location Map for Landfill Gas Monitoring at TKO Area 137 (-0+740 - -1+060)

### MONITORING RESULTS AND OBSERVATIONS

5.10. In this reporting period, 30 times of landfill gas monitoring were conducted during excavations at 1m depth or more within the consultation zone and whenever workers entered the excavation on the day at TKO Area 137 (Ch0+750 – Ch0+780). No exceedance of action or limit levels for methane, oxygen and carbon dioxide was recorded. Detail of landfill gas monitoring results are presented in **Appendix L**.





### 6. ECOLOGY

#### MONITORING REQUIREMENTS

6.1. In accordance with Section 8.1 of the EM&A Manual, weekly site audit shall be carried out by the ET include checking whether good site practices are being properly implemented by the Contractor and the extent of the works area within the Clear Water Bay Country Park should be checked by the ET during the weekly site audit.

### **SITE INSPECTION**

6.2. Weekly site audit was carried out by the ET in the reporting month, no trespass by the Contractor outside the works area of the Project and Clear Water Bay Country Park, and no damage to the vegetation and rocky shore outside the Project area was observed in the reporting month. Retained trees was properly protected during the construction works, no unacceptable construction works was observed.



6.3. If non-compliance were found during the construction works, the actions in accordance with the Event and Action Plan will be carried out according to **Appendix E.** 





# 7. Summary of Exceedance, Complaints, Notification of Summons and Prosecutions

7.1. The Environmental Complaint Handling Procedure is shown in below **Figure 6.1**:

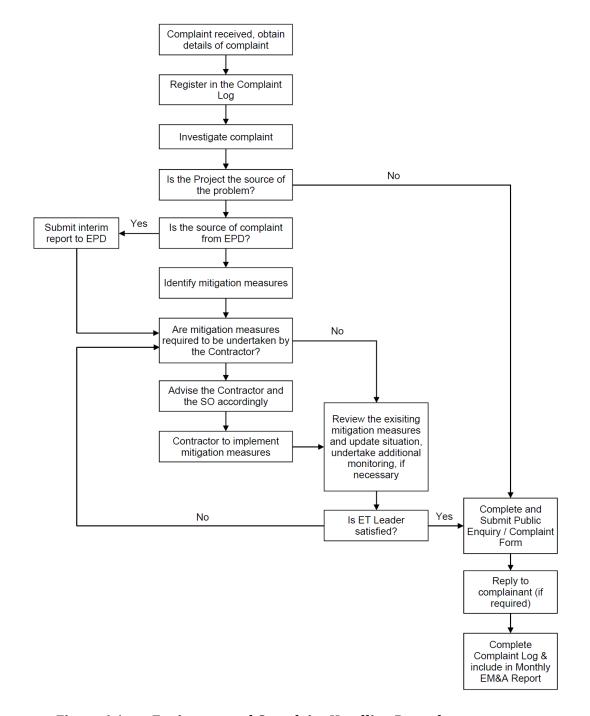


Figure 6.1 Environmental Complaint Handling Procedures





- 7.2. No noise monitoring was conducted during the reporting period since there are no Contract-related construction activities undertaken within a radius of 300m from the monitoring locations. No action Level exceedance for construction noise monitoring was recorded in the reporting month.
- 7.3. General water quality monitoring at the ten monitoring stations (CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36 and WSR37) were conducted were 3, 5, 7, 10, 12, 14, 17, 19, 21, 27 and 31 January 2023.
- 7.4. Sixty-three (63) of the general water quality monitoring results of SS obtained had exceeded the Action Level. Forty-six (46) of the general water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Level.
- 7.5. Investigation on the reason of exceedance has been carried out, where the exceedances of SS on were 3, 7, 10, 12, 14, 17, 19, 21, 27 and 31 January 2023 were concluded to be unrelated to the Contract as detailed in the Incident Reports on Action Level or Limit Level Non-compliance along with supporting materials in **Appendix K**.
- 7.6. In this reporting period, 30 times of landfill gas monitoring were conducted at TKO Area 137 (Ch0+750 Ch0+780). No action or limit level exceedance was recorded during the reporting period.
- 7.7. No environmental complaint, notification of summons and prosecution was received in the reporting month. Statistics on complaint and notification of summons and prosecution are summarized in **Appendix J**.





#### 8. EM&A SITE INSPECTION

8.1. Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, site inspections were carried out on 3, 10, 17, 27 and 31 January 2023 at the site portions listed in **Table 8.1** below.

Table 8.1 Summaries of Site Inspection Record

Date	Inspected Site Portion	Time
3 January 2023	TKO Area 137	14:30 - 15:30
10 January 2023	TKO Area 137	14:30 - 15:30
17 January 2023	TKO Area 137	14:30 - 16:00
27 January 2023	TKO Area 137	14:30 - 15:30
31 January 2023	TKO Area 137	09:00 - 10:40

- 8.2. Joint site inspections with IEC were carried out on 3, 10, 17, 27 and 31 January 2023.
- 8.3. Environmental deficiencies were observed during weekly site inspection. Key observations during the site inspections and during the reporting period are summarized in **Table 8.2**.

**Table 8.2 Site Observations** 

Date	Environmental Observations	Follow-up Status
3 January 2023	No major observations were recorded on the reporting day.	Nil
10 January 2023	No major observations were recorded on the reporting day.	Nil
17 January 2023	No major observations were recorded on the reporting day.	Nil
27 January 2023	No major observations were recorded on the reporting day.	Nil
31 January 2023	1. A chemical container found on the ground near the OSCG Building shall be stored properly. The chemical containers were removed immediately after notification.	The chemical containers     were removed     immediately.

8.4. According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents should be implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix C**. Site inspection proforma of the reporting period is provided in **Appendix I**.





#### 9. FUTURE KEY ISSUES

#### 9.1. Works to be undertaken in the next reporting month are:

#### **Administration Building**

- Installation of Aluminium Window, curtain wall, balustrade, the subframe of glass wall, Aluminium Louvre, tiling works, timber door subframe
- Construction of interior finishes at 2/F, 3/F, and 4/F and staircase at 1st floor
- Floor finishes at 1/F open area and Roof
- Erection of block wall
- Installation of building services, lifting and electrical switchboard

#### Chemical building

- installation of louvre
- Underground utility construction work
- Installation of building services and mechanical equipment

#### Main Electrical & Central Chiller Plant Building

- Construction of Check Water Meter Cabinet and Plinths for Genset
- Installation metal and timber Doors
- Installation of chillers, building services, electrical switchboard

#### ActiDAFF

- Metal railing installation
- R/F tile laying works
- Underground utility construction work
- Erection and dismantling of scaffolding, installation of mechanical equipment and piping, bubble test

#### Product Water Storage Tank Building

- tile laying works
- Installation of Design for Manufacturing and Assembly on East & West Sides
- Resin Injection work & Water Test for 4 Water Tanks
- Installation of Cat Ladders in Water Tanks
- Underground utility construction work
- Installation of building services, mechanical equipment and steel pipe

#### **OSCG** Building

- Installation of Design for Manufacturing and Assembly Panel
- Resin Injection work & water test for Brine Tank
- Construction of External staircases
- Underground utility construction work
- Installation of building services and mechanical equipment, lifting of tanks

#### **Reverse Osmosis Building**

- Installation of Design for Manufacturing and Assembly Panels at East & West Sides
- Installation of window, hand railings and Louvres



- Construction of Staircases
- Underground utility construction
- Installation of building services, electrical switchboard, mechanical equipment, steel pipe and Glass Reinforced Plastics (GRP) pipe

#### Post Treatment Building

- installation of louvre
- Installation of Design for Manufacturing and Assembly Panels
- Underground utility construction

#### Inspection corridor

- Formwork Erection and Steel fixing works for segments 1-7
- Construction of stair tower No. 1

#### CO<sub>2</sub> Tanks

• Installation of pipes

#### **Outfall Shaft**

- Dredging for diffuser pipe
- GRP Diffuser pipe installation
- Rock material back fill

#### Intake shaft

• Shafts backfill rock and excavation and lateral support (ELS) removal

#### Combined Shaft

- Installation of louvre and window
- Underground utility construction
- Staircases and internal finishing, puddle pipe installation, stop log wall construction
- Waterproofing works
- Installation of mechanical equipment and pipes, stoplogs and band screens

#### Pump room

• internal finishing, waterproofing, E&M installation

#### **Elevated Walkway**

• Lift shaft construction

#### Slope works

- Excavation at slope toe and access erection, soil anchor and grouting construction Other
- 132 kV temporary emergency vehicular access (eva) Construction
- Permanent road construction at Zone A, B, C
- Construction of parapet on top slab of backwash tank



- 9.2. The major environmental impacts brought by the above construction works will include:
  - Construction dust and noise generation from excavation and construction works;
  - Waste generation from construction activities; and
  - Impact on water quality from marine construction works and inland construction works.
- 9.3. The key environmental mitigation measures for the Project in the coming reporting period associated with the above construction works will include:
  - Dust suppression by regular wetting and water spraying for construction works
  - Reduction of noise from equipment and machinery on-site by regular checking of on-site plant/vehicle to ensure proper functioning
  - Sorting and storage of general refuse and construction waste
  - Deployment of temporary silt curtain in the area where marine construction works were conducted and deployment of water sedimentation tanks for treatment of wastewater at inland and marine areas before discharge





#### 10. CONCLUSIONS AND RECOMMENDATIONS

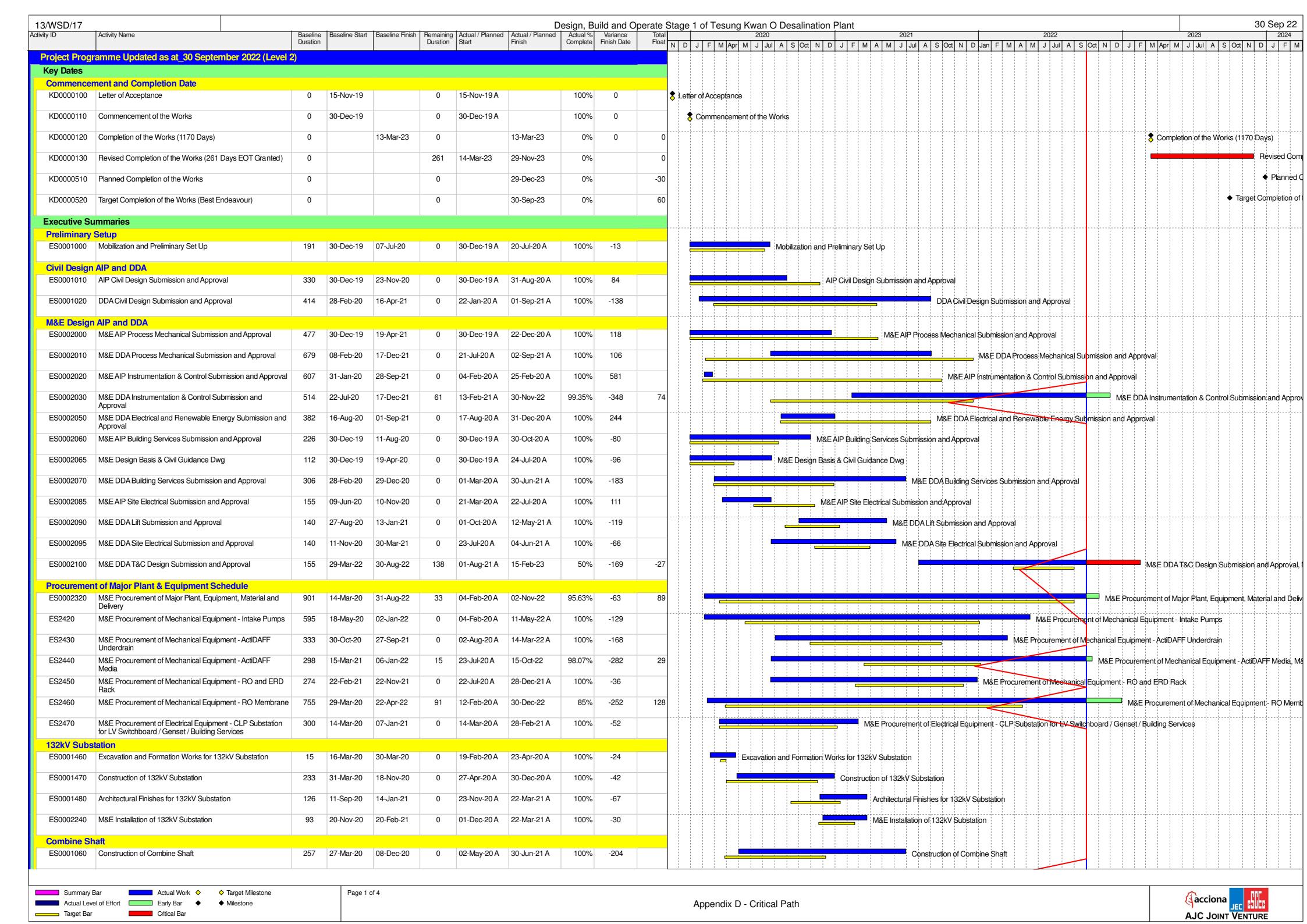
- 10.1. This is the 35<sup>th</sup> Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 January to 31 January 2023, in accordance with the EM&A Manual and the requirement under FEP-01/503/2015/A.
- 10.2. No noise monitoring was conducted in the reporting period due to the over distant monitoring station from the works location, in which construction activities were not undertaken within a radius of 300m from the monitoring locations.
- 10.3. The EM&A works for water quality were conducted during the reporting period in accordance with the EM&A Manual.
- 10.4. Sixty-three (63) of the general water quality monitoring results of SS obtained had exceeded the Action Level. Forty-six (46) of the general water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Level. After investigation, all exceedances were concluded unrelated to the Project.
- 10.5. In this reporting period, 30 times of landfill gas monitoring were conducted at TKO Area 137 (Ch0+750 -Ch0+780). No action or limit level exceedance was recorded in the reporting period.
- 10.6. Weekly environmental site inspections were conducted during the reporting period. Observations and recommendations were reported during the site inspections. All items are rectified within the reporting period. The environmental performance of the project was therefore considered satisfactory.
- 10.7. According to the environmental site inspections performed in the reporting month, the Contractor is reminded to pay attention on chemical storage, site hygiene and dust suppression mitigation measures.
- 10.8. No environmental complaint, notification of summons and prosecution was received in the reporting period.
- 10.9. The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

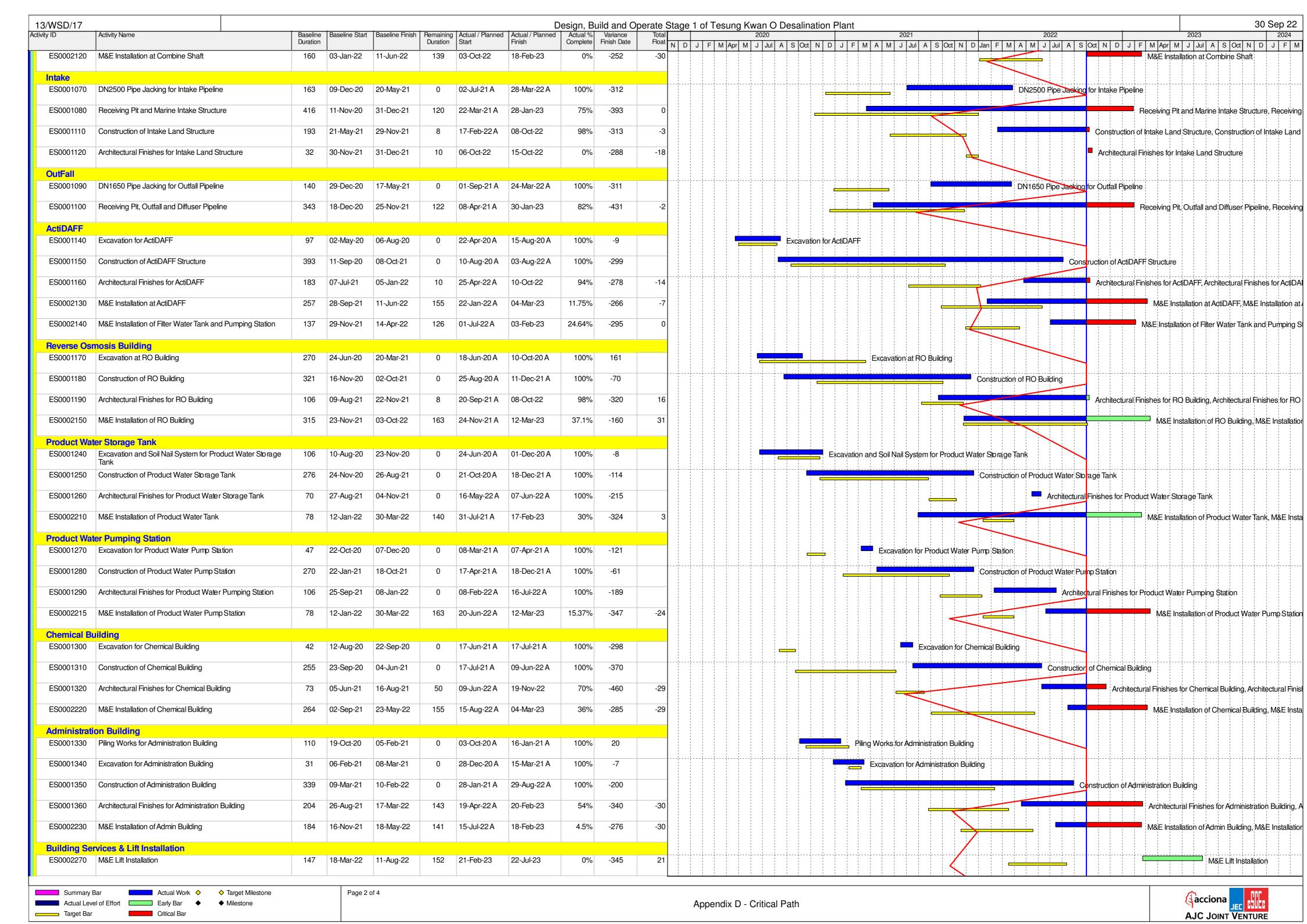


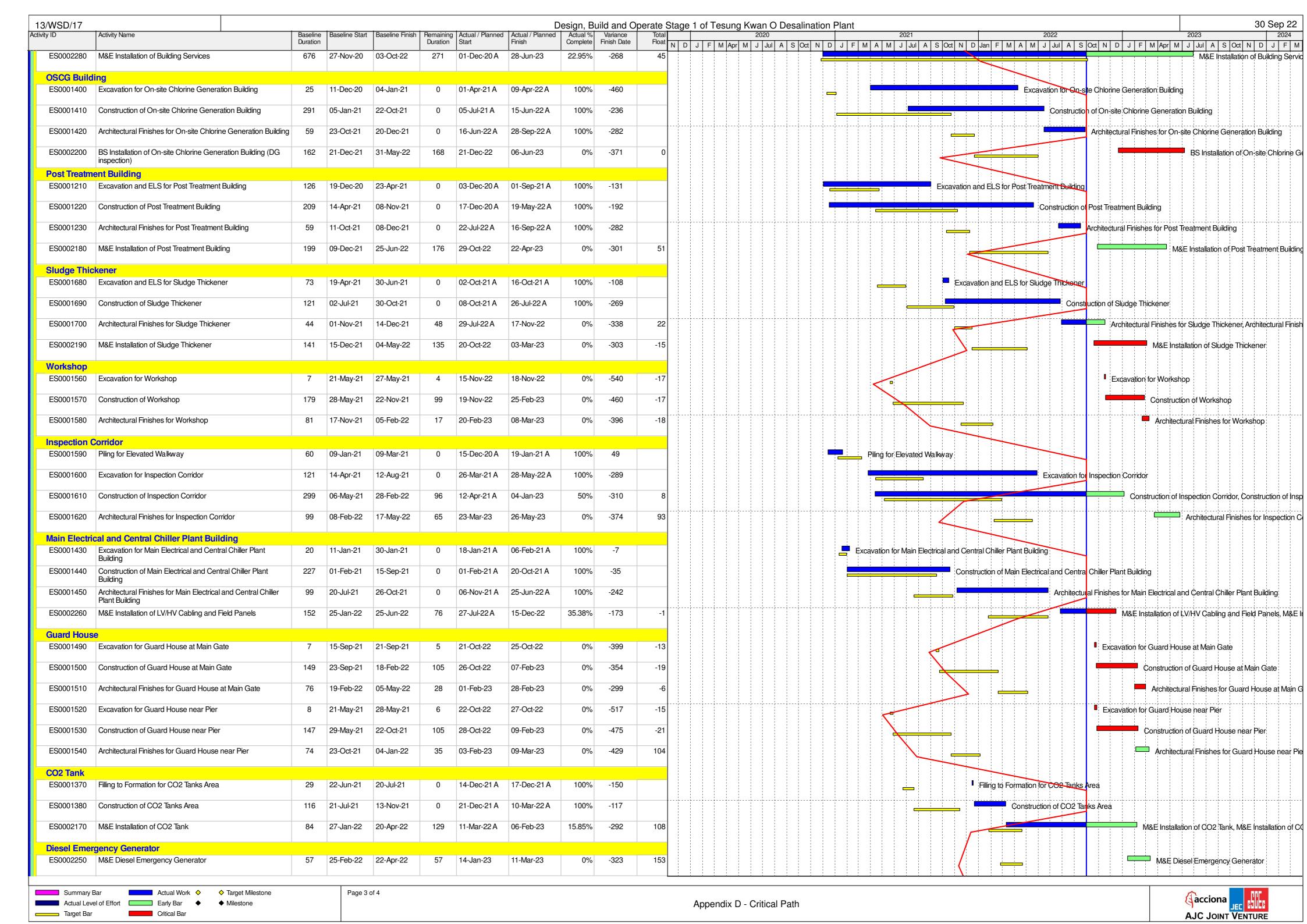


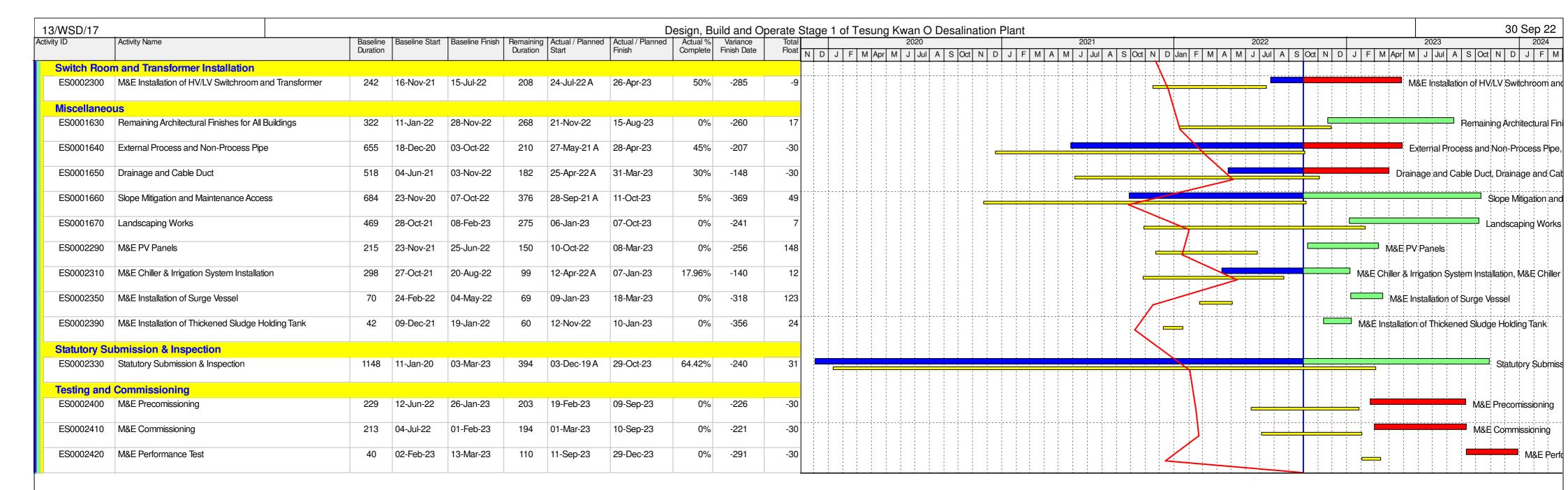
# Appendix A

## **Construction Programme**









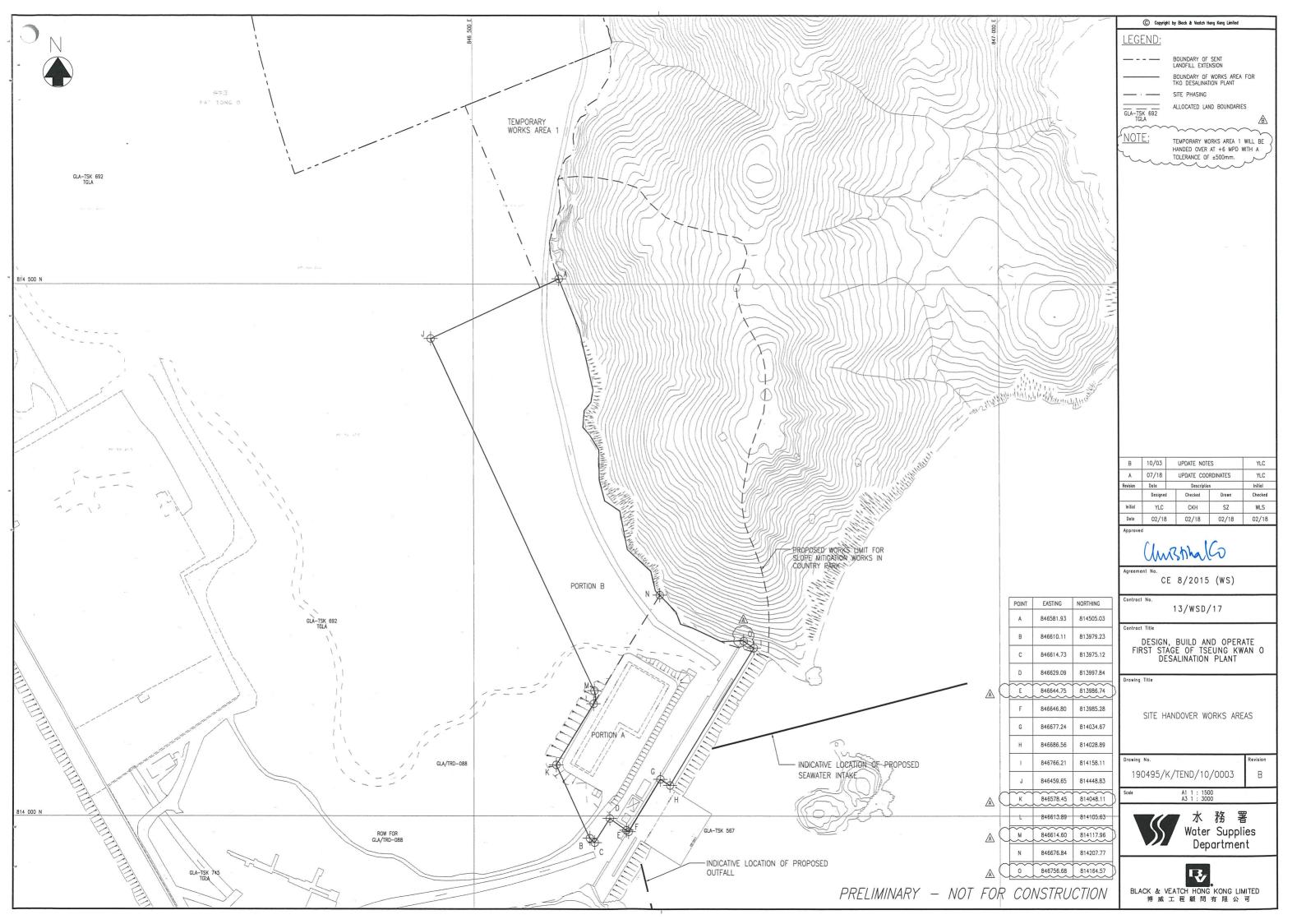






### Appendix B

Overview of Desalination Plant in Tseung Kwan O



### BUILDINGS IN FIRST STAGE

DOILDI	NOO IN TINOT OTNOL		
CODE	NAME OF BUILDING	TOTAL G.F.A. (m²)	SITE COVERAGE (m²)
В	COMBINE SHAFT	759.876	759,876
С	ACTIDAFF	10027_547	5455_346
G	REVERSE OSMOSIS BUILDING AND ELECTRICAL BUILDING	4511,455	5367,935
н	CO2 TANKS AREA	-	-
J	PRODUCT WATER STORAGE TANK, PUMP STATION AND ELECTRICAL BUILDING	1974.610	2933,980
К	SLUDGE TREATMENT BUILDING, TANK AND PUMP ROOM	2531.044	1228,361
М	ADMINISTRATION BUILDING & ELECTRICAL BUILDING C	2459,713	1114,062
N	MAIN ELECTRICAL AND CENTRAL CHILLER PLANT BUILDING	-	459,893
R1	ELECTROCHLORINATION BUILDING & ELECTRICAL BUILDING A	657.992	825.776
S	132 kV SUBSTATION	-	943.560
Т	IRRIGATION WATER TANK AND PUMP ROOM	-	156.148
R2	CHEMICAL BUILDING	813.056	813,056
V	VISITOR GALLERY	1330-410	1330.410
X1	GUARD HOUSE AND FS CONTROL ROOM	39.585	39.585
X2	GUARD HOUSE	22.035	22.035
Υ	R+D OUTDOOR	-	-
Z	WASTE WATER TREATMENT PLANT	48.000	48,000
	TOTAL =	25175,323	21498,023

#### LEGEND / ABBREVIATION

H/L WINDOW HIGH LEVEL WINDOW METAL LOUVRES CAT LADDER

ACCESSIBLE UNISEX TOILET

PROPOSED FINISH FLOOR LEVEL IN METER ABOVE P.D. STRUCTURAL FLOOR LEVEL IN METER ABOVE P.D. MECHANNICAL VENTILATION & ARTIFICIAL LIGHTING

4.5kg CO2 FIRE EXTINGUISHER

HOSE REEL

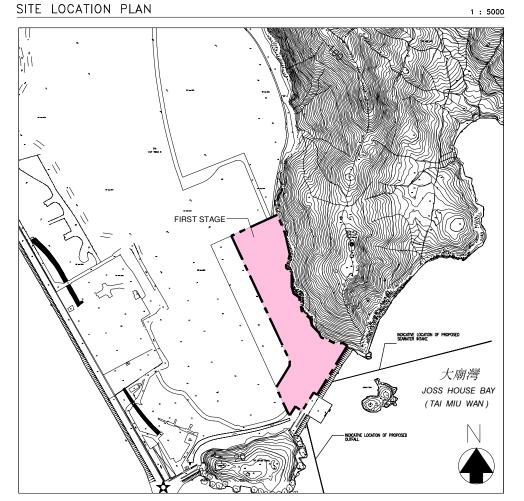
FIREMAN'S LIFT LIFT FOR THE BARRIER FREE ACCESS

PIPE DUCT

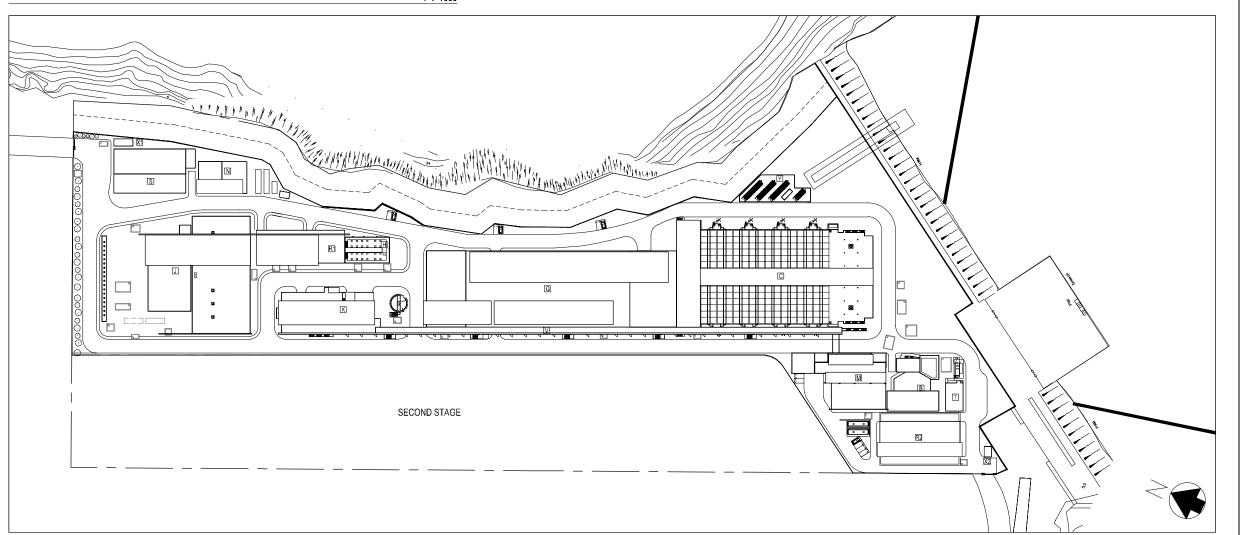
#### PLOT RATIO & SITE COVERAGE CALCULATION:

TOTAL G.F.A. TOTAL SITE COVERAGE

SITE COVERAGE



### FIRST STAGE OF TSEUNG KWAN O DESALINATION PLANT





©COPYRIGHT RESERVED





### Appendix C

Summary of Implementation Status of Environmental Mitigation





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent	Impl	emen Stage	tation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Implementation Agent	D	С	0	status	Guidelines
Air Quality				1				
S4.8.1	Impervious dust screen or sheeting will be provided to enclose scaffolding from the ground floor level of building for construction of superstructure of the new buildings.	Land site/ During Construction	Contractor(s)		<b>V</b>		Implemented	Air Pollution Control (Construction Dust)
S4.8.1	Impervious sheet will be provided for skip hoist for material transport.	Land site/ During Construction, particularly dry season	Contractor(s)		1		NA	-
S4.8.1	The area where dusty work takes place should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after dusty activities as far as practicable.	Land site/ During Construction	Contractor(s)		1		Implemented	-
S4.8.1	All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation.	Land site/ During Construction	Contractor(s)		<b>√</b>		Implemented	-
S4.8.1	Dropping heights for excavated materials should be controlled to a practical height to minimize the fugitive dust arising from unloading.	Land site/ During Construction	Contractor(s)		1		Implemented	-
S4.8.1	During transportation by truck, materials should not be loaded to a level higher than the side and tail boards, and should be dampened or covered before transport.	Land site/ During Construction	Contractor(s)		1		Implemented	-
S4.8.1	Wheel washing device should be provided at the exits of the work sites. Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty material from its body and wheels as far as practicable.	Land site/ During Construction	Contractor(s)		<b>V</b>		Implemented	-
S4.8.1	Road sections between vehicle-wash areas and vehicular entrance will be paved.	Land site/ During Construction	Contractor(s)		<b>√</b>		Implemented	-
S4.8.1	Hoarding of not less than 2.4m high from ground level will be provided along the length of the Project Site boundary.	Land site/ During construction	Contractor(s)	<b>V</b>	<b>✓</b>		N/A	-
S4.8.1	Haul roads will be kept clear of dusty materials and will be sprayed with water so as to maintain the entire road surface wet at all times.	Land site/ During construction	Contractor(s)		1		Implemented	-





EIA	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent		emen Stage		Implementation	Relevant Legislation &
Reference		main concerns to address		D	С	0	status	Guidelines
S4.8.1	Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets or sprayed with water to maintain the entire surface wet all the time.	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S4.8.1	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Land site/ During construction	Contractor(s)		<b>✓</b>		Implemented	-
S4.8.1	All exposed areas will be kept wet always to minimise dust emission.	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S4.8.1	Ultra-low-sulphur diesel (ULSD) will be used for all construction plant on-site, as defined as diesel fuel containing not more than 0.005% sulphur by weight) as stipulated in Environment, Transport and Works Bureau Technical Circular (ETWB-TC(W)) No 19/2005 on Environmental Management on Construction Sites.	Land site/ During construction/ During Operation	Contractor(s)		<b>√</b>	1	Implemented	Environment, Transport and Works Bureau Technical Circular (ETWB- TC(W)) No 19/2005 on Environmental Management on Construction Sites
S4.8.1	The engine of the construction equipment during idling will be switched off.	Land site/ During construction	Contractor(s)		1		Implemented	-
S4.8.1	Concrete batching plant will be required on site. control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented. The control measures recommended in the Guidance Note on a Best Practicable Means for Cement Works (Concrete Batching Plant) (BPM 3/2 (93)) will be implemented.	Land site/ During construction	Contractor(s)		•		N/A	-
S4.8.1	Regular maintenance of construction equipment deployed on-site will be conducted to prevent black smoke emission.	Land site/ During construction	Contractor(s)		✓		Implemented	-
S4.10	To ensure proper implementation of the recommended dust mitigation measures and good construction site practices during the construction phase, environmental site audits on weekly basis is recommended throughout the construction period.	Land site/ During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		<b>√</b>		Implemented	-





EIA	Recommended Environmental Protection Measures/	Objectives of the	Implementation	_	ementa	tion	Implementation	Relevant Legislation &
Reference	Mitigation Measures	recommended measures & main concerns to address	Agent	D	Stage C	0	status	Guidelines
Noise								
S5.7	Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase.	Noise control/ During construction	Contractor(s)		<b>√</b>		N/A	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	Mobile plant, if any, will be sited as far away from NSRs as possible.	Noise control/ During construction	Contractor(s)		<b>✓</b>		N/A	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum.	Noise control/ During construction	Contractor(s)		<b>✓</b>		Implemented	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	Plants known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.	Noise control/ During construction	Contractor(s)		<b>√</b>		N/A	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities.	Noise control/ During construction	Contractor(s)		<b>4</b>		N/A	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	Use of Quite Powered Mechanical Equipment (QPME).	Noise control/ During construction	Contractor(s)		<b>√</b>		Implemented	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	Movable noise barriers of 3m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m-2 and have no o or gappeningss.	Noise control/ During construction	Contractor(s)		<b>V</b>		N/A	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	Noise control/ During construction	Contractor(s)		<b>4</b>		N/A	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	Construction activities (e.g. excavation/shoring, reinstatement (asphalt), and pipe jacking) will be planned and carried out in sequence, such that items of PME proposed for these activities will not be operated simultaneously.	Noise control/ During construction	Contractor(s)	<b>*</b>	<b>√</b>		Implemented	A Practical Guide for the Reduction of Noise from Construction Works
S5.7	PMEs will not be used at the works areas near educational institutions with residual impact (ie the "influence area" within a	Noise control / During construction	Contractor(s)		<b>4</b>		N/A	A Practical Guide for the Reduction of Noise from





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent		ementa Stage		Implementation status	Relevant Legislation & Guidelines
		main concerns to address		D	С	0		
	radius of 40m) during school hours in order to reduce impact to the educational institutions.							Construction Works
S5.7	Noise enclosures or acoustic sheds would be used to cover stationary PME such as generators.  Portable/Movable noise enclosure made of material with superficial surface density of at least 7 kg m-2 may be used for screening the noise from operation of the saw/groover, concrete.	Noise control/ Pre- construction/ During construction	Contractor(s)	•	<b>✓</b>		N/A	-
S5.9	Sawcutting pavement, breaking up of pavement, excavation /shoring, pipe laying, backfilling, reinstatement (concrete) and pipe jacking shall be scheduled outside the examination period.	Noise control/ Pre- construction/ During construction	Contractor(s)	<b>√</b>	<b>✓</b>		N/A	-
S5.9	In view the duration of noise exceedance at Creative Secondary School, PLK Laws Foundation College, TKO Kei Tak Primary School and School of Continuing and Professional Studies-CUHK is limited to 8 weeks, the construction work in the influence areas near the four schools shall be scheduled during long school holidays (eg summer holiday, Easter holiday or Christmas holiday, etc) as far as practicable. Scheduling the construction work for the four schools.	Noise control/ Pre- construction/ During construction	Contractor(s)	<b>✓</b>	<b>✓</b>		N/A	-
S5.10	A noise monitoring programme shall be implemented for the construction phase.	Designated monitoring stations as defined in EM&A Manual/During construction phase	Environmental Team		<b>✓</b>		N/A	-
S5.10	The effectiveness of on-site control measures could also be evaluated through the regular site audits.	All facilities/ During construction	Contractor(s)/ET & Independent Environmental Checker (IEC)		<b>√</b>		Implemented	-





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent		ement Stage	ation	Implementation status	Relevant Legislation & Guidelines
Reference	Finagation Measures	main concerns to address		D	C	0	Status	& duidennes
Water Qua	lity							
S6.9	Dredged marine sediment will be disposed of in a gazetted marine disposal area in accordance with marine dumping permit conditions of the Dumping at Sea Ordinance (DASO).	Marine Dredging/ During construction	Contractor(s)		<b>✓</b>		Implemented	Dumping at Sea Ordinance (DASO)
S6.9	Disposal vessels will be fitted with tight bottom seals in order to prevent leakage of material during transport.	Marine Dredging/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S6.9	Barges will be filled to a level, which ensures that material does not spill over during transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action.	Marine Dredging/ During construction	Contractor(s)		<b>*</b>		Implemented	-
S6.9	After dredging, any excess materials will be cleaned from decks and exposed fittings before the vessel is moved from the dredging area.	Marine Dredging/ During construction	Contractor(s)		✓		Implemented	-
S6.9	All vessels should be well maintained and inspected before use to limit any potential discharges to the marine environment.	Marine Dredging/ During construction	Contractor(s)		✓		Implemented	-
S6.9	All vessels must have a clean ballast system.	Marine Dredging/ During construction	Contractor(s)		✓		Implemented	-
S6.9	No discharge of sewage/grey wastewater should be allowed. Wastewater from potentially contaminated area on working vessels should be minimized and collected. These kinds of wastewater should be brought back to port and discharged at appropriate collection and treatment system.	Marine Dredging/ During construction	Contractor(s)		✓		Implemented	-
S6.9	No soil waste is allowed to be disposed overboard.	Marine Dredging/ During construction	Contractor(s)		<b>√</b>		N/A	-
S6.9	Silt removal facilities such as silt traps or sedimentation facilities will be provided to remove silt particles from runoff to meet the requirements of the TM standard under the WPCO. The design of silt removal facilities will be based on the guidelines provided in ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	Land site & drainage/ During construction	Contractor(s)		•		Implemented	ProPECC PN 1/94 TM Standard under the WPCO





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	Impl	emer Stag	ntation e	Implementation status	Relevant Legislation & Guidelines
	· ·	main concerns to address		D	С	0		
S6.9	Earthworks to form the final surfaces will be followed up with surface protection and drainage works to prevent erosion caused by rainstorms.	Land site & drainage/ During construction	Contractor(s)		1		Implemented	-
S6.9	Appropriate surface drainage will be designed and provided where necessary.	Land site & drainage/ During construction	Contractor(s)		1		Implemented	-
S6.9	The precautions to be taken at any time of year when rainstorms are likely together with the actions to be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC PN 1/94.	Land site & drainage/ During construction	Contractor(s)	✓	<b>√</b>		Implemented	ProPECC PN 1/94
S6.9	Oil interceptors will be provided in the drainage system where necessary and regularly emptied to prevent the release of oil and grease into the storm water drainage system after accidental spillages.	Land site & drainage/ During construction	Contractor(s)		<b>√</b>		N/A	-
S6.9	Temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge, if any, will be adequately designed for the controlled release of storm flows.	Land site & drainage/ During construction	Contractor(s)		<b>✓</b>		Implemented	-
S6.9	The temporary diverted drainage, if any, will be reinstated to the original condition when the construction work has finished or when the temporary diversion is no longer required.	Land site & drainage/ During construction	Contractor(s)		<b>*</b>		N/A	-
S6.9	Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the construction workers over the construction site to prevent direct disposal of sewage into the water environment.	Land site & drainage/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S6.9 and S6.12	The sterilization water should be dechlorinated with total residual chlorine (TRC) level below 1 mg/L before discharge to public sewer. In situ testing of TRC should also be conducted for the discharge of chlorinated water for pipeline disinfection to ensure sufficient dechlorination before discharge to public sewer.	Sterilization of water mains prior to commissioning	Contractor(s)		1	<b>*</b>	N/A	Technical Memorandum for Effluents Discharged into Drainage and Sewerage Systems
S6.9	The cleaning and flushing water should also be treated and desilted to the relevant discharge requirement stipulated in TM-DSS before discharging.	Sterilization of water mains prior to commissioning	Contractor(s)		•	<b>✓</b>	Implemented after reminder	Inland and Coastal Waters





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	recommended measures &		Implementation Stage			Implementation status	Relevant Legislation & Guidelines
		main concerns to address		D	C	0		
S6.9	Site drainage should be well maintained, and good construction practices should be observed to ensure that oil, fuels, solvents, and other chemicals are managed, stored and handled properly and do not enter the nearby water streams.	Land site & drainage/ During construction/ During operation	Contractor(s)		<b>✓</b>	<b>&gt;</b>	Implemented	-
S6.12	Regular site inspections will be carried out in order to confirm that regulatory requirements are being met and that contractors are implementing the standard site practice and mitigation measures as proposed to reduce potential impacts to water quality.	During construction	Contractor(s)/ ET & IEC		<b>✓</b>		Implemented	-





	Downward Down V	Objectives of the		Impl	emei	ntation		
EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	recommended measures &	Implementation Agent		Stag	e	Implementation Status	Relevant Legislation & Guidelines
		main concerns to address		D	С	0	Status	duidennes
Waste Mar			2 ()	1 1		Ι	* 1 . 1	
S8.5	Nomination of approved personnel to be responsible for standard site practices, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the site.	Contract mobilization/ During construction	Contractor(s)		•		Implemented	-
S8.5	Training of site personnel in proper waste management and chemical handling procedures. Training will be provided to workers on the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling at the beginning of the construction works.	Contract mobilization/ During construction	Contractor(s)		<b>&gt;</b>		Implemented	-
S8.5	Provision of sufficient waste disposal points and regular collection for disposal.	All area/ During construction/ During operation	Contractor(s)		<b>&gt;</b>	<b>✓</b>	Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	Appropriate measures to reduce windblown litter and dust transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	All area/ During construction	Contractor(s)		✓		Implemented	DEVB TC(W) No. 8/2010, Enhanced Specification for Site Cleanliness and Tidiness.
S8.5	A waste management plan (WMP) as stated in the "ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites" for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established and implemented during the construction phase as part of the Environmental Management Plan (EMP). The Contractor will be required to prepare the EMP and submits it to the Architect/ Engineer under the Contract for approval prior to implementation.	All area/ During construction	Contractor(s)		✓		Implemented	ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites
S8.5	Separation of chemical wastes for special handling and appropriate treatment at the Chemical Waste Treatment Centre at Tsing Yi.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	Chapters 2 & 3 Code of Practice on the Packaging, Labelling & Storage of Chemical Wastes published under the Waste Disposal Ordinance (Cap 354), Section 35
S8.5	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.	Land site/ During construction	Contractor(s)		✓		Implemented after reminder	Waste Disposal Ordinance (Cap 354)





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent	Impl	emer Stag	ntation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	implementation Agent	D	C	0	Status	Guidelines
S8.5	A recording system for the amount of wastes generated/recycled and disposal sites. The trip-ticket system will be included as one of the contractual requirements and implemented by the contractor(s).	Land site/ During construction	Contractor(s)		<b>√</b>		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal.	Land site/ During construction/ During operation	Contractor(s)		<b>&gt;</b>		Implemented	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
S8.5	Encourage collection of aluminium cans and wastepaper by individual collectors during construction with separate labelled bins provided to segregate these wastes from other general refuse by the workforce.	Land site/ During construction	Contractor(s)		<b>&gt;</b>		Implemented	ETWB TCW No. 33/2002, Management of Construction and Demolition Material Including Rock
S8.5	Any unused chemicals and those with remaining functional capacity will be recycled as far as possible.	Land site/ During construction	Contractor(s)		✓		N/A	-
S8.5	Use of reusable non-timber formwork to reduce the amount of C&D materials.	All areas/ During construction	Contractor(s)		<b>√</b>		Implemented	WBTC 32/92, The Use of Tropical Hard Wood on Construction Site
S8.5	Prior to disposal of construction waste, wood, steel, and other metals will be separated to the extent practical, for re-use and/or recycling to reduce the quantity of waste to be disposed of to landfill.	All areas/ During construction	Contractor(s)		<b>*</b>		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	Proper storage and site practices to reduce the potential for damage or contamination of construction materials.	All areas/ During construction	Contractor(s)		✓		Implemented	-
S8.5	Plan and stock construction materials carefully to reduce amount of waste generated and avoid unnecessary generation of waste.	All areas/ During construction	Contractor(s)		<b>\</b>		Implemented	-
S8.5	A Sediment Quality Report (SQR) for sampling and chemical testing of the sediment will be prepared and submitted to the EPD for approval. The approved detailed sampling and chemical testing will be carried out prior to the commencement of the dredging activities to confirm the sediment disposal method.	Marine works/ During construction	Contractor(s)		✓		N/A	ETWB TC(W) No. 34/2002 and Dumping at Sea Ordinance (DASO)





EIA	Recommended Environmental Protection Measures/	Objectives of the		Impl		tation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	recommended measures & main concerns to address	Implementation Agent	D	Stag C	e 0	Status	Guidelines
S8.5	The management of dredged/ excavated sediment management requirement from ETWB TC(W) No. 34/2002 will be incorporated in the Specification of the Contract Documents.	Marine works/ During construction	WSD/ Contractor(s)		✓		Implemented	ETWB TC(W) No. 34/2002 and Dumping at Sea Ordinance (DASO)
S8.5	The contractor will open a billing account with EPD in accordance with the Waste Disposal (Charges for Disposal of Construction Waste) Regulation for the payment of disposal charges.	Contract mobilization/ During construction	Contractor(s)		<b>*</b>		Implemented	Cap 354N Waste Disposal (Charges for Disposal of Construction Waste) Regulation
S8.5	A trip-ticket system will be established in accordance with DEVB TC(W) No. 6/2010 to monitor the reuse of surplus excavated materials off-site and disposal of construction waste and general refuse at transfer facilities/ landfills, and to control fly-tipping.	Contract mobilization/ During construction	Contractor(s)		<b>&gt;</b>		Implemented	DEVB TC(W) No. 6/2010, Trip Ticket System for Disposal of Construction & Demolition Materials
S8.5	The project proponent will also conduct regular inspection of the waste management measures implemented on site as described in the Waste Management Plan.	All area/ During construction	Contractor(s)/ Environmental Team (ET) & Independent Environmental Checker (IEC)		<b>&gt;</b>		Implemented	ETWB TC(W) No. 19/2005, Environmental Management on Construction Sites
S8.5	A recording system (similar to summary table as shown in Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005) for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established during the construction phase.	All area/ During construction	Contractor(s)		<b>✓</b>		Implemented	Annex 5 and Annex 6 of Appendix G of ETWB TC(W) No. 19/2005
S8.5	Inert C&D materials (public fill) will be reused within the Project as far as practicable.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S8.5	Public fill and construction waste shall be segregated and stored in different containers or skips to facilitate reuse or recycling of materials and their proper disposal.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S8.5	Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S8.5	To reduce the potential dust and water quality impacts of site formation works, C&D materials will be wetted as quickly as possible to the extent practice after filling.	All area/ During construction	Contractor(s)		✓		Implemented	Air Pollution Control (Construction Dust) Regulation (Cap 311R); WPCO (Cap 358)





EIA	Recommended Environmental Protection Measures/	Objectives of the		Impl		itation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	recommended measures & main concerns to address	Implementation Agent	D	Stag C	e 0	Status	Guidelines
S8.5	Open stockpiles of excavated/ fill materials or construction wastes on-site should be covered with tarpaulin or similar fabric.	Land site/ During Construction, particularly dry season	Contractor(s)	D	✓	0	Implemented	Air Pollution Control (Construction Dust) Regulation (Cap 311R)
S8.5	Chemical waste container shall be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed.	All area/ During construction/ During operation	Contractor(s)/WSD		1	<b>~</b>	Implemented	
S8.5	Chemical waste container shall have a capacity of less than 450 L unless the specifications have been approved by the EPD.	All area/ During construction/ During operation	Contractor(s)/ WSD		<b>√</b>	✓	Implemented	
S8.5	A label in English and Chinese shall be displayed on the chemical container in accordance with instructions prescribed in Schedule 2 of the Regulations.	All area/During construction/During operation	Contractor(s)/WSD		<b>√</b>	<b>√</b>	Implemented	
S8.5	Storage areas for chemical waste shall be enclosed on at least 3 sides.	All area/ During construction/ During operation	Contractor(s)/WSD		<b>√</b>	<b>√</b>	Implemented	Waste Disposal
S8.5	Storage areas for chemical waste shall have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest.	All area/ During construction/ During operation	Contractor(s)/WSD		<b>✓</b>	<b>✓</b>	Implemented	(Chemical Waste) (General) Regulation; Code of Practice on the Packaging,
S8.5	Storage areas for chemical waste shall have adequate ventilation.	All area/ During construction/ During operation	Contractor(s)/WSD		<b>√</b>	<b>√</b>	Implemented	Handling and Storage of Chemical Wastes
S8.5	Storage areas for chemical waste shall be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary).	All area/ During construction/ During operation	Contractor(s)/WSD		<b>√</b>	<b>√</b>	Implemented	
S8.5	Storage areas for chemical waste shall be arranged so that incompatible materials are appropriately separated.	All area/ During construction/ During operation	Contractor(s)/WSD		<b>✓</b>	<b>✓</b>	Implemented	
S8.5	General refuse will be stored in enclosed bins or compaction units separately from construction and chemical wastes.	All area/ During construction/ During operation	Contractor(s)/WSD		<b>√</b>	<b>√</b>	Implemented after reminder	
S8.5	Adequate number of waste containers will be provided to avoid over-spillage of waste.	All area/ During construction/ During operation	Contractor(s)/WSD		•	<b>√</b>	Implemented	DEVB TC(W) No. 8/2010 Enhanced Specification for Site Cleanliness and Tidiness.





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent		emei Stag	ntation e	Implementation Status	Relevant Legislation & Guidelines
Reference	Mitigation Measures	main concerns to address		D	C	0	Status	Guidelilles
S8.5	A reputable waste collector will be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimise odour, pest and litter impacts.	All area/ During construction/ During operation	Contractor(s)/ WSD		•	<b>✓</b>	Implemented	-
S8.5	Recycling bins will be provided at strategic locations within the Site to facilitate recovery of recyclable materials (including aluminum can, waste paper, glass bottles and plastic bottles) from the Site. Materials recovered will be sold for recycling.	All area/ During construction/ During operation	Contractor(s)/WSD		<b>√</b>	<b>√</b>	Implemented	-
S8.5	To avoid any odour and litter impact, accurate number of portable toilets will be provided for workers on-site.	All area/ During construction	Contractor(s)		<b>√</b>		Implemented	-
S8.5	The burning of refuse on construction sites is prohibited by law.	All area/ During construction	Contractor(s)		✓		Implemented	Air Pollution Control Ordinance (Cap 311)
S8.7	To facilitate monitoring and control over the contractors' performance on waste management, a waste inspection and audit programme will be implemented throughout the construction phase.	All facilities/ During construction	ET/IEC		<b>✓</b>		Implemented	-





FIA	December 1 Comment 1 December 1 December 1	Objectives of the		Impl	lemei	ıtation	T	D-1
EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	recommended measures &	Implementation Agent		Stag		Implementation Status	Relevant Legislation & Guidelines
Ecology	_	main concerns to address		D	С	0		
S9.7	For slope mitigation works within the Clear Water Bay Country Park, to avoid tree felling and damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and rock dowels can be adjusted during detailed design, and a setback distance from existing trees is recommended to be maintained as far as practical. A detailed specification describing the exact locations of the flexible barrier foundation plates, soil nails and rock dowels will be prepared to illustrate how the setback distance from existing trees would be implemented for tree avoidance.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	<b>*</b>	•		Implemented	-
S9.7	Pruning of tree canopies along the alignment of the flexible barriers shall be limited to a minimum.	Slope mitigation works area/ During construction	Contractor(s)		✓		Implemented	
S9.7	The alignment of flexible barriers shall be optimized to preserve all species of conservation interest and minimize the impact to the existing vegetation as far as practicable. All individuals of <i>Marsdenia lachnostoma</i> within the slope mitigation areas shall be retained <i>in- situ</i> , by positioning the alignment of flexible barrier at a minimum 1.5m in a radius away from these individuals.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	<b>√</b>	1		Implemented	-
S9.7 and 9.10	At the detailed design stage prior to the commencement of the slope mitigation works, a vegetation survey shall be carried out at the slope mitigation areas within the Clear Water Bay Country Park to assess the condition and identify the location of each individual of <i>Marsdenia lachnostoma</i> and other flora species of conservation interest that may be directly affected by the construction works.	Slope mitigation works area/ During detailed design/ During construction	Contractor(s)	<b>√</b>			Implemented	-
S9.7	Temporary fencing will be installed to fence off the concerned species either in groups of individually within the works area and in the close proximity to prevent from being damaged and disturbed during construction. A sign identifying the site shall be attached to the fence and flagging tape shall be attached to the individuals to visualize their locations.	Slope mitigation works area/ During construction	Contractor(s)		•		Implemented	-
S9.7 and S9.10	A specification for fencing and demarcating individuals of <i>Marsdenai lachnostoma</i> (or other flora species of conservation interest, if found) adjacent to the proposed alignment of the flexible barriers will be prepared to protect the species.	Slope mitigation works area/ During construction	Contractor(s)		<b>✓</b>		Implemented	-
S9.7	Induction training shall also be provided to all site personnel in order to brief them on this flora of conservation interest including the locations and their importance.	Slope mitigation works area/ During construction	Contractor(s)		✓		Implemented	-





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent		Implementation Stage		implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	r · · · · · · · · · · · · · · · · · · ·	D	С	0	Status	Guidelines
S9.7	The resident site supervisory staff will closely monitor the conditions of concerned individuals during construction of flexible barriers in the close proximity.	Slope mitigation works area/ During construction	Contractor(s)		<b>✓</b>		Implemented	-
S9.7	Erect fences along the boundary of the works area before the commencement of works to prevent vehicle movements and encroachment of personnel onto adjacent areas.	All area/ During construction	Contractor(s)		✓		Implemented	-
S9.7	Regularly check the work site boundaries to ensure that they are not breached and that damage does not occur to surrounding areas.	All area/ During construction	Contractor(s)/ET		✓		Implemented	-
S9.7	Avoid any damage and disturbance, particularly those caused by filling and illegal dumping, to the surrounding habitats through proper management of waste disposal.	All area/ During construction	Contractor(s)		<b>*</b>		Implemented	-
S9.7	Reinstate temporarily affected areas, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting. The tree/shrub species will be chosen with reference to those in the surrounding area.	All area/ During construction	Contractor(s)		<b>✓</b>		To be implemented	-
S9.7	Affected habitats within the Clear Water Bay Country Bay shall be reinstated by hydro-seeding and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works.	All area/ During construction	Contractor(s)		<b>✓</b>		To be implemented	-





EIA	Recommended Environmental Protection Measures/	Objectives of the				tation	Implementation	Relevant Legislation &
Reference		recommended measures & main concerns to address	Implementation Agent	D	Stag	e 0	Status	Guidelines
Landscap	e & Visual	main concerns to address		<u> </u>	C	U		
S11.10 & 11.11	The construction area and area allowed for temporary structures, such as the contractor's office, will be minimized to a practical minimum. (MM1)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	✓	<b>✓</b>	✓	Implemented	-
S11.10 & 11.11	At the detailed design stage, the design team will seek to minimize the landscape footprint of the Project and above ground facilities, while satisfying all other requirements. (MM2)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	<b>√</b>	<b>1</b>	✓	Implemented	-
S11.10 & 11.11	Design principles will be adopted to take into account the surrounding area, particularly Clear Water Bay Country Park behind and the nearby waterfront, with due consideration given to:  - green roofs where practical (i.e. without equipment on the roof);  - roadside planting;  - aesthetic treatment of all structures;  - vertical greening;  - screen planting along application site; and  - landscape enhancement with amenity planting where practical including planting along the edge (site boundary) fence with native shrubs where feasible, to reduce their visual impact and blend them into the surrounding landscape. (MM3)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	•	*	<b>✓</b>	Implemented	-
S11.10 & 11.11	All trees within the Project Site or the potential slope mitigation works area will be carefully protected during construction according to DEVB TCW No. 10/2013 – Tree Preservation (MM4)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	<b>*</b>	<b>√</b>	<b>√</b>	Implemented after reminder	ETWB TCW No. 3/2006 - Tree Preservation.
S11.10 & 11.11	No tree within the Country Park will be felled. Trees within the Site unavoidably affected by the works will be transplanted where necessary and practical. For trees that need to be felled, compensatory planting will be provided to the satisfaction of relevant Government departments.  A compensatory tree planting proposal including locations of tree compensation will be submitted to seek relevant government department's approval, in accordance with DEVB TC(W) No. 10/2013. (MM5)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	~	<b>✓</b>	<b>✓</b>	Implemented	DEVB TC(W) No. 10/2013
S11.10 & 11.11	Any slope mitigation works necessary to address natural terrain hazards, will be minimized to minimize any potential environmental impact to the Country Park e.g. soil nailing and rock stabilization will aim to avoid existing trees e.g. should any restoration of vegetation be necessary, the best planting matrix with native species will be established, with the aim of resembling the existing vegetation. (MM6)	All area/ Detailed design/ During construction/ During operation	WSD/ Contractor(s)	<b>✓</b>	•	<b>√</b>	Implemented	





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	Implementation Stage			Implementation Status	Relevant Legislation & Guidelines
Reference		main concerns to address		D	C	0	Status	Guidelines
S11.10 &	Dredging works for the installation of intake structures and	All area/ Detailed design/	WSD/ Contractor(s)	<b>✓</b>	✓	<b>✓</b>	Implemented	
11.11	outfall diffusers should be minimized to avoid or reduce any	During construction/ During						
	potential environmental impacts to as low as reasonably	operation						
	practicable (ALARP). The intake and outfall structures (e.g.							
	intake openings and diffuser heads) will be prefabricated and							
	transferred to site for installation. (MM7)							
S11.10 &	All night-time lighting will be reduced to a practical minimum	All area/ Detailed design/	WSD/ Contractor(s)	✓	✓	✓	Implemented	-
11.11	both in terms of number of level and will be hooded and	During construction/ During						
	directional. (MM8) units and lux level and will be hooded and	operation						
	directional. (MM8)	-						





EIA		Objectives of the	I		ement Stage	tation	Implementation	n Relevant Legislation &
Reference		recommended measures & main concerns to address	Implementation Agent	D	С	0	Status	Guidelines
Landfill G	as Hazard							
S12.7	During all works, safety procedures should be implemented to minimize the risks of fires and explosions, asphyxiation of workers and toxicity effects resulting from contact with contaminated soil and groundwater.	All area/ Detailed design/ During construction/operation	Contractor(s)	✓	<b>*</b>	<b>✓</b>	Implemented	-
S12.7	During trenching and excavation as well as creation of confined spaces at near to or below ground level, precautions should be clearly laid down and rigidly Gas detection equipment and appropriate breathing apparatus should be available and used when entering confined spaces or trenches deeper than 1 meter.	All area/ Detailed design/ During construction/operation	Contractor(s)	✓	<b>✓</b>	<b>✓</b>	Implemented	
S12.7	The Contractor should make the workers are aware of potential hazards of working in confined spaces (any chamber, manhole or culvert which is large enough to permit access to personnel). Such work in confined spaces is controlled by the Factories and Industrial Undertakings (Confined Spaces) Regulations of the Factories and Industrial Undertakings Ordinance.  Following the Safety Guide to Working in Confined Spaces ensures compliance with the above regulations.	All area/ Detailed design/ During construction/operation	Contractor(s)	<b>√</b>	<b>✓</b>	<b>✓</b>	Implemented	
S12.7	Safety officers, specifically trained with regard to landfill gas and leachate related hazards and the appropriate actions to take in adverse circumstances, should be present on the site throughout the works, in particular, when works are undertaken below grade.	All area/ Detailed design/ During construction/operation	Contractor(s)	<b>~</b>	<b>✓</b>	<b>✓</b>	Implemented	
S12.7	All personnel who work on site and all visitors to the site should be made aware of the possibility of ignition of gas in the vicinity of the works, the possible presence of contaminated water and the need to avoid physical contact with it.	All area/ Detailed design/ During construction/operation	Contractor(s)	<b>√</b>	<b>✓</b>	✓	Implemented	
S12.7	Monitoring for landfill gas should be undertaken in all excavations, manholes, chambers (particularly during pipe jacking) and any confined spaces through the use of an intrinsically safe portable instrument, appropriately calibrated and capable of measuring the concentrations of methane. carbon dioxide and oxygen.	All area/ Detailed design/ During construction/operation	Contractor(s)	<b>→</b>	•	•	Implemented	
S12.7	Monitoring frequency and areas to be monitored should be specified prior to commencement of groundwork, either by the Safety Officer, or by an appropriately qualified person. All measurements should be recorded and documented.	All area/ Detailed design/ During construction/operation	Contractor(s)	<b>→</b>	<b>✓</b>	<b>✓</b>	Implemented	
S12.7	Proceed drilling with adequate care and precautions against the potential hazards which may be encountered.	All area/ Detailed design/ During construction/operation	Contractor(s)	✓	<b>√</b>	✓	Implemented	





	1			Imple	ement	tation		
EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent		Stage		Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	implementation Agent	D	С	0	Status	Guidelines
S12.7	Prior to the commencement of the site works, the drilling contractor should devise a 'method-of- working' statement covering all normal and emergency procedures (including but not limited to number of operatives, experience and special skills of operatives, normal method of operations, emergency procedures, <i>supervisors</i> responsibilities, storage and use of safety equipment, safety procedures and signs, barriers and guarding). The site <i>supervisor</i> and all operatives must be familiar with this statement.	All area/ During construction/operation	Contractor(s)	✓	<b>✓</b>	<b>√</b>	Implemented	
S12.7	Where below ground service entries are necessary to the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II), the entry point should be sealed to prevent gas entry. In addition, any below grade cable trenches entering the Incoming Switchgear Room and 132 kV Substation can become the pathway for landfill gas and hence grilled metal covers should be used.	All area/ Detailed design/ During construction/operation	Contractor(s)	<b>✓</b>	•	•	N/A	
S12.7	It is recommended regular landfill gas monitoring should be carried out at the Incoming Switchgear Room, 132 kV Substation and Chlorine Store (I) and (II). The monitoring frequency will be monthly for the first year of operation. If the monitoring results show no sign of landfill gas migration, reduce the monitoring frequency to once every six months.	All area/ Detailed design/ During construction/operation	Contractor(s)	<b>✓</b>	<b>✓</b>	✓	N/A	
S12.7	The manholes and utility pits within the Project Site and along the fresh water mains. Each manhole/ utility pit should be monitored with two measurements (at mid depth and base). Each measurement should be monitored for a minimum of 10 minutes. A steady reading and peak reading should be recorded at each manhole/ utility pit and for each measurement. The need for venting the manhole/ utility pit and further monitoring will be reviewed after the initial monitoring.	All area/ Detailed design/ During construction/operation	Contractor(s)	<b>✓</b>	•	•	Implemented	
S12.7	All construction, operation and maintenance personnel working on-site as well as visitors should be made aware of the hazards of landfill gas and its possible presence on-site. This should be achieved through a combination of posting warning signs in prominent places and also by access to detailed information on landfill gas hazards and the designs and procedural means by which these hazards are being minimized on-site.	All area/ Detailed design/ During construction/operation	Contractor(s)	<b>✓</b>	<b>✓</b>	<b>✓</b>	Implemented	





## Appendix D

Impact Monitoring Schedule

### Contract No. 13/WSD/17

### Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Water Quality Monitoring Schedule (January 2023)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR4, WSR16, WSR33, WSR36, WSR37 Tidal Period: Ebb Tide: 08:16-11:00 Flood Tide: 11:00-19:16 Monitoring Time: Mid-ebb: 08:30-11:00 Mid-flood: 13:00-15:00		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37  Tidal Period: Ebb Tide: 10:00-12:00 Flood Tide: 10:00-12:00 Mid-ebb 10:00-12:00 Mid-flood: 14:00-16:00		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR46, WSR33, WSR46, WSR33, WSR46, Ebb Tide: 11:11-13:23 Flood Tide: 13:23-21:10 Monitoring Time:  Mid-ebb: 11:15-13:15 Mid-flood: 15:00-17:00
8	9	10	11	12	13	14
15	16.	Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR4, WSR16, WSR33, WSR36, WSR37 Tidal Period:  Ebb Tide: 12:46-15:30 Flood Tide: 05:52-12:46 Monitoring Time: Mid-ebb: 13:00-15:00 Mid-flood: 08:00-11:00	18	Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37 Tidal Period: Ebb Tide: 13:59-17:17 Flood Tide: 06:53-13:59 Monitoring Time: Mid-ebb: 14:00-16:00 Mid-flood: 08:00-10:00	20	Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR45, WSR37, WSR36, WSR37, WSR36, WSR36, WSR36, WSR36, WSR37, WSR36, WSR37, WSR36, WSR37, WSR3
15	16	17	18	19	20	21
		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37 Tidal Period:  Ebb Tide: 05:46-09:53 Flood Tide: 09:53-17:13 Monitoring Time: Mid-ebb: 05:00-09:53 Mid-flood: 12:00-14:00		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37 <u>Tidal Period:</u> Ebb Tide: 08:52-11:32 Flood Tide: 11:32-18:29 <u>Monitoring Time:</u> Mid-ebb: 09:00-11:00 Mid-flood: 13:00-15:00		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37 Tidal Period: Ebb Tide: 1030-113-26 Flood Tide: 13:26-20:20 Monitoring Time: Mid-ebb: 10:30-12:30 Mid-flood: 15:00-17:00
22	23	24	25	26	27	28
Site Close <sup>®</sup>	Site Close*	Site Close*	Site Close*		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR3, WSR4, WSR16, WSR3, WSR3, WSR36, WSR37 <u>Tidal Period:</u> Ebb Tide: 14-40-19-01 Flood Tide: 07-05-14-40 <u>Monitoring Time:</u> Mid-ebb: 15:00-17:00 Mid-flood: 08:00-10:00	
29	30	31				
		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR3, WSR3, WSR36, WSR36, WSR36, WSR36, WSR36, WSR36, WSR36, WSR37, Tidal Period.  Ebb Tide: 13:51-17:00 Flood Tide: 06:33-13:51  Monitoring Time: Mid-ebb: 14:00-16:00 Mid-flood: 08:00-10:00				

Monitoring Parameters: Dissolved oxygen, Temperature, pH, Turbidity, Salinity, Suspended Solids

- Due to safety concern of vessel transportation earlier than 0700. Water Quality Monitoring would start at 0800.

- Prioritized routing: Mid-Ebb: CE—WSR16—WSR37—WSR36—WSR33—Remaining stations and Mid-Flood: CF—WSR1—WSR2—WSR3—WSR3—WSR3+Remaining stations

\*As confirmed with the main Contractor, no land based and marrine construction work will be carried out during Chinese New Year (22 January 2023), in view of that water quality monitoring will not be conducted during the Chinese New Year.

## Contract No. 13/WSD/17

## Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Tentative Water Quality Monitoring Schedule (February 2023)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
				Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR37, WSR36, WSR37, Tidal Period: Ebb Tide: 09:00-12:00 Flood Tide: 12:00-19:00 Monitoring Time: Mid-ebb: 09:00-11:00 Mid-flood: 14:00-16:00		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR456, WSR37, Tidal Period; Ebb Tide: 10:29-12:53 Flood Tide: 12:53-20:28 Monitoring Time: Mid-ebb: 10:30-12:30 Mid-flood: 15:00-17:00
5	6	7	8	9	10	11
	Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR3, WSR3, WSR4, WSR16, WSR3, WSR3, WSR46, WSR37 Tidal Period.  Ebb Tide: 11:06-14:36 Flood Tide: 04:25-11:06 Monitoring Time: Mid-ebb: 11:30-13:30 Mid-flood: 09:00-11:00		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR43, WSR46, WSR33, WSR46, WSR33, WSR46, WSR36, WSR76 Tidal Period:  Ebb Tide: 11:47-16:03 Flood Tide: 05:15-11:47  Monitoring Time: Mid-ebb: 12:00-14:00 Mid-flood: 09:00-11:00		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR39, WSR39, WSR39, WSR39, WSR39, WSR39, WSR36, WSR37  Tidal Period: Ebb Tide: 12:43-17:34 Flood Tide: 06:06-12:42  Monitoring Time: Mid-ebb: 13:00-15:00 Mid-flood:08:00-10:00	
12	13	14	15	16	17	18
	Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR37 WSR3, WSR4, WSR16, WSR37 Tidal Period: Eibb Tide: 14:34-20:47 Flood Tide: 07:25-14:34 Monitoring Time: Mid-ebb: 15:00-17:00 Mid-flood: 09:00-11:00		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR3, WSR		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR3, WSR3, WSR3, WSR3, WSR3 WSR3, WSR3, WSR3 WSR3,	
19	20	21	22	23	24	25
		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR37 Tidal Period:  Ebb Tide: 11:11-15:26 Flood Tide: 04:16-11:11 Monitoring Time: Mid-ebb: 11:30-13:30 Mid-flood: 09:00-11:00		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR3, WSR3, WSR3, WSR3 MSR26, WSR3 Tidal Period: Ebb Tidie: 12:171-7:03 Flood Tide: 05:19-12:17 Monitoring Time: Mid-ebb: 13:00-15:00 Mid-flood: 09:00-11:00		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR3, WSR
26	27	28				
		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR3, WSR4, WSR16, WSR3, WSR56, WSR3, WSR56, WSR3, WSR56, WSR3, WSR56, WSR3, WSR56, WSR3, WSR56, WSR57, WSR56, WSR56				

1. Monitoring Parameters: Dissolved oxygen, Temperature, pH, Turbidity, Salinity, Suspended Solids

- Due to safety concern of vessel transportation earlier than 0700, Water Quality Monitoring would start at 0800.
- Prioritized routing: Mid-Ebb: CE→WSR16→WSR37→WSR36→WSR33→Remaining stations and Mid-Flood: CF→WSR1→WSR2→WSR3→WSR4→Remaining stations





# Appendix E

Event / Action Plan





## Table E1 Event and Action Plan for Construction Noise Monitoring

Event	Action				
	ET	IEC	ER	Contractor	
Action Level	1. Carry out investigation to identify the source and cause of the complaint/ exceedance(s) 2. Notify IEC, ER, and Contractor and report the results of investigation to the Contractor, ER and the IEC 3. Discuss with the Contractor and IEC for remedial measures required 4. If the complaint is related to the Project, conduct additional monitoring for checking mitigation effectiveness and report the findings and results to the IEC, ER and the Contractor	Supervise the implementation of remedial measures	Confirm receipt of Notification of Exceedance in writing     Require Contractor to propose remedial measures for the analysed noise problem     Ensure remedial measures are properly implemented	Submit noise mitigation proposals, if required, to the IEC and ER     Implement noise mitigation proposals.	
Limit Level	1. Carry out investigation to identify the source and cause of the exceedance 2. Notify IEC, ER, Project Proponent, EPD and Contractor 3. Repeat measurements to confirm findings 4. Provide investigation report to IEC, ER, EPD and Contractor he causes of the exceedances 5. If the exceedance is related to the Project, assess effectiveness by additional monitoring. 6. Report the remedial action implemented and the additional monitoring results to IEC, EPD, ER and Contractor 7. If exceedance stops, cease additional monitoring	Supervise the implementation of remedial measures	writing  Require the Contractor to propose remedial measures for the analysed noise problem	Take immediate action to avoid further exceedance     Submit proposals for remedial actions to IEC and ER within 3 working days of notification     Implement the agreed proposals     Resubmit proposals if problem still not under control     Stop the relevant activity of works as determined by the Project Proponent until the exceedance is abated	

Notes: ET = Environmental Team, IEC = Independent Environmental Checker; ER = Engineering Representatives





## Table E2 Event and Action Plan for Water Quality Monitoring

Event	Action			
	ET	IEC	Contractor(s)	ER
Action Level being exceeded by one sampling day	Repeat in situ measurement on the next day of exceedance to confirm findings;     Check monitoring data, plant, equipment and Contractor(s)'s working methods;     Identify source(s) of impact and record in notification of exceedance;     Inform IEC, Contractor(s) and ER.	Check monitoring data submitted by ET and Contractor(s)'s working methods;     Inform EPD.	Confirm receipt of notification of exceedance in writing:     Check plant and equipment and rectify unacceptable practice	<ol> <li>Confirm receipt of notification of exceedance in writing.</li> </ol>
Action Level being exceeded by two or more consecutive sampling days	Repeat in situ measurement on the next day of exceedance to confirm findings;     Check monitoring data, plant, equipment and Contractor(s)'s working methods;     Identify source(s) of impact and record in notification of exceedance;     Inform IEC, Contractor(s) and ER;     Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented	Check monitoring data submitted by ET and Contractor(s)'s working methods;     Inform EPD;     Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly;     Assess the effectiveness of the implemented mitigation measures.	Confirm receipt of notification of exceedance in writing;     Check plant and equipment and rectify unacceptable practice;     Consider changes of working methods;     Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days;     Implement the agreed mitigation measures.	Confirm receipt of notification of exceedance in writing;     Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented.     Ensure additional mitigation measures are properly implemented.
Limit Level being exceeded by one sampling day	Repeat in situ measurement on the next day of exceedance to confirm findings;     Check monitoring data, plant, equipment and Contractor(s)'s working methods;     Identify source(s) of impact and record in notification of exceedance;     Inform IEC, Contractor(s) and ER;     Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented	Check monitoring data submitted by ET and Contractor(s)'s working methods;     Inform EPD;     Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly;     Assess the effectiveness of the implemented mitigation measures.	Confirm receipt of notification of exceedance in writing;     Check plant and equipment and rectify unacceptable practice;     Critically review the need to change working methods;     Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days;     Implement the agreed mitigation measures.	1. Confirm receipt of notification of exceedance in writing; 2. Discuss with the IEC on the proposed additional mitigation measures and agree on the mitigation measures to be implemented. 3. Ensure additional mitigation measures are properly implemented. 4. Request Contractor(s) to critically review the working methods.
Limit Level being exceeded by two or more consecutive sampling days	<ol> <li>Repeat in situ measurement on the next day of exceedance to confirm findings;</li> <li>Check monitoring data, plant, equipment and Contractor(s)'s working methods;</li> <li>Identify source(s) of impact and record in notification of exceedance;</li> <li>Inform IEC, Contractor(s) and ER;</li> <li>Discuss with IEC and Contractor(s) on additional mitigation measures and ensure that they are implemented</li> </ol>	Check monitoring data submitted by ET and Contractor(s)'s working methods;     Inform EPD;     Discuss with ET and Contractor(s) on additional mitigation measures and advise ER accordingly;     Assess the effectiveness of the implemented mitigation measures.	1. Confirm receipt of notification of exceedance in writing; 2. Check plant and equipment and rectify unacceptable practice; 3. Critically review the need to change working methods; 4. Discuss with ET and IEC on additional mitigation measures and propose them to ER within 3 working days; 5. Implement the agreed mitigation measures. 6. As directed by ER, slow down or stop all or part of the marine construction works/ production volume of the desalination plant until no exceedance of Limit Level.	mitigation measures and agree on the mitigation measures to be implemented.  3. Ensure additional mitigation measures are properly implemented.  4. Request Contractor(s) to critically review the working methods;  5. Consider and instruct, if necessary, the e Contractor(s) to slow down or to stop all or part of

Notes: ET = Environmental Team, IEC = Independent Environmental Checker; ER = Engineering Representatives. The above actions should be taken within 1 working day after the exceedance is identified during operation phase.





Table E2 Event and Action Plan for Ecology during Construction Phase

Event				Act	ion			
Lvent	ET		IEC		Contractor(s)			
Non- conformity on one occassion	1. 2. 3. 4.	Identify source Inform IEC and ER Discuss remedial actions with IEC, the ER and the Contractor Monitor/ audit/ review remedial actions until rectification has been completed	<ol> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> </ol>	Check monitoring/ auditing results Check the Contractor's working method Discuss with the ET and Contractor on possible remedial measures Advise the ER on effectiveness of proposed remedial measures Check the implementation of remedial measures	1. 2. 3. 4.	Take immediate action to avoid further problem Amend working methods if needed Submit proposals for remedial actions to ET, ER and IEC Rectify damage and implement the agreed remedial actions	1. 2. 3.	Notify Contractor Ensure remedial measures an properly implemented Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the works in case of serious non-conformity until situation i rectified
Repeated Non- comformity	1. 2. 3. 4. 5.	Identify source Inform IEC, ER, EPD and AFCD Increase monitoring and audit frequency Discuss remedial actions with the IEC, the ER and the Contractor Monitor/ audit/ review remedial actions until rectification has been completed If non-conformity stops, cease additional monitoring/ auditing	1. 2. 3. 4. 5.	Check monitoring/ auditing results Check the Contractor's working method Discuss with the ET and Contractor on possible remedial measures Supervise the implementation of remedial measures Advise the ER on effectiveness of proposed remedial measures and keep EPD and AFCD informed	1. 2. 3. 4.	Take immediate action to avoid further problem Amend working methods if needed Submit proposals for remedial actions to ET, ER and IEC Rectify damage and implement the agreed remedial actions	1. 2. 3.	Notify Contractor Ensure remedial measures are properly implemented Consider and instruct, if necessary, the Contactor to slow down or to stop all or part of the works in the case of serious non-conformity until situation i rectified

Notes: ET = Environmental Team, IEC = Independent Environmental Checker; ER = Engineering Representatives





# Appendix F

Water Quality and Landfill Gas Equipment Calibration Certification



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BB120089

Date of Issue

: 04 January 2023

Page No.

: 1 of 2

#### PART A - CUSTOMER INFORMATION

Acuity Sustainability Consulting Limited

Unit E, 12/F, Ford Glory Plaza 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

**PART B - SAMPLE INFORMATION** 

Name of Equipment:

HORIBA U-53

Manufacturer:

**HORIBA** 

Serial Number:

S2A98W8H

Date of Received :

30 December 2022

Date of Calibration:

30 December 2022

Date of Next Calibration: Request No.:

29 March 2023 D-BB120089

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter

Reference Method

pH value

APHA 21e 4500 H+

Temperature

Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March

2008: Working Thermometer Calibration Procedure

Salinity

APHA 21e 2520 B

Dissolved oxygen

APHA 21e 4500 O

Turbidity

APHA 21e 2130 B

## **PART D - CALIBRATION RESULT**

#### (1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.18	0.18	Satisfactory
7.42	7.26	-0.16	Satisfactory
10.01	9.86	-0.15	Satisfactory

Tolerance of pH value should be less than  $\pm$  0.2 ( pH unit )

#### (2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
15	13.89	-1.11	Satisfactory
26	26.25	0.25	Satisfactory
34	33.80	-0.20	Satisfactory

Tolerance of Temperature should be less than  $\pm 2.0$  ( °C )

#### (3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	10.10	1.00	Satisfactory
20	19.49	-2.55	Satisfactory
30	29.96	-0.13	Satisfactory

Tolerance of Salinity should be less than  $\pm$  10.0 (%)

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

Assistant Manager (Chemical Testing)



## 專業化驗有限公司 QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BB120089

Date of Issue

: 04 January 2023

Page No.

: 2 of 2

## (4) Dissolved oxygen

Expected Reading ( mg/L )	Display Reading ( mg/L )	Tolerance	Result
9.01	8.90	-0.11	Satisfactory
5.82	5.64	-0.18	Satisfactory
2.29	1.89	-0.40	Satisfactory
0.74	1.10	0.36	Satisfactory

Tolerance of Dissolved oxygen should be less than  $\pm~0.5$  ( mg/L )

## (5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.86	-	Satisfactory
10	9.86	-1.4	Satisfactory
20	21.3	6.5	Satisfactory
100	106	6.0	Satisfactory
. 800	798	-0.3	Satisfactory

Tolerance of Turbidity should be less than  $\pm$  10.0 ( % )

#### Remark(s)

- 'The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.
- ·The results relate only to the calibrated equipment as received
- 'The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
- ·The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

--- END OF REPORT ---



## 專業化驗有限公司 QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BC010055

**Date of Issue** 

: 17 January 2023

Page No.

: 1 of 2

#### PART A - CUSTOMER INFORMATION

Acuity Sustainability Consulting Limited

Unit E, 12/F, Ford Glory Plaza 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

## PART B - SAMPLE INFORMATION

Name of Equipment:

YSI ProDSS (Multi-Parameters)

Manufacturer:

YSI (a xylem brand)

Serial Number:

22C106561

Date of Received:

12 January 2023

Date of Calibration :

17 January 2023

Date of Next Calibration:

16 April 2023

Request No.:

D-BC010055

#### PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

**Test Parameter** 

Reference Method

pH value

APHA 21e 4500 H+

Temperature

Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March

2008: Working Thermometer Calibration Procedure

Salinity

APHA 21e 2520 B

Dissolved oxygen

APHA 21e 4500 O

Turbidity

APHA 21e 2130 B

## PART D - CALIBRATION RESULT

### (1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.18	0.18	Satisfactory
7.42	7.58	0.16	Satisfactory
10.01	10.14	0.13	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

#### (2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
10	9.6	-0.4	Satisfactory
23	23.4	0.4	Satisfactory
33	33.2	0.2	Satisfactory

Tolerance of Temperature should be less than  $\pm 2.0$  ( °C )

## (3) Salinity

Expected Reading ( g/L )	Display Reading (g/L)	Tolerance (%)	Result
10	9.99	-0.10	Satisfactory
_ 20	20.29	1.45	Satisfactory
30	31.38	4.60	Satisfactory

Tolerance of Salinity should be less than  $\pm 10.0$  (%)

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

Assistant Manager (Chemical Testing)

LEE Chun-ning

This report shall not be reproduced unless with prior written approval from this laboratory



## 專業化驗有限公司 QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BC010055

**Date of Issue** 

: 17 January 2023

Page No.

: 2 of 2

## (4) Dissolved oxygen

Expected Reading ( mg/L )	Display Reading ( mg/L )	Tolerance	Result
9.00	9.03	0.03	Satisfactory
5.88	6.07	0.19	Satisfactory
2.65	3.07	0.42	Satisfactory
1.14	1.31	0.17	Satisfactory

Tolerance of Dissolved oxygen should be less than  $\pm$  0.5 ( mg/L )

## (5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.16		Satisfactory
10	9.67	-3.3	Satisfactory
20	18.45	-7.8	Satisfactory
100	92.80	-7.2	Satisfactory
800	768.00	-4.0	Satisfactory

Tolerance of Turbidity should be less than  $\pm$  10.0 (%)

## Remark(s)

- 'The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.
- ·The results relate only to the calibrated equipment as received
- The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
- ·The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

--- END OF REPORT ---





5A, Blk1 Kin Ho Ind. Bldg., 20-24 Au Pui Wan St., Fo Tan, Shatin, N.T., HK. Tel: (852) 8109 8368 Fax: (852) 3007 4857 E-mail: sales@ysftool.com www.sokkia.com.hk www.ysf.com.hk

Supply, Repair, Rental, Scanning and Calibration Service of Surveying Instruments and Accessories Certificate, No.: CAL220353

Page 1 of 1

## CALIBRATION CERTIFICATE OF MULTI GAS DETECTOR

Client

: China State Construction Engineering (Hong Kong) Ltd.

Address

: 29/F., China Overseas Bldg., 139 Hennessy Road, Hong Kong

Unit-Under-Test (UUT) Information

Description

: Multi gas detector

Manufacturer

: GMI

Model No.

: PS500

Serial No.

: 25492809/21

**Calibrator Information** 

Description

: (1) 4 in 1 Std. gases (O<sub>2</sub>,H<sub>2</sub>S,CO,LEL(Methane))

(2) Std. CO<sub>2</sub> gas (0.30%)

Serial No.

: (1) C-048-06

(2) C-087-02

Received date

: 2 Sept., 2022

Date of calibration

: 2 Sept., 2022

Next calibration date

: 1 Sept., 2023

Calibration location

: YSF Calibration Laboratory

Environmental conditions

: 20.9-21.8°C / 52-63%RH

Method used

: By direct comparison

### Calibration Results:

Total Carta	
Parameters	Measured value
(1) Methane (50% LEL)	47% LEL
(2) Oxygen (18%)	18.2%
(3) Hydrogen Sulphide (25ppm)	23ppm
(4) Carbon monoxide (100ppm)	96ppm
(5) Carbon monoxide (0.30%)	0.28%

#### Remark:

. The equipment used in this calibration is	traceable to recognized	National Standards
---	-------------------------	--------------------

					//	
Tested by:	Lam Man Kwong	_ Date : _	2 Sept., 2022	_ Certified by	:do	Date : 2 Sept. 2022
					So Chi Kuen (Lab Manager)	

\*\* End of Certificate \*\*





## Appendix G

Water Quality and Landfill Gas Monitoring Data

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:11:00 PM	8.47	8.3	32.5	20.8	2.3	2.5
CE	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:11:00 PM	8.31	8.4	32.6	20.9	2.3	2.5
CE	20230103	Cloudy	Moderate	Mid-Flood	Middle	10.6	4:10:00 PM	8.51	8.4	32.5	20.8	2.4	3.0
CE	20230103	Cloudy	Moderate	Mid-Flood	Middle	10.6	4:10:00 PM	8.52	8.3	32.6	20.9	2.5	2.5
CE	20230103	Cloudy	Moderate	Mid-Flood	Bottom	20.1	4:09:00 PM	8.45	8.3	32.5	20.8	2.5	2.5
CE	20230103	Cloudy	Moderate	Mid-Flood	Bottom	20.1	4:09:00 PM	8.41	8.3	32.4	20.8	2.5	2.5
CF	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	1:35:00 PM	8.86	8.3	32.3	20.9	2.7	2.5
CF	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	1:35:00 PM	8.83	8.3	32.3	20.9	2.8	3.0
CF	20230103	Cloudy	Moderate	Mid-Flood	Middle	9.8	1:34:00 PM	8.73	8.3	32.5	20.9	2.8	2.5
CF	20230103	Cloudy	Moderate	Mid-Flood	Middle	9.8	1:34:00 PM	8.76	8.3	32.3	20.8	2.9	3.0
CF	20230103	Cloudy	Moderate	Mid-Flood	Bottom	18.5	1:33:00 PM	8.76	8.3	32.4	20.9	3.2	3.0
CF	20230103	Cloudy	Moderate	Mid-Flood	Bottom	18.5	1:33:00 PM	8.83	8.3	32.5	20.8	3.1	2.5
WSR01	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	1:59:00 PM	9.36	8.3	31.5	20.8	2.4	3.0
WSR01	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	1:59:00 PM	9.37	8.3	31.6	20.8	2.1	3.0
WSR01	20230103	Cloudy	Moderate	Mid-Flood	Middle	4.2	1:58:00 PM	9.31	8.3	31.5	20.8	2.2	3.0
WSR01	20230103	Cloudy	Moderate	Mid-Flood	Middle	4.2	1:58:00 PM	9.26	8.3	31.5	20.8	2.2	4.0
WSR01	20230103	Cloudy	Moderate	Mid-Flood	Bottom	7.4	1:57:00 PM	9.39	8.3	31.5	20.8	2.1	3.0
WSR01	20230103	Cloudy	Moderate	Mid-Flood	Bottom	7.4	1:57:00 PM	9.38	8.4	31.7	20.8	2.0	2.5
WSR02	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:17:00 PM	8.96	8.3	31.7	21.4	2.4	4.0
WSR02	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:17:00 PM	8.85	8.3	31.8	21.4	2.4	2.5
WSR02	20230103	Cloudy	Moderate	Mid-Flood	Middle	4.7	2:16:00 PM	8.89	8.3	31.7	21.4	2.1	4.0
WSR02	20230103	Cloudy	Moderate	Mid-Flood	Middle	4.7	2:16:00 PM	8.94	8.3	31.9	21.4	2.2	5.0
WSR02	20230103	Cloudy	Moderate	Mid-Flood	Bottom	8.3	2:15:00 PM	8.86	8.3	31.7	21.4	2.3	3.0
WSR02	20230103	Cloudy	Moderate	Mid-Flood	Bottom	8.3	2:15:00 PM	8.84	8.3	31.9	21.5	2.2	3.0
WSR03	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:30:00 PM	8.96	8.3	32.5	20.8	1.9	2.5
WSR03	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:30:00 PM	8.96	8.2	32.4	20.8	2.0	3.0
WSR03	20230103	Cloudy	Moderate	Mid-Flood	Middle	4.0	2:29:00 PM	8.91	8.3	32.5	20.8	1.9	3.0
WSR03	20230103	Cloudy	Moderate	Mid-Flood	Middle	4.0	2:29:00 PM	8.98	8.2	32.4	20.8	2.1	3.0
WSR03	20230103	Cloudy	Moderate	Mid-Flood	Bottom	7.0	2:28:00 PM	9	8.3	32.5	20.8	2.3	3.0
WSR03	20230103	Cloudy	Moderate	Mid-Flood	Bottom	7.0	2:28:00 PM	8.91	8.3	32.4	20.8	2.1	3.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:43:00 PM	8.46	8.3	32.2	20.8	1.9	2.5
WSR04	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:43:00 PM	8.32	8.3	32.1	20.7	2.1	3.0
WSR04	20230103	Cloudy	Moderate	Mid-Flood	Middle	3.5	2:42:00 PM	8.51	8.3	32.2	20.7	2.3	4.0
WSR04	20230103	Cloudy	Moderate	Mid-Flood	Middle	3.5	2:42:00 PM	8.49	8.3	32.3	20.7	2.3	4.0
WSR04	20230103	Cloudy	Moderate	Mid-Flood	Bottom	5.9	2:41:00 PM	8.49	8.3	32.1	20.8	2.2	4.0
WSR04	20230103	Cloudy	Moderate	Mid-Flood	Bottom	5.9	2:41:00 PM	8.33	8.3	32.2	20.8	2.3	4.0
WSR16	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:47:00 PM	8.38	8.3	32.1	21.5	2.0	3.0
WSR16	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:47:00 PM	8.31	8.4	31.9	21.4	2.3	4.0
WSR16	20230103	Cloudy	Moderate	Mid-Flood	Middle	8.0	3:46:00 PM	8.44	8.3	31.9	21.5	2.2	8.0
WSR16	20230103	Cloudy	Moderate	Mid-Flood	Middle	8.0	3:46:00 PM	8.51	8.3	32.2	21.5	1.9	14.0
WSR16	20230103	Cloudy	Moderate	Mid-Flood	Bottom	15.0	3:45:00 PM	8.47	8.3	32.0	21.5	2.2	2.5
WSR16	20230103	Cloudy	Moderate	Mid-Flood	Bottom	15.0	3:45:00 PM	8.42	8.3	32.0	21.4	2.0	3.0
WSR33	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:57:00 PM	8.45	8.3	31.5	20.7	2.2	5.0
WSR33	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:57:00 PM	8.43	8.4	31.5	20.7	2.4	3.0
WSR33	20230103	Cloudy	Moderate	Mid-Flood	Middle	3.5	2:56:00 PM	8.46	8.3	31.7	20.7	2.0	2.5
WSR33	20230103	Cloudy	Moderate	Mid-Flood	Middle	3.5	2:56:00 PM	8.38	8.4	31.7	20.6	2.1	2.5
WSR33	20230103	Cloudy	Moderate	Mid-Flood	Bottom	6.0	2:55:00 PM	8.38	8.3	31.7	20.7	1.9	4.0
WSR33	20230103	Cloudy	Moderate	Mid-Flood	Bottom	6.0	2:55:00 PM	8.52	8.3	31.7	20.7	2.1	5.0
WSR36	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:09:00 PM	9.32	8.3	32.4	21.3	2.2	3.0
WSR36	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:09:00 PM	9.39	8.3	32.4	21.4	2.1	3.0
WSR36	20230103	Cloudy	Moderate	Mid-Flood	Middle	3.5	3:09:00 PM	9.3	8.3	32.4	21.4	2.2	3.0
WSR36	20230103	Cloudy	Moderate	Mid-Flood	Middle	3.5	3:09:00 PM	9.27	8.3	32.3	21.4	2.4	2.5
WSR36	20230103	Cloudy	Moderate	Mid-Flood	Bottom	6.0	3:08:00 PM	9.28	8.4	32.3	21.4	1.8	3.0
WSR36	20230103	Cloudy	Moderate	Mid-Flood	Bottom	6.0	3:08:00 PM	9.24	8.3	32.4	21.4	2.1	3.0
WSR37	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:24:00 PM	9.25	8.3	32.4	21.3	2.2	3.0
WSR37	20230103	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:24:00 PM	9.15	8.3	32.3	21.3	2.3	3.0
WSR37	20230103	Cloudy	Moderate	Mid-Flood	Middle	4.0	3:23:00 PM	9.26	8.3	32.4	21.2	2.3	2.5
WSR37	20230103	Cloudy	Moderate	Mid-Flood	Middle	4.0	3:23:00 PM	9.19	8.3	32.5	21.3	2.2	2.5
WSR37	20230103	Cloudy	Moderate	Mid-Flood	Bottom	6.9	3:22:00 PM	9.25	8.3	32.5	21.2	2.3	2.5
WSR37	20230103	Cloudy	Moderate	Mid-Flood	Bottom	6.9	3:22:00 PM	9.2	8.3	32.3	21.3	2.0	3.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:02:00 PM	8.98	8.3	31.1	21.5	2.2	2.5
CE	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:02:00 PM	9.01	8.3	31.3	21.6	2.3	2.5
CE	20230105	Cloudy	Moderate	Mid-Flood	Middle	11.4	5:01:00 PM	8.95	8.3	31.3	21.6	2.1	2.5
CE	20230105	Cloudy	Moderate	Mid-Flood	Middle	11.4	5:01:00 PM	8.94	8.3	31.1	21.7	2.1	2.5
CE	20230105	Cloudy	Moderate	Mid-Flood	Bottom	21.8	5:00:00 PM	8.93	8.3	31.2	21.6	2.4	2.5
CE	20230105	Cloudy	Moderate	Mid-Flood	Bottom	21.8	5:00:00 PM	8.89	8.3	31.4	21.7	2.3	2.5
CF	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:23:00 PM	8.37	8.2	31.5	21.3	2.7	2.5
CF	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:23:00 PM	8.35	8.3	31.4	21.3	2.6	2.5
CF	20230105	Cloudy	Moderate	Mid-Flood	Middle	10.9	2:22:00 PM	8.32	8.2	31.5	21.2	2.7	2.5
CF	20230105	Cloudy	Moderate	Mid-Flood	Middle	10.9	2:22:00 PM	8.25	8.3	31.5	21.3	2.5	2.5
CF	20230105	Cloudy	Moderate	Mid-Flood	Bottom	20.8	2:21:00 PM	8.37	8.3	31.4	21.3	3.0	2.5
CF	20230105	Cloudy	Moderate	Mid-Flood	Bottom	20.8	2:21:00 PM	8.23	8.3	31.3	21.3	2.8	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:47:00 PM	8.62	8.2	32.0	21.3	2.0	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:47:00 PM	8.66	8.4	32.2	21.4	2.0	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Flood	Middle	4.5	2:46:00 PM	8.65	8.2	32.2	21.3	2.2	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Flood	Middle	4.5	2:46:00 PM	8.6	8.2	32.1	21.4	2.1	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Flood	Bottom	8.0	2:45:00 PM	8.61	8.3	32.0	21.3	2.4	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Flood	Bottom	8.0	2:45:00 PM	8.57	8.2	32.2	21.3	2.1	2.5
WSR02	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:05:00 PM	8.98	8.3	32.2	21.5	2.0	2.5
WSR02	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:05:00 PM	9.03	8.3	32.2	21.5	2.0	2.5
WSR02	20230105	Cloudy	Moderate	Mid-Flood	Middle	4.8	3:04:00 PM	8.96	8.4	32.2	21.4	2.2	2.5
WSR02	20230105	Cloudy	Moderate	Mid-Flood	Middle	4.8	3:04:00 PM	9.03	8.2	32.4	21.4	2.0	3.0
WSR02	20230105	Cloudy	Moderate	Mid-Flood	Bottom	8.5	3:03:00 PM	8.99	8.4	32.2	21.5	2.1	3.0
WSR02	20230105	Cloudy	Moderate	Mid-Flood	Bottom	8.5	3:03:00 PM	9.04	8.2	32.3	21.4	2.1	4.0
WSR03	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:19:00 PM	8.81	8.3	31.7	21.2	2.0	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:19:00 PM	8.7	8.3	31.6	21.2	2.3	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Flood	Middle	4.1	3:18:00 PM	8.74	8.3	31.7	21.3	1.9	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Flood	Middle	4.1	3:18:00 PM	8.73	8.4	31.8	21.2	2.0	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Flood	Bottom	7.1	3:17:00 PM	8.8	8.4	31.8	21.3	2.2	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Flood	Bottom	7.1	3:17:00 PM	8.74	8.4	31.8	21.3	2.2	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:32:00 PM	8.73	8.2	31.5	21.7	2.3	2.5
WSR04	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:32:00 PM	8.81	8.3	31.3	21.6	2.2	2.5
WSR04	20230105	Cloudy	Moderate	Mid-Flood	Middle	3.6	3:31:00 PM	8.87	8.3	31.4	21.5	2.0	2.5
WSR04	20230105	Cloudy	Moderate	Mid-Flood	Middle	3.6	3:31:00 PM	8.76	8.2	31.4	21.6	2.2	2.5
WSR04	20230105	Cloudy	Moderate	Mid-Flood	Bottom	6.2	3:30:00 PM	8.78	8.3	31.4	21.7	1.9	2.5
WSR04	20230105	Cloudy	Moderate	Mid-Flood	Bottom	6.2	3:30:00 PM	8.87	8.3	31.4	21.6	2.0	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:38:00 PM	8.27	8.4	32.4	21.8	2.1	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:38:00 PM	8.29	8.4	32.4	21.7	2.3	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Flood	Middle	8.6	4:37:00 PM	8.31	8.4	32.3	21.6	2.3	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Flood	Middle	8.6	4:37:00 PM	8.35	8.4	32.2	21.8	2.4	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Flood	Bottom	16.1	4:36:00 PM	8.3	8.4	32.4	21.6	2.4	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Flood	Bottom	16.1	4:36:00 PM	8.39	8.4	32.4	21.6	2.1	2.5
WSR33	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:47:00 PM	8.82	8.2	32.1	21.2	2.1	2.5
WSR33	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:47:00 PM	8.73	8.4	32.3	21.2	2.3	2.5
WSR33	20230105	Cloudy	Moderate	Mid-Flood	Middle	3.9	3:46:00 PM	8.82	8.2	32.1	21.3	2.2	2.5
WSR33	20230105	Cloudy	Moderate	Mid-Flood	Middle	3.9	3:46:00 PM	8.72	8.5	32.3	21.3	2.2	2.5
WSR33	20230105	Cloudy	Moderate	Mid-Flood	Bottom	6.7	3:45:00 PM	8.8	8.2	32.1	21.2	2.1	2.5
WSR33	20230105	Cloudy	Moderate	Mid-Flood	Bottom	6.7	3:45:00 PM	8.74	8.5	32.2	21.2	2.1	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:01:00 PM	8.09	8.4	32.0	21.2	2.2	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:01:00 PM	8.1	8.4	32.2	21.3	2.1	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Flood	Middle	3.8	4:01:00 PM	8.17	8.4	31.9	21.3	2.0	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Flood	Middle	3.8	4:01:00 PM	8.15	8.2	32.1	21.2	1.9	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Flood	Bottom	6.5	4:00:00 PM	8.14	8.4	32.2	21.2	2.0	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Flood	Bottom	6.5	4:00:00 PM	8.16	8.4	32.2	21.2	2.2	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:17:00 PM	8.78	8.2	31.7	21.5	2.3	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:17:00 PM	8.74	8.4	31.4	21.6	2.0	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Flood	Middle	3.8	4:16:00 PM	8.83	8.4	31.6	21.6	2.2	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Flood	Middle	3.8	4:16:00 PM	8.81	8.4	31.7	21.5	2.1	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Flood	Bottom	6.6	4:15:00 PM	8.78	8.4	31.6	21.6	2.4	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Flood	Bottom	6.6	4:15:00 PM	8.74	8.4	31.4	21.6	2.2	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	6:05:00 PM	8.67	8.3	32.6	20.9	2.5	2.5
CE	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	6:05:00 PM	8.65	8.4	32.7	21.0	2.5	2.5
CE	20230107	Cloudy	Moderate	Mid-Flood	Middle	10.3	6:04:00 PM	8.66	8.4	32.6	20.9	2.5	2.5
CE	20230107	Cloudy	Moderate	Mid-Flood	Middle	10.3	6:04:00 PM	8.7	8.3	32.6	20.9	2.5	2.5
CE	20230107	Cloudy	Moderate	Mid-Flood	Bottom	19.5	6:03:00 PM	8.66	8.4	32.6	21.0	2.5	2.5
CE	20230107	Cloudy	Moderate	Mid-Flood	Bottom	19.5	6:03:00 PM	8.69	8.4	32.7	20.9	2.6	2.5
CF	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:33:00 PM	8.6	8.3	31.6	20.6	2.8	2.5
CF	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:33:00 PM	8.6	8.3	31.6	20.5	2.6	3.0
CF	20230107	Cloudy	Moderate	Mid-Flood	Middle	9.8	3:32:00 PM	8.62	8.3	31.5	20.5	2.8	2.5
CF	20230107	Cloudy	Moderate	Mid-Flood	Middle	9.8	3:32:00 PM	8.63	8.3	31.5	20.5	2.8	2.5
CF	20230107	Cloudy	Moderate	Mid-Flood	Bottom	18.5	3:31:00 PM	8.64	8.4	31.6	20.5	3.0	2.5
CF	20230107	Cloudy	Moderate	Mid-Flood	Bottom	18.5	3:31:00 PM	8.59	8.3	31.6	20.5	2.9	2.5
WSR01	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:55:00 PM	8.74	8.3	31.8	20.8	2.3	2.5
WSR01	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:55:00 PM	8.67	8.2	31.6	20.8	2.3	2.5
WSR01	20230107	Cloudy	Moderate	Mid-Flood	Middle	4.5	3:54:00 PM	8.73	8.2	31.8	20.7	2.3	5.0
WSR01	20230107	Cloudy	Moderate	Mid-Flood	Middle	4.5	3:54:00 PM	8.69	8.2	31.6	20.8	2.5	4.0
WSR01	20230107	Cloudy	Moderate	Mid-Flood	Bottom	7.9	3:53:00 PM	8.71	8.2	31.6	20.8	2.4	2.5
WSR01	20230107	Cloudy	Moderate	Mid-Flood	Bottom	7.9	3:53:00 PM	8.7	8.3	31.7	20.7	2.3	2.5
WSR02	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:12:00 PM	8.94	8.3	32.4	20.3	2.2	8.0
WSR02	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:12:00 PM	8.99	8.4	32.6	20.3	2.4	5.0
WSR02	20230107	Cloudy	Moderate	Mid-Flood	Middle	4.9	4:11:00 PM	8.97	8.3	32.4	20.3	2.1	2.5
WSR02	20230107	Cloudy	Moderate	Mid-Flood	Middle	4.9	4:11:00 PM	8.99	8.4	32.4	20.3	2.1	2.5
WSR02	20230107	Cloudy	Moderate	Mid-Flood	Bottom	8.8	4:10:00 PM	8.91	8.3	32.5	20.3	2.0	2.5
WSR02	20230107	Cloudy	Moderate	Mid-Flood	Bottom	8.8	4:10:00 PM	8.94	8.4	32.4	20.4	2.2	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:26:00 PM	8.8	8.4	32.3	20.8	2.2	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:26:00 PM	8.86	8.4	32.2	20.9	2.2	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Flood	Middle	3.8	4:25:00 PM	8.86	8.4	32.3	20.8	2.5	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Flood	Middle	3.8	4:25:00 PM	8.83	8.3	32.3	20.8	2.1	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Flood	Bottom	6.5	4:24:00 PM	8.79	8.4	32.3	20.8	2.3	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Flood	Bottom	6.5	4:24:00 PM	8.8	8.3	32.3	20.9	2.1	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:38:00 PM	8.45	8.2	31.8	20.7	2.3	3.0
WSR04	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:38:00 PM	8.45	8.2	31.7	20.8	2.2	2.5
WSR04	20230107	Cloudy	Moderate	Mid-Flood	Middle	3.8	4:37:00 PM	8.42	8.3	31.7	20.7	2.1	18.0
WSR04	20230107	Cloudy	Moderate	Mid-Flood	Middle	3.8	4:37:00 PM	8.45	8.3	31.7	20.8	2.0	14.0
WSR04	20230107	Cloudy	Moderate	Mid-Flood	Bottom	6.5	4:36:00 PM	8.39	8.2	31.7	20.7	2.2	2.5
WSR04	20230107	Cloudy	Moderate	Mid-Flood	Bottom	6.5	4:36:00 PM	8.43	8.3	31.7	20.8	2.4	2.5
WSR16	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:41:00 PM	8.56	8.3	32.6	20.6	2.3	9.0
WSR16	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:41:00 PM	8.54	8.3	32.8	20.5	2.3	5.0
WSR16	20230107	Cloudy	Moderate	Mid-Flood	Middle	8.3	5:40:00 PM	8.55	8.3	32.7	20.5	2.4	2.5
WSR16	20230107	Cloudy	Moderate	Mid-Flood	Middle	8.3	5:40:00 PM	8.53	8.3	32.8	20.6	2.3	3.0
WSR16	20230107	Cloudy	Moderate	Mid-Flood	Bottom	15.5	5:39:00 PM	8.53	8.3	32.6	20.6	2.2	5.0
WSR16	20230107	Cloudy	Moderate	Mid-Flood	Bottom	15.5	5:39:00 PM	8.49	8.3	32.7	20.5	2.4	3.0
WSR33	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:52:00 PM	9.19	8.2	31.9	20.6	2.3	3.0
WSR33	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:52:00 PM	9.21	8.3	31.9	20.6	2.5	3.0
WSR33	20230107	Cloudy	Moderate	Mid-Flood	Middle	3.9	4:51:00 PM	9.17	8.3	31.9	20.5	2.4	3.0
WSR33	20230107	Cloudy	Moderate	Mid-Flood	Middle	3.9	4:51:00 PM	9.13	8.2	32.0	20.6	2.4	5.0
WSR33	20230107	Cloudy	Moderate	Mid-Flood	Bottom	6.7	4:50:00 PM	9.21	8.3	32.0	20.6	2.4	2.5
WSR33	20230107	Cloudy	Moderate	Mid-Flood	Bottom	6.7	4:50:00 PM	9.15	8.2	32.0	20.5	2.4	4.0
WSR36	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:03:00 PM	8.95	8.2	32.0	20.7	2.3	2.5
WSR36	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:03:00 PM	8.93	8.3	32.0	20.7	2.3	3.0
WSR36	20230107	Cloudy	Moderate	Mid-Flood	Middle	3.2	5:03:00 PM	8.94	8.3	32.0	20.7	2.2	7.0
WSR36	20230107	Cloudy	Moderate	Mid-Flood	Middle	3.2	5:03:00 PM	8.91	8.2	31.9	20.7	2.2	5.0
WSR36	20230107	Cloudy	Moderate	Mid-Flood	Bottom	5.4	5:02:00 PM	8.91	8.3	32.0	20.6	2.2	3.0
WSR36	20230107	Cloudy	Moderate	Mid-Flood	Bottom	5.4	5:02:00 PM	8.93	8.3	31.9	20.7	2.3	2.5
WSR37	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:18:00 PM	8.75	8.2	32.8	20.5	2.2	6.0
WSR37	20230107	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:18:00 PM	8.83	8.3	32.7	20.6	2.3	7.0
WSR37	20230107	Cloudy	Moderate	Mid-Flood	Middle	4.2	5:17:00 PM	8.79	8.2	32.6	20.5	2.3	3.0
WSR37	20230107	Cloudy	Moderate	Mid-Flood	Middle	4.2	5:17:00 PM	8.83	8.3	32.7	20.6	2.0	3.0
WSR37	20230107	Cloudy	Moderate	Mid-Flood	Bottom	7.3	5:16:00 PM	8.78	8.3	32.7	20.6	2.4	2.5
WSR37	20230107	Cloudy	Moderate	Mid-Flood	Bottom	7.3	5:16:00 PM	8.78	8.3	32.7	20.5	2.4	3.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:36:00 AM	8.53	8.2	30.7	21.2	2.4	3.0
CE	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:36:00 AM	8.59	8.2	31.0	21.3	2.2	2.5
CE	20230110	Cloudy	Moderate	Mid-Flood	Middle	11.2	10:35:00 AM	8.48	8.2	30.7	21.2	2.4	2.5
CE	20230110	Cloudy	Moderate	Mid-Flood	Middle	11.2	10:35:00 AM	8.4	8.2	30.9	21.2	2.3	3.0
CE	20230110	Cloudy	Moderate	Mid-Flood	Bottom	21.3	10:34:00 AM	8.5	8.2	30.8	21.1	2.8	9.0
CE	20230110	Cloudy	Moderate	Mid-Flood	Bottom	21.3	10:34:00 AM	8.49	8.2	30.8	21.1	2.7	7.0
CF	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:02:00 AM	8.39	8.2	30.7	21.7	3.4	2.5
CF	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:02:00 AM	8.58	8.2	30.8	21.7	3.4	2.5
CF	20230110	Cloudy	Moderate	Mid-Flood	Middle	9.8	8:01:00 AM	8.46	8.2	30.7	21.7	3.2	3.0
CF	20230110	Cloudy	Moderate	Mid-Flood	Middle	9.8	8:01:00 AM	8.5	8.2	30.9	21.6	3.0	3.0
CF	20230110	Cloudy	Moderate	Mid-Flood	Bottom	18.5	8:00:00 AM	8.54	8.2	31.0	21.7	3.5	2.5
CF	20230110	Cloudy	Moderate	Mid-Flood	Bottom	18.5	8:00:00 AM	8.56	8.2	30.8	21.8	3.3	2.5
WSR01	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:26:00 AM	8.45	8.2	30.9	21.7	2.2	9.0
WSR01	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:26:00 AM	8.42	8.2	30.8	21.7	2.4	5.0
WSR01	20230110	Cloudy	Moderate	Mid-Flood	Middle	4.8	8:25:00 AM	8.43	8.2	30.9	21.8	2.1	2.5
WSR01	20230110	Cloudy	Moderate	Mid-Flood	Middle	4.8	8:25:00 AM	8.61	8.2	31.0	21.7	2.3	4.0
WSR01	20230110	Cloudy	Moderate	Mid-Flood	Bottom	8.5	8:24:00 AM	8.42	8.2	30.9	21.8	1.8	3.0
WSR01	20230110	Cloudy	Moderate	Mid-Flood	Bottom	8.5	8:24:00 AM	8.4	8.2	31.0	21.8	2.0	3.0
WSR02	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:43:00 AM	8.43	8.2	30.8	21.8	1.6	2.5
WSR02	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:43:00 AM	8.43	8.2	30.9	21.7	1.7	2.5
WSR02	20230110	Cloudy	Moderate	Mid-Flood	Middle	4.5	8:42:00 AM	8.39	8.2	30.9	21.7	1.6	4.0
WSR02	20230110	Cloudy	Moderate	Mid-Flood	Middle	4.5	8:42:00 AM	8.41	8.2	30.9	21.8	1.9	4.0
WSR02	20230110	Cloudy	Moderate	Mid-Flood	Bottom	8.0	8:41:00 AM	8.55	8.2	30.8	21.7	1.7	4.0
WSR02	20230110	Cloudy	Moderate	Mid-Flood	Bottom	8.0	8:41:00 AM	8.49	8.2	30.8	21.7	1.6	5.0
WSR03	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:56:00 AM	8.44	8.2	30.8	21.2	2.2	5.0
WSR03	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:56:00 AM	8.46	8.2	31.0	21.3	2.4	5.0
WSR03	20230110	Cloudy	Moderate	Mid-Flood	Middle	4.2	8:55:00 AM	8.5	8.2	31.0	21.2	2.3	7.0
WSR03	20230110	Cloudy	Moderate	Mid-Flood	Middle	4.2	8:55:00 AM	8.55	8.2	30.9	21.2	2.2	7.0
WSR03	20230110	Cloudy	Moderate	Mid-Flood	Bottom	7.4	8:54:00 AM	8.47	8.2	30.9	21.4	2.4	5.0
WSR03	20230110	Cloudy	Moderate	Mid-Flood	Bottom	7.4	8:54:00 AM	8.5	8.2	30.9	21.2	2.3	5.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:09:00 AM	8.59	8.2	30.9	21.2	2.6	3.0
WSR04	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:09:00 AM	8.49	8.2	30.8	21.2	2.5	2.5
WSR04	20230110	Cloudy	Moderate	Mid-Flood	Middle	3.5	9:08:00 AM	8.39	8.2	30.7	21.3	2.0	4.0
WSR04	20230110	Cloudy	Moderate	Mid-Flood	Middle	3.5	9:08:00 AM	8.46	8.2	30.8	21.3	2.0	3.0
WSR04	20230110	Cloudy	Moderate	Mid-Flood	Bottom	6.0	9:07:00 AM	8.59	8.2	30.8	21.3	2.4	4.0
WSR04	20230110	Cloudy	Moderate	Mid-Flood	Bottom	6.0	9:07:00 AM	8.4	8.2	30.9	21.2	2.2	6.0
WSR16	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:13:00 AM	8.56	8.2	30.9	21.7	2.3	4.0
WSR16	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:13:00 AM	8.44	8.2	30.9	21.6	2.2	3.0
WSR16	20230110	Cloudy	Moderate	Mid-Flood	Middle	8.4	10:12:00 AM	8.45	8.2	30.7	21.7	1.9	4.0
WSR16	20230110	Cloudy	Moderate	Mid-Flood	Middle	8.4	10:12:00 AM	8.5	8.2	30.7	21.7	2.2	5.0
WSR16	20230110	Cloudy	Moderate	Mid-Flood	Bottom	15.8	10:11:00 AM	8.52	8.2	31.0	21.6	2.0	4.0
WSR16	20230110	Cloudy	Moderate	Mid-Flood	Bottom	15.8	10:11:00 AM	8.48	8.2	30.7	21.7	1.7	5.0
WSR33	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:23:00 AM	8.61	8.2	30.8	21.3	2.4	5.0
WSR33	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:23:00 AM	8.5	8.2	30.7	21.2	2.3	4.0
WSR33	20230110	Cloudy	Moderate	Mid-Flood	Middle	3.5	9:22:00 AM	8.47	8.2	30.9	21.2	2.0	2.5
WSR33	20230110	Cloudy	Moderate	Mid-Flood	Middle	3.5	9:22:00 AM	8.51	8.2	30.7	21.4	2.2	4.0
WSR33	20230110	Cloudy	Moderate	Mid-Flood	Bottom	6.0	9:21:00 AM	8.57	8.2	30.7	21.3	2.1	3.0
WSR33	20230110	Cloudy	Moderate	Mid-Flood	Bottom	6.0	9:21:00 AM	8.59	8.2	30.9	21.2	2.1	6.0
WSR36	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:36:00 AM	8.57	8.2	30.8	20.9	2.3	4.0
WSR36	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:36:00 AM	8.49	8.2	30.8	20.9	2.5	2.5
WSR36	20230110	Cloudy	Moderate	Mid-Flood	Middle	3.9	9:36:00 AM	8.43	8.2	30.9	21.0	2.3	4.0
WSR36	20230110	Cloudy	Moderate	Mid-Flood	Middle	3.9	9:36:00 AM	8.42	8.2	30.9	21.0	2.0	4.0
WSR36	20230110	Cloudy	Moderate	Mid-Flood	Bottom	6.7	9:35:00 AM	8.44	8.2	30.9	21.0	1.9	4.0
WSR36	20230110	Cloudy	Moderate	Mid-Flood	Bottom	6.7	9:35:00 AM	8.5	8.2	30.7	21.0	2.2	3.0
WSR37	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:52:00 AM	8.42	8.2	30.8	21.2	2.1	2.5
WSR37	20230110	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:52:00 AM	8.55	8.2	30.9	21.1	2.2	3.0
WSR37	20230110	Cloudy	Moderate	Mid-Flood	Middle	4.1	9:51:00 AM	8.41	8.2	30.7	21.2	2.4	4.0
WSR37	20230110	Cloudy	Moderate	Mid-Flood	Middle	4.1	9:51:00 AM	8.48	8.2	30.8	21.1	2.2	2.5
WSR37	20230110	Cloudy	Moderate	Mid-Flood	Bottom	7.1	9:50:00 AM	8.43	8.2	31.0	21.2	2.4	3.0
WSR37	20230110	Cloudy	Moderate	Mid-Flood	Bottom	7.1	9:50:00 AM	8.46	8.2	30.8	21.3	2.3	6.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:17:00 AM	8.44	8.2	31.4	21.2	2.4	5.0
CE	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:17:00 AM	8.37	8.2	31.6	21.2	2.5	4.0
CE	20230112	Cloudy	Moderate	Mid-Flood	Middle	11.7	11:16:00 AM	8.37	8.2	31.4	21.3	2.7	4.0
CE	20230112	Cloudy	Moderate	Mid-Flood	Middle	11.7	11:16:00 AM	8.34	8.2	31.5	21.3	2.5	2.5
CE	20230112	Cloudy	Moderate	Mid-Flood	Bottom	22.3	11:15:00 AM	8.31	8.2	31.5	21.4	2.8	3.0
CE	20230112	Cloudy	Moderate	Mid-Flood	Bottom	22.3	11:15:00 AM	8.29	8.2	31.5	21.4	2.7	2.5
CF	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:43:00 AM	8.45	8.2	32.0	21.5	2.8	3.0
CF	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:43:00 AM	8.57	8.2	32.0	21.5	2.7	4.0
CF	20230112	Cloudy	Moderate	Mid-Flood	Middle	10.4	8:42:00 AM	8.32	8.2	32.0	21.5	2.9	3.0
CF	20230112	Cloudy	Moderate	Mid-Flood	Middle	10.4	8:42:00 AM	8.52	8.2	32.0	21.5	2.8	3.0
CF	20230112	Cloudy	Moderate	Mid-Flood	Bottom	19.8	8:41:00 AM	8.37	8.2	32.0	21.4	3.0	5.0
CF	20230112	Cloudy	Moderate	Mid-Flood	Bottom	19.8	8:41:00 AM	8.54	8.2	31.9	21.4	2.9	5.0
WSR01	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:06:00 AM	9.05	8.3	32.6	21.2	2.3	3.0
WSR01	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:06:00 AM	8.99	8.3	32.7	21.3	2.1	3.0
WSR01	20230112	Cloudy	Moderate	Mid-Flood	Middle	4.7	9:05:00 AM	8.88	8.2	32.6	21.3	2.1	4.0
WSR01	20230112	Cloudy	Moderate	Mid-Flood	Middle	4.7	9:05:00 AM	8.86	8.3	32.6	21.3	2.2	4.0
WSR01	20230112	Cloudy	Moderate	Mid-Flood	Bottom	8.4	9:04:00 AM	8.81	8.3	32.6	21.4	2.1	3.0
WSR01	20230112	Cloudy	Moderate	Mid-Flood	Bottom	8.4	9:04:00 AM	9.02	8.2	32.6	21.3	2.2	4.0
WSR02	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:23:00 AM	8.95	8.3	31.8	21.2	2.1	3.0
WSR02	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:23:00 AM	9.08	8.3	31.8	21.3	2.3	3.0
WSR02	20230112	Cloudy	Moderate	Mid-Flood	Middle	4.6	9:22:00 AM	9.08	8.3	31.9	21.3	2.2	3.0
WSR02	20230112	Cloudy	Moderate	Mid-Flood	Middle	4.6	9:22:00 AM	8.91	8.3	31.9	21.3	2.3	3.0
WSR02	20230112	Cloudy	Moderate	Mid-Flood	Bottom	8.1	9:21:00 AM	9.02	8.2	31.9	21.2	2.2	3.0
WSR02	20230112	Cloudy	Moderate	Mid-Flood	Bottom	8.1	9:21:00 AM	9.07	8.2	31.9	21.3	2.2	2.5
WSR03	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:36:00 AM	8.87	8.2	31.7	21.0	2.2	2.5
WSR03	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:36:00 AM	8.78	8.2	31.6	21.0	2.1	3.0
WSR03	20230112	Cloudy	Moderate	Mid-Flood	Middle	4.0	9:35:00 AM	8.87	8.2	31.6	21.0	2.2	2.5
WSR03	20230112	Cloudy	Moderate	Mid-Flood	Middle	4.0	9:35:00 AM	8.81	8.2	31.7	21.1	2.3	4.0
WSR03	20230112	Cloudy	Moderate	Mid-Flood	Bottom	6.9	9:34:00 AM	8.86	8.2	31.7	21.0	2.1	4.0
WSR03	20230112	Cloudy	Moderate	Mid-Flood	Bottom	6.9	9:34:00 AM	8.69	8.2	31.7	21.0	2.0	3.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:49:00 AM	8.57	8.2	31.6	21.1	2.1	3.0
WSR04	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:49:00 AM	8.65	8.3	31.6	21.2	2.1	5.0
WSR04	20230112	Cloudy	Moderate	Mid-Flood	Middle	3.9	9:48:00 AM	8.73	8.3	31.6	21.1	2.0	4.0
WSR04	20230112	Cloudy	Moderate	Mid-Flood	Middle	3.9	9:48:00 AM	8.73	8.3	31.6	21.1	2.1	4.0
WSR04	20230112	Cloudy	Moderate	Mid-Flood	Bottom	6.8	9:47:00 AM	8.57	8.2	31.5	21.0	2.0	2.5
WSR04	20230112	Cloudy	Moderate	Mid-Flood	Bottom	6.8	9:47:00 AM	8.54	8.3	31.5	21.0	2.0	2.5
WSR16	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:53:00 AM	9.27	8.3	31.6	21.3	2.2	2.5
WSR16	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:53:00 AM	9.3	8.3	31.7	21.2	2.2	2.5
WSR16	20230112	Cloudy	Moderate	Mid-Flood	Middle	7.6	10:52:00 AM	9.33	8.3	31.6	21.3	2.1	5.0
WSR16	20230112	Cloudy	Moderate	Mid-Flood	Middle	7.6	10:52:00 AM	9.34	8.3	31.7	21.3	2.2	9.0
WSR16	20230112	Cloudy	Moderate	Mid-Flood	Bottom	14.1	10:51:00 AM	9.47	8.3	31.6	21.2	2.2	6.0
WSR16	20230112	Cloudy	Moderate	Mid-Flood	Bottom	14.1	10:51:00 AM	9.25	8.3	31.6	21.3	2.0	7.0
WSR33	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:03:00 AM	8.56	8.2	32.4	21.2	2.3	3.0
WSR33	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:03:00 AM	8.6	8.2	32.4	21.2	2.5	5.0
WSR33	20230112	Cloudy	Moderate	Mid-Flood	Middle	3.8	10:02:00 AM	8.77	8.2	32.4	21.2	2.3	2.5
WSR33	20230112	Cloudy	Moderate	Mid-Flood	Middle	3.8	10:02:00 AM	8.57	8.3	32.3	21.2	2.0	2.5
WSR33	20230112	Cloudy	Moderate	Mid-Flood	Bottom	6.5	10:01:00 AM	8.59	8.2	32.4	21.1	2.3	2.5
WSR33	20230112	Cloudy	Moderate	Mid-Flood	Bottom	6.5	10:01:00 AM	8.72	8.2	32.4	21.2	2.3	4.0
WSR36	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:16:00 AM	8.34	8.2	32.0	20.7	2.3	6.0
WSR36	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:16:00 AM	8.4	8.2	32.1	20.8	1.9	9.0
WSR36	20230112	Cloudy	Moderate	Mid-Flood	Middle	3.6	10:16:00 AM	8.41	8.2	32.0	20.8	2.2	4.0
WSR36	20230112	Cloudy	Moderate	Mid-Flood	Middle	3.6	10:16:00 AM	8.42	8.2	32.0	20.9	2.1	2.5
WSR36	20230112	Cloudy	Moderate	Mid-Flood	Bottom	6.2	10:15:00 AM	8.34	8.2	31.9	20.7	2.2	3.0
WSR36	20230112	Cloudy	Moderate	Mid-Flood	Bottom	6.2	10:15:00 AM	8.36	8.2	32.1	20.8	2.3	5.0
WSR37	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:31:00 AM	8.3	8.2	31.6	21.0	2.0	2.5
WSR37	20230112	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:31:00 AM	8.4	8.2	31.8	21.0	2.1	2.5
WSR37	20230112	Cloudy	Moderate	Mid-Flood	Middle	3.8	10:30:00 AM	8.4	8.2	31.7	21.1	2.1	4.0
WSR37	20230112	Cloudy	Moderate	Mid-Flood	Middle	3.8	10:30:00 AM	8.26	8.3	31.8	21.0	2.2	2.5
WSR37	20230112	Cloudy	Moderate	Mid-Flood	Bottom	6.6	10:29:00 AM	8.33	8.2	31.7	21.0	2.1	5.0
WSR37	20230112	Cloudy	Moderate	Mid-Flood	Bottom	6.6	10:29:00 AM	8.43	8.2	31.6	21.0	2.2	5.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:32:00 PM	8.82	8.1	32.5	21.1	2.5	2.5
CE	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:32:00 PM	8.83	8.1	32.4	21.1	2.4	3.0
CE	20230114	Cloudy	Moderate	Mid-Flood	Middle	10.0	12:31:00 PM	8.77	8.1	32.6	21.0	2.6	3.0
CE	20230114	Cloudy	Moderate	Mid-Flood	Middle	10.0	12:31:00 PM	8.8	8.1	32.5	21.1	2.8	2.5
CE	20230114	Cloudy	Moderate	Mid-Flood	Bottom	19.0	12:30:00 PM	8.85	8.1	32.6	21.0	2.6	2.5
CE	20230114	Cloudy	Moderate	Mid-Flood	Bottom	19.0	12:30:00 PM	8.82	8.2	32.6	21.0	2.8	3.0
CF	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:56:00 AM	8.55	8.2	32.7	21.2	2.7	3.0
CF	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:56:00 AM	8.46	8.1	32.6	21.1	2.7	2.5
CF	20230114	Cloudy	Moderate	Mid-Flood	Middle	10.7	9:55:00 AM	8.47	8.2	32.7	21.2	2.9	3.0
CF	20230114	Cloudy	Moderate	Mid-Flood	Middle	10.7	9:55:00 AM	8.52	8.1	32.6	21.2	2.8	2.5
CF	20230114	Cloudy	Moderate	Mid-Flood	Bottom	20.4	9:54:00 AM	8.55	8.2	32.6	21.2	2.9	4.0
CF	20230114	Cloudy	Moderate	Mid-Flood	Bottom	20.4	9:54:00 AM	8.46	8.2	32.6	21.2	3.1	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:19:00 AM	9.22	8.1	32.4	21.2	2.1	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:19:00 AM	9.19	8.2	32.4	21.3	2.0	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Flood	Middle	4.6	10:18:00 AM	9.24	8.2	32.4	21.3	1.9	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Flood	Middle	4.6	10:18:00 AM	9.3	8.2	32.4	21.2	2.1	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Flood	Bottom	8.1	10:17:00 AM	9.29	8.2	32.4	21.2	1.9	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Flood	Bottom	8.1	10:17:00 AM	9.28	8.2	32.3	21.2	2.2	2.5
WSR02	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:37:00 AM	9.3	8.1	32.5	21.0	1.9	2.5
WSR02	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:37:00 AM	9.18	8.2	32.7	20.9	1.9	3.0
WSR02	20230114	Cloudy	Moderate	Mid-Flood	Middle	4.9	10:36:00 AM	9.27	8.2	32.6	21.0	2.0	3.0
WSR02	20230114	Cloudy	Moderate	Mid-Flood	Middle	4.9	10:36:00 AM	9.25	8.2	32.6	21.0	1.7	3.0
WSR02	20230114	Cloudy	Moderate	Mid-Flood	Bottom	8.8	10:35:00 AM	9.19	8.2	32.7	21.0	1.9	3.0
WSR02	20230114	Cloudy	Moderate	Mid-Flood	Bottom	8.8	10:35:00 AM	9.23	8.2	32.6	21.0	1.8	3.0
WSR03	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:50:00 AM	9.01	8.1	33.1	20.9	2.1	3.0
WSR03	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:50:00 AM	9.02	8.1	33.1	20.8	2.2	3.0
WSR03	20230114	Cloudy	Moderate	Mid-Flood	Middle	4.0	10:49:00 AM	9.1	8.1	33.1	20.9	2.2	2.5
WSR03	20230114	Cloudy	Moderate	Mid-Flood	Middle	4.0	10:49:00 AM	9.05	8.1	32.9	21.0	2.0	3.0
WSR03	20230114	Cloudy	Moderate	Mid-Flood	Bottom	6.9	10:48:00 AM	9.11	8.1	33.0	20.8	2.3	4.0
WSR03	20230114	Cloudy	Moderate	Mid-Flood	Bottom	6.9	10:48:00 AM	9	8.1	33.0	20.9	2.0	3.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:03:00 AM	8.6	8.1	32.2	21.3	2.2	3.0
WSR04	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:03:00 AM	8.63	8.1	32.2	21.2	1.9	3.0
WSR04	20230114	Cloudy	Moderate	Mid-Flood	Middle	3.8	11:02:00 AM	8.68	8.2	32.3	21.3	1.9	2.5
WSR04	20230114	Cloudy	Moderate	Mid-Flood	Middle	3.8	11:02:00 AM	8.67	8.2	32.4	21.2	2.0	2.5
WSR04	20230114	Cloudy	Moderate	Mid-Flood	Bottom	6.5	11:01:00 AM	8.67	8.2	32.3	21.2	2.3	3.0
WSR04	20230114	Cloudy	Moderate	Mid-Flood	Bottom	6.5	11:01:00 AM	8.57	8.2	32.5	21.3	2.4	4.0
WSR16	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:09:00 PM	8.88	8.2	32.6	21.2	1.8	2.5
WSR16	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:09:00 PM	8.9	8.2	32.5	21.3	2.1	2.5
WSR16	20230114	Cloudy	Moderate	Mid-Flood	Middle	7.7	12:08:00 PM	8.81	8.2	32.4	21.2	2.4	2.5
WSR16	20230114	Cloudy	Moderate	Mid-Flood	Middle	7.7	12:08:00 PM	8.82	8.2	32.4	21.3	2.4	2.5
WSR16	20230114	Cloudy	Moderate	Mid-Flood	Bottom	14.4	12:07:00 PM	8.84	8.1	32.4	21.4	2.2	2.5
WSR16	20230114	Cloudy	Moderate	Mid-Flood	Bottom	14.4	12:07:00 PM	8.88	8.2	32.4	21.3	2.3	4.0
WSR33	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:18:00 AM	8.91	8.1	32.5	20.6	2.3	3.0
WSR33	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:18:00 AM	8.89	8.2	32.3	20.7	2.0	2.5
WSR33	20230114	Cloudy	Moderate	Mid-Flood	Middle	3.7	11:17:00 AM	8.92	8.2	32.3	20.7	1.9	2.5
WSR33	20230114	Cloudy	Moderate	Mid-Flood	Middle	3.7	11:17:00 AM	8.87	8.1	32.3	20.8	2.0	2.5
WSR33	20230114	Cloudy	Moderate	Mid-Flood	Bottom	6.4	11:16:00 AM	8.8	8.2	32.4	20.7	2.0	3.0
WSR33	20230114	Cloudy	Moderate	Mid-Flood	Bottom	6.4	11:16:00 AM	8.87	8.2	32.5	20.7	2.2	3.0
WSR36	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:32:00 AM	9.22	8.1	32.3	20.7	2.3	3.0
WSR36	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:32:00 AM	9.26	8.1	32.1	20.5	2.1	2.5
WSR36	20230114	Cloudy	Moderate	Mid-Flood	Middle	3.2	11:32:00 AM	9.3	8.2	32.4	20.7	2.3	3.0
WSR36	20230114	Cloudy	Moderate	Mid-Flood	Middle	3.2	11:32:00 AM	9.22	8.2	32.3	20.6	2.4	3.0
WSR36	20230114	Cloudy	Moderate	Mid-Flood	Bottom	5.3	11:31:00 AM	9.27	8.1	32.2	20.6	2.2	2.5
WSR36	20230114	Cloudy	Moderate	Mid-Flood	Bottom	5.3	11:31:00 AM	9.23	8.1	32.2	20.7	2.4	2.5
WSR37	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:47:00 AM	9.21	8.1	32.0	20.6	2.5	2.5
WSR37	20230114	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:47:00 AM	9.22	8.1	32.1	20.7	2.5	2.5
WSR37	20230114	Cloudy	Moderate	Mid-Flood	Middle	4.4	11:46:00 AM	9.3	8.1	32.0	20.7	2.3	2.5
WSR37	20230114	Cloudy	Moderate	Mid-Flood	Middle	4.4	11:46:00 AM	9.26	8.1	32.0	20.6	2.2	2.5
WSR37	20230114	Cloudy	Moderate	Mid-Flood	Bottom	7.7	11:45:00 AM	9.24	8.1	32.0	20.6	2.2	3.0
WSR37	20230114	Cloudy	Moderate	Mid-Flood	Bottom	7.7	11:45:00 AM	9.24	8.2	32.1	20.7	2.0	3.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:26:00 PM	8.49	8.3	32.1	20.7	2.7	3.0
CE	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:26:00 PM	8.53	8.2	32.2	20.6	2.6	4.0
CE	20230117	Cloudy	Moderate	Mid-Flood	Middle	10.4	2:25:00 PM	8.47	8.3	32.0	20.7	2.7	3.0
CE	20230117	Cloudy	Moderate	Mid-Flood	Middle	10.4	2:25:00 PM	8.61	8.3	32.2	20.7	2.7	4.0
CE	20230117	Cloudy	Moderate	Mid-Flood	Bottom	19.8	2:24:00 PM	8.45	8.3	32.1	20.7	2.9	2.5
CE	20230117	Cloudy	Moderate	Mid-Flood	Bottom	19.8	2:24:00 PM	8.33	8.2	32.2	20.6	2.8	3.0
CF	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:50:00 AM	9.19	8.3	32.1	20.0	2.9	2.5
CF	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:50:00 AM	8.94	8.3	32.1	20.1	2.7	4.0
CF	20230117	Cloudy	Moderate	Mid-Flood	Middle	9.5	11:49:00 AM	8.99	8.2	32.2	20.1	3.0	2.5
CF	20230117	Cloudy	Moderate	Mid-Flood	Middle	9.5	11:49:00 AM	9	8.2	32.1	20.1	2.9	4.0
CF	20230117	Cloudy	Moderate	Mid-Flood	Bottom	18.0	11:48:00 AM	8.95	8.3	32.2	20.0	3.2	5.0
CF	20230117	Cloudy	Moderate	Mid-Flood	Bottom	18.0	11:48:00 AM	9.1	8.2	32.2	20.0	3.3	3.0
WSR01	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:14:00 PM	9.24	8.2	32.0	20.4	2.0	5.0
WSR01	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:14:00 PM	9.56	8.3	31.9	20.4	2.1	3.0
WSR01	20230117	Cloudy	Moderate	Mid-Flood	Middle	4.2	12:13:00 PM	9.25	8.2	32.0	20.4	2.3	5.0
WSR01	20230117	Cloudy	Moderate	Mid-Flood	Middle	4.2	12:13:00 PM	9.26	8.3	31.9	20.4	2.3	5.0
WSR01	20230117	Cloudy	Moderate	Mid-Flood	Bottom	7.4	12:12:00 PM	9.33	8.2	32.0	20.4	1.8	4.0
WSR01	20230117	Cloudy	Moderate	Mid-Flood	Bottom	7.4	12:12:00 PM	9.34	8.3	31.9	20.4	1.9	4.0
WSR02	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:32:00 PM	9.31	8.2	32.3	20.3	1.4	4.0
WSR02	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:32:00 PM	9.37	8.2	32.4	20.4	1.4	4.0
WSR02	20230117	Cloudy	Moderate	Mid-Flood	Middle	4.8	12:31:00 PM	9.23	8.3	32.3	20.3	1.3	5.0
WSR02	20230117	Cloudy	Moderate	Mid-Flood	Middle	4.8	12:31:00 PM	9.43	8.3	32.2	20.4	1.3	4.0
WSR02	20230117	Cloudy	Moderate	Mid-Flood	Bottom	8.6	12:30:00 PM	9.27	8.3	32.4	20.3	1.8	4.0
WSR02	20230117	Cloudy	Moderate	Mid-Flood	Bottom	8.6	12:30:00 PM	9.42	8.3	32.2	20.4	1.6	3.0
WSR03	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:46:00 PM	9.33	8.3	32.6	20.2	2.1	4.0
WSR03	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:46:00 PM	9.19	8.2	32.7	20.2	2.4	5.0
WSR03	20230117	Cloudy	Moderate	Mid-Flood	Middle	4.0	12:45:00 PM	9.26	8.3	32.6	20.3	2.5	3.0
WSR03	20230117	Cloudy	Moderate	Mid-Flood	Middle	4.0	12:45:00 PM	9.04	8.2	32.6	20.2	2.5	3.0
WSR03	20230117	Cloudy	Moderate	Mid-Flood	Bottom	7.0	12:44:00 PM	9.11	8.3	32.6	20.2	1.9	4.0
WSR03	20230117	Cloudy	Moderate	Mid-Flood	Bottom	7.0	12:44:00 PM	9.25	8.3	32.7	20.2	2.1	4.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:59:00 PM	8.91	8.2	32.0	20.2	2.3	2.5
WSR04	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	12:59:00 PM	8.83	8.1	32.0	20.2	2.4	3.0
WSR04	20230117	Cloudy	Moderate	Mid-Flood	Middle	3.4	12:58:00 PM	8.78	8.2	32.0	20.2	2.1	2.5
WSR04	20230117	Cloudy	Moderate	Mid-Flood	Middle	3.4	12:58:00 PM	8.97	8.2	32.0	20.2	2.3	3.0
WSR04	20230117	Cloudy	Moderate	Mid-Flood	Bottom	5.7	12:57:00 PM	9.1	8.1	31.9	20.3	2.2	2.5
WSR04	20230117	Cloudy	Moderate	Mid-Flood	Bottom	5.7	12:57:00 PM	9.07	8.2	31.9	20.2	2.4	3.0
WSR16	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:03:00 PM	9.15	8.3	32.5	20.7	2.3	3.0
WSR16	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	2:03:00 PM	9.24	8.2	32.5	20.7	2.3	2.5
WSR16	20230117	Cloudy	Moderate	Mid-Flood	Middle	7.7	2:02:00 PM	9.34	8.3	32.4	20.7	2.1	4.0
WSR16	20230117	Cloudy	Moderate	Mid-Flood	Middle	7.7	2:02:00 PM	9.43	8.2	32.4	20.6	2.5	3.0
WSR16	20230117	Cloudy	Moderate	Mid-Flood	Bottom	14.3	2:01:00 PM	9.33	8.3	32.5	20.6	2.3	3.0
WSR16	20230117	Cloudy	Moderate	Mid-Flood	Bottom	14.3	2:01:00 PM	9.19	8.3	32.4	20.7	2.0	3.0
WSR33	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	1:13:00 PM	8.84	8.2	32.7	20.4	2.4	3.0
WSR33	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	1:13:00 PM	8.8	8.3	32.7	20.3	2.4	4.0
WSR33	20230117	Cloudy	Moderate	Mid-Flood	Middle	3.7	1:12:00 PM	8.8	8.2	32.6	20.4	2.1	3.0
WSR33	20230117	Cloudy	Moderate	Mid-Flood	Middle	3.7	1:12:00 PM	8.71	8.3	32.5	20.4	2.2	2.5
WSR33	20230117	Cloudy	Moderate	Mid-Flood	Bottom	6.4	1:11:00 PM	8.85	8.3	32.6	20.4	1.9	3.0
WSR33	20230117	Cloudy	Moderate	Mid-Flood	Bottom	6.4	1:11:00 PM	8.6	8.3	32.7	20.4	2.0	4.0
WSR36	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	1:26:00 PM	9.33	8.2	32.1	20.7	2.3	3.0
WSR36	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	1:26:00 PM	9.17	8.2	32.2	20.7	2.5	3.0
WSR36	20230117	Cloudy	Moderate	Mid-Flood	Middle	3.2	1:26:00 PM	9.22	8.2	32.2	20.7	2.1	3.0
WSR36	20230117	Cloudy	Moderate	Mid-Flood	Middle	3.2	1:26:00 PM	9.13	8.2	32.1	20.7	2.3	2.5
WSR36	20230117	Cloudy	Moderate	Mid-Flood	Bottom	5.3	1:25:00 PM	9.29	8.2	32.1	20.7	2.2	3.0
WSR36	20230117	Cloudy	Moderate	Mid-Flood	Bottom	5.3	1:25:00 PM	9.44	8.2	32.2	20.7	2.4	5.0
WSR37	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	1:41:00 PM	8.99	8.2	32.8	20.7	2.3	4.0
WSR37	20230117	Cloudy	Moderate	Mid-Flood	Surface	1.0	1:41:00 PM	9.02	8.2	32.8	20.7	2.3	2.5
WSR37	20230117	Cloudy	Moderate	Mid-Flood	Middle	4.1	1:40:00 PM	9.05	8.2	33.0	20.7	2.1	3.0
WSR37	20230117	Cloudy	Moderate	Mid-Flood	Middle	4.1	1:40:00 PM	8.93	8.2	32.9	20.6	2.2	3.0
WSR37	20230117	Cloudy	Moderate	Mid-Flood	Bottom	7.1	1:39:00 PM	9.08	8.2	32.8	20.7	2.0	2.5
WSR37	20230117	Cloudy	Moderate	Mid-Flood	Bottom	7.1	1:39:00 PM	8.93	8.2	32.8	20.7	2.3	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	3:52:00 PM	8.08	8.2	32.0	22.7	2.4	2.5
CE	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	3:52:00 PM	8.18	8.2	32.1	22.7	2.4	2.5
CE	20230119	Sunny	Moderate	Mid-Flood	Middle	12.2	3:51:00 PM	8.14	8.1	32.0	22.8	2.4	3.0
CE	20230119	Sunny	Moderate	Mid-Flood	Middle	12.2	3:51:00 PM	8.09	8.1	32.1	22.8	2.4	2.5
CE	20230119	Sunny	Moderate	Mid-Flood	Bottom	23.3	3:50:00 PM	8.13	8.2	32.1	22.7	2.8	3.0
CE	20230119	Sunny	Moderate	Mid-Flood	Bottom	23.3	3:50:00 PM	8.21	8.2	32.2	22.8	2.5	3.0
CF	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	1:17:00 PM	8.15	8.3	32.1	22.5	2.8	3.0
CF	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	1:17:00 PM	8.14	8.2	32.1	22.6	2.9	4.0
CF	20230119	Sunny	Moderate	Mid-Flood	Middle	10.3	1:16:00 PM	8.16	8.3	32.1	22.5	2.9	3.0
CF	20230119	Sunny	Moderate	Mid-Flood	Middle	10.3	1:16:00 PM	8.16	8.3	32.1	22.5	3.1	3.0
CF	20230119	Sunny	Moderate	Mid-Flood	Bottom	19.6	1:15:00 PM	8.17	8.3	32.2	22.6	3.0	5.0
CF	20230119	Sunny	Moderate	Mid-Flood	Bottom	19.6	1:15:00 PM	8.17	8.3	32.1	22.6	3.0	3.0
WSR01	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	1:40:00 PM	8.28	8.2	32.0	22.2	2.4	3.0
WSR01	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	1:40:00 PM	8.31	8.2	32.1	22.1	2.5	2.5
WSR01	20230119	Sunny	Moderate	Mid-Flood	Middle	4.4	1:39:00 PM	8.34	8.2	32.1	22.1	1.8	3.0
WSR01	20230119	Sunny	Moderate	Mid-Flood	Middle	4.4	1:39:00 PM	8.33	8.2	32.0	22.2	2.1	2.5
WSR01	20230119	Sunny	Moderate	Mid-Flood	Bottom	7.8	1:38:00 PM	8.42	8.1	32.0	22.1	1.7	3.0
WSR01	20230119	Sunny	Moderate	Mid-Flood	Bottom	7.8	1:38:00 PM	8.42	8.2	32.0	22.2	2.0	2.5
WSR02	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	1:59:00 PM	9.14	8.4	31.4	22.6	2.0	3.0
WSR02	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	1:59:00 PM	9.13	8.4	31.4	22.5	1.9	2.5
WSR02	20230119	Sunny	Moderate	Mid-Flood	Middle	4.7	1:58:00 PM	9.05	8.4	31.4	22.6	2.1	2.5
WSR02	20230119	Sunny	Moderate	Mid-Flood	Middle	4.7	1:58:00 PM	9.12	8.4	31.4	22.6	2.3	3.0
WSR02	20230119	Sunny	Moderate	Mid-Flood	Bottom	8.3	1:57:00 PM	9.1	8.4	31.3	22.6	2.0	3.0
WSR02	20230119	Sunny	Moderate	Mid-Flood	Bottom	8.3	1:57:00 PM	9.12	8.4	31.3	22.6	2.2	3.0
WSR03	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	2:12:00 PM	8.98	8.3	31.9	22.3	1.8	3.0
WSR03	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	2:12:00 PM	8.99	8.2	32.0	22.3	1.9	3.0
WSR03	20230119	Sunny	Moderate	Mid-Flood	Middle	3.9	2:11:00 PM	8.94	8.2	32.0	22.3	2.0	3.0
WSR03	20230119	Sunny	Moderate	Mid-Flood	Middle	3.9	2:11:00 PM	8.92	8.2	32.0	22.3	2.1	4.0
WSR03	20230119	Sunny	Moderate	Mid-Flood	Bottom	6.8	2:10:00 PM	8.96	8.3	32.1	22.2	2.0	3.0
WSR03	20230119	Sunny	Moderate	Mid-Flood	Bottom	6.8	2:10:00 PM	8.85	8.3	32.0	22.2	2.3	3.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	2:25:00 PM	8.59	8.3	31.7	22.5	2.0	4.0
WSR04	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	2:25:00 PM	8.56	8.3	31.9	22.6	2.2	3.0
WSR04	20230119	Sunny	Moderate	Mid-Flood	Middle	3.8	2:24:00 PM	8.54	8.3	31.8	22.5	2.3	3.0
WSR04	20230119	Sunny	Moderate	Mid-Flood	Middle	3.8	2:24:00 PM	8.47	8.3	31.8	22.5	2.1	3.0
WSR04	20230119	Sunny	Moderate	Mid-Flood	Bottom	6.6	2:23:00 PM	8.48	8.3	31.9	22.6	2.0	3.0
WSR04	20230119	Sunny	Moderate	Mid-Flood	Bottom	6.6	2:23:00 PM	8.54	8.3	31.9	22.5	2.3	4.0
WSR16	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	3:28:00 PM	8.57	8.1	31.7	22.2	2.3	2.5
WSR16	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	3:28:00 PM	8.64	8.1	31.7	22.2	2.3	3.0
WSR16	20230119	Sunny	Moderate	Mid-Flood	Middle	8.2	3:27:00 PM	8.69	8.1	31.6	22.1	2.2	4.0
WSR16	20230119	Sunny	Moderate	Mid-Flood	Middle	8.2	3:27:00 PM	8.67	8.2	31.5	22.1	2.0	2.5
WSR16	20230119	Sunny	Moderate	Mid-Flood	Bottom	15.4	3:26:00 PM	8.6	8.1	31.6	22.1	2.0	3.0
WSR16	20230119	Sunny	Moderate	Mid-Flood	Bottom	15.4	3:26:00 PM	8.57	8.2	31.6	22.0	2.1	3.0
WSR33	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	2:38:00 PM	8.29	8.3	31.9	22.0	1.8	4.0
WSR33	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	2:38:00 PM	8.34	8.3	31.9	22.1	1.9	2.5
WSR33	20230119	Sunny	Moderate	Mid-Flood	Middle	3.6	2:37:00 PM	8.29	8.3	31.9	22.0	2.1	4.0
WSR33	20230119	Sunny	Moderate	Mid-Flood	Middle	3.6	2:37:00 PM	8.22	8.4	31.9	22.0	2.2	4.0
WSR33	20230119	Sunny	Moderate	Mid-Flood	Bottom	6.1	2:36:00 PM	8.32	8.3	31.9	22.1	1.7	4.0
WSR33	20230119	Sunny	Moderate	Mid-Flood	Bottom	6.1	2:36:00 PM	8.36	8.4	31.8	22.0	1.9	3.0
WSR36	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	2:51:00 PM	8.58	8.4	31.6	22.7	2.1	4.0
WSR36	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	2:51:00 PM	8.6	8.4	31.6	22.8	2.1	2.5
WSR36	20230119	Sunny	Moderate	Mid-Flood	Middle	3.8	2:51:00 PM	8.58	8.4	31.5	22.7	2.1	3.0
WSR36	20230119	Sunny	Moderate	Mid-Flood	Middle	3.8	2:51:00 PM	8.6	8.4	31.6	22.7	1.8	3.0
WSR36	20230119	Sunny	Moderate	Mid-Flood	Bottom	6.6	2:50:00 PM	8.49	8.3	31.6	22.7	2.0	4.0
WSR36	20230119	Sunny	Moderate	Mid-Flood	Bottom	6.6	2:50:00 PM	8.57	8.4	31.5	22.7	2.1	2.5
WSR37	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	3:06:00 PM	9.04	8.3	31.3	22.0	2.0	3.0
WSR37	20230119	Sunny	Moderate	Mid-Flood	Surface	1.0	3:06:00 PM	8.94	8.4	31.3	22.0	2.1	3.0
WSR37	20230119	Sunny	Moderate	Mid-Flood	Middle	3.8	3:05:00 PM	8.94	8.3	31.3	22.0	1.8	6.0
WSR37	20230119	Sunny	Moderate	Mid-Flood	Middle	3.8	3:05:00 PM	8.97	8.3	31.4	22.0	1.9	3.0
WSR37	20230119	Sunny	Moderate	Mid-Flood	Bottom	6.6	3:04:00 PM	8.97	8.3	31.4	22.1	2.0	2.5
WSR37	20230119	Sunny	Moderate	Mid-Flood	Bottom	6.6	3:04:00 PM	8.93	8.3	31.4	22.0	2.2	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:50:00 PM	8.84	8.2	33.2	20.4	2.4	2.5
CE	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:50:00 PM	8.82	8.3	33.2	20.3	2.2	2.5
CE	20230121	Cloudy	Moderate	Mid-Flood	Middle	11.5	5:49:00 PM	8.78	8.2	33.2	20.3	2.6	2.5
CE	20230121	Cloudy	Moderate	Mid-Flood	Middle	11.5	5:49:00 PM	8.92	8.2	33.2	20.4	2.4	2.5
CE	20230121	Cloudy	Moderate	Mid-Flood	Bottom	21.9	5:48:00 PM	8.87	8.2	33.1	20.3	2.7	3.0
CE	20230121	Cloudy	Moderate	Mid-Flood	Bottom	21.9	5:48:00 PM	9	8.2	33.3	20.4	2.7	3.0
CF	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:10:00 PM	9.14	8.2	32.5	20.5	2.5	5.0
CF	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:10:00 PM	8.97	8.3	32.3	20.5	2.7	7.0
CF	20230121	Cloudy	Moderate	Mid-Flood	Middle	10.4	3:09:00 PM	8.92	8.3	32.3	20.6	2.9	3.0
CF	20230121	Cloudy	Moderate	Mid-Flood	Middle	10.4	3:09:00 PM	8.93	8.2	32.3	20.6	2.7	2.5
CF	20230121	Cloudy	Moderate	Mid-Flood	Bottom	19.7	3:08:00 PM	8.96	8.2	32.4	20.6	3.0	2.5
CF	20230121	Cloudy	Moderate	Mid-Flood	Bottom	19.7	3:08:00 PM	8.92	8.2	32.5	20.6	2.7	3.0
WSR01	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:33:00 PM	8.74	8.3	32.5	20.4	2.0	5.0
WSR01	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:33:00 PM	8.71	8.3	32.7	20.3	2.0	8.0
WSR01	20230121	Cloudy	Moderate	Mid-Flood	Middle	4.2	3:32:00 PM	8.81	8.3	32.6	20.3	2.1	5.0
WSR01	20230121	Cloudy	Moderate	Mid-Flood	Middle	4.2	3:32:00 PM	8.82	8.3	32.8	20.3	2.3	8.0
WSR01	20230121	Cloudy	Moderate	Mid-Flood	Bottom	7.3	3:31:00 PM	8.89	8.3	32.6	20.3	2.1	2.5
WSR01	20230121	Cloudy	Moderate	Mid-Flood	Bottom	7.3	3:31:00 PM	8.74	8.3	32.7	20.3	1.9	2.5
WSR02	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:52:00 PM	9.46	8.3	33.2	20.0	1.8	2.5
WSR02	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	3:52:00 PM	9.32	8.3	33.2	19.9	1.6	2.5
WSR02	20230121	Cloudy	Moderate	Mid-Flood	Middle	4.8	3:51:00 PM	9.55	8.3	33.2	20.0	1.7	3.0
WSR02	20230121	Cloudy	Moderate	Mid-Flood	Middle	4.8	3:51:00 PM	9.52	8.3	33.2	19.9	1.8	2.5
WSR02	20230121	Cloudy	Moderate	Mid-Flood	Bottom	8.5	3:50:00 PM	9.48	8.3	33.5	19.9	1.9	8.0
WSR02	20230121	Cloudy	Moderate	Mid-Flood	Bottom	8.5	3:50:00 PM	9.43	8.4	33.4	20.0	2.0	6.0
WSR03	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:05:00 PM	8.58	8.3	32.5	20.0	2.2	2.5
WSR03	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:05:00 PM	8.68	8.3	32.5	20.0	1.9	3.0
WSR03	20230121	Cloudy	Moderate	Mid-Flood	Middle	4.2	4:04:00 PM	8.67	8.3	32.4	20.0	1.9	2.5
WSR03	20230121	Cloudy	Moderate	Mid-Flood	Middle	4.2	4:04:00 PM	8.67	8.3	32.6	20.0	2.2	3.0
WSR03	20230121	Cloudy	Moderate	Mid-Flood	Bottom	7.3	4:03:00 PM	8.73	8.3	32.3	20.0	1.9	4.0
WSR03	20230121	Cloudy	Moderate	Mid-Flood	Bottom	7.3	4:03:00 PM	8.64	8.3	32.6	20.0	2.0	3.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:18:00 PM	8.99	8.3	33.0	20.3	2.1	3.0
WSR04	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:18:00 PM	9.02	8.2	33.0	20.2	1.8	2.5
WSR04	20230121	Cloudy	Moderate	Mid-Flood	Middle	3.7	4:17:00 PM	8.88	8.2	33.2	20.3	2.2	3.0
WSR04	20230121	Cloudy	Moderate	Mid-Flood	Middle	3.7	4:17:00 PM	9.03	8.3	33.3	20.2	1.9	3.0
WSR04	20230121	Cloudy	Moderate	Mid-Flood	Bottom	6.3	4:16:00 PM	8.98	8.2	33.1	20.3	2.1	6.0
WSR04	20230121	Cloudy	Moderate	Mid-Flood	Bottom	6.3	4:16:00 PM	8.99	8.3	33.0	20.3	2.1	8.0
WSR16	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:26:00 PM	9.32	8.3	32.7	20.3	2.0	3.0
WSR16	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:26:00 PM	9.32	8.3	32.7	20.3	1.9	4.0
WSR16	20230121	Cloudy	Moderate	Mid-Flood	Middle	8.0	5:25:00 PM	9.12	8.3	32.7	20.3	2.2	3.0
WSR16	20230121	Cloudy	Moderate	Mid-Flood	Middle	8.0	5:25:00 PM	9.31	8.3	32.8	20.3	2.3	3.0
WSR16	20230121	Cloudy	Moderate	Mid-Flood	Bottom	15.0	5:24:00 PM	9.12	8.3	32.6	20.3	1.9	3.0
WSR16	20230121	Cloudy	Moderate	Mid-Flood	Bottom	15.0	5:24:00 PM	9.32	8.3	32.8	20.3	2.0	2.5
WSR33	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:31:00 PM	9.31	8.3	33.2	20.5	1.8	8.0
WSR33	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:31:00 PM	9.27	8.3	32.9	20.4	1.9	7.0
WSR33	20230121	Cloudy	Moderate	Mid-Flood	Middle	3.9	4:30:00 PM	9.24	8.3	32.9	20.5	1.9	6.0
WSR33	20230121	Cloudy	Moderate	Mid-Flood	Middle	3.9	4:30:00 PM	9.41	8.3	33.1	20.5	2.0	9.0
WSR33	20230121	Cloudy	Moderate	Mid-Flood	Bottom	6.7	4:29:00 PM	9.27	8.3	33.1	20.5	2.0	3.0
WSR33	20230121	Cloudy	Moderate	Mid-Flood	Bottom	6.7	4:29:00 PM	9.31	8.3	33.0	20.5	1.8	3.0
WSR36	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:46:00 PM	8.56	8.3	32.3	20.0	1.9	6.0
WSR36	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	4:46:00 PM	8.63	8.3	32.4	19.9	2.0	9.0
WSR36	20230121	Cloudy	Moderate	Mid-Flood	Middle	3.5	4:46:00 PM	8.52	8.2	32.4	19.9	2.1	3.0
WSR36	20230121	Cloudy	Moderate	Mid-Flood	Middle	3.5	4:46:00 PM	8.5	8.2	32.2	20.0	2.0	2.5
WSR36	20230121	Cloudy	Moderate	Mid-Flood	Bottom	6.0	4:45:00 PM	8.63	8.2	32.5	20.0	1.9	9.0
WSR36	20230121	Cloudy	Moderate	Mid-Flood	Bottom	6.0	4:45:00 PM	8.66	8.3	32.4	19.9	2.0	6.0
WSR37	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:03:00 PM	8.92	8.2	32.7	20.4	2.0	2.5
WSR37	20230121	Cloudy	Moderate	Mid-Flood	Surface	1.0	5:03:00 PM	8.91	8.2	32.9	20.3	1.9	2.5
WSR37	20230121	Cloudy	Moderate	Mid-Flood	Middle	4.2	5:02:00 PM	8.92	8.2	32.7	20.3	2.1	2.5
WSR37	20230121	Cloudy	Moderate	Mid-Flood	Middle	4.2	5:02:00 PM	9.08	8.3	32.7	20.4	2.2	2.5
WSR37	20230121	Cloudy	Moderate	Mid-Flood	Bottom	7.3	5:01:00 PM	8.86	8.2	32.7	20.4	2.2	2.5
WSR37	20230121	Cloudy	Moderate	Mid-Flood	Bottom	7.3	5:01:00 PM	9.02	8.2	32.7	20.3	2.2	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:07:00 AM	9.28	8.4	32.4	20.3	2.6	5.0
CE	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	11:07:00 AM	9.2	8.4	32.5	20.4	2.5	4.0
CE	20230131	Cloudy	Moderate	Mid-Flood	Middle	10.3	11:06:00 AM	9.31	8.4	32.7	20.4	2.6	4.0
CE	20230131	Cloudy	Moderate	Mid-Flood	Middle	10.3	11:06:00 AM	9.29	8.4	32.7	20.4	2.7	4.0
CE	20230131	Cloudy	Moderate	Mid-Flood	Bottom	19.6	11:05:00 AM	9.15	8.4	32.6	20.4	2.9	4.0
CE	20230131	Cloudy	Moderate	Mid-Flood	Bottom	19.6	11:05:00 AM	9.17	8.4	32.4	20.3	3.0	5.0
CF	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:18:00 AM	8.62	8.3	31.6	20.4	2.9	7.0
CF	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:18:00 AM	8.48	8.3	31.7	20.4	3.0	4.0
CF	20230131	Cloudy	Moderate	Mid-Flood	Middle	10.6	8:17:00 AM	8.53	8.2	31.6	20.4	3.2	4.0
CF	20230131	Cloudy	Moderate	Mid-Flood	Middle	10.6	8:17:00 AM	8.68	8.2	31.8	20.5	3.1	7.0
CF	20230131	Cloudy	Moderate	Mid-Flood	Bottom	20.2	8:16:00 AM	8.63	8.3	31.6	20.5	3.5	8.0
CF	20230131	Cloudy	Moderate	Mid-Flood	Bottom	20.2	8:16:00 AM	8.51	8.2	31.8	20.4	3.7	9.0
WSR01	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:42:00 AM	8.68	8.3	32.5	20.8	2.5	3.0
WSR01	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	8:42:00 AM	8.61	8.3	32.7	20.8	2.2	3.0
WSR01	20230131	Cloudy	Moderate	Mid-Flood	Middle	4.8	8:41:00 AM	8.75	8.3	32.4	20.8	2.2	7.0
WSR01	20230131	Cloudy	Moderate	Mid-Flood	Middle	4.8	8:41:00 AM	8.75	8.3	32.7	20.8	2.3	5.0
WSR01	20230131	Cloudy	Moderate	Mid-Flood	Bottom	8.5	8:40:00 AM	8.6	8.4	32.6	20.8	2.3	6.0
WSR01	20230131	Cloudy	Moderate	Mid-Flood	Bottom	8.5	8:40:00 AM	8.77	8.4	32.4	20.7	2.4	6.0
WSR02	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:02:00 AM	8.35	8.2	31.7	20.5	2.2	6.0
WSR02	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:02:00 AM	8.45	8.2	31.9	20.7	2.4	4.0
WSR02	20230131	Cloudy	Moderate	Mid-Flood	Middle	4.7	9:01:00 AM	8.33	8.2	31.7	20.6	2.2	7.0
WSR02	20230131	Cloudy	Moderate	Mid-Flood	Middle	4.7	9:01:00 AM	8.41	8.2	31.8	20.6	2.5	5.0
WSR02	20230131	Cloudy	Moderate	Mid-Flood	Bottom	8.3	9:00:00 AM	8.41	8.2	31.9	20.6	2.1	6.0
WSR02	20230131	Cloudy	Moderate	Mid-Flood	Bottom	8.3	9:00:00 AM	8.41	8.2	32.0	20.5	2.3	3.0
WSR03	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:17:00 AM	8.58	8.2	31.8	20.9	2.4	4.0
WSR03	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:17:00 AM	8.71	8.2	31.9	21.1	2.4	8.0
WSR03	20230131	Cloudy	Moderate	Mid-Flood	Middle	4.2	9:16:00 AM	8.54	8.2	32.0	21.0	2.4	7.0
WSR03	20230131	Cloudy	Moderate	Mid-Flood	Middle	4.2	9:16:00 AM	8.64	8.3	32.0	21.0	2.3	9.0
WSR03	20230131	Cloudy	Moderate	Mid-Flood	Bottom	7.3	9:15:00 AM	8.73	8.3	31.9	21.1	2.3	4.0
WSR03	20230131	Cloudy	Moderate	Mid-Flood	Bottom	7.3	9:15:00 AM	8.64	8.3	32.0	21.0	2.6	3.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:33:00 AM	8.47	8.3	32.1	20.5	2.4	7.0
WSR04	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:33:00 AM	8.5	8.3	32.1	20.3	2.4	7.0
WSR04	20230131	Cloudy	Moderate	Mid-Flood	Middle	3.6	9:32:00 AM	8.57	8.3	32.0	20.3	2.1	8.0
WSR04	20230131	Cloudy	Moderate	Mid-Flood	Middle	3.6	9:32:00 AM	8.51	8.3	32.0	20.5	2.5	7.0
WSR04	20230131	Cloudy	Moderate	Mid-Flood	Bottom	6.1	9:31:00 AM	8.58	8.2	32.2	20.4	2.2	5.0
WSR04	20230131	Cloudy	Moderate	Mid-Flood	Bottom	6.1	9:31:00 AM	8.66	8.3	32.0	20.5	2.2	5.0
WSR16	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:42:00 AM	8.56	8.3	32.5	20.6	2.4	3.0
WSR16	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:42:00 AM	8.43	8.3	32.4	20.6	2.3	4.0
WSR16	20230131	Cloudy	Moderate	Mid-Flood	Middle	8.7	10:41:00 AM	8.53	8.3	32.8	20.6	2.4	7.0
WSR16	20230131	Cloudy	Moderate	Mid-Flood	Middle	8.7	10:41:00 AM	8.39	8.2	32.5	20.5	2.4	8.0
WSR16	20230131	Cloudy	Moderate	Mid-Flood	Bottom	16.3	10:40:00 AM	8.43	8.2	32.7	20.5	2.3	6.0
WSR16	20230131	Cloudy	Moderate	Mid-Flood	Bottom	16.3	10:40:00 AM	8.51	8.2	32.6	20.6	2.5	4.0
WSR33	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:50:00 AM	8.98	8.4	32.6	20.4	2.4	7.0
WSR33	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	9:50:00 AM	9.06	8.4	32.3	20.4	2.4	4.0
WSR33	20230131	Cloudy	Moderate	Mid-Flood	Middle	3.8	9:49:00 AM	9.04	8.4	32.4	20.5	2.3	4.0
WSR33	20230131	Cloudy	Moderate	Mid-Flood	Middle	3.8	9:49:00 AM	9.17	8.4	32.5	20.4	2.3	5.0
WSR33	20230131	Cloudy	Moderate	Mid-Flood	Bottom	6.5	9:48:00 AM	9.1	8.3	32.3	20.4	2.2	4.0
WSR33	20230131	Cloudy	Moderate	Mid-Flood	Bottom	6.5	9:48:00 AM	9.15	8.4	32.3	20.5	2.2	6.0
WSR36	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:03:00 AM	8.46	8.4	32.3	20.6	2.3	5.0
WSR36	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:03:00 AM	8.59	8.4	32.1	20.5	2.4	4.0
WSR36	20230131	Cloudy	Moderate	Mid-Flood	Middle	3.8	10:03:00 AM	8.62	8.4	32.2	20.4	2.2	4.0
WSR36	20230131	Cloudy	Moderate	Mid-Flood	Middle	3.8	10:03:00 AM	8.49	8.4	32.0	20.5	2.4	4.0
WSR36	20230131	Cloudy	Moderate	Mid-Flood	Bottom	6.5	10:02:00 AM	8.65	8.3	32.3	20.5	2.2	7.0
WSR36	20230131	Cloudy	Moderate	Mid-Flood	Bottom	6.5	10:02:00 AM	8.62	8.4	31.9	20.5	2.2	8.0
WSR37	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:19:00 AM	9.4	8.4	32.4	21.2	2.2	2.5
WSR37	20230131	Cloudy	Moderate	Mid-Flood	Surface	1.0	10:19:00 AM	9.43	8.4	32.8	21.1	2.2	2.5
WSR37	20230131	Cloudy	Moderate	Mid-Flood	Middle	4.2	10:18:00 AM	9.33	8.4	32.7	21.0	2.3	2.5
WSR37	20230131	Cloudy	Moderate	Mid-Flood	Middle	4.2	10:18:00 AM	9.41	8.4	32.8	21.0	2.2	3.0
WSR37	20230131	Cloudy	Moderate	Mid-Flood	Bottom	7.3	10:17:00 AM	9.27	8.4	32.7	21.2	2.3	4.0
WSR37	20230131	Cloudy	Moderate	Mid-Flood	Bottom	7.3	10:17:00 AM	9.28	8.3	32.7	21.1	2.3	6.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:27:00 AM	8.2	8.2	31.7	21.1	2.8	2.5
CE	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:27:00 AM	8.4	8.3	31.5	21.1	2.8	2.5
CE	20230103	Cloudy	Moderate	Mid-Ebb	Middle	11.4	8:26:00 AM	8.4	8.3	31.5	21.1	3.1	2.5
CE	20230103	Cloudy	Moderate	Mid-Ebb	Middle	11.4	8:26:00 AM	8.3	8.3	31.6	21.1	3.1	2.5
CE	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	21.8	8:25:00 AM	8.4	8.3	31.4	21.1	3.0	2.5
CE	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	21.8	8:25:00 AM	8.4	8.3	31.6	21.1	3.2	2.5
CF	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:02:00 AM	8.9	8.4	32.6	21.0	2.7	2.5
CF	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:02:00 AM	8.9	8.4	32.6	21.1	2.8	2.5
CF	20230103	Cloudy	Moderate	Mid-Ebb	Middle	10.5	11:01:00 AM	8.9	8.4	32.5	21.0	2.6	4.0
CF	20230103	Cloudy	Moderate	Mid-Ebb	Middle	10.5	11:01:00 AM	8.9	8.4	32.6	21.0	2.7	3.0
CF	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	19.9	11:00:00 AM	9.0	8.4	32.7	21.0	2.7	2.5
CF	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	19.9	11:00:00 AM	8.9	8.4	32.6	21.1	2.8	2.5
WSR01	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:38:00 AM	8.4	8.3	31.9	20.8	2.3	2.5
WSR01	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:38:00 AM	8.3	8.3	32.0	20.8	1.9	2.5
WSR01	20230103	Cloudy	Moderate	Mid-Ebb	Middle	4.5	10:37:00 AM	8.3	8.3	31.9	20.7	2.2	2.5
WSR01	20230103	Cloudy	Moderate	Mid-Ebb	Middle	4.5	10:37:00 AM	8.3	8.3	32.0	20.8	2.0	3.0
WSR01	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	7.9	10:36:00 AM	8.2	8.3	31.9	20.7	2.0	2.5
WSR01	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	7.9	10:36:00 AM	8.4	8.3	32.1	20.7	2.2	2.5
WSR02	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:20:00 AM	8.2	8.3	32.4	21.1	2.5	7.0
WSR02	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:20:00 AM	8.4	8.3	32.5	21.1	2.6	9.0
WSR02	20230103	Cloudy	Moderate	Mid-Ebb	Middle	4.5	10:19:00 AM	8.4	8.2	32.6	21.1	2.1	3.0
WSR02	20230103	Cloudy	Moderate	Mid-Ebb	Middle	4.5	10:19:00 AM	8.4	8.3	32.5	21.2	2.2	2.5
WSR02	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	8.0	10:18:00 AM	8.4	8.2	32.5	21.2	2.3	3.0
WSR02	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	8.0	10:18:00 AM	8.3	8.3	32.6	21.1	2.3	3.0
WSR03	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:05:00 AM	8.3	8.2	32.4	21.0	2.2	2.5
WSR03	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:05:00 AM	8.3	8.3	32.5	21.1	2.2	3.0
WSR03	20230103	Cloudy	Moderate	Mid-Ebb	Middle	3.7	10:04:00 AM	8.3	8.2	32.5	21.0	2.1	2.5
WSR03	20230103	Cloudy	Moderate	Mid-Ebb	Middle	3.7	10:04:00 AM	8.3	8.2	32.5	21.0	2.1	3.0
WSR03	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	10:03:00 AM	8.3	8.3	32.6	21.0	2.0	2.5
WSR03	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	10:03:00 AM	8.2	8.2	32.4	21.0	2.0	4.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:53:00 AM	9.2	8.2	32.1	20.9	2.2	3.0
WSR04	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:53:00 AM	9.2	8.3	32.1	20.9	2.1	4.0
WSR04	20230103	Cloudy	Moderate	Mid-Ebb	Middle	3.5	9:52:00 AM	9.2	8.3	32.1	20.9	2.1	3.0
WSR04	20230103	Cloudy	Moderate	Mid-Ebb	Middle	3.5	9:52:00 AM	9.1	8.3	32.2	20.9	2.3	4.0
WSR04	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	6.0	9:51:00 AM	9.1	8.3	32.1	20.9	1.9	2.5
WSR04	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	6.0	9:51:00 AM	9.1	8.3	32.2	20.9	2.0	2.5
WSR16	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:50:00 AM	8.7	8.3	32.1	21.3	2.0	3.0
WSR16	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:50:00 AM	8.7	8.3	31.9	21.3	2.0	2.5
WSR16	20230103	Cloudy	Moderate	Mid-Ebb	Middle	7.6	8:49:00 AM	8.7	8.2	32.2	21.4	2.3	4.0
WSR16	20230103	Cloudy	Moderate	Mid-Ebb	Middle	7.6	8:49:00 AM	8.6	8.2	32.0	21.3	2.0	2.5
WSR16	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	14.1	8:48:00 AM	8.6	8.3	32.1	21.3	1.9	3.0
WSR16	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	14.1	8:48:00 AM	8.6	8.2	32.0	21.2	2.0	2.5
WSR33	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:40:00 AM	8.7	8.4	32.4	20.6	2.0	2.5
WSR33	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:40:00 AM	8.7	8.4	32.4	20.6	2.3	2.5
WSR33	20230103	Cloudy	Moderate	Mid-Ebb	Middle	3.7	9:39:00 AM	8.7	8.4	32.4	20.6	1.9	3.0
WSR33	20230103	Cloudy	Moderate	Mid-Ebb	Middle	3.7	9:39:00 AM	8.7	8.4	32.3	20.7	2.0	3.0
WSR33	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	6.3	9:38:00 AM	8.7	8.3	32.3	20.6	2.2	3.0
WSR33	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	6.3	9:38:00 AM	8.7	8.4	32.2	20.7	1.9	3.0
WSR36	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:26:00 AM	8.8	8.3	32.6	21.1	2.2	2.5
WSR36	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:26:00 AM	8.7	8.4	32.7	21.2	2.3	4.0
WSR36	20230103	Cloudy	Moderate	Mid-Ebb	Middle	3.5	9:26:00 AM	8.8	8.3	32.8	21.2	1.9	3.0
WSR36	20230103	Cloudy	Moderate	Mid-Ebb	Middle	3.5	9:26:00 AM	8.7	8.3	32.5	21.1	2.3	4.0
WSR36	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	5.9	9:25:00 AM	8.7	8.3	32.6	21.2	1.8	4.0
WSR36	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	5.9	9:25:00 AM	8.7	8.3	32.6	21.1	1.9	3.0
WSR37	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:12:00 AM	8.4	8.3	32.4	20.9	2.2	2.5
WSR37	20230103	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:12:00 AM	8.4	8.4	32.3	20.9	2.5	2.5
WSR37	20230103	Cloudy	Moderate	Mid-Ebb	Middle	4.3	9:11:00 AM	8.5	8.4	32.3	20.9	2.1	2.5
WSR37	20230103	Cloudy	Moderate	Mid-Ebb	Middle	4.3	9:11:00 AM	8.5	8.4	32.4	20.8	2.2	4.0
WSR37	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	7.6	9:10:00 AM	8.6	8.3	32.3	20.9	2.2	3.0
WSR37	20230103	Cloudy	Moderate	Mid-Ebb	Bottom	7.6	9:10:00 AM	8.5	8.3	32.3	20.8	2.0	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:08:00 AM	8.7	8.3	32.2	21.0	2.4	2.5
CE	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:08:00 AM	8.7	8.3	32.3	21.1	2.5	2.5
CE	20230105	Cloudy	Moderate	Mid-Ebb	Middle	10.2	10:07:00 AM	8.6	8.3	32.1	21.1	2.5	2.5
CE	20230105	Cloudy	Moderate	Mid-Ebb	Middle	10.2	10:07:00 AM	8.7	8.3	32.2	21.1	2.6	2.5
CE	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	19.4	10:06:00 AM	8.7	8.3	32.2	21.0	2.8	2.5
CE	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	19.4	10:06:00 AM	8.7	8.3	32.1	21.1	2.8	2.5
CF	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:46:00 PM	8.7	8.3	32.4	21.7	2.2	2.5
CF	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:46:00 PM	8.7	8.3	32.3	21.7	2.2	2.5
CF	20230105	Cloudy	Moderate	Mid-Ebb	Middle	10.0	12:45:00 PM	8.6	8.3	32.3	21.8	2.4	2.5
CF	20230105	Cloudy	Moderate	Mid-Ebb	Middle	10.0	12:45:00 PM	8.7	8.3	32.4	21.7	2.2	2.5
CF	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	18.9	12:44:00 PM	8.7	8.3	32.4	21.8	2.2	2.5
CF	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	18.9	12:44:00 PM	8.7	8.3	32.5	21.8	2.3	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:22:00 PM	8.9	8.3	32.5	21.5	2.0	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:22:00 PM	9.0	8.3	32.4	21.5	2.0	3.0
WSR01	20230105	Cloudy	Moderate	Mid-Ebb	Middle	4.6	12:21:00 PM	9.0	8.3	32.5	21.6	2.0	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Ebb	Middle	4.6	12:21:00 PM	9.0	8.3	32.5	21.6	2.3	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	8.1	12:20:00 PM	8.9	8.3	32.5	21.5	1.9	2.5
WSR01	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	8.1	12:20:00 PM	8.9	8.3	32.6	21.5	2.2	2.5
WSR02	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:04:00 PM	9.1	8.4	32.0	21.1	2.4	2.5
WSR02	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:04:00 PM	9.2	8.4	32.1	21.1	2.3	2.5
WSR02	20230105	Cloudy	Moderate	Mid-Ebb	Middle	4.6	12:03:00 PM	9.1	8.3	32.1	21.0	2.3	2.5
WSR02	20230105	Cloudy	Moderate	Mid-Ebb	Middle	4.6	12:03:00 PM	9.2	8.3	32.1	21.0	2.2	2.5
WSR02	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	8.1	12:02:00 PM	9.0	8.3	32.1	21.1	1.8	2.5
WSR02	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	8.1	12:02:00 PM	9.1	8.3	32.1	21.0	1.8	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:49:00 AM	8.7	8.3	31.7	21.6	2.2	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:49:00 AM	8.7	8.3	31.5	21.5	2.3	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Ebb	Middle	3.9	11:48:00 AM	8.7	8.2	31.5	21.5	2.0	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Ebb	Middle	3.9	11:48:00 AM	8.7	8.2	31.7	21.5	2.1	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	6.7	11:47:00 AM	8.8	8.3	31.6	21.4	1.8	2.5
WSR03	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	6.7	11:47:00 AM	8.8	8.2	31.5	21.5	2.1	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	pН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:36:00 AM	8.8	8.3	31.7	21.5	2.1	2.5
WSR04	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:36:00 AM	8.8	8.3	31.7	21.5	2.2	2.5
WSR04	20230105	Cloudy	Moderate	Mid-Ebb	Middle	3.4	11:35:00 AM	8.8	8.4	31.6	21.6	2.4	2.5
WSR04	20230105	Cloudy	Moderate	Mid-Ebb	Middle	3.4	11:35:00 AM	8.7	8.4	31.6	21.5	2.2	2.5
WSR04	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	5.7	11:34:00 AM	8.8	8.4	31.5	21.6	1.9	2.5
WSR04	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	5.7	11:34:00 AM	8.8	8.3	31.5	21.5	2.0	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:30:00 AM	8.7	8.3	31.5	21.5	2.3	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:30:00 AM	8.6	8.3	31.5	21.6	2.4	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Ebb	Middle	7.7	10:29:00 AM	8.6	8.3	31.5	21.6	2.1	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Ebb	Middle	7.7	10:29:00 AM	8.7	8.3	31.5	21.6	2.2	2.5
WSR16	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	14.4	10:28:00 AM	8.6	8.3	31.5	21.5	2.0	3.0
WSR16	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	14.4	10:28:00 AM	8.6	8.3	31.6	21.6	1.9	4.0
WSR33	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:21:00 AM	8.4	8.3	32.5	21.4	2.1	2.5
WSR33	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:21:00 AM	8.4	8.3	32.6	21.4	2.2	3.0
WSR33	20230105	Cloudy	Moderate	Mid-Ebb	Middle	3.8	11:20:00 AM	8.4	8.3	32.6	21.4	2.2	3.0
WSR33	20230105	Cloudy	Moderate	Mid-Ebb	Middle	3.8	11:20:00 AM	8.5	8.3	32.4	21.3	2.1	3.0
WSR33	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	6.6	11:19:00 AM	8.4	8.3	32.5	21.4	1.9	2.5
WSR33	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	6.6	11:19:00 AM	8.5	8.2	32.6	21.3	1.9	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:06:00 AM	8.5	8.3	31.4	21.2	2.1	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:06:00 AM	8.4	8.3	31.5	21.2	2.3	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Ebb	Middle	3.3	11:06:00 AM	8.4	8.3	31.6	21.2	2.3	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Ebb	Middle	3.3	11:06:00 AM	8.4	8.3	31.6	21.3	2.0	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	5.5	11:05:00 AM	8.4	8.3	31.7	21.2	2.3	2.5
WSR36	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	5.5	11:05:00 AM	8.4	8.3	31.5	21.3	2.3	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:52:00 AM	8.3	8.3	32.4	21.7	2.2	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:52:00 AM	8.3	8.3	32.3	21.6	2.2	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Ebb	Middle	3.8	10:51:00 AM	8.4	8.3	32.4	21.7	2.2	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Ebb	Middle	3.8	10:51:00 AM	8.3	8.3	32.4	21.6	2.3	2.5
WSR37	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	6.6	10:50:00 AM	8.3	8.3	32.3	21.6	2.0	3.0
WSR37	20230105	Cloudy	Moderate	Mid-Ebb	Bottom	6.6	10:50:00 AM	8.3	8.3	32.4	21.7	2.1	3.0
		-											

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:19:00 AM	8.5	8.3	31.5	20.8	2.7	2.5
CE	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:19:00 AM	8.5	8.2	31.5	20.8	2.8	3.0
CE	20230107	Cloudy	Moderate	Mid-Ebb	Middle	10.4	11:18:00 AM	8.5	8.3	31.7	20.7	2.8	2.5
CE	20230107	Cloudy	Moderate	Mid-Ebb	Middle	10.4	11:18:00 AM	8.5	8.3	31.5	20.7	2.8	3.0
CE	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	19.8	11:17:00 AM	8.5	8.3	31.7	20.7	2.9	3.0
CE	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	19.8	11:17:00 AM	8.6	8.3	31.5	20.7	3.1	2.5
CF	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:46:00 PM	9.2	8.2	32.0	20.4	2.5	3.0
CF	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:46:00 PM	9.2	8.3	32.0	20.3	2.6	2.5
CF	20230107	Cloudy	Moderate	Mid-Ebb	Middle	10.2	1:45:00 PM	9.2	8.2	32.2	20.3	2.4	2.5
CF	20230107	Cloudy	Moderate	Mid-Ebb	Middle	10.2	1:45:00 PM	9.2	8.3	32.0	20.4	2.5	2.5
CF	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	19.4	1:44:00 PM	9.2	8.3	32.1	20.4	2.7	2.5
CF	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	19.4	1:44:00 PM	9.2	8.2	32.0	20.3	2.7	2.5
WSR01	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:24:00 PM	8.6	8.2	31.5	20.4	2.2	2.5
WSR01	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:24:00 PM	8.6	8.2	31.5	20.4	2.0	2.5
WSR01	20230107	Cloudy	Moderate	Mid-Ebb	Middle	4.6	1:23:00 PM	8.5	8.2	31.4	20.4	2.2	3.0
WSR01	20230107	Cloudy	Moderate	Mid-Ebb	Middle	4.6	1:23:00 PM	8.6	8.2	31.4	20.4	2.3	4.0
WSR01	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	8.1	1:22:00 PM	8.6	8.3	31.5	20.3	2.1	3.0
WSR01	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	8.1	1:22:00 PM	8.6	8.3	31.5	20.3	2.1	2.5
WSR02	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:07:00 PM	8.4	8.3	32.4	20.4	1.9	3.0
WSR02	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:07:00 PM	8.4	8.2	32.5	20.4	1.9	2.5
WSR02	20230107	Cloudy	Moderate	Mid-Ebb	Middle	4.8	1:06:00 PM	8.3	8.3	32.4	20.5	2.1	11.0
WSR02	20230107	Cloudy	Moderate	Mid-Ebb	Middle	4.8	1:06:00 PM	8.4	8.3	32.3	20.4	2.4	8.0
WSR02	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	8.6	1:05:00 PM	8.5	8.3	32.5	20.3	2.1	3.0
WSR02	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	8.6	1:05:00 PM	8.4	8.3	32.4	20.3	2.2	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:53:00 PM	9.0	8.3	31.5	20.1	2.3	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:53:00 PM	9.0	8.3	31.7	20.1	2.1	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Ebb	Middle	4.1	12:52:00 PM	9.0	8.3	31.7	20.1	1.9	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Ebb	Middle	4.1	12:52:00 PM	9.0	8.3	31.5	20.1	2.2	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	7.1	12:51:00 PM	9.0	8.3	31.6	20.1	2.1	2.5
WSR03	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	7.1	12:51:00 PM	9.0	8.3	31.5	20.2	1.9	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:41:00 PM	9.2	8.3	31.8	20.3	2.4	2.5
WSR04	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:41:00 PM	9.2	8.3	31.8	20.2	2.4	2.5
WSR04	20230107	Cloudy	Moderate	Mid-Ebb	Middle	3.7	12:40:00 PM	9.1	8.2	31.7	20.3	2.2	2.5
WSR04	20230107	Cloudy	Moderate	Mid-Ebb	Middle	3.7	12:40:00 PM	9.2	8.3	31.9	20.2	2.3	2.5
WSR04	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	12:39:00 PM	9.2	8.3	31.7	20.2	2.1	2.5
WSR04	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	12:39:00 PM	9.1	8.3	31.8	20.2	2.3	2.5
WSR16	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:41:00 AM	8.8	8.2	32.0	20.9	2.4	2.5
WSR16	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:41:00 AM	8.9	8.3	32.1	20.9	2.3	2.5
WSR16	20230107	Cloudy	Moderate	Mid-Ebb	Middle	8.0	11:40:00 AM	8.8	8.3	32.1	20.9	2.4	3.0
WSR16	20230107	Cloudy	Moderate	Mid-Ebb	Middle	8.0	11:40:00 AM	8.9	8.2	32.2	20.8	2.4	2.5
WSR16	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	15.0	11:39:00 AM	8.8	8.2	32.1	20.9	2.3	2.5
WSR16	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	15.0	11:39:00 AM	8.8	8.2	32.0	20.9	2.3	2.5
WSR33	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:28:00 PM	8.8	8.2	32.3	20.1	2.3	2.5
WSR33	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:28:00 PM	8.8	8.3	32.3	20.2	2.3	2.5
WSR33	20230107	Cloudy	Moderate	Mid-Ebb	Middle	3.8	12:27:00 PM	8.9	8.2	32.3	20.1	2.3	2.5
WSR33	20230107	Cloudy	Moderate	Mid-Ebb	Middle	3.8	12:27:00 PM	8.9	8.3	32.3	20.2	2.4	2.5
WSR33	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	6.6	12:26:00 PM	8.8	8.3	32.2	20.2	2.3	3.0
WSR33	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	6.6	12:26:00 PM	8.8	8.3	32.1	20.1	2.5	5.0
WSR36	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:15:00 PM	8.4	8.4	32.2	20.9	2.4	2.5
WSR36	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:15:00 PM	8.4	8.3	32.1	20.8	2.5	2.5
WSR36	20230107	Cloudy	Moderate	Mid-Ebb	Middle	3.5	12:15:00 PM	8.4	8.3	32.1	20.7	2.2	2.5
WSR36	20230107	Cloudy	Moderate	Mid-Ebb	Middle	3.5	12:15:00 PM	8.4	8.3	32.1	20.8	2.3	2.5
WSR36	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	5.9	12:14:00 PM	8.4	8.3	32.1	20.9	2.4	2.5
WSR36	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	5.9	12:14:00 PM	8.4	8.3	32.1	20.8	2.2	2.5
WSR37	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:02:00 PM	8.4	8.2	32.7	20.9	2.2	2.5
WSR37	20230107	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:02:00 PM	8.4	8.3	32.5	20.9	2.4	2.5
WSR37	20230107	Cloudy	Moderate	Mid-Ebb	Middle	4.1	12:01:00 PM	8.4	8.3	32.7	20.8	2.1	2.5
WSR37	20230107	Cloudy	Moderate	Mid-Ebb	Middle	4.1	12:01:00 PM	8.5	8.2	32.7	20.9	2.3	2.5
WSR37	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	7.1	12:00:00 PM	8.4	8.2	32.5	20.9	2.1	2.5
WSR37	20230107	Cloudy	Moderate	Mid-Ebb	Bottom	7.1	12:00:00 PM	8.4	8.2	32.6	20.8	2.4	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:56:00 PM	9.1	8.3	30.9	21.7	3.3	2.5
CE	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:56:00 PM	9.2	8.3	30.8	21.7	3.4	4.0
CE	20230110	Cloudy	Moderate	Mid-Ebb	Middle	12.0	12:55:00 PM	9.2	8.3	30.8	21.7	3.1	3.0
CE	20230110	Cloudy	Moderate	Mid-Ebb	Middle	12.0	12:55:00 PM	9.2	8.3	30.9	21.8	3.5	3.0
CE	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	22.9	12:54:00 PM	9.1	8.3	31.0	21.6	3.4	5.0
CE	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	22.9	12:54:00 PM	9.2	8.3	31.0	21.8	3.4	3.0
CF	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:27:00 PM	8.9	8.3	31.4	21.3	2.7	3.0
CF	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:27:00 PM	8.9	8.3	31.4	21.4	2.6	3.0
CF	20230110	Cloudy	Moderate	Mid-Ebb	Middle	10.0	3:26:00 PM	8.9	8.3	31.4	21.5	2.8	3.0
CF	20230110	Cloudy	Moderate	Mid-Ebb	Middle	10.0	3:26:00 PM	8.9	8.3	31.2	21.3	2.6	2.5
CF	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	18.9	3:25:00 PM	8.8	8.3	31.2	21.4	2.8	3.0
CF	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	18.9	3:25:00 PM	8.7	8.3	31.3	21.5	2.7	3.0
WSR01	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:05:00 PM	9.2	8.2	30.8	21.8	2.3	5.0
WSR01	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:05:00 PM	9.2	8.3	30.9	21.8	2.5	4.0
WSR01	20230110	Cloudy	Moderate	Mid-Ebb	Middle	4.6	3:04:00 PM	9.3	8.2	30.8	21.7	2.6	3.0
WSR01	20230110	Cloudy	Moderate	Mid-Ebb	Middle	4.6	3:04:00 PM	9.3	8.2	30.8	21.7	2.5	3.0
WSR01	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	8.2	3:03:00 PM	9.3	8.2	30.8	21.7	2.3	4.0
WSR01	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	8.2	3:03:00 PM	9.2	8.3	30.8	21.8	2.0	3.0
WSR02	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:47:00 PM	9.1	8.3	30.9	21.4	2.0	4.0
WSR02	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:47:00 PM	9.1	8.4	31.0	21.3	2.1	3.0
WSR02	20230110	Cloudy	Moderate	Mid-Ebb	Middle	4.8	2:46:00 PM	9.0	8.3	31.1	21.3	2.0	4.0
WSR02	20230110	Cloudy	Moderate	Mid-Ebb	Middle	4.8	2:46:00 PM	9.1	8.4	31.0	21.3	1.9	8.0
WSR02	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	8.5	2:45:00 PM	9.0	8.3	31.0	21.3	1.9	5.0
WSR02	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	8.5	2:45:00 PM	9.1	8.4	31.1	21.4	2.2	5.0
WSR03	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:31:00 PM	8.7	8.2	31.5	21.7	2.0	5.0
WSR03	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:31:00 PM	8.6	8.2	31.6	21.8	2.1	8.0
WSR03	20230110	Cloudy	Moderate	Mid-Ebb	Middle	4.2	2:30:00 PM	8.6	8.2	31.4	21.6	2.2	2.5
WSR03	20230110	Cloudy	Moderate	Mid-Ebb	Middle	4.2	2:30:00 PM	8.7	8.2	31.5	21.7	2.6	4.0
WSR03	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	7.3	2:29:00 PM	8.6	8.3	31.5	21.8	1.9	3.0
WSR03	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	7.3	2:29:00 PM	8.6	8.3	31.5	21.8	2.0	5.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:19:00 PM	8.9	8.2	31.5	21.2	2.6	3.0
WSR04	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:19:00 PM	8.7	8.2	31.5	21.3	2.3	4.0
WSR04	20230110	Cloudy	Moderate	Mid-Ebb	Middle	3.5	2:18:00 PM	8.8	8.2	31.6	21.3	2.5	5.0
WSR04	20230110	Cloudy	Moderate	Mid-Ebb	Middle	3.5	2:18:00 PM	8.8	8.2	31.7	21.2	2.6	5.0
WSR04	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	5.9	2:17:00 PM	8.8	8.2	31.7	21.2	1.6	3.0
WSR04	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	5.9	2:17:00 PM	8.8	8.2	31.6	21.2	1.6	6.0
WSR16	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:18:00 PM	8.8	8.2	31.8	21.2	2.4	8.0
WSR16	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:18:00 PM	9.0	8.2	31.7	21.1	2.4	5.0
WSR16	20230110	Cloudy	Moderate	Mid-Ebb	Middle	8.0	1:17:00 PM	8.8	8.3	32.0	21.3	2.5	4.0
WSR16	20230110	Cloudy	Moderate	Mid-Ebb	Middle	8.0	1:17:00 PM	8.9	8.2	31.7	21.3	2.5	4.0
WSR16	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	15.0	1:16:00 PM	8.8	8.3	31.9	21.1	1.8	4.0
WSR16	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	15.0	1:16:00 PM	8.8	8.3	31.7	21.1	2.1	4.0
WSR33	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:05:00 PM	9.2	8.2	31.6	21.4	2.1	4.0
WSR33	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:05:00 PM	9.1	8.3	31.7	21.4	2.6	5.0
WSR33	20230110	Cloudy	Moderate	Mid-Ebb	Middle	3.7	2:04:00 PM	9.1	8.2	31.6	21.5	2.6	6.0
WSR33	20230110	Cloudy	Moderate	Mid-Ebb	Middle	3.7	2:04:00 PM	9.1	8.2	31.6	21.5	2.5	5.0
WSR33	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	6.3	2:03:00 PM	9.1	8.2	31.7	21.5	2.4	4.0
WSR33	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	6.3	2:03:00 PM	9.1	8.3	31.6	21.6	2.1	6.0
WSR36	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:51:00 PM	8.7	8.4	30.9	21.3	2.3	5.0
WSR36	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:51:00 PM	8.6	8.4	31.0	21.2	2.6	6.0
WSR36	20230110	Cloudy	Moderate	Mid-Ebb	Middle	3.1	1:51:00 PM	8.7	8.4	30.9	21.2	2.5	4.0
WSR36	20230110	Cloudy	Moderate	Mid-Ebb	Middle	3.1	1:51:00 PM	8.7	8.4	31.0	21.1	2.2	4.0
WSR36	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	5.1	1:50:00 PM	8.6	8.4	31.1	21.2	2.1	3.0
WSR36	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	5.1	1:50:00 PM	8.6	8.4	31.1	21.3	1.9	5.0
WSR37	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:39:00 PM	9.0	8.3	31.2	21.6	2.0	3.0
WSR37	20230110	Cloudy	Moderate	Mid-Ebb	Surface	1.0	1:39:00 PM	9.0	8.3	31.1	21.7	2.3	3.0
WSR37	20230110	Cloudy	Moderate	Mid-Ebb	Middle	4.0	1:38:00 PM	8.9	8.3	31.0	21.6	2.1	4.0
WSR37	20230110	Cloudy	Moderate	Mid-Ebb	Middle	4.0	1:38:00 PM	8.9	8.4	31.1	21.6	2.5	3.0
WSR37	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	6.9	1:37:00 PM	9.0	8.3	31.0	21.5	1.8	3.0
WSR37	20230110	Cloudy	Moderate	Mid-Ebb	Bottom	6.9	1:37:00 PM	9.0	8.3	31.1	21.7	2.1	3.0

CE   20230112   Cloudy   Moderate   Mid-Ebb   Surface   1.0   2:10:00 PM   9.2   8.3   31.8   20.9   2.7   2.5	Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE         20230112         Cloudy         Moderate         Mid-Ebb         Middle         10.7         2.09:00 PM         9.3         8.3         31.9         20.8         2.8         2.5           CE         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         20.4         2:09:00 PM         9.3         8.3         31.8         2.09         3.0         2.5           CE         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         20.4         2:08:00 PM         9.4         8.2         31.9         2.09         3.0         2.5           CE         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:40:00 PM         8.4         8.3         31.7         21.2         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Mid-Ebb         Midelb         10.3         4:39:00 PM         8.3         8.3         31.5         21.1         2.4         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.1 <td>CE</td> <td>20230112</td> <td>Cloudy</td> <td>Moderate</td> <td>Mid-Ebb</td> <td>Surface</td> <td>1.0</td> <td>2:10:00 PM</td> <td>9.2</td> <td>8.3</td> <td>31.8</td> <td>20.9</td> <td>2.7</td> <td>2.5</td>	CE	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:10:00 PM	9.2	8.3	31.8	20.9	2.7	2.5
CE         20230112         Cloudy         Moderate         Mid-Ebb         Middle         1.07         2.09:00 PM         9.3         8.3         31.8         20.9         3.0         2.5           CE         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         20.4         2:08:00 PM         9.4         8.2         31.9         20.9         3.0         2.5           CE         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         20.4         2:08:00 PM         9.2         8.3         31.8         20.9         3.0         4.0           CF         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:40:00 PM         8.4         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Briddle         10.3         4:39:00 PM         8.3         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.1         2.6         3.0	CE	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:10:00 PM	9.4	8.3	32.0	20.9	2.8	2.5
CE         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         20.4         2:08:00 PM         9.4         8.2         31.9         20.9         3.0         2.5           CE         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:40:00 PM         8.4         8.3         31.8         20.9         3.0         4.0           CF         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:40:00 PM         8.4         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Middle         10.3         4:39:00 PM         8.3         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.2         31.5         21.1         2.6         5.0	CE	20230112	Cloudy	Moderate	Mid-Ebb	Middle	10.7	2:09:00 PM	9.3	8.3	31.9	20.8	2.8	2.5
CE         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         20.4         2.08:00 PM         9.2         8.3         31.8         20.9         3.0         4.0           CF         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         44:0:00 PM         8.4         8.3         31.7         21.2         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Mid-Bbb         Mid-Bbb         Mid-Bbb         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Middle         10.3         4:39:00 PM         8.3         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.1         2.6         5.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.1         21.2         2.1         7.0	CE	20230112	Cloudy	Moderate	Mid-Ebb	Middle	10.7	2:09:00 PM	9.3	8.3	31.8	20.9	3.0	2.5
CF         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:40:00 PM         8.4         8.3         31.7         21.2         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:40:00 PM         8.4         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Middle         10.3         4:39:00 PM         8.3         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.2         2.6         3.0           CF         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.1         21.2         2.6         5.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.1         21.2         2.1         7.0	CE	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	20.4	2:08:00 PM	9.4	8.2	31.9	20.9	3.0	2.5
CF         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:40:00 PM         8.4         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Middle         10.3         4:39:00 PM         8.3         8.3         31.5         21.1         2.4         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.1         2.6         3.0           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.1         2.6         5.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.1         21.2         2.6         5.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.2         21.1         2.4         4.0 </td <td>CE</td> <td>20230112</td> <td>Cloudy</td> <td>Moderate</td> <td>Mid-Ebb</td> <td>Bottom</td> <td>20.4</td> <td>2:08:00 PM</td> <td>9.2</td> <td>8.3</td> <td>31.8</td> <td>20.9</td> <td>3.0</td> <td>4.0</td>	CE	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	20.4	2:08:00 PM	9.2	8.3	31.8	20.9	3.0	4.0
CF         20230112         Cloudy         Moderate         Mid-Ebb         Middle         10.3         4:39:00 PM         8.3         8.3         31.5         21.1         2.4         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.2         2.6         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.1         21.2         2.1         7.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Middle         4.6         4:16:00 PM         9.2         8.3         32.1         21.2         2.3         4.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.1         21.1         2.4         4.0<	CF	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:40:00 PM	8.4	8.3	31.7	21.2	2.5	2.5
CF         20230112         Cloudy         Moderate         Mid-Ebb         Middle         10.3         4:39:00 PM         8.3         8.3         31.7         21.1         2.5         2.5           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.2         2.6         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.1         21.2         2.1         7.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.2         21.1         2.4         4.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Middle         4.6         4:16:00 PM         9.2         8.3         32.2         21.1         2.2         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.2         21.1         2.3         3	CF	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:40:00 PM	8.4	8.3	31.5	21.1	2.5	2.5
CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.3         31.5         21.2         2.6         3.0           CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.2         31.5         21.1         2.6         5.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.1         21.2         2.1         7.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.1         21.1         2.4         4.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Midlelb         4.6         4:16:00 PM         9.2         8.3         32.1         21.1         2.2         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.2         21.1         2.3	CF	20230112	Cloudy	Moderate	Mid-Ebb	Middle	10.3	4:39:00 PM	8.3	8.3	31.5	21.1	2.4	2.5
CF         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         19.5         4:38:00 PM         8.4         8.2         31.5         21.1         2.6         5.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.1         21.2         2.1         7.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.2         21.1         2.4         4.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Middle         4.6         4:16:00 PM         9.2         8.3         32.1         21.1         2.2         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.3         21.1         2.2         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.2         21.1         2.4 <th< td=""><td>CF</td><td>20230112</td><td>Cloudy</td><td>Moderate</td><td>Mid-Ebb</td><td>Middle</td><td>10.3</td><td>4:39:00 PM</td><td>8.3</td><td>8.3</td><td>31.7</td><td>21.1</td><td>2.5</td><td>2.5</td></th<>	CF	20230112	Cloudy	Moderate	Mid-Ebb	Middle	10.3	4:39:00 PM	8.3	8.3	31.7	21.1	2.5	2.5
WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.2         8.3         32.1         21.2         2.1         7.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.3         8.3         32.2         21.1         2.4         4.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Middle         4.6         4:16:00 PM         9.2         8.3         32.1         21.1         2.2         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.1         21.1         2.2         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.2         21.1         2.3         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.4         8.2         32.3         21.1         2.3	CF	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	19.5	4:38:00 PM	8.4	8.3	31.5	21.2	2.6	3.0
WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         4:17:00 PM         9.3         8.3         32.2         21.1         2.4         4.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Middle         4.6         4:16:00 PM         9.2         8.3         32.3         21.2         2.3         4.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.1         21.1         2.2         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.2         21.1         2.3         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.4         8.2         32.3         21.1         2.4         4.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.5         8.2         32.3         21.1         2.4	CF	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	19.5	4:38:00 PM	8.4	8.2	31.5	21.1	2.6	5.0
WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Middle         4.6         4:16:00 PM         9.2         8.3         32.3         21.2         2.3         4.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Middle         4.6         4:16:00 PM         9.2         8.3         32.1         21.1         2.2         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.3         8.3         32.2         21.1         2.3         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.4         8.2         32.3         21.1         2.3         2.5           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.5         8.2         32.3         21.1         2.1         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Midle         5.0         3:58:00 PM         8.5         8.2         32.2         21.1         2.4 <t< td=""><td>WSR01</td><td>20230112</td><td>Cloudy</td><td>Moderate</td><td>Mid-Ebb</td><td>Surface</td><td>1.0</td><td>4:17:00 PM</td><td>9.2</td><td>8.3</td><td>32.1</td><td>21.2</td><td>2.1</td><td>7.0</td></t<>	WSR01	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:17:00 PM	9.2	8.3	32.1	21.2	2.1	7.0
WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Middle         4.6         4:16:00 PM         9.2         8.3         32.1         21.1         2.2         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.3         8.3         32.3         21.1         2.3         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.2         21.1         2.4         4.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.4         8.2         32.3         21.1         2.3         2.5           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Middle         5.0         3:58:00 PM         8.5         8.2         32.3         21.1         2.1         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Midle         5.0         3:58:00 PM         8.3         8.2         32.2         21.1         2.4 <td< td=""><td>WSR01</td><td>20230112</td><td>Cloudy</td><td>Moderate</td><td>Mid-Ebb</td><td>Surface</td><td>1.0</td><td>4:17:00 PM</td><td>9.3</td><td>8.3</td><td>32.2</td><td>21.1</td><td>2.4</td><td>4.0</td></td<>	WSR01	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:17:00 PM	9.3	8.3	32.2	21.1	2.4	4.0
WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.3         8.3         32.3         21.1         2.3         3.0           WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.2         21.1         2.4         4.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.4         8.2         32.3         21.1         2.3         2.5           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.5         8.2         32.3         21.1         2.1         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Middle         5.0         3:58:00 PM         8.5         8.2         32.3         21.1         2.4         5.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.4         8.2         32.1         21.1         2.1         <	WSR01	20230112	Cloudy	Moderate	Mid-Ebb	Middle	4.6	4:16:00 PM	9.2	8.3	32.3	21.2	2.3	4.0
WSR01         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.2         4:15:00 PM         9.2         8.3         32.2         21.1         2.4         4.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.4         8.2         32.3         21.1         2.3         2.5           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Midle         5.0         3:58:00 PM         8.5         8.2         32.3         21.1         2.1         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Midle         5.0         3:58:00 PM         8.5         8.2         32.3         21.2         2.2         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.4         8.2         32.1         21.1         2.4         5.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.4         8.2         32.3         21.1         1.8	WSR01	20230112	Cloudy	Moderate	Mid-Ebb	Middle	4.6	4:16:00 PM	9.2	8.3	32.1	21.1	2.2	3.0
WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.4         8.2         32.3         21.1         2.3         2.5           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.5         8.2         32.3         21.1         2.1         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Midle         5.0         3:58:00 PM         8.5         8.2         32.3         21.2         2.2         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Midle         5.0         3:58:00 PM         8.3         8.2         32.2         21.1         2.4         5.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.4         8.2         32.1         21.1         2.1         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.3         8.2         32.3         21.1         2.4 <t< td=""><td>WSR01</td><td>20230112</td><td>Cloudy</td><td>Moderate</td><td>Mid-Ebb</td><td>Bottom</td><td>8.2</td><td>4:15:00 PM</td><td>9.3</td><td>8.3</td><td>32.3</td><td>21.1</td><td>2.3</td><td>3.0</td></t<>	WSR01	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	8.2	4:15:00 PM	9.3	8.3	32.3	21.1	2.3	3.0
WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:59:00 PM         8.5         8.2         32.3         21.1         2.1         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Middle         5.0         3:58:00 PM         8.5         8.2         32.3         21.2         2.2         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.4         8.2         32.1         21.1         2.4         5.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.4         8.2         32.1         21.1         2.1         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.3         8.2         32.3         21.1         1.8         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.4         8.3         32.2         21.0         2.2	WSR01	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	8.2	4:15:00 PM	9.2	8.3	32.2	21.1	2.4	4.0
WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Middle         5.0         3:58:00 PM         8.5         8.2         32.3         21.2         2.2         3.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Middle         5.0         3:58:00 PM         8.3         8.2         32.2         21.1         2.4         5.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.4         8.2         32.1         21.1         2.1         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.3         8.2         32.3         21.1         2.4         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.3         8.2         32.3         21.1         2.4         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Midle         3.7         3:42:00 PM         8.3         8.2         32.2         21.1         2.0 <t< td=""><td>WSR02</td><td>20230112</td><td>Cloudy</td><td>Moderate</td><td>Mid-Ebb</td><td>Surface</td><td>1.0</td><td>3:59:00 PM</td><td>8.4</td><td>8.2</td><td>32.3</td><td>21.1</td><td>2.3</td><td>2.5</td></t<>	WSR02	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:59:00 PM	8.4	8.2	32.3	21.1	2.3	2.5
WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Middle         5.0         3:58:00 PM         8.3         8.2         32.2         21.1         2.4         5.0           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.4         8.2         32.1         21.1         2.1         2.5           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.3         8.2         32.3         21.1         1.8         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.3         8.2         32.3         21.1         2.4         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.4         8.3         32.2         21.0         2.2         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Middle         3.7         3:42:00 PM         8.3         8.2         32.2         21.1         2.0         <	WSR02	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:59:00 PM	8.5	8.2	32.3	21.1	2.1	3.0
WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.4         8.2         32.1         21.1         2.1         2.5           WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.3         8.2         32.3         21.1         1.8         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.3         8.2         32.3         21.1         2.4         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.4         8.3         32.2         21.0         2.2         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Middle         3.7         3:42:00 PM         8.3         8.2         32.2         21.1         2.0         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Middle         3.7         3:42:00 PM         8.3         8.3         32.3         21.1         2.1         <	WSR02	20230112	Cloudy	Moderate	Mid-Ebb	Middle	5.0	3:58:00 PM	8.5	8.2	32.3	21.2	2.2	3.0
WSR02         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         8.9         3:57:00 PM         8.3         8.2         32.3         21.1         1.8         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.3         8.2         32.3         21.1         2.4         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.4         8.3         32.2         21.0         2.2         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Middle         3.7         3:42:00 PM         8.3         8.2         32.2         21.1         2.0         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Middle         3.7         3:42:00 PM         8.3         8.3         32.3         21.1         2.1         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         6.4         3:41:00 PM         8.3         8.2         32.3         21.0         2.0         <	WSR02	20230112	Cloudy	Moderate	Mid-Ebb	Middle	5.0	3:58:00 PM	8.3	8.2	32.2	21.1	2.4	5.0
WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.3         8.2         32.3         21.1         2.4         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.4         8.3         32.2         21.0         2.2         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Middle         3.7         3:42:00 PM         8.3         8.2         32.2         21.1         2.0         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Middle         3.7         3:42:00 PM         8.3         8.3         32.3         21.1         2.1         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         6.4         3:41:00 PM         8.3         8.2         32.3         21.0         2.0         3.0	WSR02	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	8.9	3:57:00 PM	8.4	8.2	32.1	21.1	2.1	2.5
WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Surface         1.0         3:43:00 PM         8.4         8.3         32.2         21.0         2.2         2.5           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Middle         3.7         3:42:00 PM         8.3         8.2         32.2         21.1         2.0         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Middle         3.7         3:42:00 PM         8.3         8.3         32.3         21.1         2.1         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         6.4         3:41:00 PM         8.3         8.2         32.3         21.0         2.0         3.0	WSR02	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	8.9	3:57:00 PM	8.3	8.2	32.3	21.1	1.8	2.5
WSR03       20230112       Cloudy       Moderate       Mid-Ebb       Middle       3.7       3:42:00 PM       8.3       8.2       32.2       21.1       2.0       3.0         WSR03       20230112       Cloudy       Moderate       Mid-Ebb       Middle       3.7       3:42:00 PM       8.3       8.3       32.3       21.1       2.1       3.0         WSR03       20230112       Cloudy       Moderate       Mid-Ebb       Bottom       6.4       3:41:00 PM       8.3       8.2       32.3       21.0       2.0       3.0	WSR03	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:43:00 PM	8.3	8.2	32.3	21.1	2.4	3.0
WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Middle         3.7         3:42:00 PM         8.3         8.3         32.3         21.1         2.1         3.0           WSR03         20230112         Cloudy         Moderate         Mid-Ebb         Bottom         6.4         3:41:00 PM         8.3         8.2         32.3         21.0         2.0         3.0	WSR03	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:43:00 PM	8.4	8.3	32.2	21.0	2.2	2.5
WSR03 20230112 Cloudy Moderate Mid-Ebb Bottom 6.4 3:41:00 PM 8.3 8.2 32.3 21.0 2.0 3.0	WSR03	20230112	Cloudy	Moderate	Mid-Ebb	Middle	3.7	3:42:00 PM	8.3	8.2	32.2	21.1	2.0	3.0
·	WSR03	20230112	Cloudy	Moderate	Mid-Ebb	Middle	3.7	3:42:00 PM	8.3	8.3	32.3	21.1	2.1	3.0
WSR03 20230112 Cloudy Moderate Mid-Ebb Bottom 6.4 3:41:00 PM 8.3 8.2 32.4 21.0 2.2 5.0	WSR03	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	3:41:00 PM	8.3	8.2	32.3	21.0	2.0	3.0
	WSR03	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	3:41:00 PM	8.3	8.2	32.4	21.0	2.2	5.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:32:00 PM	9.3	8.3	31.3	21.1	2.0	4.0
WSR04	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:32:00 PM	9.2	8.3	31.3	21.2	2.2	2.5
WSR04	20230112	Cloudy	Moderate	Mid-Ebb	Middle	3.4	3:31:00 PM	9.3	8.2	31.3	21.2	2.1	7.0
WSR04	20230112	Cloudy	Moderate	Mid-Ebb	Middle	3.4	3:31:00 PM	9.3	8.3	31.4	21.2	2.1	7.0
WSR04	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	5.7	3:30:00 PM	9.2	8.3	31.3	21.2	1.8	3.0
WSR04	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	5.7	3:30:00 PM	9.2	8.3	31.2	21.2	1.8	2.5
WSR16	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:32:00 PM	8.9	8.3	32.3	21.0	2.4	4.0
WSR16	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:32:00 PM	8.7	8.2	32.5	21.0	2.3	5.0
WSR16	20230112	Cloudy	Moderate	Mid-Ebb	Middle	8.3	2:31:00 PM	8.8	8.2	32.4	21.1	2.3	5.0
WSR16	20230112	Cloudy	Moderate	Mid-Ebb	Middle	8.3	2:31:00 PM	8.8	8.2	32.5	21.0	2.5	8.0
WSR16	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	15.5	2:30:00 PM	8.8	8.3	32.6	21.1	2.2	5.0
WSR16	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	15.5	2:30:00 PM	8.9	8.2	32.4	21.1	2.3	3.0
WSR33	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:18:00 PM	8.8	8.3	32.4	20.7	2.3	2.5
WSR33	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:18:00 PM	8.8	8.2	32.2	20.7	2.3	2.5
WSR33	20230112	Cloudy	Moderate	Mid-Ebb	Middle	3.8	3:17:00 PM	8.6	8.2	32.2	20.6	2.3	2.5
WSR33	20230112	Cloudy	Moderate	Mid-Ebb	Middle	3.8	3:17:00 PM	8.7	8.2	32.2	20.7	2.4	2.5
WSR33	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	6.5	3:16:00 PM	8.8	8.2	32.3	20.7	2.4	3.0
WSR33	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	6.5	3:16:00 PM	8.6	8.2	32.2	20.7	2.4	2.5
WSR36	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:05:00 PM	9.1	8.2	32.1	20.7	1.8	2.5
WSR36	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:05:00 PM	9.2	8.2	32.1	20.7	2.2	2.5
WSR36	20230112	Cloudy	Moderate	Mid-Ebb	Middle	3.7	3:05:00 PM	9.2	8.3	32.1	20.8	2.0	2.5
WSR36	20230112	Cloudy	Moderate	Mid-Ebb	Middle	3.7	3:05:00 PM	9.2	8.2	32.0	20.8	2.1	2.5
WSR36	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	3:04:00 PM	9.2	8.2	32.1	20.8	1.8	3.0
WSR36	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	3:04:00 PM	9.1	8.2	32.0	20.8	1.9	2.5
WSR37	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:52:00 PM	9.1	8.3	32.0	21.0	2.2	3.0
WSR37	20230112	Cloudy	Moderate	Mid-Ebb	Surface	1.0	2:52:00 PM	9.2	8.2	32.1	21.0	2.3	2.5
WSR37	20230112	Cloudy	Moderate	Mid-Ebb	Middle	4.0	2:51:00 PM	9.1	8.3	32.0	21.0	2.1	2.5
WSR37	20230112	Cloudy	Moderate	Mid-Ebb	Middle	4.0	2:51:00 PM	9.0	8.3	32.0	21.0	2.1	2.5
WSR37	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	7.0	2:50:00 PM	9.1	8.3	31.9	21.0	2.3	2.5
WSR37	20230112	Cloudy	Moderate	Mid-Ebb	Bottom	7.0	2:50:00 PM	9.0	8.3	31.9	21.1	2.4	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:45:00 PM	9.3	8.1	32.6	20.8	3.0	2.5
CE	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	3:45:00 PM	9.2	8.2	32.8	20.9	3.1	3.0
CE	20230114	Cloudy	Moderate	Mid-Ebb	Middle	11.7	3:44:00 PM	9.3	8.1	32.8	20.8	3.2	2.5
CE	20230114	Cloudy	Moderate	Mid-Ebb	Middle	11.7	3:44:00 PM	9.2	8.1	32.8	20.8	2.9	2.5
CE	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	22.3	3:43:00 PM	9.2	8.1	32.7	20.9	3.2	3.0
CE	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	22.3	3:43:00 PM	9.2	8.1	32.6	20.9	3.4	3.0
CF	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	6:16:00 PM	8.3	8.1	32.1	21.0	2.4	4.0
CF	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	6:16:00 PM	8.3	8.1	32.2	21.1	2.7	2.5
CF	20230114	Cloudy	Moderate	Mid-Ebb	Middle	10.4	6:15:00 PM	8.2	8.1	32.0	21.0	2.7	2.5
CF	20230114	Cloudy	Moderate	Mid-Ebb	Middle	10.4	6:15:00 PM	8.3	8.2	32.0	21.1	2.9	4.0
CF	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	19.7	6:14:00 PM	8.3	8.1	32.2	21.0	3.0	3.0
CF	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	19.7	6:14:00 PM	8.3	8.1	32.1	21.1	2.7	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	5:52:00 PM	8.8	8.2	32.3	20.9	1.9	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	5:52:00 PM	8.8	8.2	32.2	20.9	1.8	3.0
WSR01	20230114	Cloudy	Moderate	Mid-Ebb	Middle	4.6	5:51:00 PM	8.8	8.2	32.4	20.9	1.9	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Ebb	Middle	4.6	5:51:00 PM	8.7	8.2	32.3	21.0	2.0	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	8.2	5:50:00 PM	8.8	8.2	32.1	20.9	2.0	2.5
WSR01	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	8.2	5:50:00 PM	8.8	8.2	32.2	21.0	2.2	2.5
WSR02	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	5:33:00 PM	9.1	8.1	32.5	21.5	2.3	2.5
WSR02	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	5:33:00 PM	9.1	8.2	32.4	21.5	2.4	2.5
WSR02	20230114	Cloudy	Moderate	Mid-Ebb	Middle	4.6	5:32:00 PM	9.1	8.2	32.6	21.4	2.0	4.0
WSR02	20230114	Cloudy	Moderate	Mid-Ebb	Middle	4.6	5:32:00 PM	9.1	8.1	32.5	21.4	2.1	2.5
WSR02	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	8.1	5:31:00 PM	9.1	8.1	32.6	21.4	2.1	3.0
WSR02	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	8.1	5:31:00 PM	9.1	8.1	32.6	21.4	2.1	2.5
WSR03	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	5:17:00 PM	9.0	8.2	32.4	21.1	2.4	2.5
WSR03	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	5:17:00 PM	8.9	8.2	32.4	21.1	2.1	3.0
WSR03	20230114	Cloudy	Moderate	Mid-Ebb	Middle	4.2	5:16:00 PM	9.0	8.1	32.5	21.1	2.3	3.0
WSR03	20230114	Cloudy	Moderate	Mid-Ebb	Middle	4.2	5:16:00 PM	8.9	8.1	32.6	21.1	2.3	3.0
WSR03	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	7.4	5:15:00 PM	9.0	8.1	32.4	21.0	2.2	3.0
WSR03	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	7.4	5:15:00 PM	9.0	8.2	32.4	21.0	1.9	5.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	5:05:00 PM	8.4	8.1	33.0	20.7	2.2	4.0
WSR04	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	5:05:00 PM	8.4	8.1	33.0	20.7	2.1	2.5
WSR04	20230114	Cloudy	Moderate	Mid-Ebb	Middle	3.5	5:04:00 PM	8.5	8.1	33.2	20.7	2.2	3.0
WSR04	20230114	Cloudy	Moderate	Mid-Ebb	Middle	3.5	5:04:00 PM	8.4	8.0	33.2	20.7	2.3	5.0
WSR04	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	5.9	5:03:00 PM	8.4	8.0	33.1	20.6	2.2	2.5
WSR04	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	5.9	5:03:00 PM	8.4	8.1	33.1	20.7	2.3	3.0
WSR16	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:08:00 PM	8.4	8.1	32.2	21.0	2.0	3.0
WSR16	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:08:00 PM	8.4	8.1	32.3	20.9	2.2	2.5
WSR16	20230114	Cloudy	Moderate	Mid-Ebb	Middle	7.6	4:07:00 PM	8.4	8.2	32.3	21.0	2.0	3.0
WSR16	20230114	Cloudy	Moderate	Mid-Ebb	Middle	7.6	4:07:00 PM	8.3	8.2	32.4	20.9	1.9	4.0
WSR16	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	14.1	4:06:00 PM	8.4	8.1	32.3	21.0	2.0	3.0
WSR16	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	14.1	4:06:00 PM	8.3	8.2	32.3	20.9	2.0	2.5
WSR33	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:53:00 PM	8.9	8.2	32.4	20.9	2.0	2.5
WSR33	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:53:00 PM	8.9	8.2	32.4	20.9	2.4	3.0
WSR33	20230114	Cloudy	Moderate	Mid-Ebb	Middle	3.7	4:52:00 PM	8.9	8.2	32.4	20.8	1.9	5.0
WSR33	20230114	Cloudy	Moderate	Mid-Ebb	Middle	3.7	4:52:00 PM	8.8	8.2	32.4	20.9	2.2	4.0
WSR33	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	6.3	4:51:00 PM	8.9	8.2	32.5	20.9	1.8	4.0
WSR33	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	6.3	4:51:00 PM	8.8	8.2	32.4	20.9	1.8	3.0
WSR36	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:41:00 PM	9.2	8.2	33.0	20.8	1.8	4.0
WSR36	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:41:00 PM	9.3	8.1	33.0	20.9	2.0	3.0
WSR36	20230114	Cloudy	Moderate	Mid-Ebb	Middle	3.4	4:41:00 PM	9.2	8.1	33.2	20.8	1.8	4.0
WSR36	20230114	Cloudy	Moderate	Mid-Ebb	Middle	3.4	4:41:00 PM	9.2	8.1	33.0	20.8	1.8	4.0
WSR36	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	5.8	4:40:00 PM	9.2	8.1	33.2	20.7	1.9	3.0
WSR36	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	5.8	4:40:00 PM	9.3	8.2	33.2	20.8	2.1	4.0
WSR37	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:29:00 PM	9.2	8.1	32.4	20.7	2.1	2.5
WSR37	20230114	Cloudy	Moderate	Mid-Ebb	Surface	1.0	4:29:00 PM	9.3	8.1	32.2	20.8	1.9	2.5
WSR37	20230114	Cloudy	Moderate	Mid-Ebb	Middle	3.9	4:28:00 PM	9.2	8.1	32.5	20.7	1.9	3.0
WSR37	20230114	Cloudy	Moderate	Mid-Ebb	Middle	3.9	4:28:00 PM	9.2	8.1	32.3	20.7	2.1	3.0
WSR37	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	6.8	4:27:00 PM	9.2	8.1	32.4	20.7	1.7	2.5
WSR37	20230114	Cloudy	Moderate	Mid-Ebb	Bottom	6.8	4:27:00 PM	9.3	8.1	32.3	20.8	2.0	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:02:00 AM	8.5	8.3	32.8	20.4	2.7	3.0
CE	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:02:00 AM	8.5	8.3	32.7	20.5	3.0	4.0
CE	20230117	Cloudy	Moderate	Mid-Ebb	Middle	11.4	8:01:00 AM	8.5	8.3	32.8	20.5	3.0	3.0
CE	20230117	Cloudy	Moderate	Mid-Ebb	Middle	11.4	8:01:00 AM	8.8	8.3	32.7	20.4	3.1	3.0
CE	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	21.8	8:00:00 AM	8.6	8.3	32.6	20.5	3.3	2.5
CE	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	21.8	8:00:00 AM	8.7	8.2	32.6	20.4	3.2	2.5
CF	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:37:00 AM	9.2	8.3	32.6	19.9	2.4	5.0
CF	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:37:00 AM	9.3	8.3	32.5	19.9	2.4	7.0
CF	20230117	Cloudy	Moderate	Mid-Ebb	Middle	10.1	10:36:00 AM	9.5	8.3	32.6	20.0	2.6	4.0
CF	20230117	Cloudy	Moderate	Mid-Ebb	Middle	10.1	10:36:00 AM	9.1	8.2	32.5	20.0	2.5	4.0
CF	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	19.1	10:35:00 AM	9.3	8.3	32.7	20.0	2.5	3.0
CF	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	19.1	10:35:00 AM	9.3	8.3	32.7	20.0	2.5	5.0
WSR01	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:13:00 AM	8.6	8.2	33.0	20.0	2.1	3.0
WSR01	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:13:00 AM	8.4	8.2	33.1	20.1	2.4	3.0
WSR01	20230117	Cloudy	Moderate	Mid-Ebb	Middle	4.3	10:12:00 AM	8.5	8.2	33.0	20.0	2.1	4.0
WSR01	20230117	Cloudy	Moderate	Mid-Ebb	Middle	4.3	10:12:00 AM	8.5	8.2	33.2	20.1	2.2	3.0
WSR01	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	7.6	10:11:00 AM	8.5	8.2	33.1	20.1	2.2	3.0
WSR01	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	7.6	10:11:00 AM	8.6	8.2	33.1	20.1	1.9	4.0
WSR02	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:54:00 AM	9.5	8.2	33.2	20.6	2.0	4.0
WSR02	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:54:00 AM	9.4	8.3	33.1	20.5	1.9	3.0
WSR02	20230117	Cloudy	Moderate	Mid-Ebb	Middle	4.8	9:53:00 AM	9.3	8.2	33.0	20.4	1.9	3.0
WSR02	20230117	Cloudy	Moderate	Mid-Ebb	Middle	4.8	9:53:00 AM	9.4	8.2	33.1	20.6	2.0	4.0
WSR02	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	8.6	9:52:00 AM	9.4	8.2	33.2	20.5	2.4	6.0
WSR02	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	8.6	9:52:00 AM	9.2	8.2	33.1	20.5	2.1	8.0
WSR03	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:39:00 AM	9.2	8.3	32.4	20.0	2.4	3.0
WSR03	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:39:00 AM	9.5	8.3	32.3	19.9	2.3	4.0
WSR03	20230117	Cloudy	Moderate	Mid-Ebb	Middle	4.0	9:38:00 AM	9.5	8.2	32.4	20.0	2.2	6.0
WSR03	20230117	Cloudy	Moderate	Mid-Ebb	Middle	4.0	9:38:00 AM	9.4	8.3	32.2	20.0	2.4	5.0
WSR03	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	7.0	9:37:00 AM	9.4	8.3	32.4	20.0	1.9	6.0
WSR03	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	7.0	9:37:00 AM	9.4	8.3	32.3	20.0	2.0	5.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:27:00 AM	9.1	8.2	32.6	20.0	2.3	2.5
WSR04	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:27:00 AM	9.1	8.2	32.7	20.0	2.4	4.0
WSR04	20230117	Cloudy	Moderate	Mid-Ebb	Middle	3.9	9:26:00 AM	9.0	8.2	32.7	19.9	2.3	3.0
WSR04	20230117	Cloudy	Moderate	Mid-Ebb	Middle	3.9	9:26:00 AM	8.9	8.2	32.8	20.1	2.4	4.0
WSR04	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	6.7	9:25:00 AM	9.0	8.2	32.7	19.9	2.0	4.0
WSR04	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	6.7	9:25:00 AM	8.9	8.2	32.7	20.0	2.3	6.0
WSR16	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:24:00 AM	9.4	8.3	32.7	20.1	2.4	5.0
WSR16	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:24:00 AM	9.5	8.2	32.7	20.0	2.4	6.0
WSR16	20230117	Cloudy	Moderate	Mid-Ebb	Middle	8.3	8:23:00 AM	9.3	8.3	32.9	20.2	2.3	4.0
WSR16	20230117	Cloudy	Moderate	Mid-Ebb	Middle	8.3	8:23:00 AM	9.5	8.3	32.7	20.2	2.1	4.0
WSR16	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	15.5	8:22:00 AM	9.6	8.3	32.7	20.1	2.4	2.5
WSR16	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	15.5	8:22:00 AM	9.5	8.3	32.9	20.2	2.4	2.5
WSR33	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:12:00 AM	9.6	8.3	32.7	19.9	2.1	4.0
WSR33	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	9:12:00 AM	9.3	8.2	32.9	19.9	2.3	2.5
WSR33	20230117	Cloudy	Moderate	Mid-Ebb	Middle	3.7	9:11:00 AM	9.6	8.2	32.8	20.0	2.3	3.0
WSR33	20230117	Cloudy	Moderate	Mid-Ebb	Middle	3.7	9:11:00 AM	9.3	8.2	32.7	20.0	2.3	2.5
WSR33	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	6.3	9:10:00 AM	9.5	8.3	32.9	20.0	2.3	3.0
WSR33	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	6.3	9:10:00 AM	9.6	8.3	32.7	20.0	2.3	2.5
WSR36	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:58:00 AM	9.0	8.2	31.9	20.6	2.3	2.5
WSR36	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:58:00 AM	9.1	8.3	32.1	20.6	2.4	3.0
WSR36	20230117	Cloudy	Moderate	Mid-Ebb	Middle	3.7	8:58:00 AM	9.0	8.3	32.1	20.6	2.2	3.0
WSR36	20230117	Cloudy	Moderate	Mid-Ebb	Middle	3.7	8:58:00 AM	9.0	8.3	31.9	20.7	2.4	2.5
WSR36	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	8:57:00 AM	8.9	8.2	32.0	20.7	2.0	2.5
WSR36	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	8:57:00 AM	9.1	8.3	31.9	20.6	2.2	3.0
WSR37	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:45:00 AM	9.5	8.3	32.1	20.7	2.0	2.5
WSR37	20230117	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:45:00 AM	9.5	8.3	32.1	20.7	2.3	2.5
WSR37	20230117	Cloudy	Moderate	Mid-Ebb	Middle	4.2	8:44:00 AM	9.5	8.2	31.9	20.6	2.3	3.0
WSR37	20230117	Cloudy	Moderate	Mid-Ebb	Middle	4.2	8:44:00 AM	9.6	8.2	32.1	20.6	2.4	2.5
WSR37	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	7.4	8:43:00 AM	9.5	8.3	32.1	20.7	2.2	4.0
WSR37	20230117	Cloudy	Moderate	Mid-Ebb	Bottom	7.4	8:43:00 AM	9.6	8.3	32.0	20.6	2.4	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	9:02:00 AM	9.2	8.2	31.9	22.4	2.6	4.0
CE	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	9:02:00 AM	9.3	8.2	31.9	22.5	2.7	2.5
CE	20230119	Sunny	Moderate	Mid-Ebb	Middle	10.2	9:01:00 AM	9.2	8.2	31.8	22.5	2.8	2.5
CE	20230119	Sunny	Moderate	Mid-Ebb	Middle	10.2	9:01:00 AM	9.2	8.2	31.9	22.5	2.7	2.5
CE	20230119	Sunny	Moderate	Mid-Ebb	Bottom	19.4	9:00:00 AM	9.2	8.2	31.8	22.4	2.9	3.0
CE	20230119	Sunny	Moderate	Mid-Ebb	Bottom	19.4	9:00:00 AM	9.2	8.2	31.9	22.4	3.2	3.0
CF	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	11:42:00 AM	8.9	8.4	32.3	22.4	2.4	2.5
CF	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	11:42:00 AM	9.0	8.3	32.4	22.3	2.4	2.5
CF	20230119	Sunny	Moderate	Mid-Ebb	Middle	9.8	11:41:00 AM	8.9	8.3	32.4	22.2	2.3	2.5
CF	20230119	Sunny	Moderate	Mid-Ebb	Middle	9.8	11:41:00 AM	9.0	8.3	32.4	22.3	2.4	3.0
CF	20230119	Sunny	Moderate	Mid-Ebb	Bottom	18.5	11:40:00 AM	8.9	8.3	32.4	22.4	2.5	2.5
CF	20230119	Sunny	Moderate	Mid-Ebb	Bottom	18.5	11:40:00 AM	9.0	8.3	32.4	22.4	2.6	2.5
WSR01	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	11:19:00 AM	9.0	8.3	32.4	22.4	1.8	2.5
WSR01	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	11:19:00 AM	8.9	8.2	32.3	22.4	2.1	3.0
WSR01	20230119	Sunny	Moderate	Mid-Ebb	Middle	4.2	11:18:00 AM	9.0	8.3	32.3	22.3	2.2	4.0
WSR01	20230119	Sunny	Moderate	Mid-Ebb	Middle	4.2	11:18:00 AM	9.1	8.3	32.4	22.4	2.3	2.5
WSR01	20230119	Sunny	Moderate	Mid-Ebb	Bottom	7.4	11:17:00 AM	9.1	8.2	32.4	22.3	1.9	2.5
WSR01	20230119	Sunny	Moderate	Mid-Ebb	Bottom	7.4	11:17:00 AM	9.0	8.3	32.4	22.4	1.9	4.0
WSR02	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	11:00:00 AM	9.1	8.1	31.9	22.6	1.9	5.0
WSR02	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	11:00:00 AM	9.2	8.2	32.1	22.5	2.2	3.0
WSR02	20230119	Sunny	Moderate	Mid-Ebb	Middle	4.7	10:59:00 AM	9.0	8.1	31.9	22.5	2.0	2.5
WSR02	20230119	Sunny	Moderate	Mid-Ebb	Middle	4.7	10:59:00 AM	9.2	8.2	31.9	22.5	1.8	2.5
WSR02	20230119	Sunny	Moderate	Mid-Ebb	Bottom	8.3	10:58:00 AM	9.0	8.1	32.1	22.5	2.1	3.0
WSR02	20230119	Sunny	Moderate	Mid-Ebb	Bottom	8.3	10:58:00 AM	9.1	8.1	31.9	22.5	2.0	2.5
WSR03	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	10:43:00 AM	8.4	8.1	31.9	22.4	1.9	2.5
WSR03	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	10:43:00 AM	8.3	8.1	31.9	22.3	2.0	2.5
WSR03	20230119	Sunny	Moderate	Mid-Ebb	Middle	3.8	10:42:00 AM	8.3	8.1	31.9	22.3	2.0	4.0
WSR03	20230119	Sunny	Moderate	Mid-Ebb	Middle	3.8	10:42:00 AM	8.3	8.1	32.0	22.2	2.0	7.0
WSR03	20230119	Sunny	Moderate	Mid-Ebb	Bottom	6.5	10:41:00 AM	8.3	8.1	31.9	22.3	2.3	3.0
WSR03	20230119	Sunny	Moderate	Mid-Ebb	Bottom	6.5	10:41:00 AM	8.4	8.1	32.0	22.4	2.0	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	10:31:00 AM	8.6	8.3	32.4	22.3	2.2	3.0
WSR04	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	10:31:00 AM	8.6	8.3	32.3	22.4	1.8	4.0
WSR04	20230119	Sunny	Moderate	Mid-Ebb	Middle	3.4	10:30:00 AM	8.7	8.4	32.4	22.3	2.2	2.5
WSR04	20230119	Sunny	Moderate	Mid-Ebb	Middle	3.4	10:30:00 AM	8.6	8.3	32.4	22.4	2.4	3.0
WSR04	20230119	Sunny	Moderate	Mid-Ebb	Bottom	5.7	10:29:00 AM	8.6	8.3	32.3	22.3	2.2	4.0
WSR04	20230119	Sunny	Moderate	Mid-Ebb	Bottom	5.7	10:29:00 AM	8.7	8.4	32.3	22.3	2.2	6.0
WSR16	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	9:24:00 AM	8.3	8.4	31.6	22.2	2.2	4.0
WSR16	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	9:24:00 AM	8.3	8.4	31.5	22.1	2.1	2.5
WSR16	20230119	Sunny	Moderate	Mid-Ebb	Middle	8.3	9:23:00 AM	8.3	8.3	31.5	22.2	1.9	3.0
WSR16	20230119	Sunny	Moderate	Mid-Ebb	Middle	8.3	9:23:00 AM	8.3	8.4	31.6	22.3	1.9	2.5
WSR16	20230119	Sunny	Moderate	Mid-Ebb	Bottom	15.5	9:22:00 AM	8.2	8.3	31.5	22.1	1.8	5.0
WSR16	20230119	Sunny	Moderate	Mid-Ebb	Bottom	15.5	9:22:00 AM	8.2	8.3	31.6	22.2	1.8	3.0
WSR33	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	10:16:00 AM	8.4	8.2	32.6	22.4	1.6	6.0
WSR33	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	10:16:00 AM	8.4	8.2	32.6	22.5	1.7	4.0
WSR33	20230119	Sunny	Moderate	Mid-Ebb	Middle	3.8	10:15:00 AM	8.3	8.1	32.5	22.5	1.8	12.0
WSR33	20230119	Sunny	Moderate	Mid-Ebb	Middle	3.8	10:15:00 AM	8.4	8.2	32.5	22.5	1.9	8.0
WSR33	20230119	Sunny	Moderate	Mid-Ebb	Bottom	6.6	10:14:00 AM	8.5	8.1	32.5	22.4	1.5	3.0
WSR33	20230119	Sunny	Moderate	Mid-Ebb	Bottom	6.6	10:14:00 AM	8.3	8.1	32.6	22.5	1.7	4.0
WSR36	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	10:01:00 AM	8.5	8.3	32.5	22.3	2.1	11.0
WSR36	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	10:01:00 AM	8.6	8.4	32.6	22.3	1.9	7.0
WSR36	20230119	Sunny	Moderate	Mid-Ebb	Middle	3.6	10:01:00 AM	8.6	8.3	32.6	22.3	2.1	4.0
WSR36	20230119	Sunny	Moderate	Mid-Ebb	Middle	3.6	10:01:00 AM	8.5	8.4	32.6	22.3	2.2	6.0
WSR36	20230119	Sunny	Moderate	Mid-Ebb	Bottom	6.1	10:00:00 AM	8.5	8.4	32.6	22.3	1.9	13.0
WSR36	20230119	Sunny	Moderate	Mid-Ebb	Bottom	6.1	10:00:00 AM	8.5	8.3	32.6	22.3	2.1	12.0
WSR37	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	9:46:00 AM	8.7	8.4	31.6	22.1	2.1	4.0
WSR37	20230119	Sunny	Moderate	Mid-Ebb	Surface	1.0	9:46:00 AM	8.7	8.4	31.6	22.2	2.2	4.0
WSR37	20230119	Sunny	Moderate	Mid-Ebb	Middle	4.3	9:45:00 AM	8.8	8.3	31.6	22.1	2.0	7.0
WSR37	20230119	Sunny	Moderate	Mid-Ebb	Middle	4.3	9:45:00 AM	8.8	8.4	31.5	22.2	2.0	6.0
WSR37	20230119	Sunny	Moderate	Mid-Ebb	Bottom	7.6	9:44:00 AM	8.7	8.4	31.5	22.2	1.8	4.0
WSR37	20230119	Sunny	Moderate	Mid-Ebb	Bottom	7.6	9:44:00 AM	8.7	8.4	31.6	22.2	2.1	6.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:40:00 AM	8.9	8.2	32.8	20.7	2.7	6.0
CE	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	10:40:00 AM	8.9	8.3	32.8	20.6	2.6	8.0
CE	20230121	Cloudy	Moderate	Mid-Ebb	Middle	11.0	10:39:00 AM	8.8	8.3	32.9	20.6	2.9	6.0
CE	20230121	Cloudy	Moderate	Mid-Ebb	Middle	11.0	10:39:00 AM	8.9	8.2	32.8	20.6	2.7	4.0
CE	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	21.0	10:38:00 AM	8.8	8.2	32.9	20.6	3.0	6.0
CE	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	21.0	10:38:00 AM	8.8	8.2	32.7	20.7	3.0	4.0
CF	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:14:00 PM	9.0	8.3	33.4	20.3	2.4	3.0
CF	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:14:00 PM	9.0	8.3	33.4	20.3	2.6	2.5
CF	20230121	Cloudy	Moderate	Mid-Ebb	Middle	10.4	12:13:00 PM	9.0	8.3	33.5	20.2	2.7	2.5
CF	20230121	Cloudy	Moderate	Mid-Ebb	Middle	10.4	12:13:00 PM	8.9	8.3	33.3	20.4	2.5	2.5
CF	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	19.7	12:12:00 PM	9.1	8.3	33.3	20.3	2.6	4.0
CF	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	19.7	12:12:00 PM	9.0	8.3	33.5	20.2	2.7	2.5
WSR01	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:51:00 PM	8.5	8.2	33.3	20.2	2.3	7.0
WSR01	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:51:00 PM	8.6	8.2	33.2	20.2	2.5	4.0
WSR01	20230121	Cloudy	Moderate	Mid-Ebb	Middle	4.2	12:50:00 PM	8.7	8.2	33.3	20.2	2.4	2.5
WSR01	20230121	Cloudy	Moderate	Mid-Ebb	Middle	4.2	12:50:00 PM	8.6	8.2	33.4	20.2	2.5	2.5
WSR01	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	7.4	12:49:00 PM	8.7	8.2	33.2	20.2	2.2	2.5
WSR01	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	7.4	12:49:00 PM	8.6	8.2	33.3	20.2	2.2	2.5
WSR02	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:32:00 PM	9.0	8.2	33.3	20.6	1.6	2.5
WSR02	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:32:00 PM	9.2	8.2	33.4	20.5	1.5	2.5
WSR02	20230121	Cloudy	Moderate	Mid-Ebb	Middle	4.5	12:31:00 PM	9.2	8.2	33.5	20.5	1.8	2.5
WSR02	20230121	Cloudy	Moderate	Mid-Ebb	Middle	4.5	12:31:00 PM	9.2	8.2	33.5	20.5	1.6	2.5
WSR02	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	8.0	12:30:00 PM	9.0	8.3	33.5	20.6	1.9	2.5
WSR02	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	8.0	12:30:00 PM	9.2	8.2	33.5	20.6	2.0	2.5
WSR03	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:16:00 PM	8.7	8.2	33.6	20.1	2.2	2.5
WSR03	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:16:00 PM	8.7	8.2	33.4	20.2	2.5	2.5
WSR03	20230121	Cloudy	Moderate	Mid-Ebb	Middle	3.9	12:15:00 PM	8.6	8.2	33.4	20.1	2.0	2.5
WSR03	20230121	Cloudy	Moderate	Mid-Ebb	Middle	3.9	12:15:00 PM	8.6	8.2	33.6	20.2	2.2	2.5
WSR03	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	6.8	12:14:00 PM	8.6	8.2	33.5	20.1	2.2	2.5
WSR03	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	6.8	12:14:00 PM	8.8	8.2	33.4	20.2	2.2	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:03:00 PM	8.8	8.3	32.8	20.7	2.1	2.5
WSR04	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	12:03:00 PM	8.8	8.3	32.6	20.6	2.4	2.5
WSR04	20230121	Cloudy	Moderate	Mid-Ebb	Middle	3.5	12:02:00 PM	8.9	8.3	32.6	20.7	2.0	2.5
WSR04	20230121	Cloudy	Moderate	Mid-Ebb	Middle	3.5	12:02:00 PM	8.8	8.3	32.8	20.6	2.2	2.5
WSR04	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	5.9	12:01:00 PM	8.7	8.3	32.7	20.6	1.9	2.5
WSR04	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	5.9	12:01:00 PM	8.8	8.3	32.7	20.6	2.3	2.5
WSR16	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:02:00 AM	9.4	8.3	32.6	20.2	2.0	2.5
WSR16	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:02:00 AM	9.5	8.2	32.7	20.0	2.1	2.5
WSR16	20230121	Cloudy	Moderate	Mid-Ebb	Middle	8.3	11:01:00 AM	9.5	8.2	32.6	20.0	2.2	2.5
WSR16	20230121	Cloudy	Moderate	Mid-Ebb	Middle	8.3	11:01:00 AM	9.5	8.2	32.7	20.2	2.2	2.5
WSR16	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	15.6	11:00:00 AM	9.3	8.2	32.8	20.2	2.2	2.5
WSR16	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	15.6	11:00:00 AM	9.5	8.2	32.7	20.2	2.1	2.5
WSR33	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:50:00 AM	8.8	8.3	33.2	20.3	2.0	2.5
WSR33	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:50:00 AM	8.8	8.3	33.0	20.3	2.2	2.5
WSR33	20230121	Cloudy	Moderate	Mid-Ebb	Middle	3.8	11:49:00 AM	8.8	8.3	33.3	20.2	2.0	3.0
WSR33	20230121	Cloudy	Moderate	Mid-Ebb	Middle	3.8	11:49:00 AM	8.9	8.3	33.2	20.2	2.1	2.5
WSR33	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	6.5	11:48:00 AM	8.9	8.3	33.0	20.2	2.2	2.5
WSR33	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	6.5	11:48:00 AM	8.9	8.3	33.2	20.1	2.1	3.0
WSR36	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:36:00 AM	8.8	8.2	33.1	20.4	2.0	2.5
WSR36	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:36:00 AM	8.7	8.2	33.1	20.5	2.2	2.5
WSR36	20230121	Cloudy	Moderate	Mid-Ebb	Middle	3.1	11:36:00 AM	8.7	8.2	33.1	20.5	2.1	2.5
WSR36	20230121	Cloudy	Moderate	Mid-Ebb	Middle	3.1	11:36:00 AM	8.7	8.3	33.2	20.4	2.3	2.5
WSR36	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	5.1	11:35:00 AM	8.8	8.2	32.9	20.5	2.1	2.5
WSR36	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	5.1	11:35:00 AM	8.8	8.2	33.2	20.6	2.1	2.5
WSR37	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:23:00 AM	8.8	8.3	32.7	20.5	2.2	3.0
WSR37	20230121	Cloudy	Moderate	Mid-Ebb	Surface	1.0	11:23:00 AM	8.8	8.3	32.9	20.4	2.2	5.0
WSR37	20230121	Cloudy	Moderate	Mid-Ebb	Middle	3.8	11:22:00 AM	8.8	8.3	32.8	20.4	2.3	2.5
WSR37	20230121	Cloudy	Moderate	Mid-Ebb	Middle	3.8	11:22:00 AM	8.8	8.3	32.9	20.4	2.1	2.5
WSR37	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	6.6	11:21:00 AM	8.7	8.3	32.9	20.6	2.1	2.5
WSR37	20230121	Cloudy	Moderate	Mid-Ebb	Bottom	6.6	11:21:00 AM	8.8	8.3	32.9	20.5	2.1	2.5

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
CE	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	6:21:00 PM	8.4	8.3	31.7	21.1	2.9	7.0
CE	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	6:21:00 PM	8.4	8.3	31.5	21.0	2.6	8.0
CE	20230131	Cloudy	Moderate	Mid-Ebb	Middle	10.8	6:20:00 PM	8.4	8.3	31.7	21.1	2.8	5.0
CE	20230131	Cloudy	Moderate	Mid-Ebb	Middle	10.8	6:20:00 PM	8.4	8.3	31.7	21.0	2.6	3.0
CE	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	20.6	6:19:00 PM	8.5	8.3	31.5	21.0	2.9	7.0
CE	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	20.6	6:19:00 PM	8.5	8.3	31.7	21.1	2.9	7.0
CF	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:53:00 PM	9.4	8.2	31.9	20.9	2.3	8.0
CF	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:53:00 PM	9.2	8.2	31.8	21.0	2.2	5.0
CF	20230131	Cloudy	Moderate	Mid-Ebb	Middle	10.0	8:52:00 PM	9.2	8.2	31.9	20.9	2.4	5.0
CF	20230131	Cloudy	Moderate	Mid-Ebb	Middle	10.0	8:52:00 PM	9.3	8.2	31.8	21.0	2.5	5.0
CF	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	18.9	8:51:00 PM	9.3	8.2	32.0	20.8	2.6	7.0
CF	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	18.9	8:51:00 PM	9.3	8.2	31.8	20.8	2.6	4.0
WSR01	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:32:00 PM	9.1	8.3	31.8	21.0	2.2	5.0
WSR01	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:32:00 PM	9.2	8.3	31.8	21.0	2.4	3.0
WSR01	20230131	Cloudy	Moderate	Mid-Ebb	Middle	4.7	8:31:00 PM	9.1	8.4	31.7	20.9	2.1	4.0
WSR01	20230131	Cloudy	Moderate	Mid-Ebb	Middle	4.7	8:31:00 PM	9.1	8.3	31.9	21.0	2.4	4.0
WSR01	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	8.3	8:30:00 PM	9.3	8.3	31.7	20.8	2.2	4.0
WSR01	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	8.3	8:30:00 PM	9.2	8.4	31.7	20.9	2.3	4.0
WSR02	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:14:00 PM	8.5	8.2	31.2	21.0	1.9	4.0
WSR02	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	8:14:00 PM	8.4	8.2	31.3	21.1	1.9	8.0
WSR02	20230131	Cloudy	Moderate	Mid-Ebb	Middle	4.8	8:13:00 PM	8.3	8.2	31.5	21.1	1.9	6.0
WSR02	20230131	Cloudy	Moderate	Mid-Ebb	Middle	4.8	8:13:00 PM	8.5	8.3	31.5	21.0	2.0	8.0
WSR02	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	8.6	8:12:00 PM	8.4	8.3	31.2	21.1	1.9	7.0
WSR02	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	8.6	8:12:00 PM	8.4	8.2	31.5	21.2	2.0	8.0
WSR03	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	7:59:00 PM	9.1	8.2	31.5	21.0	2.0	4.0
WSR03	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	7:59:00 PM	9.1	8.2	31.2	21.0	2.3	5.0
WSR03	20230131	Cloudy	Moderate	Mid-Ebb	Middle	3.7	7:58:00 PM	9.3	8.3	31.3	21.0	1.9	4.0
WSR03	20230131	Cloudy	Moderate	Mid-Ebb	Middle	3.7	7:58:00 PM	9.2	8.2	31.2	20.9	2.1	4.0
WSR03	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	7:57:00 PM	9.1	8.2	31.5	21.0	1.9	7.0
WSR03	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	7:57:00 PM	9.2	8.2	31.4	20.9	1.9	4.0

Location	Date	Weather	Sea Condition	Tidal	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (oC)	Turbidty (NTU)	Suspended Solids (mg/L)
WSR04	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	7:46:00 PM	9.1	8.2	32.1	20.7	2.2	5.0
WSR04	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	7:46:00 PM	9.1	8.2	32.4	20.6	2.0	5.0
WSR04	20230131	Cloudy	Moderate	Mid-Ebb	Middle	3.6	7:45:00 PM	9.0	8.2	32.2	20.6	2.0	9.0
WSR04	20230131	Cloudy	Moderate	Mid-Ebb	Middle	3.6	7:45:00 PM	9.0	8.3	32.1	20.5	1.8	8.0
WSR04	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	6.1	7:44:00 PM	9.2	8.3	32.2	20.5	1.8	5.0
WSR04	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	6.1	7:44:00 PM	9.1	8.2	32.1	20.6	2.0	6.0
WSR16	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	6:43:00 PM	8.5	8.2	32.0	21.1	2.4	4.0
WSR16	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	6:43:00 PM	8.6	8.3	31.8	21.2	2.5	6.0
WSR16	20230131	Cloudy	Moderate	Mid-Ebb	Middle	8.3	6:42:00 PM	8.5	8.3	32.1	21.2	2.2	5.0
WSR16	20230131	Cloudy	Moderate	Mid-Ebb	Middle	8.3	6:42:00 PM	8.5	8.2	32.1	21.2	2.5	3.0
WSR16	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	15.6	6:41:00 PM	8.4	8.2	32.0	21.2	1.9	3.0
WSR16	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	15.6	6:41:00 PM	8.6	8.3	31.8	21.2	2.0	4.0
WSR33	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	7:32:00 PM	9.1	8.2	31.9	21.3	2.0	5.0
WSR33	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	7:32:00 PM	9.3	8.2	31.8	21.3	1.9	4.0
WSR33	20230131	Cloudy	Moderate	Mid-Ebb	Middle	3.7	7:31:00 PM	9.2	8.2	32.0	21.3	2.2	5.0
WSR33	20230131	Cloudy	Moderate	Mid-Ebb	Middle	3.7	7:31:00 PM	9.3	8.3	31.8	21.3	1.9	3.0
WSR33	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	7:30:00 PM	9.3	8.2	31.7	21.3	1.8	5.0
WSR33	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	6.4	7:30:00 PM	9.1	8.2	31.8	21.2	2.1	4.0
WSR36	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	7:18:00 PM	8.4	8.2	32.3	21.1	1.9	5.0
WSR36	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	7:18:00 PM	8.3	8.2	32.4	21.0	2.1	4.0
WSR36	20230131	Cloudy	Moderate	Mid-Ebb	Middle	3.6	7:18:00 PM	8.5	8.2	32.4	21.1	1.8	4.0
WSR36	20230131	Cloudy	Moderate	Mid-Ebb	Middle	3.6	7:18:00 PM	8.4	8.3	32.3	21.0	2.1	5.0
WSR36	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	6.2	7:17:00 PM	8.5	8.2	32.5	21.0	1.9	4.0
WSR36	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	6.2	7:17:00 PM	8.3	8.2	32.4	21.1	2.2	5.0
WSR37	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	7:04:00 PM	9.1	8.2	31.9	20.5	2.1	3.0
WSR37	20230131	Cloudy	Moderate	Mid-Ebb	Surface	1.0	7:04:00 PM	9.0	8.2	32.1	20.6	1.9	3.0
WSR37	20230131	Cloudy	Moderate	Mid-Ebb	Middle	4.2	7:03:00 PM	8.9	8.2	31.9	20.4	2.2	7.0
WSR37	20230131	Cloudy	Moderate	Mid-Ebb	Middle	4.2	7:03:00 PM	9.0	8.2	32.1	20.4	2.2	6.0
WSR37	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	7.4	7:02:00 PM	8.9	8.2	32.2	20.5	1.9	3.0
WSR37	20230131	Cloudy	Moderate	Mid-Ebb	Bottom	7.4	7:02:00 PM	9.1	8.2	32.1	20.4	1.9	6.0

## **Landfill Gas Monitoring - Field Measurement Recording Sheet**

Contract Title Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Contract No.: 13/WSD/17

Serial No.	Monitoring Equipment	Last Calibration
254938	GMI-PS500	2/9/2022

Monitoring	Date	Time	Weather Condition		Landfill Gas	Parameters		Physical Parameters		Measi	ured by
Location	(dd/mm/yyyy)	(hh:mm)	Sunny/ Fine/ Overcast/ Drizzle/ Rain/ Storm/ Hazy	Methane (%LEL)	Oxygen (%)	Carbon Dioxide (%)	Balance Gas (%) (e.g. H2S)	Temp (°C) / Pressure mBar	Trench Depth (m)	Name	Signature
Ch0+750 - Ch0+780	1/ 2023	8:30	Swy	Ö	20-9	0.03	υ	169 1/023	2	Peter	Alta
Ch0+750 - Ch0+780	· <u>\$</u> /1/ 2023	13:30	Sung	o	Wl	Ju?	0	19.2 / (02)	2	Peter	MAR
Ch0+750 - Ch0+780	6 /1/2023	8:30	Surry	O	20.8	0.03	O	185/1/23	2	Peter	MAR
Ch0+750 - Ch0+780	6 /1/2023	13:30	Sunny	Ó	20.9	0.03	O	V.21 1023	2	Peter	Who
Ch0+750 - Ch0+780	7 /1/2023	8:30	Fix	0	20.9	0.03	0	19,7 / 1027	2	Peter	Mun
Ch0+750 - Ch0+780	/1/2023	13:30	F.re	6	20. 7	0,03	3	19.8/1023	2	Peter	AKA
Ch0+750 - Ch0+780	/1/2023	8:30	R						2	Peter	
Ch0+750 - Ch0+780	/1/ 2023	13:30						1	2	Peter	
Ch0+750 - Ch0+780	/1/ 2023	8:30							2	Peter	
Ch0+750 - Ch0+780	/1/ 2023	13:30						/	2	Peter	
Ch0+750 - Ch0+780	/1/ 2023	8:30						/	2	Peter	
Ch0+750 - Ch0+780	/1/ 2023	13:30						1	2	Peter	
Ch0+750 - Ch0+780	/1/ 2023	8:30						1	2	Peter	
Ch0+750 - Ch0+780	/1/2023	13:30							2	Peter	

Checked by: The Along Date 15/2/2023

1)2

## **Landfill Gas Monitoring - Field Measurement Recording Sheet**

Contract Title Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Contract No.: 13/WSD/17

GMI-PS500	2/9/2022
	GMI-PS500

Monitoring	Date	Time	Weather Condition		Landfill Gas	Parameters		Physical Parameters		Measu	ured by
Location	(dd/mm/yyyy)	(hh:mm)	Sunny/ Fine/ Overcast/ Drizzle/ Rain/ Storm/ Hazy	Methane (%LEL)	Oxygen (%)	Carbon Dioxide (%)	Balance Gas (%) (e.g. H2S)	Temp (°C) / Pressure mBar	Trench Depth (m)	Name	Signature
Ch0+750 - Ch0+780	9 /1/2023	8:30	7;h	U	20,5	0.03	U	169 / 1022	2	Peter	Alta
Ch0+750 - Ch0+780	9 /1/ 2023	13:30	Fla	٥	2.9	0.03	0	1812 1/20	2	Peter	Mon
Ch0+750 - Ch0+780	ĵ () /1/ 2023	8:30	Eury	O	20.5	0_0}	0	175/1020	2	Peter	pro
Ch0+750 - Ch0+780	i 🔊 /1/ 2023	13:30	Sury	U	20.9	203	O	19.5/1000	2	Peter	an
Ch0+750 - Ch0+780	// /1/ 2023	8:30	Fine	0	20.5	0,03	0	1851/11	2	Peter	MAN
Ch0+750 - Ch0+780	// /1/ 2023	13:30	F.LL	O	Wil	3 میں	0	19:7/1018	2	Peter	Mon
Ch0+750 - Ch0+780	12/1/2023	8:30	File	O	20.8	0.63	Ø	19.5/10/8	2	Peter	Mon
Ch0+750 - Ch0+780	[2/1/2023	13:30	File	6	Luf	0.03	0	20-2/10/8	2	Peter	MAR
Ch0+750 - Ch0+780	1.5/1/2023	8:30	Suning	0	24	w?	0	17.81 /1	2	Peter	MAN
Ch0+750 - Ch0+780	13 /1/2023	13:30	Enny	0	20.9	0203	O	19,1/017	2	Peter	Mark
Ch0+750 - Ch0+780	TY /1/2023	8:30	Fihe	0	20.9	0.03	0	18.5/ 1017	2	Peter	Mar
Ch0+750 - Ch0+780	[4/1/2023	13:30	I in	O	Dul	403	0	19.51 614	2	Peter	Show
Ch0+750 - Ch0+780	/1/ 2023	8:30						/	2	Peter	
Ch0+750 - Ch0+780	/1/ 2023	13:30						/	2	Peter	

Checked by: 4 H.F. You Alow
Date 15/2/2023

### **Landfill Gas Monitoring - Field Measurement Recording Sheet**

Contract Title Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Contract No.: 13/WSD/17

Serial No.	Monitoring Equipment	Last Calibration
254938	GMI-PS500	2/9/2022

Monitoring	Date	Time	Weather Condition		Landfill Gas	Parameters		Physical Parameters		Measi	ured by
Location	(dd/mm/yyyy)	(hh:mm)	Sunny/ Fine/ Overcast/ Drizzle/ Rain/ Storm/ Hazy	Methane (%LEL)	Oxygen (%)	Carbon Dioxide (%)	Balance Gas (%) (e.g. H2S)	Temp (°C) / Pressure mBar	Trench Depth (m)	Name	Signature
Ch0+750 - Ch0+780	16/1/2023	8:30	Fire	U	24.9	0.03	0	20,2/104	2	Peter	May
Ch0+750 - Ch0+780	16 /1/2023	13:30	Fire	O	2.8	0,03	O	V.2 / 1011	2	Peter	Who
Ch0+750 - Ch0+780	/ ] /1/ 2023	8:30	Fibe	O	249	203	0	20.3 /10.9.4	2	Peter	Mon
Ch0+750 - Ch0+780	/ 7 /1/ 2023	13:30	-ite	O	wif	0.03	0	V1.7 / (w9.4	2	Peter	My
Ch0+750 - Ch0+780	/1/2023	8:30	File	D	24	0.03	0	2011 / 1014	2	Peter	por
Ch0+750 - Ch0+780	B /1/ 2023	13:30	I;he	0	20.9	0,03	0	225/1014	2	Peter	MAR
Ch0+750 - Ch0+780	/9 /1/ 2023	8:30	Sway	0	208	0,03	0	18.9 / 1021	2	Peter	ANKA
Ch0+750 - Ch0+780	19 /1/ 2023	13:30	Swan	Ö	20-	0,03	0	212/10m	2	Peter	Men
Ch0+750 - Ch0+780	20/1/2023	8:30	Fire	Ø	20.9	0_0 }	0	19.5 / 1024	2	Peter	MAR
Ch0+750 - Ch0+780	7/0 /1/2023	13:30	FIRE	Ö	20.7	0,03	0	20.5 1/024	2	Peter	from
Ch0+750 - Ch0+780	/1/2023	8:30	Fin	O	20.9	0,03	0	19,8 / 1022	2	Peter	MEN
Ch0+750 - Ch0+780	2/ /1/ 2023	13:30	Fire	0	20-9	0.03	0	2/12/1/02	2	Peter	apr
Ch0+750 - Ch0+780	/1/ 2023	8:30						1	2	Peter	
Ch0+750 - Ch0+780	/1/ 2023	13:30						/	2	Peter	

Checked by: 4 H.F.Yon P.Z.W

Date (5/2/2023





# Appendix H

Waste Flow Table





### Monthly Summary Waste Flow Table for 2023 (year)

W	1	Actual Quar	ntities of Inert C&	D Materials Genera	ated Monthly			Actual Quantities	of C&D Wastes (	Generated Monthly	
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
Jan	3383.820	0.000	0.000	0.000	3383.820	0.000	0.000	0.000	0.000	0.000	143.690
Feb									N		
Mar									ő.		
Apr											
May									9		
Jun											
Sub-total	3383.820	0.000	0.000	0.000	3383.820	0.000	0.000	0.000	0.000	0.000	143.690
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Total	3383.820	0.000	0.000	0.000	3383.820	0.000	0.000	0.000	0.000	0.000	143.690





## Appendix I

Site Inspection Proforma





#### Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

#### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspectio	on Date: _	3 ( ( ) D) Inspected by: ET: Jacky learn Contractor: 15 230	SO: Mr. IEC: Mr.	L.H. Tea	wsi	D;
Weathe	-	7 0				
Conditi		Sunny Fine Overcast Drizzle Rain	Storm	Н	azy	
Temper	rature	Humidity High	Low			
Wind		Calm Light Breeze Strong				
licini	EIA ref.		N/A	Yes	No	Photo/Remarks
No.					-	
0.00		General		<del>-/</del> 1		
0.01		Is the current Environmental Permit displayed conspicuously at all vehicle site				
0.02		entrances/exits for public's information at any time?				
0.02		Is ET Leader's log-book kept readily available for inspections?				
		Construction Dust		<del></del>		
1.00	54.8.1	Are dusty materials, such as excavated materials, building debris and construction				
1.01		materials, and exposed earth surface properly covered to prevent dust emission?				
1.02	54.8.1	Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to		$\Box$		
100		dusty construction works for dust suppression?				
	54.8.1	Are fumes or smoke emitting plants or construction activities shielded by a screen?				
1.04	54.8.1	Are wheel-washing facilities with high-pressure water jets provided at all site exits?				
1.05	54.8.1	Is wheel-washing provided to all vehicles leaving the site?				
1.06 S	54.8.1	Are road section near the site exit free from dusty material?				
1.07 S	54.8.1	Are all main haul roads inside the site paved or sprayed with water to minimize			$\overline{\Box}$	
		dust emission during vehicle movement?				
1.08 S	54.8.1	Are water spraying provided immediately prior to any loading or transfer of dusty	[7]			
		materials?	<u>.</u> ₩		Ш	
1.09 S		Are covers provided to all dump trucks carrying dusty materials when entering and				
		leaving the site?				
1.10 S		Are the working areas for uprooting of trees, shrubs, or vegetation or the removal				
		of boulders, poles, pillars sprayed with water to maintain the entire surface wet?				
1.11 S		Is exposed earth properly treated within six months after the last construction				
_		activity on site?		Щ,		
1.12 S	34.8.1	Does the operation of plants on site free form dark smoke emission?				
1.13 S	4.8.1	Are vehicles travelling at speed not exceeding 15km/hr within the site?		V		
1.14 S	4.8.1	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top		<del>-/</del> 1		
		and 3 sides?				
		4000 C 3 E				





Member of the Aurecon Group Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Photo/Remarks Item N/A Yes No Are de-bagging, batching and mixing processes of bagged cement carried out in 1.15 S4.8.1 1.16 S4.8.1 Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public? 1.17 S4.8.1 Is open burning prohibited? Construction Noise (Airborne) 2.00 S5.7 Are quiet plants adopted on site? 2.01 2.02 S5.7 Are the PMEs operating on site well-maintained to minimize the generation of excessive noise? 2.03 S5.7 Are plants throttled down or turned off when not in use? 2.04 S5.7 Are the plants known to emit noise strongly in one direction oriented to face away from NSRs? 2.05 S5.7 Are moveable barriers provided to screen NSRs from plant or noisy operations? 2.06 S5.7 Are silencers, mufflers and enclosures provided to plants? 2.07 \$5.7 Are the hoods, cover panels and inspection hatches of PMEs closed during operation? 2.08 S5.7 Are purposely-built site hoarding construction with appropriate materials provided along the site boundary? Are noisy operation properly scheduled to minimize exposure and cumulative 2.09 S5.7 impacts to nearby sensitive receivers? Are valid noise emission label(s) affixed to all hand-held breakers operating on 2.10 S5.7 site? 2.11 S5.7 Are valid noise emission label(s) affixed to all air compressors operating on site? Are all construction noise permit(s) applied for percussive piling work? 2.12 S5.7 2.13 S5.7 Are construction noise permit(s) applied for general construction works during restricted hours? Are valid construction noise permit(s) displayed at all vehicular exits? 2.14 S5.7 3.00 3.01 S6.9 Is effluent discharge license obtained for wastewater discharge from site? Is effluent discharged according to the effluent discharge license? 3.02 S6.9 Is wastewater discharge from site properly treated prior to discharge? 3.03 S6.9 Are perimeter channels provided to intercept storm runoff from outside the site? 3.04 S6.9 Are sand/silt removal facilities such as sand/silt traps and sediment basins provided 3.05 S6.9 to remove sand/silt particles from runoff?



		ct no. 15/4/5D/1/ Design, Duna and Operate First Stage of	iseung K	wan O	Desalin	ation Plant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
3.06	S6.9	Is surface runoff diverted to sedimentation facilities?				
3.07	S6.9	Is the drainage system properly maintained?		V		
3.08	S6.9	Are construction works carefully programmed to minimize soil excavation works				
		during rainy seasons?	V			
3.09	S6.9	Are exposed soil surface protected by paving as soon as possible to reduce the				
		potential of soil erosion?				
	S6.9	Are temporary access roads protected by crushed gravel?				
	S6.9	Are exposed slope surface properly protected?				<i>x</i>
3.12	S6.9	Is trench excavation avoided in the wet season as far as practicable, or if necessary,				
		backfilled in short sections after excavation?			Ш	
3.13	S6.9	Are open stockpiles of construction materials on site covered by tarpaulin or similar				
		fabric during construction?		$\sqrt{}$		
3.14	S6.9	Is runoff from wheel-washing facilities avoided?				
3.15	C( 0					
3.13	30.9	Is oil leakage or spillage prevented?				V 200 (0, a) (a)
3.16	S6.9	Are there any measures to prevent the release of oil and grease into the storm	一一		一一	
		drainage system?		$\sqrt{}$		
3.17	S6.9	Are the oil interceptors/ grease traps properly maintained?				
3.18	S6.9	Are debris and rubbish generated on site collected, handled and disposed of			$\overline{}$	
		properly to avoid them entering the streams?				
3.19	S6.9	Are all fuel tanks and storage areas provided with locks and be sited on sealed				
		areas, within bunds of capacity equal to 110% of the storage capacity of the largest				
		tank?		Ų.	Ш	
3.20	S6.9	Are tanks, containers, storage area bunded and the locations locked as far as				
		possible from the sensitive watercourse and stormwater drains?				
3.21	S6.9	Are sufficient chemical toilets provided on site to handle sewage from construction		<u> </u>		
		work force?				
3.22	S6.9	Are sewage disposal and toilet maintenance of the portable chemical toilets	$\overline{}$		$\overline{}$	
	1	provided by the licensed contractors?		$\checkmark$		
3.23	S6.9	Is concrete washing water properly collected and treated prior to discharge?	V			
3.24	S6.9 I	s suitable type of silt curtains deployed during dredging to reduce the elevation of				
	- 1	suspended solids to nearby sensitive receivers?	$\sqrt{}$			
3.25	\$6.9					
		s closed grab dredger used to reduce the potential leakage of sediments?	V			
3.26		s closed grab dredger of 3 to 6 m <sup>3</sup> used for dredging at seawater intake?				
3.27	S6.9 I	s specific work staff assigned the responsibility for monitoring the number of grab				
	c	lredged per hour? Is number of cycle limited to 20-21 grab per hour for 3m³ closed	<del></del>			
		grab, 10-11 grab per hour for 6m3 closed grab?	$\checkmark$			
- 1	۲					The state of the s





Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Photo/Remarks Item N/A Yes No 3.28 S6.9 Is the grab operated in slow and controlled manner such that the impact to seabed by the grab when being lowered could be minimized? Is the operator ensured the grab be properly closed before lifting the grab? Is the maximum allowed dredging rate at the seawater intake limited to 750 m3/day 3.29 S6.9 while the maximum allowed dredging rate at the submarine outfall is 3,500 m3/day? Is dredged marine sediment disposed of in a gazetted marine disposal area in 3.30 S6.9 accordance with marine dumping permit conditions of the Dumping at Sea Ordinance (DASO)? Are disposal vessels fitted with tight bottom seals in order to prevent leakage of 3.31 S6.9 material during transport? Are barges filled to a level which ensures that material does not spill over during 3.32 S6.9 transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action? Are excess materials cleaned from decks and exposed fittings before the vessel is 3.33 S6.9 moved from the dredging area after dredging? Are the contractor(s) confirmed that the works cause no visible foam, oil, grease, 3.34 S6.9 litter or other objectionable matter to be present in the water within and adjacent to the dredging site? When the dredged material has been unloaded at the disposal areas, is any material 3.35 S6.9 accumulated on the deck or other exposed parts of the vessel removed and placed in the hold or a hopper? Is dredger maintained adequate clearance between vessels and the seabed at all 3.36 S6.9 states of the tide and reduce operations speed to ensure that excessive turbidity is not generated by turbulence from vessel movement or propeller wash? Is the contractor shall regularly inspect the silt curtains and check that they are 3.37 S6.9 moored and marked to avoid danger to marine traffic? Is regular inspection on the integrity of the silt curtain carried out by the contractor and any damage to the silt curtain shall be repaired by the contractor promptly? 3.38 S6.9 Are all vessels have a clean ballast system? Are all vessels well maintained and inspected before use to limit any potential 3.39 S6.9 discharges to the marine environment? Is any discharge of sewage/grey wastewater? Is wastewater from potentially 3.40 S6.9 contaminated area on working vessels should be minimized and collected? 3.41 S6.9 Is any soil waste disposed overboard? 4.00 Waste Management Is a trip-ticket system implemented to monitor the disposal of C&D and solid 4.01 S8.5 wastes at public filling facilities and landfills? 4.02 S8.5 Is a recording system implemented to record the amount of wastes generated, recycled and disposed of? 4.03 S8.5 Is the Contractor registered as a chemical waste producer?



<del></del>	Jontia	et no. 10/ WBD/17 Design, Duna and Operate First Stage of	iscung it	wan O	Desami	ation I lant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
4.04	S8.5	Is chemical waste separated from other waste and collected by a licensed chemical waste collector?				
4.05	S8.5	Are trip tickets for chemical waste disposal available for inspection?				
4.06	S8.5	Is drip tray provided for chemical storage?				
4.07	S8.5	Are all containers for chemical waste properly labelled?				
4.08	\$8.5	Is chemical waste storage area used solely for storage of chemical waste and properly labelled?				
4.09	S8.5	Are incompatible chemical wastes stored in different areas?				
4.10	S8.5	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?		Í		
4.11	S8.5	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or of 20% by volume of the chemical waste stored in that area, whichever is the greatest, provide?		$\checkmark$		
4.12	S8.5	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?				G-1-1-1
4.13	S8.5	Are sufficient general refuse disposal/collection points provided on site?				
4.14	S8.5	Is general refuse disposed of properly and regularly?				
4.15	S8.5	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?				
4.16	S8.5	Are individual collectors for aluminum cans, plastic bottles and packaging material and office paper provided to encourage waste segregation?				
4.17	S8.5	Are C&D wastes sorted on site?		$\checkmark$		
4.18	S8.5	Are C&D waste disposed of properly?		$\sqrt{}$		
4.19		Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?				
4.20		Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				
4.21		Are the construction materials stored properly to minimize the potential for damage or contamination?				
4.22	S8.5	Is a dumping license obtained to deliver public fill to public filling areas?				
5.00	S11.10	Landscape and Visual				
5.01	& 11.11	Are Is site hoarding provided?				
	S11.10 & 11.11	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
	S11.10 & 11.11	Is construction light oriented away from the sensitive receivers?				





Member of the Aurecon Group Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Photo/Remarks Item No. 5.04 S11.10 Is grass hydroseeding provided to slopes as soon as the completion of works? & 11.11 S11.10 & Are damages to trees outside site boundary due construction works avoided? 11 11 5.06 S11.10 & s excavation works carried out manually instead of machinery operation within 2.5m vicinity of any preserved trees? 11.11 5.07 S11.10 & Are the retained and transplanted tree(s) properly protected and in good conditions? 11 11 \$11.10 & Are surgery works carried out for damaged trees? 11.11 6.00 S9.7 Ecology 6.01 Is site runoff properly treated to prevent any silly runoff? 6.02 S9.7 Are silt trap installed and well-maintained? 6.03 S9.7 Are stockpiles properly covered to avoid generating silty runoff? 6.04 S9.7 Are construction works restricted to works area which are clearly defined? For slope mitigation works within the Clear Water Bay Country Park, are tree felling and \$9.7 6.05 damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and rock dowels adjusted during detailed design, and a setback distance from existing trees is recommended to be maintained as far as practical? Are pruning of tree canopies along the alignment of the flexible barriers limited to a 6.06 S9.7 minimum? Is the alignment of flexible barriers optimized to preserve all species of conservation S9.7 6.07 interest and minimize the impact to the existing vegetation as far as practicable? Are the alignment of flexible barriers positioned at minimum 1.5 m in a radius away from these individuals? 6.08 S9.7 Is temporary fencing installed to fence off the concerned species either in groups of Fereing was individually within the works area and in the close proximity to prevent from being properly execte damaged and disturbed during construction? Is a sign identifying the site attached to the fence and flagging tape shall be attached to the individuals to visualize their locations? Is a specification for fencing and demarcating individuals of Marsdenai lachnostoma (or 6.09 S9.7 Clear water Bay country other flora species of conservation interest, if found) adjacent to the proposed alignment of the flexible barriers prepared to protect the species? the Contractor 6.10 S9.7 Is any induction training provided to all site personnel in order to brief them on this flora NAS OBSENED of conservation interest including the locations and their importance? Nurma sit Is the resident site supervisory staff closely monitor the conditions of concerned 6.11 S9.7 inspectionindividuals during construction of flexible barriers in the close proximity? Are fences erected along the boundary of the works area before the commencement of 6.12 S9.7 works to prevent vehicle movements and encroachment of personnel onto adjacent Is regular check of the work site boundaries performed to ensure that they are not 6.13 S9.7 breached and that damage does not occur to surrounding areas? Is any damage and disturbance avoided, particularly those caused by filling and illegal 6.14 S9.7

dumping, to the surrounding habitats through proper management of waste disposal?



(	Contra	ct no. 13/WSD/17 Design, Build and Operate First Stage of '	Iseung K	wan O	Desalina	ation Plant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
6.15	\$9.7	Are temporarily affected areas reinstated, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting?	1			_
6.16	S9.7	Are affected habitats within the Clear Water Bay Country Bay reinstated by hydro- seeding and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works?	$\Box$			
<b>7.00</b> 7.01	S12.7	Landfill Gas Hazard  Are the safety procedures implemented to minimise the risks of fires and explosions, asphyxiation of works and toxicity effects during all works?				
7.02	S12.7	Are the gas detection equipment and precautions being used during trenching and excavation as well as creation of confined spaces?				
7.03	S12.7	Are the training with regard to the awareness of potential hazards of working in confined spaces provided from the Contractor to the workers?		V		
7.04	S12.7	Are the safety officers trained with regard to landfill gas and leachate related hazards and presented on the site throughout the works undertaken below grade?				
7.05	S12.7	Are the all personnel working on site and all visitor made aware of the possibility of ignition of gas, the possible presence of contaminated water and the need to avoid physical contact?				
7.06	S12.7	Is the monitoring of landfill gas being undertaken in all excavations, manholes, chambers and any confined spaces?				
7.07	S12.7	Are the monitoring frequency and areas being specified by the safety officers or appropriately qualified person? Are the all measurements being recorded and documented?				
7.08	S12.7	Is the drilling proceeded with adequate care and precautions against the potential hazards?				
7.09	S12.7	Is the method statement covering all normal and emergency procedures provided by the drilling contractor prior to the commencement of the site works?				
7.10	S12.7	Are the below ground services entries being sealed to prevent gas entry? Are the grilled metal covers being used for below grade cable trenches?				
7.11	S12.7	Is each manhole or utility pit monitored with two measurements (at mid-depth and base) for minimum of 10 minutes? Is the steady reading and peak reading recorded at each manhole or utility pit?	<b>V</b>			
7.12	S12.7	Are the warning signs of the hazards of landfill gas and its possible presence on site posted in prominent places?				
<b>8.00</b> 8.01		Overall Is the EM&A properly implemented in general?				



Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection:									
Reminden	1 1	on pill							
O General Lousekeeping at the OSE and excess notes shall be removed in voids		. V. Dullo42	9,						
EXTESS WOTEN SMAIL GE TO COLOR		·							
Signatures:									
ET Contractor's Supervising Officer's Representative Representative Representative		WSD's Representative							
(Name: Name: Name: Name: Louis) (Name: Louis) (Name: Louis)	)	(Name:	)						
	-1								





#### Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

#### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

No.   No.   Photo/Remarks   No.   Photo-Remarks   Phot	Inspection Date: 10 12023 Inspected by: ET: Jacky Jewa SO: Mr. Raymond Kolk WSD: Contractor: Ms. Flatory Teau IEC: Mr. Jourse Kusan					
Construction Dust 1.02 S4.8.1 Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?  1.05 S4.8.1 Are fully materials such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?  1.05 S4.8.1 Are wheel-washing facilities with high-pressure water jets provided at all site exist?  1.06 S4.8.1 Are roads ection near the site exit free from dusty material?  1.07 S4.8.1 Are all main haul roads inside the site paved or sprayed with water to maintain the entire surface water properly incovered to prevent dust materials?  1.08 S4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 S4.8.1 Are water spraying provided in materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Se exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?		14230 - 16200 Contractor: 178 That Day 1849	IEC. <u>/ (r.</u>	Louis Kul	<i>h</i>	
Temperature Wind    C						
N/A   Yes   No   Photo/Remarks	Condition	Sunny Fine Overcast Orizzle Rain	Storm	Haz	zy	
Item   ElA ref	Temperature	C Humidity High Moderate	Low			
No.    Ceneral   Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?   O.02   Is ET Leader's log-book kept readily available for inspections?	Wind	Calm Light Breeze Strong				
No.    Ceneral   Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?   O.02   Is ET Leader's log-book kept readily available for inspections?	E by c					
Ceneral   Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for inspections?   Is ET Leader's log-book kept readily available for	licent		N/A	Yes	No	Photo/Remarks
1.00   1.00		General				
contrances/exits for public's information at any time?    1.00						
S. E. I. Leader's log-book kept readily available for inspections?						
Construction Dust  1.00 \$4.8.1 Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?  1.02 \$4.8.1 Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to dusty construction works for dust suppression?  1.03 \$4.8.1 Are fumes or smoke emitting plants or construction activities shielded by a screen?  1.04 \$4.8.1 Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 \$4.8.1 Is wheel-washing provided to all vehicles leaving the site?  1.06 \$4.8.1 Are road section near the site exit free from dusty material?  1.07 \$4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 \$4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 \$4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 \$4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 \$4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 \$4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 \$4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 \$4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	0.02	Is FT Leader's log-book kent readily available for inspections?			$\Box$	
1.00 S4.8.1 Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?  1.02 S4.8.1 Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to dusty construction works for dust suppression?  1.03 S4.8.1 Are fumes or smoke emitting plants or construction activities shielded by a screen?  1.04 S4.8.1 Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 S4.8.1 Is wheel-washing provided to all vehicles leaving the site?  1.06 S4.8.1 Are road section near the site exit free from dusty material?  1.07 S4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 S4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top		is ET Leader's log-book kept readily available for hispections:				
1.01 materials, and exposed earth surface properly covered to prevent dust emission?  1.02 S4.8.1 Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to dusty construction works for dust suppression?  1.03 S4.8.1 Are fumes or smoke emitting plants or construction activities shielded by a screen?  1.04 S4.8.1 Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 S4.8.1 Is wheel-washing provided to all vehicles leaving the site?  1.06 S4.8.1 Are road section near the site exit free from dusty material?  1.07 S4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 S4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?						
1.02 S4.8.1 Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to dusty construction works for dust suppression?  1.03 S4.8.1 Are fumes or smoke emitting plants or construction activities shielded by a screen?  1.04 S4.8.1 Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 S4.8.1 Is wheel-washing provided to all vehicles leaving the site?  1.06 S4.8.1 Are road section near the site exit free from dusty material?  1.07 S4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 S4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?	2.00					
dusty construction works for dust suppression?  1.03 \$4.8.1 Are fumes or smoke emitting plants or construction activities shielded by a screen?  1.04 \$4.8.1 Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 \$4.8.1 Is wheel-washing provided to all vehicles leaving the site?  1.06 \$4.8.1 Are road section near the site exit free from dusty material?  1.07 \$4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 \$4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 \$4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 \$4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 \$4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 \$4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 \$4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 \$4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top					Man	
1.03 \$4.8.1 Are fumes or smoke emitting plants or construction activities shielded by a screen?  1.04 \$4.8.1 Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 \$4.8.1 Is wheel-washing provided to all vehicles leaving the site?  1.06 \$4.8.1 Are road section near the site exit free from dusty material?  1.07 \$4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 \$4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 \$4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 \$4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 \$4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 \$4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 \$4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?	1.02   \$4.8.1					
Are fumes or smoke emitting plants or construction activities shielded by a screen?  1.04 \$4.8.1 Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 \$4.8.1 Is wheel-washing provided to all vehicles leaving the site?  1.06 \$4.8.1 Are road section near the site exit free from dusty material?  1.07 \$4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 \$4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 \$4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 \$4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 \$4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 \$4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 \$4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?	1.03 \$4.8.1	dusty construction works for dust suppression:			_	
Are wheel-washing facilities with high-pressure water jets provided at all site exits?  1.05 S4.8.1 Is wheel-washing provided to all vehicles leaving the site?  1.06 S4.8.1 Are road section near the site exit free from dusty material?  1.07 S4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 S4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.03 54.0.1	Are fumes or smoke emitting plants or construction activities shielded by a screen?				7
1.05 S4.8.1 Is wheel-washing provided to all vehicles leaving the site?  1.06 S4.8.1 Are road section near the site exit free from dusty material?  1.07 S4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 S4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.04 S4.8.1	Are wheel-washing facilities with high-pressure water jets provided at all site exite?			$\overline{\Box}$	
1.06   S4.8.1   Are road section near the site exit free from dusty material?		and wheel-washing facilities with high-pressure water jets provided at an site exits:			Ш	
Are road section near the site exit free from dusty material?  1.07 S4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 S4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.05 S4.8.1	Is wheel-washing provided to all vehicles leaving the site?				
Are road section near the site exit free from dusty material?  1.07 S4.8.1 Are all main haul roads inside the site paved or sprayed with water to minimize dust emission during vehicle movement?  1.08 S4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.06 \$4.8.1				<u> </u>	
dust emission during vehicle movement?  1.08 S4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.00 54.6.1	Are road section near the site exit free from dusty material?				7
1.08 S4.8.1 Are water spraying provided immediately prior to any loading or transfer of dusty materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.07 S4.8.1	Are all main haul roads inside the site paved or sprayed with water to minimize		$\Box$	П	
materials?  1.09 S4.8.1 Are covers provided to all dump trucks carrying dusty materials when entering and leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top		dust emission during vehicle movement?			Ш	
1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.08 S4.8.1				П	1
leaving the site?  1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top		materials?			Ш	
1.10 S4.8.1 Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.09 S4.8.1					
of boulders, poles, pillars sprayed with water to maintain the entire surface wet?  1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.10 64.9.1			<del></del>		
1.11 S4.8.1 Is exposed earth properly treated within six months after the last construction activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.10 54.6.1					
activity on site?  1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.11 \$4.8.1			=	=	
1.12 S4.8.1 Does the operation of plants on site free form dark smoke emission?  1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	51.0.1					
1.13 S4.8.1 Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.12 S4.8.1					
Are vehicles travelling at speed not exceeding 15km/hr within the site?  1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top		Does the operation of plants on site free form dark smoke emission?			$\square$	-
1.14 S4.8.1 Are stock of more than 20 bags of cement or day PFA covered or sheltered on top	1.13 S4.8.1	Are vehicles travelling at speed not exceeding 15km/hr within the site?				
		and remotes travelling at speed not exceeding 13km/iii within the site:		$\bigvee$	Ш	
and 3 sides?	1.14 S4.8.1				П	
		and 3 sides?			Ш	





	onua	te no. 15/ 11/ Design, Dund and Operate First Stage of	iscung ix	wan O i	Desam	iation I lant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
1.15	S4.8.1	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	V			
1.16	S4.8.1	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?				
1.17	S4.8.1	Is open burning prohibited?				
2.00		Construction Noise (Airborne)				
2.01	S5.7	Are quiet plants adopted on site?		1		
2.02	S5.7	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?				No. of the Control of
2.03	S5.7	Are plants throttled down or turned off when not in use?				18 · 18 · 18 · 18
2.04	S5.7	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?				
2.05	S5.7	Are moveable barriers provided to screen NSRs from plant or noisy operations?				
2.06	S5.7	Are silencers, mufflers and enclosures provided to plants?				
2.07	S5.7	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?				
2.00	0.5.5	1				
2.08	S5.7	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?				
2.09	S5.7	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?	V			
2.10	S5.7	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	$\sqrt{}$			
2.11	S5.7	Are valid noise emission label(s) affixed to all air compressors operating on site?	V			
2.12	S5.7	Are all construction noise permit(s) applied for percussive piling work?				
2.13	S5.7	Are construction noise permit(s) applied for general construction works during restricted hours?		1		
2.14	S5.7	Are valid construction noise permit(s) displayed at all vehicular exits?		V		
3.00		Water Quality				
3.01	S6.9	Is effluent discharge license obtained for wastewater discharge from site?		V		
3.02	S6.9	Is effluent discharged according to the effluent discharge license?		V		
3.03	S6.9	Is wastewater discharge from site properly treated prior to discharge?		V		
3.04	S6.9	Are perimeter channels provided to intercept storm runoff from outside the site?				
3.05	S6.9	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided				
		to remove sand/silt particles from runoff?				



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
3.06	S6.9	Is surface runoff diverted to sedimentation facilities?				
3.07	S6.9	Is the drainage system properly maintained?				Reminder 1
3.08	S6.9	Are construction works carefully programmed to minimize soil excavation works				
		during rainy seasons?	$\bigvee$			-
3.09	S6.9	Are exposed soil surface protected by paving as soon as possible to reduce the			$\Box$	
		potential of soil erosion?	Ш	لكنا	Ш	
3.10	S6.9	Are temporary access roads protected by crushed gravel?				
3.11	S6.9	Are exposed slope surface properly protected?				
3.12	S6.9	Is trench excavation avoided in the wet season as far as practicable, or if necessary,				
		backfilled in short sections after excavation?		$\Box$		
3.13	S6.9	Are open stockpiles of construction materials on site covered by tarpaulin or similar				
		fabric during construction?				
3.14	S6.9	Is runoff from wheel-washing facilities avoided?				
3.15	S6.9	Is oil leakage or spillage prevented?				
3.16	S6.9	Are there any measures to prevent the release of oil and grease into the storm			$\overline{\Box}$	
		drainage system?				
3.17	S6.9	Are the oil interceptors/ grease traps properly maintained?	$\checkmark$			
3.18	S6.9	Are debris and rubbish generated on site collected, handled and disposed of			$\Box$	
		properly to avoid them entering the streams?		V	Ш	-
3.19	S6.9	Are all fuel tanks and storage areas provided with locks and be sited on sealed			$\Box$	
		areas, within bunds of capacity equal to 110% of the storage capacity of the largest				
		tank?		20		
3.20	S6.9	Are tanks, containers, storage area bunded and the locations locked as far as				
		possible from the sensitive watercourse and stormwater drains?				
3.21	S6.9	Are sufficient chemical toilets provided on site to handle sewage from construction work force?				
3.22	S6.9	Are sewage disposal and toilet maintenance of the portable chemical toilets			$\overline{}$	
		provided by the licensed contractors?				
3.23	S6.9	Is concrete washing water properly collected and treated prior to discharge?				
3.24	S6.9	Is suitable type of silt curtains deployed during dredging to reduce the elevation of				
		suspended solids to nearby sensitive receivers?				
3.25	S6.9	Is closed grab dredger used to reduce the potential leakage of sediments?				
3.26	S6.9	Is closed grab dredger of 3 to 6 m <sup>3</sup> used for dredging at seawater intake?				
			W		Ш	
3.27	S6.9	Is specific work staff assigned the responsibility for monitoring the number of grab				
		dredged per hour? Is number of cycle limited to 20-21 grab per hour for 3m <sup>3</sup> closed				l
		grab, 10-11 grab per hour for 6m3 closed grab?				



Itam	EIA ref.	lov 10/1/2014 2015 and and operate 1115t Stage of	N/A	Yes	No	Dhata/Damarka
10111	Ent ioi.		IN/A	1 68	NO	Photo/Remarks
No.						
3.28	S6.9	Is the grab operated in slow and controlled manner such that the impact to seabed				
		by the grab when being lowered could be minimized? Is the operator ensured the	1			
		grab be properly closed before lifting the grab?	W			
3.29	S6.9	Is the maximum allowed dredging rate at the seawater intake limited to 750 m3/day				
0000000000		while the maximum allowed dredging rate at the submarine outfall is 3,500				
		m3/day?				_
3.30	S6.9	Is dredged marine sediment disposed of in a gazetted marine disposal area in				
		accordance with marine dumping permit conditions of the Dumping at Sea				
		Ordinance (DASO)?		Ш		
3.31	S6.9	Are disposal vessels fitted with tight bottom seals in order to prevent leakage of				
		material during transport?	1/			
2.22	06.0					
3.32	\$6.9	Are barges filled to a level which ensures that material does not spill over during				
		transport to the disposal site and that adequate freeboard is maintained to ensure	1/			
		that the decks are not washed by wave action?				
3.33	S6.9	Are excess materials cleaned from decks and exposed fittings before the vessel is				
		moved from the dredging area after dredging?				
3.34	\$6.9	Are the contractor(s) confirmed that the works cause no visible foam, oil, grease,				
5.51	50.7					
		litter or other objectionable matter to be present in the water within and adjacent	\/			
		to the dredging site?				
3.35	S6.9	When the dredged material has been unloaded at the disposal areas, is any material				
		accumulated on the deck or other exposed parts of the vessel removed and placed in				
		the hold or a hopper?				
3.36	S6.9	Is dredger maintained adequate clearance between vessels and the seabed at all				
		states of the tide and reduce operations speed to ensure that excessive turbidity is				
		not generated by turbulence from vessel movement or propeller wash?				
3.37	S6.9	Is the contractor shall regularly inspect the silt curtains and check that they are				
		moored and marked to avoid danger to marine traffic? Is regular inspection on the				
		integrity of the silt curtain carried out by the contractor and any damage to the silt		<del></del>		
		curtain shall be repaired by the contractor promptly?				
3.38	56.9					-
5.50	50.7	Are all vessels have a clean ballast system?				
2 20	66.0	Annual control of the state of				_
3.39	30.9	Are all vessels well maintained and inspected before use to limit any potential				
		discharges to the marine environment?		ш	ш	
3.40	S6.9	Is any discharge of sewage/grey wastewater? Is wastewater from potentially				
		contaminated area on working vessels should be minimized and collected?				
3.41	S6.9			$\overline{}$		
		Is any soil waste disposed overboard?	1/			
4.00		Waste Management				
4.01	S8.5	Is a trip-ticket system implemented to monitor the disposal of C&D and solid				
The state of the s		wastes at public filling facilities and landfills?				
		mastes at paone inning facilities and fandings:				
4.02	S8.5	Is a recording system implemented to record the amount of wastes generated,				
		recycled and disposed of?		$\checkmark$		
4.03	S8.5					
		Is the Contractor registered as a chemical waste producer?		\/		
				-		



		et no. 13/ WSD/17 Design, Dund and Operate First Stage of	iscung ix	wan O	Desaill	lation I lant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
4.04	S8.5	Is chemical waste separated from other waste and collected by a licensed chemical waste collector?	r/			
4.05	S8.5	Are trip tickets for chemical waste disposal available for inspection?	П		П	
4.06	S8.5	Is drip tray provided for chemical storage?				
4.07	S8.5	Are all containers for chemical waste properly labelled?				
4.08	S8.5	Is chemical waste storage area used solely for storage of chemical waste and properly labelled?		V		
4.09	S8.5	Are incompatible chemical wastes stored in different areas?				
4.10	S8.5	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?				
4.11	\$8.5	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or of 20% by volume of the chemical waste stored in that area, whichever is the greatest, provide?				
4.12	S8.5	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?				
4.13	S8.5	Are sufficient general refuse disposal/collection points provided on site?				
4.14	S8.5	Is general refuse disposed of properly and regularly?				
4.15	S8.5	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?				-
4.16		Are individual collectors for aluminum cans, plastic bottles and packaging material and office paper provided to encourage waste segregation?				( Marie and a second
4.17	\$8.5	Are C&D wastes sorted on site?				7
4.18	S8.5	Are C&D waste disposed of properly?				A
4.19	S8.5	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?				
4.20		Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				8
4.21	S8.5	Are the construction materials stored properly to minimize the potential for damage or contamination?		V		
4.22	S8.5	Is a dumping license obtained to deliver public fill to public filling areas?				
5.00	S11.10	Landscape and Visual	/			
5.01	& 11.11	Are Is site hoarding provided?	1			
5.02	S11.10 & 11.11	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				1
5.03	S11.10 & 11.11	Is construction light oriented away from the sensitive receivers?				





Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Yes Photo/Remarks Item No. 5.04 \$11.10 Is grass hydroseeding provided to slopes as soon as the completion of works? & 11.11 5.05 S11.10 & Are damages to trees outside site boundary due construction works avoided? 11.11 5.06 S11.10 & s excavation works carried out manually instead of machinery operation within 2.5m 11.11 vicinity of any preserved trees? 5.07 S11.10 & Are the retained and transplanted tree(s) properly protected and in good conditions? 11.11 5.08 S11.10 & Are surgery works carried out for damaged trees? 11.11 S9.7 6.00 Ecology 6.01 Is site runoff properly treated to prevent any silly runoff? 6.02 S9.7 Are silt trap installed and well-maintained? S9.7 6.03 Are stockpiles properly covered to avoid generating silty runoff? 6.04 S9.7 Are construction works restricted to works area which are clearly defined? 6.05 S9.7 For slope mitigation works within the Clear Water Bay Country Park, are tree felling and damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and rock dowels adjusted during detailed design, and a setback distance from existing trees is recommended to be maintained as far as practical? 6.06 S9.7 Are pruning of tree canopies along the alignment of the flexible barriers limited to a minimum? S9.7 Is the alignment of flexible barriers optimized to preserve all species of conservation 6.07 interest and minimize the impact to the existing vegetation as far as practicable? Are the alignment of flexible barriers positioned at minimum 1.5 m in a radius away from these 6.08 S9.7 Is temporary fencing installed to fence off the concerned species either in groups of Fencing was projectly erected individually within the works area and in the close proximity to prevent from being derine the damaged and disturbed during construction? Is a sign identifying the site attached to the ton fence and flagging tape shall be attached to the individuals to visualize their locations? clear 6.09 S9.7 Is a specification for fencing and demarcating individuals of Marsdenai lachnostoma (or Water Bay Country Pork other flora species of conservation interest, if found) adjacent to the proposed alignment traspag of the flexible barriers prepared to protect the species? 6.10 S9.7 Is any induction training provided to all site personnel in order to brief them on this flora Constru Contractor Was oxard of conservation interest including the locations and their importance? 6.11 S9.7 Is the resident site supervisory staff closely monitor the conditions of concerned diring sike individuals during construction of flexible barriers in the close proximity? 6.12 S9.7 Are fences erected along the boundary of the works area before the commencement of works to prevent vehicle movements and encroachment of personnel onto adjacent areas? 6.13 S9.7 Is regular check of the work site boundaries performed to ensure that they are not breached and that damage does not occur to surrounding areas? 6.14 S9.7 Is any damage and disturbance avoided, particularly those caused by filling and illegal

dumping, to the surrounding habitats through proper management of waste disposal?



Member of the Aurecon Group

(	Contra	ct no. 13/WSD/17 Design, Build and Operate First Stage of T	seung Kv	van O I	)esalina	tion Plant
	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
6.15	S9.7	Are temporarily affected areas reinstated, particularly the habitats of plantation and				-
		shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting?				
6.16	59.7	Are affected habitats within the Clear Water Bay Country Bay reinstated by hydro-				
	,	seeding and planting of climbers and native shrub seedlings where practical upon	1.7			
		completion of the slope mitigation works?			Ш	-
7.00		Landfill Gas Hazard				
7.01	S12.7	Are the safety procedures implemented to minimise the risks of fires and explosions,				
		asphyxiation of works and toxicity effects during all works?		لسكنسا		
7.02	S12.7	Are the gas detection equipment and precautions being used during trenching and				
		excavation as well as creation of confined spaces?				
7.03	S12.7	Are the training with regard to the awareness of potential hazards of working in confined				
		spaces provided from the Contractor to the workers?			Ш_	
7.04	S12.7	Are the safety officers trained with regard to landfill gas and leachate related hazards and				
		presented on the site throughout the works undertaken below grade?				
7.05	S12.7	Are the all personnel working on site and all visitor made aware of the possibility of		-4		
		ignition of gas, the possible presence of contaminated water and the need to avoid				
		physical contact?				
7.06	S12.7	Is the monitoring of landfill gas being undertaken in all excavations, manholes,				
		chambers and any confined spaces?				
7.07	S12.7	Are the monitoring frequency and areas being specified by the safety officers or		$\Box$		
		appropriately qualified person? Are the all measurements being recorded and		$\vee$	Ш	-
		documented?				
7.08	S12.7	Is the drilling proceeded with adequate care and precautions against the potential				
		hazards?	LY			
7.09	S12.7	Is the method statement covering all normal and emergency procedures provided by				
		the drilling contractor prior to the commencement of the site works?		ᆜ		
7.10	S12.7	Are the below ground services entries being sealed to prevent gas entry? Are the				
		grilled metal covers being used for below grade cable trenches?	$\vee$	Ш		
7.11	S12.7	Is each manhole or utility pit monitored with two measurements (at mid-depth and				
		base) for minimum of 10 minutes? Is the steady reading and peak reading recorded				
		at each manhole or utility pit?				30000 a
7.12	S12.7	Are the warning signs of the hazards of landfill gas and its possible presence on site				
		posted in prominent places?		Ш		
8.00		Overall				
8.01	I	Is the EM&A properly implemented in general?	1 1 1	\ /	1 1	



emark / Follow up of Observati	ion(s) and Non-compliance(s)	of Last Weekly Site Inspection	on:				
Reminder  1) The nontractions are reminded to sensure the relises in the Chainage channel under  construction.							
Signatures:	10 to						
ET Representative	Contractor's Representative (Name: [thu 15~))	Supervising Officer's Representative  (Name:	IEC's Representative (Name: 1943)	WSD's Representative (Name:			
LEUNG MUNDHO	(100)	Kegnowl	Ynan				





### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

	ction Date: _	17 ( 26) 3 Inspected by: ET: Jacky Jeung	so: Mr	- Raymon	Koli wsi	D:
Inspe	ction Time:	14230 - 1530 Contractor: Ms. (2010) Today	IEC: July.	Just K	1/21-	
Weat						
Cond	dition	Sunny Fine Overcast Drizzle Rain	Storm	Н	łazy	
Temp	perature	C Humidity High Moderate	Low			
Wind	i	Calm Light Breeze Strong				
			1970331			
Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.				10		
0.00		General				
0.01		Is the current Environmental Permit displayed conspicuously at all vehicle site				
0.02	-	entrances/exits for public's information at any time?				
0.02		Is ET Leader's log-book kept readily available for inspections?				
		Construction Dust		/	10-20-	
1.00	S4.8.1	Are dusty materials, such as excavated materials, building debris and construction				
1.01		materials, and exposed earth surface properly covered to prevent dust emission?				
1.02	\$4.8.1	Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to				
- 22		dusty construction works for dust suppression?				
1.03	S4.8.1	Are fumes or smoke emitting plants or construction activities shielded by a screen?				1
1.04	S4.8.1	Are wheel-washing facilities with high-pressure water jets provided at all site exits?				
1.05	S4.8.1	Is wheel-washing provided to all vehicles leaving the site?				
1.06	\$4.8.1	Are road section near the site exit free from dusty material?				
1.07	S4.8.1	Are all main haul roads inside the site paved or sprayed with water to minimize			$\overline{\Box}$	
		dust emission during vehicle movement?				
1.08	S4.8.1	Are water spraying provided immediately prior to any loading or transfer of dusty materials?		П	П	
1.09	\$4.8.1	Are covers provided to all dump trucks carrying dusty materials when entering and				
		leaving the site?				
1.10	S4.8.1	Are the working areas for uprooting of trees, shrubs, or vegetation or the removal				
		of boulders, poles, pillars sprayed with water to maintain the entire surface wet?				
1.11	S4.8.1	Is exposed earth properly treated within six months after the last construction				
		activity on site?			Ш	
1.12	S4.8.1	Does the operation of plants on site free form dark smoke emission?				
1.13	S4.8.1	Are vehicles travelling at speed not exceeding 15km/hr within the site?				
1.14	S4.8.1	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top				
		and 3 sides?				





Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.			,			
1.15	S4.8.1	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?				
1.16	S4.8.1	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?				
1.17	S4.8.1	Is open burning prohibited?				
2.00		Construction Noise (Airborne)			$\overline{}$	
2.01	S5.7	Are quiet plants adopted on site?			Ш	
2.02	S5.7	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?				
2.03	S5.7	Are plants throttled down or turned off when not in use?		V		
2.04	S5.7	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?				
2.05	S5.7	Are moveable barriers provided to screen NSRs from plant or noisy operations?				
2.06	S5.7	Are silencers, mufflers and enclosures provided to plants?				
2.07	S5.7	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?				
2.08	S5.7	Are purposely-built site hoarding construction with appropriate materials provided				
		along the site boundary?				
2.09	S5.7	Are noisy operation properly scheduled to minimize exposure and cumulative				
		impacts to nearby sensitive receivers?			Ш	
2.10	S5.7	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?				
2.11	S5.7	Are valid noise emission label(s) affixed to all air compressors operating on site?				
2.12	S5.7	Are all construction noise permit(s) applied for percussive piling work?				
2.13	S5.7	Are construction noise permit(s) applied for general construction works during		14.X		
		restricted hours?				
2.14	S5.7	Are valid construction noise permit(s) displayed at all vehicular exits?		V		
3.00		Water Quality				
3.01	S6.9	Is effluent discharge license obtained for wastewater discharge from site?			Ш	
3.02	S6.9	Is effluent discharged according to the effluent discharge license?		V		
3.03	S6.9	Is wastewater discharge from site properly treated prior to discharge?				
3.04	S6.9	Are perimeter channels provided to intercept storm runoff from outside the site?				
3.05	S6.9	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided		/		
		to remove sand/silt particles from runoff?				





Item	EIA ref.	Do not not not not not only of not not only of not only of not not only of not not only of not not only of not not not only of not	N/A	Yes	No	Photo/Remarks
No.						
3.06	S6.9	Is surface runoff diverted to sedimentation facilities?				Ranivola
3.07	S6.9	Is the drainage system properly maintained?				
3.08	S6.9	Are construction works carefully programmed to minimize soil excavation works			$\Box$	
		during rainy seasons?				
3.09		Are exposed soil surface protected by paving as soon as possible to reduce the			$\Box$	
		potential of soil erosion?				
3.10		Are temporary access roads protected by crushed gravel?				
3.11		Are exposed slope surface properly protected?				"
3.12		Is trench excavation avoided in the wet season as far as practicable, or if necessary,		$\overline{\Box}$		
		backfilled in short sections after excavation?			Ш	1
3.13		Are open stockpiles of construction materials on site covered by tarpaulin or similar			$\Box$	
		fabric during construction?			Ш	1
3.14	S6.9	Is runoff from wheel-washing facilities avoided?				
3.15	S6.9	ls oil leakage or spillage prevented?				
3.16	S6.9	Are there any measures to prevent the release of oil and grease into the storm			$\Box$	
		drainage system?				
3.17	S6.9	Are the oil interceptors/ grease traps properly maintained?				
3.18	S6.9	Are debris and rubbish generated on site collected, handled and disposed of				
		properly to avoid them entering the streams?			Ш	
3.19	S6.9	Are all fuel tanks and storage areas provided with locks and be sited on sealed				
		areas, within bunds of capacity equal to 110% of the storage capacity of the largest				
100		tank?		,		
3.20		Are tanks, containers, storage area bunded and the locations locked as far as				
		possible from the sensitive watercourse and stormwater drains?				
3.21		Are sufficient chemical toilets provided on site to handle sewage from construction work force?				
3.22	\$6.9	Are sewage disposal and toilet maintenance of the portable chemical toilets			$\overline{}$	
		provided by the licensed contractors?				
3.23	S6.9	Is concrete washing water properly collected and treated prior to discharge?				
3.24	S6.9	Is suitable type of silt curtains deployed during dredging to reduce the elevation of	<u></u>			
		suspended solids to nearby sensitive receivers?				
3.25	S6.9	Is closed grab dredger used to reduce the potential leakage of sediments?				
3.26	\$6.9	Is closed grab dredger of 3 to 6 m <sup>3</sup> used for dredging at seawater intake?				
3.27	\$6.9	s specific work staff assigned the responsibility for monitoring the number of grab				
		dredged per hour? Is number of cycle limited to 20-21 grab per hour for 3m <sup>3</sup> closed				
	- 1	grab, 10-11 grab per hour for 6m3 closed grab?				



em	EIA ref.		N/A	Yes	No	Photo/Remarks
o.						
3.28	S6.9	Is the grab operated in slow and controlled manner such that the impact to seabed by the grab when being lowered could be minimized? Is the operator ensured the grab be properly closed before lifting the grab?				
3.29	S6.9	Is the maximum allowed dredging rate at the seawater intake limited to 750 m3/day while the maximum allowed dredging rate at the submarine outfall is 3,500 m3/day?				
3.30	S6.9	Is dredged marine sediment disposed of in a gazetted marine disposal area in accordance with marine dumping permit conditions of the Dumping at Sea Ordinance (DASO)?				
3.31	S6.9	Are disposal vessels fitted with tight bottom seals in order to prevent leakage of material during transport?				
3.32	S6.9	Are barges filled to a level which ensures that material does not spill over during transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action?				
3.33	S6.9	Are excess materials cleaned from decks and exposed fittings before the vessel is moved from the dredging area after dredging?				
3.34	S6.9	Are the contractor(s) confirmed that the works cause no visible foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the dredging site?				
3.35	S6.9	When the dredged material has been unloaded at the disposal areas, is any material accumulated on the deck or other exposed parts of the vessel removed and placed in the hold or a hopper?				
3.36	S6.9	Is dredger maintained adequate clearance between vessels and the seabed at all states of the tide and reduce operations speed to ensure that excessive turbidity is not generated by turbulence from vessel movement or propeller wash?				
3.37	S6.9	Is the contractor shall regularly inspect the silt curtains and check that they are moored and marked to avoid danger to marine traffic? Is regular inspection on the integrity of the silt curtain carried out by the contractor and any damage to the silt curtain shall be repaired by the contractor promptly?				
3.38	S6.9	Are all vessels have a clean ballast system?	V			
3.39	S6.9	Are all vessels well maintained and inspected before use to limit any potential discharges to the marine environment?				
3.40	S6.9	Is any discharge of sewage/grey wastewater? Is wastewater from potentially contaminated area on working vessels should be minimized and collected?				
3.41	S6.9	Is any soil waste disposed overboard?				
.00		Waste Management				
4.01	S8.5	Is a trip-ticket system implemented to monitor the disposal of C&D and solid wastes at public filling facilities and landfills?				
4.02	S8.5	Is a recording system implemented to record the amount of wastes generated, recycled and disposed of?				
4.03	S8.5	Is the Contractor registered as a chemical waste producer?				





Item	EIA ref.	and the state of t	N/A	Yes	No	Photo/Remarks
No.						
4.04	S8.5	Is chemical waste separated from other waste and collected by a licensed chemical waste collector?				
4.05	S8.5	Are trip tickets for chemical waste disposal available for inspection?				
4.06	S8.5	Is drip tray provided for chemical storage?				
4.07	S8.5	Are all containers for chemical waste properly labelled?		V		
4.08	\$8.5	Is chemical waste storage area used solely for storage of chemical waste and				
:		properly labelled?				
4.09	S8.5	Are incompatible chemical wastes stored in different areas?				
4.10	S8.5	Is the chemical waste storage area enclosed on at least 3 sides and adequately				
		ventilated?				*****
4.11	S8.5	Is an impermeable floor and bunding, of capacity to accommodate 110% of the				
		volume of the largest container or of 20% by volume of the chemical waste stored				•
4.10	00.5	in that area, whichever is the greatest, provide?				
4.12	88.5	Are a routine cleaning and maintenance programme implemented for drainage		1		
4.13	58.5	systems, sump pits, and oil interceptors?				
		Are sufficient general refuse disposal/collection points provided on site?		W		
4.14	\$8.5	Is general refuse disposed of properly and regularly?				
4.15	\$8.5	Are appropriate measures adopted to minimize windblown litter and dust during				
		transportation of waste?		V,		-
4.16	S8.5	Are individual collectors for aluminum cans, plastic bottles and packaging material				
		and office paper provided to encourage waste segregation?				
4.17	\$8.5	Are C&D wastes sorted on site?				
4.18	\$8.5	Are C&D waste disposed of properly?				
4.19	\$8.5	Are unused C&D materials or chemicals recycled or reused to reduce the quantity				
		of waste?				
4.20	S8.5	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal				
		off-site?				
4.21	S8.5	Are the construction materials stored properly to minimize the potential for damage				
		or contamination?				-
4.22	\$8.5	Is a dumping license obtained to deliver public fill to public filling areas?				
5.00	S11.10	Landscape and Visual				
		Are Is site hoarding provided?				
5.02	\$11.10 & 11.11	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
5.03	S11.10 &	Is construction light oriented away from the sensitive receivers?	V			



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
5.04	S11.10 & 11.11	Is grass hydroseeding provided to slopes as soon as the completion of works?				
5.05	S11.10 & 11.11	Are damages to trees outside site boundary due construction works avoided?				
5.06	S11.10 &	Is excavation works carried out manually instead of machinery operation within 2.5m				
SV - 1912 - 300	11.11	vicinity of any preserved trees?		Ш		
5.07	S11.10 & 11.11	Are the retained and transplanted tree(s) properly protected and in good conditions?				
5.08	S11.10 &	Are surgery works carried out for damaged trees?				
6.00	S9.7	Ecology			$\overline{}$	
6.01		Is site runoff properly treated to prevent any silly runoff?		1/		
6.02	S9.7	Are silt trap installed and well-maintained?				
6.03	S9.7	Are stockpiles properly covered to avoid generating silty runoff?				
6.04	S9.7	Are construction works restricted to works area which are clearly defined?				
6.05	S9.7	For slope mitigation works within the Clear Water Bay Country Park, are tree felling and				
		damages to trees, the exact locations of the flexible barrier foundation plates, soil nails				
		and rock dowels adjusted during detailed design, and a setback distance from existing				
		trees is recommended to be maintained as far as practical?				
6.06	S9.7	Are pruning of tree canopies along the alignment of the flexible barriers limited to a minimum?				
6.07	S9.7	Is the alignment of flexible barriers optimized to preserve all species of conservation				
		interest and minimize the impact to the existing vegetation as far as practicable? Are the				
		alignment of flexible barriers positioned at minimum 1.5 m in a radius away from these				
		individuals?	ш		ш	
6.08	S9.7	Is temporary fencing installed to fence off the concerned species either in groups of				Feacing was
		individually within the works area and in the close proximity to prevent from being				properly erected
		damaged and disturbed during construction? Is a sign identifying the site attached to the				dery the
		fence and flagging tape shall be attached to the individuals to visualize their locations?		4		Construction,
6.09	S9.7	Is a specification for fencing and demarcating individuals of Marsdenai lachnostoma (or				Clear Writer
		other flora species of conservation interest, if found) adjacent to the proposed alignment of the flexible barriers prepared to protect the species?				Bex Country.
6.10	\$9.7	Is any induction training provided to all site personnel in order to brief them on this flora				No Impres
		of conservation interest including the locations and their importance?			Ш	Contractor 1005 absorbed
6.11	S9.7	Is the resident site supervisory staff closely monitor the conditions of concerned individuals during construction of flexible barriers in the close proximity?		V		day ste
6.12	S9.7	Are fences erected along the boundary of the works area before the commencement of		9		
		works to prevent vehicle movements and encroachment of personnel onto adjacent		/		-
		areas?		$\bigvee$		
6.13	S9.7	Is regular check of the work site boundaries performed to ensure that they are not				
		breached and that damage does not occur to surrounding areas?				
6.14	S9.7	Is any damage and disturbance avoided, particularly those caused by filling and illegal			$\Box$	
		dumping, to the surrounding habitats through proper management of waste disposal?		$\checkmark$		



•	ontra	et no. 13/WSD/17 Design, Build and Operate First Stage of	iseung Kv	van O 1	Jesanna	ttion riant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
6.15	S9.7	Are temporarily affected areas reinstated, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting?				
6.16	S9.7	Are affected habitats within the Clear Water Bay Country Bay reinstated by hydro- seeding and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works?				
<b>7.00</b> 7.01	S12.7	Landfill Gas Hazard  Are the safety procedures implemented to minimise the risks of fires and explosions, asphyxiation of works and toxicity effects during all works?				
7.02	S12.7	Are the gas detection equipment and precautions being used during trenching and excavation as well as creation of confined spaces?				
7.03	S12.7	Are the training with regard to the awareness of potential hazards of working in confined spaces provided from the Contractor to the workers?				
7.04	S12.7	Are the safety officers trained with regard to landfill gas and leachate related hazards and presented on the site throughout the works undertaken below grade?				
7.05	S12.7	Are the all personnel working on site and all visitor made aware of the possibility of ignition of gas, the possible presence of contaminated water and the need to avoid physical contact?				
7.06	S12.7	Is the monitoring of landfill gas being undertaken in all excavations, manholes, chambers and any confined spaces?				
7.07	S12.7	Are the monitoring frequency and areas being specified by the safety officers or appropriately qualified person? Are the all measurements being recorded and documented?				
7.08	S12.7	Is the drilling proceeded with adequate care and precautions against the potential hazards?				
7.09	S12.7	Is the method statement covering all normal and emergency procedures provided by the drilling contractor prior to the commencement of the site works?				
7.10	S12.7	Are the below ground services entries being sealed to prevent gas entry? Are the grilled metal covers being used for below grade cable trenches?				
7.11	S12.7	Is each manhole or utility pit monitored with two measurements (at mid-depth and base) for minimum of 10 minutes? Is the steady reading and peak reading recorded at each manhole or utility pit?				
7.12	S12.7	Are the warning signs of the hazards of landfill gas and its possible presence on site posted in prominent places?				
8.00 8.01		Overall  Is the EM& A properly implemented in general?				



Remark / Follow up of Observation(s) as	nd Non-compliance(s) of Last V	Weekly Site Inspection	:	Ļ			
Keninden							
1.) The contractor pool of west	ins one nemi	nded to	dear up	a smell			
pool of LINT	en near the	contrac	tons nost	anca			
pool of were	() /// ()	•		· ·			
				*			
				*			
9							
Signatures:							
ET Contra		vising Officer's	IEC's	WSD's			
Representative Repre	esentative Repres	sentative	Representative	Representative			
	· LP	JA.	MA				
(Name:	e: Titley (Say) (Name		(Name: Louis)	(Name:			
LAUND (11418V/110		D1.	Kevan				
		llole	-				





### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

	on Date: _	27/1/2013 Inspected by: ET: Howard Chan Contractor: MS. Tishay Tsang	SO: Mr. 1 IEC: Mr. 1	Derek La	WSD:	
Inspecti	on Time: _	14230 - 15:30				
Weathe	er					
Conditi	ion	Sunny Fine Overcast Drizzle Rain	Storm	Ha	zy	
Tempe	rature	Calm Light Breeze Strong	Low			
Wind		Laiii Ligit Breeze Booking				
. 1	EIA ref.		N/A	Yes	No	Photo/Remarks
	EIA ICI.					
No.						
0.00		General				
0.01		Is the current Environmental Permit displayed conspicuously at all vehicle site		$\mathbf{V}$		
		entrances/exits for public's information at any time?				
0.02		Is ET Leader's log-book kept readily available for inspections?				
		Construction Dust				
1.00	S4.8.1	Are dusty materials, such as excavated materials, building debris and construction				
1.01		materials, and exposed earth surface properly covered to prevent dust emission?				
50.000.000	S4.8.1	Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to				
1.02	54.0.1	dusty construction works for dust suppression?				
1.02	04.0.1	dusty construction works for dust suppression.				
1.03	S4.8.1	Are fumes or smoke emitting plants or construction activities shielded by a screen?		Щ		
1.04	\$4.8.1	Are wheel-washing facilities with high-pressure water jets provided at all site exits?				
1.05	S4.8.1	Is wheel-washing provided to all vehicles leaving the site?				
1.06	S4.8.1	Are road section near the site exit free from dusty material?				
1.07	\$4.8.1	Are all main haul roads inside the site paved or sprayed with water to minimize				
		dust emission during vehicle movement?		$\searrow$		
1.08	\$4.8.1	Are water spraying provided immediately prior to any loading or transfer of dusty		$\overline{}$		
1.00	0 1.0.1	materials?				
1.00	C4 0 1	Are covers provided to all dump trucks carrying dusty materials when entering and			$\overline{}$	
1.09	S4.8.1	00 00 00 00 00 00 00 00 00 00 00 00 00				
		leaving the site?				
1.10	\$4.8.1	Are the working areas for uprooting of trees, shrubs, or vegetation or the removal of boulders, poles, pillars sprayed with water to maintain the entire surface wet?				
1.11	S4.8.1	Is exposed earth properly treated within six months after the last construction				
		activity on site?				
1.12	S4.8.1	Does the operation of plants on site free form dark smoke emission?				
1.13	S4.8.1					
		Are vehicles travelling at speed not exceeding 15km/hr within the site?		$\checkmark$		
1.14	C4 0 1	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top				
1.14	S4.8.1			$\sqrt{}$		
		and 3 sides?				
			-			



	L	the. 157 WSD/17 Design, Build and Operate First Stage of	iseung K	wan O	Desalin	ation Plant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
1.15	S4.8.1	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	V			
1.16	S4.8.1	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?	-			
1.17	S4.8.1	Is open burning prohibited?				
2.00		Construction Noise (Airborne)				
2.01	S5.7	Are quiet plants adopted on site?				
2.02	S5.7	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?				
2.03	S5.7	Are plants throttled down or turned off when not in use?				
2.04	S5.7	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?				
2.05	S5.7	Are moveable barriers provided to screen NSRs from plant or noisy operations?				
2.06	S5.7	Are silencers, mufflers and enclosures provided to plants?				
2.07	S5.7	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?			$\overline{\sqcap}$	
2.08	S5.7	Are purposely-built site hoarding construction with appropriate materials provided				
		along the site boundary?	$\sqrt{}$			
2.09	1	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?				
2.10	1	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?				
2.11	S5.7	Are valid noise emission label(s) affixed to all air compressors operating on site?				
2.12	S5.7	Are all construction noise permit(s) applied for percussive piling work?				
2.13		Are construction noise permit(s) applied for general construction works during restricted hours?				
2.14	S5.7	Are valid construction noise permit(s) displayed at all vehicular exits?				
3.00		Water Quality			_	
		s effluent discharge license obtained for wastewater discharge from site?				
		s effluent discharged according to the effluent discharge license?				
3.03		s wastewater discharge from site properly treated prior to discharge?				
3.04		Are perimeter channels provided to intercept storm runoff from outside the site?				
3.05		Are sand/silt removal facilities such as sand/silt traps and sediment basins provided o remove sand/silt particles from runoff?				



(	contrac	et no. 13/WSD/17 Design, Build and Operate First Stage of	iseung Kv	vali O i	Jesaiiii	ation I lant
ltem No.	EIA ref.		N/A	Yes	No	Photo/Remarks
3.06	S6.9	Is surface runoff diverted to sedimentation facilities?				
3.07	S6.9	Is the drainage system properly maintained?				
3.08	S6.9	Are construction works carefully programmed to minimize soil excavation works during rainy seasons?				
3.09	S6.9	Are exposed soil surface protected by paving as soon as possible to reduce the potential of soil erosion?				
3.10	S6.9	Are temporary access roads protected by crushed gravel?				
3.11	S6.9	Are exposed slope surface properly protected?				
3.12	S6.9	Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation?				
3.13	S6.9	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric during construction?				
3.14	S6.9	Is runoff from wheel-washing facilities avoided?		$\square$		
3.15	S6.9	Is oil leakage or spillage prevented?		V		
3.16	S6.9	Are there any measures to prevent the release of oil and grease into the storm drainage system?				
3.17	S6.9	Are the oil interceptors/ grease traps properly maintained?				
3.18	S6.9	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?				
3.19	\$6.9	Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within bunds of capacity equal to 110% of the storage capacity of the largest tank?				
3.20	S6.9	Are tanks, containers, storage area bunded and the locations locked as far as possible from the sensitive watercourse and stormwater drains?				
3.21	S6.9	Are sufficient chemical toilets provided on site to handle sewage from construction work force?				
3.22	S6.9	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by the licensed contractors?				
3.23	S6.9	Is concrete washing water properly collected and treated prior to discharge?				
3.24	S6.9	Is suitable type of silt curtains deployed during dredging to reduce the elevation of suspended solids to nearby sensitive receivers?				
3.25	S6.9	Is closed grab dredger used to reduce the potential leakage of sediments?				
3.26	\$6.9	Is closed grab dredger of 3 to 6 m <sup>3</sup> used for dredging at seawater intake?				
3.27	S6.9	Is specific work staff assigned the responsibility for monitoring the number of grab dredged per hour? Is number of cycle limited to 20-21 grab per hour for 3m³ closed grab, 10-11 grab per hour for 6m3 closed grab?				



	EIA ref.	ct no. 13/WSD/17 Design, Build and Operate First Stage of				
Item No.	CIA ret.		N/A	Yes	No	Photo/Remarks
3.28	S6.9	Is the grab operated in slow and controlled manner such that the impact to seabed				
		by the grab when being lowered could be minimized? Is the operator ensured the				
		grab be properly closed before lifting the grab?	$\checkmark$			
3.29	\$6.9	Is the maximum allowed dredging rate at the seawater intake limited to 750 m3/day				
J.27	50.5	•				
		while the maximum allowed dredging rate at the submarine outfall is 3,500 m3/day?				
3.30	S6.9	Is dredged marine sediment disposed of in a gazetted marine disposal area in		-		
		accordance with marine dumping permit conditions of the Dumping at Sea Ordinance (DASO)?				
3.31	S6.9	Are disposal vessels fitted with tight bottom seals in order to prevent leakage of				
		material during transport?				
3.32	S6.9	Are barges filled to a level which ensures that material does not spill over during				
		transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action?				
3.33	S6.9	Are excess materials cleaned from decks and exposed fittings before the vessel is		=	=	
		moved from the dredging area after dredging?				
3.34	S6.9	Are the contractor(s) confirmed that the works cause no visible foam, oil, grease,				
		litter or other objectionable matter to be present in the water within and adjacent				
		to the dredging site?				
3.35	S6.9	When the dredged material has been unloaded at the disposal areas, is any material				
		accumulated on the deck or other exposed parts of the vessel removed and placed in				
		the hold or a hopper?				
3.36	S6.9	Is dredger maintained adequate clearance between vessels and the seabed at all				
		states of the tide and reduce operations speed to ensure that excessive turbidity is				
		not generated by turbulence from vessel movement or propeller wash?		Ш		
3.37	S6.9	Is the contractor shall regularly inspect the silt curtains and check that they are				
		moored and marked to avoid danger to marine traffic? Is regular inspection on the				
		integrity of the silt curtain carried out by the contractor and any damage to the silt	,			
		curtain shall be repaired by the contractor promptly?				
200	0(0	curtain shall be repaired by the contractor promptly:	V		Ш_	
3.38	50.9	Are all vessels have a clean ballast system?				
3.39	S6.9	Are all vessels well maintained and inspected before use to limit any potential				
		discharges to the marine environment?				
3.40	S6.9	Is any discharge of sewage/grey wastewater? Is wastewater from potentially	<u> </u>		$\overline{}$	
		contaminated area on working vessels should be minimized and collected?				
3.41	S6.9	Is any soil waste disposed overboard?				
.00		Waste Management				
.01	S8.5	Is a trip-ticket system implemented to monitor the disposal of C&D and solid				
		wastes at public filling facilities and landfills?				
.02	S8.5	Is a recording system implemented to record the amount of wastes generated,				
		recycled and disposed of?				-
4.03		Is the Contractor registered as a chemical waste producer?				



	Juna	te no. 15/ 11 SD/11 Design, Bund and Operate 1 11 st Stage of	iscums in	Wall O	D COCCATA	ation I must
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
4.04	S8.5	Is chemical waste separated from other waste and collected by a licensed chemical waste collector?	Ø			
4.05	S8.5	Are trip tickets for chemical waste disposal available for inspection?				
4.06	S8.5	Is drip tray provided for chemical storage?				
4.07	S8.5	Are all containers for chemical waste properly labelled?				1-12-
4.08	\$8.5	Is chemical waste storage area used solely for storage of chemical waste and properly labelled?				
4.09	S8.5	Are incompatible chemical wastes stored in different areas?				3
4.10	S8.5	Is the chemical waste storage area enclosed on at least 3 sides and adequately ventilated?				
4.11	S8.5	Is an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or of 20% by volume of the chemical waste stored in that area, whichever is the greatest, provide?		Ø		
4.12	S8.5	Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors?				
4.13	S8.5	Are sufficient general refuse disposal/collection points provided on site?				-
4.14	S8.5	Is general refuse disposed of properly and regularly?				
4.15	S8.5	Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?				
4.16	S8.5	Are individual collectors for aluminum cans, plastic bottles and packaging material and office paper provided to encourage waste segregation?				_
4.17	S8.5	Are C&D wastes sorted on site?				
4.18	S8.5	Are C&D waste disposed of properly?				
4.19	S8.5	Are unused C&D materials or chemicals recycled or reused to reduce the quantity of waste?				_
4.20	S8.5	Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				
4.21	S8.5	Are the construction materials stored properly to minimize the potential for damage or contamination?				
4.22	S8.5	ls a dumping license obtained to deliver public fill to public filling areas?				
5.00	S11.10	Landscape and Visual				
5.01	1	Are Is site hoarding provided?				
5.02	S11.10 & 11.11	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
5.03	S11.10 &	Is construction light oriented away from the sensitive receivers?				



		te not 107 (1827) Design, Duna and Operate 1 fist Stage of	iscume is	Ween O	Couling	ation I fairt
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
	S11.10					
3.04	& 11.11	ls grass hydroseeding provided to slopes as soon as the completion of works?				
5.05	S11.10 & 11.11	Are damages to trees outside site boundary due construction works avoided?		$\sqrt{}$		
5.06	S11.10 &	ls excavation works carried out manually instead of machinery operation within 2.5m				
	11.11	vicinity of any preserved trees?	$\mathbf{V}$	Ш	Ш	_
5.07	S11.10 & 11.11	Are the retained and transplanted tree(s) properly protected and in good conditions?				ROL
5.08	S11.10 & 11.11	Are surgery works carried out for damaged trees?	$\Box$			
6.00	S9.7	Ecology				
6.01		ls site runoff properly treated to prevent any silly runoff?		$\checkmark$	Ш	-
6.02	S9.7	Are silt trap installed and well-maintained?				
6.03	S9.7	Are stockpiles properly covered to avoid generating silty runoff?				
6.04	S9.7	Are construction works restricted to works area which are clearly defined?				
6.05	S9.7	For slope mitigation works within the Clear Water Bay Country Park, are tree felling and				
		damages to trees, the exact locations of the flexible barrier foundation plates, soil nails				
		and rock dowels adjusted during detailed design, and a setback distance from existing				
		trees is recommended to be maintained as far as practical?		$\checkmark$		
6.06		Are pruning of tree canopies along the alignment of the flexible barriers limited to a minimum?				1000 m
6.07	S9.7	Is the alignment of flexible barriers optimized to preserve all species of conservation				Fenāna was
		interest and minimize the impact to the existing vegetation as far as practicable? Are the				property erected
		alignment of flexible barriers positioned at minimum 1.5 m in a radius away from these				during the
		individuals?				Construction
6.08	S9.7	Is temporary fencing installed to fence off the concerned species either in groups of				Clear Water
		individually within the works area and in the close proximity to prevent from being		,		Bay Country
		damaged and disturbed during construction? Is a sign identifying the site attached to the fence and flagging tape shall be attached to the individuals to visualize their locations?		$\bigvee$		Tork. No.
6.09	0.000	Is a specification for fencing and demarcating individuals of Marsdenai lachnostoma (or				the Cartificator
0.07		other flora species of conservation interest, if found) adjacent to the proposed alignment				duma 21to
		of the flexible barriers prepared to protect the species?		i/		inspection.
6.10	S9.7	Is any induction training provided to all site personnel in order to brief them on this flora			$\overline{\Box}$	
		of conservation interest including the locations and their importance?			Ш	
6.11		Is the resident site supervisory staff closely monitor the conditions of concerned				
		individuals during construction of flexible barriers in the close proximity?	Ш		Ш	
6.12	S9.7	Are fences erected along the boundary of the works area before the commencement of		,		
		works to prevent vehicle movements and encroachment of personnel onto adjacent areas?		$\sqrt{}$		
6.13		Is regular check of the work site boundaries performed to ensure that they are not				
		breached and that damage does not occur to surrounding areas?		$\sqrt{}$		
6.14	S9.7	Is any damage and disturbance avoided, particularly those caused by filling and illegal				-
		dumping, to the surrounding habitats through proper management of waste disposal?		$\sqrt{}$		



(	ontra	et no. 13/WSD/1/ Design, Build and Operate First Stage of	racung ix	van O i	o csamin	ttion I lant
ltem No.	EIA ref.		N/A	Yes	No	Photo/Remarks
	S9.7	Are temporarily affected areas reinstated, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting?	$\square$			
6.16	S9.7	Are affected habitats within the Clear Water Bay Country Bay reinstated by hydro- seeding and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works?	Ø			_
<b>7.00</b> 7.01	S12.7	Landfill Gas Hazard  Are the safety procedures implemented to minimise the risks of fires and explosions, asphyxiation of works and toxicity effects during all works?				
7.02	S12.7	Are the gas detection equipment and precautions being used during trenching and excavation as well as creation of confined spaces?				
7.03	S12.7	Are the training with regard to the awareness of potential hazards of working in confined spaces provided from the Contractor to the workers?				
7.04	S12.7	Are the safety officers trained with regard to landfill gas and leachate related hazards and presented on the site throughout the works undertaken below grade?				
7.05	S12.7	Are the all personnel working on site and all visitor made aware of the possibility of ignition of gas, the possible presence of contaminated water and the need to avoid physical contact?				
7.06	S12.7	Is the monitoring of landfill gas being undertaken in all excavations, manholes, chambers and any confined spaces?				
7.07	S12.7	Are the monitoring frequency and areas being specified by the safety officers or appropriately qualified person? Are the all measurements being recorded and documented?				
7.08	S12.7	Is the drilling proceeded with adequate care and precautions against the potential hazards?				
7.09	S12.7	Is the method statement covering all normal and emergency procedures provided by the drilling contractor prior to the commencement of the site works?		$\Box$		
7.10	S12.7	Are the below ground services entries being sealed to prevent gas entry? Are the grilled metal covers being used for below grade cable trenches?				
7.11	S12.7	Is each manhole or utility pit monitored with two measurements (at mid-depth and base) for minimum of 10 minutes? Is the steady reading and peak reading recorded at each manhole or utility pit?				3
7.12	S12.7	Are the warning signs of the hazards of landfill gas and its possible presence on site posted in prominent places?				
<b>8.00</b>		Overall  Is the EM&A properly implemented in general?		$\square$		- 1000





Remar	k / Follow up of Observa	ation(s) and Non-compliance	e(s) of Last Weekly Site Insp	pection:	
R	eminder 2				
Ro	ole The Cont protection	tractor was Zone hear	reminded to the ELP )	, reinstitute 32 kV substati	the tree
	Signatures:				
	ET Representative	Contractor's Representative	Supervising Officer's Representative	IEC's Representative	WSD's Representative
(	Name: Howard Chan	(Name: Titley Isay)	(Name: Doels Lon	(Name: Lower )	(Name:





### WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspe	ction Date:	3 1 ( ) 2023 Inspected by: ET: Jacky Lenna	so: 19	Raman	Koll W	SD: Mr. Call. 820
Inspec	ction Time:	09200 - 10240 Contractor: 195 Tistany Isage	IEC: MY	Tour K	wan	ı
Weat	ther					
Cond	lition	Sunny Fine Overcast Drizzle Rain	Storm	☐ I	łazy	
Temp	perature	15°C Humidity High Moderate	Low			
Wind	ı	Calm Light Breeze Strong				
		_				
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
0.00		General				
0.01		Is the current Environmental Permit displayed conspicuously at all vehicle site			$\Box$	
		entrances/exits for public's information at any time?		\/_		
0.02		Is ET Leader's log-book kept readily available for inspections?	$I_{\Box}$		П	
		Construction Dust				
1.00	\$4.8.1	Are dusty materials, such as excavated materials, building debris and construction		<u> </u>		
1.01		materials, and exposed earth surface properly covered to prevent dust emission?		$\vee$		
1.02	\$4.8.1	Are screenings, enclosures, water spraying, or vacuum cleaning devices provided to	$\vdash$			
		dusty construction works for dust suppression?				
1.03	S4.8.1	Ara fumos or smalks amitting allows				
		Are fumes or smoke emitting plants or construction activities shielded by a screen?				
1.04	S4.8.1	Are wheel-washing facilities with high-pressure water jets provided at all site exits?			П	
1.05	S4.8.1	In what was in the property of		<del></del>	二	
		Is wheel-washing provided to all vehicles leaving the site?				_
1.06	\$4.8.1	Are road section near the site exit free from dusty material?				
1.07	\$4.8.1	Are all main haul roads inside the site paved or sprayed with water to minimize				
	1	dust emission during vehicle movement?		$\square$		
1.08	S4.8.1	Are water spraying provided immediately prior to any loading or transfer of dusty				
1		materials?				
1.09	S4.8.1	Are covers provided to all dump trucks carrying dusty materials when entering and				
		leaving the site?				
1.10		Are the working areas for uprooting of trees, shrubs, or vegetation or the removal			П	
		of boulders, poles, pillars sprayed with water to maintain the entire surface wet?				
1.11	- 1	Is exposed earth properly treated within six months after the last construction	[. /			
		activity on site?			Ш	
1.12	S4.8.1	Does the operation of plants on site free form dark smoke emission?		V		
.13	S4.8.1	A		<u></u>		
		Are vehicles travelling at speed not exceeding 15km/hr within the site?				
.14	- 1	Are stock of more than 20 bags of cement or day PFA covered or sheltered on top			П	
		and 3 sides?				-



	EIA ref.	t no. 15/11/5D/17/Design, Dana and Special Lines	N/A	Yes	No	Photo/Remarks
Item No.	EIA ICI.					
1.15	S4.8.1	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?	V			
1.16	S4.8.1	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?				
1.17	S4.8.1	Is open burning prohibited?				
2.00		Construction Noise (Airborne)				
2.01	S5.7	Are quiet plants adopted on site?				
2.02	S5.7	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?				
2.03	S5.7	Are plants throttled down or turned off when not in use?				
2.04	S5.7	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?				
2.05	S5.7	Are moveable barriers provided to screen NSRs from plant or noisy operations?				
2.06	S5.7	Are silencers, mufflers and enclosures provided to plants?				7
2.07	S5.7	Are the hoods, cover panels and inspection hatches of PMEs closed during operation?				
2.08	S5.7	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?				
2.09	S5.7	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?	V			
2.10	S5.7	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	V			
2.11	\$5.7	Are valid noise emission label(s) affixed to all air compressors operating on site?				
2.12	S5.7	Are all construction noise permit(s) applied for percussive piling work?				
2.13	S5.7	Are construction noise permit(s) applied for general construction works during restricted hours?		V		
2.14	S5.7	Are valid construction noise permit(s) displayed at all vehicular exits?		V		
3.00		Water Quality				-
3.01	S6.9	Is effluent discharge license obtained for wastewater discharge from site?				11/
3.02	S6.9	Is effluent discharged according to the effluent discharge license?		V		
3.03	\$6.9	Is wastewater discharge from site properly treated prior to discharge?		V		
3.04	S6.9	Are perimeter channels provided to intercept storm runoff from outside the site?				
3.05	S6.9	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to remove sand/silt particles from runoff?				
			100 100 100 100			



<u> </u>		tet no. 157 WSD/17 Design, Bund and Operate First Stage of	rseung is	wan O	Desain	lation Plant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
3.06	\$6.9	Is surface runoff diverted to sedimentation facilities?		1		
3.07	S6.9	Is the drainage system properly maintained?				
3.08	S6.9	Are construction works carefully programmed to minimize soil excavation works during rainy seasons?	V			
2.00	0.6.0	- Control - Cont				
3.09	S6.9	Are exposed soil surface protected by paving as soon as possible to reduce the potential of soil erosion?				
3.10	S6.9	Are temporary access roads protected by crushed gravel?				
3.11	S6.9	Are exposed slope surface properly protected?	V			
3.12	S6.9	Is trench excavation avoided in the wet season as far as practicable, or if necessary,		$\overline{}$	一三	
		backfilled in short sections after excavation?				
3.13	S6.9	Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric during construction?				
3.14	S6.9	Is runoff from wheel-washing facilities avoided?				
3.15	S6.9	Is oil leakage or spillage prevented?				Dominales
3.16	S6.9	Are there any measures to prevent the release of oil and grease into the storm				
2.17		drainage system?				
3.17		Are the oil interceptors/ grease traps properly maintained?				Davinter
3.18	S6.9	Are debris and rubbish generated on site collected, handled and disposed of				
2.10		properly to avoid them entering the streams?		$\subseteq$	Ш	
3.19		Are all fuel tanks and storage areas provided with locks and be sited on sealed areas, within bunds of capacity equal to 110% of the storage capacity of the largest tank?				
3.20	S6.9	Are tanks, containers, storage area bunded and the locations locked as far as				
		possible from the sensitive watercourse and stormwater drains?				
3.21		Are sufficient chemical toilets provided on site to handle sewage from construction work force?	8			,
3.22	-	Are sewage disposal and toilet maintenance of the portable chemical toilets provided by the licensed contractors?	-			
3.23	S6.9	Is concrete washing water properly collected and treated prior to discharge?		$\overline{\Box}$	$\overline{\Box}$	
3.24	\$6.9	Is suitable type of silt curtains deployed during dredging to reduce the elevation of				
		suspended solids to nearby sensitive receivers?				
3.25	\$6.9	Is closed grab dredger used to reduce the potential leakage of sediments?				
3.26	\$6.9	Is closed grab dredger of 3 to 6 m <sup>3</sup> used for dredging at seawater intake?				
3.27	\$6.9	Is specific work staff assigned the responsibility for monitoring the number of grab				
		dredged per hour? Is number of cycle limited to 20-21 grab per hour for 3m <sup>3</sup> closed grab, 10-11 grab per hour for 6m3 closed grab?				



	EIA ref.	t no. 15/11/56/1/ Besign, Build and Specials 21150 stage 01-	N/A	Yes	No	Photo/Remarks
itelli.	EIA ICI.		1071	103	110	1 10 10, 110, 110, 110, 110, 110, 110,
No.						
3.28		Is the grab operated in slow and controlled manner such that the impact to seabed				
	45.1	by the grab when being lowered could be minimized? Is the operator ensured the	1			
		grab be properly closed before lifting the grab?				
3.29	S6.9	Is the maximum allowed dredging rate at the seawater intake limited to 750 m3/day				
		while the maximum allowed dredging rate at the submarine outfall is 3,500				
		m3/day?				
2.20		Is dredged marine sediment disposed of in a gazetted marine disposal area in				
3.30	56.9					
		accordance with marine dumping permit conditions of the Dumping at Sea	. /			
		Ordinance (DASO)?	4			
3.31	S6.9	Are disposal vessels fitted with tight bottom seals in order to prevent leakage of				
		material during transport?				
3.32	S6.9	Are barges filled to a level which ensures that material does not spill over during				
		transport to the disposal site and that adequate freeboard is maintained to ensure				
		that the decks are not washed by wave action?				
	0.6.0					
3.33	\$6.9	Are excess materials cleaned from decks and exposed fittings before the vessel is				
		moved from the dredging area after dredging?				
3.34	S6.9	Are the contractor(s) confirmed that the works cause no visible foam, oil, grease,	/			
		litter or other objectionable matter to be present in the water within and adjacent				
		to the dredging site?				
3 35	S6.9	When the dredged material has been unloaded at the disposal areas, is any material				
3.55	30.9	accumulated on the deck or other exposed parts of the vessel removed and placed in				
		the hold or a hopper?				
3.36	S6.9	Is dredger maintained adequate clearance between vessels and the seabed at all				
		states of the tide and reduce operations speed to ensure that excessive turbidity is				
		not generated by turbulence from vessel movement or propeller wash?				
3.37	S6.9	Is the contractor shall regularly inspect the silt curtains and check that they are				24
		moored and marked to avoid danger to marine traffic? Is regular inspection on the				
		integrity of the silt curtain carried out by the contractor and any damage to the silt	,			
		curtain shall be repaired by the contractor promptly?				
3.38	S6.9	Are all vessels have a clean ballast system?				
		The production of the projection of the production of the producti		Ш	Ш	
3.39	S6.9	Are all vessels well maintained and inspected before use to limit any potential				
		discharges to the marine environment?	لكها			
3.40	S6.9	Is any discharge of sewage/grey wastewater? Is wastewater from potentially				
		contaminated area on working vessels should be minimized and collected?				
2.11	56.6	Total and the control of the control				
3.41	S6.9	Is any soil waste disposed overboard?	i/			
4.00		Waste Management				
4.01	S8.5	Is a trip-ticket system implemented to monitor the disposal of C&D and solid				
		wastes at public filling facilities and landfills?		, A		
- 1				$\Box$		
4.02	S8.5	Is a recording system implemented to record the amount of wastes generated,		, ,		
		recycled and disposed of?				
4.03	S8.5			7		
		Is the Contractor registered as a chemical waste producer?				



Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						
4.04	S8.5	Is chemical waste separated from other waste and collected by a licensed chemical				
		waste collector?				-
4.05	S8.5	Are trip tickets for chemical waste disposal available for inspection?		V		
4.06	S8.5	Is drip tray provided for chemical storage?		X		obs 1
4.07	S8.5	Are all containers for chemical waste properly labelled?				
4.08	S8.5	Is chemical waste storage area used solely for storage of chemical waste and				
		properly labelled?				
4.09	S8.5	Are incompatible chemical wastes stored in different areas?				
4.10	S8.5	Is the chemical waste storage area enclosed on at least 3 sides and adequately		[c_]		
		ventilated?				
4.11	S8.5	ls an impermeable floor and bunding, of capacity to accommodate 110% of the				
		volume of the largest container or of 20% by volume of the chemical waste stored				
		in that area, whichever is the greatest, provide?				
4.12	S8.5	Are a routine cleaning and maintenance programme implemented for drainage				
	00.4	systems, sump pits, and oil interceptors?				
4.13		Are sufficient general refuse disposal/collection points provided on site?		V		
4.14	S8.5	Is general refuse disposed of properly and regularly?				
4.15	S8.5	Are appropriate measures adopted to minimize windblown litter and dust during		1/1		
		transportation of waste?	الساء			-
4.16	S8.5	Are individual collectors for aluminum cans, plastic bottles and packaging material				
		and office paper provided to encourage waste segregation?			Ш	
4.17	S8.5	Are C&D wastes sorted on site?				
4.18		Are C&D waste disposed of properly?				
4.19	S8.5	Are unused C&D materials or chemicals recycled or reused to reduce the quantity		( )		
		of waste?				-
4.20		Are public fill and C&D waste reuse on site as far as practicable to avoid disposal off-site?				
4.21	S8.5	Are the construction materials stored properly to minimize the potential for damage		$\square$		
		or contamination?				
4.22	S8.5	Is a dumping license obtained to deliver public fill to public filling areas?		V		-
5.00	S11.10	Landscape and Visual			_	
		Are Is site hoarding provided?				
	11.11	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
- 1	S11.10 & 11.11	s construction light oriented away from the sensitive receivers?				





Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

| N/A Yes No Photo/Remarks

Item	EIA ref.		IN/A	165	140	r noto/Remarks
No.						
	S11.10 & 11.11	Is grass hydroseeding provided to slopes as soon as the completion of works?				
5.05	S11.10 &	Are damages to trees outside site boundary due construction works avoided?				
5.06	S11.10 &	ls excavation works carried out manually instead of machinery operation within 2.5m				
	11.11	vicinity of any preserved trees?		Щ	Ш	
5.07	S11.10 & 11.11	Are the retained and transplanted tree(s) properly protected and in good conditions?				
5.08	S11.10 &	Are surgery works carried out for damaged trees?				
6.00	S9.7	Ecology				
6.01		ls site runoff properly treated to prevent any silly runoff?	Ш	V	Ш	
6.02	S9.7	Are silt trap installed and well-maintained?				
6.03	S9.7	Are stockpiles properly covered to avoid generating silty runoff?		$\sqrt{}$		
6.04	S9.7	Are construction works restricted to works area which are clearly defined?				
6.05	S9.7	For slope mitigation works within the Clear Water Bay Country Park, are tree felling and damages to trees, the exact locations of the flexible barrier foundation plates, soil nails and rock dowels adjusted during detailed design, and a setback distance from existing trees is recommended to be maintained as far as practical?				
6.06	S9.7	Are pruning of tree canopies along the alignment of the flexible barriers limited to a minimum?				
6.07	S9.7	Is the alignment of flexible barriers optimized to preserve all species of conservation interest and minimize the impact to the existing vegetation as far as practicable? Are the alignment of flexible barriers positioned at minimum 1.5 m in a radius away from these individuals?				_
6.08	S9.7	Is temporary fencing installed to fence off the concerned species either in groups of individually within the works area and in the close proximity to prevent from being damaged and disturbed during construction? Is a sign identifying the site attached to the fence and flagging tape shall be attached to the individuals to visualize their locations?				Fencing was properly exceled clary the consection works at
6.09	\$9.7	Is a specification for fencing and demarcating individuals of Marsdenai lachnostoma (or other flora species of conservation interest, if found) adjacent to the proposed alignment of the flexible barriers prepared to protect the species?				Clear Water Bay Contry Park No Tregress by
6.10	S9.7	Is any induction training provided to all site personnel in order to brief them on this flora of conservation interest including the locations and their importance?				the Contacta was observed
6.11	\$9.7	ls the resident site supervisory staff closely monitor the conditions of concerned individuals during construction of flexible barriers in the close proximity?				site ingestr
6.12	\$9.7	Are fences erected along the boundary of the works area before the commencement of works to prevent vehicle movements and encroachment of personnel onto adjacent areas?				
6.13	S9.7	Is regular check of the work site boundaries performed to ensure that they are not breached and that damage does not occur to surrounding areas?				
6.14	S9.7	Is any damage and disturbance avoided, particularly those caused by filling and illegal dumping, to the surrounding habitats through proper management of waste disposal?		V		



		ct no. 13/WSD/17 Design, Build and Operate First Stage of	Iseung K	wan O	Desalina	ation Plant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
6.15	S9.7	Are temporarily affected areas reinstated, particularly the habitats of plantation and shrubland-grassland immediately after completion of construction works, through on-site tree/shrub planting?				
6.16	S9.7	Are affected habitats within the Clear Water Bay Country Bay reinstated by hydro- seeding and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works?				-
<b>7.00</b> 7.01	S12.7	Landfill Gas Hazard  Are the safety procedures implemented to minimise the risks of fires and explosions, asphyxiation of works and toxicity effects during all works?				
7.02	S12.7	Are the gas detection equipment and precautions being used during trenching and excavation as well as creation of confined spaces?				8
7.03	S12.7	Are the training with regard to the awareness of potential hazards of working in confined spaces provided from the Contractor to the workers?		V		
7.04	S12.7	Are the safety officers trained with regard to landfill gas and leachate related hazards and presented on the site throughout the works undertaken below grade?		V		
7.05	S12.7	Are the all personnel working on site and all visitor made aware of the possibility of ignition of gas, the possible presence of contaminated water and the need to avoid physical contact?				
7.06	S12.7	Is the monitoring of landfill gas being undertaken in all excavations, manholes, chambers and any confined spaces?		V		
7.07	S12.7	Are the monitoring frequency and areas being specified by the safety officers or appropriately qualified person? Are the all measurements being recorded and documented?				
7.08	S12.7	Is the drilling proceeded with adequate care and precautions against the potential hazards?				
7.09	S12.7	Is the method statement covering all normal and emergency procedures provided by the drilling contractor prior to the commencement of the site works?				
7.10	S12.7	Are the below ground services entries being sealed to prevent gas entry? Are the grilled metal covers being used for below grade cable trenches?				1000
7.11	S12.7	Is each manhole or utility pit monitored with two measurements (at mid-depth and base) for minimum of 10 minutes? Is the steady reading and peak reading recorded at each manhole or utility pit?				-
7.12	S12.7	Are the warning signs of the hazards of landfill gas and its possible presence on site posted in prominent places?				
<b>8.00</b> 8.01		Overall Is the EM&A properly implemented in general?				



Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection:
Observation (s)
1.) A chemical container found on me grown
OSEG Building shell be stored properly. The contractors
1) A chemical container found on the ground near the OSEG Building shell be stored properly. The contractors were removed thinned is to be after notification.
Reminder (8)
1.) The contractors are reminded to check and proper
1.) The contractors one reminded to check and proper maintenance of the digger near the Contined Sheft.
2.). The contractors are reminded to chan up the empty containers near the Actidal. General housekeeping are reminded
Signatures:
ET Contractor's Supervising Officer's IEC's WSD's Representative Representative Representative Representative
Representative Representative Representative Representative Representative
(Name: louis) (Name: louis) (Name: louis)
(Name: Jours ) (Name: Trly Isay) (Name: Dynam) (Name: Jours ) (Name: Jours )
loh





# Appendix J

# Complaint Log





### **Statistical Summary of Environmental Complaints**

D D . 1	En	vironmental Complai	nt Statistics
Reporting Period	Frequency	Cumulative	Complaint Nature
1 – 31 January 2023	0	1	N/A

### **Statistical Summary of Environmental Summons**

Dan antina Dania d	E	nvironmental Summons	Statistics				
Reporting Period	Frequency	Cumulative	Details				
1 - 31 January 2023	0	0	N/A				

### Statistical Summary of Environmental Prosecution

Donastic - David	En	vironmental Prosecution	ı Statistics
Reporting Period	Frequency	Cumulative	Details
1 – 31 January 2023	0	0	N/A





# Appendix K

Exceedance Report (s)





### **Bi-Weekly Incident Report on Action Level or Limit Level Non-Compliance**

Date of	Monitoring	Tide	Parameter	Measurement Result	Sampling depth	Depth Average Result	Action (mg			Level g/L)	Exceedance	Marine construction activities with	Exceedance related to	Re	asons c	f non-pro	ject rela	ted exc	eedance		
exceedance	Station			(mg/L)	1 0 1	(mg/L)	95%-ile	Control 120%	99%-ile	Control 130%		contact with water (Y/N)	Project (Y/N)	(1)	(2)	(3) (4)	(5)	(6)	(7) (8)		
	WSR2					3.58					Action Level	N	N	✓		<b>√</b>		✓	<b>√ √</b>		
	WSR4	Flood	Suspended Solid			3.58	5.00	5.00 3.30	5.00 3.30	6.00	3.58	Action Level	N	N	✓		<b>√</b>		✓	<b>√</b>	
	WSR16	F1000	Suspended Sond			5.75	3.00			3.30	0.00	3.36	Limit Level	N	N	<b>✓</b>		<b>✓</b> ✓		<b>✓</b>	<b>✓</b> ✓
03/01/2023	WSR33					3.67					Limit Level	N	N			<b>√</b>		<b>✓</b>	<b>✓</b> ✓		
	WSR2					4.58					Limit Level	N	N	✓		<b>✓ ✓</b>			<b>✓ ✓</b>		
	WSR4	Ebb	Suspended Solid			3.17	5.00	3.00	6.00	3.25	Action Level	N	N	✓		✓ <b>✓</b>			✓		
	WSR36					3.42					Limit Level	N	N			<b>√</b>			<b>✓</b> ✓		
	WSR1					3.17					Action Level	N	N	✓		✓			<b>✓ ✓</b>		
	WSR2					3.83					Limit Level	N	N	✓		<b>√</b> ✓			<b>√ √</b>		
	WSR4					7.08					Limit Level	N	N	✓		<b>√</b> ✓			<b>√ √</b>		
07/01/2022	WSR16	Flood	Suspended Solid			4.58	5.00	5.00	3.10 6.00	3.10	6.00	3.36	Limit Level	N	N	✓		<b>✓ ✓</b>			<b>√ √</b>
07/01/2023	WSR33					3.42					Limit Level	N	N			<b>√</b> ✓			<b>✓ ✓</b>		
	WSR36					3.83					Limit Level	N	N			<b>√</b> ✓			<b>√ √</b>		
	WSR37					4.08					Limit Level	N	N			<b>√</b> ✓			<b>✓ ✓</b>		
	WSR2	Ebb	Suspended Solid			5.00	5.00	3.30	6.00	3.58	Limit Level	N	N	✓		<b>√</b> ✓		✓	<b>√ √</b>		
	WSR1					4.42						Limit Level	N	N	✓		✓ <b>✓</b>	✓		<b>√ √</b>	
	WSR2					3.67					Limit Level	N	N	✓		<b>√</b> ✓	✓		<b>√ √</b>		
	WSR3					5.67					Limit Level	N	N	✓		<b>√</b> ✓	<b>✓</b>		<b>√ √</b>		
	WSR4	Flood	C J. J C.1: J			3.75	5.00	3.20	6.00	3.47	Limit Level	N	N	✓		<b>√</b> ✓	~		✓ ✓		
	WSR16	F1000	Suspended Solid			4.17	3.00	3.20	0.00	3.47	Limit Level	N	N	✓		<b>√</b> ✓	<b>✓</b>		<b>√ √</b>		
	WSR33					4.08					Limit Level	N	N			<b>√</b>	<b>✓</b>		✓		
10/01/2023	WSR36					3.58					Limit Level	N	N			<b>✓</b> ✓	<b>✓</b>		✓		
10/01/2023	WSR37					3.50					Limit Level	N	N			<b>√</b>	<b>✓</b>		✓		
	WSR2					4.83					Limit Level	N	N	<b>✓</b>		<b>√</b>	✓		✓		
	WSR3					4.58					Limit Level	N	N	✓		✓ <b>✓</b>	~		✓		
	WSR4	Ebb	Suspended Solid			4.33	5.00	4.10	6.00	4.44	Action Level	N	N	✓		<b>√</b> ✓	✓		<b>✓ ✓</b>		
	WSR16	EUU	Suspended Sond			4.83	5.00	4.10	0.00	4.44	Limit Level	N	N	✓		<b>√</b> ✓	✓		<b>✓ ✓</b>		
	WSR33					5.00				Limit Level	N	N			<b>√</b> ✓	✓		<b>✓ ✓</b>			
	WSR33 WSR36					4.50					Limit Level	N	N			✓	~		<b>✓ ✓</b>		





Date of exceedance	Monitoring Station	Tide	Parameter	Measurement Result	Sampling depth	Depth Average Result	Action (mg	Level g/L)	Limit Level (mg/L)		I I		I I		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)		Exceedance	ng/L)		Exceedance related to Project	Re	easons	of non-	projec	et related	excee	edanc	3
exceedance	Station			(mg/L)		(mg/L)	95%-ile	Control 120%	99%-ile	Control 130%		contact with water (Y/N)	(Y/N)	(1)	(2)	(3)	(4)	(5)	5) (	(7)	(8)																	
	WSR16	El 1	0 1101.1	-		5.33	5.00	4.60	6.00	4.00	Limit Level	N	N	✓		✓	✓	<b>✓</b>		✓	✓																	
	WSR36	Flood	Suspended Solid			4.92	5.00	4.60	6.00	4.98	Action Level	N	N			✓	✓	✓		✓	✓																	
12/01/2023	WSR1					4.17			6.00 3.58		Limit Level	N	N	✓		✓	✓	✓ ·	/	<b>✓</b>	✓																	
	WSR4	Ebb	Suspended Solid			4.33	5.00	3.30		6.00 3.58	Limit Level	N	N	✓		✓	✓	· ,	/	✓	✓																	
	WSR16					5.00					Limit Level	N	N	✓		✓	✓	✓ ·	/	<b>✓</b>	✓																	
	WSR4					3.33					Action Level	N	N	✓		✓	✓	✓		✓	✓																	
14/01/2023	WSR33	Ebb	Suspended Solid			3.58	5.00	3.30	3.30	6.00	3.58	Action Level	N	N			✓	<b>✓</b>	✓		✓	✓																
	WSR36					3.67					Limit Level	N	N			✓	<b>✓</b>	✓		✓	✓																	

Reasons of Non-Project related exceedance:

- 1) WSR1, WSR2, WSR3, WSR4, WSR16 were located distant from the construction site and possibility of being affected by marine construction activity was considered limited
- 2) Control station value already exceed either the Action or Limit Level.
- 3) No algal bloom, silt plume or pollution discharge from site area was observed.
- 4) Water quality mitigation measures were observed maintained / implemented properly.
- 5) Rainfall was recorded at Tseung Kwan O during the monitoring period, rainfall may lead to release of SS content form the soil of the nearby lands (e.g., Country Park, fill bank).
- 6) No action and limit level exceedance observed at WSR36 (Intake Shaft) or WSR37 (Outfall Shaft).
- 7) No marine construction activity was conducted at WSR36 (Intake Shaft).
- 8) No marine construction activity was conducted at WSR37 (Outfall Shaft).

### Conclusion:

During water quality monitoring on 3 January 2023, two (2) Action Level and two (2) Limit Level exceedances of Suspended Solids were recorded during mid-flood tide, and one (1) Action Level and two (2) Limit Level exceedances of Suspended Solids were recorded during mid-ebb tide. After investigation, all exceedances were considered non-project related.

During water quality monitoring on 7 January 2023, one (1) Action Level and six (6) Limit Level exceedances of Suspended Solids were recorded during mid-flood tide, and one (1) Limit Level exceedance of Suspended Solids was recorded during mid-flood tide, and one (1) Limit Level exceedances were considered non-project related.

During water quality monitoring on 10 January 2023, eight (8) Limit Level exceedances of Suspended Solids were recorded during mid-flood tide, and one (1) Action Level and five (5) Limit Level exceedances of Suspended Solids were recorded during mid-ebb tide. After investigation, all exceedances were considered non-project related.

During water quality monitoring on 12 January 2023, one (1) Action Level and one (1) Limit Level exceedance of Suspended Solids were recorded during mid-flood tide, and three (3) Limit Level exceedances of Suspended Solids were recorded during mid-ebb tide. After investigation, all exceedances were considered non-project related.

During water quality monitoring on 14 January 2023, two (2) Action Level and one (1) Limit Level exceedance of Suspended Solids were recorded during mid-ebb tide. After investigation, all exceedances were considered non-project related.

Total thirty-seven (37) Action Level and twenty-nine (29) Limit Level exceedances for Suspended Solid of impact water quality monitoring were recorded between 3 January 2023 and 14 January 2023. After investigation, all exceedances were considered non-project related.

No action or limit level exceedance for turbidity was recorded between 3 January 2023 and 14 January 2023.



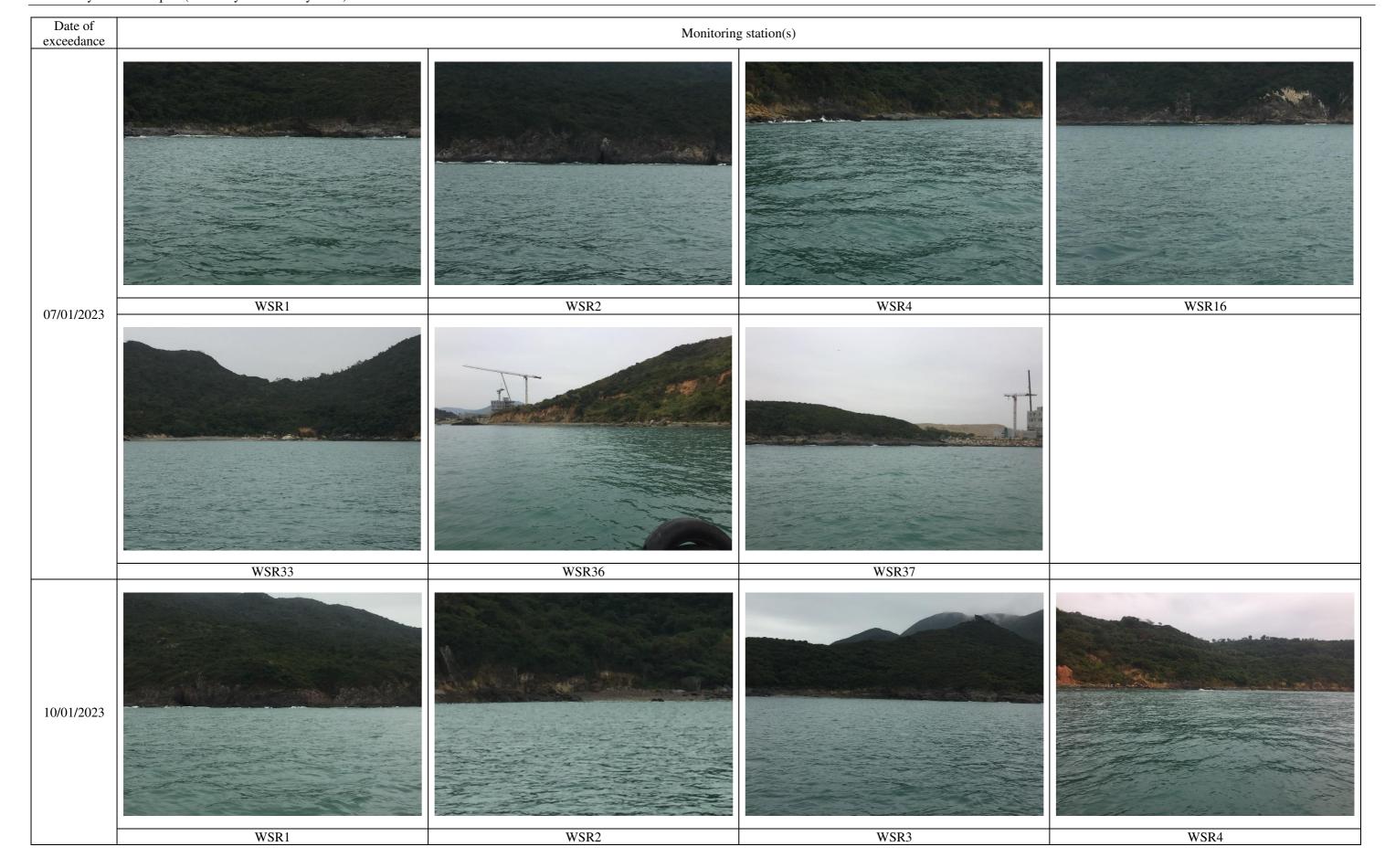


### Supporting Photo:

Date of exceedance		Monitoring	g station(s)	
03/01/2023	WSR2	WSR4	WSR16	WSR33
03/01/2023	WSR36			









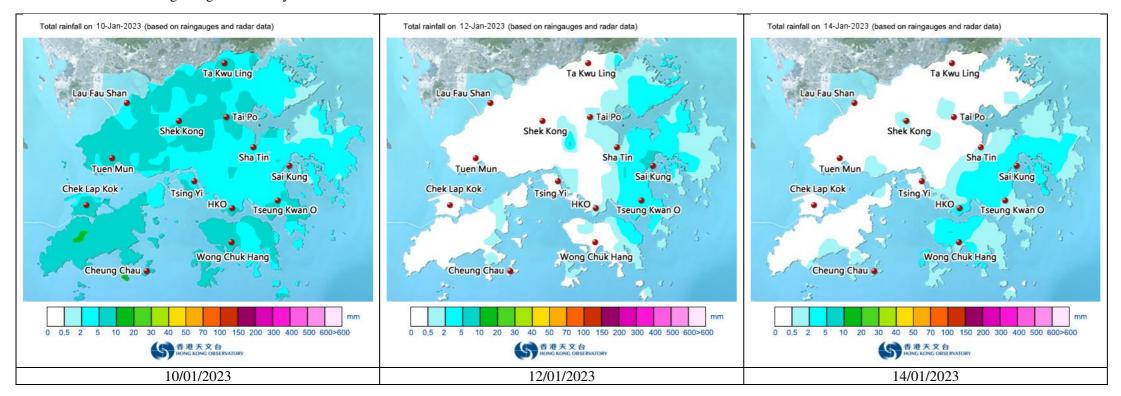


Date of exceedance		Monitorin	g station(s)	
	WSR16	WSR33	WSR36	WSR37
12/01/2023				
	WSR1	WSR4	WSR16	WSR36
14/01/2023				
	WSR4	WSR33	WSR36	





### Rainfall Record from Hong Kong Observatory:







### **Bi-Weekly Incident Report on Action Level or Limit Level Non-Compliance**

Date of	Monitoring	Tide	Parameter	Measurement Result	Sampling depth	Depth Average Result	Action (mg			Level g/L)	Exceedance	Marine construction activities with contact with water	Exceedance related to		Reaso		on-pro		elated									
exceedance	Station			(mg/L)		(mg/L)	95%-ile	Control 120%	99%-ile	Control 130%		(Y/N)	Project (Y/N)	(1)	(2)	(3)	(4)	(5)	(6)	(7)								
	WSR1	Flood	Suspended Solid			4.33	5.00	4.20	6.00	4.55	Action Level	N	N	✓		✓		✓	✓	✓								
	WSR2					4.67					Limit Level	N	N	✓		✓		✓	✓	✓								
17/01/2023	WSR3	Ebb	Suspended Solid	1		4.83	5.00	3.60	6.00	3.90	Limit Level	N	N	✓		✓		✓	>	<b>&gt;</b>								
	WSR4	EUU	Suspended Sond			3.92	3.00	3.00	0.00	3.90	Limit Level	N	N	✓		✓		✓	<b>&gt;</b>	✓								
	WSR16					4.00					Limit Level	N	N	✓		✓		✓	✓	✓								
	WSR3					3.58					Action Level	N	N	✓		✓			✓	✓								
	WSR4					3.75					Action Level	N	N	✓		✓			✓	✓								
19/01/2023	WSR33	Ebb	Suspended Solid			6.17	5.00	3.50	6.00	3.79	Limit Level	N	N			✓			✓	✓								
	WSR36					8.83					Limit Level	N	N			✓			✓	✓								
	WSR37					5.17					Limit Level	N	N			✓			✓	✓								
	WSR1					5.17					Limit Level	N	N	✓		✓			✓	✓								
21/01/2023	WSR33	Flood	Suspended Solid			6.00	5.00	4.60	6.00	4.98	Limit Level	N	N			✓			✓	✓								
	WSR36					5.92													Limit Level	N	N			✓			✓	✓
	WSR2					5.50					Limit Level	N	N	✓		✓			✓	✓								
	WSR3					6.33					Limit Level	N	N	✓		✓			✓	✓								
27/01/2022	WSR4	F1 1	G 1.10.1.1			6.83	5.00	4.50	6.00	4.00	Limit Level	N	N	✓		✓			✓	✓								
27/01/2023	WSR16	Flood	Suspended Solid			6.33	5.00	4.50	6.00	4.88	Limit Level	N	N	✓		✓			✓	✓								
	WSR33					4.67					Action Level	N	N			✓			✓	✓								
	WSR36			1		4.83					Action Level	N	N			✓			>	<b>✓</b>								
	WSR2					5.17					Action Level	N	N	✓	✓	✓			✓	✓								
	WSR3					5.83					Action Level	N	N	✓	✓	✓			✓	✓								
	WSR4	Flood	Suspended Solid			6.50	5.00	7.80	6.00	8.45	Limit Level	N	N	✓	✓	✓			✓	✓								
31/01/2023	WSR16					5.33					Action Level	N	N	✓	✓	✓			<b>\</b>	<b>\</b>								
	WSR36					5.33					Action Level	N	N		✓	✓			<b>✓</b>	✓								
	WSR2	E:L1	Cuomended C 111			6.83	5.00	7.40	6.00	9.02	Limit Level	N	N	✓	✓	✓		<b>✓</b>	<b>\</b>	<b>\</b>								
	WSR4	Ebb	Suspended Solid			6.33	5.00	7.40	6.00	8.02	Limit Level	N	N	✓	✓	✓		✓	<b>✓</b>	✓								

Reasons of Non-Project related exceedance:

- 1) WSR1, WSR2, WSR3, WSR4, WSR16 were located distant from the construction site and possibility of being affected by marine construction activity was considered limited.
- 2) Control station value already exceed either the Action or Limit Level.
- 3) No algal bloom, silt plume or pollution discharge from site area was observed.
- 4) Rainfall was recorded at Tseung Kwan O during the monitoring period, rainfall may lead to release of SS content form the soil of the nearby lands (e.g., Country Park, fill bank).
- 5) No action and limit level exceedance observed at WSR36 (Intake Shaft) or WSR37 (Outfall Shaft).
- 6) No marine construction activity was conducted at WSR36 (Intake Shaft).
- 7) No marine construction activity was conducted at WSR37 (Outfall Shaft).

Contract No. 13/WSD/17
Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant
`Bi-Weekly Incident Report (17 January – 31 January 2023)





#### Conclusion:

During water quality monitoring on 17 January 2023, one (1) Action Level exceedances of Suspended Solids were recorded during mid-flood tide, and four (4) Limit Level exceedances of Suspended Solids were recorded during mid-ebb tide. After investigation, all exceedances were considered non-project related.

During water quality monitoring on 19 January 2023, two (2) Action Level and three (3) Limit Level exceedances of Suspended Solids were recorded during mid-ebb tide. After investigation, all exceedances were considered non-project related.

During water quality monitoring on 21 January 2023, three (3) Limit Level exceedances of Suspended Solids were recorded during mid-flood tide. After investigation, all exceedances were considered non-project related.

During water quality monitoring on 27 January 2023, two (2) Action Level and four (4) Limit Level exceedances of Suspended Solids were recorded during mid-flood tide. After investigation, all exceedances were considered non-project related.

During water quality monitoring on 31 January 2023, four (4) Action Level and one (1) Limit Level exceedances of Suspended Solids were recorded during mid-flood tide, and two (2) Limit Level exceedances of Suspended Solids were recorded during mid-ebb tide. After investigation, all exceedances were considered non-project related.

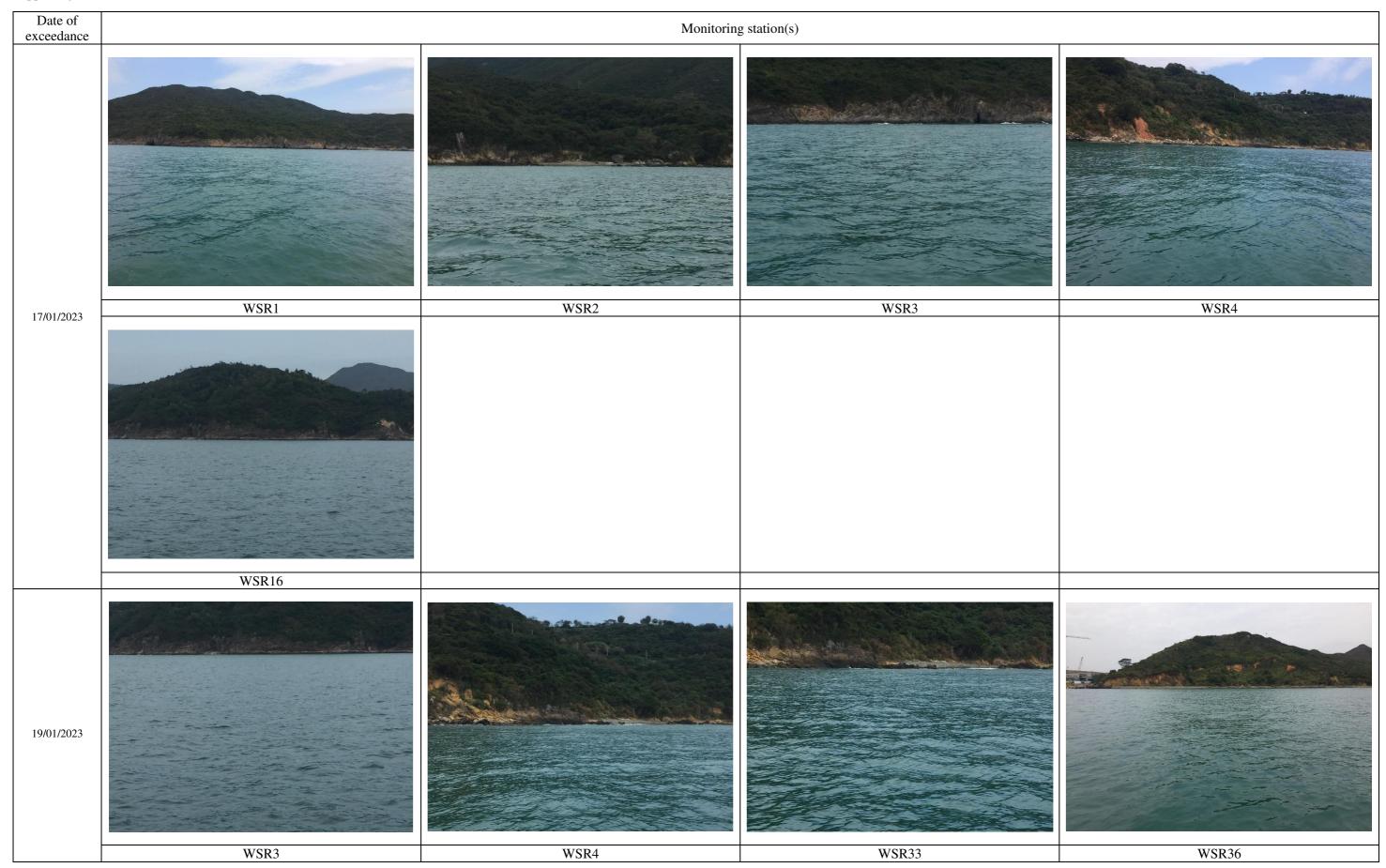
Total twenty-six (26) Action Level and seventeen (17) Limit Level exceedances for Suspended Solid of impact water quality monitoring were recorded between 17 January 2023 and 31 January 2023. After investigation, all exceedances were considered non-project related.

No action or limit level exceedance for turbidity was recorded between 17 January 2023 and 31 January 2023.





Supporting Photo:







Date of exceedance		Monitorin	g station(s)	
	WSR37			
21/01/2023				
	WSR1	WSR33	WSR36	
27/01/2023				
	WSR2	WSR3	WSR4	WSR16





Date of exceedance		Monitoring	g station(s)	
	WSR33	WSR36		
31/01/2023	WSR2	WSR3	WSR4	WSR16
51/01/2023				
	WSR36			