





Contract No. 13/WSD/17

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

Monthly EM&A Report No.47 (Period from 1 January to 31 January 2024)

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	Prepared by:	Reviewed and Certified by:
Name	Alex LEUNG	Jacky LEUNG
Position	Environmental Team Member	Environmental Team Leader
Signature	Alim	A
Date:	9 February 2024	9 February 2024



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

Your reference:

Our reference: HKWSD202/50/109494
Date: 9 February 2024

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.47 (January 2024)

We refer to email of 9 February 2024 attaching Monthly EM&A Report No.47 (January 2024) 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

Alex Chan Independent Environmental Checker

CYCA/lsmt







REVISION HISTORY

Rev.	DESCRIPTION OF MODIFICATION	DATE
1.	First Issue for Comments	07/02/2024
2	Revised according to the Comments	09/02/2024



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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 47th 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 2024.
- 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

- Landscaping works on roof of building.
- External wall aluminum features installation
- Finishing works for doghouse.
- Installation of building services, cable laying, electrical switchboard, Pressure Test, electrical switchboard, testing and commissioning

Chemical building

- Landscape work at roof
- Construction of hose reel cabinet.
- Defect rectification

Main Electrical & Central Chiller Plant Building

- Installation of Roof Tile for Fuel Tank Room
- Minor Installation of building services, electrical switchboard, cable laying, pressure test





ActiDAFF

- Underground utility construction work
- Installation of access opening covers for filtered water tank
- Carrying out finishing works for staircase no. 3
- Minor Installation of mechanical equipment, piping system, building services, electrical switchboards and cable laying, fiber-reinforced plastic cover Installation

Product Water Storage Tank Building

- Water Test in Tank A
- Waterproofing work at Roof Slab on Tank A
- Tank A water test and defect rectification
- Installation of building services, cable laying, Installation of mechanical equipment, steel pipe, Pressure Test

OSCG Building

- Installation of Railing on Brine Maker Tank
- Protective Coating for dangerous goods Rooms
- Installation of building services, mechanical equipment and cable laying, Lightning Installation, testing and commissioning

Reverse Osmosis Building

- Installation of Handrailings
- Installation of Glass House
- Installation of building services, electrical switchboard, cable laying, Photovoltaic Panel. Minor Installation of mechanical equipment and raised floor, testing and commissioning
- Underground utility construction work

Post Treatment Building

- Installation of Cat Ladders in Water Tanks
- Placing Soil Mix at Roof
- Curb Construction for Rescue Opening at Water Tanks
- Installation of building services, mechanical equipment and piping system, Pressure Test

Inspection corridor

- Construction of roof tiling works
- Installation of steel balustrade at roof
- Installation of Movement Joints
- Installation of glass window
- Installation of building services, Lift Installation

 CO_2 Tanks

• Tank surface cleaning, testing and commissioning

Combined Shaft and Pump room

• Internal finishing, defect rectification



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Guard House

- Installation of Building Services
- Workshop construction work

Other

- Glass Roof and Glass Canopy installation at elevated walkway
- Security Fence footing construction work
- Manhole 5 Glass Reinforced Plastic Pipe Installation work
- Underground utility rectification work
- Road Construction
- Traffic signage work
- Footpath Construction
- Landscape Construction
- Landscape planting work
- Irrigation System Construction
- Slope work Shotcreting; Rock anchor installation, Rock break
- Water Pressure Test for Fire Services and Plumbing System
- Traffic signage work
- A6. The major environmental impacts brought by the above construction works include:
 - Construction dust and noise generation from construction works and excavation works;
 - Waste generation from the construction activities
- 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 silt curtain at the marine areas; and
 - Sorting and storage of general refuse and construction waste;

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 construction phase marine water quality programme was ceased from 1 September 2023 due to the completion of marine-related construction works.
- A10. The EM&A works for commissioning phase water quality were conducted during the reporting period in accordance with the EM&A Manual. Seventeen (17) of the





commissioning phase water quality monitoring results of SS obtained had exceeded the Action Level. Ten (10) of the commissioning phase water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Level.

- A11. Water quality monitoring of the discharge of dechlorinated effluent in disinfection procedure is completed in December. The hourly dechlorinated effluent monitoring during the discharge is finished.
- A12. In this reporting period, 18 times of landfill gas monitoring were periodically conducted at TKO Area 137 (Ch1+340 Ch1+600). No exceedances of action level and limit level was observed.
- A13. Joint site inspections of the construction work by ET and IEC were carried out on 2, 9, 16, 25 and 29 January 2024 to audit the mitigation measures implementation status. Observation and Reminders 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. One (1) environmental complaint was received in the reporting period. No 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

- Sealing up wall opening
- External wall painting works
- Construction of block work for pipe duct.
- Installation of glass door for laboratory
- Minor Installation of building services, cable laying and termination, Photovoltaic Panel Installation, Testing & Commissioning

Chemical building

- Installation of Irrigation system
- Construction of hose reel cabinet.
- Defect rectification





Main Electrical & Central Chiller Plant Building
Installation of Roof Tile for Fuel Tank Room
• Minor Installation of building services, electrical switchboard, cable laying,
pressure test
ActiDAFF
Underground utility construction work
Installation of drainpipe on corridor
• Minor Installation of mechanical equipment, installation of building services,
Minor cable laying and termination, Installation of Lightning System,
Installation of Fibre Reinforced Polymer Cover Installation, Testing &
Commissioning
Product Water Storage Tank Building
Underground utility construction work
Water Test in Tank A and defect rectification
Waterproofing work at Roof Slab on Tank A
Tank A water test and defect rectification
• Installation of building services, cable laying and termination, Testing &
Commissioning
OSCG Building
Installation of Railing on Brine Maker Tank
 Protective Coating for dangerous goods Rooms
 Installation of building services, mechanical equipment and cable laying and
termination, testing and commissioning
Reverse Osmosis Building
Placing Soil Mix at Roof
Installation of Glass House
Underground utility construction work
• Installation of building services, electrical switchboard of cable laying and
termination, Minor Installation of mechanical equipment and raised floor,
testing and commissioning, Photovoltaic Panel Installation
Post Treatment Building
Installation of Cat Ladders in Irrigation Tanks
Placing Soil Mix at Roof
Curb Construction for Rescue Opening at Water Tanks
• Minor Installation of building services, Minor Installation of mechanical
equipment, Cable laying and termination, Pressure Test
Inspection corridor
Construction of roof tiling
Internal decoration and finishing works
Installation of building services, Lift Installation
-





CO₂ Tanks

• Tank surface cleaning, testing and commissioning

Combined Shaft and Pump room

- CCTV Installation, Installation of Lightning System, Minor building services Installation, testing and commissioning
- Internal finishing, defect rectification

Guard House

- Installation of Building Services
- Workshop construction work
- Architectural Builders Works and Finishes

Other

- Master meter Room Architectural Builders Works and Finishes
- Open Channel and Wave deflector Wall
- Glass Roof and Glass Canopy installation at elevated walkway
- Security Fence footing construction work
- Manhole 5 Glass Reinforced Plastic Pipe Installation work
- Underground utility rectification work
- Road Construction
- Traffic signage work
- Footpath Construction
- Landscape Construction
- Landscape planting work
- Irrigation System Construction
- Slope work Shotcreting; Rock anchor installation, Rock break
- Water Pressure Test for Fire Services and Plumbing System
- Open Channel and Wave deflector Wall
- Traffic signage work

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
- 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 silt curtain at the marine areas.



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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.
- 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 47th 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**.

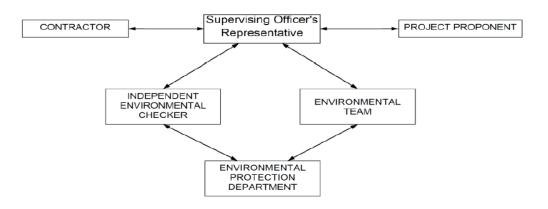


Figure 1.1Contract Organization Chart

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



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Table 1.1Contact Details of Key Personnel

Party	Position	Name	Telephone no.
Contract Proponent (Water Supplies Department)	SE/CM2	Milton Law	2634-3573
Supervising Officer	Project Manager	Christina Ko	2608-7302
(Binnies Hong Kong Limited)	Chief Resident Engineer	Roger Wu	6343-1002
	Project Manager	Stephen Yeung	2807-4665
The Jardine Engineering Corporation, Limited, China State Construction Engineering (Hong Kong) Limited and	Environmental Monitoring Manager	Brian Kam	9456-9541
Acciona Agua, S.A. Trading	Environmental Monitoring Manager	Joy Chan	6468-1782
Acuity Sustainability Consulting Limited	Environmental Team Leader	Jacky Leung	2698-6833
ANewR Consulting Limited	Independent Environmental Checker (IEC)	Mr. CHAN Yi Chun, Alex	2618-2831

SUMMARY OF CONSTRUCTION WORKS

- 1.7. Details of the major construction activities undertaken in this reporting period are shown 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

- Landscaping works on roof of building.
- External wall aluminum features installation
- Finishing works for doghouse.
- Installation of building services, cable laying, electrical switchboard, Pressure Test, electrical switchboard, testing and commissioning

Chemical building

- Landscape work at roof
- Construction of hose reel cabinet.
- Defect rectification

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Main Electrical & Central Chiller Plant Building			
 Installation of Roof Tile for Fuel Tank Room 			
• Minor Installation of building services, electrical switchboard, cable laying,			
pressure test			
ActiDAFF			
Underground utility construction work			
Installation of access opening covers for filtered water tank			
• Carrying out finishing works for staircase no. 3			
 Minor Installation of mechanical equipment, piping system, building 			
services, electrical switchboards and cable laying, fiber-reinforced plastic			
cover Installation			
Product Water Storage Tank Building			
• Water Test in Tank A			
Waterproofing work at Roof Slab on Tank A			
Tank A water test and defect rectification			
• Installation of building services, cable laying, Installation of mechanical			
equipment, steel pipe, Pressure Test			
OSCG Building			
Installation of Railing on Brine Maker Tank			
 Protective Coating for dangerous goods Rooms 			
 Installation of building services, mechanical equipment and cable laying, 			
Lightning Installation, testing and commissioning			
Reverse Osmosis Building			
Installation of Handrailings			
Installation of Glass House			
 Installation of building services, electrical switchboard, cable laying, 			
Photovoltaic Panel. Minor Installation of mechanical equipment and raised			
floor, testing and commissioning			
Underground utility construction work			
Post Treatment Building			
Installation of Cat Ladders in Water Tanks			
Placing Soil Mix at Roof			
Curb Construction for Rescue Opening at Water Tanks			
 Installation of building services, mechanical equipment and piping system, 			
Pressure Test			
Inspection corridor			
Construction of roof tiling works			
Installation of steel balustrade at roof			
Installation of Movement Joints			
Installation of glass window			
Installation of building services, Lift Installation			





CO₂ Tanks

• Tank surface cleaning, testing and commissioning

Combined Shaft and Pump room

- Internal finishing, defect rectification
- Guard House
- Installation of Building Services
- Workshop construction work

Other

- Glass Roof and Glass Canopy installation at elevated walkway
- Security Fence footing construction work
- Manhole 5 Glass Reinforced Plastic Pipe Installation work
- Underground utility rectification work
- Road Construction
- Traffic signage work
- Footpath Construction
- Landscape Construction
- Landscape planting work
- Irrigation System Construction
- Slope work Shotcreting; Rock anchor installation, Rock break
- Water Pressure Test for Fire Services and Plumbing System
- Traffic signage work
- 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 1.2Summary of the Status of Valid Environmental Licence, Notification,
Permit and Documentations

Downit / Licon and	Valid Period		Status	Domori	
Permit/ Licences	From To		Status	Remark	
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 Disposal of Construction Waste					
7036276	Throughout the Contract		Valid	-	
Chemical Waste Producer Registration					
5213-839-A2987-01	Throughout the Contract		Valid	-	
Wastewater Discharge Licence (Land and Marine works)					

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Dormit / Liconcoc	Valid	Period	Status	Remark
Permit/ Licences	From	То	Status	
WT00035775-2020	23/08/2021	31/07/2025	Valid	-
WT00044188-2023	16/06/2023	30/06/2028	Valid	For Plant T&C and operation
Construction Noise Permit				
GW-RE1514-23	22/12/2023	21/06/2024	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.			
Construction Phase Impact Monitoring	Ceased from 1 September 2023			
Commissioning Phase Marine Impact Monitoring	On-going			
Impact Monitoring of Effluent Discharge from Main Disinfection	Completed			
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	Completed			
Waste Management				
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.

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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 and the commissioning phase of the Contract during the reporting period is provided in **Appendix C**.



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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.

Time	Duration	Interval	Parameters
Daytime: 0700-1900	Day time: 0700-1900 (during normal weekdays)	Continuously in $L_{eq 5min}/L_{eq 30min}$ (average of 6 consecutive $L_{eq 5min}$)	L _{eq 30min} L _{10 30min} & L _{90 30min}

Table 2.1Noise Monitoring Parameters, Time, Frequency and Duration

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.

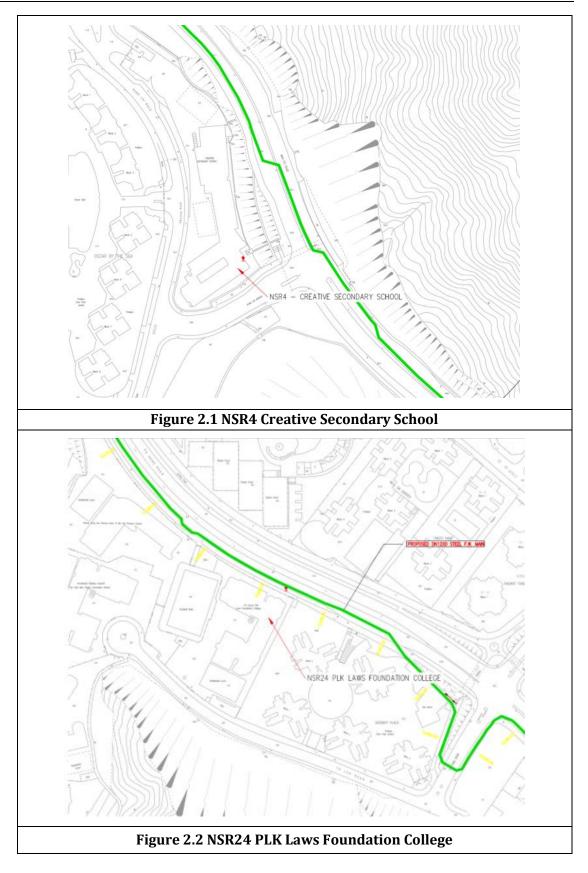
NSR ID	Noise Sensitive Receivers	Monitoring Location	Position
NSR 4	Creative Secondary School	Roof Floor	1 m from facade
NSR 24	PLK Laws Foundation College	Pedestrian Road on Ground Floor	Free-field
NSR 31	School of Continuing and Professional Studies - CUHK	Roof Floor	1 m from facade

Table 2.2Noise Sensitive Receivers

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

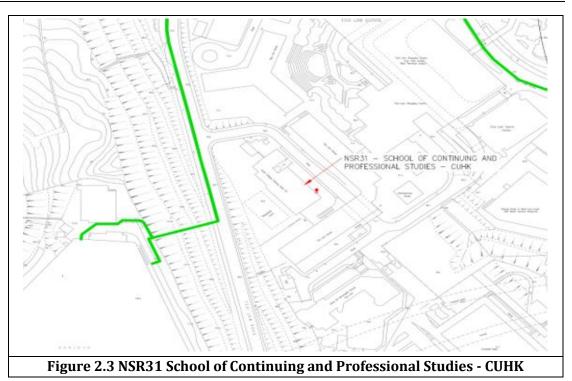












IMPACT MONITORING METHODOLOGY

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

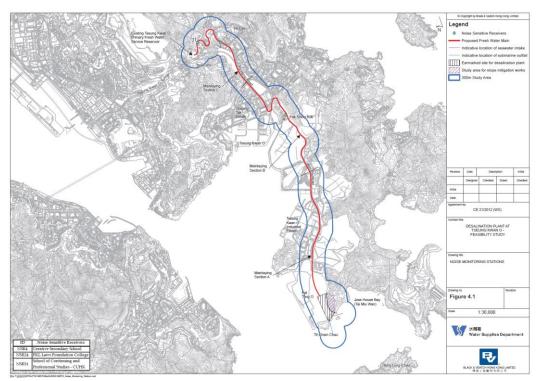


Figure 2.4 Site Layout Plan with Noise Sensitive Receivers and Desalination Plant

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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 was 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; and
 - Operation activities during commissioning 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	٥C	-
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.



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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.

Total Residual Chlorine -Total residual chlorine (TRC) shall be measured in-situ using approved test kit.

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. 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

- 3.9. 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 the requirements of HOKLAS or another internationally accredited scheme.
- 3.10. Parameters for laboratory measurements, standard methods and detection limits are presented in **Table 3.2**.

u	election minus of main	me water quanty mon	ittor ing	
Parameters	Standard Methods	ethods Detection Limit		Precision
Dissolved oxygen	Instrumental, CTD	0.1	-	±25%
Temperature	Instrumental, CTD	0.1	-	±25%
рН	Instrumental, CTD	0.1	-	±25%
Turbidity	Instrumental, CTD	0.1	-	±25%
Salinity	Instrumental, CTD	0.1	-	±25%
Suspended Solids	APHA 23 rd Ed 2540D	1.0	2.5	±17%
Iron	APHA 3111 B	0.2	-	±25%
Total residual chlorine	Lovibond MD200	Lowest limit = 0.01mg/L; Upper limit = 6 mg/L	-	±25%

Table 3.2Laboratory measurements, standard methods, and corresponding
detection limits of marine water quality monitoring



MONITORING LOCATION

Construction Phase

3.11. The Impact water quality monitoring was ceased from 1 September 2023 due to the completion of marine-related construction works.

Commissioning Phase

3.12. The commissioning phase impact water quality monitoring locations are in accordance with the EM&A Manual and detailed in **Table 3.3** 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.

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 nixing zone, \sim 200m west of outfall diffuser
NF2	846942	813614	Edge of nixing zone, \sim 200m east of outfall diffuser
NF3	846742	813414	Edge of nixing zone, \sim 200m south of outfall diffuser

 Table 3.3
 Location of Impact Water Quality Monitoring Stations

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 O (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. NF1 to NF3 are the Edge of nixing zone.





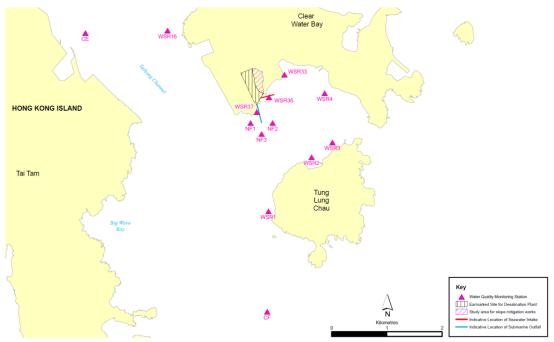


Figure 3.1 Impact water quality monitoring locations under EM&A Manual

Disinfection

3.14. Effluent of disinfection from desalination plant shall be collected at a suitable location after all treatment process before discharge. The sampling location should be agreed with WSD and EPD, and should fulfil the following requirements:

 \cdot Effluent collected at the sampling location is representative to the effluent discharged at the outfall diffuser.

• Sampling works at the sampling location would not interfere with the desalination plant operation.

• Sampling works at the sampling location would not induce safety hazard (e.g. staff sampling effluent drops into the culvert)

3.15. According to the approved Flushing and Disinfection Procedure and Supplementary of the Disinfection Procedure for Desalination Plant at Tseung Kwan O, the sampling point of the dechlorinated effluent was located at Contact tank/Product Water Tank (PWT) and T1GKC01AA502/manhole 18. The approved sampling location was shown in Table 3.4, Figure 3.2 and Figure 3.3 below.

System/Loop	Discharge	Sampling Location	
	location		
Contact tank/	Culvert	Contact tank/PWT	
Product Water Tank (PWT)	Cuivert		
Connection to	Manhole 18 in	Sampling point	
dist. network	connection point	T1GKC01AA502/manhole 18	

Table 3.4Sampling location of dechlorinated effluent

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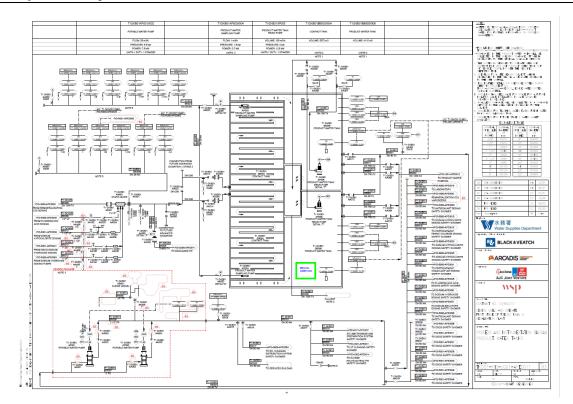


Figure 3.2 Impact water quality monitoring point for dechlorinated effluent (Contact tank/PWT)

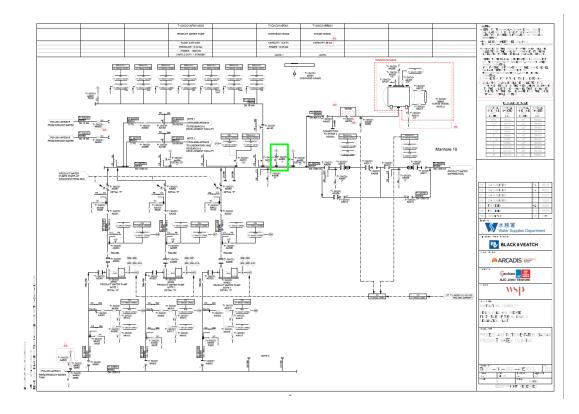


Figure 3.3 Impact water quality monitoring point for dechlorinated effluent (Sampling point T1GKC01AA502/manhole 18)





SAMPLING FREQUENCY

<u>Commissioning Phase</u>

3.16. Impact water quality monitoring were carried out three days per week during the commission phase. Monitoring at each station was undertaken once per day. 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.

Disinfection

3.17. For the discharge of dechlorinated effluent used after main sterilization, in-situ testing of total residual chlorine should be conducted every 1 hour (not less than) at the discharge point(s) when dechlorinated effluent is being discharged.

SAMPLING DEPTHS & REPLICATION

3.18. During impact water quality monitoring, each station was sampled, and measurements/ water samples were 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.

ACTION AND LIMIT LEVELS

Commissioning Phase

3.19. 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 3.6.

Disinfection

3.20. The Action and Limit Levels have been set in accordance with the approved EM&A Manual and presented in **Table 3.6**. For the TRC, the discharge should be suspended if the TRC level of the dechlorinated effluent exceeds the 0.1 mg/L. Chlorinated water should be fully neutralized before discharge. Discharge of the water will be done once it is ensured that the chlorine has been neutralized and it is below the discharge limit.





Table 3.6Derived Action and Limit Levels for Water Quality

Parameters	Action	Limit		
Commissioni	ng Phase Impact Monitoring			
D0 in mg/L	Surface and Middle	Surface and Middle		
	7.30 mg L ⁻¹	4 mg L ⁻¹		
	Bottom	<u>Bottom</u>		
	7.31 mg L ⁻¹	2 mg L ⁻¹		
	<u>Tung Lung Chau Fish Culture Zone</u>	Tung Lung Chau Fish Culture Zone		
	5.1 mgL ⁻¹ or level at control station	5.0 mgL ⁻¹ or level at control station		
	(Whichever the lower)	(Whichever the lower)		
SS in mg/L	5.00 mg L ⁻¹ or 20% exceedance of	$6.00 \text{ mg } L^{-1} \text{ or } 30\%$ exceedance of value		
(Depth-	value at any impact station	at any impact station compared with		
averaged)	compared with corresponding data	corresponding data from control		
	from control station	station		
Turbidity in	2.41 NTU or 20% exceedance of	2.84 NTU or 30% exceedance of value		
NTU (Depth-	value at any impact station	at any impact station compared with		
averaged)	compared with corresponding data	corresponding data from control		
	from control station	station		
Salinity in	34.25 PSU or 9% exceedance of	34.56 PSU or 10% exceedance of value		
PSU (Depth-	value at any impact station	at any impact station compared with		
averaged)	compared with corresponding data	corresponding data from control		
	from control station	station		
Iron in mg/L	0.3 mg/L	0.3 mg/L		
(Depth-				
averaged)				
Total residual	0.01 mg/L	0.01 mg/L		
chlorine in				
mg/L				
Total residual	0.1 mg/L	0.1 mg/L		
chlorine in				
mg/L				
(Disinfection)				

Notes:

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.

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





MONITORING RESULTS AND OBSERVATIONS

Construction Phase

3.21. Referring to EM&A Manual, the general water quality monitoring should be carried out when there are marine-related construction activities undertaken. General water quality monitoring at the ten monitoring stations (CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36 and WSR37) was ceased from 1 September 2023 due to the completion of marine-related construction works.

Commissioning Phase

- 3.22. Considering the first testing and commissioning(T&C) phase of Tseung Kwan O Desalination Plant was started in the reporting period, additional marine water quality monitoring was conducted at the thirteen monitoring stations (CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2 and NF3) from 12 December 2023. The Action and Limit Level would be referred to the approved EM&A Manual Table 5.4 First-year Operation Phase Marine Water Monitoring
- 3.23. Seventeen (17) of the commissioning phase water quality monitoring results of SS obtained had exceeded the Action Level. Ten (10) of the commissioning phase water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Level.
- 3.24. Investigation on the reason of exceedance has been carried out, where the exceedances of SS on 4, 11, 13, 18, 23 and 30 January 2024 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**.
- 3.25. Monitoring results of 8 key parameters: Salinity, DO, turbidity, SS, pH, temperature, Total Residual Chlorine and Iron in this reporting, are summarized in Table 3.7, and detailed results are presented in **Appendix G**.



Table 3.7Summary of Impact Water Quality Monitoring Results

						Paramete	ers			
Locations		Salinity	Dissolved Oxy (mg/L)			Turbidity	Suspended Solids	Temp.	TRC	Iron
		(ppt)	Surface & Middle	Bottom	рН	(NTU)	(mg/L)	(°C)	(mg/L)	(mg/L)
	Avg.	32.9	9.1	9.1	7.3	2.4	4.0	23.3	< 0.01	<0.10
CE	Min.	32.2	8.5	8.4	7.1	1.7	2.5	21.7	< 0.01	<0.10
	Max.	33.8	9.5	9.5	7.4	3.2	7.0	24.4	< 0.01	<0.10
	Avg.	32.7	9.1	9.1	7.3	2.4	3.9	23.3	< 0.01	<0.10
CF	Min.	31.8	8.7	8.7	7.1	1.8	2.5	21.9	< 0.01	<0.10
	Max.	33.9	9.8	9.8	7.4	3.0	7.0	24.4	< 0.01	<0.10
	Avg.	32.8	8.9	8.9	7.3	2.0	4.1	23.3	< 0.01	<0.10
WSR1	Min.	31.4	8.3	8.2	7.1	1.5	2.5	21.6	< 0.01	<0.10
	Max.	34.0	9.4	9.4	7.4	2.3	9.0	24.4	< 0.01	<0.10
	Avg.	32.8	8.9	8.9	7.3	2.0	4.0	23.3	< 0.01	<0.10
WSR2	Min.	31.7	8.4	8.4	7.1	1.5	2.5	21.7	< 0.01	<0.10
	Max.	34.0	9.6	9.6	7.4	2.4	9.0	24.3	< 0.01	<0.10
	Avg.	32.9	8.9	8.9	7.3	1.9	3.9	23.4	< 0.01	<0.10
WSR3	Min.	31.9	8.4	8.4	7.1	1.5	2.5	22.0	< 0.01	<0.10
	Max.	33.8	9.5	9.6	7.4	2.3	7.0	24.4	< 0.01	<0.10
	Avg.	33.0	9.1	9.1	7.2	2.0	3.7	23.3	< 0.01	<0.10
WSR4	Min.	31.7	8.4	8.4	7.1	1.5	2.5	21.8	< 0.01	<0.10
	Max.	33.7	9.9	9.9	7.4	2.4	6.0	24.3	< 0.01	<0.10
	Avg.	32.6	9.0	9.0	7.3	2.0	3.8	23.3	< 0.01	<0.10
WSR16	Min.	31.6	8.0	8.0	7.1	1.6	2.5	21.8	< 0.01	<0.10
	Max.	33.5	9.6	9.7	7.4	2.3	7.0	24.3	< 0.01	<0.10

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		Parameters								
Locations		Salinity	Dissolved Oxygen (mg/L)			Turbidity	Suspended Solids	Temp.	TRC	Iron
		(ppt)	Surface & Middle	Bottom	рН	(NTU)	(mg/L)	(°C)	(mg/L)	(mg/L)
	Avg.	32.8	8.9	8.9	7.3	2.1	4.0	23.3	< 0.01	<0.10
WSR33	Min.	32.0	8.4	8.4	7.2	1.7	2.5	21.8	< 0.01	<0.10
	Max.	33.6	9.7	9.7	7.4	2.4	10.0	24.4	<0.01	<0.10
	Avg.	32.8	9.0	9.1	7.3	2.0	4.0	23.3	< 0.01	< 0.10
WSR36	Min.	31.7	8.3	8.3	7.1	1.5	2.5	21.6	< 0.01	<0.10
	Max.	34.1	9.8	9.8	7.4	2.4	8.0	24.5	< 0.01	<0.10
	Avg.	32.9	9.2	9.1	7.3	2.2	4.1	23.3	< 0.01	<0.10
WSR37	Min.	32.1	8.4	8.5	7.1	1.6	2.5	21.5	< 0.01	<0.10
	Max.	33.6	9.9	9.9	7.4	2.4	9.0	24.6	< 0.01	<0.10
	Avg.	33.1	9.0	9.0	7.2	1.9	3.7	23.3	< 0.01	<0.10
NF1	Min.	32.3	8.2	8.2	7.1	1.5	2.5	21.8	< 0.01	<0.10
	Max.	34.3	9.6	9.6	7.5	2.4	6.0	24.4	< 0.01	<0.10
	Avg.	33.0	8.7	8.7	7.3	1.9	3.9	23.3	< 0.01	<0.10
NF2	Min.	32.1	8.4	8.4	7.1	1.7	2.5	21.6	< 0.01	<0.10
	Max.	33.8	9.2	9.2	7.5	2.2	7.0	24.4	< 0.01	<0.10
	Avg.	32.9	8.9	8.9	7.2	2.0	3.7	23.3	< 0.01	<0.10
NF3	Min.	31.8	8.3	8.3	7.1	1.5	2.5	21.7	< 0.01	<0.10
	Max.	33.6	9.6	9.4	7.4	2.3	8.0	24.3	< 0.01	<0.10

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 D0 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.

Disinfection

3.26. The dechlorinated effluent monitoring at Contact Tank / Product Water Tank was carried out by AJCJV on 24 November 2023 and the monitoring for the connection to distribution network was carried out on 2 & 3 December 2023. The disinfection procedure is completed. The hourly dechlorinated effluent monitoring during the discharge is finished.



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
-----------	---

	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of C&D Wastes Generated Monthly					
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)
Jan 2024	*301.60	0.000	0.000	0.000	*310.60	0.000	0.000	0.000	0.000	0.000	*51.55

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

*The record updated to 20/01/2024 due to the EPD Transaction Records system failure, the update of the waste transaction records form EPD for account-holders' use is temporarily suspended. The data form 21/01 to 31/01 will be updated in next report period.



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**.



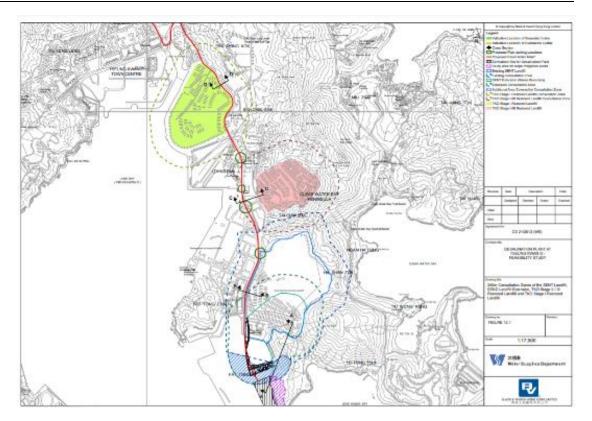


Figure 5.1 Overview of the SENT Extension Consultation Zone and the Contract Site Area

MONITORING PARAMETERS

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

Parameters	Action Level	Limit Level
Oxygen (O ₂)	<19% O ₂	< 19% 0 ₂
Methane (CH ₄)	>10% LEL	>20% LEL
Carbon Dioxide (CO ₂)	>0.5% CO ₂	>1.5% CO ₂

 Table 5.1
 Action and Limit Level for Landfill Gas Monitoring Equipment

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 F**.

Table 5.2Landfill Gas Monitoring Equipment

Equipment	Brand and Model	Calibration Expiry Date		
Portable Gas Detector	GMI PS500 – 25492809/21	21 August 2024		

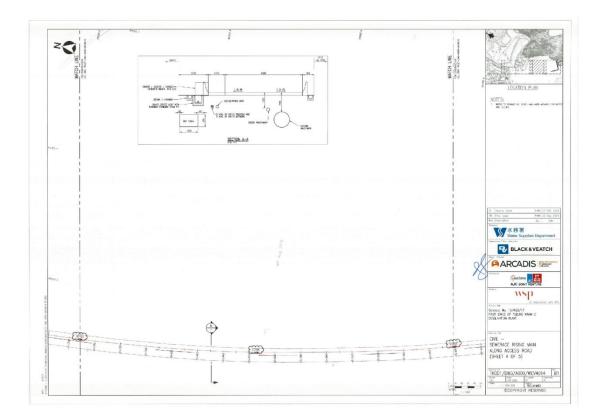


Figure 5.2 Location Map for Landfill Gas Monitoring at TKO Area 137 (-0+440 - -0+760)

7





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, 18 times of landfill gas monitoring were periodically conducted during excavations at 300mm to 1m depth within the consultation zone and whenever workers entered the excavation on the day at TKO Area 137 (Ch1+340 – Ch1+600). No exceedances of action level and limit level was observed.



6. ECOLOGY

MONITORING REQUIREMENTS

6.13. 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

- 6.14. 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.
- 6.15. 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

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

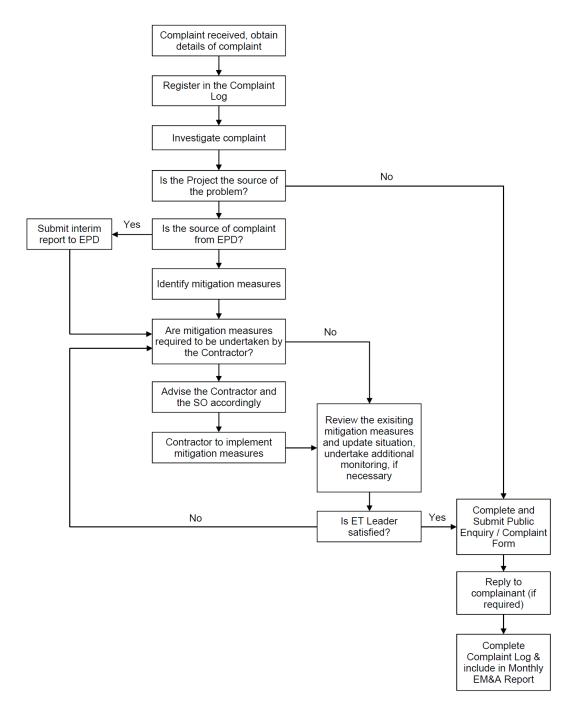


Figure 6.1 Environmental Complaint Handling Procedures



- 7.14. 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.
- 7.15. Construction phase general water quality monitoring at the ten monitoring stations (CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36 and WSR37) are ceased from 1 September 2023 due to the completion of marine-related construction works.
- 7.16. The EM&A works for commissioning phase water quality were conducted at the thirteen monitoring stations (CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37 NF1, NF2 and NF3) during the reporting period in accordance with the EM&A Manual
- 7.17. Seventeen (17) of the commissioning phase water quality monitoring results of SS obtained had exceeded the Action Level. Ten (10) of the commissioning phase water quality monitoring results of SS obtained during the reporting period had exceeded the Limit Leve. After investigation, all exceedances were concluded unrelated to the Project.
- 7.18. Monitoring of dechlorinated effluent was completed in December 2023. The hourly dechlorinated effluent monitoring during the discharge is finished.
- 7.19. In this reporting period, 18 times of landfill gas monitoring were periodically conducted at TKO Area 137 (Ch1+340 Ch1+600). No exceedances of action level and limit level was observed.
- 7.20. One (1) environmental complaint was received in the reporting month. No notification of summons and prosecution Statistics on complaint and notification of summons and prosecution are summarized in **Appendix J**.



8. EM&A SITE INSPECTION

8.13. 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 2, 9, 16, 25 and 29 January 2024 at the site portions listed in **Table 7.1** below.

Date	Inspected Site Portion	Time
2 January 2024	TKO Area 137	14:30 - 15:30
9 January 2024	TKO Area 137	14:30 - 15:30
16 January 2024	TKO Area 137	14:30 - 15:30
25 January 2024	TKO Area 137	14:30 - 15:30
29 January 2024	TKO Area 137	09:15 - 10:45

Table 7.1	Summaries of Site Inspection Record
	building of bite inspection fields

- 8.14. Joint site inspections with IEC were carried out on 09, 16, 25 and 29 January 2024.
- 8.15. Environmental deficiencies were observed during weekly site inspection. Key observations during the site inspections and during the reporting period are summarized in **Table 7.2**.

Date	Environmental Observations	Follow-up Status
2 Jan 2024	No major environmental deficiency was observed.	N/A
9 Jan 2024	No major environmental deficiency was observed.	N/A
16 Jan 2024	A chemical container found near RO Building without a drip tray, the contractors are reminded to provide a drip tray or proper storage for the chemical containers.	The chemical container was removed.
25 Jan 2024	No major environmental deficiency was observed.	N/A
29 Jan 2024	No major environmental deficiency was observed.	N/A

Table 7.2Site Observations

7.1. 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**

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

Administration Building

- Sealing up wall opening
- External wall painting works
- Construction of block work for pipe duct.
- Installation of glass door for laboratory
- Minor Installation of building services, cable laying and termination, Photovoltaic Panel Installation, Testing & Commissioning

Chemical building

- Installation of Irrigation system
- Construction of hose reel cabinet.
- Defect rectification

Main Electrical & Central Chiller Plant Building

- Installation of Roof Tile for Fuel Tank Room
- Minor Installation of building services, electrical switchboard, cable laying, pressure test

ActiDAFF

- Underground utility construction work
- Installation of drainpipe on corridor
- Minor Installation of mechanical equipment, installation of building services, Minor cable laying and termination, Installation of Lightning System, Installation of Fibre Reinforced Polymer Cover Installation, Testing & Commissioning

Product Water Storage Tank Building

- Underground utility construction work
- Water Test in Tank A and defect rectification
- Waterproofing work at Roof Slab on Tank A
- Tank A water test and defect rectification
- Installation of building services, cable laying and termination, Testing & Commissioning

OSCG Building

- Installation of Railing on Brine Maker Tank
- Protective Coating for dangerous goods Rooms
- Installation of building services, mechanical equipment and cable laying and termination, testing and commissioning

Reverse Osmosis Building

- Placing Soil Mix at Roof
- Installation of Glass House
- Underground utility construction work

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Installation of building services, electrical switchboard of cable laying and termination, Minor Installation of mechanical equipment and raised floor, testing and commissioning, Photovoltaic Panel Installation Post Treatment Building Installation of Cat Ladders in Irrigation Tanks • Placing Soil Mix at Roof • Curb Construction for Rescue Opening at Water Tanks Minor Installation of building services, Minor Installation of mechanical • equipment, Cable laying and termination, Pressure Test Inspection corridor Construction of roof tiling • Internal decoration and finishing works • Installation of building services, Lift Installation • CO₂ Tanks Tank surface cleaning, testing and commissioning • Combined Shaft and Pump room CCTV Installation, Installation of Lightning System, Minor building services Installation, testing and commissioning Internal finishing, defect rectification Guard House Installation of Building Services • Workshop construction work Architectural Builders Works and Finishes • Other Master meter Room Architectural Builders Works and Finishes • **Open Channel and Wave deflector Wall** Glass Roof and Glass Canopy installation at elevated walkway Security Fence footing construction work • Manhole 5 Glass Reinforced Plastic Pipe Installation work Underground utility rectification work **Road Construction** Traffic signage work Footpath Construction Landscape Construction • Landscape planting work Irrigation System Construction Slope work – Shotcreting; Rock anchor installation, Rock break Water Pressure Test for Fire Services and Plumbing System Open Channel and Wave deflector Wall Traffic signage work



9.14. 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
- 9.15. 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; and
 - Deployment of silt curtain at the marine areas.



10. CONCLUSIONS AND RECOMMENDATIONS

- 10.1. This is the 47th Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 December to 31 December 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 marine water quality programme was ceased from 1 September 2023 due to the completion of marine-related construction works.
- 10.4. The EM&A works for commissioning phase water quality were conducted during the reporting period in accordance with the EM&A Manual
- 10.5. Seventeen (17) of the commissioning phase water quality monitoring results of SS obtained had exceeded the Action Level. Ten (10) of the commissioning phase 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.
- 10.6. Water quality monitoring of the discharge of dechlorinated effluent in disinfection procedure is completed in December. The hourly dechlorinated effluent monitoring during the discharge is finished.
- 10.7. In this reporting period, 18 times of landfill gas monitoring were periodically conducted at TKO Area 137 (Ch1+340 Ch1+600). No exceedances of action level and limit level was observed.
- 10.8. Weekly environmental site inspections were conducted during the reporting period. Observations and reminders were reported during the site inspections. All items are rectified within the reporting period. The environmental performance of the project was therefore considered satisfactory.
- 10.9. 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.
- 10.10. One (1) environmental complaint related to noise nuisance was received in the reporting period. No notification of summons and prosecution was received in the reporting period.
- 10.11. The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

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Appendix A

Master Programme

/ ID	Activity Name	Baseline	Baseline Start	Baseline Finish	Remaining		Actual / Planned	Actual %	Suild and C	Total		
		Duration			Duration	Start	Finish	Complete	Finish Date	Float	Ν	D J
	ramme Updated as at_30 Nov 2023 (Level 2)											
ey Dates												
Commencer KD0000100	The second secon	0	15-Nov-19		0	15-Nov-19 A		100%	0		•	etter
		0	15-1100-19		0	13-NUV-19A		100 %	0		\$ L	eller
KD0000110	Commencement of the Works	0	30-Dec-19		0	30-Dec-19 A		100%	0			\$
KD0000120	Completion of the Works (1170 Days)	0		13-Mar-23	0		13-Mar-23 A	100%	0			
KD0000130	Revised Completion of the Works (324 Days EOT Granted)	0			62	14-Mar-23 A	31-Jan-24	80.86%		0		
KD0000510	Planned Completion of the Works	0			0		20-Aug-24	0%		-202		
KD0000520	Target Completion of the Works (Best Endeavour)	0			0		18-Dec-23	0%		44		
100000320	raiger completion of the works (Dest Endeavour)	0			0		10-Dec-23	0 /8		44		
xecutive Su	immaries											
Preliminary												
ES0001000	Mobilization and Preliminary Set Up	191	30-Dec-19	07-Jul-20	0	30-Dec-19 A	20-Jul-20 A	100%	-13			—
ivil Design	AIP and DDA											
ES0001010	AIP Civil Design Submission and Approval	330	30-Dec-19	23-Nov-20	0	30-Dec-19 A	31-Aug-20 A	100%	84			-
ES0001020	DDA Civil Design Submission and Approval	414	28-Feb-20	16-Apr-21	0	22-Jan-20 A	01-Sep-21 A	100%	-138			
.00001020			2010020		Ū			10078	100			
	AIP and DDA	1										
ES0002000	M&EAIP Process Mechanical Submission and Approval	477	30-Dec-19	19-Apr-21	0	30-Dec-19 A	22-Dec-20 A	100%	118			
ES0002010	M&E DDA Process Mechanical Submission and Approval	679	08-Feb-20	17-Dec-21	0	21-Jul-20 A	02-Sep-21 A	100%	106			1
-50000000	M®E AID Instrumentation & Constral Submission and Approval	607	01 Jan 00	00 Con 01	0	04 Feb 20 A	OF Fab 00 A	100%	E01			
ES0002020	M&E AIP Instrumentation & Control Submission and Approval	607	31-Jan-20	28-Sep-21	0	04-Feb-20 A	25-Feb-20 A	100%	581			
ES0002030	M&E DDA Instrumentation & Control Submission and	514	22-Jul-20	17-Dec-21	0	13-Feb-21 A	14-Apr-23 A	100%	-483			
ES0002050	Approval M&E DDA Electrical and Renewable Energy Submission and	382	16-Aug-20	01-Sep-21	0	17-Aug-20 A	31-Dec-20 A	100%	244			
200002000	Approval	002	10 / lug 20	01 000 21	Ŭ	17 Aug 2077	01 200 2077	100 /0	2-1-1			
ES0002060	M&EAIP Building Services Submission and Approval	226	30-Dec-19	11-Aug-20	0	30-Dec-19 A	30-Oct-20 A	100%	-80			-
ES0002065	M&E Design Basis & Civil Guidance Dwg	112	30-Dec-19	19-Apr-20	0	30-Dec-19 A	24-Jul-20 A	100%	-96			Ē
ES0002070	M&E DDA Building Services Submission and Approval	306	28-Feb-20	29-Dec-20	0	01-Mar-20 A	30-Jun-21 A	100%	-183			
ES0002085	M&E AIP Site Electrical Submission and Approval	155	09-Jun-20	10-Nov-20	0	21-Mar-20 A	22-Jul-20 A	100%	111			
ES0002090	M&E DDA Lift Submission and Approval	140	27-Aug-20	13-Jan-21	0	01-Oct-20 A	12-May-21 A	100%	-119			
E30002090	Nike DDA Liit Submission and Approval	140	27-Aug-20	13-Jan-21	0	01-OCI-20A	12-1VIdy-21 A	100%	-119			
ES0002095	M&E DDA Site Electrical Submission and Approval	140	11-Nov-20	30-Mar-21	0	23-Jul-20 A	04-Jun-21 A	100%	-66			
ES0002100	M&E DDA T&C Design Submission and Approval	155	29-Mar-22	30-Aug-22	0	01-Aug-21 A	05-Oct-23 A	100%	-401			
	t of Major Plant & Equipment Schedule	001	44.14 00	04.4				40004	100			
ES0002320	M&E Procurement of Major Plant, Equipment, Material and Delivery	901	14-Mar-20	31-Aug-22	0	04-Feb-20 A	16-Jan-23 A	100%	-138			
ES2420	M&E Procurement of Mechanical Equipment - Intake Pumps	595	18-May-20	02-Jan-22	0	04-Feb-20 A	11-May-22 A	100%	-129			
ES2430	M&E Procurement of Mechanical Equipment - ActiDAFF	333	30-Oct-20	27-Sep-21	0	02-Aug-20 A	14-Mar-22 A	100%	-168			
	Underdrain	000	00-001-20	∠1-0 0 0-21	U	02-Aug-20A	1-111a1-22 A	100%	-100			
ES2440	M&E Procurement of Mechanical Equipment - ActiDAFF	298	15-Mar-21	06-Jan-22	0	23-Jul-20 A	14-Oct-22 A	100%	-281			
ES2450	Media M&E Procurement of Mechanical Equipment - RO and ERD	274	22-Feb-21	22-Nov-21	0	22-Jul-20 A	28-Dec-21 A	100%	-36			
	Rack											
ES2460	M&E Procurement of Mechanical Equipment - RO Membrane	755	29-Mar-20	22-Apr-22	0	12-Feb-20 A	28-Dec-22 A	100%	-250			
ES2470	M&E Procurement of Electrical Equipment - CLP Substation	300	14-Mar-20	07-Jan-21	0	14-Mar-20 A	28-Feb-21 A	100%	-52			
	for LV Switchboard / Genset / Building Services											
32kV Subst ES0001460	tation Excavation and Formation Works for 132kV Substation	15	16-Mar-20	30-Mar-20	0	10 Ech 20 A	22 Apr 20 A	100%	-24			
ESUUU1460	Excavation and Formation Works for 132kV Substation	15	10-11/101-20	30-IVIAI-20	0	19-Feb-20 A	23-Apr-20 A	100%	-24			
ES0001470	Construction of 132kV Substation	233	31-Mar-20	18-Nov-20	0	27-Apr-20 A	30-Dec-20 A	100%	-42			
ES0001480	Architectural Finishes for 132kV Substation	126	11-Sep-20	14-Jan-21	0	23-Nov-20 A	22-Mar-21 A	100%	-67			
		120						100 /0				
ES0002240	M&E Installation of 132kV Substation	93	20-Nov-20	20-Feb-21	0	01-Dec-20 A	22-Mar-21 A	100%	-30			
Combine Sh	aft]										
ES0001060	Construction of Combine Shaft	229	27-Mar-20	10-Nov-20	0	02-May-20 A	30-Jun-21 A	100%	-232			
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 ◆ Target Milestone

 .evel of Effort
 Early Bar
 ◆ Milestone

 Bar
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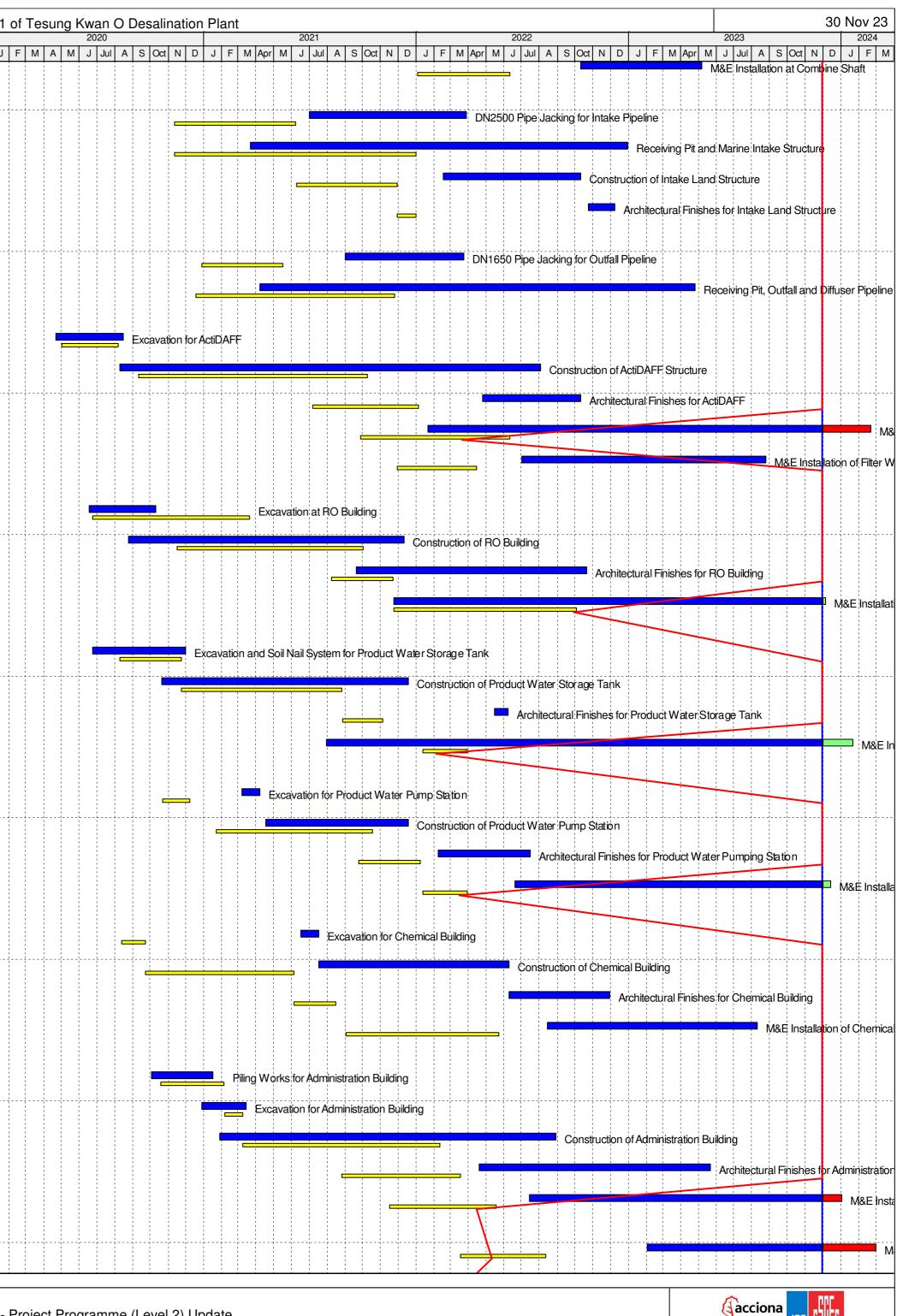


VSD/17	Activity Name	Baseline Duration	Baseline Start	Baseline Finish	Remaining Duration	Actual / Planned Start	Actual / Planned Finish	Actual % Complete	Build and (Variance Finish Date	Total Float	
S0002120	M&E Installation at Combine Shaft	160	03-Jan-22	11-Jun-22	0	11-Oct-22 A	06-May-23 A	100%	-329		
take S0001070	DN2500 Pipe Jacking for Intake Pipeline	210	11-Nov-20	08-Jun-21	0	02-Jul-21 A	28-Mar-22 A	100%	-293		.
S0001080	Receiving Pit and Marine Intake Structure	416	11-Nov-20	31-Dec-21	0	22-Mar-21 A	30-Dec-22 A	100%	-364		-
S0001110	Construction of Intake Land Structure	174	09-Jun-21	29-Nov-21	0	17-Feb-22 A	10-Oct-22 A	100%	-315		
S0001120	Architectural Finishes for Intake Land Structure	32	30-Nov-21	31-Dec-21	0	24-Oct-22 A	08-Dec-22 A	100%	-342		-
utFall	DNI 250 Dia a Jacking fay Quitfall Diacting	140	29-Dec-20	17 May 01		01 Car 01 A	04 Max 00 A	100%	011		
S0001090	DN1650 Pipe Jacking for Outfall Pipeline Receiving Pit, Outfall and Diffuser Pipeline	343	18-Dec-20	17-May-21 25-Nov-21	0	01-Sep-21 A 08-Apr-21 A	24-Mar-22 A 25-Apr-23 A	100%	-311 -516		-
		545	10-Dec-20	23-1100-21	U	00-401-21 4	23-Api-23 A	100 %	-510		
S0001140	Excavation for ActiDAFF	97	02-May-20	06-Aug-20	0	22-Apr-20 A	15-Aug-20 A	100%	-9		
S0001150	Construction of ActiDAFF Structure	393	11-Sep-20	08-Oct-21	0	10-Aug-20 A	03-Aug-22 A	100%	-299		-
S0001160	Architectural Finishes for ActiDAFF	183	07-Jul-21	05-Jan-22	0	25-Apr-22 A	10-Oct-22 A	100%	-278		
S0002130	M&E Installation at ActiDAFF	257	28-Sep-21	11-Jun-22	83	22-Jan-22 A	21-Feb-24	97.22%	-620	-21	
S0002140	M&E Installation of Filter Water Tank and Pumping Station	137	29-Nov-21	14-Apr-22	0	01-Jul-22 A	24-Aug-23 A	100%	-497		
everse Osr S0001170	nosis Building Excavation at RO Building	270	24-Jun-20	20-Mar-21	0	18-Jun-20 A	10-Oct-20 A	100%	161		
S0001180	Construction of RO Building	321	16-Nov-20	02-Oct-21	0	25-Aug-20 A	11-Dec-21 A	100%	-70		
S0001190	Architectural Finishes for RO Building	106	09-Aug-21	22-Nov-21	0	20-Sep-21 A	21-Oct-22 A	100%	-333		-
S0002150	M&E Installation of RO Building	315	23-Nov-21	03-Oct-22	5	24-Nov-21 A	05-Dec-23	98.3%	-428	57	-
r <mark>oduct Wat</mark> S0001240	er Storage Tank Excavation and Soil Nail System for Product Water Storage	106	10-Aug-20	23-Nov-20	0	24-Jun-20 A	01-Dec-20 A	100%	-8		
S0001250	Tank Construction of Product Water Storage Tank	276	24-Nov-20	26-Aug-21	0	21-Oct-20 A	18-Dec-21 A	100%	-114		
S0001260	Architectural Finishes for Product Water Storage Tank	70	27-Aug-21	04-Nov-21	0	16-May-22 A	07-Jun-22 A	100%	-215		-
S0002210	M&E Installation of Product Water Tank	78	12-Jan-22	30-Mar-22	53	31-Jul-21 A	22-Jan-24	95.76%	-663	9	-
oduct Wat	er Pumping Station										
S0001270	Excavation for Product Water Pump Station	47	22-Oct-20	07-Dec-20	0	08-Mar-21 A	07-Apr-21 A	100%	-121		
S0001280	Construction of Product Water Pump Station	270	22-Jan-21	18-Oct-21	0	17-Apr-21 A	18-Dec-21 A	100%	-61		-
S0001290	Architectural Finishes for Product Water Pumping Station	106	25-Sep-21	08-Jan-22	0	08-Feb-22 A	16-Jul-22 A	100%	-189		
S0002215	M&E Installation of Product Water Pump Station	78	12-Jan-22	30-Mar-22	14	20-Jun-22 A	14-Dec-23	90%	-624	48	
<mark>nemical Bu</mark> S0001300	Lilding Excavation for Chemical Building	42	12-Aug-20	22-Sep-20	0	17-Jun-21 A	17-Jul-21 A	100%	-298		
S0001310	Construction of Chemical Building	255	23-Sep-20	04-Jun-21	0	17-Jul-21 A	09-Jun-22 A	100%	-370		
S0001320	Architectural Finishes for Chemical Building	73	05-Jun-21	16-Aug-21	0	09-Jun-22 A	30-Nov-22 A	100%	-471		-
S0002220	M&E Installation of Chemical Building	264	02-Sep-21	23-May-22	0	15-Aug-22 A	10-Aug-23 A	100%	-444		-
dministrati	on Building										
S0001330	Piling Works for Administration Building	110	19-Oct-20	05-Feb-21	0	03-Oct-20 A	16-Jan-21 A	100%	20		
S0001340	Excavation for Administration Building	31	06-Feb-21	08-Mar-21	0	28-Dec-20 A	15-Mar-21 A	100%	-7		
S0001350	Construction of Administration Building	339	09-Mar-21	10-Feb-22	0	28-Jan-21 A	29-Aug-22 A	100%	-200		
S0001360	Architectural Finishes for Administration Building	204	26-Aug-21	17-Mar-22	0	19-Apr-22 A	22-May-23 A	100%	-431		
S0002230	M&E Installation of Admin Building	184	16-Nov-21	18-May-22	33	15-Jul-22 A	02-Jan-24	80.6%	-594	-61	_
v	Vices & Lift Installation M&E Lift Installation	147	18-Mar-22	11-Aug-22	92	02-Feb-23 A	01-Mar-24	48%	-568	-30	
S0002270		147	18-Mar-22	11-Aug-22	92	02-Feb-23 A	01-Mar-24	48%	-568		-30

Actual Level of Effort Early Bar \blacklozenge Milestone

Critical Bar

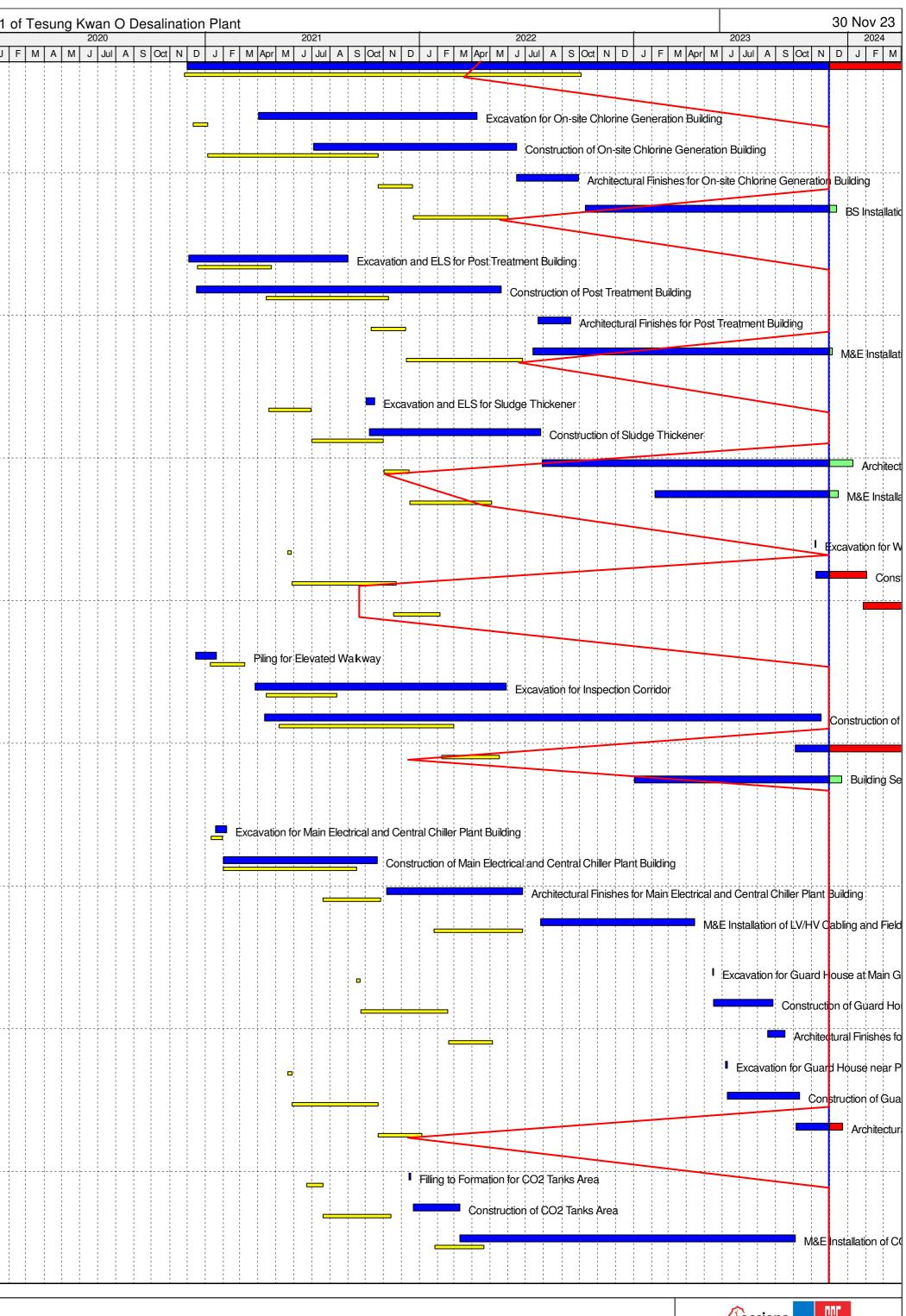
Target Bar



Appendix E - Project Programme (Level 2) Update

AJC JOINT VENTURE

		Duration			Duration	Start	Finish	Complete	Finish Date	Float	N D	
ES0002280	M&E Installation of Building Services	676	27-Nov-20	03-Oct-22	200	01-Dec-20 A	17-Jun-24	69.95%	-623	-138		J
SCG Build	ing											
ES0001400	Excavation for On-site Chlorine Generation Building	25	11-Dec-20	04-Jan-21	0	01-Apr-21 A	09-Apr-22 A	100%	-460			
ES0001410	Construction of On-site Chlorine Generation Building	291	05-Jan-21	22-Oct-21	0	05-Jul-21 A	15-Jun-22 A	100%	-236			
ES0001420	Architectural Finishes for On-site Chlorine Generation Building	59	23-Oct-21	20-Dec-21	0	16-Jun-22 A	28-Sep-22 A	100%	-282			
ES0002200	BS Installation of On-site Chlorine Generation Building (DG inspection)	162	21-Dec-21	31-May-22	13	11-Oct-22 A	13-Dec-23	86.76%	-561	5		-
	ent Building											
ES0001210	Excavation and ELS for Post Treatment Building	126	19-Dec-20	23-Apr-21	0	03-Dec-20 A	01-Sep-21 A	100%	-131			
ES0001220	Construction of Post Treatment Building	209	14-Apr-21	08-Nov-21	0	17-Dec-20 A	19-May-22 A	100%	-192			
ES0001230	Architectural Finishes for Post Treatment Building	59	11-Oct-21	08-Dec-21	0	22-Jul-22 A	16-Sep-22 A	100%	-282			
ES0002180	M&E Installation of Post Treatment Building	199	09-Dec-21	25-Jun-22	5	14-Jul-22 A	05-Dec-23	94.51%	-528	57		
ludge Thic	kener											
ES0001680	Excavation and ELS for Sludge Thickener	73	19-Apr-21	30-Jun-21	0	02-Oct-21 A	16-Oct-21 A	100%	-108			
ES0001690	Construction of Sludge Thickener	121	02-Jul-21	30-Oct-21	0	08-Oct-21 A	26-Jul-22 A	100%	-269			
ES0001700	Architectural Finishes for Sludge Thickener	44	01-Nov-21	14-Dec-21	41	29-Jul-22 A	10-Jan-24	91.8%	-757	21		
ES0002190	M&E Installation of Sludge Thickener	141	15-Dec-21	04-May-22	15	06-Feb-23 A	15-Dec-23	90%	-590	47		
Vorkshop ES0001560	Excavation for Workshop	7	21-May-21	27-May-21	0	06-Nov-23 A	07-Nov-23 A	100%	-894			
ES0001570	Construction of Workshop	179	28-May-21	22-Nov-21	64	08-Nov-23 A	02-Feb-24	26%	-802	-144		
ES0001580	Architectural Finishes for Workshop	81	17-Nov-21	05-Feb-22	81	27-Jan-24	16-Apr-24	0%	-801	-144		
Ispection C ES0001590	Piling for Elevated Wakway	60	09-Jan-21	09-Mar-21	0	15-Dec-20 A	19-Jan-21 A	100%	49			
S0001600	Excavation for Inspection Corridor	121	14-Apr-21	12-Aug-21	0	26-Mar-21 A	28-May-22 A	100%	-289			
S0001610	Construction of Inspection Corridor	299	06-May-21	28-Feb-22	0	12-Apr-21 A	16-Nov-23 A	100%	-626			
S0001620	Architectural Finishes for Inspection Corridor	99	08-Feb-22	17-May-22	156	03-Oct-23 A	04-May-24	27%	-718	-94		
S0001625	Building Services for Inspection Corridor	0			21	03-Jan-23 A	21-Dec-23	85%		2		
ain Electri	cal and Central Chiller Plant Building											
ES0001430	Excavation for Main Electrical and Central Chiller Plant Building	20	11-Jan-21	30-Jan-21	0	18-Jan-21 A	06-Feb-21 A	100%	-7			
ES0001440	Construction of Main Electrical and Central Chiller Plant Building	227	01-Feb-21	15-Sep-21	0	01-Feb-21 A	20-Oct-21 A	100%	-35			
ES0001450	Architectural Finishes for Main Electrical and Central Chiller	99	20-Jul-21	26-Oct-21	0	06-Nov-21 A	25-Jun-22 A	100%	-242			
S0002260	Plant Building M&E Installation of LV/HV Cabling and Field Panels	152	25-Jan-22	25-Jun-22	0	27-Jul-22 A	14-Apr-23 A	100%	-293			
iuard Hous	e e e e e e e e e e e e e e e e e e e											
ES0001490	Excavation for Guard House at Main Gate	7	15-Sep-21	21-Sep-21	0	16-May-23 A	17-May-23 A	100%	-603			
ES0001500	Construction of Guard House at Main Gate	149	23-Sep-21	18-Feb-22	0	18-May-23 A	26-Aug-23 A	100%	-554			-
ES0001510	Architectural Finishes for Guard House at Main Gate	76	19-Feb-22	05-May-22	0	18-Aug-23 A	15-Sep-23 A	100%	-498			- - -
ES0001520	Excavation for Guard House near Pier	8	21-May-21	28-May-21	0	07-Jun-23 A	09-Jun-23 A	100%	-742			
ES0001530	Construction of Guard House near Pier	147	29-May-21	22-Oct-21	0	10-Jun-23 A	10-Oct-23 A	100%	-718			
ES0001540	Architectural Finishes for Guard House near Pier	74	23-Oct-21	04-Jan-22	23	05-Oct-23 A	23-Dec-23	71%	-718	-23		
O2 Tank												
ES0001370	Filling to Formation for CO2 Tanks Area	29	22-Jun-21	20-Jul-21	0	14-Dec-21 A	17-Dec-21 A	100%	-150			+
S0001380	Construction of CO2 Tanks Area	116	21-Jul-21	13-Nov-21	0	21-Dec-21 A	10-Mar-22 A	100%	-117			
S0002170	M&E Installation of CO2 Tank Area	84	27-Jan-22	20-Apr-22	0	11-Mar-22 A	03-Oct-23 A	100%	-531			
iesel Emer	rgency Generator		1		1		- I	-				



- Project Programme (Level 2) Update

3/WSD/17 vity ID	Activity Name	Baseline	Baseline Star	t Baseline Finis	h Romaining	Actual / Planned				Dperate Sta	1	0110	oung i	2020	0 2 00	amat				2021		Ī			2022			1		2023		30 N
	Activity Name	Duration	Daseinie Stan		h Remaining Duration		Finish	Complete				I F M			AS	Oct N		FM	Apr M	2021	ASO		JEN	Apr M		AS			M Apr M		S Oct N	
ES0002250	M&E Diesel Emergency Generator	57	25-Feb-22	22-Apr-22	0	16-Jan-23 A	28-Jul-23 A	100%	-462																						E Diesel E	Energe
Switch Roor	m and Transformer Installation							1							· · · · · · · · · · · · · · · · · · ·				+								· · · · · · · · · · · · · · · · · · ·					
ES0002300	M&E Installation of HV/LV Switchroom and Transformer	242	16-Nov-21	15-Jul-22	0	24-Jul-22 A	20-Apr-23 A	100%	-279																				M&E	Installation	of HV/LV	Swite
Miscellaneo	ous																															
ES0001630	Remaining Architectural Finishes for All Buildings	322	11-Jan-22	28-Nov-22	223	09-Dec-22 A	10-Jul-24	91%	-590	-161														~								
ES0001640	External Process and Non-Process Pipe	655	18-Dec-20	03-Oct-22	0	27-May-21 A	23-Nov-23 A	100%	-416								-									· · · ·						E>
ES0001650	Drainage and Cable Duct	518	04-Jun-21	03-Nov-22	0	25-Apr-22 A	18-Jul-23 A	100%	-257																		·····			Drair	age and	Cab
ES0001660	Slope Mitigation Works	684	23-Nov-20	07-Oct-22	264	28-Sep-21 A	20-Aug-24	20%	-683	-202						-																+
ES0001670	Landscaping Works	469	28-Oct-21	08-Feb-23	145	01-Mar-23 A	23-Apr-24	20%	-440	-83																		[+
ES0002290	M&E PV Panels	215	23-Nov-21	25-Jun-22	89	05-Jan-23 A	27-Feb-24	6%	-612	-27																						+
ES0002310	M&E Chiller & Irrigation System Installation	298	27-Oct-21	20-Aug-22	57	25-Aug-23 A	26-Jan-24	16.4%	-524	5																						+
ES0002350	M&E Installation of Surge Vessel	70	24-Feb-22	04-May-22	0	15-Sep-23 A	30-Oct-23 A	100%	-544														·····									Л&Е
ES0002390	M&E Installation of Thickened Sludge Holding Tank	42	09-Dec-21	19-Jan-22	9	27-Mar-23 A	09-Dec-23	26%	-689	13																						
Statutory Su	Ibmission & Inspection																															
ES0002330	Statutory Submission & Inspection	1148	11-Jan-20	03-Mar-23	218	03-Dec-19 A	05-Jul-24	87.7%	-490	-156				1 1 		-									· · ·							٢
	Commissioning																							· · · · · · · · · · · · · · · · · · ·								
ES0002400	M&E Precomissioning	229	12-Jun-22	26-Jan-23	22	22-Apr-23 A	22-Dec-23	84%	-330	31																						٢
ES0002410	M&E Commissioning	213	04-Jul-22	01-Feb-23	32	02-Jun-23 A	01-Jan-24	69%	-334	30																		+				
ES0002420	M&E Performance Test	40	02-Feb-23	13-Mar-23	53	01-Dec-23	22-Jan-24	0%	-315	9																						

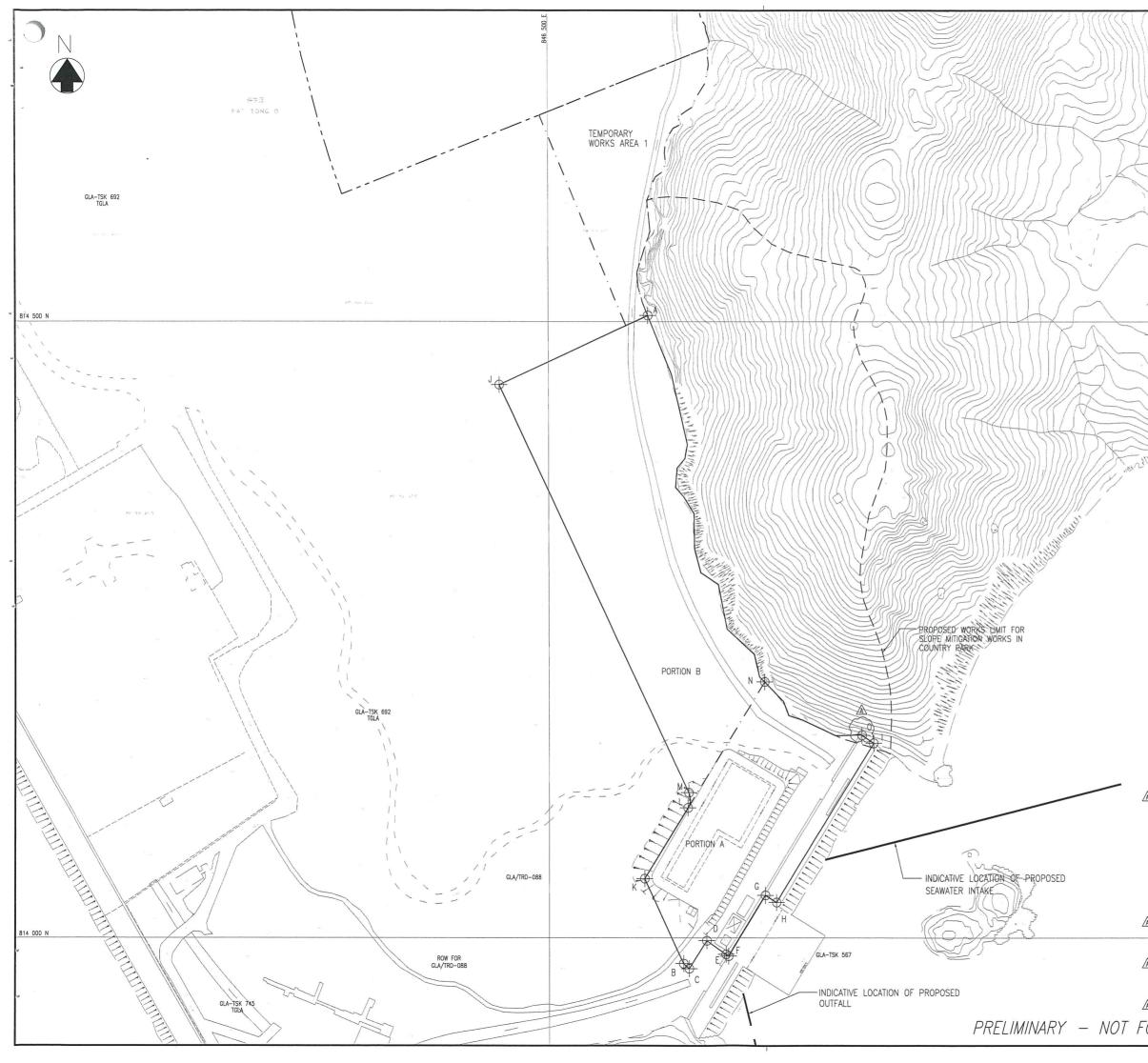






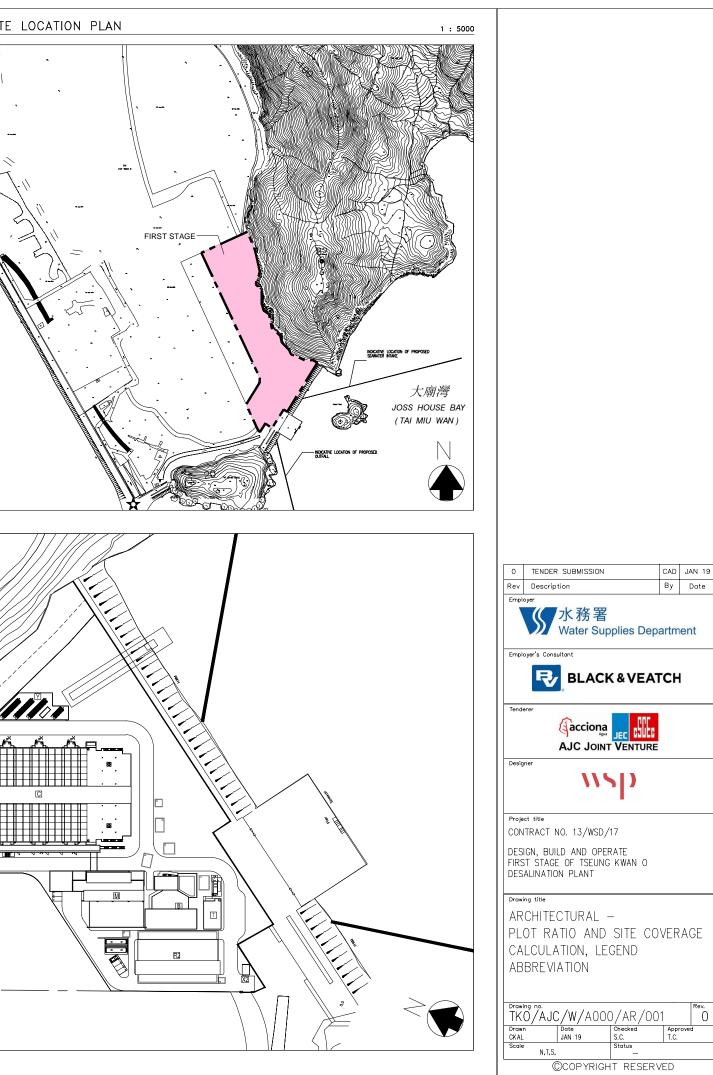
Appendix B

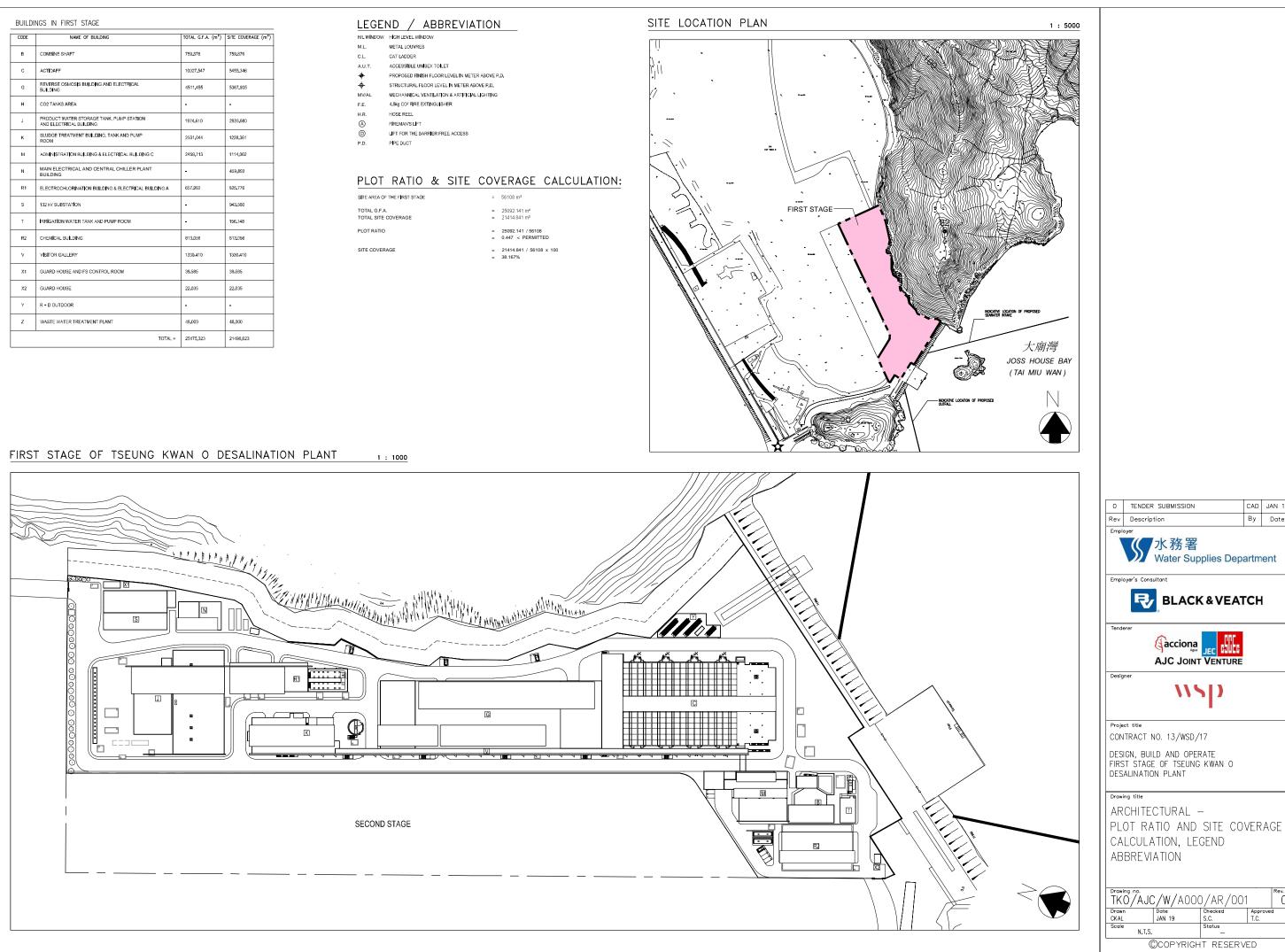
Overview of Desalination Plant in Tseung Kwan O



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847-000	1	14	1)))	, /	LEGEND:
	1	11	SS1 /		BOUNDARY OF SENT
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	1		1º		TKO DESALINATION PLANT
))			HHL.		GLA-TSK 692 ALLOCATED LAND BOUNDARIES
$\langle \langle \rangle$	4	tt	H.	>	NOTE: TEMPORARY WORKS AREA 1 WILL BE
+	_	K			HANDED OVER AT +6 MPD WITH A TOLERANCE OF ±500mm.
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					B 10/03 UPDATE NOTES YLC
					A 07/18 UPDATE COORDINATES YLC Revision Date Description Initial
					Designed Checked Drawn Checked
					Initial YLC CKH SZ WLS Date 02/18 02/18 02/18 02/18
					Approved
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					Agreement No. CE 8/2015 (WS)
	ſ	POINT	EASTING	NORTHING	Contract No.
		А	846581.93	814505.03	13/WSD/17
		В	846610.11	813979.23	Contract Title DESIGN. BUILD AND OPERATE
	1		010010.11		
		С	846614.73	813975.12	DESIGN, BUILD AND OPERATE FIRST STAGE OF TSEUNG KWAN O DESALINATION PLANT
		C D		813975.12 813997.84	FIRST STÁGE OF TSEUNG KWAN O DESALINATION PLANT
			846614.73		DESALINATION PLANT
		D	846614.73 846629.09	813997.84	DESALINATION PLANT
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		D E F G H	846614.73 846629.09 846644.75 846646.80 846677.24 846686.56	813997.84 813986.74 813985.28 814034.67 814028.89	DESALINATION PLANT Drowing Title SITE HANDOVER WORKS AREAS Drowing No. 190495/K/TEND/10/0003 B
		D E F G H	846614.73 846629.09 846644.75 846646.80 846646.80 846677.24 846686.56 846766.21	813997.84 813986.74 813985.28 814034.67 814028.89 814158.11	DESALINATION PLANT Drowing Title SITE HANDOVER WORKS AREAS Drowing No. Revision
		D E F G H J	846614.73 846629.09 846644.75 846646.80 846677.24 846686.56 846766.21 846459.65	813997.84 813986.74 813985.28 814034.67 814028.89 814158.11 814448.83 814048.11 814405.63	DESALINATION PLANT Drowing Title SITE HANDOVER WORKS AREAS Drowing No. 190495/K/TEND/10/0003 B Scele A1 1 : 1500 A3 1 : 3000 水務署
		D E F G H I J	846614.73 846629.09 846644.75 846646.80 846677.24 846686.56 846766.21 846766.21 846459.65 846578.45	813997.84 813986.74 813985.28 814034.67 814028.89 814158.11 814448.83 814048.11	DESALINATION PLANT Drowing Title SITE HANDOVER WORKS AREAS Drowing No. 190495/K/TEND/10/0003 B Scole A1 1 :: 1500 A3 1 :: 3000 水務署 Water Supplies
		D E F G H I J K L	846614.73 846629.09 846644.75 846646.80 846677.24 846686.56 8466766.21 8466578.45 8466578.45 846613.89	813997.84 813986.74 813985.28 814034.67 814028.89 814158.11 814448.83 814048.11 814405.63	DESALINATION PLANT Drowing Title SITE HANDOVER WORKS AREAS Drowing No. 190495/K/TEND/10/0003 B Scele A1 1 : 1500 A3 1 : 3000 水務署
		D F G H J K L M	846614.73 846629.09 846644.75 846646.80 846677.24 846686.56 8466766.21 846659.65 846578.45 846613.89 846614.60	813997.84 813986.74 813985.28 814034.67 814028.89 814028.89 814158.11 814448.83 814048.11 814405.63 814117.96	DESALINATION PLANT Drowing Title SITE HANDOVER WORKS AREAS Drowing No. 190495/K/TEND/10/0003 B Scole A1 1 :: 1500 A3 1 :: 3000 水務署 Water Supplies

CODE	NAME OF BUILDING	TOTAL G.F.A. (m ²)	SITE COVERAGE (m ²)
В	COMBINE SHAFT	759.876	759.876
с	ACTIDAFF	10027.547	5455 <u>.</u> 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
٧	VISITOR GALLERY	1330.410	1330.410
X1	GUARD HOUSE AND FS CONTROL ROOM	39.585	39.585
X2	GUARD HOUSE	22.035	22.035
Y	R + D OUTDOOR	-	-
z	WASTE WATER TREATMENT PLANT	48.000	48.000
	TOTAL =	25175.323	21498.023









Appendix C

Summary of Implementation Status of Environmental Mitigation





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent		ement Stage		Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Implementation Agent	D	C	0	status	Guidelines
Air Quality								
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)		~		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)		√		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)		•		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)		•		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)		√		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)		•		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)		•		Implemented	-
S4.8.1	Road sections between vehicle-wash areas and vehicular entrance will be paved.	Land site/ During Construction	Contractor(s)		1		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)	1	•		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)		√		Implemented after reminder	-





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent	-	ement Stage	tation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Implementation Agent	D	C	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)		~		Implemented after reminder	-
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)		~		Implemented	-
S4.8.1	All exposed areas will be kept wet always to minimise dust emission.	Land site/ During construction	Contractor(s)		~		Implemented	-
\$4.8.1	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)		•	•	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)		•		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 after observation	-
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)		•		Implemented	-



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EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	-	ementa Stage	ation	Implementation status	Relevant Legislation & Guidelines
Keleience	Mugation Measures	main concerns to address	Agent	D	C	0	status	Guidennes
Noise							1	
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)		•		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)		~		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)		√		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)		~		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)		~		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)		•		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)		~		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)		-		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)		•		N/A	A Practical Guide for the Reduction of Noise from Construction Works
\$5.7	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)	•	•		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)		~		N/A	A Practical Guide for the Reduction of Noise from





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation	-	ement	ation	Implementation	Relevant Legislation & Guidelines
Reference	Mitigation Measures	main concerns to address	Agent	D	Stage C	0	status	Guidennes
	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)	~	✓		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)	~	~		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)				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		v		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)		•		Implemented	-





EIA	Recommended Environmental Protection Measures/	Objectives of the	Implementation Agent	Imple	nentatio	n Implementation	Relevant Legislation
Reference	Mitigation Measures	recommended measures &			tage	status	& Guidelines
		main concerns to address		D	C O		
Water Qua		1	T			- 1	r
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)		~	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)		✓	Implemented	-
\$6.9	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)		•	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)		✓	N/A	-
\$6.9	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
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)		~	Implemented	-





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	C	0		
S6.9	Appropriate surface drainage will be designed and provided where necessary.	Land site & drainage/ During construction	Contractor(s)		~		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)	~	~		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)		~		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)		~		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)		•		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)		~		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)		•	*	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)		•	•	Implemented	Inland and Coastal Waters
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)		•	•	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		•		Implemented	-





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent		emen Stag	itation e	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	r s s s s	D	C	0	Status	Guidelines
Waste Mar								-
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)		•		Implemented	-
S8.5	Provision of sufficient waste disposal points and regular collection for disposal.	All area/ During construction/ During operation	Contractor(s)		•	~	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
\$8.5	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)		•		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	Waste Disposal Ordinance (Cap 354)





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent	-	ementa Stage	Implementation	0
Reference	Mitigation Measures	main concerns to address	1 0	D		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)		•	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)		•	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)		•	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)		~	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)		•	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)		~	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 recommended measures &	Implementation Agent		emen Stage	tation	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address	Implementation Agent	D	C	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)		•		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)		•		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)		<		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)		<		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)		•		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)		~		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)		<		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 recommended measures &	Implementation Agent	Impl	emer Stag	ntation e	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address		D	C	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)		~		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		~	*	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		•	*	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		•	•	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		~	•	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		~	~	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		~	•	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		~	•	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		~	*	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		~	✓	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		•	•	Implemented	DEVB TC(W) No. 8/2010 Enhanced Specification for Site Cleanliness and Tidiness.





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent	Impl	emer Stag	ntation ge	Implementation	Relevant Legislation &
Reference	Mitigation Measures	main concerns to address		D	C	0	Status	Guidelines
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 minimize odour, pest and litter impacts.	All area/ During construction/ During operation	Contractor(s)/ WSD		~	~	Implemented	-
S8.5	Recycling bins will be provided at strategic locations within the Site to facilitate recovery of recyclable materials (including aluminum can, wastepaper, glass bottles and plastic bottles) from the Site. Materials recovered will be sold for recycling.	All area/ During construction/ During operation	Contractor(s)/ WSD		~	√	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)		~		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		~		Implemented	-





EIA	Recommended Environmental Protection Measures/	Objectives of the recommended measures &	Implementation Agent	Impl	emer Stag	itation e	Implementation	
Reference	Mitigation Measures	main concerns to address	r e e e e	D	C	0	Status	Guidelines
Ecology								
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)	•	•		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)	√	~		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)	~			Implemented	-
\$9.7	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)		~		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	Impl	emer Stag	ntation e	Implementation	Relevant Legislation & Guidelines
Reference	Mitigation Measures	main concerns to address		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)		~		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)		•		Implemented	-
\$9.7	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)		✓		To be implemented	-
\$9.7	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)		~		To be implemented	-





EIA Reference	8	Objectives of the recommended measures & main concerns to address	Implementation Agent	Impl	emen Stag	itation e	Implementation Status	Relevant Legislation & Guidelines
				D	C	0		
Landscap					.		r	
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)	*	~	4	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)	~	<	1	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)	~	 Image: A start of the start of	✓	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)	*	*	1	Implemented	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)	*	•	~	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)	•	•	✓	Implemented	



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EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures &	Implementation Agent	Implementa Stage			Implementation Status	Relevant Legislation & Guidelines
		main concerns to address		D	С	0	Status	Guidennes
S11.10 &	Dredging works for the installation of intake structures and outfall	All area/ Detailed design/	WSD/ Contractor(s)	✓	✓	~	Implemented	
11.11	diffusers should be minimized to avoid or reduce any potential	During construction/ During						
	environmental impacts to as low as reasonably practicable	operation						
	(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 Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	Implementation Stage			Implementation	Relevant Legislation &
				D	С	0	Status	Guidelines
Landfill G	as Hazard					1		
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)	•		√	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)	*	✓	√	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)	•	~	•	Implemented	
\$12.7	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)	*	~	√	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)	•		√	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)	•	•	•	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)	~		√	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)		~	4	Implemented	





EIA Reference	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Implementation Agent	-	ement Stage	tation	Implementation Status	Relevant Legislation & Guidelines
				D	C	0		
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)	•	•	~	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)	•	•	~	N/A	
\$12.7	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)	•	•	~	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)	•	•	~	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)	•	•	~	Implemented	





Appendix D

Impact Monitoring Schedule

Contract No. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Tentative Water Quality Monitoring Schedule (January 2024)

3un	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
		Impact Water Quality monitoring for		Impact Water Quality monitoring for		Impact Water Quality monitoring for
		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1
		WSR33, WSR36, WSR37, NF1, NF2, NF3				WSR33, WSR36, WSR37, NF1, NF2, NF3
				WSR33, WSR36, WSR37, NF1, NF2, NF3		WSR33, WSR36, WSR37, NF1, NF2, NF3
		Monitoring Time:				
		Mid-flood: 09:38 - 13:08		Monitoring Time:		Monitoring Time:
				Mid-flood: 10:52 - 14:22		Mid-flood: 11:50 - 15:20
	8	9	10	11	12	13
		Impact Water Quality monitoring for		Impact Water Quality monitoring for		Impact Water Quality monitoring for
		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1
		WSR33, WSR36, WSR37, NF1, NF2, NF3		WSR33, WSR36, WSR37, NF1, NF2, NF3		WSR33, WSR36, WSR37, NF1, NF2, NF3
				(1)(0)(0), (1)(0)(0), (1)(0)(0), (1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(10100, 10100, 10107, 11 1, 11 2, 11 5
		Monitoring Time:		Monitoring Time:		Monitoring Time:
		Mid-ebb: 08:54 - 11:49		Mid-ebb: 10:24 - 13:22	1	Mid-flood:08:14 - 11:44
				Wild+600. 10.24 - 15.22		Mid-1000.08.14 - 11.44
	15	16	17	18	19	20
		10	.,	10	2	20
		Impact Water Quality monitoring for		Impact Water Quality monitoring for		Impact Water Quality monitoring for
		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		
		WSR33, WSR36, WSR37, NF1, NF2, NF3				CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1
				WSR33, WSR36, WSR37, NF1, NF2, NF3		WSR33, WSR36, WSR37, NF1, NF2, NF3
		Monitoring Time:				
		Mid-flood: 08:49 - 12:19		Monitoring Time:		Monitoring Time:
				Mid-flood: 10:13 - 13:43		Mid-flood: 09:00 - 18:00
	22	23	24	25	26	27
		20	24	20	20	27
		Inner Weter Oneline munitarian for		Internet Water One liter music site for		Internet Water Orabits meritorian for
		Impact Water Quality monitoring for		Impact Water Quality monitoring for		Impact Water Quality monitoring for
		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1
		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3
		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3
		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16 WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	8	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time: Mid-flood: 09:24 - 12:54	1	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16 WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time: Mid-flood: 09:24 - 12:54	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time: Mid-flood: 09:24 - 12:54	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSRI, WSRZ, WSRI, WSR3, WSR3, WSRI, SNR, NP, NP, Monitoring Time: Mid-flood: 0924 - 12:54 30 Impact Water Quality monitoring for	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSRI, WSRZ, WSRI, WSR33, WSR35, WSR37, NF1, NF2, NF3 Monitoring Time: Mid-flood: 09:24 - 12:54 30 Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSRI, WSRZ, WSRI, WSR3, WSR3, WSRI, SNR, NP, NP, Monitoring Time: Mid-flood: 0924 - 12:54 30 Impact Water Quality monitoring for	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSRI, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time: Mid-flood: 09:24 - 12:54 30 Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSRI, WSRZ, WSRI, WSRI, WSR3, WSR36, WSR7, NF1, NF2, NF3 Monitoring Time: Mid-flood; 09/24 - 12/54 30 Impact Water Quality monitoring for CE, CF, WSRI, WSR2, WSR3, WSR4, WSR16, WSR33, WSR6, WSR37, NF1, NF2, NF3 Monitoring Time:	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSRI, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time: Mid-flood: 09:24 - 12:54 30 Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSRI, WSRZ, WSRI, WSRI, WSR3, WSR36, WSR7, NF1, NF2, NF3 Monitoring Time: Mid-flood; 09/24 - 12/54 30 Impact Water Quality monitoring for CE, CF, WSRI, WSR2, WSR3, WSR4, WSR16, WSR33, WSR50, WSR3, WF1, NF2, NF3 Monitoring Time:	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSRI, WSRZ, WSRI, WSRI, WSR3, WSR36, WSR7, NF1, NF2, NF3 Monitoring Time: Mid-flood; 09/24 - 12/54 30 Impact Water Quality monitoring for CE, CF, WSRI, WSR2, WSR3, WSR4, WSR16, WSR33, WSR50, WSR3, WF1, NF2, NF3 Monitoring Time:	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29	CE, CF, WSRI, WSRZ, WSRI, WSRI, WSR3, WSR36, WSR7, NF1, NF2, NF3 Monitoring Time: Mid-flood; 09/24 - 12/54 30 Impact Water Quality monitoring for CE, CF, WSRI, WSR2, WSR3, WSR4, WSR16, WSR33, WSR50, WSR3, WF1, NF2, NF3 Monitoring Time:	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
wks	29	CE, CF, WSRI, WSRZ, WSRI, WSRI, WSR3, WSR36, WSR7, NF1, NF2, NF3 Monitoring Time: Mid-flood; 09/24 - 12/54 30 Impact Water Quality monitoring for CE, CF, WSRI, WSR2, WSR3, WSR4, WSR16, WSR33, WSR50, WSR3, WF1, NF2, NF3 Monitoring Time:	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
	29 29 mperature: pH, Turbidity, Salinity, Suspended Solids	CE, CF, WSRI, WSRZ, WSRI, WSRI, WSR3, WSR36, WSR7, NF1, NF2, NF3 Monitoring Time: Mid-flood; 09/24 - 12/54 30 Impact Water Quality monitoring for CE, CF, WSRI, WSR2, WSR3, WSR4, WSR16, WSR33, WSR50, WSR3, WF1, NF2, NF3 Monitoring Time:	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:
		CE, CF, WSRI, WSRZ, WSRI, WSRI, WSR3, WSR36, WSR7, NF1, NF2, NF3 Monitoring Time: Mid-flood; 09/24 - 12/54 30 Impact Water Quality monitoring for CE, CF, WSRI, WSR2, WSR3, WSR4, WSR16, WSR33, WSR50, WSR3, WF1, NF2, NF3 Monitoring Time:	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR WSR33, WSR36, WSR37, NF1, NF2, NF Monitoring Time:
tonitoring Parameters: Dissolved oxygen, Ter		CE, CF, WSRI, WSRZ, WSRI, WSRI, WSR3, WSR3, WSRN, NFI, NF2, NF3 Monitoring Time: Mid-flood: 09/24 - 12/54 30 Impact Water Quality monitoring for CE, CF, WSRI, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time: Mid-flood: 08:00 - 11:19	31	CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:		CE, CF, WSR1, WSR2, WSR3, WSR4, WSR WSR33, WSR36, WSR37, NF1, NF2, NF3 Monitoring Time:

Due to safety concern of vessel transportation earlier than 0700, Water Quality Monitoring would start at 0800.
 Prioritized routing: Mid-ebb: CE-wWSR16-WWSR37-WWSR36-WWSR33-Remaining stations and Mid-flood: CF-WSR1-WSR2-WSR3-WSR4-Remaining stations

Contract No. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Tentative Water Quality Monitoring Schedule (February 2024)

Sun	Mon	Tue	Wed		Fri	Sat
				1	2	3
				Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,
				WSR33, WSR36, WSR37, NF1, NF2, NF3		WSR33, WSR36, WSR37, NF1, NF2, NF3
				Tide Period: Mid-flood: 07:02 - 13:58		Tide Period: Mid-flood: 07:49 - 15:14
	5	6	7	8	9	10
	Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16,	
	WSR33, WSR36, WSR37, NF1, NF2, NF3		WSR33, WSR36, WSR37, NF1, NF2, NF3		WSR33, WSR36, WSR37, NF1, NF2, NF3	
	Tide Period : Mid-flood: 01:41 - 16:21		Tide Period: Mid-flood: 02:23 - 18:21		Tide Period: Mid-flood: 03:26 - 10:29	
	12	13	14	15	16	17
		-				
	Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3			Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3
	Tide Period: Mid-flood: 05:05 - 12:02			Tide Period: Mid-flood: 06:33 - 14:03		Tide Period: Mid-flood: 07:17 - 15:49
	19	20	21	22	23	24
		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR1 WSR33, WSR36, WSR37, NF1, NF2, NF3
		Tide Period: Mid-flood: 01:57 - 18:45		Tide Period: Mid-ebb: 10:32 - 14:33		Tide Period: Mid-flood: 03:50 - 10:32
	26	27	28	29		
		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3		Impact Water Quality monitoring for CE, CF, WSR1, WSR2, WSR3, WSR4, WSR16, WSR33, WSR36, WSR37, NF1, NF2, NF3		
		Tīde Period: Mid-flood: 05:00 - 12:08		Tide Period: Mid-flood: 05:44 - 12:08		
Remarks: . Monitoring Parameters: Dissolved oxygen, Temperatu	are, pH, Turbidity, Salinity, Suspended Solids					

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





Appendix E

Event / Action Plan

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Table E1Event and Action Plan for Construction Noise Monitoring

Event	Action			
	ET	IEC	ER	Contractor
Action Level	 Carry out investigation to identify the source and cause of the complaint/ exceedance(s) Notify IEC, ER, and Contractor and report the results of investigation to the Contractor, ER and the IEC Discuss with the Contractor and IEC for remedial measures required 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 	 Review the analyzed results submitted by the ET Review the proposed remedial measures by the Contractor and advise the ER accordingly 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	 Carry out investigation to identify the source and cause of the exceedance Notify IEC, ER, Project Proponent, EPD and Contractor Repeat measurements to confirm findings Provide investigation report to IEC, ER, EPD and Contractor he causes of the exceedances If the exceedance is related to the Project, assess effectiveness by additional monitoring. Report the remedial action implemented and the additional monitoring results to IEC, EPD, ER and Contractor If exceedance stops, cease additional monitoring 	 Supervise the implementation of remedial measures 	writing 2. 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

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Table E2Event 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 	 Confirm receipt of notification of exceedance in writing.
Action Level being exceeded by two or more consecutive sampling days	 Repeat <i>in situ</i> 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 properlimplemented.
Limit Level being exceeded by one sampling day	 Repeat <i>in situ</i> 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. 	 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 properl implemented. Request Contractor(s) to critically review the working methods.
Limit Level being exceeded by two or more consecutive sampling days	 Repeat <i>in situ</i> 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. 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. 	 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 properl implemented. Request Contractor(s) to critically review the working methods; Consider and instruct, if necessary, the Contractor(s) to slow down or to stop all or part of the marine construction works/ production volume of the desalination plant until no exceedance of Lim Level.

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 E2Event and Action Plan for Ecology during Construction Phase

Event	Action							
Lvent	ET		IEC		Cor	ntractor(s)	ER	
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	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 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 are 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 is 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 is rectified

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

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aurecor



WaterQualityMonitoringEquipmentandLandfillGasEquipmentCalibrationCertification

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.:Date of Issue:Page No.:

: R-BC120002 : 05 December 2023 : 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 :	22D100436
Date of Received :	01 December 2023
Date of Calibration :	04 December 2023
Date of Next Calibration :	03 March 2024
Request No. :	D-BC120002

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

e Method
e 4500-H+ B
of international Accreditation New Zealand Technical Guide no. 3 Second edition March
rking Thermometer Calibration Procedure
e 2520 B
e 4500-O G (Membrane Electrode Method)
e 2130 B (Nephelometric Method)

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.13	0.13	Satisfactory
7.42	7.45	0.03	Satisfactory
10.01	10.02	0.01	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
36	35.5	-0.5	Satisfactory
25	24.8	-0.2	Satisfactory
15	15.1	0.1	Satisfactory

Tolerance of Temperature should be less than \pm 2.0 ($^{\circ}C$)

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.57	-4.30	Satisfactory
20	19.14	-4.30	Satisfactory
30	29.99	-0.03	Satisfactory

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

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun-ning Assistant Manager



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.	: R-BC120002
Date of Issue	: 05 December 2023
Page No.	: 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.99	8.35	0.36	Satisfactory
5.00	5.10	0.10	Satisfactory
2.58	2.40	-0.18	Satisfactory
0.10	0.20	0.10	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	0.50		Satisfactory
10	9.88	-1.2	Satisfactory
20	18.35	-8.2	Satisfactory
100	95.10	-4.9	Satisfactory
800	736.55	-7.9	Satisfactory

Tolerance of Turbidity should be less than ± 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 ---



ALS Technichem (HK) Pty Ltd 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong T: +852 2610 1044 F: +852 2610 2021 www.alsglobal.com

111/22/105/

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: CLIENT: ADDRESS:

JOE HO ACUITY SUSTAINABILITY CONSULTING LIMITED UNIT E, 12/F, FORD GLORY PLAZA, NO. 37-39 WING HONG STREET, CHEUNG SHA WAN, KOWLOON

WORK ORDER:	HK2344056
SUB-BATCH:	0
LABORATORY:	HONG KONG
DATE RECEIVED:	03-Nov-2023
DATE OF ISSUE:	08-Nov-2023

MORK ORDER.

GENERAL COMMENTS

The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

The "Tolerance Limit" quoted is the acceptance criteria applicable for similar equipment used by the laboratory or quoted from relevant international standards.

The "Next Calibration Date" is recommended according to best practice principle as practised by the laboratory or quoted from relevant international standards.

The validity of equipment/ meter performance only applies to the result(s) stated in the report.

This report superseded any previous report(s) with same work order number.

EQUIPMENT INFORMATION

Equipment information (Brand name, Model No., Serial No. and Equipment No.) is provided by client. Equipment Type: Chlorine Meter Service Nature: Performance Check Scope: Free Chlorine and Total Residual Chlorine Brand Name/ Model No.: [LOVIBOND]/[MD200]

Serial No./ Equipment No.: Date of Calibration:

[19/82456]/[N/A] 07-November-2023

Ma Sin

Mr Chan Siu Ming, Vico Assistant Laboratory Manager Environmental

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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION



WORK ORDER:	HK2344056			0
SUB-BATCH: DATE OF ISSUE: CLIENT:	0 08-Nov-2023 ACUITY SUSTAINABILITY CO	ONSULTING LIMITED		
Equipment Type: Brand Name/ Model No.: Serial No./	Chlorine Meter [LOVIBOND]/ [MD200] [19/82456]/ [N/A]			
Equipment No.: Date of Calibration:	07-November-2023	Date of Next Calibration:	07-February-2024	

PARAMETERS:

Free Chlorine

Method Ref: APHA (23rd edition), 4500Cl: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (%)
0.2	0.20	+0.0
1.0	0.97	-3.0
2.0	1.99	-0.5
	Tolerance Limit (%)	±10.0

Total Residual Chlorine

Method Ref: APHA (23rd edition), 4500Cl: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (%)
0.2	0.18	-10.0
1.0	0.96	-4.0
2.0	1.98	-1.0
	Tolerance Limit (%)	±10.0

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

Ma Ling

Mr Chan Siu Ming, Vico Assistant Laboratory Manager Environmental





Appendix G

Water Quality Monitoring Data & Landfill Gas Monitoring Data

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Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	Total Chlorine (mg/L)
CE	2/1/2024	Mid-flood	Sunny	Moderate	S	1	12:46:00 PM	8.8	7.3	33.5	22.9	2.4	2.5	<0.10	<0.01
CE	2/1/2024	Mid-flood	Sunny	Moderate	S	1	12:46:00 PM	8.8	7.2	33.5	22.9	2.3	3.0	<0.10	<0.01
CE	2/1/2024	Mid-flood	Sunny	Moderate	М	11	12:47:00 PM	8.9	7.2	33.6	22.9	2.3	3.0	<0.10	<0.01
CE	2/1/2024	Mid-flood	Sunny	Moderate	М	11	12:47:00 PM	8.9	7.3	33.6	22.9	2.4	3.0	<0.10	<0.01
CE	2/1/2024	Mid-flood	Sunny	Moderate	В	21	12:48:00 PM	8.9	7.2	33.7	22.9	2.4	5.0	<0.10	<0.01
CE	2/1/2024	Mid-flood	Sunny	Moderate	В	21	12:48:00 PM	8.8	7.2	33.5	22.9	2.6	4.0	<0.10	<0.01
CF	2/1/2024	Mid-flood	Sunny	Moderate	S	1	9:38:00 AM	9.1	7.4	32.8	23.1	2.6	2.5	<0.10	<0.01
CF	2/1/2024	Mid-flood	Sunny	Moderate	S	1	9:38:00 AM	9.1	7.4	32.9	23.0	2.7	3.0	<0.10	<0.01
CF	2/1/2024	Mid-flood	Sunny	Moderate	М	10	9:39:00 AM	9.2	7.4	32.9	23.0	2.7	7.0	<0.10	<0.01
CF	2/1/2024	Mid-flood	Sunny	Moderate	М	10	9:39:00 AM	9.2	7.4	32.9	23.0	2.8	6.0	<0.10	<0.01
CF	2/1/2024	Mid-flood	Sunny	Moderate	В	19	9:40:00 AM	9.2	7.4	32.9	22.9	2.8	5.0	<0.10	<0.01
CF	2/1/2024	Mid-flood	Sunny	Moderate	В	19	9:40:00 AM	9.1	7.4	32.8	23.0	2.7	6.0	<0.10	<0.01
WSR01	2/1/2024	Mid-flood	Sunny	Moderate	S	1	10:02:00 AM	9.3	7.3	33.1	23.0	2.1	6.0	<0.10	<0.01
WSR01	2/1/2024	Mid-flood	Sunny	Moderate	S	1	10:02:00 AM	9.3	7.3	33.2	23.0	2.2	4.0	<0.10	<0.01
WSR01	2/1/2024	Mid-flood	Sunny	Moderate	М	5	10:03:00 AM	9.4	7.3	33.1	23.0	2.1	3.0	<0.10	<0.01
WSR01	2/1/2024	Mid-flood	Sunny	Moderate	М	5	10:03:00 AM	9.4	7.3	33.1	23.0	2.2	6.0	<0.10	<0.01
WSR01	2/1/2024	Mid-flood	Sunny	Moderate	В	8	10:04:00 AM	9.3	7.3	33.0	23.1	2.2	3.0	<0.10	<0.01
WSR01	2/1/2024	Mid-flood	Sunny	Moderate	В	8	10:04:00 AM	9.3	7.4	33.2	23.1	2.1	5.0	<0.10	<0.01
WSR02	2/1/2024	Mid-flood	Sunny	Moderate	S	1	10:21:00 AM	8.7	7.4	34.0	23.0	2.4	5.0	<0.10	<0.01
WSR02	2/1/2024	Mid-flood	Sunny	Moderate	S	1	10:21:00 AM	8.7	7.4	34.0	23.0	2.3	6.0	<0.10	<0.01
WSR02	2/1/2024	Mid-flood	Sunny	Moderate	М	5	10:22:00 AM	8.8	7.4	33.9	23.0	2.3	5.0	<0.10	<0.01
WSR02	2/1/2024	Mid-flood	Sunny	Moderate	М	5	10:22:00 AM	8.7	7.4	34.0	23.0	2.2	5.0	<0.10	<0.01
WSR02	2/1/2024	Mid-flood	Sunny	Moderate	В	9	10:23:00 AM	8.8	7.4	34.0	23.1	2.1	3.0	<0.10	<0.01
WSR02	2/1/2024	Mid-flood	Sunny	Moderate	В	9	10:23:00 AM	8.7	7.4	33.9	23.0	2.3	4.0	<0.10	<0.01
WSR03	2/1/2024	Mid-flood	Sunny	Moderate	S	1	10:37:00 AM	9.0	7.4	33.8	22.9	1.9	5.0	<0.10	<0.01
WSR03	2/1/2024	Mid-flood	Sunny	Moderate	S	1	10:37:00 AM	9.0	7.3	33.8	22.9	2.0	3.0	<0.10	<0.01
WSR03	2/1/2024	Mid-flood	Sunny	Moderate	М	4	10:38:00 AM	9.0	7.3	33.8	22.9	2.0	2.5	<0.10	<0.01
WSR03	2/1/2024	Mid-flood	Sunny	Moderate	М	4	10:38:00 AM	9.1	7.3	33.8	22.8	1.9	3.0	<0.10	<0.01
WSR03	2/1/2024	Mid-flood	Sunny	Moderate	В	8	10:39:00 AM	9.0	7.3	33.8	22.8	1.9	2.5	<0.10	<0.01
WSR03	2/1/2024	Mid-flood	Sunny	Moderate	В	8	10:39:00 AM	9.0	7.3	33.8	22.9	2.0	2.5	<0.10	<0.01
WSR04	2/1/2024	Mid-flood	Sunny	Moderate	S	1	10:51:00 AM	8.9	7.3	33.7	23.0	2.2	2.5	<0.10	<0.01
WSR04	2/1/2024	Mid-flood	Sunny	Moderate	S	1	10:51:00 AM	8.9	7.3	33.6	23.1	2.1	4.0	<0.10	<0.01
WSR04	2/1/2024	Mid-flood	Sunny	Moderate	М	3	10:52:00 AM	9.0	7.3	33.7	23.2	2.2	5.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) To	otal Chlorine (mg/L)
WSR04	2/1/2024	Mid-flood	Sunny	Moderate	М	3	10:52:00 AM	8.9	7.3	33.7	23.1	2.2	5.0	<0.10	<0.01
WSR04	2/1/2024	Mid-flood	Sunny	Moderate	В	6	10:53:00 AM	9.0	7.3	33.6	23.1	2.3	3.0	<0.10	<0.01
WSR04	2/1/2024	Mid-flood	Sunny	Moderate	В	6	10:53:00 AM	8.9	7.3	33.6	23.1	2.3	4.0	<0.10	<0.01
WSR16	2/1/2024	Mid-flood	Sunny	Moderate	S	1	12:25:00 PM	9.2	7.3	33.5	23.2	2.1	3.0	<0.10	<0.01
WSR16	2/1/2024	Mid-flood	Sunny	Moderate	S	1	12:25:00 PM	9.2	7.4	33.5	23.0	2.0	4.0	<0.10	<0.01
WSR16	2/1/2024	Mid-flood	Sunny	Moderate	М	9	12:26:00 PM	9.3	7.3	33.5	23.1	2.0	4.0	<0.10	<0.01
WSR16	2/1/2024	Mid-flood	Sunny	Moderate	М	9	12:26:00 PM	9.2	7.4	33.5	23.1	2.3	4.0	<0.10	<0.01
WSR16	2/1/2024	Mid-flood	Sunny	Moderate	В	16	12:27:00 PM	9.2	7.4	33.5	23.1	1.9	4.0	<0.10	<0.01
WSR16	2/1/2024	Mid-flood	Sunny	Moderate	В	16	12:27:00 PM	9.2	7.4	33.4	23.1	2.1	4.0	<0.10	<0.01
WSR33	2/1/2024	Mid-flood	Sunny	Moderate	S	1	11:08:00 AM	8.9	7.3	33.2	23.1	1.9	3.0	<0.10	<0.01
WSR33	2/1/2024	Mid-flood	Sunny	Moderate	S	1	11:08:00 AM	8.9	7.2	33.2	23.1	1.9	4.0	<0.10	<0.01
WSR33	2/1/2024	Mid-flood	Sunny	Moderate	М	4	11:09:00 AM	9.0	7.3	33.2	23.1	2.1	3.0	<0.10	<0.01
WSR33	2/1/2024	Mid-flood	Sunny	Moderate	М	4	11:09:00 AM	8.9	7.2	33.3	23.0	2.0	3.0	<0.10	<0.01
WSR33	2/1/2024	Mid-flood	Sunny	Moderate	В	6	11:10:00 AM	8.9	7.2	33.3	23.1	2.0	3.0	<0.10	<0.01
WSR33	2/1/2024	Mid-flood	Sunny	Moderate	В	6	11:10:00 AM	9.0	7.2	33.2	23.1	1.9	2.5	<0.10	<0.01
WSR36	2/1/2024	Mid-flood	Sunny	Moderate	S	1	11:25:00 AM	9.0	7.2	33.9	23.1	2.0	2.5	<0.10	<0.01
WSR36	2/1/2024	Mid-flood	Sunny	Moderate	S	1	11:25:00 AM	9.0	7.2	34.1	23.0	2.0	2.5	<0.10	<0.01
WSR36	2/1/2024	Mid-flood	Sunny	Moderate	М	4	11:26:00 AM	9.0	7.2	34.0	23.1	2.0	2.5	<0.10	<0.01
WSR36	2/1/2024	Mid-flood	Sunny	Moderate	М	4	11:26:00 AM	9.0	7.3	33.9	23.0	2.0	3.0	<0.10	<0.01
WSR36	2/1/2024	Mid-flood	Sunny	Moderate	В	7	11:26:00 AM	9.1	7.2	33.9	23.0	2.1	3.0	<0.10	<0.01
WSR36	2/1/2024	Mid-flood	Sunny	Moderate	В	7	11:26:00 AM	9.0	7.3	34.0	23.0	2.1	2.5	<0.10	<0.01
WSR37	2/1/2024	Mid-flood	Sunny	Moderate	S	1	11:40:00 AM	9.4	7.3	32.6	23.0	2.0	3.0	<0.10	<0.01
WSR37	2/1/2024	Mid-flood	Sunny	Moderate	S	1	11:40:00 AM	9.5	7.3	32.6	23.1	2.4	3.0	<0.10	<0.01
WSR37	2/1/2024	Mid-flood	Sunny	Moderate	М	4	11:41:00 AM	9.5	7.3	32.7	23.0	2.3	6.0	<0.10	<0.01
WSR37	2/1/2024	Mid-flood	Sunny	Moderate	М	4	11:41:00 AM	9.5	7.3	32.6	23.0	2.2	3.0	<0.10	<0.01
WSR37	2/1/2024	Mid-flood	Sunny	Moderate	В	7	11:42:00 AM	9.4	7.3	32.6	23.0	2.4	4.0	<0.10	<0.01
WSR37	2/1/2024	Mid-flood	Sunny	Moderate	В	7	11:42:00 AM	9.4	7.3	32.7	23.0	2.1	4.0	<0.10	<0.01
NF1	2/1/2024	Mid-flood	Sunny	Moderate	S	1	12:18:00 PM	8.6	7.2	34.2	23.1	2.1	4.0	<0.10	<0.01
NF1	2/1/2024	Mid-flood	Sunny	Moderate	S	1	12:18:00 PM	8.7	7.1	34.2	23.1	2.2	3.0	<0.10	<0.01
NF1	2/1/2024	Mid-flood	Sunny	Moderate	М	7	12:19:00 PM	8.6	7.1	34.1	23.1	2.3	4.0	<0.10	<0.01
NF1	2/1/2024	Mid-flood	Sunny	Moderate	М	7	12:19:00 PM	8.7	7.2	34.2	23.2	2.4	3.0	<0.10	<0.01
NF1	2/1/2024	Mid-flood	Sunny	Moderate	В	12	12:20:00 PM	8.7	7.1	34.3	23.2	2.4	4.0	<0.10	<0.01
NF1	2/1/2024	Mid-flood	Sunny	Moderate	В	12	12:20:00 PM	8.8	7.1	34.2	23.1	2.2	5.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	otal Chlorine (mg/L)
NF2	2/1/2024	Mid-flood	Sunny	Moderate	S	1	12:11:00 PM	8.5	7.3	33.8	23.0	1.8	4.0	<0.10	<0.01
NF2	2/1/2024	Mid-flood	Sunny	Moderate	S	1	12:11:00 PM	8.5	7.3	33.8	23.1	1.8	2.5	<0.10	<0.01
NF2	2/1/2024	Mid-flood	Sunny	Moderate	М	5	12:12:00 PM	8.5	7.3	33.8	23.1	1.8	7.0	<0.10	<0.01
NF2	2/1/2024	Mid-flood	Sunny	Moderate	М	5	12:12:00 PM	8.6	7.3	33.8	23.1	1.8	5.0	<0.10	<0.01
NF2	2/1/2024	Mid-flood	Sunny	Moderate	В	10	12:13:00 PM	8.6	7.3	33.7	23.1	1.8	5.0	<0.10	<0.01
NF2	2/1/2024	Mid-flood	Sunny	Moderate	В	10	12:13:00 PM	8.6	7.3	33.8	23.1	1.7	3.0	<0.10	<0.01
NF3	2/1/2024	Mid-flood	Sunny	Moderate	S	1	12:05:00 PM	8.4	7.1	33.2	23.1	1.7	4.0	<0.10	<0.01
NF3	2/1/2024	Mid-flood	Sunny	Moderate	S	1	12:05:00 PM	8.4	7.1	33.1	23.1	1.6	2.5	<0.10	<0.01
NF3	2/1/2024	Mid-flood	Sunny	Moderate	М	6	12:06:00 PM	8.4	7.1	33.1	23.1	1.6	4.0	<0.10	<0.01
NF3	2/1/2024	Mid-flood	Sunny	Moderate	М	6	12:06:00 PM	8.5	7.2	33.1	23.0	1.5	4.0	<0.10	<0.01
NF3	2/1/2024	Mid-flood	Sunny	Moderate	В	11	12:07:00 PM	8.4	7.2	33.2	23.1	1.6	4.0	<0.10	<0.01
NF3	2/1/2024	Mid-flood	Sunny	Moderate	В	11	12:07:00 PM	8.5	7.1	33.1	23.0	1.7	2.5	<0.10	<0.01
CE	4/1/2024	Mid-flood	Sunny	Moderate	S	1	1:55:00 PM	9.0	7.3	33.3	23.0	2.5	2.5	<0.10	<0.01
CE	4/1/2024	Mid-flood	Sunny	Moderate	S	1	1:55:00 PM	9.3	7.3	33.4	23.1	2.4	3.0	<0.10	<0.01
CE	4/1/2024	Mid-flood	Sunny	Moderate	М	11	1:56:00 PM	9.1	7.3	33.4	23.0	2.4	3.0	<0.10	<0.01
CE	4/1/2024	Mid-flood	Sunny	Moderate	М	11	1:56:00 PM	9.2	7.3	33.4	23.0	2.4	2.5	<0.10	<0.01
CE	4/1/2024	Mid-flood	Sunny	Moderate	В	21	1:57:00 PM	9.2	7.3	33.4	23.0	2.5	3.0	<0.10	<0.01
CE	4/1/2024	Mid-flood	Sunny	Moderate	В	21	1:57:00 PM	9.0	7.3	33.4	23.0	2.5	3.0	<0.10	<0.01
CF	4/1/2024	Mid-flood	Sunny	Moderate	S	1	10:52:00 AM	9.0	7.3	32.1	23.1	2.7	2.5	<0.10	<0.01
CF	4/1/2024	Mid-flood	Sunny	Moderate	S	1	10:52:00 AM	9.0	7.4	32.2	23.2	2.7	3.0	<0.10	<0.01
CF	4/1/2024	Mid-flood	Sunny	Moderate	М	11	10:53:00 AM	9.0	7.3	32.2	23.1	2.7	3.0	<0.10	<0.01
CF	4/1/2024	Mid-flood	Sunny	Moderate	М	11	10:53:00 AM	8.8	7.3	32.3	23.1	2.7	3.0	<0.10	<0.01
CF	4/1/2024	Mid-flood	Sunny	Moderate	В	21	10:54:00 AM	8.9	7.3	32.1	23.1	2.7	3.0	<0.10	<0.01
CF	4/1/2024	Mid-flood	Sunny	Moderate	В	21	10:54:00 AM	9.0	7.3	32.1	23.2	2.7	3.0	<0.10	<0.01
WSR01	4/1/2024	Mid-flood	Sunny	Moderate	S	1	11:15:00 AM	9.2	7.1	32.6	23.1	2.1	3.0	<0.10	<0.01
WSR01	4/1/2024	Mid-flood	Sunny	Moderate	S	1	11:15:00 AM	9.2	7.1	32.7	23.1	2.1	3.0	<0.10	<0.01
WSR01	4/1/2024	Mid-flood	Sunny	Moderate	М	5	11:16:00 AM	9.2	7.1	32.7	23.2	2.1	3.0	<0.10	<0.01
WSR01	4/1/2024	Mid-flood	Sunny	Moderate	М	5	11:16:00 AM	9.1	7.2	32.7	23.2	2.1	3.0	<0.10	<0.01
WSR01	4/1/2024	Mid-flood	Sunny	Moderate	В	9	11:17:00 AM	9.3	7.2	32.7	23.1	2.1	3.0	<0.10	<0.01
WSR01	4/1/2024	Mid-flood	Sunny	Moderate	В	9	11:17:00 AM	9.1	7.2	32.7	23.2	2.1	3.0	<0.10	<0.01
WSR02	4/1/2024	Mid-flood	Sunny	Moderate	S	1	11:33:00 AM	9.0	7.3	32.2	22.9	2.1	3.0	<0.10	<0.01
WSR02	4/1/2024	Mid-flood	Sunny	Moderate	S	1	11:33:00 AM	9.1	7.2	32.3	22.9	2.0	3.0	<0.10	<0.01
WSR02	4/1/2024	Mid-flood	Sunny	Moderate	М	5	11:34:00 AM	9.0	7.2	32.3	22.9	2.1	2.5	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) 1	otal Chlorine (mg/L)
WSR02	4/1/2024	Mid-flood	Sunny	Moderate	М	5	11:34:00 AM	8.9	7.3	32.1	23.0	2.0	3.0	<0.10	<0.01
WSR02	4/1/2024	Mid-flood	Sunny	Moderate	В	8	11:35:00 AM	9.0	7.2	32.2	22.9	2.0	2.5	<0.10	<0.01
WSR02	4/1/2024	Mid-flood	Sunny	Moderate	В	8	11:35:00 AM	9.0	7.3	32.3	22.9	2.1	4.0	<0.10	<0.01
WSR03	4/1/2024	Mid-flood	Sunny	Moderate	S	1	11:49:00 AM	8.7	7.3	32.7	23.2	1.9	3.0	<0.10	<0.01
WSR03	4/1/2024	Mid-flood	Sunny	Moderate	S	1	11:49:00 AM	8.8	7.2	32.5	23.2	1.8	3.0	<0.10	<0.01
WSR03	4/1/2024	Mid-flood	Sunny	Moderate	М	4	11:50:00 AM	8.8	7.3	32.6	23.1	1.8	4.0	<0.10	<0.01
WSR03	4/1/2024	Mid-flood	Sunny	Moderate	М	4	11:50:00 AM	8.5	7.3	32.6	23.2	1.9	4.0	<0.10	<0.01
WSR03	4/1/2024	Mid-flood	Sunny	Moderate	В	7	11:51:00 AM	8.6	7.3	32.5	23.2	1.9	4.0	<0.10	<0.01
WSR03	4/1/2024	Mid-flood	Sunny	Moderate	В	7	11:51:00 AM	8.7	7.3	32.6	23.2	1.9	3.0	<0.10	<0.01
WSR04	4/1/2024	Mid-flood	Sunny	Moderate	S	1	12:02:00 PM	9.2	7.3	32.1	23.1	2.2	3.0	<0.10	<0.01
WSR04	4/1/2024	Mid-flood	Sunny	Moderate	S	1	12:02:00 PM	9.2	7.3	32.3	23.1	2.2	3.0	<0.10	<0.01
WSR04	4/1/2024	Mid-flood	Sunny	Moderate	М	4	12:03:00 PM	9.2	7.3	32.3	23.1	2.4	4.0	<0.10	<0.01
WSR04	4/1/2024	Mid-flood	Sunny	Moderate	М	4	12:03:00 PM	9.3	7.3	32.3	23.0	2.2	2.5	<0.10	<0.01
WSR04	4/1/2024	Mid-flood	Sunny	Moderate	В	7	12:04:00 PM	9.4	7.3	32.2	23.1	2.4	4.0	<0.10	<0.01
WSR04	4/1/2024	Mid-flood	Sunny	Moderate	В	7	12:04:00 PM	9.2	7.3	32.3	23.0	2.2	4.0	<0.10	<0.01
WSR16	4/1/2024	Mid-flood	Sunny	Moderate	S	1	1:33:00 PM	9.2	7.3	32.3	23.1	1.9	3.0	<0.10	<0.01
WSR16	4/1/2024	Mid-flood	Sunny	Moderate	S	1	1:33:00 PM	9.0	7.3	32.2	23.1	1.9	2.5	<0.10	<0.01
WSR16	4/1/2024	Mid-flood	Sunny	Moderate	М	8	1:34:00 PM	9.2	7.3	32.1	23.1	1.9	4.0	<0.10	<0.01
WSR16	4/1/2024	Mid-flood	Sunny	Moderate	М	8	1:34:00 PM	9.1	7.3	32.3	23.0	1.9	4.0	<0.10	<0.01
WSR16	4/1/2024	Mid-flood	Sunny	Moderate	В	14	1:35:00 PM	9.2	7.2	32.3	23.1	1.9	4.0	<0.10	<0.01
WSR16	4/1/2024	Mid-flood	Sunny	Moderate	В	14	1:35:00 PM	9.2	7.3	32.3	23.0	1.8	3.0	<0.10	<0.01
WSR33	4/1/2024	Mid-flood	Sunny	Moderate	S	1	12:19:00 PM	8.7	7.4	33.4	23.1	2.1	4.0	<0.10	<0.01
WSR33	4/1/2024	Mid-flood	Sunny	Moderate	S	1	12:19:00 PM	8.7	7.4	33.2	23.1	2.0	5.0	<0.10	<0.01
WSR33	4/1/2024	Mid-flood	Sunny	Moderate	М	4	12:20:00 PM	8.6	7.4	33.3	23.0	2.1	3.0	<0.10	<0.01
WSR33	4/1/2024	Mid-flood	Sunny	Moderate	М	4	12:20:00 PM	8.6	7.4	33.2	23.1	2.1	3.0	<0.10	<0.01
WSR33	4/1/2024	Mid-flood	Sunny	Moderate	В	6	12:21:00 PM	8.8	7.4	33.2	23.0	2.1	2.5	<0.10	<0.01
WSR33	4/1/2024	Mid-flood	Sunny	Moderate	В	6	12:21:00 PM	8.8	7.4	33.2	23.0	2.1	3.0	<0.10	<0.01
WSR36	4/1/2024	Mid-flood	Sunny	Moderate	S	1	12:33:00 PM	8.5	7.2	32.0	23.2	2.2	3.0	<0.10	<0.01
WSR36	4/1/2024	Mid-flood	Sunny	Moderate	S	1	12:33:00 PM	8.4	7.2	32.1	23.2	2.2	5.0	<0.10	<0.01
WSR36	4/1/2024	Mid-flood	Sunny	Moderate	М	4	12:34:00 PM	8.5	7.2	32.1	23.2	2.2	6.0	<0.10	<0.01
WSR36	4/1/2024	Mid-flood	Sunny	Moderate	М	4	12:34:00 PM	8.6	7.2	32.0	23.2	2.2	4.0	<0.10	<0.01
WSR36	4/1/2024	Mid-flood	Sunny	Moderate	В	6	12:34:00 PM	8.6	7.2	32.2	23.3	2.2	4.0	<0.10	<0.01
WSR36	4/1/2024	Mid-flood	Sunny	Moderate	В	6	12:34:00 PM	8.5	7.2	32.0	23.2	2.2	2.5	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	otal Chlorine (mg/L)
WSR37	4/1/2024	Mid-flood	Sunny	Moderate	S	1	12:48:00 PM	9.2	7.3	32.9	23.1	1.6	3.0	<0.10	<0.01
WSR37	4/1/2024	Mid-flood	Sunny	Moderate	S	1	12:48:00 PM	9.4	7.2	32.9	23.1	1.6	4.0	<0.10	<0.01
WSR37	4/1/2024	Mid-flood	Sunny	Moderate	М	4	12:49:00 PM	9.4	7.3	33.0	23.2	1.6	3.0	<0.10	<0.01
WSR37	4/1/2024	Mid-flood	Sunny	Moderate	М	4	12:49:00 PM	9.3	7.3	33.1	23.1	1.6	2.5	<0.10	<0.01
WSR37	4/1/2024	Mid-flood	Sunny	Moderate	В	7	12:50:00 PM	9.2	7.3	33.0	23.1	1.6	5.0	<0.10	<0.01
WSR37	4/1/2024	Mid-flood	Sunny	Moderate	В	7	12:50:00 PM	9.3	7.3	33.1	23.1	1.6	3.0	<0.10	<0.01
NF1	4/1/2024	Mid-flood	Sunny	Moderate	S	1	1:26:00 PM	9.1	7.3	33.4	23.0	1.6	3.0	<0.10	<0.01
NF1	4/1/2024	Mid-flood	Sunny	Moderate	S	1	1:26:00 PM	9.0	7.3	33.3	23.1	1.5	4.0	<0.10	<0.01
NF1	4/1/2024	Mid-flood	Sunny	Moderate	М	7	1:27:00 PM	9.0	7.3	33.4	23.0	1.6	3.0	<0.10	<0.01
NF1	4/1/2024	Mid-flood	Sunny	Moderate	М	7	1:27:00 PM	8.9	7.3	33.4	23.0	1.6	3.0	<0.10	<0.01
NF1	4/1/2024	Mid-flood	Sunny	Moderate	В	12	1:28:00 PM	8.9	7.3	33.2	23.1	1.5	4.0	<0.10	<0.01
NF1	4/1/2024	Mid-flood	Sunny	Moderate	В	12	1:28:00 PM	8.9	7.3	33.3	23.0	1.6	4.0	<0.10	<0.01
NF2	4/1/2024	Mid-flood	Sunny	Moderate	S	1	1:19:00 PM	8.5	7.2	33.0	23.0	1.8	2.5	<0.10	<0.01
NF2	4/1/2024	Mid-flood	Sunny	Moderate	S	1	1:19:00 PM	8.5	7.2	32.9	22.9	1.8	4.0	<0.10	<0.01
NF2	4/1/2024	Mid-flood	Sunny	Moderate	М	5	1:20:00 PM	8.5	7.2	33.0	22.9	1.9	2.5	<0.10	<0.01
NF2	4/1/2024	Mid-flood	Sunny	Moderate	М	5	1:20:00 PM	8.6	7.2	33.0	23.0	1.8	3.0	<0.10	<0.01
NF2	4/1/2024	Mid-flood	Sunny	Moderate	В	9	1:21:00 PM	8.5	7.2	33.0	23.0	1.9	4.0	<0.10	<0.01
NF2	4/1/2024	Mid-flood	Sunny	Moderate	В	9	1:21:00 PM	8.5	7.2	32.9	23.0	1.9	4.0	<0.10	<0.01
NF3	4/1/2024	Mid-flood	Sunny	Moderate	S	1	1:13:00 PM	8.8	7.4	33.3	23.1	1.9	4.0	<0.10	<0.01
NF3	4/1/2024	Mid-flood	Sunny	Moderate	S	1	1:13:00 PM	8.8	7.4	33.3	23.0	2.0	3.0	<0.10	<0.01
NF3	4/1/2024	Mid-flood	Sunny	Moderate	М	6	1:14:00 PM	8.7	7.4	33.3	23.1	1.9	3.0	<0.10	<0.01
NF3	4/1/2024	Mid-flood	Sunny	Moderate	М	6	1:14:00 PM	8.7	7.3	33.4	23.0	2.0	5.0	<0.10	<0.01
NF3	4/1/2024	Mid-flood	Sunny	Moderate	В	11	1:15:00 PM	8.9	7.4	33.3	23.0	1.9	5.0	<0.10	<0.01
NF3	4/1/2024	Mid-flood	Sunny	Moderate	В	11	1:15:00 PM	8.7	7.4	33.4	23.0	1.9	4.0	<0.10	<0.01
CE	6/1/2024	Mid-flood	Sunny	Moderate	S	1	2:48:00 PM	9.3	7.4	32.7	23.7	2.4	2.5	<0.10	<0.01
CE	6/1/2024	Mid-flood	Sunny	Moderate	S	1	2:48:00 PM	9.2	7.3	32.6	23.7	2.4	3.0	<0.10	<0.01
CE	6/1/2024	Mid-flood	Sunny	Moderate	М	12	2:49:00 PM	9.3	7.3	32.5	23.6	2.4	3.0	<0.10	<0.01
CE	6/1/2024	Mid-flood	Sunny	Moderate	М	12	2:49:00 PM	9.2	7.3	32.5	23.6	2.4	3.0	<0.10	<0.01
CE	6/1/2024	Mid-flood	Sunny	Moderate	В	23	2:50:00 PM	9.3	7.4	32.6	23.6	2.4	3.0	<0.10	<0.01
CE	6/1/2024	Mid-flood	Sunny	Moderate	В	23	2:50:00 PM	9.2	7.4	32.6	23.7	2.5	3.0	<0.10	<0.01
CF	6/1/2024	Mid-flood	Sunny	Moderate	S	1	11:50:00 AM	9.1	7.2	33.6	23.4	2.6	4.0	<0.10	<0.01
CF	6/1/2024	Mid-flood	Sunny	Moderate	S	1	11:50:00 AM	9.2	7.2	33.4	23.5	2.7	4.0	<0.10	<0.01
CF	6/1/2024	Mid-flood	Sunny	Moderate	М	11	11:51:00 AM	9.2	7.2	33.5	23.4	2.8	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) To	otal Chlorine (mg/L)
CF	6/1/2024	Mid-flood	Sunny	Moderate	М	11	11:51:00 AM	9.2	7.2	33.4	23.4	2.6	2.5	<0.10	<0.01
CF	6/1/2024	Mid-flood	Sunny	Moderate	В	20	11:52:00 AM	9.2	7.2	33.6	23.4	2.5	3.0	<0.10	<0.01
CF	6/1/2024	Mid-flood	Sunny	Moderate	В	20	11:52:00 AM	9.2	7.2	33.5	23.5	2.6	3.0	<0.10	<0.01
WSR01	6/1/2024	Mid-flood	Sunny	Moderate	S	1	12:14:00 PM	9.1	7.2	32.0	23.4	1.7	4.0	<0.10	<0.01
WSR01	6/1/2024	Mid-flood	Sunny	Moderate	S	1	12:14:00 PM	9.1	7.3	32.0	23.3	1.7	3.0	<0.10	<0.01
WSR01	6/1/2024	Mid-flood	Sunny	Moderate	М	4	12:15:00 PM	9.2	7.2	32.0	23.3	1.7	3.0	<0.10	<0.01
WSR01	6/1/2024	Mid-flood	Sunny	Moderate	М	4	12:15:00 PM	9.1	7.2	32.0	23.4	1.7	3.0	<0.10	<0.01
WSR01	6/1/2024	Mid-flood	Sunny	Moderate	В	7	12:16:00 PM	9.2	7.3	31.9	23.3	1.7	3.0	<0.10	<0.01
WSR01	6/1/2024	Mid-flood	Sunny	Moderate	В	7	12:16:00 PM	9.1	7.3	32.0	23.4	1.7	2.5	<0.10	<0.01
WSR02	6/1/2024	Mid-flood	Sunny	Moderate	S	1	12:32:00 PM	9.2	7.1	33.4	23.4	1.8	4.0	<0.10	<0.01
WSR02	6/1/2024	Mid-flood	Sunny	Moderate	S	1	12:32:00 PM	9.3	7.1	33.5	23.4	1.8	4.0	<0.10	<0.01
WSR02	6/1/2024	Mid-flood	Sunny	Moderate	М	5	12:33:00 PM	9.2	7.1	33.4	23.4	1.8	3.0	<0.10	<0.01
WSR02	6/1/2024	Mid-flood	Sunny	Moderate	М	5	12:33:00 PM	9.1	7.1	33.4	23.5	1.8	2.5	<0.10	<0.01
WSR02	6/1/2024	Mid-flood	Sunny	Moderate	В	8	12:34:00 PM	9.2	7.1	33.4	23.4	1.8	3.0	<0.10	<0.01
WSR02	6/1/2024	Mid-flood	Sunny	Moderate	В	8	12:34:00 PM	9.2	7.1	33.5	23.4	1.8	3.0	<0.10	<0.01
WSR03	6/1/2024	Mid-flood	Sunny	Moderate	S	1	12:48:00 PM	9.2	7.2	32.9	23.6	1.8	3.0	<0.10	<0.01
WSR03	6/1/2024	Mid-flood	Sunny	Moderate	S	1	12:48:00 PM	9.3	7.2	32.7	23.6	1.8	3.0	<0.10	<0.01
WSR03	6/1/2024	Mid-flood	Sunny	Moderate	М	4	12:49:00 PM	9.3	7.2	32.8	23.6	1.8	4.0	<0.10	<0.01
WSR03	6/1/2024	Mid-flood	Sunny	Moderate	М	4	12:49:00 PM	9.4	7.3	32.8	23.6	1.8	5.0	<0.10	<0.01
WSR03	6/1/2024	Mid-flood	Sunny	Moderate	В	7	12:50:00 PM	9.2	7.2	32.9	23.6	1.8	4.0	<0.10	<0.01
WSR03	6/1/2024	Mid-flood	Sunny	Moderate	В	7	12:50:00 PM	9.3	7.3	32.9	23.5	1.8	5.0	<0.10	<0.01
WSR04	6/1/2024	Mid-flood	Sunny	Moderate	S	1	1:02:00 PM	9.5	7.3	33.4	23.3	1.8	4.0	<0.10	<0.01
WSR04	6/1/2024	Mid-flood	Sunny	Moderate	S	1	1:02:00 PM	9.7	7.2	33.4	23.3	1.8	4.0	<0.10	<0.01
WSR04	6/1/2024	Mid-flood	Sunny	Moderate	М	4	1:03:00 PM	9.6	7.3	33.3	23.4	1.8	2.5	<0.10	<0.01
WSR04	6/1/2024	Mid-flood	Sunny	Moderate	М	4	1:03:00 PM	9.5	7.3	33.3	23.4	1.8	2.5	<0.10	<0.01
WSR04	6/1/2024	Mid-flood	Sunny	Moderate	В	6	1:04:00 PM	9.7	7.2	33.3	23.4	1.8	4.0	<0.10	<0.01
WSR04	6/1/2024	Mid-flood	Sunny	Moderate	В	6	1:04:00 PM	9.6	7.3	33.3	23.3	1.8	2.5	<0.10	<0.01
WSR16	6/1/2024	Mid-flood	Sunny	Moderate	S	1	2:27:00 PM	9.5	7.2	33.0	23.4	1.7	2.5	<0.10	<0.01
WSR16	6/1/2024	Mid-flood	Sunny	Moderate	S	1	2:27:00 PM	9.5	7.2	33.0	23.4	1.6	3.0	<0.10	<0.01
WSR16	6/1/2024	Mid-flood	Sunny	Moderate	М	8	2:28:00 PM	9.6	7.1	33.0	23.4	1.6	5.0	<0.10	<0.01
WSR16	6/1/2024	Mid-flood	Sunny	Moderate	М	8	2:28:00 PM	9.5	7.2	33.0	23.4	1.6	5.0	<0.10	<0.01
WSR16	6/1/2024	Mid-flood	Sunny	Moderate	В	14	2:29:00 PM	9.5	7.2	33.0	23.5	1.6	4.0	<0.10	<0.01
WSR16	6/1/2024	Mid-flood	Sunny	Moderate	В	14	2:29:00 PM	9.5	7.2	33.1	23.5	1.7	3.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	otal Chlorine (mg/L)
WSR33	6/1/2024	Mid-flood	Sunny	Moderate	S	1	1:19:00 PM	8.8	7.3	33.0	23.3	2.4	2.5	<0.10	<0.01
WSR33	6/1/2024	Mid-flood	Sunny	Moderate	S	1	1:19:00 PM	8.9	7.3	33.0	23.3	2.3	3.0	<0.10	<0.01
WSR33	6/1/2024	Mid-flood	Sunny	Moderate	М	4	1:20:00 PM	8.8	7.3	32.9	23.3	2.4	4.0	<0.10	<0.01
WSR33	6/1/2024	Mid-flood	Sunny	Moderate	М	4	1:20:00 PM	8.9	7.3	32.9	23.3	2.3	4.0	<0.10	<0.01
WSR33	6/1/2024	Mid-flood	Sunny	Moderate	В	7	1:21:00 PM	8.8	7.3	33.1	23.3	2.3	4.0	<0.10	<0.01
WSR33	6/1/2024	Mid-flood	Sunny	Moderate	В	7	1:21:00 PM	8.8	7.3	33.0	23.2	2.3	3.0	<0.10	<0.01
WSR36	6/1/2024	Mid-flood	Sunny	Moderate	S	1	1:33:00 PM	9.8	7.3	33.4	23.4	1.9	3.0	<0.10	<0.01
WSR36	6/1/2024	Mid-flood	Sunny	Moderate	S	1	1:33:00 PM	9.7	7.3	33.4	23.4	1.9	4.0	<0.10	<0.01
WSR36	6/1/2024	Mid-flood	Sunny	Moderate	М	4	1:34:00 PM	9.8	7.2	33.4	23.4	1.9	2.5	<0.10	<0.01
WSR36	6/1/2024	Mid-flood	Sunny	Moderate	М	4	1:34:00 PM	9.8	7.3	33.4	23.5	1.9	3.0	<0.10	<0.01
WSR36	6/1/2024	Mid-flood	Sunny	Moderate	В	7	1:34:00 PM	9.8	7.3	33.4	23.4	1.9	5.0	<0.10	<0.01
WSR36	6/1/2024	Mid-flood	Sunny	Moderate	В	7	1:34:00 PM	9.8	7.3	33.5	23.4	1.9	5.0	<0.10	<0.01
WSR37	6/1/2024	Mid-flood	Sunny	Moderate	S	1	1:48:00 PM	9.5	7.2	32.2	23.3	2.3	3.0	<0.10	<0.01
WSR37	6/1/2024	Mid-flood	Sunny	Moderate	S	1	1:48:00 PM	9.3	7.2	32.1	23.3	2.3	5.0	<0.10	<0.01
WSR37	6/1/2024	Mid-flood	Sunny	Moderate	М	4	1:49:00 PM	9.4	7.2	32.2	23.2	2.2	3.0	<0.10	<0.01
WSR37	6/1/2024	Mid-flood	Sunny	Moderate	М	4	1:49:00 PM	9.4	7.1	32.2	23.3	2.2	3.0	<0.10	<0.01
WSR37	6/1/2024	Mid-flood	Sunny	Moderate	В	8	1:50:00 PM	9.3	7.2	32.2	23.3	2.4	5.0	<0.10	<0.01
WSR37	6/1/2024	Mid-flood	Sunny	Moderate	В	8	1:50:00 PM	9.5	7.1	32.2	23.2	2.2	3.0	<0.10	<0.01
NF1	6/1/2024	Mid-flood	Sunny	Moderate	S	1	2:12:00 PM	9.0	7.2	32.5	23.1	2.1	2.5	<0.10	<0.01
NF1	6/1/2024	Mid-flood	Sunny	Moderate	S	1	2:12:00 PM	9.0	7.2	32.6	23.2	2.1	2.5	<0.10	<0.01
NF1	6/1/2024	Mid-flood	Sunny	Moderate	М	7	2:13:00 PM	9.0	7.2	32.4	23.2	2.1	4.0	<0.10	<0.01
NF1	6/1/2024	Mid-flood	Sunny	Moderate	М	7	2:13:00 PM	9.1	7.2	32.6	23.2	2.1	5.0	<0.10	<0.01
NF1	6/1/2024	Mid-flood	Sunny	Moderate	В	12	2:14:00 PM	9.0	7.2	32.5	23.1	2.1	3.0	<0.10	<0.01
NF1	6/1/2024	Mid-flood	Sunny	Moderate	В	12	2:14:00 PM	9.0	7.2	32.5	23.2	2.1	3.0	<0.10	<0.01
NF2	6/1/2024	Mid-flood	Sunny	Moderate	S	1	2:04:00 PM	8.8	7.3	33.4	23.3	2.2	4.0	<0.10	<0.01
NF2	6/1/2024	Mid-flood	Sunny	Moderate	S	1	2:04:00 PM	8.9	7.3	33.3	23.5	2.2	5.0	<0.10	<0.01
NF2	6/1/2024	Mid-flood	Sunny	Moderate	М	5	2:05:00 PM	8.8	7.3	33.3	23.5	2.1	5.0	<0.10	<0.01
NF2	6/1/2024	Mid-flood	Sunny	Moderate	М	5	2:05:00 PM	8.7	7.3	33.3	23.4	2.1	4.0	<0.10	<0.01
NF2	6/1/2024	Mid-flood	Sunny	Moderate	В	10	2:06:00 PM	8.8	7.2	33.3	23.4	2.2	3.0	<0.10	<0.01
NF2	6/1/2024	Mid-flood	Sunny	Moderate	В	10	2:06:00 PM	8.8	7.3	33.2	23.5	2.1	3.0	<0.10	<0.01
NF3	6/1/2024	Mid-flood	Sunny	Moderate	S	1	1:57:00 PM	9.6	7.2	33.4	23.4	1.8	3.0	<0.10	<0.01
NF3	6/1/2024	Mid-flood	Sunny	Moderate	S	1	1:57:00 PM	9.4	7.1	33.4	23.5	1.9	2.5	<0.10	<0.01
NF3	6/1/2024	Mid-flood	Sunny	Moderate	М	6	1:58:00 PM	9.5	7.1	33.4	23.4	1.9	2.5	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	D0 (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) To	otal Chlorine (mg/L)
NF3	6/1/2024	Mid-flood	Sunny	Moderate	М	6	1:58:00 PM	9.5	7.2	33.3	23.4	1.9	3.0	<0.10	<0.01
NF3	6/1/2024	Mid-flood	Sunny	Moderate	В	12	1:59:00 PM	9.4	7.1	33.3	23.3	1.9	4.0	<0.10	<0.01
NF3	6/1/2024	Mid-flood	Sunny	Moderate	В	12	1:59:00 PM	9.4	7.2	33.4	23.3	1.9	3.0	<0.10	<0.01
CE	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	8:54:00 AM	9.2	7.3	33.0	24.1	2.8	5.0	<0.10	<0.01
CE	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	8:54:00 AM	9.2	7.4	32.9	24.0	2.9	5.0	<0.10	<0.01
CE	9/1/2024	Mid-ebb	Sunny	Moderate	М	11	8:55:00 AM	9.0	7.4	33.0	24.0	2.9	3.0	<0.10	<0.01
CE	9/1/2024	Mid-ebb	Sunny	Moderate	М	11	8:55:00 AM	9.0	7.3	32.9	24.0	2.9	5.0	<0.10	<0.01
CE	9/1/2024	Mid-ebb	Sunny	Moderate	В	21	8:56:00 AM	9.1	7.3	33.0	24.1	2.7	5.0	<0.10	<0.01
CE	9/1/2024	Mid-ebb	Sunny	Moderate	В	21	8:56:00 AM	9.2	7.3	32.9	24.1	2.8	5.0	<0.10	<0.01
CF	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:02:00 PM	9.2	7.3	32.7	24.2	2.5	4.0	<0.10	<0.01
CF	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:02:00 PM	9.0	7.3	32.8	24.2	2.4	4.0	<0.10	<0.01
CF	9/1/2024	Mid-ebb	Sunny	Moderate	М	11	12:03:00 PM	9.2	7.3	32.7	24.2	2.3	5.0	<0.10	<0.01
CF	9/1/2024	Mid-ebb	Sunny	Moderate	М	11	12:03:00 PM	9.0	7.3	32.7	24.2	2.3	5.0	<0.10	<0.01
CF	9/1/2024	Mid-ebb	Sunny	Moderate	В	20	12:04:00 PM	9.0	7.3	32.7	24.3	2.3	4.0	<0.10	<0.01
CF	9/1/2024	Mid-ebb	Sunny	Moderate	В	20	12:04:00 PM	9.2	7.3	32.7	24.2	2.3	4.0	<0.10	<0.01
WSR01	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:36:00 AM	9.0	7.3	32.2	24.2	1.8	4.0	<0.10	<0.01
WSR01	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:36:00 AM	8.9	7.3	32.2	24.2	1.8	4.0	<0.10	<0.01
WSR01	9/1/2024	Mid-ebb	Sunny	Moderate	М	4	11:37:00 AM	8.9	7.4	32.2	24.1	1.6	4.0	<0.10	<0.01
WSR01	9/1/2024	Mid-ebb	Sunny	Moderate	М	4	11:37:00 AM	8.9	7.3	32.2	24.2	1.7	5.0	<0.10	<0.01
WSR01	9/1/2024	Mid-ebb	Sunny	Moderate	В	8	11:38:00 AM	9.0	7.3	32.2	24.2	1.5	4.0	<0.10	<0.01
WSR01	9/1/2024	Mid-ebb	Sunny	Moderate	В	8	11:38:00 AM	8.8	7.3	32.2	24.3	1.6	3.0	<0.10	<0.01
WSR02	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:18:00 AM	8.6	7.2	32.0	24.2	1.9	4.0	<0.10	<0.01
WSR02	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:18:00 AM	8.8	7.2	32.1	24.2	1.9	3.0	<0.10	<0.01
WSR02	9/1/2024	Mid-ebb	Sunny	Moderate	М	5	11:19:00 AM	8.8	7.2	32.1	24.2	2.0	3.0	<0.10	<0.01
WSR02	9/1/2024	Mid-ebb	Sunny	Moderate	М	5	11:19:00 AM	8.7	7.2	32.2	24.2	2.0	3.0	<0.10	<0.01
WSR02	9/1/2024	Mid-ebb	Sunny	Moderate	В	9	11:20:00 AM	8.9	7.2	32.1	24.2	1.9	3.0	<0.10	<0.01
WSR02	9/1/2024	Mid-ebb	Sunny	Moderate	В	9	11:20:00 AM	8.6	7.2	32.1	24.2	2.0	4.0	<0.10	<0.01
WSR03	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:00:00 AM	8.8	7.3	32.9	24.2	1.7	3.0	<0.10	<0.01
WSR03	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:00:00 AM	8.8	7.3	32.9	24.2	1.7	5.0	<0.10	<0.01
WSR03	9/1/2024	Mid-ebb	Sunny	Moderate	М	4	11:01:00 AM	8.6	7.2	32.8	24.2	1.7	3.0	<0.10	<0.01
WSR03	9/1/2024	Mid-ebb	Sunny	Moderate	М	4	11:01:00 AM	8.9	7.3	32.8	24.2	1.7	3.0	<0.10	<0.01
WSR03	9/1/2024	Mid-ebb	Sunny	Moderate	В	7	11:02:00 AM	8.8	7.2	32.7	24.2	1.7	3.0	<0.10	<0.01
WSR03	9/1/2024	Mid-ebb	Sunny	Moderate	В	7	11:02:00 AM	8.8	7.2	32.8	24.2	1.7	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	otal Chlorine (mg/L)
WSR04	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:47:00 AM	8.9	7.3	31.8	24.2	1.6	4.0	<0.10	<0.01
WSR04	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:47:00 AM	8.9	7.2	31.7	24.1	1.6	4.0	<0.10	<0.01
WSR04	9/1/2024	Mid-ebb	Sunny	Moderate	М	4	10:48:00 AM	8.8	7.2	31.7	24.1	1.5	5.0	<0.10	<0.01
WSR04	9/1/2024	Mid-ebb	Sunny	Moderate	М	4	10:48:00 AM	8.8	7.2	31.7	24.1	1.5	4.0	<0.10	<0.01
WSR04	9/1/2024	Mid-ebb	Sunny	Moderate	В	7	10:49:00 AM	8.8	7.3	31.7	24.1	1.5	5.0	<0.10	<0.01
WSR04	9/1/2024	Mid-ebb	Sunny	Moderate	В	7	10:49:00 AM	9.0	7.3	31.8	24.1	1.5	5.0	<0.10	<0.01
WSR16	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	9:17:00 AM	9.0	7.3	32.0	24.2	2.0	5.0	<0.10	<0.01
WSR16	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	9:17:00 AM	8.9	7.3	32.1	24.3	1.9	3.0	<0.10	<0.01
WSR16	9/1/2024	Mid-ebb	Sunny	Moderate	М	8	9:18:00 AM	9.0	7.3	32.2	24.2	1.9	4.0	<0.10	<0.01
WSR16	9/1/2024	Mid-ebb	Sunny	Moderate	М	8	9:18:00 AM	8.9	7.2	32.1	24.2	1.9	6.0	<0.10	<0.01
WSR16	9/1/2024	Mid-ebb	Sunny	Moderate	В	14	9:19:00 AM	9.0	7.3	32.1	24.2	1.9	3.0	<0.10	<0.01
WSR16	9/1/2024	Mid-ebb	Sunny	Moderate	В	14	9:19:00 AM	9.0	7.3	32.1	24.3	2.0	3.0	<0.10	<0.01
WSR33	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:30:00 AM	8.6	7.3	32.0	24.4	1.9	3.0	<0.10	<0.01
WSR33	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:30:00 AM	8.4	7.3	32.1	24.4	1.9	5.0	<0.10	<0.01
WSR33	9/1/2024	Mid-ebb	Sunny	Moderate	М	4	10:31:00 AM	8.5	7.3	32.0	24.3	2.0	4.0	<0.10	<0.01
WSR33	9/1/2024	Mid-ebb	Sunny	Moderate	М	4	10:31:00 AM	8.5	7.3	32.0	24.3	1.9	4.0	<0.10	<0.01
WSR33	9/1/2024	Mid-ebb	Sunny	Moderate	В	7	10:32:00 AM	8.6	7.3	32.0	24.3	2.0	3.0	<0.10	<0.01
WSR33	9/1/2024	Mid-ebb	Sunny	Moderate	В	7	10:32:00 AM	8.5	7.3	32.0	24.4	1.9	5.0	<0.10	<0.01
WSR36	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:17:00 AM	9.3	7.4	31.8	24.2	1.5	6.0	<0.10	<0.01
WSR36	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:17:00 AM	9.3	7.4	31.8	24.2	1.6	3.0	<0.10	<0.01
WSR36	9/1/2024	Mid-ebb	Sunny	Moderate	М	3	10:18:00 AM	9.3	7.4	31.8	24.2	1.6	4.0	<0.10	<0.01
WSR36	9/1/2024	Mid-ebb	Sunny	Moderate	М	3	10:18:00 AM	9.1	7.3	31.7	24.2	1.6	3.0	<0.10	<0.01
WSR36	9/1/2024	Mid-ebb	Sunny	Moderate	В	6	10:18:00 AM	9.2	7.3	31.8	24.2	1.6	3.0	<0.10	<0.01
WSR36	9/1/2024	Mid-ebb	Sunny	Moderate	В	6	10:18:00 AM	9.2	7.3	31.7	24.1	1.5	5.0	<0.10	<0.01
WSR37	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:10:00 AM	8.7	7.4	32.8	24.1	2.4	4.0	<0.10	<0.01
WSR37	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:10:00 AM	8.8	7.4	32.9	24.1	2.3	5.0	<0.10	<0.01
WSR37	9/1/2024	Mid-ebb	Sunny	Moderate	М	4	10:11:00 AM	8.8	7.4	32.9	24.1	2.4	4.0	<0.10	<0.01
WSR37	9/1/2024	Mid-ebb	Sunny	Moderate	М	4	10:11:00 AM	8.7	7.4	32.8	24.1	2.3	4.0	<0.10	<0.01
WSR37	9/1/2024	Mid-ebb	Sunny	Moderate	В	8	10:12:00 AM	8.7	7.4	32.8	24.1	2.4	5.0	<0.10	<0.01
WSR37	9/1/2024	Mid-ebb	Sunny	Moderate	В	8	10:12:00 AM	8.7	7.4	32.8	24.2	2.4	4.0	<0.10	<0.01
NF1	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	9:38:00 AM	8.2	7.2	32.5	24.1	2.0	4.0	<0.10	<0.01
NF1	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	9:38:00 AM	8.3	7.2	32.5	24.1	2.0	3.0	<0.10	<0.01
NF1	9/1/2024	Mid-ebb	Sunny	Moderate	М	7	9:39:00 AM	8.4	7.2	32.5	24.2	2.0	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	otal Chlorine (mg/L)
NF1	9/1/2024	Mid-ebb	Sunny	Moderate	М	7	9:39:00 AM	8.3	7.2	32.6	24.2	2.0	4.0	<0.10	<0.01
NF1	9/1/2024	Mid-ebb	Sunny	Moderate	В	12	9:40:00 AM	8.2	7.1	32.5	24.1	2.0	3.0	<0.10	<0.01
NF1	9/1/2024	Mid-ebb	Sunny	Moderate	В	12	9:40:00 AM	8.2	7.2	32.6	24.2	2.0	4.0	<0.10	<0.01
NF2	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	9:55:00 AM	9.2	7.2	32.2	24.4	1.9	4.0	<0.10	<0.01
NF2	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	9:55:00 AM	9.1	7.3	32.1	24.4	1.9	5.0	<0.10	<0.01
NF2	9/1/2024	Mid-ebb	Sunny	Moderate	М	5	9:56:00 AM	9.0	7.3	32.1	24.4	1.9	5.0	<0.10	<0.01
NF2	9/1/2024	Mid-ebb	Sunny	Moderate	М	5	9:56:00 AM	9.0	7.2	32.2	24.4	2.0	4.0	<0.10	<0.01
NF2	9/1/2024	Mid-ebb	Sunny	Moderate	В	9	9:57:00 AM	9.0	7.2	32.2	24.4	1.9	3.0	<0.10	<0.01
NF2	9/1/2024	Mid-ebb	Sunny	Moderate	В	9	9:57:00 AM	9.0	7.3	32.2	24.4	1.9	3.0	<0.10	<0.01
NF3	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:03:00 AM	9.1	7.4	31.9	24.0	1.6	3.0	<0.10	<0.01
NF3	9/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:03:00 AM	8.9	7.4	31.9	24.0	1.7	3.0	<0.10	<0.01
NF3	9/1/2024	Mid-ebb	Sunny	Moderate	М	6	10:04:00 AM	9.0	7.4	31.9	24.0	1.8	3.0	<0.10	<0.01
NF3	9/1/2024	Mid-ebb	Sunny	Moderate	М	6	10:04:00 AM	9.0	7.4	31.8	24.0	1.8	4.0	<0.10	<0.01
NF3	9/1/2024	Mid-ebb	Sunny	Moderate	В	11	10:05:00 AM	9.1	7.4	31.8	24.1	1.8	4.0	<0.10	<0.01
NF3	9/1/2024	Mid-ebb	Sunny	Moderate	В	11	10:05:00 AM	8.9	7.4	31.8	24.0	1.8	3.0	<0.10	<0.01
CE	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:24:00 AM	8.5	7.3	33.4	23.8	2.7	4.0	<0.10	<0.01
CE	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:24:00 AM	8.5	7.3	33.4	23.8	2.7	4.0	<0.10	<0.01
CE	11/1/2024	Mid-ebb	Sunny	Moderate	М	11	10:25:00 AM	8.6	7.3	33.4	23.8	2.7	4.0	<0.10	<0.01
CE	11/1/2024	Mid-ebb	Sunny	Moderate	М	11	10:25:00 AM	8.5	7.3	33.4	23.9	2.7	3.0	<0.10	<0.01
CE	11/1/2024	Mid-ebb	Sunny	Moderate	В	22	10:26:00 AM	8.6	7.4	33.4	23.8	2.7	4.0	<0.10	<0.01
CE	11/1/2024	Mid-ebb	Sunny	Moderate	В	22	10:26:00 AM	8.4	7.3	33.4	23.9	2.8	3.0	<0.10	<0.01
CF	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:31:00 PM	9.1	7.1	31.9	24.0	2.5	3.0	<0.10	<0.01
CF	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:31:00 PM	9.1	7.1	31.8	24.0	2.3	3.0	<0.10	<0.01
CF	11/1/2024	Mid-ebb	Sunny	Moderate	М	10	1:32:00 PM	9.0	7.2	31.8	24.0	2.5	3.0	<0.10	<0.01
CF	11/1/2024	Mid-ebb	Sunny	Moderate	М	10	1:32:00 PM	8.9	7.2	31.9	24.0	2.3	4.0	<0.10	<0.01
CF	11/1/2024	Mid-ebb	Sunny	Moderate	В	19	1:33:00 PM	9.1	7.2	31.9	24.0	2.5	3.0	<0.10	<0.01
CF	11/1/2024	Mid-ebb	Sunny	Moderate	В	19	1:33:00 PM	9.0	7.1	31.8	24.0	2.3	4.0	<0.10	<0.01
WSR01	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:08:00 PM	9.1	7.3	32.9	24.1	2.2	3.0	<0.10	<0.01
WSR01	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:08:00 PM	9.0	7.3	33.0	24.0	2.2	3.0	<0.10	<0.01
WSR01	11/1/2024	Mid-ebb	Sunny	Moderate	М	5	1:09:00 PM	9.0	7.3	32.9	24.0	2.3	4.0	<0.10	<0.01
WSR01	11/1/2024	Mid-ebb	Sunny	Moderate	М	5	1:09:00 PM	8.9	7.3	33.0	24.0	2.2	3.0	<0.10	<0.01
WSR01	11/1/2024	Mid-ebb	Sunny	Moderate	В	8	1:10:00 PM	9.1	7.3	32.9	24.0	2.2	3.0	<0.10	<0.01
WSR01	11/1/2024	Mid-ebb	Sunny	Moderate	В	8	1:10:00 PM	9.0	7.3	33.0	24.1	2.3	3.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	'otal Chlorine (mg/L)
WSR02	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:49:00 PM	9.0	7.3	32.4	23.8	2.2	4.0	<0.10	<0.01
WSR02	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:49:00 PM	9.1	7.3	32.4	23.8	2.2	4.0	<0.10	<0.01
WSR02	11/1/2024	Mid-ebb	Sunny	Moderate	М	5	12:50:00 PM	9.1	7.3	32.4	23.8	2.1	3.0	<0.10	<0.01
WSR02	11/1/2024	Mid-ebb	Sunny	Moderate	М	5	12:50:00 PM	9.2	7.4	32.5	23.8	2.1	4.0	<0.10	<0.01
WSR02	11/1/2024	Mid-ebb	Sunny	Moderate	В	8	12:51:00 PM	9.1	7.3	32.5	23.9	2.1	5.0	<0.10	<0.01
WSR02	11/1/2024	Mid-ebb	Sunny	Moderate	В	8	12:51:00 PM	9.2	7.4	32.4	23.8	2.2	7.0	<0.10	<0.01
WSR03	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:31:00 PM	8.9	7.2	33.1	24.0	2.0	4.0	<0.10	<0.01
WSR03	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:31:00 PM	9.0	7.3	33.0	24.0	2.0	7.0	<0.10	<0.01
WSR03	11/1/2024	Mid-ebb	Sunny	Moderate	М	4	12:32:00 PM	8.8	7.2	33.1	24.0	2.0	5.0	<0.10	<0.01
WSR03	11/1/2024	Mid-ebb	Sunny	Moderate	М	4	12:32:00 PM	8.9	7.2	33.1	24.0	1.9	5.0	<0.10	<0.01
WSR03	11/1/2024	Mid-ebb	Sunny	Moderate	В	7	12:33:00 PM	8.9	7.2	33.0	24.0	2.0	6.0	<0.10	<0.01
WSR03	11/1/2024	Mid-ebb	Sunny	Moderate	В	7	12:33:00 PM	8.9	7.2	33.0	24.0	2.0	4.0	<0.10	<0.01
WSR04	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:18:00 PM	9.4	7.3	33.5	23.8	1.8	3.0	<0.10	<0.01
WSR04	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:18:00 PM	9.4	7.2	33.5	23.8	1.8	3.0	<0.10	<0.01
WSR04	11/1/2024	Mid-ebb	Sunny	Moderate	М	4	12:19:00 PM	9.5	7.2	33.5	23.9	1.8	5.0	<0.10	<0.01
WSR04	11/1/2024	Mid-ebb	Sunny	Moderate	М	4	12:19:00 PM	9.3	7.2	33.5	23.8	1.8	3.0	<0.10	<0.01
WSR04	11/1/2024	Mid-ebb	Sunny	Moderate	В	6	12:20:00 PM	9.2	7.2	33.4	23.8	1.9	3.0	<0.10	<0.01
WSR04	11/1/2024	Mid-ebb	Sunny	Moderate	В	6	12:20:00 PM	9.5	7.2	33.5	23.8	1.8	3.0	<0.10	<0.01
WSR16	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:47:00 AM	9.1	7.2	33.1	23.9	1.9	4.0	<0.10	<0.01
WSR16	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	10:47:00 AM	9.0	7.1	33.1	23.9	1.8	3.0	<0.10	<0.01
WSR16	11/1/2024	Mid-ebb	Sunny	Moderate	М	8	10:48:00 AM	9.1	7.2	33.2	23.9	1.9	4.0	<0.10	<0.01
WSR16	11/1/2024	Mid-ebb	Sunny	Moderate	М	8	10:48:00 AM	9.0	7.2	33.2	23.9	1.8	3.0	<0.10	<0.01
WSR16	11/1/2024	Mid-ebb	Sunny	Moderate	В	15	10:49:00 AM	9.0	7.2	33.2	23.8	1.9	3.0	<0.10	<0.01
WSR16	11/1/2024	Mid-ebb	Sunny	Moderate	В	15	10:49:00 AM	9.1	7.2	33.2	23.9	1.8	3.0	<0.10	<0.01
WSR33	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:01:00 PM	9.0	7.4	32.8	24.1	2.1	4.0	<0.10	<0.01
WSR33	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:01:00 PM	8.8	7.3	32.8	24.2	2.2	4.0	<0.10	<0.01
WSR33	11/1/2024	Mid-ebb	Sunny	Moderate	М	4	12:02:00 PM	9.0	7.3	32.9	24.2	2.2	3.0	<0.10	<0.01
WSR33	11/1/2024	Mid-ebb	Sunny	Moderate	М	4	12:02:00 PM	9.0	7.3	32.9	24.1	2.2	5.0	<0.10	<0.01
WSR33	11/1/2024	Mid-ebb	Sunny	Moderate	В	6	12:03:00 PM	8.8	7.3	32.8	24.1	2.2	3.0	<0.10	<0.01
WSR33	11/1/2024	Mid-ebb	Sunny	Moderate	В	6	12:03:00 PM	8.9	7.3	32.8	24.1	2.2	4.0	<0.10	<0.01
WSR36	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:47:00 AM	8.6	7.3	32.9	23.9	2.0	3.0	<0.10	<0.01
WSR36	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:47:00 AM	8.8	7.4	32.9	23.9	2.1	4.0	<0.10	<0.01
WSR36	11/1/2024	Mid-ebb	Sunny	Moderate	М	4	11:48:00 AM	8.9	7.4	33.0	23.9	2.1	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	otal Chlorine (mg/L)
WSR36	11/1/2024	Mid-ebb	Sunny	Moderate	М	4	11:48:00 AM	8.7	7.4	33.0	23.9	2.1	4.0	<0.10	<0.01
WSR36	11/1/2024	Mid-ebb	Sunny	Moderate	В	7	11:48:00 AM	8.8	7.4	32.9	24.0	2.1	3.0	<0.10	<0.01
WSR36	11/1/2024	Mid-ebb	Sunny	Moderate	В	7	11:48:00 AM	8.6	7.4	32.9	24.0	2.1	5.0	<0.10	<0.01
WSR37	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:41:00 AM	9.8	7.2	32.2	23.7	2.4	3.0	<0.10	<0.01
WSR37	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:41:00 AM	9.6	7.3	32.2	23.8	2.3	3.0	<0.10	<0.01
WSR37	11/1/2024	Mid-ebb	Sunny	Moderate	М	4	11:42:00 AM	9.6	7.3	32.2	23.8	2.0	3.0	<0.10	<0.01
WSR37	11/1/2024	Mid-ebb	Sunny	Moderate	М	4	11:42:00 AM	9.6	7.2	32.1	23.7	1.9	3.0	<0.10	<0.01
WSR37	11/1/2024	Mid-ebb	Sunny	Moderate	В	8	11:43:00 AM	9.7	7.2	32.2	23.7	2.1	4.0	<0.10	<0.01
WSR37	11/1/2024	Mid-ebb	Sunny	Moderate	В	8	11:43:00 AM	9.8	7.2	32.2	23.7	1.9	3.0	<0.10	<0.01
NF1	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:09:00 AM	9.3	7.3	32.7	23.9	1.9	4.0	<0.10	<0.01
NF1	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:09:00 AM	9.2	7.3	32.7	24.0	2.0	3.0	<0.10	<0.01
NF1	11/1/2024	Mid-ebb	Sunny	Moderate	М	7	11:10:00 AM	9.2	7.3	32.6	24.0	1.9	2.5	<0.10	<0.01
NF1	11/1/2024	Mid-ebb	Sunny	Moderate	М	7	11:10:00 AM	9.3	7.2	32.7	24.0	1.8	3.0	<0.10	<0.01
NF1	11/1/2024	Mid-ebb	Sunny	Moderate	В	12	11:11:00 AM	9.3	7.3	32.6	23.9	2.0	3.0	<0.10	<0.01
NF1	11/1/2024	Mid-ebb	Sunny	Moderate	В	12	11:11:00 AM	9.2	7.3	32.7	23.9	2.0	5.0	<0.10	<0.01
NF2	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:26:00 AM	8.5	7.3	32.2	23.9	1.8	4.0	<0.10	<0.01
NF2	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:26:00 AM	8.4	7.2	32.3	23.9	1.9	3.0	<0.10	<0.01
NF2	11/1/2024	Mid-ebb	Sunny	Moderate	М	5	11:27:00 AM	8.6	7.3	32.2	23.9	1.8	4.0	<0.10	<0.01
NF2	11/1/2024	Mid-ebb	Sunny	Moderate	М	5	11:27:00 AM	8.4	7.3	32.3	23.9	1.9	3.0	<0.10	<0.01
NF2	11/1/2024	Mid-ebb	Sunny	Moderate	В	10	11:28:00 AM	8.6	7.3	32.2	23.9	1.8	3.0	<0.10	<0.01
NF2	11/1/2024	Mid-ebb	Sunny	Moderate	В	10	11:28:00 AM	8.7	7.3	32.3	23.9	1.8	5.0	<0.10	<0.01
NF3	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:34:00 AM	8.4	7.1	33.5	24.0	2.1	3.0	<0.10	<0.01
NF3	11/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:34:00 AM	8.5	7.1	33.6	24.0	2.1	3.0	<0.10	<0.01
NF3	11/1/2024	Mid-ebb	Sunny	Moderate	М	6	11:35:00 AM	8.5	7.1	33.6	24.0	2.1	3.0	<0.10	<0.01
NF3	11/1/2024	Mid-ebb	Sunny	Moderate	М	6	11:35:00 AM	8.4	7.1	33.6	24.0	2.2	3.0	<0.10	<0.01
NF3	11/1/2024	Mid-ebb	Sunny	Moderate	В	11	11:36:00 AM	8.5	7.1	33.6	24.0	2.2	3.0	<0.10	<0.01
NF3	11/1/2024	Mid-ebb	Sunny	Moderate	В	11	11:36:00 AM	8.6	7.1	33.5	24.0	2.2	4.0	<0.10	<0.01
CE	13/1/2024	Mid-flood	Sunny	Moderate	S	1	11:09:00 AM	9.3	7.4	32.4	23.2	2.3	5.0	<0.10	<0.01
CE	13/1/2024	Mid-flood	Sunny	Moderate	S	1	11:09:00 AM	9.2	7.3	32.4	23.2	2.3	3.0	<0.10	<0.01
CE	13/1/2024	Mid-flood	Sunny	Moderate	М	12	11:10:00 AM	9.2	7.4	32.4	23.2	2.3	5.0	<0.10	<0.01
CE	13/1/2024	Mid-flood	Sunny	Moderate	М	12	11:10:00 AM	9.3	7.4	32.4	23.2	2.3	3.0	<0.10	<0.01
CE	13/1/2024	Mid-flood	Sunny	Moderate	В	23	11:11:00 AM	9.2	7.4	32.5	23.2	2.3	5.0	<0.10	<0.01
CE	13/1/2024	Mid-flood	Sunny	Moderate	В	23	11:11:00 AM	9.3	7.4	32.4	23.2	2.3	3.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	'otal Chlorine (mg/L)
CF	13/1/2024	Mid-flood	Sunny	Moderate	S	1	8:14:00 AM	8.7	7.2	32.6	23.3	2.5	3.0	<0.10	<0.01
CF	13/1/2024	Mid-flood	Sunny	Moderate	S	1	8:14:00 AM	8.7	7.2	32.5	23.2	2.4	5.0	<0.10	<0.01
CF	13/1/2024	Mid-flood	Sunny	Moderate	М	10	8:15:00 AM	8.7	7.3	32.5	23.2	2.5	4.0	<0.10	<0.01
CF	13/1/2024	Mid-flood	Sunny	Moderate	М	10	8:15:00 AM	8.7	7.3	32.6	23.2	2.5	4.0	<0.10	<0.01
CF	13/1/2024	Mid-flood	Sunny	Moderate	В	18	8:16:00 AM	8.8	7.2	32.6	23.3	2.5	4.0	<0.10	<0.01
CF	13/1/2024	Mid-flood	Sunny	Moderate	В	18	8:16:00 AM	8.7	7.2	32.5	23.2	2.5	3.0	<0.10	<0.01
WSR01	13/1/2024	Mid-flood	Sunny	Moderate	S	1	8:36:00 AM	9.0	7.3	32.6	23.3	1.9	4.0	<0.10	<0.01
WSR01	13/1/2024	Mid-flood	Sunny	Moderate	S	1	8:36:00 AM	9.1	7.4	32.7	23.3	1.9	3.0	<0.10	<0.01
WSR01	13/1/2024	Mid-flood	Sunny	Moderate	М	4	8:37:00 AM	9.0	7.3	32.7	23.2	1.9	4.0	<0.10	<0.01
WSR01	13/1/2024	Mid-flood	Sunny	Moderate	М	4	8:37:00 AM	9.0	7.3	32.7	23.3	1.9	5.0	<0.10	<0.01
WSR01	13/1/2024	Mid-flood	Sunny	Moderate	В	8	8:38:00 AM	9.1	7.3	32.7	23.2	1.9	5.0	<0.10	<0.01
WSR01	13/1/2024	Mid-flood	Sunny	Moderate	В	8	8:38:00 AM	9.0	7.3	32.6	23.3	1.9	5.0	<0.10	<0.01
WSR02	13/1/2024	Mid-flood	Sunny	Moderate	S	1	8:55:00 AM	8.8	7.4	32.7	23.2	2.0	3.0	<0.10	<0.01
WSR02	13/1/2024	Mid-flood	Sunny	Moderate	S	1	8:55:00 AM	8.9	7.3	32.7	23.2	2.0	3.0	<0.10	<0.01
WSR02	13/1/2024	Mid-flood	Sunny	Moderate	М	5	8:56:00 AM	8.8	7.4	32.6	23.2	2.0	3.0	<0.10	<0.01
WSR02	13/1/2024	Mid-flood	Sunny	Moderate	М	5	8:56:00 AM	8.8	7.4	32.6	23.2	2.0	3.0	<0.10	<0.01
WSR02	13/1/2024	Mid-flood	Sunny	Moderate	В	8	8:57:00 AM	8.8	7.3	32.7	23.2	2.0	5.0	<0.10	<0.01
WSR02	13/1/2024	Mid-flood	Sunny	Moderate	В	8	8:57:00 AM	8.8	7.3	32.6	23.3	2.0	3.0	<0.10	<0.01
WSR03	13/1/2024	Mid-flood	Sunny	Moderate	S	1	9:09:00 AM	9.1	7.2	33.6	23.1	1.8	4.0	<0.10	<0.01
WSR03	13/1/2024	Mid-flood	Sunny	Moderate	S	1	9:09:00 AM	9.1	7.2	33.6	23.2	1.8	3.0	<0.10	<0.01
WSR03	13/1/2024	Mid-flood	Sunny	Moderate	М	4	9:10:00 AM	9.2	7.2	33.6	23.2	1.8	6.0	<0.10	<0.01
WSR03	13/1/2024	Mid-flood	Sunny	Moderate	М	4	9:10:00 AM	9.1	7.2	33.6	23.1	1.8	3.0	<0.10	<0.01
WSR03	13/1/2024	Mid-flood	Sunny	Moderate	В	7	9:11:00 AM	9.1	7.2	33.6	23.1	1.8	3.0	<0.10	<0.01
WSR03	13/1/2024	Mid-flood	Sunny	Moderate	В	7	9:11:00 AM	9.1	7.2	33.6	23.2	1.8	3.0	<0.10	<0.01
WSR04	13/1/2024	Mid-flood	Sunny	Moderate	S	1	9:25:00 AM	8.8	7.2	32.7	23.0	2.0	3.0	<0.10	<0.01
WSR04	13/1/2024	Mid-flood	Sunny	Moderate	S	1	9:25:00 AM	8.7	7.2	32.7	23.0	2.0	3.0	<0.10	<0.01
WSR04	13/1/2024	Mid-flood	Sunny	Moderate	М	3	9:26:00 AM	8.7	7.2	32.8	23.1	2.0	2.5	<0.10	<0.01
WSR04	13/1/2024	Mid-flood	Sunny	Moderate	М	3	9:26:00 AM	8.8	7.2	32.8	23.0	2.0	3.0	<0.10	<0.01
WSR04	13/1/2024	Mid-flood	Sunny	Moderate	В	6	9:27:00 AM	8.8	7.2	32.8	23.0	2.0	3.0	<0.10	<0.01
WSR04	13/1/2024	Mid-flood	Sunny	Moderate	В	6	9:27:00 AM	8.8	7.2	32.8	23.0	2.0	5.0	<0.10	<0.01
WSR16	13/1/2024	Mid-flood	Sunny	Moderate	S	1	10:48:00 AM	9.5	7.4	33.4	23.3	2.1	2.5	<0.10	<0.01
WSR16	13/1/2024	Mid-flood	Sunny	Moderate	S	1	10:48:00 AM	9.4	7.4	33.3	23.3	2.1	4.0	<0.10	<0.01
WSR16	13/1/2024	Mid-flood	Sunny	Moderate	М	8	10:49:00 AM	9.5	7.3	33.3	23.3	2.1	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) 1	otal Chlorine (mg/L)
WSR16	13/1/2024	Mid-flood	Sunny	Moderate	М	8	10:49:00 AM	9.6	7.3	33.3	23.3	2.1	3.0	<0.10	<0.01
WSR16	13/1/2024	Mid-flood	Sunny	Moderate	В	14	10:50:00 AM	9.5	7.3	33.3	23.3	2.1	3.0	<0.10	<0.01
WSR16	13/1/2024	Mid-flood	Sunny	Moderate	В	14	10:50:00 AM	9.4	7.4	33.4	23.3	2.1	3.0	<0.10	<0.01
WSR33	13/1/2024	Mid-flood	Sunny	Moderate	S	1	9:40:00 AM	9.7	7.2	32.1	23.3	1.8	2.5	<0.10	<0.01
WSR33	13/1/2024	Mid-flood	Sunny	Moderate	S	1	9:40:00 AM	9.7	7.2	32.1	23.2	1.8	3.0	<0.10	<0.01
WSR33	13/1/2024	Mid-flood	Sunny	Moderate	М	4	9:41:00 AM	9.6	7.3	32.1	23.2	1.8	2.5	<0.10	<0.01
WSR33	13/1/2024	Mid-flood	Sunny	Moderate	М	4	9:41:00 AM	9.6	7.2	32.1	23.3	1.7	4.0	<0.10	<0.01
WSR33	13/1/2024	Mid-flood	Sunny	Moderate	В	7	9:42:00 AM	9.7	7.2	32.1	23.2	1.7	4.0	<0.10	<0.01
WSR33	13/1/2024	Mid-flood	Sunny	Moderate	В	7	9:42:00 AM	9.6	7.2	32.1	23.2	1.7	4.0	<0.10	<0.01
WSR36	13/1/2024	Mid-flood	Sunny	Moderate	S	1	9:55:00 AM	9.2	7.4	33.0	23.2	2.3	3.0	<0.10	<0.01
WSR36	13/1/2024	Mid-flood	Sunny	Moderate	S	1	9:55:00 AM	9.2	7.4	33.0	23.3	2.4	3.0	<0.10	<0.01
WSR36	13/1/2024	Mid-flood	Sunny	Moderate	М	3	9:56:00 AM	9.2	7.4	33.0	23.2	2.3	4.0	<0.10	<0.01
WSR36	13/1/2024	Mid-flood	Sunny	Moderate	М	3	9:56:00 AM	9.1	7.4	33.1	23.2	2.3	4.0	<0.10	<0.01
WSR36	13/1/2024	Mid-flood	Sunny	Moderate	В	5	9:56:00 AM	9.2	7.4	33.0	23.2	2.3	3.0	<0.10	<0.01
WSR36	13/1/2024	Mid-flood	Sunny	Moderate	В	5	9:56:00 AM	9.2	7.4	33.0	23.2	2.3	3.0	<0.10	<0.01
WSR37	13/1/2024	Mid-flood	Sunny	Moderate	S	1	10:12:00 AM	9.0	7.2	33.3	23.5	2.2	4.0	<0.10	<0.01
WSR37	13/1/2024	Mid-flood	Sunny	Moderate	S	1	10:12:00 AM	9.0	7.2	33.4	23.5	2.2	5.0	<0.10	<0.01
WSR37	13/1/2024	Mid-flood	Sunny	Moderate	М	4	10:13:00 AM	9.0	7.3	33.3	23.5	2.2	3.0	<0.10	<0.01
WSR37	13/1/2024	Mid-flood	Sunny	Moderate	М	4	10:13:00 AM	8.9	7.2	33.4	23.4	2.2	3.0	<0.10	<0.01
WSR37	13/1/2024	Mid-flood	Sunny	Moderate	В	7	10:14:00 AM	8.9	7.3	33.3	23.5	2.2	3.0	<0.10	<0.01
WSR37	13/1/2024	Mid-flood	Sunny	Moderate	В	7	10:14:00 AM	9.1	7.2	33.3	23.5	2.2	4.0	<0.10	<0.01
NF1	13/1/2024	Mid-flood	Sunny	Moderate	S	1	10:36:00 AM	9.0	7.3	33.0	23.4	1.6	4.0	<0.10	<0.01
NF1	13/1/2024	Mid-flood	Sunny	Moderate	S	1	10:36:00 AM	9.1	7.2	32.9	23.4	1.6	3.0	<0.10	<0.01
NF1	13/1/2024	Mid-flood	Sunny	Moderate	М	7	10:37:00 AM	9.0	7.2	32.9	23.4	1.6	5.0	<0.10	<0.01
NF1	13/1/2024	Mid-flood	Sunny	Moderate	М	7	10:37:00 AM	9.0	7.3	33.0	23.4	1.7	5.0	<0.10	<0.01
NF1	13/1/2024	Mid-flood	Sunny	Moderate	В	13	10:38:00 AM	9.0	7.3	33.0	23.3	1.6	6.0	<0.10	<0.01
NF1	13/1/2024	Mid-flood	Sunny	Moderate	В	13	10:38:00 AM	9.0	7.2	33.0	23.3	1.7	5.0	<0.10	<0.01
NF2	13/1/2024	Mid-flood	Sunny	Moderate	S	1	10:28:00 AM	8.5	7.4	33.3	23.3	2.0	3.0	<0.10	<0.01
NF2	13/1/2024	Mid-flood	Sunny	Moderate	S	1	10:28:00 AM	8.5	7.3	33.2	23.3	2.1	3.0	<0.10	<0.01
NF2	13/1/2024	Mid-flood	Sunny	Moderate	М	5	10:29:00 AM	8.4	7.4	33.3	23.3	2.0	4.0	<0.10	<0.01
NF2	13/1/2024	Mid-flood	Sunny	Moderate	М	5	10:29:00 AM	8.5	7.3	33.2	23.3	2.0	3.0	<0.10	<0.01
NF2	13/1/2024	Mid-flood	Sunny	Moderate	В	10	10:30:00 AM	8.5	7.3	33.3	23.3	2.0	4.0	<0.10	<0.01
NF2	13/1/2024	Mid-flood	Sunny	Moderate	В	10	10:30:00 AM	8.4	7.4	33.3	23.2	2.1	6.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	otal Chlorine (mg/L)
NF3	13/1/2024	Mid-flood	Sunny	Moderate	S	1	10:21:00 AM	9.4	7.2	32.7	23.3	2.2	5.0	<0.10	<0.01
NF3	13/1/2024	Mid-flood	Sunny	Moderate	S	1	10:21:00 AM	9.3	7.2	32.8	23.3	2.2	3.0	<0.10	<0.01
NF3	13/1/2024	Mid-flood	Sunny	Moderate	М	6	10:22:00 AM	9.3	7.2	32.8	23.3	2.2	3.0	<0.10	<0.01
NF3	13/1/2024	Mid-flood	Sunny	Moderate	М	6	10:22:00 AM	9.4	7.2	32.7	23.3	2.2	5.0	<0.10	<0.01
NF3	13/1/2024	Mid-flood	Sunny	Moderate	В	11	10:23:00 AM	9.4	7.2	32.8	23.3	2.2	3.0	<0.10	<0.01
NF3	13/1/2024	Mid-flood	Sunny	Moderate	В	11	10:23:00 AM	9.4	7.2	32.8	23.3	2.2	2.5	<0.10	<0.01
CE	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	11:09:00 AM	9.1	7.1	32.2	23.6	2.4	6.0	<0.10	<0.01
CE	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	11:09:00 AM	9.0	7.2	32.2	23.5	2.4	4.0	<0.10	<0.01
CE	16/1/2024	Mid-flood	Cloudy	Moderate	М	11	11:10:00 AM	9.0	7.2	32.3	23.5	2.4	4.0	<0.10	<0.01
CE	16/1/2024	Mid-flood	Cloudy	Moderate	М	11	11:10:00 AM	9.0	7.1	32.2	23.5	2.3	4.0	<0.10	<0.01
CE	16/1/2024	Mid-flood	Cloudy	Moderate	В	21	11:11:00 AM	8.9	7.1	32.2	23.5	2.3	5.0	<0.10	<0.01
CE	16/1/2024	Mid-flood	Cloudy	Moderate	В	21	11:11:00 AM	8.9	7.2	32.2	23.4	2.3	3.0	<0.10	<0.01
CF	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:14:00 AM	9.1	7.2	32.5	23.3	2.6	4.0	<0.10	<0.01
CF	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:14:00 AM	9.1	7.2	32.5	23.3	2.4	3.0	<0.10	<0.01
CF	16/1/2024	Mid-flood	Cloudy	Moderate	М	10	8:15:00 AM	9.0	7.2	32.5	23.3	2.5	5.0	<0.10	<0.01
CF	16/1/2024	Mid-flood	Cloudy	Moderate	М	10	8:15:00 AM	9.0	7.2	32.5	23.3	2.6	3.0	<0.10	<0.01
CF	16/1/2024	Mid-flood	Cloudy	Moderate	В	19	8:16:00 AM	9.0	7.2	32.5	23.3	2.5	4.0	<0.10	<0.01
CF	16/1/2024	Mid-flood	Cloudy	Moderate	В	19	8:16:00 AM	9.0	7.2	32.5	23.3	2.5	4.0	<0.10	<0.01
WSR01	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:36:00 AM	8.3	7.1	33.9	23.6	2.2	5.0	<0.10	<0.01
WSR01	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:36:00 AM	8.3	7.1	34.0	23.5	2.1	5.0	<0.10	<0.01
WSR01	16/1/2024	Mid-flood	Cloudy	Moderate	М	4	8:37:00 AM	8.4	7.1	34.0	23.6	2.2	5.0	<0.10	<0.01
WSR01	16/1/2024	Mid-flood	Cloudy	Moderate	М	4	8:37:00 AM	8.3	7.1	34.0	23.6	2.2	5.0	<0.10	<0.01
WSR01	16/1/2024	Mid-flood	Cloudy	Moderate	В	7	8:38:00 AM	8.3	7.1	33.9	23.5	2.2	4.0	<0.10	<0.01
WSR01	16/1/2024	Mid-flood	Cloudy	Moderate	В	7	8:38:00 AM	8.2	7.2	34.0	23.5	2.2	3.0	<0.10	<0.01
WSR02	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:55:00 AM	8.5	7.2	33.6	23.6	2.2	5.0	<0.10	<0.01
WSR02	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:55:00 AM	8.6	7.2	33.6	23.6	2.2	3.0	<0.10	<0.01
WSR02	16/1/2024	Mid-flood	Cloudy	Moderate	М	5	8:56:00 AM	8.6	7.2	33.6	23.6	2.2	5.0	<0.10	<0.01
WSR02	16/1/2024	Mid-flood	Cloudy	Moderate	М	5	8:56:00 AM	8.5	7.2	33.6	23.6	2.2	3.0	<0.10	<0.01
WSR02	16/1/2024	Mid-flood	Cloudy	Moderate	В	9	8:57:00 AM	8.5	7.2	33.6	23.6	2.2	5.0	<0.10	<0.01
WSR02	16/1/2024	Mid-flood	Cloudy	Moderate	В	9	8:57:00 AM	8.6	7.2	33.6	23.6	2.2	4.0	<0.10	<0.01
WSR03	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:09:00 AM	8.5	7.3	32.7	23.6	2.2	3.0	<0.10	<0.01
WSR03	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:09:00 AM	8.5	7.3	32.7	23.6	2.2	5.0	<0.10	<0.01
WSR03	16/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:10:00 AM	8.4	7.3	32.7	23.7	2.2	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	otal Chlorine (mg/L)
WSR03	16/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:10:00 AM	8.5	7.3	32.7	23.7	2.2	5.0	<0.10	<0.01
WSR03	16/1/2024	Mid-flood	Cloudy	Moderate	В	7	9:11:00 AM	8.4	7.3	32.7	23.6	2.2	3.0	<0.10	<0.01
WSR03	16/1/2024	Mid-flood	Cloudy	Moderate	В	7	9:11:00 AM	8.4	7.3	32.6	23.6	2.2	4.0	<0.10	<0.01
WSR04	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:25:00 AM	9.6	7.1	33.6	23.6	2.3	4.0	<0.10	<0.01
WSR04	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:25:00 AM	9.5	7.2	33.6	23.6	2.3	3.0	<0.10	<0.01
WSR04	16/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:26:00 AM	9.6	7.2	33.6	23.6	2.2	3.0	<0.10	<0.01
WSR04	16/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:26:00 AM	9.6	7.1	33.6	23.7	2.2	5.0	<0.10	<0.01
WSR04	16/1/2024	Mid-flood	Cloudy	Moderate	В	6	9:27:00 AM	9.5	7.1	33.6	23.6	2.2	4.0	<0.10	<0.01
WSR04	16/1/2024	Mid-flood	Cloudy	Moderate	В	6	9:27:00 AM	9.5	7.1	33.6	23.7	2.0	3.0	<0.10	<0.01
WSR16	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:48:00 AM	8.6	7.2	32.4	23.5	2.3	3.0	<0.10	<0.01
WSR16	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:48:00 AM	8.6	7.2	32.4	23.6	2.3	4.0	<0.10	<0.01
WSR16	16/1/2024	Mid-flood	Cloudy	Moderate	М	8	10:49:00 AM	8.5	7.2	32.4	23.6	2.3	4.0	<0.10	<0.01
WSR16	16/1/2024	Mid-flood	Cloudy	Moderate	М	8	10:49:00 AM	8.6	7.2	32.4	23.6	2.3	3.0	<0.10	<0.01
WSR16	16/1/2024	Mid-flood	Cloudy	Moderate	В	14	10:50:00 AM	8.5	7.2	32.4	23.5	2.3	4.0	<0.10	<0.01
WSR16	16/1/2024	Mid-flood	Cloudy	Moderate	В	14	10:50:00 AM	8.5	7.2	32.4	23.5	2.3	3.0	<0.10	<0.01
WSR33	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:40:00 AM	8.7	7.3	32.7	23.5	2.2	3.0	<0.10	<0.01
WSR33	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:40:00 AM	8.6	7.3	32.7	23.5	2.2	4.0	<0.10	<0.01
WSR33	16/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:41:00 AM	8.7	7.3	32.7	23.6	2.2	4.0	<0.10	<0.01
WSR33	16/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:41:00 AM	8.7	7.3	32.7	23.5	2.2	3.0	<0.10	<0.01
WSR33	16/1/2024	Mid-flood	Cloudy	Moderate	В	6	9:42:00 AM	8.6	7.3	32.8	23.6	2.2	3.0	<0.10	<0.01
WSR33	16/1/2024	Mid-flood	Cloudy	Moderate	В	6	9:42:00 AM	8.7	7.3	32.7	23.6	2.2	4.0	<0.10	<0.01
WSR36	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:55:00 AM	8.8	7.4	33.6	23.4	2.2	4.0	<0.10	<0.01
WSR36	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:55:00 AM	8.8	7.3	33.6	23.3	2.1	5.0	<0.10	<0.01
WSR36	16/1/2024	Mid-flood	Cloudy	Moderate	М	3	9:56:00 AM	8.7	7.3	33.6	23.4	2.1	4.0	<0.10	<0.01
WSR36	16/1/2024	Mid-flood	Cloudy	Moderate	М	3	9:56:00 AM	8.8	7.3	33.6	23.4	2.2	3.0	<0.10	<0.01
WSR36	16/1/2024	Mid-flood	Cloudy	Moderate	В	5	9:56:00 AM	8.7	7.4	33.6	23.4	2.2	4.0	<0.10	<0.01
WSR36	16/1/2024	Mid-flood	Cloudy	Moderate	В	5	9:56:00 AM	8.8	7.4	33.6	23.4	2.1	4.0	<0.10	<0.01
WSR37	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:12:00 AM	9.3	7.1	33.4	23.5	2.2	3.0	<0.10	<0.01
WSR37	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:12:00 AM	9.5	7.1	33.4	23.4	2.2	4.0	<0.10	<0.01
WSR37	16/1/2024	Mid-flood	Cloudy	Moderate	М	4	10:13:00 AM	9.3	7.1	33.5	23.4	2.2	4.0	<0.10	<0.01
WSR37	16/1/2024	Mid-flood	Cloudy	Moderate	М	4	10:13:00 AM	9.5	7.1	33.5	23.4	2.2	3.0	<0.10	<0.01
WSR37	16/1/2024	Mid-flood	Cloudy	Moderate	В	7	10:14:00 AM	9.5	7.1	33.5	23.5	2.2	5.0	<0.10	<0.01
WSR37	16/1/2024	Mid-flood	Cloudy	Moderate	В	7	10:14:00 AM	9.4	7.1	33.5	23.4	2.2	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) 1	otal Chlorine (mg/L)
NF1	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:36:00 AM	8.6	7.2	33.4	23.3	2.2	4.0	<0.10	<0.01
NF1	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:36:00 AM	8.6	7.2	33.4	23.4	2.3	4.0	<0.10	<0.01
NF1	16/1/2024	Mid-flood	Cloudy	Moderate	М	7	10:37:00 AM	8.6	7.2	33.4	23.3	2.2	4.0	<0.10	<0.01
NF1	16/1/2024	Mid-flood	Cloudy	Moderate	М	7	10:37:00 AM	8.6	7.2	33.4	23.4	2.2	5.0	<0.10	<0.01
NF1	16/1/2024	Mid-flood	Cloudy	Moderate	В	13	10:38:00 AM	8.7	7.2	33.4	23.4	2.2	3.0	<0.10	<0.01
NF1	16/1/2024	Mid-flood	Cloudy	Moderate	В	13	10:38:00 AM	8.7	7.2	33.4	23.4	2.2	4.0	<0.10	<0.01
NF2	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:28:00 AM	9.1	7.1	33.2	23.4	1.8	4.0	<0.10	<0.01
NF2	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:28:00 AM	9.0	7.1	33.1	23.3	1.8	5.0	<0.10	<0.01
NF2	16/1/2024	Mid-flood	Cloudy	Moderate	М	5	10:29:00 AM	9.1	7.1	33.1	23.3	1.8	5.0	<0.10	<0.01
NF2	16/1/2024	Mid-flood	Cloudy	Moderate	М	5	10:29:00 AM	9.1	7.1	33.1	23.4	1.8	5.0	<0.10	<0.01
NF2	16/1/2024	Mid-flood	Cloudy	Moderate	В	10	10:30:00 AM	9.1	7.1	33.1	23.3	1.8	4.0	<0.10	<0.01
NF2	16/1/2024	Mid-flood	Cloudy	Moderate	В	10	10:30:00 AM	9.0	7.1	33.2	23.3	1.8	4.0	<0.10	<0.01
NF3	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:21:00 AM	8.3	7.2	32.9	23.7	2.3	3.0	<0.10	<0.01
NF3	16/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:21:00 AM	8.3	7.2	32.9	23.7	2.3	5.0	<0.10	<0.01
NF3	16/1/2024	Mid-flood	Cloudy	Moderate	М	6	10:22:00 AM	8.3	7.2	32.8	23.7	2.3	4.0	<0.10	<0.01
NF3	16/1/2024	Mid-flood	Cloudy	Moderate	М	6	10:22:00 AM	8.2	7.2	32.8	23.7	2.3	4.0	<0.10	<0.01
NF3	16/1/2024	Mid-flood	Cloudy	Moderate	В	11	10:23:00 AM	8.3	7.1	32.8	23.8	2.3	5.0	<0.10	<0.01
NF3	16/1/2024	Mid-flood	Cloudy	Moderate	В	11	10:23:00 AM	8.3	7.2	32.8	23.7	2.3	3.0	<0.10	<0.01
CE	18/1/2024	Mid-flood	Sunny	Moderate	S	1	1:12:00 PM	9.5	7.2	32.5	23.3	1.7	2.5	<0.10	<0.01
CE	18/1/2024	Mid-flood	Sunny	Moderate	S	1	1:12:00 PM	9.4	7.2	32.6	23.3	1.7	3.0	<0.10	<0.01
CE	18/1/2024	Mid-flood	Sunny	Moderate	М	12	1:13:00 PM	9.5	7.2	32.6	23.3	1.7	3.0	<0.10	<0.01
CE	18/1/2024	Mid-flood	Sunny	Moderate	М	12	1:13:00 PM	9.4	7.2	32.6	23.4	1.7	5.0	<0.10	<0.01
CE	18/1/2024	Mid-flood	Sunny	Moderate	В	22	1:14:00 PM	9.5	7.2	32.6	23.3	1.7	4.0	<0.10	<0.01
CE	18/1/2024	Mid-flood	Sunny	Moderate	В	22	1:14:00 PM	9.5	7.2	32.6	23.3	1.7	5.0	<0.10	<0.01
CF	18/1/2024	Mid-flood	Sunny	Moderate	S	1	10:15:00 AM	8.8	7.3	32.8	23.3	2.2	4.0	<0.10	<0.01
CF	18/1/2024	Mid-flood	Sunny	Moderate	S	1	10:15:00 AM	8.8	7.3	32.9	23.4	2.2	3.0	<0.10	<0.01
CF	18/1/2024	Mid-flood	Sunny	Moderate	М	10	10:16:00 AM	8.9	7.4	32.8	23.4	2.2	3.0	<0.10	<0.01
CF	18/1/2024	Mid-flood	Sunny	Moderate	М	10	10:16:00 AM	8.8	7.4	32.8	23.3	2.2	4.0	<0.10	<0.01
CF	18/1/2024	Mid-flood	Sunny	Moderate	В	20	10:17:00 AM	8.9	7.3	32.8	23.4	2.2	5.0	<0.10	<0.01
CF	18/1/2024	Mid-flood	Sunny	Moderate	В	20	10:17:00 AM	8.8	7.3	32.9	23.3	2.2	3.0	<0.10	<0.01
WSR01	18/1/2024	Mid-flood	Sunny	Moderate	S	1	10:38:00 AM	9.1	7.2	33.6	23.2	1.9	4.0	<0.10	<0.01
WSR01	18/1/2024	Mid-flood	Sunny	Moderate	S	1	10:38:00 AM	9.2	7.2	33.6	23.2	2.0	3.0	<0.10	<0.01
WSR01	18/1/2024	Mid-flood	Sunny	Moderate	М	5	10:39:00 AM	9.2	7.2	33.7	23.2	1.9	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	otal Chlorine (mg/L)
WSR01	18/1/2024	Mid-flood	Sunny	Moderate	М	5	10:39:00 AM	9.1	7.2	33.7	23.2	1.9	5.0	<0.10	<0.01
WSR01	18/1/2024	Mid-flood	Sunny	Moderate	В	9	10:40:00 AM	9.1	7.2	33.6	23.2	1.9	4.0	<0.10	<0.01
WSR01	18/1/2024	Mid-flood	Sunny	Moderate	В	9	10:40:00 AM	9.2	7.2	33.7	23.2	1.9	4.0	<0.10	<0.01
WSR02	18/1/2024	Mid-flood	Sunny	Moderate	S	1	10:56:00 AM	9.3	7.3	33.2	23.1	1.6	3.0	<0.10	<0.01
WSR02	18/1/2024	Mid-flood	Sunny	Moderate	S	1	10:56:00 AM	9.4	7.4	33.2	23.1	1.6	4.0	<0.10	<0.01
WSR02	18/1/2024	Mid-flood	Sunny	Moderate	М	5	10:57:00 AM	9.4	7.3	33.3	23.2	1.5	3.0	<0.10	<0.01
WSR02	18/1/2024	Mid-flood	Sunny	Moderate	М	5	10:57:00 AM	9.3	7.3	33.3	23.1	1.6	4.0	<0.10	<0.01
WSR02	18/1/2024	Mid-flood	Sunny	Moderate	В	8	10:58:00 AM	9.4	7.4	33.2	23.2	1.6	2.5	<0.10	<0.01
WSR02	18/1/2024	Mid-flood	Sunny	Moderate	В	8	10:58:00 AM	9.4	7.3	33.3	23.1	1.6	4.0	<0.10	<0.01
WSR03	18/1/2024	Mid-flood	Sunny	Moderate	S	1	11:10:00 AM	8.6	7.2	32.9	23.3	2.2	2.5	<0.10	<0.01
WSR03	18/1/2024	Mid-flood	Sunny	Moderate	S	1	11:10:00 AM	8.6	7.2	32.9	23.3	2.2	3.0	<0.10	<0.01
WSR03	18/1/2024	Mid-flood	Sunny	Moderate	М	4	11:11:00 AM	8.7	7.2	32.9	23.3	2.2	5.0	<0.10	<0.01
WSR03	18/1/2024	Mid-flood	Sunny	Moderate	М	4	11:11:00 AM	8.6	7.2	32.9	23.3	2.2	3.0	<0.10	<0.01
WSR03	18/1/2024	Mid-flood	Sunny	Moderate	В	7	11:12:00 AM	8.6	7.2	32.9	23.3	2.2	2.5	<0.10	<0.01
WSR03	18/1/2024	Mid-flood	Sunny	Moderate	В	7	11:12:00 AM	8.7	7.2	32.9	23.3	2.2	3.0	<0.10	<0.01
WSR04	18/1/2024	Mid-flood	Sunny	Moderate	S	1	11:26:00 AM	8.5	7.2	33.5	23.3	1.9	3.0	<0.10	<0.01
WSR04	18/1/2024	Mid-flood	Sunny	Moderate	S	1	11:26:00 AM	8.6	7.2	33.5	23.2	1.9	3.0	<0.10	<0.01
WSR04	18/1/2024	Mid-flood	Sunny	Moderate	М	3	11:27:00 AM	8.6	7.1	33.5	23.2	1.9	4.0	<0.10	<0.01
WSR04	18/1/2024	Mid-flood	Sunny	Moderate	М	3	11:27:00 AM	8.6	7.1	33.5	23.2	1.9	5.0	<0.10	<0.01
WSR04	18/1/2024	Mid-flood	Sunny	Moderate	В	6	11:28:00 AM	8.5	7.2	33.5	23.3	1.9	5.0	<0.10	<0.01
WSR04	18/1/2024	Mid-flood	Sunny	Moderate	В	6	11:28:00 AM	8.5	7.2	33.5	23.3	1.9	4.0	<0.10	<0.01
WSR16	18/1/2024	Mid-flood	Sunny	Moderate	S	1	12:52:00 PM	9.4	7.4	32.8	23.4	2.2	3.0	<0.10	<0.01
WSR16	18/1/2024	Mid-flood	Sunny	Moderate	S	1	12:52:00 PM	9.5	7.4	32.8	23.4	2.2	4.0	<0.10	<0.01
WSR16	18/1/2024	Mid-flood	Sunny	Moderate	М	8	12:53:00 PM	9.5	7.3	32.7	23.5	2.2	3.0	<0.10	<0.01
WSR16	18/1/2024	Mid-flood	Sunny	Moderate	М	8	12:53:00 PM	9.5	7.4	32.7	23.5	2.2	3.0	<0.10	<0.01
WSR16	18/1/2024	Mid-flood	Sunny	Moderate	В	14	12:54:00 PM	9.4	7.4	32.8	23.5	2.2	4.0	<0.10	<0.01
WSR16	18/1/2024	Mid-flood	Sunny	Moderate	В	14	12:54:00 PM	9.4	7.4	32.8	23.4	2.2	5.0	<0.10	<0.01
WSR33	18/1/2024	Mid-flood	Sunny	Moderate	S	1	11:40:00 AM	9.2	7.4	33.3	23.3	2.3	4.0	<0.10	<0.01
WSR33	18/1/2024	Mid-flood	Sunny	Moderate	S	1	11:40:00 AM	9.2	7.4	33.4	23.2	2.3	5.0	<0.10	<0.01
WSR33	18/1/2024	Mid-flood	Sunny	Moderate	М	4	11:41:00 AM	9.2	7.4	33.3	23.2	2.3	5.0	<0.10	<0.01
WSR33	18/1/2024	Mid-flood	Sunny	Moderate	М	4	11:41:00 AM	9.3	7.4	33.4	23.2	2.3	4.0	<0.10	<0.01
WSR33	18/1/2024	Mid-flood	Sunny	Moderate	В	7	11:42:00 AM	9.2	7.4	33.3	23.2	2.3	5.0	<0.10	<0.01
WSR33	18/1/2024	Mid-flood	Sunny	Moderate	В	7	11:42:00 AM	9.3	7.3	33.3	23.3	2.3	6.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	'otal Chlorine (mg/L)
WSR36	18/1/2024	Mid-flood	Sunny	Moderate	S	1	11:57:00 AM	8.7	7.2	32.4	23.4	1.9	5.0	<0.10	<0.01
WSR36	18/1/2024	Mid-flood	Sunny	Moderate	S	1	11:57:00 AM	8.8	7.2	32.3	23.4	1.9	5.0	<0.10	<0.01
WSR36	18/1/2024	Mid-flood	Sunny	Moderate	М	3	11:58:00 AM	8.7	7.2	32.4	23.3	1.9	5.0	<0.10	<0.01
WSR36	18/1/2024	Mid-flood	Sunny	Moderate	М	3	11:58:00 AM	8.8	7.2	32.5	23.3	1.9	6.0	<0.10	<0.01
WSR36	18/1/2024	Mid-flood	Sunny	Moderate	В	5	11:58:00 AM	8.7	7.2	32.4	23.3	1.8	6.0	<0.10	<0.01
WSR36	18/1/2024	Mid-flood	Sunny	Moderate	В	5	11:58:00 AM	8.8	7.2	32.4	23.4	1.8	5.0	<0.10	<0.01
WSR37	18/1/2024	Mid-flood	Sunny	Moderate	S	1	12:13:00 PM	9.2	7.4	33.1	23.1	2.2	3.0	<0.10	<0.01
WSR37	18/1/2024	Mid-flood	Sunny	Moderate	S	1	12:13:00 PM	9.2	7.4	33.2	23.1	2.2	5.0	<0.10	<0.01
WSR37	18/1/2024	Mid-flood	Sunny	Moderate	М	4	12:14:00 PM	9.2	7.4	33.2	23.2	2.2	4.0	<0.10	<0.01
WSR37	18/1/2024	Mid-flood	Sunny	Moderate	М	4	12:14:00 PM	9.2	7.4	33.2	23.2	2.2	4.0	<0.10	<0.01
WSR37	18/1/2024	Mid-flood	Sunny	Moderate	В	7	12:15:00 PM	9.1	7.4	33.2	23.1	2.2	4.0	<0.10	<0.01
WSR37	18/1/2024	Mid-flood	Sunny	Moderate	В	7	12:15:00 PM	9.1	7.4	33.1	23.2	2.2	3.0	<0.10	<0.01
NF1	18/1/2024	Mid-flood	Sunny	Moderate	S	1	12:37:00 PM	9.4	7.3	33.0	23.5	1.6	4.0	<0.10	<0.01
NF1	18/1/2024	Mid-flood	Sunny	Moderate	S	1	12:37:00 PM	9.3	7.2	33.0	23.4	1.6	3.0	<0.10	<0.01
NF1	18/1/2024	Mid-flood	Sunny	Moderate	М	7	12:38:00 PM	9.4	7.2	33.0	23.4	1.6	5.0	<0.10	<0.01
NF1	18/1/2024	Mid-flood	Sunny	Moderate	М	7	12:38:00 PM	9.3	7.2	33.0	23.5	1.6	3.0	<0.10	<0.01
NF1	18/1/2024	Mid-flood	Sunny	Moderate	В	13	12:39:00 PM	9.4	7.3	33.0	23.4	1.6	3.0	<0.10	<0.01
NF1	18/1/2024	Mid-flood	Sunny	Moderate	В	13	12:39:00 PM	9.3	7.3	33.0	23.4	1.6	5.0	<0.10	<0.01
NF2	18/1/2024	Mid-flood	Sunny	Moderate	S	1	12:29:00 PM	8.7	7.3	33.7	23.3	2.0	4.0	<0.10	<0.01
NF2	18/1/2024	Mid-flood	Sunny	Moderate	S	1	12:29:00 PM	8.6	7.4	33.7	23.2	2.0	4.0	<0.10	<0.01
NF2	18/1/2024	Mid-flood	Sunny	Moderate	М	5	12:30:00 PM	8.7	7.3	33.8	23.3	1.9	3.0	<0.10	<0.01
NF2	18/1/2024	Mid-flood	Sunny	Moderate	М	5	12:30:00 PM	8.6	7.4	33.7	23.2	2.0	4.0	<0.10	<0.01
NF2	18/1/2024	Mid-flood	Sunny	Moderate	В	10	12:31:00 PM	8.6	7.4	33.7	23.3	1.9	4.0	<0.10	<0.01
NF2	18/1/2024	Mid-flood	Sunny	Moderate	В	10	12:31:00 PM	8.6	7.4	33.7	23.3	2.0	4.0	<0.10	<0.01
NF3	18/1/2024	Mid-flood	Sunny	Moderate	S	1	12:22:00 PM	8.6	7.3	33.3	23.5	1.7	3.0	<0.10	<0.01
NF3	18/1/2024	Mid-flood	Sunny	Moderate	S	1	12:22:00 PM	8.7	7.3	33.3	23.5	1.7	4.0	<0.10	<0.01
NF3	18/1/2024	Mid-flood	Sunny	Moderate	М	6	12:23:00 PM	8.6	7.3	33.3	23.5	1.7	4.0	<0.10	<0.01
NF3	18/1/2024	Mid-flood	Sunny	Moderate	М	6	12:23:00 PM	8.7	7.3	33.3	23.5	1.7	4.0	<0.10	<0.01
NF3	18/1/2024	Mid-flood	Sunny	Moderate	В	11	12:24:00 PM	8.6	7.3	33.2	23.5	1.7	5.0	<0.10	<0.01
NF3	18/1/2024	Mid-flood	Sunny	Moderate	В	11	12:24:00 PM	8.6	7.3	33.2	23.5	1.7	3.0	<0.10	<0.01
CE	20/1/2024	Mid-flood	Sunny	Moderate	S	1	11:37:00 AM	9.1	7.2	33.3	23.6	2.7	4.0	<0.10	<0.01
CE	20/1/2024	Mid-flood	Sunny	Moderate	S	1	11:37:00 AM	9.1	7.2	33.3	23.5	2.7	2.5	<0.10	<0.01
CE	20/1/2024	Mid-flood	Sunny	Moderate	М	11	11:38:00 AM	9.1	7.2	33.3	23.5	2.7	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	otal Chlorine (mg/L)
CE	20/1/2024	Mid-flood	Sunny	Moderate	М	11	11:38:00 AM	9.0	7.2	33.2	23.5	2.7	4.0	<0.10	<0.01
CE	20/1/2024	Mid-flood	Sunny	Moderate	В	20	11:39:00 AM	9.1	7.3	33.3	23.5	2.7	5.0	<0.10	<0.01
CE	20/1/2024	Mid-flood	Sunny	Moderate	В	20	11:39:00 AM	9.1	7.3	33.3	23.5	2.7	3.0	<0.10	<0.01
CF	20/1/2024	Mid-flood	Sunny	Moderate	S	1	2:46:00 PM	9.1	7.2	32.4	23.6	2.3	4.0	<0.10	<0.01
CF	20/1/2024	Mid-flood	Sunny	Moderate	S	1	2:46:00 PM	9.2	7.2	32.4	23.5	2.2	5.0	<0.10	<0.01
CF	20/1/2024	Mid-flood	Sunny	Moderate	М	11	2:47:00 PM	9.1	7.2	32.3	23.5	2.2	5.0	<0.10	<0.01
CF	20/1/2024	Mid-flood	Sunny	Moderate	М	11	2:47:00 PM	9.1	7.1	32.3	23.6	2.2	3.0	<0.10	<0.01
CF	20/1/2024	Mid-flood	Sunny	Moderate	В	21	2:48:00 PM	9.1	7.2	32.4	23.6	2.2	2.5	<0.10	<0.01
CF	20/1/2024	Mid-flood	Sunny	Moderate	В	21	2:48:00 PM	9.1	7.2	32.3	23.5	2.2	3.0	<0.10	<0.01
WSR01	20/1/2024	Mid-flood	Sunny	Moderate	S	1	2:22:00 PM	8.7	7.1	32.4	23.4	2.3	4.0	<0.10	<0.01
WSR01	20/1/2024	Mid-flood	Sunny	Moderate	S	1	2:22:00 PM	8.6	7.2	32.3	23.4	2.3	2.5	<0.10	<0.01
WSR01	20/1/2024	Mid-flood	Sunny	Moderate	М	5	2:23:00 PM	8.6	7.1	32.4	23.4	2.3	3.0	<0.10	<0.01
WSR01	20/1/2024	Mid-flood	Sunny	Moderate	М	5	2:23:00 PM	8.7	7.2	32.4	23.4	2.3	5.0	<0.10	<0.01
WSR01	20/1/2024	Mid-flood	Sunny	Moderate	В	8	2:24:00 PM	8.6	7.2	32.3	23.4	2.2	3.0	<0.10	<0.01
WSR01	20/1/2024	Mid-flood	Sunny	Moderate	В	8	2:24:00 PM	8.6	7.2	32.4	23.4	2.2	2.5	<0.10	<0.01
WSR02	20/1/2024	Mid-flood	Sunny	Moderate	S	1	2:03:00 PM	8.8	7.2	32.8	23.3	2.3	4.0	<0.10	<0.01
WSR02	20/1/2024	Mid-flood	Sunny	Moderate	S	1	2:03:00 PM	8.8	7.2	32.6	23.3	2.2	3.0	<0.10	<0.01
WSR02	20/1/2024	Mid-flood	Sunny	Moderate	М	5	2:04:00 PM	8.8	7.3	32.7	23.3	2.2	4.0	<0.10	<0.01
WSR02	20/1/2024	Mid-flood	Sunny	Moderate	М	5	2:04:00 PM	8.8	7.2	32.7	23.3	2.3	2.5	<0.10	<0.01
WSR02	20/1/2024	Mid-flood	Sunny	Moderate	В	9	2:05:00 PM	8.8	7.2	32.6	23.3	2.3	4.0	<0.10	<0.01
WSR02	20/1/2024	Mid-flood	Sunny	Moderate	В	9	2:05:00 PM	8.8	7.2	32.7	23.3	2.3	2.5	<0.10	<0.01
WSR03	20/1/2024	Mid-flood	Sunny	Moderate	S	1	1:45:00 PM	9.3	7.3	32.8	23.4	1.6	4.0	<0.10	<0.01
WSR03	20/1/2024	Mid-flood	Sunny	Moderate	S	1	1:45:00 PM	9.3	7.3	32.9	23.5	1.5	3.0	<0.10	<0.01
WSR03	20/1/2024	Mid-flood	Sunny	Moderate	М	4	1:46:00 PM	9.3	7.3	32.8	23.4	1.6	3.0	<0.10	<0.01
WSR03	20/1/2024	Mid-flood	Sunny	Moderate	М	4	1:46:00 PM	9.4	7.4	32.9	23.4	1.6	2.5	<0.10	<0.01
WSR03	20/1/2024	Mid-flood	Sunny	Moderate	В	7	1:47:00 PM	9.3	7.3	32.9	23.4	1.5	4.0	<0.10	<0.01
WSR03	20/1/2024	Mid-flood	Sunny	Moderate	В	7	1:47:00 PM	9.3	7.3	32.9	23.4	1.5	3.0	<0.10	<0.01
WSR04	20/1/2024	Mid-flood	Sunny	Moderate	S	1	1:31:00 PM	9.6	7.3	32.8	23.6	1.9	2.5	<0.10	<0.01
WSR04	20/1/2024	Mid-flood	Sunny	Moderate	S	1	1:31:00 PM	9.5	7.3	32.7	23.6	1.8	3.0	<0.10	<0.01
WSR04	20/1/2024	Mid-flood	Sunny	Moderate	М	4	1:32:00 PM	9.5	7.3	32.7	23.7	1.8	3.0	<0.10	<0.01
WSR04	20/1/2024	Mid-flood	Sunny	Moderate	М	4	1:32:00 PM	9.5	7.3	32.8	23.7	1.8	2.5	<0.10	<0.01
WSR04	20/1/2024	Mid-flood	Sunny	Moderate	В	7	1:33:00 PM	9.6	7.3	32.7	23.7	1.8	3.0	<0.10	<0.01
WSR04	20/1/2024	Mid-flood	Sunny	Moderate	В	7	1:33:00 PM	9.5	7.3	32.8	23.6	1.8	2.5	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	'otal Chlorine (mg/L)
WSR16	20/1/2024	Mid-flood	Sunny	Moderate	S	1	12:00:00 PM	9.6	7.3	32.2	23.5	2.2	2.5	<0.10	<0.01
WSR16	20/1/2024	Mid-flood	Sunny	Moderate	S	1	12:00:00 PM	9.6	7.3	32.2	23.5	2.2	2.5	<0.10	<0.01
WSR16	20/1/2024	Mid-flood	Sunny	Moderate	М	8	12:01:00 PM	9.6	7.3	32.3	23.5	2.2	2.5	<0.10	<0.01
WSR16	20/1/2024	Mid-flood	Sunny	Moderate	М	8	12:01:00 PM	9.6	7.3	32.3	23.5	2.2	4.0	<0.10	<0.01
WSR16	20/1/2024	Mid-flood	Sunny	Moderate	В	14	12:02:00 PM	9.7	7.3	32.3	23.4	2.2	4.0	<0.10	<0.01
WSR16	20/1/2024	Mid-flood	Sunny	Moderate	В	14	12:02:00 PM	9.6	7.3	32.2	23.5	2.2	2.5	<0.10	<0.01
WSR33	20/1/2024	Mid-flood	Sunny	Moderate	S	1	1:14:00 PM	9.0	7.3	33.6	23.3	2.2	4.0	<0.10	<0.01
WSR33	20/1/2024	Mid-flood	Sunny	Moderate	S	1	1:14:00 PM	9.0	7.3	33.6	23.4	2.1	2.5	<0.10	<0.01
WSR33	20/1/2024	Mid-flood	Sunny	Moderate	М	4	1:15:00 PM	9.1	7.2	33.5	23.4	2.2	3.0	<0.10	<0.01
WSR33	20/1/2024	Mid-flood	Sunny	Moderate	М	4	1:15:00 PM	9.1	7.3	33.6	23.3	2.2	2.5	<0.10	<0.01
WSR33	20/1/2024	Mid-flood	Sunny	Moderate	В	6	1:16:00 PM	9.0	7.3	33.6	23.3	2.2	3.0	<0.10	<0.01
WSR33	20/1/2024	Mid-flood	Sunny	Moderate	В	6	1:16:00 PM	9.1	7.3	33.6	23.4	2.3	3.0	<0.10	<0.01
WSR36	20/1/2024	Mid-flood	Sunny	Moderate	S	1	1:00:00 PM	9.8	7.3	32.6	23.3	2.2	4.0	<0.10	<0.01
WSR36	20/1/2024	Mid-flood	Sunny	Moderate	S	1	1:00:00 PM	9.8	7.4	32.7	23.3	2.2	4.0	<0.10	<0.01
WSR36	20/1/2024	Mid-flood	Sunny	Moderate	М	3	1:01:00 PM	9.8	7.4	32.6	23.3	2.2	2.5	<0.10	<0.01
WSR36	20/1/2024	Mid-flood	Sunny	Moderate	М	3	1:01:00 PM	9.8	7.3	32.6	23.3	2.1	3.0	<0.10	<0.01
WSR36	20/1/2024	Mid-flood	Sunny	Moderate	В	6	1:01:00 PM	9.8	7.4	32.7	23.3	2.2	3.0	<0.10	<0.01
WSR36	20/1/2024	Mid-flood	Sunny	Moderate	В	6	1:01:00 PM	9.8	7.3	32.6	23.3	2.2	3.0	<0.10	<0.01
WSR37	20/1/2024	Mid-flood	Sunny	Moderate	S	1	12:54:00 PM	8.5	7.1	32.7	23.4	2.2	4.0	<0.10	<0.01
WSR37	20/1/2024	Mid-flood	Sunny	Moderate	S	1	12:54:00 PM	8.4	7.2	32.6	23.5	2.3	4.0	<0.10	<0.01
WSR37	20/1/2024	Mid-flood	Sunny	Moderate	М	4	12:55:00 PM	8.5	7.2	32.6	23.5	2.2	2.5	<0.10	<0.01
WSR37	20/1/2024	Mid-flood	Sunny	Moderate	М	4	12:55:00 PM	8.5	7.2	32.7	23.5	2.3	2.5	<0.10	<0.01
WSR37	20/1/2024	Mid-flood	Sunny	Moderate	В	8	12:56:00 PM	8.5	7.1	32.7	23.4	2.2	3.0	<0.10	<0.01
WSR37	20/1/2024	Mid-flood	Sunny	Moderate	В	8	12:56:00 PM	8.5	7.2	32.7	23.5	2.2	5.0	<0.10	<0.01
NF1	20/1/2024	Mid-flood	Sunny	Moderate	S	1	12:22:00 PM	9.2	7.2	32.3	23.3	2.2	3.0	<0.10	<0.01
NF1	20/1/2024	Mid-flood	Sunny	Moderate	S	1	12:22:00 PM	9.3	7.2	32.3	23.3	2.2	3.0	<0.10	<0.01
NF1	20/1/2024	Mid-flood	Sunny	Moderate	М	7	12:23:00 PM	9.2	7.2	32.4	23.3	2.2	2.5	<0.10	<0.01
NF1	20/1/2024	Mid-flood	Sunny	Moderate	М	7	12:23:00 PM	9.3	7.3	32.4	23.3	2.3	2.5	<0.10	<0.01
NF1	20/1/2024	Mid-flood	Sunny	Moderate	В	12	12:24:00 PM	9.2	7.2	32.4	23.3	2.2	3.0	<0.10	<0.01
NF1	20/1/2024	Mid-flood	Sunny	Moderate	В	12	12:24:00 PM	9.3	7.3	32.4	23.3	2.2	2.5	<0.10	<0.01
NF2	20/1/2024	Mid-flood	Sunny	Moderate	S	1	12:39:00 PM	8.4	7.2	32.5	23.6	1.9	2.5	<0.10	<0.01
NF2	20/1/2024	Mid-flood	Sunny	Moderate	S	1	12:39:00 PM	8.4	7.2	32.7	23.7	1.8	3.0	<0.10	<0.01
NF2	20/1/2024	Mid-flood	Sunny	Moderate	М	5	12:40:00 PM	8.4	7.2	32.7	23.6	1.9	3.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) 1	otal Chlorine (mg/L)
NF2	20/1/2024	Mid-flood	Sunny	Moderate	М	5	12:40:00 PM	8.4	7.1	32.5	23.6	1.9	2.5	<0.10	<0.01
NF2	20/1/2024	Mid-flood	Sunny	Moderate	В	10	12:41:00 PM	8.4	7.1	32.6	23.6	1.9	2.5	<0.10	<0.01
NF2	20/1/2024	Mid-flood	Sunny	Moderate	В	10	12:41:00 PM	8.4	7.1	32.6	23.6	1.9	2.5	<0.10	<0.01
NF3	20/1/2024	Mid-flood	Sunny	Moderate	S	1	12:47:00 PM	9.2	7.4	33.3	23.3	1.7	3.0	<0.10	<0.01
NF3	20/1/2024	Mid-flood	Sunny	Moderate	S	1	12:47:00 PM	9.1	7.4	33.4	23.4	1.7	3.0	<0.10	<0.01
NF3	20/1/2024	Mid-flood	Sunny	Moderate	М	6	12:48:00 PM	9.2	7.4	33.2	23.4	1.8	3.0	<0.10	<0.01
NF3	20/1/2024	Mid-flood	Sunny	Moderate	М	6	12:48:00 PM	9.1	7.4	33.3	23.4	1.7	2.5	<0.10	<0.01
NF3	20/1/2024	Mid-flood	Sunny	Moderate	В	11	12:49:00 PM	9.1	7.4	33.3	23.4	1.8	3.0	<0.10	<0.01
NF3	20/1/2024	Mid-flood	Sunny	Moderate	В	11	12:49:00 PM	9.2	7.4	33.3	23.3	1.8	2.5	<0.10	<0.01
CE	23/1/2024	Mid-flood	Sunny	Moderate	S	1	12:21:00 PM	9.1	7.3	33.1	23.2	2.6	7.0	<0.10	<0.01
CE	23/1/2024	Mid-flood	Sunny	Moderate	S	1	12:21:00 PM	9.1	7.3	33.1	23.3	2.6	4.0	<0.10	<0.01
CE	23/1/2024	Mid-flood	Sunny	Moderate	М	12	12:22:00 PM	9.1	7.3	33.1	23.3	2.5	6.0	<0.10	<0.01
CE	23/1/2024	Mid-flood	Sunny	Moderate	М	12	12:22:00 PM	9.1	7.3	33.2	23.3	2.5	7.0	<0.10	<0.01
CE	23/1/2024	Mid-flood	Sunny	Moderate	В	22	12:23:00 PM	9.1	7.3	33.1	23.3	2.5	4.0	<0.10	<0.01
CE	23/1/2024	Mid-flood	Sunny	Moderate	В	22	12:23:00 PM	9.1	7.3	33.1	23.3	2.5	6.0	<0.10	<0.01
CF	23/1/2024	Mid-flood	Sunny	Moderate	S	1	9:24:00 AM	9.8	7.2	33.9	23.2	2.7	6.0	<0.10	<0.01
CF	23/1/2024	Mid-flood	Sunny	Moderate	S	1	9:24:00 AM	9.8	7.2	33.8	23.2	2.8	5.0	<0.10	<0.01
CF	23/1/2024	Mid-flood	Sunny	Moderate	М	10	9:25:00 AM	9.7	7.2	33.9	23.2	2.6	4.0	<0.10	<0.01
CF	23/1/2024	Mid-flood	Sunny	Moderate	М	10	9:25:00 AM	9.7	7.1	33.9	23.3	2.6	5.0	<0.10	<0.01
CF	23/1/2024	Mid-flood	Sunny	Moderate	В	20	9:26:00 AM	9.7	7.2	33.9	23.2	2.6	4.0	<0.10	<0.01
CF	23/1/2024	Mid-flood	Sunny	Moderate	В	20	9:26:00 AM	9.8	7.2	33.8	23.2	2.7	5.0	<0.10	<0.01
WSR01	23/1/2024	Mid-flood	Sunny	Moderate	S	1	9:48:00 AM	8.5	7.4	33.8	23.3	2.2	6.0	<0.10	<0.01
WSR01	23/1/2024	Mid-flood	Sunny	Moderate	S	1	9:48:00 AM	8.7	7.4	33.7	23.3	2.2	6.0	<0.10	<0.01
WSR01	23/1/2024	Mid-flood	Sunny	Moderate	М	4	9:49:00 AM	8.7	7.4	33.7	23.3	2.2	7.0	<0.10	<0.01
WSR01	23/1/2024	Mid-flood	Sunny	Moderate	М	4	9:49:00 AM	8.6	7.4	33.8	23.3	2.2	7.0	<0.10	<0.01
WSR01	23/1/2024	Mid-flood	Sunny	Moderate	В	7	9:50:00 AM	8.6	7.4	33.7	23.3	2.2	6.0	<0.10	<0.01
WSR01	23/1/2024	Mid-flood	Sunny	Moderate	В	7	9:50:00 AM	8.7	7.4	33.8	23.3	2.2	9.0	<0.10	<0.01
WSR02	23/1/2024	Mid-flood	Sunny	Moderate	S	1	10:07:00 AM	9.6	7.2	33.2	23.2	1.8	5.0	<0.10	<0.01
WSR02	23/1/2024	Mid-flood	Sunny	Moderate	S	1	10:07:00 AM	9.6	7.2	33.3	23.3	1.8	9.0	<0.10	<0.01
WSR02	23/1/2024	Mid-flood	Sunny	Moderate	М	5	10:08:00 AM	9.7	7.2	33.2	23.2	1.7	9.0	<0.10	<0.01
WSR02	23/1/2024	Mid-flood	Sunny	Moderate	М	5	10:08:00 AM	9.6	7.2	33.3	23.2	1.8	8.0	<0.10	<0.01
WSR02	23/1/2024	Mid-flood	Sunny	Moderate	В	9	10:09:00 AM	9.6	7.2	33.2	23.3	1.8	4.0	<0.10	<0.01
WSR02	23/1/2024	Mid-flood	Sunny	Moderate	В	9	10:09:00 AM	9.6	7.2	33.3	23.2	1.8	5.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	D0 (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	Cotal Chlorine (mg/L)
WSR03	23/1/2024	Mid-flood	Sunny	Moderate	S	1	10:23:00 AM	9.5	7.3	32.5	23.3	1.7	5.0	<0.10	<0.01
WSR03	23/1/2024	Mid-flood	Sunny	Moderate	S	1	10:23:00 AM	9.5	7.2	32.7	23.3	1.8	6.0	<0.10	<0.01
WSR03	23/1/2024	Mid-flood	Sunny	Moderate	М	4	10:24:00 AM	9.6	7.3	32.7	23.3	1.9	6.0	<0.10	<0.01
WSR03	23/1/2024	Mid-flood	Sunny	Moderate	М	4	10:24:00 AM	9.5	7.3	32.6	23.2	1.9	4.0	<0.10	<0.01
WSR03	23/1/2024	Mid-flood	Sunny	Moderate	В	7	10:25:00 AM	9.6	7.3	32.6	23.3	1.9	7.0	<0.10	<0.01
WSR03	23/1/2024	Mid-flood	Sunny	Moderate	В	7	10:25:00 AM	9.5	7.3	32.6	23.3	1.9	6.0	<0.10	<0.01
WSR04	23/1/2024	Mid-flood	Sunny	Moderate	S	1	10:36:00 AM	8.8	7.2	32.8	23.2	2.0	4.0	<0.10	<0.01
WSR04	23/1/2024	Mid-flood	Sunny	Moderate	S	1	10:36:00 AM	8.8	7.2	32.9	23.2	2.0	4.0	<0.10	<0.01
WSR04	23/1/2024	Mid-flood	Sunny	Moderate	М	4	10:37:00 AM	8.8	7.2	32.8	23.3	2.0	4.0	<0.10	<0.01
WSR04	23/1/2024	Mid-flood	Sunny	Moderate	М	4	10:37:00 AM	8.7	7.2	32.8	23.2	2.0	4.0	<0.10	<0.01
WSR04	23/1/2024	Mid-flood	Sunny	Moderate	В	7	10:38:00 AM	8.8	7.2	32.9	23.3	2.0	5.0	<0.10	<0.01
WSR04	23/1/2024	Mid-flood	Sunny	Moderate	В	7	10:38:00 AM	8.7	7.2	32.9	23.2	2.0	6.0	<0.10	<0.01
WSR16	23/1/2024	Mid-flood	Sunny	Moderate	S	1	12:01:00 PM	8.9	7.2	32.0	23.2	1.8	3.0	<0.10	<0.01
WSR16	23/1/2024	Mid-flood	Sunny	Moderate	S	1	12:01:00 PM	8.9	7.1	32.1	23.2	1.9	5.0	<0.10	<0.01
WSR16	23/1/2024	Mid-flood	Sunny	Moderate	М	8	12:02:00 PM	8.8	7.1	32.0	23.2	1.8	7.0	<0.10	<0.01
WSR16	23/1/2024	Mid-flood	Sunny	Moderate	М	8	12:02:00 PM	8.9	7.2	32.1	23.2	1.8	5.0	<0.10	<0.01
WSR16	23/1/2024	Mid-flood	Sunny	Moderate	В	15	12:03:00 PM	8.8	7.1	32.1	23.2	1.9	7.0	<0.10	<0.01
WSR16	23/1/2024	Mid-flood	Sunny	Moderate	В	15	12:03:00 PM	8.8	7.2	32.0	23.2	2.0	5.0	<0.10	<0.01
WSR33	23/1/2024	Mid-flood	Sunny	Moderate	S	1	10:53:00 AM	8.9	7.4	32.7	23.1	1.8	7.0	<0.10	<0.01
WSR33	23/1/2024	Mid-flood	Sunny	Moderate	S	1	10:53:00 AM	8.9	7.4	32.7	23.1	1.9	5.0	<0.10	<0.01
WSR33	23/1/2024	Mid-flood	Sunny	Moderate	М	4	10:54:00 AM	8.8	7.4	32.6	23.2	1.8	5.0	<0.10	<0.01
WSR33	23/1/2024	Mid-flood	Sunny	Moderate	М	4	10:54:00 AM	8.8	7.4	32.7	23.1	1.9	5.0	<0.10	<0.01
WSR33	23/1/2024	Mid-flood	Sunny	Moderate	В	7	10:55:00 AM	8.9	7.4	32.6	23.1	1.8	9.0	<0.10	<0.01
WSR33	23/1/2024	Mid-flood	Sunny	Moderate	В	7	10:55:00 AM	8.8	7.4	32.6	23.1	1.8	10.0	<0.10	<0.01
WSR36	23/1/2024	Mid-flood	Sunny	Moderate	S	1	11:08:00 AM	9.1	7.4	32.7	23.4	2.2	7.0	<0.10	<0.01
WSR36	23/1/2024	Mid-flood	Sunny	Moderate	S	1	11:08:00 AM	9.1	7.4	32.7	23.3	2.2	5.0	<0.10	<0.01
WSR36	23/1/2024	Mid-flood	Sunny	Moderate	М	3	11:09:00 AM	9.1	7.4	32.6	23.3	2.2	8.0	<0.10	<0.01
WSR36	23/1/2024	Mid-flood	Sunny	Moderate	М	3	11:09:00 AM	9.0	7.3	32.7	23.3	2.2	5.0	<0.10	<0.01
WSR36	23/1/2024	Mid-flood	Sunny	Moderate	В	5	11:09:00 AM	9.1	7.4	32.6	23.3	2.2	6.0	<0.10	<0.01
WSR36	23/1/2024	Mid-flood	Sunny	Moderate	В	5	11:09:00 AM	9.1	7.4	32.6	23.4	2.2	5.0	<0.10	<0.01
WSR37	23/1/2024	Mid-flood	Sunny	Moderate	S	1	11:25:00 AM	9.0	7.4	33.5	23.1	2.1	6.0	<0.10	<0.01
WSR37	23/1/2024	Mid-flood	Sunny	Moderate	S	1	11:25:00 AM	9.0	7.4	33.6	23.1	2.1	9.0	<0.10	<0.01
WSR37	23/1/2024	Mid-flood	Sunny	Moderate	М	4	11:26:00 AM	9.0	7.4	33.5	23.1	2.0	8.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	'otal Chlorine (mg/L)
WSR37	23/1/2024	Mid-flood	Sunny	Moderate	М	4	11:26:00 AM	9.0	7.4	33.6	23.1	2.1	5.0	<0.10	<0.01
WSR37	23/1/2024	Mid-flood	Sunny	Moderate	В	7	11:27:00 AM	9.1	7.4	33.6	23.1	2.1	5.0	<0.10	<0.01
WSR37	23/1/2024	Mid-flood	Sunny	Moderate	В	7	11:27:00 AM	9.1	7.4	33.5	23.2	2.1	8.0	<0.10	<0.01
NF1	23/1/2024	Mid-flood	Sunny	Moderate	S	1	11:49:00 AM	9.5	7.2	33.6	23.1	1.8	4.0	<0.10	<0.01
NF1	23/1/2024	Mid-flood	Sunny	Moderate	S	1	11:49:00 AM	9.5	7.2	33.6	23.1	1.6	4.0	<0.10	<0.01
NF1	23/1/2024	Mid-flood	Sunny	Moderate	М	7	11:50:00 AM	9.5	7.2	33.6	23.1	1.8	3.0	<0.10	<0.01
NF1	23/1/2024	Mid-flood	Sunny	Moderate	М	7	11:50:00 AM	9.5	7.2	33.6	23.1	1.6	3.0	<0.10	<0.01
NF1	23/1/2024	Mid-flood	Sunny	Moderate	В	13	11:51:00 AM	9.5	7.2	33.6	23.0	1.6	4.0	<0.10	<0.01
NF1	23/1/2024	Mid-flood	Sunny	Moderate	В	13	11:51:00 AM	9.5	7.2	33.5	23.0	1.6	5.0	<0.10	<0.01
NF2	23/1/2024	Mid-flood	Sunny	Moderate	S	1	11:41:00 AM	8.9	7.4	33.0	23.3	1.9	3.0	<0.10	<0.01
NF2	23/1/2024	Mid-flood	Sunny	Moderate	S	1	11:41:00 AM	8.9	7.3	33.1	23.3	1.9	3.0	<0.10	<0.01
NF2	23/1/2024	Mid-flood	Sunny	Moderate	М	5	11:42:00 AM	9.0	7.4	33.0	23.2	1.9	5.0	<0.10	<0.01
NF2	23/1/2024	Mid-flood	Sunny	Moderate	М	5	11:42:00 AM	9.0	7.3	33.0	23.3	1.9	3.0	<0.10	<0.01
NF2	23/1/2024	Mid-flood	Sunny	Moderate	В	9	11:43:00 AM	8.9	7.3	33.0	23.3	1.9	5.0	<0.10	<0.01
NF2	23/1/2024	Mid-flood	Sunny	Moderate	В	9	11:43:00 AM	8.9	7.4	33.0	23.3	1.9	3.0	<0.10	<0.01
NF3	23/1/2024	Mid-flood	Sunny	Moderate	S	1	11:34:00 AM	8.6	7.2	33.2	23.2	2.2	3.0	<0.10	<0.01
NF3	23/1/2024	Mid-flood	Sunny	Moderate	S	1	11:34:00 AM	8.6	7.2	33.3	23.2	2.2	3.0	<0.10	<0.01
NF3	23/1/2024	Mid-flood	Sunny	Moderate	М	6	11:35:00 AM	8.5	7.2	33.2	23.2	2.2	3.0	<0.10	<0.01
NF3	23/1/2024	Mid-flood	Sunny	Moderate	М	6	11:35:00 AM	8.6	7.2	33.2	23.2	2.2	2.5	<0.10	<0.01
NF3	23/1/2024	Mid-flood	Sunny	Moderate	В	11	11:36:00 AM	8.6	7.2	33.3	23.2	2.2	3.0	<0.10	<0.01
NF3	23/1/2024	Mid-flood	Sunny	Moderate	В	11	11:36:00 AM	8.5	7.2	33.2	23.2	2.2	3.0	<0.10	<0.01
CE	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:00:00 AM	9.2	7.3	32.9	22.5	3.2	4.0	<0.10	<0.01
CE	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:00:00 AM	9.2	7.4	32.9	22.5	3.1	4.0	<0.10	<0.01
CE	25/1/2024	Mid-ebb	Sunny	Moderate	М	11	11:01:00 AM	9.2	7.4	32.9	22.6	2.9	6.0	<0.10	<0.01
CE	25/1/2024	Mid-ebb	Sunny	Moderate	М	11	11:01:00 AM	9.3	7.4	32.8	22.5	2.9	5.0	<0.10	<0.01
CE	25/1/2024	Mid-ebb	Sunny	Moderate	В	22	11:02:00 AM	9.2	7.4	32.7	22.5	2.9	4.0	<0.10	<0.01
CE	25/1/2024	Mid-ebb	Sunny	Moderate	В	22	11:02:00 AM	9.3	7.4	32.8	22.5	3.1	5.0	<0.10	<0.01
CF	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	2:15:00 PM	9.6	7.4	32.7	22.6	2.9	5.0	<0.10	<0.01
CF	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	2:15:00 PM	9.5	7.4	32.8	22.6	3.0	3.0	<0.10	<0.01
CF	25/1/2024	Mid-ebb	Sunny	Moderate	М	11	2:16:00 PM	9.6	7.4	32.7	22.6	2.7	4.0	<0.10	<0.01
CF	25/1/2024	Mid-ebb	Sunny	Moderate	М	11	2:16:00 PM	9.5	7.4	32.6	22.7	2.7	3.0	<0.10	<0.01
CF	25/1/2024	Mid-ebb	Sunny	Moderate	В	20	2:17:00 PM	9.5	7.4	32.6	22.7	2.8	5.0	<0.10	<0.01
CF	25/1/2024	Mid-ebb	Sunny	Moderate	В	20	2:17:00 PM	9.5	7.4	32.7	22.6	2.7	5.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	otal Chlorine (mg/L)
WSR01	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:51:00 PM	9.4	7.3	31.6	22.9	1.7	5.0	<0.10	<0.01
WSR01	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:51:00 PM	9.3	7.3	31.4	22.9	1.7	4.0	<0.10	<0.01
WSR01	25/1/2024	Mid-ebb	Sunny	Moderate	М	4	1:52:00 PM	9.4	7.3	31.4	22.8	1.6	3.0	<0.10	<0.01
WSR01	25/1/2024	Mid-ebb	Sunny	Moderate	М	4	1:52:00 PM	9.4	7.3	31.6	22.8	1.6	4.0	<0.10	<0.01
WSR01	25/1/2024	Mid-ebb	Sunny	Moderate	В	7	1:53:00 PM	9.4	7.3	31.5	22.8	1.6	3.0	<0.10	<0.01
WSR01	25/1/2024	Mid-ebb	Sunny	Moderate	В	7	1:53:00 PM	9.4	7.3	31.4	22.8	1.6	5.0	<0.10	<0.01
WSR02	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:33:00 PM	9.0	7.2	31.9	22.8	1.7	4.0	<0.10	<0.01
WSR02	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:33:00 PM	9.0	7.2	31.8	22.8	1.7	4.0	<0.10	<0.01
WSR02	25/1/2024	Mid-ebb	Sunny	Moderate	М	5	1:34:00 PM	9.0	7.2	31.7	22.8	1.7	3.0	<0.10	<0.01
WSR02	25/1/2024	Mid-ebb	Sunny	Moderate	М	5	1:34:00 PM	9.0	7.2	31.8	22.9	1.6	3.0	<0.10	<0.01
WSR02	25/1/2024	Mid-ebb	Sunny	Moderate	В	8	1:35:00 PM	8.9	7.2	31.9	22.8	1.7	4.0	<0.10	<0.01
WSR02	25/1/2024	Mid-ebb	Sunny	Moderate	В	8	1:35:00 PM	8.9	7.2	31.7	22.8	1.6	4.0	<0.10	<0.01
WSR03	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:15:00 PM	9.5	7.2	32.1	22.9	1.7	3.0	<0.10	<0.01
WSR03	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:15:00 PM	9.5	7.1	31.9	22.9	1.7	3.0	<0.10	<0.01
WSR03	25/1/2024	Mid-ebb	Sunny	Moderate	М	4	1:16:00 PM	9.4	7.1	31.9	22.9	1.7	4.0	<0.10	<0.01
WSR03	25/1/2024	Mid-ebb	Sunny	Moderate	М	4	1:16:00 PM	9.5	7.2	32.1	22.9	1.7	4.0	<0.10	<0.01
WSR03	25/1/2024	Mid-ebb	Sunny	Moderate	В	7	1:17:00 PM	9.5	7.2	32.0	22.9	1.8	4.0	<0.10	<0.01
WSR03	25/1/2024	Mid-ebb	Sunny	Moderate	В	7	1:17:00 PM	9.5	7.2	32.0	23.0	1.7	3.0	<0.10	<0.01
WSR04	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:01:00 PM	9.9	7.4	32.8	22.6	2.3	3.0	<0.10	<0.01
WSR04	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	1:01:00 PM	9.8	7.4	33.0	22.7	2.3	3.0	<0.10	<0.01
WSR04	25/1/2024	Mid-ebb	Sunny	Moderate	М	4	1:02:00 PM	9.9	7.3	32.8	22.7	2.3	3.0	<0.10	<0.01
WSR04	25/1/2024	Mid-ebb	Sunny	Moderate	М	4	1:02:00 PM	9.9	7.3	32.8	22.7	2.2	3.0	<0.10	<0.01
WSR04	25/1/2024	Mid-ebb	Sunny	Moderate	В	7	1:03:00 PM	9.8	7.4	32.9	22.7	2.3	3.0	<0.10	<0.01
WSR04	25/1/2024	Mid-ebb	Sunny	Moderate	В	7	1:03:00 PM	9.9	7.3	32.9	22.6	2.3	3.0	<0.10	<0.01
WSR16	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:24:00 AM	9.2	7.2	31.8	22.7	2.2	4.0	<0.10	<0.01
WSR16	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:24:00 AM	9.3	7.2	31.6	22.6	2.2	3.0	<0.10	<0.01
WSR16	25/1/2024	Mid-ebb	Sunny	Moderate	М	8	11:25:00 AM	9.3	7.3	31.6	22.7	2.2	3.0	<0.10	<0.01
WSR16	25/1/2024	Mid-ebb	Sunny	Moderate	М	8	11:25:00 AM	9.3	7.3	31.7	22.6	2.2	5.0	<0.10	<0.01
WSR16	25/1/2024	Mid-ebb	Sunny	Moderate	В	14	11:26:00 AM	9.3	7.2	31.6	22.6	2.2	2.5	<0.10	<0.01
WSR16	25/1/2024	Mid-ebb	Sunny	Moderate	В	14	11:26:00 AM	9.2	7.3	31.6	22.6	2.3	2.5	<0.10	<0.01
WSR33	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:44:00 PM	9.3	7.4	32.5	22.9	2.3	5.0	<0.10	<0.01
WSR33	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:44:00 PM	9.2	7.4	32.5	22.9	2.2	5.0	<0.10	<0.01
WSR33	25/1/2024	Mid-ebb	Sunny	Moderate	М	4	12:45:00 PM	9.3	7.4	32.8	22.9	2.3	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	D0 (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	otal Chlorine (mg/L)
WSR33	25/1/2024	Mid-ebb	Sunny	Moderate	М	4	12:45:00 PM	9.2	7.4	32.6	22.8	2.2	5.0	<0.10	<0.01
WSR33	25/1/2024	Mid-ebb	Sunny	Moderate	В	7	12:46:00 PM	9.2	7.4	32.7	22.9	2.3	4.0	<0.10	<0.01
WSR33	25/1/2024	Mid-ebb	Sunny	Moderate	В	7	12:46:00 PM	9.2	7.4	32.5	22.9	2.3	4.0	<0.10	<0.01
WSR36	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:26:00 PM	9.4	7.3	32.3	22.9	2.2	6.0	<0.10	<0.01
WSR36	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:26:00 PM	9.5	7.3	32.4	22.9	2.2	6.0	<0.10	<0.01
WSR36	25/1/2024	Mid-ebb	Sunny	Moderate	М	3	12:27:00 PM	9.5	7.4	32.3	22.9	2.0	3.0	<0.10	<0.01
WSR36	25/1/2024	Mid-ebb	Sunny	Moderate	М	3	12:27:00 PM	9.5	7.4	32.2	23.0	2.0	4.0	<0.10	<0.01
WSR36	25/1/2024	Mid-ebb	Sunny	Moderate	В	6	12:27:00 PM	9.6	7.4	32.1	22.9	1.8	4.0	<0.10	<0.01
WSR36	25/1/2024	Mid-ebb	Sunny	Moderate	В	6	12:27:00 PM	9.5	7.4	32.3	22.9	2.0	6.0	<0.10	<0.01
WSR37	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:20:00 PM	9.9	7.4	32.5	23.1	2.3	4.0	<0.10	<0.01
WSR37	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:20:00 PM	9.8	7.3	32.4	23.0	2.3	6.0	<0.10	<0.01
WSR37	25/1/2024	Mid-ebb	Sunny	Moderate	М	4	12:21:00 PM	9.9	7.3	32.6	23.0	2.3	4.0	<0.10	<0.01
WSR37	25/1/2024	Mid-ebb	Sunny	Moderate	М	4	12:21:00 PM	9.8	7.3	32.6	23.0	2.3	5.0	<0.10	<0.01
WSR37	25/1/2024	Mid-ebb	Sunny	Moderate	В	7	12:22:00 PM	9.8	7.3	32.5	23.0	2.3	5.0	<0.10	<0.01
WSR37	25/1/2024	Mid-ebb	Sunny	Moderate	В	7	12:22:00 PM	9.9	7.3	32.7	22.9	2.3	3.0	<0.10	<0.01
NF1	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:46:00 AM	9.6	7.5	32.6	22.7	1.7	3.0	<0.10	<0.01
NF1	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	11:46:00 AM	9.6	7.4	32.7	22.8	1.7	5.0	<0.10	<0.01
NF1	25/1/2024	Mid-ebb	Sunny	Moderate	М	7	11:47:00 AM	9.6	7.4	32.5	22.8	1.7	3.0	<0.10	<0.01
NF1	25/1/2024	Mid-ebb	Sunny	Moderate	М	7	11:47:00 AM	9.6	7.4	32.7	22.8	1.7	4.0	<0.10	<0.01
NF1	25/1/2024	Mid-ebb	Sunny	Moderate	В	13	11:48:00 AM	9.6	7.4	32.5	22.8	1.7	5.0	<0.10	<0.01
NF1	25/1/2024	Mid-ebb	Sunny	Moderate	В	13	11:48:00 AM	9.5	7.5	32.6	22.7	1.6	3.0	<0.10	<0.01
NF2	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:03:00 PM	9.1	7.2	32.3	22.7	2.2	3.0	<0.10	<0.01
NF2	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:03:00 PM	9.1	7.2	32.6	22.7	2.2	3.0	<0.10	<0.01
NF2	25/1/2024	Mid-ebb	Sunny	Moderate	М	5	12:04:00 PM	9.1	7.2	32.3	22.8	2.2	4.0	<0.10	<0.01
NF2	25/1/2024	Mid-ebb	Sunny	Moderate	М	5	12:04:00 PM	9.1	7.2	32.4	22.7	2.2	3.0	<0.10	<0.01
NF2	25/1/2024	Mid-ebb	Sunny	Moderate	В	10	12:05:00 PM	9.2	7.2	32.4	22.7	2.2	5.0	<0.10	<0.01
NF2	25/1/2024	Mid-ebb	Sunny	Moderate	В	10	12:05:00 PM	9.1	7.2	32.3	22.8	2.2	4.0	<0.10	<0.01
NF3	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:12:00 PM	9.1	7.3	32.5	23.1	2.0	3.0	<0.10	<0.01
NF3	25/1/2024	Mid-ebb	Sunny	Moderate	S	1	12:12:00 PM	9.1	7.3	32.6	23.0	2.1	3.0	<0.10	<0.01
NF3	25/1/2024	Mid-ebb	Sunny	Moderate	М	6	12:13:00 PM	9.1	7.2	32.6	23.0	2.1	6.0	<0.10	<0.01
NF3	25/1/2024	Mid-ebb	Sunny	Moderate	М	6	12:13:00 PM	9.0	7.3	32.6	23.0	2.0	3.0	<0.10	<0.01
NF3	25/1/2024	Mid-ebb	Sunny	Moderate	В	11	12:14:00 PM	9.1	7.3	32.6	23.0	2.0	5.0	<0.10	<0.01
NF3	25/1/2024	Mid-ebb	Sunny	Moderate	В	11	12:14:00 PM	9.0	7.3	32.7	23.0	2.0	3.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	otal Chlorine (mg/L)
CE	27/1/2024	Mid-flood	Sunny	Moderate	S	1	10:51:00 AM	8.6	7.4	32.3	24.3	1.8	3.0	<0.10	<0.01
CE	27/1/2024	Mid-flood	Sunny	Moderate	S	1	10:51:00 AM	8.6	7.3	32.2	24.3	1.7	2.5	<0.10	<0.01
CE	27/1/2024	Mid-flood	Sunny	Moderate	М	10	10:52:00 AM	8.7	7.3	32.3	24.3	1.8	4.0	<0.10	<0.01
CE	27/1/2024	Mid-flood	Sunny	Moderate	М	10	10:52:00 AM	8.6	7.3	32.3	24.3	1.7	5.0	<0.10	<0.01
CE	27/1/2024	Mid-flood	Sunny	Moderate	В	20	10:53:00 AM	8.6	7.3	32.3	24.3	1.7	4.0	<0.10	<0.01
CE	27/1/2024	Mid-flood	Sunny	Moderate	В	20	10:53:00 AM	8.6	7.3	32.2	24.4	1.7	4.0	<0.10	<0.01
CF	27/1/2024	Mid-flood	Sunny	Moderate	S	1	8:03:00 AM	9.2	7.3	32.2	24.4	1.8	5.0	<0.10	<0.01
CF	27/1/2024	Mid-flood	Sunny	Moderate	S	1	8:03:00 AM	9.2	7.3	32.2	24.3	1.8	4.0	<0.10	<0.01
CF	27/1/2024	Mid-flood	Sunny	Moderate	М	10	8:04:00 AM	9.3	7.2	32.2	24.3	1.8	4.0	<0.10	<0.01
CF	27/1/2024	Mid-flood	Sunny	Moderate	М	10	8:04:00 AM	9.2	7.3	32.2	24.4	1.8	2.5	<0.10	<0.01
CF	27/1/2024	Mid-flood	Sunny	Moderate	В	19	8:05:00 AM	9.2	7.3	32.3	24.2	1.8	4.0	<0.10	<0.01
CF	27/1/2024	Mid-flood	Sunny	Moderate	В	19	8:05:00 AM	9.2	7.2	32.2	24.3	1.8	3.0	<0.10	<0.01
WSR01	27/1/2024	Mid-flood	Sunny	Moderate	S	1	8:26:00 AM	8.7	7.3	32.7	24.4	2.2	3.0	<0.10	<0.01
WSR01	27/1/2024	Mid-flood	Sunny	Moderate	S	1	8:26:00 AM	8.6	7.3	32.7	24.4	2.1	4.0	<0.10	<0.01
WSR01	27/1/2024	Mid-flood	Sunny	Moderate	М	4	8:27:00 AM	8.7	7.2	32.7	24.4	2.1	4.0	<0.10	<0.01
WSR01	27/1/2024	Mid-flood	Sunny	Moderate	М	4	8:27:00 AM	8.7	7.2	32.6	24.4	2.1	6.0	<0.10	<0.01
WSR01	27/1/2024	Mid-flood	Sunny	Moderate	В	8	8:28:00 AM	8.7	7.3	32.7	24.4	2.1	6.0	<0.10	<0.01
WSR01	27/1/2024	Mid-flood	Sunny	Moderate	В	8	8:28:00 AM	8.6	7.3	32.7	24.3	2.1	4.0	<0.10	<0.01
WSR02	27/1/2024	Mid-flood	Sunny	Moderate	S	1	8:44:00 AM	8.4	7.4	32.7	24.2	1.6	4.0	<0.10	<0.01
WSR02	27/1/2024	Mid-flood	Sunny	Moderate	S	1	8:44:00 AM	8.5	7.4	32.6	24.2	1.6	4.0	<0.10	<0.01
WSR02	27/1/2024	Mid-flood	Sunny	Moderate	М	5	8:45:00 AM	8.5	7.4	32.7	24.3	1.7	4.0	<0.10	<0.01
WSR02	27/1/2024	Mid-flood	Sunny	Moderate	М	5	8:45:00 AM	8.5	7.3	32.6	24.3	1.7	3.0	<0.10	<0.01
WSR02	27/1/2024	Mid-flood	Sunny	Moderate	В	9	8:46:00 AM	8.4	7.4	32.6	24.3	1.7	4.0	<0.10	<0.01
WSR02	27/1/2024	Mid-flood	Sunny	Moderate	В	9	8:46:00 AM	8.4	7.3	32.7	24.2	1.7	3.0	<0.10	<0.01
WSR03	27/1/2024	Mid-flood	Sunny	Moderate	S	1	8:57:00 AM	8.5	7.4	33.3	24.4	2.2	3.0	<0.10	<0.01
WSR03	27/1/2024	Mid-flood	Sunny	Moderate	S	1	8:57:00 AM	8.6	7.3	33.3	24.4	2.2	6.0	<0.10	<0.01
WSR03	27/1/2024	Mid-flood	Sunny	Moderate	М	4	8:58:00 AM	8.6	7.4	33.2	24.4	2.2	4.0	<0.10	<0.01
WSR03	27/1/2024	Mid-flood	Sunny	Moderate	М	4	8:58:00 AM	8.5	7.4	33.3	24.4	2.2	3.0	<0.10	<0.01
WSR03	27/1/2024	Mid-flood	Sunny	Moderate	В	7	8:59:00 AM	8.6	7.3	33.2	24.4	2.2	5.0	<0.10	<0.01
WSR03	27/1/2024	Mid-flood	Sunny	Moderate	В	7	8:59:00 AM	8.5	7.4	33.3	24.4	2.3	4.0	<0.10	<0.01
WSR04	27/1/2024	Mid-flood	Sunny	Moderate	S	1	9:11:00 AM	8.4	7.2	33.0	24.1	1.9	2.5	<0.10	<0.01
WSR04	27/1/2024	Mid-flood	Sunny	Moderate	S	1	9:11:00 AM	8.4	7.3	33.0	24.1	1.9	2.5	<0.10	<0.01
WSR04	27/1/2024	Mid-flood	Sunny	Moderate	М	4	9:12:00 AM	8.4	7.2	32.9	24.2	1.9	5.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	рН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	otal Chlorine (mg/L)
WSR04	27/1/2024	Mid-flood	Sunny	Moderate	М	4	9:12:00 AM	8.3	7.3	32.9	24.2	1.9	6.0	<0.10	<0.01
WSR04	27/1/2024	Mid-flood	Sunny	Moderate	В	7	9:13:00 AM	8.4	7.2	32.9	24.3	1.9	5.0	<0.10	<0.01
WSR04	27/1/2024	Mid-flood	Sunny	Moderate	В	7	9:13:00 AM	8.4	7.2	32.9	24.2	1.9	5.0	<0.10	<0.01
WSR16	27/1/2024	Mid-flood	Sunny	Moderate	S	1	10:31:00 AM	8.0	7.3	32.7	24.2	2.0	4.0	<0.10	<0.01
WSR16	27/1/2024	Mid-flood	Sunny	Moderate	S	1	10:31:00 AM	8.0	7.2	32.9	24.2	2.0	3.0	<0.10	<0.01
WSR16	27/1/2024	Mid-flood	Sunny	Moderate	М	8	10:32:00 AM	8.1	7.2	32.9	24.2	2.0	5.0	<0.10	<0.01
WSR16	27/1/2024	Mid-flood	Sunny	Moderate	М	8	10:32:00 AM	8.0	7.2	32.9	24.1	1.9	4.0	<0.10	<0.01
WSR16	27/1/2024	Mid-flood	Sunny	Moderate	В	15	10:33:00 AM	8.0	7.2	32.8	24.2	2.0	4.0	<0.10	<0.01
WSR16	27/1/2024	Mid-flood	Sunny	Moderate	В	15	10:33:00 AM	8.0	7.3	32.8	24.2	2.0	5.0	<0.10	<0.01
WSR33	27/1/2024	Mid-flood	Sunny	Moderate	S	1	9:26:00 AM	8.4	7.3	33.1	24.4	2.4	5.0	<0.10	<0.01
WSR33	27/1/2024	Mid-flood	Sunny	Moderate	S	1	9:26:00 AM	8.4	7.2	33.0	24.3	2.4	5.0	<0.10	<0.01
WSR33	27/1/2024	Mid-flood	Sunny	Moderate	М	4	9:27:00 AM	8.4	7.2	33.0	24.4	2.4	4.0	<0.10	<0.01
WSR33	27/1/2024	Mid-flood	Sunny	Moderate	М	4	9:27:00 AM	8.4	7.2	33.0	24.4	2.4	3.0	<0.10	<0.01
WSR33	27/1/2024	Mid-flood	Sunny	Moderate	В	6	9:28:00 AM	8.4	7.2	32.9	24.3	2.4	3.0	<0.10	<0.01
WSR33	27/1/2024	Mid-flood	Sunny	Moderate	В	6	9:28:00 AM	8.4	7.2	33.0	24.3	2.4	5.0	<0.10	<0.01
WSR36	27/1/2024	Mid-flood	Sunny	Moderate	S	1	9:40:00 AM	9.1	7.3	32.3	24.4	1.9	3.0	<0.10	<0.01
WSR36	27/1/2024	Mid-flood	Sunny	Moderate	S	1	9:40:00 AM	9.2	7.3	32.1	24.5	1.9	4.0	<0.10	<0.01
WSR36	27/1/2024	Mid-flood	Sunny	Moderate	М	3	9:41:00 AM	9.1	7.3	32.2	24.4	2.0	3.0	<0.10	<0.01
WSR36	27/1/2024	Mid-flood	Sunny	Moderate	М	3	9:41:00 AM	9.2	7.3	32.2	24.4	2.0	3.0	<0.10	<0.01
WSR36	27/1/2024	Mid-flood	Sunny	Moderate	В	6	9:41:00 AM	9.2	7.4	32.2	24.4	2.0	3.0	<0.10	<0.01
WSR36	27/1/2024	Mid-flood	Sunny	Moderate	В	6	9:41:00 AM	9.1	7.3	32.2	24.5	1.9	3.0	<0.10	<0.01
WSR37	27/1/2024	Mid-flood	Sunny	Moderate	S	1	9:55:00 AM	8.9	7.4	33.0	24.5	2.3	4.0	<0.10	<0.01
WSR37	27/1/2024	Mid-flood	Sunny	Moderate	S	1	9:55:00 AM	8.9	7.4	33.1	24.5	2.3	5.0	<0.10	<0.01
WSR37	27/1/2024	Mid-flood	Sunny	Moderate	М	4	9:56:00 AM	8.9	7.3	33.1	24.6	2.3	3.0	<0.10	<0.01
WSR37	27/1/2024	Mid-flood	Sunny	Moderate	М	4	9:56:00 AM	8.8	7.4	33.2	24.6	2.3	5.0	<0.10	<0.01
WSR37	27/1/2024	Mid-flood	Sunny	Moderate	В	7	9:57:00 AM	8.9	7.3	33.2	24.6	2.4	4.0	<0.10	<0.01
WSR37	27/1/2024	Mid-flood	Sunny	Moderate	В	7	9:57:00 AM	8.9	7.3	33.1	24.5	2.3	3.0	<0.10	<0.01
NF1	27/1/2024	Mid-flood	Sunny	Moderate	S	1	10:20:00 AM	9.0	7.3	33.2	24.4	1.8	4.0	<0.10	<0.01
NF1	27/1/2024	Mid-flood	Sunny	Moderate	S	1	10:20:00 AM	8.9	7.3	33.1	24.4	1.8	4.0	<0.10	<0.01
NF1	27/1/2024	Mid-flood	Sunny	Moderate	М	7	10:21:00 AM	9.0	7.3	33.1	24.4	1.8	5.0	<0.10	<0.01
NF1	27/1/2024	Mid-flood	Sunny	Moderate	М	7	10:21:00 AM	8.9	7.4	33.1	24.4	1.8	4.0	<0.10	<0.01
NF1	27/1/2024	Mid-flood	Sunny	Moderate	В	12	10:22:00 AM	9.0	7.3	33.1	24.4	1.8	3.0	<0.10	<0.01
NF1	27/1/2024	Mid-flood	Sunny	Moderate	В	12	10:22:00 AM	9.0	7.3	33.2	24.4	1.8	5.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	D0 (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	otal Chlorine (mg/L)
NF2	27/1/2024	Mid-flood	Sunny	Moderate	S	1	10:11:00 AM	8.6	7.3	33.3	24.3	1.8	2.5	<0.10	<0.01
NF2	27/1/2024	Mid-flood	Sunny	Moderate	S	1	10:11:00 AM	8.7	7.4	33.4	24.3	1.8	3.0	<0.10	<0.01
NF2	27/1/2024	Mid-flood	Sunny	Moderate	М	5	10:12:00 AM	8.7	7.3	33.4	24.3	1.8	4.0	<0.10	<0.01
NF2	27/1/2024	Mid-flood	Sunny	Moderate	М	5	10:12:00 AM	8.6	7.4	33.3	24.3	1.7	5.0	<0.10	<0.01
NF2	27/1/2024	Mid-flood	Sunny	Moderate	В	10	10:13:00 AM	8.6	7.3	33.3	24.2	1.8	5.0	<0.10	<0.01
NF2	27/1/2024	Mid-flood	Sunny	Moderate	В	10	10:13:00 AM	8.6	7.3	33.3	24.2	1.8	4.0	<0.10	<0.01
NF3	27/1/2024	Mid-flood	Sunny	Moderate	S	1	10:04:00 AM	8.8	7.2	32.2	24.3	1.9	5.0	<0.10	<0.01
NF3	27/1/2024	Mid-flood	Sunny	Moderate	S	1	10:04:00 AM	8.8	7.2	32.2	24.3	2.0	5.0	<0.10	<0.01
NF3	27/1/2024	Mid-flood	Sunny	Moderate	М	6	10:05:00 AM	8.8	7.3	32.2	24.2	2.0	4.0	<0.10	<0.01
NF3	27/1/2024	Mid-flood	Sunny	Moderate	М	6	10:05:00 AM	8.9	7.3	32.2	24.2	1.9	4.0	<0.10	<0.01
NF3	27/1/2024	Mid-flood	Sunny	Moderate	В	11	10:06:00 AM	8.8	7.3	32.3	24.2	1.9	4.0	<0.10	<0.01
NF3	27/1/2024	Mid-flood	Sunny	Moderate	В	11	10:06:00 AM	8.8	7.2	32.2	24.3	2.0	3.0	<0.10	<0.01
CE	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	11:00:00 AM	9.1	7.3	33.8	21.8	2.3	4.0	<0.10	<0.01
CE	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	11:00:00 AM	9.1	7.3	33.7	21.7	2.3	5.0	<0.10	<0.01
CE	30/1/2024	Mid-flood	Cloudy	Moderate	М	12	11:01:00 AM	9.1	7.3	33.8	21.8	2.2	4.0	<0.10	<0.01
CE	30/1/2024	Mid-flood	Cloudy	Moderate	М	12	11:01:00 AM	9.1	7.3	33.8	21.7	2.2	4.0	<0.10	<0.01
CE	30/1/2024	Mid-flood	Cloudy	Moderate	В	22	11:02:00 AM	9.1	7.3	33.7	21.8	2.1	6.0	<0.10	<0.01
CE	30/1/2024	Mid-flood	Cloudy	Moderate	В	22	11:02:00 AM	9.1	7.3	33.7	21.8	2.1	5.0	<0.10	<0.01
CF	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:00:00 AM	8.8	7.2	33.4	21.9	2.5	3.0	<0.10	<0.01
CF	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:00:00 AM	8.8	7.2	33.4	21.9	2.4	5.0	<0.10	<0.01
CF	30/1/2024	Mid-flood	Cloudy	Moderate	М	11	8:01:00 AM	8.7	7.2	33.4	21.9	2.4	6.0	<0.10	<0.01
CF	30/1/2024	Mid-flood	Cloudy	Moderate	М	11	8:01:00 AM	8.7	7.1	33.4	21.9	2.4	5.0	<0.10	<0.01
CF	30/1/2024	Mid-flood	Cloudy	Moderate	В	20	8:02:00 AM	8.7	7.1	33.4	21.9	2.4	5.0	<0.10	<0.01
CF	30/1/2024	Mid-flood	Cloudy	Moderate	В	20	8:02:00 AM	8.7	7.1	33.4	21.9	2.4	3.0	<0.10	<0.01
WSR01	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:24:00 AM	8.5	7.2	33.4	21.6	1.7	5.0	<0.10	<0.01
WSR01	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:24:00 AM	8.5	7.2	33.3	21.6	1.6	6.0	<0.10	<0.01
WSR01	30/1/2024	Mid-flood	Cloudy	Moderate	М	4	8:25:00 AM	8.5	7.2	33.3	21.6	1.7	4.0	<0.10	<0.01
WSR01	30/1/2024	Mid-flood	Cloudy	Moderate	М	4	8:25:00 AM	8.5	7.3	33.3	21.6	1.7	5.0	<0.10	<0.01
WSR01	30/1/2024	Mid-flood	Cloudy	Moderate	В	8	8:26:00 AM	8.5	7.3	33.3	21.6	1.6	3.0	<0.10	<0.01
WSR01	30/1/2024	Mid-flood	Cloudy	Moderate	В	8	8:26:00 AM	8.5	7.2	33.4	21.6	1.7	3.0	<0.10	<0.01
WSR02	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:44:00 AM	8.8	7.3	32.6	21.7	2.2	5.0	<0.10	<0.01
WSR02	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:44:00 AM	8.7	7.3	32.6	21.7	2.2	5.0	<0.10	<0.01
WSR02	30/1/2024	Mid-flood	Cloudy	Moderate	М	5	8:45:00 AM	8.8	7.3	32.6	21.7	2.2	3.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	D0 (mg/L)	pН	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L)	otal Chlorine (mg/L)
WSR02	30/1/2024	Mid-flood	Cloudy	Moderate	М	5	8:45:00 AM	8.7	7.3	32.6	21.7	2.2	4.0	<0.10	<0.01
WSR02	30/1/2024	Mid-flood	Cloudy	Moderate	В	9	8:46:00 AM	8.7	7.3	32.6	21.7	2.2	6.0	<0.10	<0.01
WSR02	30/1/2024	Mid-flood	Cloudy	Moderate	В	9	8:46:00 AM	8.7	7.3	32.6	21.7	2.2	4.0	<0.10	<0.01
WSR03	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:58:00 AM	8.4	7.2	33.1	22.0	2.3	3.0	<0.10	<0.01
WSR03	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	8:58:00 AM	8.4	7.2	33.1	22.0	2.3	3.0	<0.10	<0.01
WSR03	30/1/2024	Mid-flood	Cloudy	Moderate	М	4	8:59:00 AM	8.5	7.2	33.1	22.0	2.3	4.0	<0.10	<0.01
WSR03	30/1/2024	Mid-flood	Cloudy	Moderate	М	4	8:59:00 AM	8.5	7.2	33.1	22.0	2.3	4.0	<0.10	<0.01
WSR03	30/1/2024	Mid-flood	Cloudy	Moderate	В	7	9:00:00 AM	8.5	7.2	33.1	22.0	2.3	4.0	<0.10	<0.01
WSR03	30/1/2024	Mid-flood	Cloudy	Moderate	В	7	9:00:00 AM	8.4	7.2	33.1	22.0	2.3	4.0	<0.10	<0.01
WSR04	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:12:00 AM	9.1	7.2	33.4	21.8	1.9	4.0	<0.10	<0.01
WSR04	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:12:00 AM	9.1	7.3	33.3	21.8	1.9	3.0	<0.10	<0.01
WSR04	30/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:13:00 AM	9.0	7.2	33.3	21.8	1.9	3.0	<0.10	<0.01
WSR04	30/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:13:00 AM	9.1	7.2	33.4	21.8	1.9	5.0	<0.10	<0.01
WSR04	30/1/2024	Mid-flood	Cloudy	Moderate	В	7	9:14:00 AM	9.1	7.3	33.4	21.8	2.0	2.5	<0.10	<0.01
WSR04	30/1/2024	Mid-flood	Cloudy	Moderate	В	7	9:14:00 AM	9.1	7.3	33.3	21.8	1.9	4.0	<0.10	<0.01
WSR16	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:37:00 AM	8.3	7.2	32.6	21.8	1.8	4.0	<0.10	<0.01
WSR16	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:37:00 AM	8.4	7.3	32.6	21.8	1.8	4.0	<0.10	<0.01
WSR16	30/1/2024	Mid-flood	Cloudy	Moderate	М	8	10:38:00 AM	8.4	7.3	32.6	21.8	1.8	5.0	<0.10	<0.01
WSR16	30/1/2024	Mid-flood	Cloudy	Moderate	М	8	10:38:00 AM	8.4	7.2	32.6	21.8	1.8	4.0	<0.10	<0.01
WSR16	30/1/2024	Mid-flood	Cloudy	Moderate	В	16	10:39:00 AM	8.4	7.3	32.6	21.8	1.8	4.0	<0.10	<0.01
WSR16	30/1/2024	Mid-flood	Cloudy	Moderate	В	16	10:39:00 AM	8.3	7.2	32.6	21.8	1.8	6.0	<0.10	<0.01
WSR33	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:27:00 AM	8.7	7.2	32.7	21.8	1.8	5.0	<0.10	<0.01
WSR33	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:27:00 AM	8.7	7.2	32.7	21.8	1.8	4.0	<0.10	<0.01
WSR33	30/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:28:00 AM	8.7	7.2	32.7	21.8	1.8	4.0	<0.10	<0.01
WSR33	30/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:28:00 AM	8.7	7.2	32.7	21.8	1.8	4.0	<0.10	<0.01
WSR33	30/1/2024	Mid-flood	Cloudy	Moderate	В	7	9:29:00 AM	8.8	7.2	32.7	21.8	1.8	3.0	<0.10	<0.01
WSR33	30/1/2024	Mid-flood	Cloudy	Moderate	В	7	9:29:00 AM	8.7	7.2	32.7	21.8	1.7	4.0	<0.10	<0.01
WSR36	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:41:00 AM	8.3	7.1	33.6	21.6	2.2	3.0	<0.10	<0.01
WSR36	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:41:00 AM	8.4	7.1	33.5	21.6	2.1	3.0	<0.10	<0.01
WSR36	30/1/2024	Mid-flood	Cloudy	Moderate	М	3	9:42:00 AM	8.3	7.1	33.6	21.6	2.2	4.0	<0.10	<0.01
WSR36	30/1/2024	Mid-flood	Cloudy	Moderate	М	3	9:42:00 AM	8.3	7.1	33.6	21.6	2.1	3.0	<0.10	<0.01
WSR36	30/1/2024	Mid-flood	Cloudy	Moderate	В	6	9:42:00 AM	8.3	7.1	33.6	21.6	2.1	5.0	<0.10	<0.01
WSR36	30/1/2024	Mid-flood	Cloudy	Moderate	В	6	9:42:00 AM	8.3	7.2	33.6	21.6	2.1	4.0	<0.10	<0.01

Location	Date	Tidal	Weather	Sea Condition	Water Level	Depth (m)	Time	DO (mg/L)	pH	Sal (ppt)	Temp (°C)	Turbidty (NTU)	SS (mg/L)	Iron (mg/L) T	otal Chlorine (mg/L)
WSR37	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:58:00 AM	8.7	7.2	32.7	21.6	2.1	3.0	<0.10	<0.01
WSR37	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	9:58:00 AM	8.7	7.2	32.7	21.6	2.0	6.0	<0.10	<0.01
WSR37	30/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:59:00 AM	8.6	7.2	32.7	21.6	2.1	5.0	<0.10	<0.01
WSR37	30/1/2024	Mid-flood	Cloudy	Moderate	М	4	9:59:00 AM	8.6	7.2	32.7	21.6	2.1	4.0	<0.10	<0.01
WSR37	30/1/2024	Mid-flood	Cloudy	Moderate	В	8	10:00:00 AM	8.7	7.2	32.7	21.5	2.0	3.0	<0.10	<0.01
WSR37	30/1/2024	Mid-flood	Cloudy	Moderate	В	8	10:00:00 AM	8.7	7.2	32.7	21.6	2.1	5.0	<0.10	<0.01
NF1	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:22:00 AM	8.4	7.2	33.4	21.8	2.0	4.0	<0.10	<0.01
NF1	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:22:00 AM	8.4	7.3	33.4	21.8	2.1	4.0	<0.10	<0.01
NF1	30/1/2024	Mid-flood	Cloudy	Moderate	М	7	10:23:00 AM	8.4	7.2	33.3	21.8	2.1	3.0	<0.10	<0.01
NF1	30/1/2024	Mid-flood	Cloudy	Moderate	М	7	10:23:00 AM	8.4	7.3	33.4	21.8	2.0	3.0	<0.10	<0.01
NF1	30/1/2024	Mid-flood	Cloudy	Moderate	В	13	10:24:00 AM	8.4	7.2	33.4	21.8	2.0	4.0	<0.10	<0.01
NF1	30/1/2024	Mid-flood	Cloudy	Moderate	В	13	10:24:00 AM	8.4	7.3	33.4	21.8	2.1	3.0	<0.10	<0.01
NF2	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:14:00 AM	9.0	7.4	32.9	21.6	2.1	5.0	<0.10	<0.01
NF2	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:14:00 AM	9.0	7.4	32.9	21.6	2.1	5.0	<0.10	<0.01
NF2	30/1/2024	Mid-flood	Cloudy	Moderate	М	5	10:15:00 AM	9.0	7.5	32.9	21.6	2.1	6.0	<0.10	<0.01
NF2	30/1/2024	Mid-flood	Cloudy	Moderate	М	5	10:15:00 AM	9.0	7.4	33.0	21.6	2.1	4.0	<0.10	<0.01
NF2	30/1/2024	Mid-flood	Cloudy	Moderate	В	9	10:16:00 AM	9.0	7.4	32.9	21.6	2.2	5.0	<0.10	<0.01
NF2	30/1/2024	Mid-flood	Cloudy	Moderate	В	9	10:16:00 AM	9.0	7.5	33.0	21.6	2.1	4.0	<0.10	<0.01
NF3	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:07:00 AM	9.1	7.1	32.9	21.7	2.2	5.0	<0.10	<0.01
NF3	30/1/2024	Mid-flood	Cloudy	Moderate	S	1	10:07:00 AM	9.1	7.2	32.8	21.7	2.2	8.0	<0.10	<0.01
NF3	30/1/2024	Mid-flood	Cloudy	Moderate	М	6	10:08:00 AM	9.0	7.2	32.9	21.7	2.2	5.0	<0.10	<0.01
NF3	30/1/2024	Mid-flood	Cloudy	Moderate	М	6	10:08:00 AM	9.0	7.2	32.9	21.7	2.2	4.0	<0.10	<0.01
NF3	30/1/2024	Mid-flood	Cloudy	Moderate	В	11	10:09:00 AM	9.1	7.2	32.9	21.7	2.2	5.0	<0.10	<0.01
NF3	30/1/2024	Mid-flood	Cloudy	Moderate	В	11	10:09:00 AM	9.1	7.1	32.9	21.7	2.2	5.0	<0.10	<0.01

Landfill Gas Monitoring - Field Measurement Recording Sheet

Contract Title :	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant	Serial No.	Monitoring Equipment	Last Calibration
Contract No. :	13/WSD/17	254938	GMI-PS500	22/8/2023

Monitoring	Working trench/	Date	Time	Weather Condition		Landfill Gas	Parameters		Physical Parameters	T 1/010 1	Meas	ured by
Location	Pit	(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/ Pit Depth (m)	Name	Signature
			08:30 (before work)						/			
Ch1+120	Washout chambers	/ /2024	13:30						/			
			15:30						/			
			08:30 (before work)	Overeast	0	20.9	0.03	D	17.8 11019,1	<1	Sem Hei Tuy	33Ar
Ch0+800	Air-valve pit	021/12024	13:30	Fine	Э	20.9	0.04	υ	20:3/1019.2	41	San Hei Tuy	
			15:30	Time	Э	20,9	0.04	Ð	18:011018.8	<1	San Hei Tur	
			08:30 (before work)	Fire	0	20,9	0.04	Э	17.511019,0	41	San Heiry	
Ch1+120	Washout chambers	081112024	13:30	Fine	õ	20.9	0.03	Ø	20.2/1019.6	<1	San Hirty	
			15:30	Fine	0	20.8	0,04	O	18,1/1019,1	<1	San Hei Tuy	
			08:30 (before work)						. /		of the f	
Ch0+800	Air-valve pit	/ /2024	13:30			and the second se			/			
			15:30						/			
		102	08:30 (before work)	Fine	D	20.9	0.04	O	18.311017,4	<1	San Hei Tu	ZZIAN
Ch1+120	Washout chambers	091/12024	13:30	Fine	0	20.9	0.04	0	23:4/1017,3	41	San Heitar	
			15:30	Fine	0	20.9	0,03	0	19.8/1017,1	41		3-2171
			08:30 (before work)						/		and the y	
Ch0+800	Air-valve pit	/ /2024	13:30						/			
			15:30						/			
			08:30 (before work)	Fine	Q	20.9	0.04	Ø	17.3/1018,1	41	San Heiry	32101
Ch1+120	Washout chambers	(0 / /2024	13:30	Sunny	Ô	22.9	0.03	Ð	20.1/1017,9		San Hei Ty	
			15:30	Fine	6	20.9	0.04	0	18.8/1018.6	21	San Heity	
			08:30 (before work)								mar up g	
Ch0+800	Air-valve pit	/ /2024	13:30						/			
		,	15:30						/			

Checked by: Yay Hin Fung Alow Date: 7410-1-2024

Landfill Gas Monitoring - Field Measurement Recording Sheet

Contract Title :	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant	Serial No.	Monitoring Equipment	Last Calibration
Contract No. :	13/WSD/17	254938	GMI-PS500	22/8/2023

Monitoring	Working trench/	Date	Time	Weather Condition		Landfill Gas	Parameters	-	Physical Parameters	Treesh / Dit D	Measu	ured by
Location	Pit	(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/ Pit Depth (m)	Name	Signature
			08:30 (before work)		0	20.9	0,04	Ð	17.4 11020.1	21	San Hei Tur	82Ar
Ch1+120	Washout chambers	1 //2024	13:30	Fine	D	20.9	0.05	U	21.8/1020,2	<1	San Hei Tuy	the second second second
	9.		15:30	Fine	C	20.8	0.03	Ŭ	17.9/1020.8	<1	Santteituz	J3AT
			08:30 (before work)								J	
Ch0+800	Air-valve pit	/ /2024	13:30						/			
			15:30						/			
			08:30 (before work)	Fine	Ð	20.9	0.03	0	17.1/1019.0	< 1	San Heity	33A1
Ch1+120	Washout chambers	121/2024	13:30	Fine	0	20.9	0,04	ð	21.4/1019.4	<1	San Hei Tu	
			15:30	Fine	O	20.9	0,04	0	19.011019.4	<1	San Hei Tus	
			08:30 (before work)						/		<i>y</i>	
Ch0+800	Air-valve pit	/ /2024	13:30						/			
			15:30						/			
			08:30 (before work)						/			
Ch1+120	Washout chambers	/ /2024	13:30						/			
			15:30						/			
			08:30 (before work)						/			
Ch0+800	Air-valve pit	/ /2024	13:30						/			
			15:30						/			
			08:30 (before work)						/			
Ch1+120	Washout chambers	/ /2024	13:30			1			/			
			15:30						/			
			08:30 (before work)						/			
Ch0+800	Air-valve pit	/ /2024	13:30						/			
			15:30						/			

Checked by : Y_{ay} MOW/ Tuna Date : 7074





Appendix H

Waste Flow Table

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Contract No. 13/WSD/17 Environmental Management Plan for Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant

Appendix F - Monthly Summary Waste Flow Table

Name of Department: WSD

Contract No.: 13/WSD/17

Monthly Summary Waste Flow Table for <u>2023 (year)</u>

		Actual Quar	tities of Inert C&I	D Materials Generat	ted Monthly				of C&D Wastes C	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	310.600	0.000	0.000	*0.000	*310.60	0.000	0.000	0.000	0.000	0.000	*51.55
Feb											
Mar											
Apr											
May											
Jun											
Sub-total	*310.60	0.000	0.000	0.000	*310.60	0.000	0.000	0.000	0.000	0.000	*51.55
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Total	*310.600	0.000	0.000	0.000	*310.60	0.000	0.000	0.000	0.000	0.000	*51.55

Notes:

(1) The performance targets are given in Section 1.69 of Specification B

(2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

(3) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging material

* The record updated to 20/01/2024 due to the EPD Transaction Records system failure, the update of the waste transaction records form EPD foraccount-holders' use is temporarily suspended. The data form 21/01 to 31/01 will be updated in next report period.





Appendix I

Site Inspection Proforma

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Inspection Date:	2/1/2023	Inspected by:	ET: Alge leng	so: Raymond Kok wsD:	
Inspection Time:	14-30 pm		Contractor: 12Hary Isay	IEC:	
Weather					
Condition	Sunny	Overcast	Drizzle Rain	Storm	
Temperature	20 °C	Humidity	High	Low	
Wind	Calm Light	Breeze	Strong		

	ELA C					
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				
		entrances/exits for public's information at any time?		/		
0.02						
		Is ET Leader's log-book kept readily available for inspections?		\langle		
		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?				
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?		\square		
	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?		/		
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?		4		
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		
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?		/		

WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST





Item EIA ref. N/A Yes No Photo/Remarks	(Contra	ct no. 13/WSD/17 Design, Build and Operate First Stage of T	seung Ku	van O I	Desalina	
115 84.8.1 Are de-bagging, batching and mixing processes of bagged cement carried out in the thered areas? 116 S4.8.1 Are hearding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?	Item						Photo/Remarks
sheltered areas?	No.						
1.16 54.8.1 Are hoarding of at least 2.4m high provided along the site boundary adjoining areas accessible by the public?	1.15	S4.8.1	Are de-bagging, batching and mixing processes of bagged cement carried out in				
accessible by the public?		1	sheltered areas?				-
1.17 S4.8.1 is open burning prohibited?	1.16	S4.8.1	Are hoarding of at least 2.4m high provided along the site boundary adjoining areas				
1.17 84.8.1 is open burning prohibited?			accessible by the public?	1			
2.00 S.7 Are quict plants adopted on site?	1.17	\$4.8.1					
2.01 85.7 Are quiet plants adopted on site?	1.17	54.0.1	is open building promoted.		6		-
2.01 85.7 Are quiet plants adopted on site?	2.00		Construction Noise (Airborne)			_	
2.02 85.7 Are the PMEs operating on site well-maintained to minimize the generation of excessive noise? 2.03 85.7 Are plants throttled down or turned off when not in use?		\$57			1		
2.03 S5.7 Are plants throat prime in the time in the plant of the plant of the plant of the plant structure of the plant structure of the plant of the plant structure of the plant of the plant structure of the structure structure of the structure of the structure							
2.03 85.7 Are plants throttled down or turned off when not in use?	2.02	\$5.7	Are the PMEs operating on site well-maintained to minimize the generation of				
Are plants throttled down or turned off when not in use?			excessive noise?				
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?	2.03	S5.7	Are plants throttled down or turned off when not in use?				
from NSRs? 2.05 85.7 Are moveable barriers provided to screen NSRs from plant or noisy operations? 2.06 85.7 Are moveable barriers provided to plants? 2.07 85.7 Are selencers, mufflers and enclosures provided to plants? 2.07 85.7 Are the hoods, cover panels and inspection hatches of PMEs closed during operation? 2.08 85.7 Are purposely-built site hoarding construction with appropriate materials provided along the site boundary? 2.09 85.7 Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers? 2.10 85.7 Are valid noise emission label(s) affixed to all hand-held breakers operating on site? 2.11 85.7 Are construction noise permit(s) applied for general construction works during restricted hours? 2.12 85.7 Are valid construction noise permit(s) displayed at all vehicular exits? 2.14 85.7 Are valid construction noise permit(s) displayed at all vehicular exits? 3.00 86.9 3.01 86.9 3.02 86.9 3.03 86.9			The planes unoucled down of tailled off when not in door				
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2.06 85.7 Are silencers, mufflers and enclosures provided to plants?	2.05	S5.7					
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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? 2.14 S5.7 Are valid construction noise permit(s) displayed at all vehicular exits? 2.14 S5.7 Are valid construction noise permit(s) displayed at all vehicular exits? 3.00 Water Quality 3.01 S6.9 Is effluent discharge license obtained for wastewater discharge from site? 3.02 S6.9 Is effluent discharge from site properly treated prior to discharge? 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			site?				
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2.13 S5.7 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? 2.14 S5.7 Are valid construction noise permit(s) displayed at all vehicular exits? 3.00 Water Quality 3.01 S6.9 Is effluent discharge license obtained for wastewater discharge from site? 3.02 S6.9 Is effluent discharged according to the effluent discharge license? 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							- 100
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3.00 Water Quality 3.01 S6.9 3.02 S6.9 Is effluent discharge license obtained for wastewater discharge from site? 3.02 S6.9 Is effluent discharge according to the effluent discharge license? 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	2 14	\$5.7	Are valid construction noise permit(s) displayed at all vehicular exits?				
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3.03 \$6.9 Is wastewater discharge from site properly treated prior to discharge?							
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	3.04	S6.9	Are perimeter channels provided to intercept storm runoff from outside the site?				
to remove sand/silt particles from runoff?	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?				



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	Contra	ct no. 13/WSD/17 Design, Build and Operate First Stage of	Tseung k	Kwan 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?				10
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?		\Box	\Box	,
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?				
3.15	S6.9	Is oil leakage or spillage prevented?		$\overline{\Box}$	\Box	
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?		1	\Box	
3.18	\$6.9	Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams?				
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		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?		\square		
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?				
3.24		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 ³ used for dredging at seawater intake?	~			
3.27	(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 ³ closed grab, 10-11 grab per hour for 6m3 closed grab?	/			





		ct no. 13/WSD/17 Design, Build and Operate First Stage of T				
Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.						1. A.M. 10. 10 1
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	\$6.9	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			1007	
		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				
5.55	50.7	moved from the dredging area after dredging?	1			
2.24	S6.9	Are the contractor(s) confirmed that the works cause no visible foam, oil, grease,				
5.54	50.9	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	\$6.9	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	\$6.9	An all used have a clean hallost system?				30Ma
		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	\$6.9	Is any discharge of sewage/grey wastewater? Is wastewater from potentially				
	1	contaminated area on working vessels should be minimized and collected?				
3.41	S6.9					and the second sec
		Is any soil waste disposed overboard?				
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?				
4.02	S8.5	Is a recording system implemented to record the amount of wastes generated,				Manual Contraction of the Contra
		recycled and disposed of?				
4.03	S8.5					
7.05	50.5	Is the Contractor registered as a chemical waste producer?		/		



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	ElA ref.	act no. 13/WSD/17 Design, Build and Operate First Stage of	-			ation Plant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
	S8.5	Is chemical waste separated from other waste and collected by a licensed chemical				
1.04	30.5	waste collector?		/		
4.05	S8.5					
4.05	30.5	Are trip tickets for chemical waste disposal available for inspection?				
4.06	S8.5	Is drip tray provided for chemical storage?				
		is drip day 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?				
4.09	S8.5	Are incompatible chemical wastes stored in different areas?				
4.10	00.5					
4.10	58.5	Is the chemical waste storage area enclosed on at least 3 sides and adequately				
	00.5	ventilated?				
4.11	58.5	Is an impermeable floor and bunding, of capacity to accommodate 110% of the		\square		
		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	58.5	Are a routine cleaning and maintenance programme implemented for drainage				
4.12	00.5	systems, sump pits, and oil interceptors?				
4.13	\$8.5	Are sufficient general refuse disposal/collection points provided on site?				
4.14	\$8.5	lo general refuse dimension of any state of the state of the				
	00.5	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?		1		
4.17	S8.5	a a a a a a a a a a a a a a a a a a a				
		Are C&D wastes sorted on site?		1		
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?		1		
4.22	\$8.5	Is a dumping license obtained to deliver public fill to public filling areas?				
				/		
5.00	\$11.10	Landscape and Visual				
		Are Is site hoarding provided?				
I	SI1.10 &	Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?				
	11.11					
	\$11.10 &	Is construction light oriented away from the sensitive receivers?				
1	1.11		1			





(Contrac	ct no. 13/WSD/17 Design, Build and Operate First Stage of T	[seung Ky	wan O I	Desalina	tion Plant
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				
	11.11	vicinity of any preserved trees?				
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	\$9.7	Easlaw				
6.00 6.01	59.1	Ecology Is site runoff properly treated to prevent any silly runoff?		1		
6.02	S9.7	Are silt trap installed and well-maintained?			\square	219
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?				
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?				(14 - 1
6.09	S9.7	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?				
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?		/		
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?				
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?		/		. <u></u>
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?		/		





(Contra	ect no. 13/WSD/17 Design, Build and Operate First Stage of	Tseung K	wan O	Desalina	ation Plant
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
1000000200	\$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?				
6.16	\$9.7	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?				
7.00 7.01	\$12.7	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	\$12.7	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	\$12.7	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	\$12.7	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	\$12.7	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 Ob	servation(s) and Non-compliance	e(s) of Last Weekly Site Inspect	ion:	
Reminder =				
E The rockburg	€ tead Contractor is regularly.	reminded to remove	the general refus	e înside the site
2 Contractor is	reminded to placed p	place the rockbrecker	head on tarpuali	n sheet.
<u>Simo tomor</u>				
Signatures: ET Representative	Contractor's Representative	Supervising Officer's Representative	IEC's Representative	WSD's Representative
(Name: Alex leng) (Name: Titly Thy)	(Name: Rgr gr gr gr	(Name:)	(Name://)
		lote		





Inspection Date:	1/01/2024	Inspected by:	ET:		so: Raymond Kok wsp:
Inspection Time:	2:30 pm		Contractor:	Tallay Bas	IEC: Alex Chan
Weather					-
Condition	Sunny	Overcast	Drizzle	Rain	Storm Hazy
Temperature	[]8_℃	Humidity	High	Moderate	Low
Wind	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 entrances/exits for public's information at any time?		\square		
0.02		Is ET Leader's log-book kept readily available for inspections?		\square		
		Construction Dust			1	1948 (1949) - 1949 - 1949 - 1949 - 1949 - 1949 - 1949 - 1949 - 1949 - 1949 - 1949 - 1949 - 1949 - 1949 - 1949 -
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	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		Are stock of more than 20 bags of cement or day PFA covered or sheltered on top and 3 sides?				
						and the second sec





(Contra	ct no. 13/WSD/17 Design, Build and Operate First Stage of T	Seung Ky	van O I	Desalina	ation Plant
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)				
2.01	\$5.7	Are quiet plants adopted on site?		/		
2.02	\$5.7	Are the PMEs operating on site well-maintained to minimize the generation of				
		excessive noise?		/		
2.03	85.7	Are plants throttled down or turned off when not in use?	/			
2.04	\$5.7	Are the plants known to emit noise strongly in one direction oriented to face away				
		from NSRs?				
2.05	85.7	Are moveable barriers provided to screen NSRs from plant or noisy operations?	\square			
2.06	\$5.7	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	\$5.7	Are noisy operation properly scheduled to minimize exposure and cumulative				
		impacts to nearby sensitive receivers?				
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	\$5.7	Are all construction noise permit(s) applied for percussive piling work?				
2.12	S5.7	Are construction noise permit(s) applied for general construction works during				
2.13	55.7	restricted hours?		/		
2.14	S5.7	Are valid construction noise permit(s) displayed at all vehicular exits?				
3.00		Water Quality				
3.01	\$6.9	Is effluent discharge license obtained for wastewater discharge from site?				
3.02	S6.9	Is effluent discharged according to the effluent discharge license?		/		
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?		/		-





Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Item EIA ref. Photo/Remarks N/A Yes No No 3.06 \$6.9 Is surface runoff diverted to sedimentation facilities? 3.07 S6.9 Is the drainage system properly maintained? Are construction works carefully programmed to minimize soil excavation works 3.08 \$6.9 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 \$6.9 Are temporary access roads protected by crushed gravel? 3.11 \$6.9 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 \$6.9 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 \$6.9 Is oil leakage or spillage prevented? 3.16 \$6.9 Are there any measures to prevent the release of oil and grease into the storm drainage system? 3.17 \$6.9 Are the oil interceptors/ grease traps properly maintained? 3.18 \$6.9 Are debris and rubbish generated on site collected, handled and disposed of properly to avoid them entering the streams? Are all fuel tanks and storage areas provided with locks and be sited on sealed 3.19 \$6.9 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 \$6.9 Are sewage disposal and toilet maintenance of the portable chemical toilets provided by the licensed contractors? 3.23 \$6.9 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 m³ 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?





em	EIA ref.		N/A	Yes	No	Photo/Remarks
ю.						
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				1000
		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	\$6.9	Are disposal vessels fitted with tight bottom seals in order to prevent leakage of				
		material during transport?	/		1.1	
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				
		that the decks are not washed by wave action?	/			
3.33	\$6.9	Are excess materials cleaned from decks and exposed fittings before the vessel is				
	50.5	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,				
	50.7	litter or other objectionable matter to be present in the water within and adjacent				
		to the dredging site?	1			
1 25	S6.9	When the dredged material has been unloaded at the disposal areas, is any material		A		6 - 18 - 19 - 19 - 19 - 19 - 19 - 19 - 19
	50.9					
		accumulated on the deck or other exposed parts of the vessel removed and placed in the hold or a hopper?				
2.26	860					
5.30	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	/			
	0.0	not generated by turbulence from vessel movement or propeller wash?				
5.37	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?		\square		
39	\$6.9	Are all vessels well maintained and inspected before use to limit any potential				
	000	discharges to the marine environment?	/			
3.40	\$6.9	Is any discharge of sewage/grey wastewater? Is wastewater from potentially				
		contaminated area on working vessels should be minimized and collected?	1			
3.41	S6.9	Is any soil waste disposed overboard?	1			
.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?				
1.02	S8.5	Is a recording system implemented to record the amount of wastes generated,				
		recycled and disposed of?		1		
1.03	S8.5					
		Is the Contractor registered as a chemical waste producer?		/		





	Contra	ect no. 13/WSD/17 Design, Build and Operate First Stage of	Tseung K	wan O	Desalin	ation Plant
Item No.	EIA ref.	9	N/A	Yes	No	Photo/Remarks
4.04	\$8.5	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?		/		
	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 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?				1
4.12		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		Are appropriate measures adopted to minimize windblown litter and dust during transportation of waste?				
4.16	\$8.5	Are individual collectors for aluminum cans, plastic bottles and packaging material and office paper provided to encourage waste segregation?		/		
4.17		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	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?	/			
		Are vegetation disturbance minimized or soil protected to reduce potential soil erosion?		\square		
	S11.10 & 11.11	Is construction light oriented away from the sensitive receivers?				





(Contra	ct no. 13/WSD/17 Design, Build and Operate First Stage of 7	Iseung Kv	van O I	Desalina	tion Plant
item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
5.04	S11.10 & 11.11	Is grass hydroseeding provided to slopes as soon as the completion of works?	\angle			
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				
	11.11	vicinity of any preserved trees?	/			
5.07	S11.10 & 11.11	Are the retained and transplanted tree(s) properly protected and in good conditions?				
5.08	S11.10 & 11.11	Are surgery works carried out for damaged trees?	/			
6.00	\$9.7	Ecology				
6.01	57.1	Is site runoff properly treated to prevent any silly runoff?		1		
6.02	S9.7	Are silt trap installed and well-maintained?				
5.03	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?				
5.07	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?				
6.09	S9.7	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?				
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?				
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?				
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?				





No.			N/A	Yes	No	Photo/Remarks
6.15	5 \$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?	\square			
6.16	\$9.7	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?				
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?				
7.02	S12.7	Are the gas detection equipment and precautions being used during trenching and excavation as well as creation of confined spaces?		\angle		
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?		\square		
7.05	\$12.7	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?		\square		
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?	\square			
7.09		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		Are the below ground services entries being sealed to prevent gas entry? Are the grilled metal covers being used for below grade cable trenches?				
		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		Are the warning signs of the hazards of landfill gas and its possible presence on site posted in prominent places?		\square		
8.00		Overall				
8.01		Is the EM&A properly implemented in general?		\angle		





Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection: 1) The Contractors are reminded to provide a proper gandage bin with rover at the near the R.O. Building. Signatures: Supervising Officer's IEC's WSD's ET Contractor's Representative Representative Representative Representative Representative (Name: Her (Man) (Name: (Name: The (Name: (Name: 15-) Cole





Inspection Date:	610/12014		Inspected by:	ET:	Jacky Lenny		mond Kok	WSD:
Inspection Time:	2=30pm			Contractor:	Titten Tight	IEC:	Hex Chen	
Weather								
Condition	Sunny	Fine	Overcast	Drizzle	Rain	Storm	Hazy	
Temperature			Humidity	High	Moderate	Low		
Wind	Calm	Light	Breeze	Strong				

Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.			IN/A	105	NO	Photo/Remarks
0.00	1	General		8 AL		
0.01		Is the current Environmental Permit displayed conspicuously at all vehicle site				
		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?				
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?		\square		
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 and 3 sides?			3	

WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST





	-	ct no. 13/WSD/17 Design, Build and Operate First Stage of T	N/A	Yes	No	Photo/Remarks
tem	EIA ref.		N/A	res	INO	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	\square			
		accessible by the public?	1			
1.17	S4.8.1	Is open burning prohibited?				
				/		
2.00	-	Construction Noise (Airborne)				
	\$5.7	Are quiet plants adopted on site?		/		
2.01						-
2.02	\$5.7	Are the PMEs operating on site well-maintained to minimize the generation of				
		excessive noise?				
2.03	S5.7	An almost through a down on turned off when not in use?				
		Are plants throttled down or turned off when not in use?				
2.04	\$5.7	Are the plants known to emit noise strongly in one direction oriented to face away				
		from NSRs?				
2.05	S5.7					
2.05	55.7	Are moveable barriers provided to screen NSRs from plant or noisy operations?	/			
0.07						
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?				.
2.09	S5.7	Are noisy operation properly scheduled to minimize exposure and cumulative				
		impacts to nearby sensitive receivers?	/			
2.10	\$5.7	Are valid noise emission label(s) affixed to all hand-held breakers operating on				
2.10	00.7	site?	/			
0.11	0.5.7	105.820				
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?				
2.14	S5.7	Are valid construction noise permit(s) displayed at all vehicular exits?				
				/		
3.00		Water Quality				
3.01	S6.9	Is effluent discharge license obtained for wastewater discharge from site?		/		
				المستك		
3.02	S6.9	Is effluent discharged according to the effluent discharge license?				
	1.1					
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?				
	1.07	Apple 19 August 19 Apple 19 Ap				
3.05	S6.9	Are sand/silt removal facilities such as sand/silt traps and sediment basins provided	1182512			
	1	to remove sand/silt particles from runoff?				
				/		





(Contra	act no. 13/WSD/17 Design, Build and Operate First Stage of	Tseung K	wan O	Desalir	ation Plant
ltem No.	EIA rei.		N/A	Yes	No	Photo/Remarks
	S6.9					
		Is surface runoff diverted to sedimentation facilities?				
3.07	\$6.9	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	\$6.9	Are exposed soil surface protected by paving as soon as possible to reduce the				
		potential of soil erosion?		/		······································
3.10	\$6.9	Are temporary access roads protected by crushed gravel?				
3.11	\$6.9	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?				
3.15	S6.9	Is oil leakage or spillage prevented?		$\overline{\Box}$		
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?			\Box	
3.18	\$6.9	Are debris and rubbish generated on site collected, handled and disposed of				
		properly to avoid them entering the streams?				
3.19		Are all fuel tanks and storage areas provided with locks and be sited on sealed				and the second second second
		areas, within bunds of capacity equal to 110% of the storage capacity of the largest		\checkmark		
	a (a	tank?				
3.20		Are tanks, containers, storage area bunded and the locations locked as far as				
2 21	_	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	S6.9	Are sewage disposal and toilet maintenance of the portable chemical toilets				
		provided by the licensed contractors?		1		
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	\$6.9	Is closed grab dredger used to reduce the potential leakage of sediments?				
3.26 S	56.9	Is closed grab dredger of 3 to 6 m ³ used for dredging at seawater intake?				0.5355
.27 S	6.9	is specific work staff assigned the responsibility for monitoring the number of grab		<u> </u>		
		dredged per hour? Is number of cycle limited to 20-21 grab per hour for 3m ³ closed				Statistics and
		grab, 10-11 grab per hour for 6m3 closed grab?			5	





Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant N/A Yes No Photo/Remarks FIA ref Item 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 \$6.9 while the maximum allowed dredging rate at the submarine outfall is 3,500 m3/dav? 3.30 \$6.9 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)? 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 \$6.9 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 \$6.9 litter or other objectionable matter to be present in the water within and adjacent to the dredging site? 3.35 \$6.9 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? 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 \$6.9 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? 3.40 \$6.9 Is any discharge of sewage/grey wastewater? Is wastewater from potentially contaminated area on working vessels should be minimized and collected? 3.41 \$6.9 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? Is a recording system implemented to record the amount of wastes generated, 4.02 \$8.5 recycled and disposed of? 4.03 \$8.5 Is the Contractor registered as a chemical waste producer?





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(Contra	ct no. 13/WSD/17 Design, Build and Operate First Stage of T	Iseung Kv	van O I	Desalin a	ation Plant
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?				
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5.06	S11.10 & 11.11	Is excavation works carried out manually instead of machinery operation within 2.5m vicinity of any preserved trees?	/			
5.07	S11.10 &	Are the retained and transplanted tree(s) properly protected and in good conditions?		/		
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6.07	\$9.7	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?				
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?		e	RI.	
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?				
6.11	\$9.7	Is the resident site supervisory staff closely monitor the conditions of concerned 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?				





	Contra	ct no. 13/WSD/17 Design, Build and Operate First Stage of	Iseung K	wan O	Desalina	ation Plant
ltem 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?				
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?				
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?		\square		
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?		\square		
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?		\square		
7.06	\$12.7	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?		\square		
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?		\square		





Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection: () A cheminal containen tomd apan R.O. Building 1) A cheminal containen tomd apan R.O. Building to the contractors week without a drip tray, the contractors one reminded to provide a drip tray on one reminded to provide a drip tray on propen storage for the cheminal containers Observation Signatures: WSD's Supervising Officer's IEC's Contractor's ET Representative Representative Representative Representative Representative Name: Tillay Te (Name: Her Cha) (Name:) (Name: (Name 9 Amoi Usu





WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Inspection Date:	25/1/2024 2=20 m	Inspected by: ET: Jacky lang SO: Raymal Kok WSD: Contractor: Tellary Isay IEC: Alex Chan
Weather Condition	Sunny Fine	Dvercast Drizzle Rain Storm Hazy
Temperature	<u>16</u> °c	Humidity High Moderate Low
Wind	Calm Light	Breeze Strong

Wind	1	Calm Light Breeze Strong				
Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
0.00		General Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?				
0.02		Is ET Leader's log-book kept readily available for inspections?				
1.00 1.01	S4.8.1	Construction Dust Are dusty materials, such as excavated materials, building debris and construction materials, and exposed earth surface properly covered to prevent dust emission?		\square		
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 and 3 sides?				





Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Item EIA ref. N/A Photo/Remarks Yes No No S4.8.1 1.15 Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas? 1.16 \$4.8.1 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 2 01 S5.7 Are quiet plants adopted on site? 2.02 \$5.7 Are the PMEs operating on site well-maintained to minimize the generation of excessive noise? 2.03 \$5.7 Are plants throttled down or turned off when not in use? 2.04 \$5.7 Are the plants known to emit noise strongly in one direction oriented to face away from NSRs? \$5.7 2.05 Are moveable barriers provided to screen NSRs from plant or noisy operations? 2.06 S5.7 Are silencers, mufflers and enclosures provided to plants? Are the hoods, cover panels and inspection hatches of PMEs closed during 2.07 S5.7 operation? 2.08 \$5.7 Are purposely-built site hoarding construction with appropriate materials provided along the site boundary? 2.09 \$5.7 Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers? 2.10 \$5.7 Are valid noise emission label(s) affixed to all hand-held breakers operating on site? Are valid noise emission label(s) affixed to all air compressors operating on site? 2.11 S5.7 2.12 \$5.7 Are all construction noise permit(s) applied for percussive piling work? 2.13 \$5.7 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 3.01 Is effluent discharge license obtained for wastewater discharge from site? \$6.9 3.02 \$6.9 Is effluent discharged according to the effluent discharge license? 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 \$6.9 Are sand/silt removal facilities such as sand/silt traps and sediment basins provided to remove sand/silt particles from runoff?





Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant EIA ref. Photo/Remarks Item N/A Yes No No 3.06 \$6.9 Is surface runoff diverted to sedimentation facilities? 3.07 \$6.9 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 \$6.9 Are exposed slope surface properly protected? 3.12 \$6.9 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? 3.15 S6.9 Is oil leakage or spillage prevented? 3.16 \$6.9 Are there any measures to prevent the release of oil and grease into the storm drainage system? 3.17 \$6.9 Are the oil interceptors/ grease traps properly maintained? 3.18 \$6.9 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 \$6.9 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 S6.9 Is closed grab dredger of 3 to 6 m³ used for dredging at seawater intake? 327 569 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?





tem	EIA ref.	ct no. 13/WSD/17 Design, Build and Operate First Stage of 7	N/A	Yes	No	Photo/Remarks
0.		a dample in the second s				
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)?				
.31	S6.9	Are disposal vessels fitted with tight bottom seals in order to prevent leakage of material during transport?				
	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?				
.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	86.9	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?				
.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?				
.36	86.9	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?				
.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?				
.38	S6.9	Are all vessels have a clean ballast system?	/			
.39	S6.9	Are all vessels well maintained and inspected before use to limit any potential discharges to the marine environment?				
.40	S6.9	Is any discharge of sewage/grey wastewater? Is wastewater from potentially contaminated area on working vessels should be minimized and collected?	/			
.41	S6.9	Is any soil waste disposed overboard?				
00 01	S8.5	Waste Management 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?				
.03	S8.5	Is the Contractor registered as a chemical waste producer?				





		ct no. 13/WSD/17 Design, Build and Operate First Stage of T		the second s		
ltem	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?				
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?				
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 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	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	Is a dumping license obtained to deliver public fill to public filling areas?		/		
5.00	S11.10	Landscape and Visual				10 200
		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 & 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 Item EIA ref N/A Yes No Photo/Remarks No 5.04 S11.10 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 & Is 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 \$11.10 & Are surgery works carried out for damaged trees? 11.11 897 6.00 Ecology 6.01 Is site runoff properly treated to prevent any silly runoff? 6.02 \$9.7 Are silt trap installed and well-maintained? 6.03 \$9.7 Are stockpiles properly covered to avoid generating silty runoff? 6.04 \$9.7 Are construction works restricted to works area which are clearly defined? 6.05 \$9.7 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 \$9.7 Are pruning of tree canopies along the alignment of the flexible barriers limited to a minimum? 6.07 \$9.7 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 \$9.7 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? 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? 6.10 \$9.7 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? 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? 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? 613 897 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 \$9.7 Is any damage and disturbance avoided, particularly those caused by filling and illegal dumping, to the surrounding habitats through proper management of waste disposal?





Item	EIA ref.		N/A	Yes	No	Photo/Remarks
No.		그는 그는 가는 비슷 다른 것이 없다는 다음을 가입니다. 말했는 것				
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?				
7.00		Landfill Gas Hazard		1.1		
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?				
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		Overall				
8.01		Is the EM&A properly implemented in general?				





1) The contractors are reminded to abose the shutter getes at the R.O. building when not in use. 2) The contractors are reminded to record any Substanticl noise generation during opportion Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection: Signatures: ET Contractor's Supervising Officer's IEC's WSD's Representati Representative Representative Representative Representative (Name: 25 ((120264 . (Name: (Name: (Name: Alex Chand (Name:)





Inspection Date:	9/1/2024 9=1Kam	Inspected by:	ET: Jacky (cuy Contractor: Tilling Tsay	so: Raymond Kala IEC: Alex Chan	WSD: HOLDLENG
Weather Condition			Drizzle Rain		
Temperature		Dvercast Humidity	Drizzle Rain	Storm Hazy	
Wind	Calm Light	Breeze	Strong		

WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST

Item No.	EIA ref.		N/A	Yes	No	Photo/Remarks
0.00 0.01		General Is the current Environmental Permit displayed conspicuously at all vehicle site entrances/exits for public's information at any time?				
0.02		Is ET Leader's log-book kept readily available for inspections?				
1.00 1.01	S4.8.1	Construction Dust 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	\$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?				-
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.	ct no. 13/WSD/17 Design, Build and Operate First Stage of 7	N/A	Yes	No	Photo/Remarks
No.			IV/A	105	NO	T noto/ Remarks
	S4.8.1	Are de-bagging, batching and mixing processes of bagged cement carried out in sheltered areas?				
1.16	\$4.8.1	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	\$5.7	Are quiet plants adopted on site?		/		
2.02	\$5.7	Are the PMEs operating on site well-maintained to minimize the generation of excessive noise?				
2.03	\$5.7	Are plants throttled down or turned off when not in use?				
2.04	\$5.7	Are the plants known to emit noise strongly in one direction oriented to face away from NSRs?				
2.05	\$5.7	Are moveable barriers provided to screen NSRs from plant or noisy operations?				
2.06	\$5.7	Are silencers, mufflers and enclosures provided to plants?				
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2.08	\$5.7	Are purposely-built site hoarding construction with appropriate materials provided along the site boundary?				
2.09	\$5.7	Are noisy operation properly scheduled to minimize exposure and cumulative impacts to nearby sensitive receivers?				
2.10	S5.7	Are valid noise emission label(s) affixed to all hand-held breakers operating on site?	/			
2.11	\$5.7	Are valid noise emission label(s) affixed to all air compressors operating on site?				
2.12	\$5.7	Are all construction noise permit(s) applied for percussive piling work?				
2.13	\$5.7	Are construction noise permit(s) applied for general construction works during restricted hours?				
2.14	\$5.7	Are valid construction noise permit(s) displayed at all vehicular exits?				
3.00		Water Quality				
3.01	S6.9	Is effluent discharge license obtained for wastewater discharge from site?		/		
3.02	S6.9	Is effluent discharged according to the effluent discharge license?		1		
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?				





Member of the Aurecon Group Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant EIA ref. Item N/A Yes No Photo/Remarks No. 3.06 \$6.9 Is surface runoff diverted to sedimentation facilities? 3.07 \$6.9 Is the drainage system properly maintained? 3.08 \$6.9 Are construction works carefully programmed to minimize soil excavation works during rainy seasons? 3.09 \$6.9 Are exposed soil surface protected by paving as soon as possible to reduce the potential of soil erosion? 3.10 \$6.9 Are temporary access roads protected by crushed gravel? 3.11 \$6.9 Are exposed slope surface properly protected? 3.12 \$6.9 Is trench excavation avoided in the wet season as far as practicable, or if necessary, backfilled in short sections after excavation? 3.13 \$6.9 Are open stockpiles of construction materials on site covered by tarpaulin or similar fabric during construction? 3.14 \$6.9 Is runoff from wheel-washing facilities avoided? 3.15 S6.9 Is oil leakage or spillage prevented? 3.16 \$6.9 Are there any measures to prevent the release of oil and grease into the storm drainage system? 3.17 \$6.9 Are the oil interceptors/ grease traps properly maintained? 3.18 \$6.9 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 \$6.9 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 \$6.9 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 \$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 m³ used for dredging at seawater intake?





em lo.	EIA ref.		N/A	Yes	No	Photo/Remarks
	S6.9	Is the grab operated in slow and controlled manner such that the impact to seabed				
.20	30.9			_		
		by the grab when being lowered could be minimized? Is the operator ensured the				
		grab be properly closed before lifting the grab?				
.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?				
.30	\$6.9	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)?	/			
21	000					
.31	S6.9	Are disposal vessels fitted with tight bottom seals in order to prevent leakage of				
		material during transport?				Real Property lies and the second
.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?				
34	S6.9	Are the contractor(s) confirmed that the works cause no visible foam, oil, grease,	-			
	50.9					
		litter or other objectionable matter to be present in the water within and adjacent				
		to the dredging site?				
.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?				
.36	\$6.9	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?	/			
27	\$6.9					
.57	50.9	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?	/			
.38	S6.9	Are all vessels have a clean ballast system?				
		Are an vessels have a clean banast system?	/			
.39	S6.9	Are all vessels well maintained and inspected before use to limit any potential				
		discharges to the marine environment?	/			
.40	S6.9	Is any discharge of sewage/grey wastewater? Is wastewater from potentially				
		contaminated area on working vessels should be minimized and collected?	/			
41	06.0	working vessels should be minimized and collected?				-
.41	S6.9	Is any soil waste disposed overboard?	1			
.00		Waste Management				
	S8.5	Is a trip-ticket system implemented to monitor the disposal of C&D and solid				
.01		Provide to the structure of the structur				
.01		wastes at public filling facilities and landfills?				
		wastes at public filling facilities and landfills?		4		
		Is a recording system implemented to record the amount of wastes generated,			\square	-
.01						
.02		Is a recording system implemented to record the amount of wastes generated,				





Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant Item EIA ref. Photo/Remarks N/A Yes No 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 \$8.5 Are all containers for chemical waste properly labelled? Is chemical waste storage area used solely for storage of chemical waste and 4.08 \$8.5 properly labelled? 4.09 \$8.5 Are incompatible chemical wastes stored in different areas? 4.10 \$8.5 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 \$8.5 Are a routine cleaning and maintenance programme implemented for drainage systems, sump pits, and oil interceptors? 4.13 \$8.5 Are sufficient general refuse disposal/collection points provided on site? 4.14 S8.5 Is general refuse disposed of properly and regularly? 4.15 \$8.5 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 \$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 \$8.5 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 5.01 & 11.11 Are Is site hoarding provided? 5.02 S11.10 & Are vegetation disturbance minimized or soil protected to reduce potential soil erosion? 11.11 5.03 S11.10 & Is construction light oriented away from the sensitive receivers? 11.11





(Contra	ct no. 13/WSD/17 Design, Build and Operate First Stage of T	Seung K	wan O I	Desalina	ation Plant
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 vicinity of any preserved trees?				
5.07	S11.10 &	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	\$9.7	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?		/		
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?				
6.09	S9.7	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?	/			
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?				
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?		/		
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?		\square		





Contract no. 13/WSD/17 Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant EIA ref. Item N/A Yes No Photo/Remarks No 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? 6.16 \$9.7 Are affected habitats within the Clear Water Bay Country Bay reinstated by hydroseeding and planting of climbers and native shrub seedlings where practical upon completion of the slope mitigation works? 7.00 Landfill Gas Hazard 7.01 Are the safety procedures implemented to minimise the risks of fires and explosions, \$12.7 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 \$127 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 \$12.7 Is the monitoring of landfill gas being undertaken in all excavations, manholes, chambers and any confined spaces? S12.7 Are the monitoring frequency and areas being specified by the safety officers or 7.07 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 \$12.7 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 Overall 8.01 Is the EM&A properly implemented in general?





Remark / Follow up of Observation(s) and Non-compliance(s) of Last Weekly Site Inspection: 1.) The contracture are reminded to properly position the ganbage bin in an anceasable area. Regular horse keeping is reminded Resinder 2.) The contractors are reminded to monitor the health of the plants for the knowsage works. Signatures: ET Contractor's Supervising Officer's IEC's WSD's Representati Representative Representative Representative Representative (Name: Hen Chun (Name: HUWAL PONG) (Name: (Name: Title (Name) Tay 11111 loh



aurecon

Appendix J

Complaint Log

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Statistical Summary of Environmental Complaints

	En	vironmental Complai	nt Statistics
Reporting Period	Frequency	Cumulative	Complaint Nature
1 – 31 January 2024	1	2	Noise

Statistical Summary of Environmental Summons

Deventione Deviced	E	nvironmental Summons	Statistics
Reporting Period	Frequency	Cumulative	Details
1 – 31 January 2024	0	0	N/A

Statistical Summary of Environmental Prosecution

Descenting Designal	Environmental Prosecution Statistics			
Reporting Period	Frequency	Cumulative	Details	
1 – 31 January 2024	0	0	N/A	

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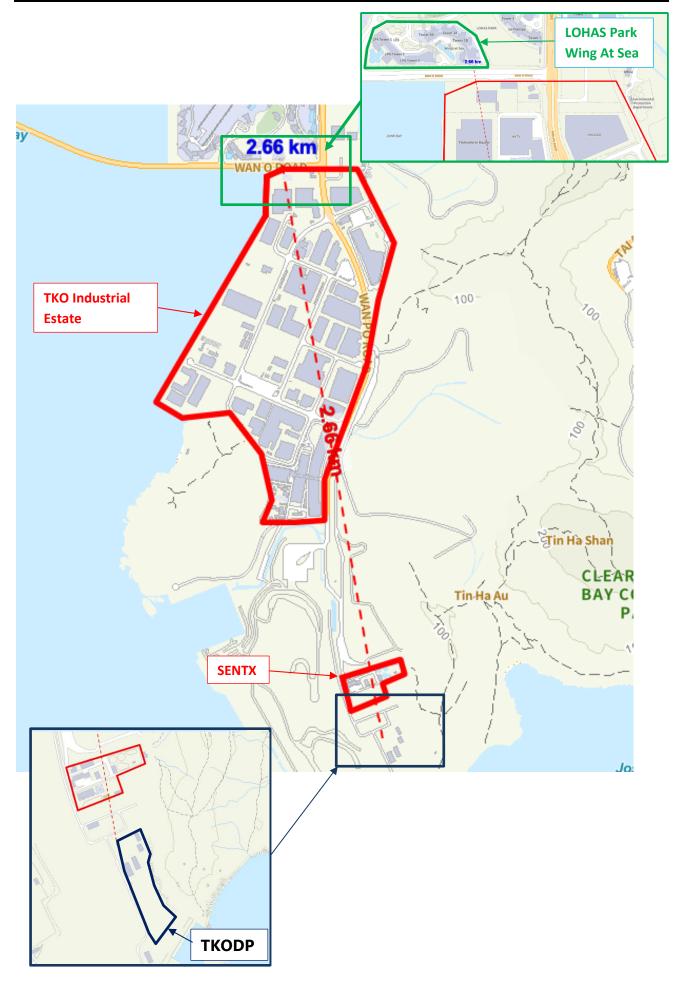
	DeSalifiation Fiance Member of the Aurecon Group
Interim Repor	<u>'t on Environmental Complaint</u>
Project Title	Design, Build and Operate First Stage of Tseung Kwan O Desalination Plant
Source of	Email from Environmental Protection Department to Water Supplies
Complaint	Department and Environmental Team Leader (ETL) dated 22 January 2024
EPD Case No.	N08/RE/00002165-24
ET Log Ref.	13/WSD/17_C002
Location of	Tseung Kwan O Desalination Plant
Incident	
Complaint description	EPD has received a formal complaint from a member of the public concerning noise nuisance from TKO Desalination Plant (TKODP) at night. "我是日出康城的居民,想投訴有關將軍澳海水化淡廠的噪音。自該廠12月開始運作,每晚10pm至早上7am都傳來陣陣低頻機械聲同震動,十分困擾,戴耳塞都難以入睡。很多康城及將軍澳的朋友都表示聽到,請幫忙向環保署及水務署反映。"
Investigation finding	Environmental Team (ET) under Contract No. 13/WSD/17 received the complaint on 22 January 2024 and a complaint investigation was undertaken in according to the EM&A Manual. Contractor, SOR, and IEC was informed immediately.
	Location Plan is provided in Appendix A .
	According to the information provided by contractor, contractor renewed the Construction Noise Permit (Permit No. GW-RE1514-23) on 22 December 2023, and construction team carried out yard piping works with hand-held grinders (Code: CNP 065) during restricted hour up to 23:00 on weekday during the concerned complaint period. The major commissioning activities during concerned period are production of desalinated water, equipment calibration and maintenance, and water sampling and analysis. The doors / gates have been installed at plant rooms entrances and most of them are kept closed during the plant commissioning. The photo record is shown in Appendix B .
	Contractor and ET arranged an ad-hoc nighttime noise monitoring on 25 January 2024 to review the potential noise generated during plant commissioning periods after received the complaint. The Leq,30mins is 53.2dB(A) after free field correction. The prediction of sound pressure level at LOHAS PARK WING AT SEA is calculated and the result is around 32.1dB(A). The detailed monitoring result and predicted noise pressure level shown in the Appendix C and Appendix D . For above justification, the complaint would be considering as non-project
	related.
Actions taken / to be taken	After received the complaint, contractor implemented mitigation measurement. The roller shutters of Reverse Osmosis Building and ActiDAFF would be kept closed to reduce the potential noise generated during plant commissioning. Contractor also posted notices in the plant in order to remind the staffs reporting any unusual noise generated during the construction / commissioning activities. (Appendix E) . Moreover, the Contractor was reminded to comply with all regulations and
	requirement stipulated in the Construction Nosie Permit and EM&A Manual.
Prepared by	Alex Leung
Date	31 January 2024



Appendix A

Location Plan







Appendix B

Site Activities

Page 4 of 18



Construction Activities

Construction team carried out yard piping works with hand-held grinders during restricted hour.



Most of doors / gates installed at plant rooms entrances are kept closed during the during the concerned complaint period.





Appendix C

Nighttime Noise Monitoring Record

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Monitoring Location



Monitoring Record



Monitoring Result

Nighttime Noise Level Results									
			_	L _{eq-5min}	, dB(A)				
Date	Time	Reading (1)	Reading (2)	Reading (3)	Reading (4)	Reading (5)	Reading (6)		Free-field Correction with Measured Level dB(A)
25/01/2024	23:12 - 23:42	49.8	49.7	50.9	50.1	49.9	50.5	50.2	53.2

Observation:

- 1. Other noise source was observed in neighboring plant during the monitoring
- 2. The roller shutters of Reverse Osmosis Building was not close during the monitoring.

Monitoring equipment and Calibration Certification

Items	Aspect	Description of Equipment	Model	Serial No.	Date of Calibration	Date of Next Calibration	Condition
1.	Noise	Acoustic Calibrator	Rion NC- 74	34615222	21-03-2023	20-03-2024	Valid
2.	Noise	Sound Level Meter	XL2	A2A-13548-E0	02-02-2023	04-02-2024	Valid

Calibration was conducted before and after the monitoring.



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Certificate of Calibration

for

Description:	Sound Level Calibrator
Manufacturer:	RION
Type No.:	NC-74
Serial No.:	34615222

Submitted by:

Customer:	Acuity Sustainability Consulting Limited
Address:	Unit E, 12/F, Ford Glory Plaza,
	Nos. 37-39 Wing Hong Street,
	Cheung Sha Wan, Kowloon,
	Hong Kong

Upon receipt for calibration, the instrument was found to be:



the allowable tolerance.

The test equipments used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 16 March 2023

Date of calibration: 21 March 2023

Date of NEXT calibration: 20 March 2024

Calibrated by:Calibration Technician	Certified by: Mr. Ng Yan Wa Laboratory Manager
Date of issue: 21 March 2023	NR TESTING LABORE
Certificate No.: APJ22-157-CC004	Page 1 of 2
Room 422, Leader Industrial Centre, 57-59 Au Pui Wan	Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668	B 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-la	b.com E-mail:inquiry@aa-lab.com



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1. Calibration Precautions:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. Calibration Specifications:

Calibration check

3. Calibration Conditions:

Air Temperature:	22.1 °C
Air Pressure:	1006 hPa
Relative Humidity:	61.7 %

4. Calibration Equipment:

Test Equipment	Туре	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV220120	HOKLAS

5. Calibration Results

5.1 Sound Pressure Level

Certificate No.: APJ22-157-CC004

Nominal value	Accept lower level	Accept upper level	Measured value
dB	dB	dB	dB
94.0	93.6	94.4	93.9

Note:

The values given in this certification only related to the values measured at the time of the calibration.



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Certificate of Calibration

for

Description:	Sound Level Meter
Manufacturer:	NTi Audio
Type No.:	XL2 (Serial No.: A2A-13548-E0)
Microphone:	ACO 7052 (Serial No.: 73912)
Preamplifier:	NTi Audio M2211 MA220 (Serial No.:5735)

Submitted by:

Customer: Acuity Sustainability Consulting Limited Address: Unit E, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

Upon receipt for calibration, the instrument was found to be:

✓ Within (31.5Hz – 8kHz) □ Outside

the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 2 February 2023

Date of calibration: 6 February 2023

Date of NEXT calibration: 5 February 2024

Calibrated by:Calibration Technician	Certified by: Mr. Ng Yan Wa Kaboratory Manager
Date of issue: 6 February 2023	AN TESTING LABOR
Certificate No.: APJ22-124-CC001	Page 1 of 4
Room 422, Leader Industrial Centre, 57-59 Au Pui Wan	
Tel: (852) 266	8 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-la	ab.com E-mail:inquiry@aa-lab.com



(A+A)*L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. Calibration Conditions:

23.9°C
1006 hPa
47.9 %

3. Calibration Equipment:

	Туре	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS

4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

Setting of		Setting of Unit-under-test (UUT)			Applied value		IEC 61672 Class 1
Range, dB	Freq.	Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA	SPL	Fast	94	1000	94.1	±0.4

Linearity

Setti	Setting of Unit-under-test (UUT)				Applied value		IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
		A SPL		94		94.1	Ref
30-130	dBA		Fast	104	1000	104.1	±0.3
				114		114.1	±0.3

Time Weighting

Set	ting of Uni	t-under-t	est (UUT)	Appl	lied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA	SPL	Fast	04	1000	94.1	Ref
50-150	UBA	SFL	Slow	94	1000	94.1	± 0.3
					3	NIR TESTING LABORATO	0 0 0 1
icate No.: A	PJ22-124	4-CC001			Solies In		Page 2 of 4
			7-59 Au Pui Wan S Tel: (852) 2668 ;		inerites in the second s	(A+A) *L	Page 2 of 4



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Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Appl	Applied value		IEC 61672 Class 1														
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB													
					31.5	94.1	±2.0													
					63	94.2	±1.5													
					125	94.1	±1.5													
					250	94.1	±1.4													
30-130	dB SPL	dB SPL Fast	Fast	94	500	94.2	±1.4													
						1000	94.1	Ref												
																		2000	94.5	±1.6
						4000	95.2	±1.6												
		-			8000	94.9	+2.1:-3.1													

A-weighting

Setti	Setting of Unit-under-test (UUT) Applied value		Setting of Unit-under-test (UUT)		UUT Reading,	IEC 61672 Class 1					
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB				
					31.5	54.8	-39.4 ±2.0				
					63	68.0	-26.2 ± 1.5				
					Fast	125	78.0	-16.1±1.5			
30-130 dBA SPL				SPL Fast			250	85.5	-8.6±1.4		
	30-130 dBA SPL	dBA SPL	IBA SPL			Fast	94	500	91.0	-3.2 ± 1.4	
							1000	94.1	Ref		
									2000	95.7	$+1.2 \pm 1.6$
										4000 96.2	$+1.0 \pm 1.6$
					8000	93.9	-1.1+2.1; -3.1				

C-weighting

Setting of Unit-under-test (UUT)		App	Applied value		IEC 61672 Class 1		
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	91.2	-3.0±2.0
					63	93.4	-0.8 ± 1.5
					125	94.0	-0.2±1.5
					250	94.1	-0.0 ± 1.4
30-130	30-130 dBC SPL	Fast	Fast 94	500	94.2	-0.0 ± 1.4	
				1000	94.1	Ref	
					2000	94.3	-0.2 ±1.6
					4000	94.4	-0.8 ± 1.6
	_				8000	92.0	-3.0 +2.1: -3.1

Certificate No.: APJ22-124-CC001



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5. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.10
	63 Hz	± 0.10
	125 Hz	± 0.10
	250 Hz	± 0.05
	500 Hz	± 0.10
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
	8000 Hz	± 0.10
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

Note:

The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)*L shall not be liable for any loss or damage resulting from the use of the equipment.

Certificate No.: APJ22-124-CC001

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Appendix D

Prediction of Sound Pressure Level



Calculation

The calculation is based on the following assumption:

- (1) The noise source is Reverse Osmosis Building.
- (2) The Effect of Influencing Factors (IFs) and the corrections for the Effect of Barriers could be neglected.
- (3) Only horizontal distance is considered.

$$Lp(R2) = Lp(R1) - 20 \cdot Log10(R2/R1)$$

Where:

Lp(R1) = Known sound pressure level at the first location = 53.2dB(A)

- Lp(R2) = Unknown sound pressure level at the second location Location
- R1 = Distance from the noise source to location of TKODP \approx 234.76 m
- R2 = Distance from noise source to the LOHAS Park \approx 2660 m

$$Lp(R2) \approx 32.1 \, dB(A)$$

The predicted sound pressure level (Horizontal) at the LOHAS Park Wing At Sea approximately equal to 32.1 dB(A).

<u>Area Sensitivity Ratings (ASRs) under Technical Memorandum for the Assessment of Noise from</u> <u>Places Other Than Domestic Premises, Public Places or Construction Sites</u>

2.3.4 Area Sensitivity Rating (ASR)

The Authority shall determine the appropriate ASR for the NSR under consideration from Table 1. Any NSR shall, irrespective of Table 1, be assigned an ASR of "C" if it is within 100 m of a zone designated as

"Industrial" or "Industrial Estate" on a statutory Outline Zoning Plan, or an ASR of "B" if it is between 100 m and 250 m

from such a zone, except in cases where Table 1 indicates an ASR of "C". Table 1 Area Sensitivity Ratings (ASRs)

Type of Area Containing NSR	Degree to which NSR is affected by IF						
Type of Area Containing NSK	Not Affected Indirectly Affected		Directly Affected				
(i) Rural area, including country parks or village type developments	А	В	В				
(ii) Low density residential area consisting of low-rise or isolated high-rise developments	А	В	С				
(iii) Urban area	В	С	С				
(iv) Area other than those above	В	В	С				

For the purpose of Table 1, the following definitions apply:

"country park" means an area that is designated as a country park pursuant to section 14 of the Country Parks Ordinance;

"directly affected" means that the NSR is at such a location that noise generated by the IF is readily noticeable at the NSR and is a dominant feature of the noise climate of the NSR;

"indirectly affected" means that the NSR is at such a location that noise generated by the IF, whilst noticeable at the NSR, is not a dominant feature of the noise climate of the NSR;

"not affected" means that the NSR is at such a location that noise generated by the IF is not noticeable at the NSR; and "urban area" means an area of high density, diverse development including a mixture of such elements as industrial activities, major trade or commercial activities and residential premises.

Acceptable Noise Levels at sensitive receiver

ASR Time Period	A	В	с
Day (0700 to 1900 hours)	60	65	70
Evening (1900 to 2300 hours)	dB(A)	dB(A)	dB(A)
Night (2300 to 0700 hours)	50 dB(A)	55 dB(A)	60 dB(A)



Monitoring Location Detail:





Appendix E

Mitigation Measures



1. Roller shutters closed in Reverse Osmosis Building and ActiDAFF.



2. Reminder notices posted.







Appendix K

Exceedance Report (s)

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Date of exceedance	Monitoring	Tide	Tide	Tide	Tide	ide Parameter	Measurement Result	Result	Result	Action Level (mg/L)		Limit Level (mg/L)		Exceedance	Marine construction activities with	Exceedance related to	Reasons of non-project related exceedance				
	Station			(mg/L)	depth	(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)	
04/01/2024	WSR3	- Flood				3.50					Action Level	Ν	Ν		~		~	~	~	~	
	WSR36		J Suspended Solid			4.08	5.00 3.50	6.00	0 3.79	Limit Level	Ν	Ν		~			~	~	~		
	NF1		(SS)			3.50				Action Level	Ν	Ν		~		~	~	~	~		
	NF3					4.00				Limit Level	Ν	Ν		~		~	~	~	~		
11/01/2024	WSR2	Suspended Solid			4.50	5.00	4.40	6.00	4.77	Action Level	Ν	Ν		~		~	~	~	~		
11/01/2024	WSR3	EDD	Ebb (SS)			5.17	5.00	4.40	6.00 4	4.77	Limit Level	Ν	Ν		~		~	~	~	~	
13/01/2024	NF1	Flood	Suspended Solid (SS)			4.67	5.00	4.60	6.00	4.98	Action Level	Ν	Ν		~		~	~	✓	✓	

1) Control station value already exceed either the Action or Limit Level.

2) No silt plume or pollution discharge from site area was observed.

3) 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).

4) No action and limit level exceedance observed at WSR37 (Outfall Shaft).

5) Marine construction activity was completed.

6) No operation activities related to the release of SS in the reporting period.

7) Water quality mitigation measures were observed maintained / implemented properly (double silt curtain).

Conclusion:

During water quality monitoring on 4 January 2024, 11 January 2024 and 13 January 2024, two (2) Action Level exceedances and one (1) Limit Level exceedances were recorded during mid-ebb tide, and five (5) Action Level and two (2) Limit Level exceedances of Suspended Solids were recorded during mid-flood tide. Total seven (7) Action Level and three (3) Limit Level exceedances for SS of impact water quality monitoring were recorded between 1 January 2024.

The marine construction works were completed on 1 September 2023. The operation activities were shown in the table below.

According to the record, most of the operation activities were instrument checking and adjustment, no operation activities might lead to the release of SS during the reporting period.

After investigation, all exceedances were considered non-project related.

Operation Activities:

04 January 2024	11 January 2024
 Production of desalinated water Equipment calibration and maintenance Production water sampling and analysis 	Production of desalinated waterEquipment maintenance
13 January 2024	
 Production of desalinated water Goods receiving at the plant ActiDAFF backwashing Equipment calibration and maintenance 	



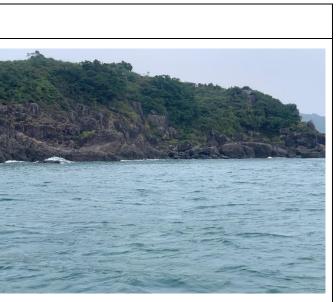


Supporting Photo:

Date of exceedance		Monitorin	g station(s)
04/01/2024			
	WSR3	WSR36	NF1
11/01/2024			
	WSR2	WSR3	
13/01/2023			
	NF1		







NF3

Date of exceedance	Monitoring	Tide	Parameter	Result		Sampling Depth Average Result		Action Level (mg/L)		nit Level mg/L)	Exceedance	Marine construction activities with	
	Station			(mg/L)	depth	(mg/L)	95%- ile	Control 120%	99%- ile	Control 130%		contact with water (Y/N)	
18/01/2024	WSR33	Flood	Suspended Solid			4.83	5.00	4.40	6.00	4.77	Limit Level	Ν	
	WSR36	FIOOd	(SS)			5.33					Limit Level	Ν	
	WSR1		b Suspended Solid (SS)			6.83	5.00	5.80		.00 6.28	Limit Level	Ν	
	WSR2					6.67			6.00		Limit Level	Ν	
	WSR3					5.67					Action Level	Ν	
23/01/2024	WSR16	Ebb				5.33					Action Level	Ν	
	WSR33					6.83					Limit Level	Ν	
	WSR36					6.00					Limit Level	Ν	
	WSR37					6.83					Limit Level	Ν	
30/01/2024	NF3	Flood	Suspended Solid (SS)			5.33	5.00	5.40	6.00	5.84	Action Level	Ν	

1) Control station value already exceed either the Action or Limit Level.

2) No silt plume or pollution discharge from site area was observed.

3) 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).

4) No action and limit level exceedance observed at WSR37 (Outfall Shaft).

5) Marine construction activity was completed.

6) No commissioning activities related to the release of SS in the reporting period.

7) Water quality mitigation measures were observed maintained / implemented properly (double silt curtain).

Conclusion:

During water quality monitoring on 18 January 2024, 23 January 2024 and 30 January 2024, seven (7) Action Level exceedances and five (5) Limit Level exceedance were recorded during <u>mid-ebb tide</u>, and three (3) Action Level and two (2) Limit Level exceedances of Suspended Solids were recorded during <u>mid-flood tide</u>. Total ten (10) Action Level and seven (7) Limit Level exceedances for SS of impact water quality monitoring were recorded between 16 January 2024.

The marine construction works were completed on 1 September 2023.

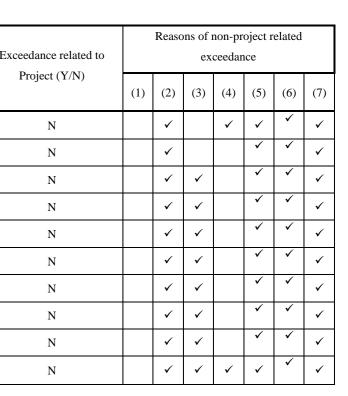
The commissioning activities were shown in the table below. The plant and the outfall shaft are operated normally.

After investigation, all exceedances were considered as non-project related.

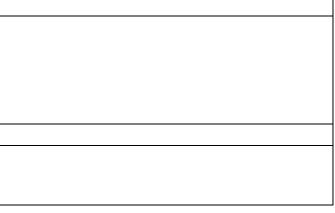
Commissioning Activities:

18 January 2024	23 January 2024
 Production of desalinated water ActiDAFF backwashing Equipment calibration and maintenance 	 Production of desalinated water Goods receiving at the plant ActiDAFF backwashing Equipment calibration and maintenance Water sampling and analysis
• 30 January 2024	
 Production of desalinated water Equipment checking 	





durecor



Supporting Photo:

Date of exceedance		Monitoring	g station(s)
18/01/2024			
	WSR33	WSR36	
23/01/2024	WSR1	WSR2	WSR3
	WSR33	WSR36	WSR37







Date of exceedance		Monitoring	g station(s)	
30/01/2023				
	NF3			





Rainfall Record

