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China Harbour Engineering Co Ltd

TEST REPORT

Contract No.: CV/2021/09 Handling of Surplus Public Fill (2022 - 2023)

TUEN MUN AREA 38 FILL BANK

MONTHLY EM&A REPORT NO.25

(JANUARY 2024)

Prepared by:

LAU, Wing Sum Assistant Environmental Officer

Checked by:

LAU, Chi Leung Environmental Team Leader

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Report No.: ENA40689

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Our Ref: PL-202402030

ETS-Testconsult Limited 8/F, Block B, Veristrong Industrial Centre 34-36 Au Pui Wan Street Fo Tan, Hong Kong

Attention: Mr. C L Lau

16 February 2024

Dear Mr. Lau,

RE: Contract No. CV/2021/09 Handling of Surplus Public Fill (2022-2023) Monthly EM&A Report (No. 25) for January 2024 for the Tuen Mun Area 38 Fill Bank

Reference is made to your submission of the Monthly EM&A Report for January 2024 for the Tuen Mun Area 38 Fill Bank, we are pleased to inform you that we have no adverse comment on the captioned report.

Thank you for your attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours faithfully,

Toang Jankery

F. C. Tsang Independent Environmental Checker

Contract No.: CV/2021/09 Handling of Surplus Public Fill (2022-2023) – Tuen Mun Area 38 Fill Bank ENA40689 Monthly EM&A Report No.25

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EXECUTIVE SUMMARY

This monthly Environmental Monitoring and Audit (EM&A) report No.25 was prepared by Environmental Team (ET) of ETS-Testconsult Ltd (ETL) for the "Contract No. CV/2021/09 Handling of Surplus Public Fill (2022-2023) – Tuen Mun (TM) Area 38 Fill Bank" (The Project).

This report documented the findings of EM&A Works conducted during the operation phase of Fill Bank at TM Area 38 in January 2024.

Site Activities

As informed by the Contractor, the site activities in this reporting period were as below:

- 1. Operation of the Public Fill Reception Facilities at Tuen Mun Fill Bank (TMFB);
- 2. Operation and Maintenance of Crushing plant at TMFB;
- 3. Delivery of public fill to Taishan at TMFB;
- 4. Operation of the Integrated Public Fill Reception at TMFB;
- 5. Operation and Maintenance of Wheel Washing Bays and Facilities at TMFB;
- 6. Operation and Maintenance of Wash House at TMFB
- 7. Personnel Position Tracking and Proximity Detection System of Moving Plant at TMFB;
- 8. Operation and Maintenance a Digital Works Supervision System (DWSS) for TMFB;
- 9. Operation of a New Soil Platform for Preliminary Sorting of Public Fill at TMFB;
- 10. Operation of Concrete Slab at Wet Deposition Platform in TMFB
- 11. Operation of AI System for Crushing Plant at TMFB
- 12. Implementation of C Easy system at TMFB (phase 1)
- 13. Carry out GCO Probe test and SRT
- 14. Setup of plants for operation of recycling public fill as blanket layer material of reclamation projects PMI No.70
- 15. Site formation works at a Tsang Tsui site
- 16. Reloction works of soil platforms

Environmental Monitoring Progress

The summary of the monitoring activities in this monitoring month is listed below:

- 24-hour TSP Monitoring: 5 Occasions at 2 designated locations
- 1-hour TSP Monitoring: 15 Occasions at 2 designated locations
- Noise, Daytime: 9 Occasions at 2 designated locations
- Marine Water Quality Monitoring: 13 Occasions at 4 designated locations
- Weekly-site inspection: 4 Occasions

Air Monitoring

No exceedance of Action and Limit level was recorded for 1-hr and 24-hr TSP monitoring in the reporting period.

Noise Monitoring

No exceedance of Action and Limit level for noise monitoring was recorded in the reporting period.

Marine Water Quality Monitoring

No exceedance of action and limit level was recorded in the reporting period.

Weekly Site Inspection

In general, performance on environmental mitigation measures implemented was found to be satisfactory in this reporting period. The major findings observed during site inspections are presented in the Section 7.0.

Environmental Complaints, Notification of summons and successful prosecutions

A complaint was received on 25 January 2024. No notification of summon and prosecution with respect to environmental issues was received in this reporting period.

Future Key Issues

Based on the site inspections and forecast of engineering works in the coming month, key issues to be considered are as follows:

- Dust generation from activities on site, such as vehicular movements along unpaved area and rock crushing activities;
- Noise impact from operating equipment and machinery on site;
- Wastewater and surface runoff from the site discharged into nearby water body; and
- Storage and usage of chemicals / fuel and chemical waste / waste oil.



1.0 INTRODUCTION

China Harbour Engineering Co Ltd (CHEC) appointed Environmental Team (ET) of ETS-Testconsult Limited (ETL) to undertake the Environmental Monitoring and Audit (EM&A) for the "Contract No: CV/2021/09 –Handling of Surplus Public Fill (2022-2023) – Tuen Mun (TM) Area 38 Fill Bank" (The Project).

In accordance with the Condition 4 of Part C of Environmental Permit (No.: EP-210/2005/F) (the EP), an EM&A programme as set out in the Project Profile should be implemented.

The EM&A programme requires environmental monitoring for air quality, water quality and environmental site inspections for air quality, water quality, landscape and visual, and waste management. The EM&A requirements for each parameter described in the following sections include:

- All monitoring parameters;
- Monitoring schedules for the reporting month and forthcoming months;
- Action and Limit levels for all environmental parameters;
- Event/Action Plans;
- Environmental mitigation measures, as recommended in the Project Profile; and
- Environmental requirements in contract documents.

Baseline monitoring was completed in May 2003 by Stanger Asia Ltd. Action and Limit Levels were established for air and water quality parameters based on the baseline monitoring results.

This report documented the findings of EM&A Works conducted during the operation phase of Fill Bank at Tuen Mun Area 38 in January 2024.

2.0 **PROJECT INFORMATION**

2.1 Construction Programme

Details of construction programme are shown in Appendix G.

2.2 Project Organization and Management Structure

The organization chart and lines of communication with respect to the on-site environmental management and monitoring program are shown in Appendix A.

2.3 Contact Details of Key Personnel

The key personnel contact names and telephone numbers are shown in Table 2.1.

<u></u>						
Organization	Name of Key Staff	Project Role	Tel. No.	Fax No.		
CEDD	Mr. C W Au Yeung, Andrew Cheung	Engineer's Representative	2623 9267 / 2762 5588	2714 0113		
IEC (Acuity)	Mr. F C Tsang	IEC	2698 9097	2333 1316		
Contractor (CHZH-JV)	Zhou Chang Ying	Senior Project Manager	96266299	22474108		
ET (ETL)	C. L. Lau	ET Leader	2946 7791	2695 3944		

 Table 2.1
 Contact Details of Key Personnel



3.0 CONSTRUCTION PROGRESS IN THIS REPORTING MONTH

As informed by the Contractor, the activities in the reporting month include:

- 1. Operation of the Public Fill Reception Facilities at Tuen Mun Fill Bank (TMFB);
- 2. Operation and Maintenance of Crushing plant at TMFB;
- 3. Delivery of public fill to Taishan at TMFB;
- 4. Operation of the Integrated Public Fill Reception at TMFB;
- 5. Operation and Maintenance of Wheel Washing Bays and Facilities at TMFB;
- 6. Operation and Maintenance of Wash House at TMFB
- 7. Personnel Position Tracking and Proximity Detection System of Moving Plant at TMFB;
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- 12. Implementation of C Easy system at TMFB (phase 1)
- 13. Carry out GCO Probe test and SRT
- 14. Setup of plants for operation of recycling public fill as blanket layer material of reclamation projects PMI No.70
- 15. Site formation works at a Tsang Tsui site
- 16. Relocation works of soil platforms

4.0 AIR QUALITY MONITORING

4.1 Monitoring Requirement

1-hr and 24-hr TSP levels were monitored in the reporting month. Table 4.3 shows the Action and Limit Levels for the environmental monitoring works.

4.2 Monitoring Equipment

Both 1-hour and 24-hour TSP air quality monitoring was performed using a High Volume Air Sampler (HVS) located at each of the designated monitoring station. Table 4.1 summarizes the equipment used in the air quality monitoring programme. Copies of the calibration certificates for the HVS and calibrator are attached in Appendix B1.

Table 4.1	Air Quality Monitoring Equipment	

Equipment	Model and Make
HVS	Graseby GMW 2484 & 1180
Calibrator	Tisch TE-5025A 4128

4.3 Monitoring Parameters, Frequency and Duration

Table 4.2 summarizes the monitoring parameters, monitoring duration and frequencies of air quality monitoring.

Parameter	Duration	Frequency
24-hr TSP	24 hr	Once per six days
1-hr TSP	1 hr	Three times per six days

4.4 Monitoring Locations and Schedule

In accordance with the Project Profile, two air-quality monitoring stations, namely TM-A1 and TM-A2, were selected for the 1-hr TSP and 24-hr TSP sampling.

Since the area for existing air monitoring station TM-A2 near Tipping Hall No.1 was handed over to EcoPark, air monitoring station TM-A2 was cancelled and the air monitoring was carried out at an alternative air monitoring station TM-RA2 (refer to Figure 1 attached) from 28 October 2008.



The locations of monitoring stations are shown in Figure 1.

During the reporting month, 1-hr and 24-hr TSP monitoring were carried out as the schedule. The details for 24-hr and 1-hr TSP monitoring carried out in this reporting month are summarized in Appendix B2.

4.5 Monitoring Methodology

Both 1-hr and 24-hr air quality monitoring (High Volume Sampler)

Instrumentation

High volume sampler (HVS) complete with appropriate sampling inlets were employed for both 1hour and 24-hour TSP monitoring. The sampler is composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complies with that required by USEPA standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).

Installation

The installation of HVS refers to the requirement stated in Appendix D2 "General Technical Requirements of Environmental Monitoring" in the Environmental Monitoring and Audit Guidelines for Development Projects in Hong Kong published by EPD.

Operation/Analytical Procedures

Operating/analytical procedures for the operation of HVS are as below:

- Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 0.6m³/min and 1.7m³/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50. The flow rate is indicated on the flow rate chart.
- For TSP sampling, fiberglass filters (GA-55) were used.
- The power supply was checked to ensure the sampler worked properly.
- On sampling, the sampler was operated 5 minutes to establish thermal equilibrium before placing any filter media at designated air monitoring station.
- The filter holding frame was then removed by loosening the four nuts and carefully a weighted and conditioned filter was centered with the stamped number upwards, on a supporting screen.
- The filter was aligned on the screen so that the gasket formed an air-tight seal on the outer edges of the filter. Then the filter holder frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
- The programmable timer will be set for a sampling period of 1 hour / 24 hours. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number.).
- After sampling, the filter was transferred from the filter holder of the HVS to a sealed plastic bag and sent to the laboratory for weighting. The elapsed time was also recoded.
- Before weighting, all filters were equilibrated in a 3esiccators for 24 hour with the temperature of 25°C <u>+</u> 3°C and the relative humidity (RH) <50% <u>+</u>5%.

Maintenance & Calibration

- The HVS and their accessories should be maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
- HVS should be calibrated at bi-monthly intervals.

Wind Data Monitoring

Wind data included wind speed and wind direction were directly extracted from Tuen Mun Station of Hong Kong Observatory during this reporting month. The wind data are presented in Appendix E.



4.6 Action and Limit Levels

Table 4.3 shows the Action and Limit levels for 24-hr TSP and 1-hr TSP monitoring.

Monitoring	24-hr TS	Ρ (μg/m³)	1-hr TSP (μg/m³)		
Location	Action Level	Limit Level	Action Level	Limit Level	
TM-A1	192	260	344	500	
TM-RA2 *	192	260	344	500	

Table 4.3 Action and Limit Levels for 24-hr TSP and 1-hr TSP

Remark (*): Since the area for existing air monitoring station TM-A2 near Tipping Hall No.1 was handed over to EcoPark, air monitoring station TM-A2 was cancelled and the air monitoring was carried out at an alternative air monitoring station TM-A2 from 28 October 2008. Since dust monitoring stations TM-A2 and TM-RA2 are located close to the major dust emission sources and no significant difference between them on the prevailing meteorological conditions, the baseline data from TM-A2 can also be valid in the case of TM-RA2.

4.7 Event-Action Plans

Please refer to Appendix F for details.

4.8 Results and Observations

All monitoring data of both 1-hr and 24-hr TSP monitoring is provided in Appendix B2. Graphical presentation of 1-hr and 24-hr TSP monitoring results for the reporting period is shown in Appendix B3. Wind data, including wind speed and wind direction, are annexed in Appendix E.

No exceedance of Action and Limit level was recorded for 1-hr and 24-hr TSP monitoring in the reporting month.

Generally, the Contractor implemented sufficient dust mitigation measures, including operation of wheel washing facilities and road dampening by water bowsers on the main haul roads and unpaved areas.

5.0 MARINE WATER QUALITY MONITORING

5.1 Monitoring Requirements

In accordance with the Project Profile, impact marine water quality monitoring was conducted three days per week. Measurements were taken at both mid-flood and mid-ebb tides at three depths (i.e. 1m below surface, mid depth and 1m from seabed) at two control monitoring stations (TM-FC1 and TM-FC2) and two impact monitoring stations (TM-FM1and TM-FM2).

5.2 Monitoring Locations

As stipulated in the EM&A requirement, there were four monitoring stations undertaken during the impact monitoring. Figure 2 shows the locations of the marine water quality monitoring stations.

5.3 Monitoring Parameters and Frequency

Monitoring of the marine water quality parameters and frequency are listed in Table 5.1.

U			
Monitoring Station	Parameter	Frequency	No. of Depths
	Depth (m)		
Control Stations:	Temperature (°C)		
TM-FC1 (Mid-ebb) and TM-FC2 (Mid-flood)	Dissolved Oxygen	2 davs/wook	3 (Surface, mid-
	(mg/L and % saturation)	2 tidoo/dov	
Impact Stations:	Turbidity (NTU)	2 tides/day	depth & bottom)
TM-FM1 and TM-FM2	Salinity (ppt)		
	Suspended solids (mg/L)		

Table 5.1 Monitoring Parameters and Frequency of the marine water



5.4 Monitoring Methodology and Equipment Used

For Location of the monitoring stations

Global Positing System (GPS)

A hand-held digital GPS was used to identify the designated monitoring stations prior to water sampling.

For Water Depth measurement

Echo Sounder

A portable, battery-operated echo sounder was used for the determination of water depth at each designated monitoring station.

For In-situ Water Quality Measurement

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 recalibrated at 3 monthly intervals or sometimes longer throughout all stages of the water quality monitoring.

Dissolved Oxygen, Salinity, Turbidity and Temperature Measuring Equipment

A portable, weatherproof multiparameter water quality meter (YSI Pro DSS) which complete with cable, sensor and DC power source were used for measuring DO, turbidity, salinity, pH and temperature:

■a dissolved oxygen level in the range of 0 to 50 mg/L and 0-500 % saturation;

- ■a turbidity in range 0-4000 NTU;
- a salinity in range 0-70 ppt;
- ■a temperature of -5-70 degree Celsius

A membrane electrode with automatic temperature compensation complete with a cable was installed.

For Water Sampling and Sample Analysis

In-situ monitoring was carried out at three depths: 1 meter below water surface, at mid-depth and 1 meter above the seabed. At each sampling depth, duplicate readings of dissolved oxygen content and turbidity were taken. The probes were drop into water, two consecutive measurements of dissolved oxygen (DO), dissolved oxygen saturation (DOS), turbidity and salinity were taken. The difference between the two readings of each set was more than 25% of the value of the first reading while a third measurement would be conducted to ensure data precision.

Water Sampler

A water sampler comprising a transparent PVC cylinder, with a capacity of not less than 2 liters, was lowered into the water body at the predetermined depth. The both opening ends of the sampler were then closed accordingly by dead weight and water samples were collected.

Water Container

The sample container, made by high-density polythene, was rinsed with a portion of the water sample. The water sample was then transferred to the container, labeled with a unique sample ID and sealed with a screw cap. The water samples were stored in a cool box maintained at 4°C. The water samples were then delivered to a local HOKLAS-accredited laboratory (Environmental Laboratory, ETS-Testconsult Ltd, HOKLAS Registration No. 022) on the same day for analysis.

The summary of testing method of testing parameter as recommended by EIA or required by EPD, with the QA/QC results in accordance with the requirement of HOKLAS or international accredited scheme is shown in Table 5.2. For the QA/QC procedures, one QC sample, one duplicate sample



and one sample spike of every batch of 20 samples were analysis. The QA/QC results are summarized in Appendix N.

Table 5.2	Summary of testing procedure	Э
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Laboratory Analysis	Testing Procedure	Detection Limit	
Total suspended solids	In house method based on APHA 19 th ed 2540D	1.0 mg/L	

In-situ measurement

All in-situ monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use. Responses of sensors and electrodes were checked with certified standard solutions before each use. The DO sensor was calibrated by wet bulb method and a zero check in distilled water was performed with the turbidity and salinity sensor before the strat of measurement.

At each measurement/sampling depth, two consecutive measurements of dissolved oxygen (DO), dissolved oxygen saturation (DOS), turbidity and salinity were taken. For DO, DOS, Turbidity and Salinity, measurements were conducted three days per week at both mid-ebb and mid-flood tides at three depths (i.e. 1m below surface, mid depth and 1m from seabed). The duplicate measurements were averaged if the difference was not greater than 25%. If the difference is greater than 25%, repeat measurement will be required to be carried out.

Table 5.3 shows the equipment used for in-situ monitoring of water quality. The calibration certificates are attached in Appendix C1.

Parameter	Model	Date of Calibration	Due Date	Equipment No.
Coordinate of Monitoring stations	Garmin eTrex 10			ET/EW/005/09
Dissolved Oxygen (Saturation), Temperature, Salinity, Turbidity	YSI Pro DSS Multiparameter Water Quality Meter	30/11/23	29/02/24	ET/EW/008/010*
Water Depth	Speedtech SM- 5			ET/EW/002/08

 Table 5.3
 Details of Marine Water Quality Monitoring Equipment (In-site measurement)

Remark: Indicates the instrument should be calibrated on site.

5.5 Action and Limit Levels

The water quality criteria, namely Action and Limit (A/L) levels are presented in the table below.

Parameter	Action Level	Limit Level	
DO (mg/L)	Surface & Middle	Surface & Middle	
	<4.78 mg/L (5%-ile of baseline data)	<4.00 mg/L (1%-ile of baseline data)	
	<u>Bottom</u>	<u>Bottom</u>	
	<4.16 mg/L (5%-ile of baseline data)	<2.00 mg/L	
SS (mg/L)	>120% of the upstream control station's	>130% of the upstream control station's	
(Depth-	SS at the same tide on the same day	SS at the same tide on the same day	
averaged)			
Turbidity (NTU)	>120% of the upstream control station's	>130% of the upstream control station's	
(Depth-	turbidity at the same tide on the same	turbidity at the same tide on the same	
averaged)	day	day	

Table 5.4Water Quality Action and Limit Levels



5.6 Event and Action Plan

Please refer to the Appendix F for details.

5.7 Monitoring Duration and Period in this reporting period

Table 5.5 is the time schedule for the marine water quality monitoring events that were conducted in this reporting period. Duration of marine water quality monitoring is detailed in Appendix C2.

Table 5.5	Time Schedule of Marine Water Quality Monitoring	

January-2024							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	1	2	3	4	5	6	
		▼		•		▼	
7	8	9	10	11	12	13	
11	15	16	17	18	10	20	
14	15	*	17	70 ▼	19	20 ▼	
21	22	23	24	25	26	27	
28	29	30	31	`			

Remark: (▼) = Marine water quality monitoring carried out by ET *Water quality monitoring on 02/09/2023 was rescheduled to 03/09/2023 due to the adverse weather condition (The Tropical Cyclone Signal No.8).

5.8 Marine Water Quality Monitoring Results

The impact water quality measurement results are detailed in Appendix C2. Appendix C3 presents the water quality monitoring data and graphical presentations of monitoring results respectively. The summary of marine water quality exceedances is shown in Table 5.6.

		, Fires a damas	DO				
Tide Station	Exceedance Level	Surface & Middle	Bottom	Turbidity	SS	Total	
		Action	0	0	0	0	0
Mid Ehh	1101-1-1011	Limit	0	0	0	0	0
T		Action	0	0	0	0	0
	TIVI-FIVIZ	Limit	0	0	0	0	0
		Action	0	0	0	0	0
Mid-	1 101-1-101 1	Limit	0	0	0	0	0
Flood 7		Action	0	0	0	0	0
	ΙΝΙ-ΓΙΝΙΖ	Limit	0	0	0	0	0
Total		Action	0	0	0	0	0
		Limit	0	0	0	0	0

 Table 5.6
 Summary of Marine Water Quality Exceedances in this reporting period

According to the summary of marine water monitoring results, no exceedance of action and limit level was recorded in this reporting month.

6.0 Noise Monitoring

6.1 Monitoring Requirements

Noise monitoring was conducted at 2 designated monitoring stations as specified in the Sections 25.10A of the Particular Specification for good site practice.

The equipment, parameter, frequency, duration, methodology, calibration details, results and observations of the noise monitoring for the reporting month are presented in this section.



6.2 Monitoring Equipment

An Integrating Sound Level Meter was used for noise monitoring. It was a Type 1 sound level meter capable of giving a continuous readout of the noise level reading including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (Lx). It complies with International Electro Technical Commission Publications IEC 61672 Type 1 specification, and speed in m/s was used to monitor the wind speed.

Table 6.1 summarizes noise monitoring equipment model being used. A copy of the calibration certificate for noise meter and calibrator are attached in Appendix D1.

Table 6.1	Noise Monitoring	Equipment
	rioloo monitoring	

Equipment	Model
Sound Level Meter	Rion NL-52 / Rion NL-31
Calibrator	Castle GA607

6.3 Monitoring Parameters, Duration and Frequency

Duration, frequencies and parameters of noise measurement are presented in Table 6.2.

Table 6.2	Duration, Frequencies and Parameters of Noise Monitoring
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Time period	Duration/min	Parameters	Frequency
Day-time: 0700-1900 hrs on normal weekday	30	Leq, L10, L90	Twice per week

6.4 Monitoring Locations and Period

Since Lands Dept did not approve to carry out noise monitoring at their own area where the noise monitoring stations TM-N1 and TM-N2 located due to the security, noise monitoring carried out at two noise monitoring stations TM-RN1 and TM-RN2 (refer to the figure 3 attached) from 18 December 2007.

The noise monitoring locations, TM-RN1 and TM-RN2 are shown in Figure 3. The noise measurement at TM-RN1 and TM-RN2 are façade measurement.

The noise-monitoring period of monitoring stations is summarized in Appendix D2.

6.5 Monitoring Procedures and Calibration Details

Operation/Analysis Procedures

- The Sound Level Meter was set on a tripod at a height of 1.2m above the ground.
- For free field measurement, the meter was positioned away from any nearby reflective surfaces.
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - Frequency weighting: A
 - Time weighting : Fast
 - Time measurement : 30 min
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94 dB at 1000HZ. If the difference in the calibration level before and after measurement was more than 1dB, the measurement would be considered invalid and repeat measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with a portable wind meter.
- During the monitoring period, the Leq, L10 and L90 were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Free Field correction to the measurements should be made. Correction factor of +3dB(A) should be made to the free Field measurements. Noise monitoring would be cancelled in the presence of fog, rain, wind with a steady speed exceeding 5m/s, or wind gusts exceeding 10m/s.



Maintenance and Calibration

- The microphone head of the sound level meter and calibrator are cleaned with soft cloth in quarterly intervals.
- The meter is sent to the supplier or HOKLAS laboratory to check and calibrated in yearly intervals.

6.6 Action and Limit Levels

The Action and Limit levels for noise levels derived as illustrated in Table 6.3.

Table 6.3 Action and Limit Levels for noise monitoring

Time Period	Action	Limit
0700-1900 hrs on normal weekdays	When one documented complaint is received	65 dB(A)

6.7 Event-Action Plans

Please refer to the Appendix F for details.

6.8 Results and Observation

The detail of the noise monitoring is provided in Appendix D2. Graphical presentation of the monitoring result for the reporting period is shown in Appendix D3.

Since no documented complaint on noise issue was received in this reporting period, no Action Level exceedance was recorded. Besides, no exceedance in Limit Level was recorded according to the result from Day-time noise monitoring.

The major sources of noise pollution observed in this reporting month were noise from the traveling dump trucks and from the operation of site machines.

7.0 ENVIRONMENTAL AUDIT

7.1 Weekly ET Site Inspections and EPD's Site Inspection

7.1.1 Weekly ET Site Inspections

Weekly site inspections were carried out by ET to monitor the timely implementation of proper environmental pollution control and mitigation measures for the Project. In this reporting month, four weekly site inspections were conducted on 04, 11, 18 and 25 January 2024. Summaries of key findings of weekly ET site inspections in this month are described in Table 7.1.

Date	Key Findings	Action(s) Taken	Action(s) Taken by	Rectification		
		recommended by ET	the Contractor	Status by ET		
			during the site audit	_		
04						
January	No defective work or obse	ervation was recorded durin	ng the weekly ET site i	inspection		
2024						
11						
January	No defective work or obse	No defective work or observation was recorded during the weekly ET site inspection				
2024						
18						
January	No defective work or obse	ervation was recorded durir	ng the weekly ET site i	inspection		
2024						
25						
January	No defective work or obse	ervation was recorded durir	ng the weekly ET site i	inspection		
2024			-			

Table 7.1 Key Findings of Weekly ET Site Inspections in this reporting month



7.1.2 The State of Air Quality Control of 3RS area in TMFB

As there was the concern about the dust emission in the 3RS collection area of TMFB, EPD arranged a joint site inspection on 06 October 2022 and the contractor carried out mitigation measures, including increasing the frequency of water spraying by water lorries, setting up water spraying machine in the 3RS area and providing cleaning at the site haul road, to minimize the dust emission. The location of 3RS and discharge point would be inspected in every weekly environmental audit.

7.1.3 EPD's Site Inspection

EPD's site inspection was carried out on 31 January 2024.

7.2 Review of Environmental Monitoring Procedures

The monitoring works conducted by the ET were inspected internally on a regular basis. The following observations have been recorded for the monitoring works:

Air Quality Monitoring

- The monitoring team recorded the observations around the monitoring stations within and outside of the construction site.
- The monitoring team recorded the temperature, air pressure and general weather condition on the monitoring day.

Water Quality Monitoring

- The monitoring team recorded the observations around the monitoring stations, which might affect the results; and
- Major water pollution sources were identified and recorded.

Noise Monitoring

- The monitoring team recorded the observations around the monitoring station, which might affect the results.
- Major noise sources were identified and recorded.

7.3 Status of Environmental Licensing and Permitting

All permits/licenses valid in this reporting month are summarized in Table 7.2.

Description	Permit No.	Valid	Period	Section			
		From	То				
Environmental	EP-	01/01/24		Issued			
Permit	210/2005/F						
Chemical Waste	5296-421-	20/04/17		Spent battery containing heavy metals and			
Registration	C1186-33			spent lubricating oil			
Effluent Discharge	WT0004275	21/02/23	29/02/28	Effluent arising from vehicle washing and dust suppression activities and			
Lioonioo	0 2022			contaminated surface runoff treated by			
				screening facilities and sedimentation			
				tanks (sedimentation and chemical			
				precipitation).			
Marine Dumping	EP/MD/24-	02/01/24	18/02/24	Approval for dumping 499,999 tons			
Permit	003			(approximately equal to 277,777 cu.m. bulked quantity) of Public Fill (Reclamation			
				Materials) from Tseung Kwan O Area 137			
				Fill Bank and Tuen Mun Area 38 Fill Bank			
				to designated dumping area at			
				Guanghaiwan of Taishan			

 Table 7.2
 Summary of environmental licensing and permit status



Billing Account for Waste Disposal	7042821	22/05/17	
Notification Pursuant to Section 3(1) of the Air Pollution Control (Construction Dust)	475208	12/04/17	

7.4 Implementation Status

7.4.1 Implementation Status of Environmental Mitigation Measures

An updated summary of the Environmental Mitigation Implementation Schedule (EMIS) is presented in Appendix I. Most of the necessary mitigation measures were implemented properly.

7.4.2 Implementation Status of Event and Action Plan

No exceedance of Action and Limit levels was recorded for 1-hr and 24-hr TSP monitoring in the reporting month. Apart from this, there was no exceedance on noise recorded in this month.

According to the marine water monitoring results, no action-level and limit-level exceedance was recorded in this reporting period.

Hence, no further action was required to be implemented.

7.4.3 Implementation Status of Environmental Complaint, Notification of Summon and Successful Prosecution Handling

A complaint was received on 25 January 2024, which was forwarded to ET by email on 26 January 2024 for investigation, from public against dust nuisance and lack of lighting facilities. The Contactor has implemented control measures including increasing the frequency of water spraying by water lorries and providing regular cleaning at the site haul road to minimize dust emission.

No notification of summon and prosecution with respect to environmental issues was received in this reporting period.

A summary of environmental complaints, notifications of summons and successful prosecutions was given in Table 7.3.

Complaints	logged	Summons	served	Successful Prosecution							
January 2024	Cumulative	ative January 2024 Cu		January 2024	Cumulative						
1	8	0	0	0	0						

Table 7.3 Summary of Environmental Complaints and Prosecutions

8.0 LANDSCAPE AND VISUAL

Landscape and visual site audit was carried out on a weekly basis to monitor environmental issues in order to ensure that all mitigation measures were implemented timely and properly. The findings in this reporting period were:

- The maximum stockpiling height at the Fill Bank was limited to a maximum of +40 mPD;
- The Contractor hydroseeded the outer slopes of the Fill Bank as far as practicable;
- The Contractor removed the stockpile of public fill in a sequence to allow the outer hydroseeded to be removed later than other portions as far as practicable; and
- Lighting was set to minimize night-time glare.



9.0 WASTE MANAGEMENT

9.1 Summary of Waste disposed of in this period

The actual amounts of different types of waste disposed of by the activities of the Project in the period are shown in Table 9.1 and the Monthly Summary Waste Flow Table is shown in Appendix K.

Table 9.1	Actual amounts of Waste generated in this reporting month	
-----------	---	--

Waste Type	Actual Amount	Disposal Locations								
Public Fill ('000m³)	0	Tuen Mun 38 Fill Bank								
C&D Waste (Others – e.g. general refuse) ('000kg)	398.4	WENT Landfill								
Chemical Waste (kg)/(L)	0(L)	Collected by licensed collector								

9.2 Advice on the Solid and Liquid Waste Management Status

The Contractor should provide sufficient preventive measures during equipment maintenance works so as to avoid oil leakage on the ground. In the event of any oil leakage, the Contractor should clean up the polluted soil and handle all the materials used for this cleaning works as chemical waste.

The drain outlet of all the bunded areas should be plugged properly. Besides, pre-cast drip trays were provided for oil drums at several areas, such as workshop and chemical storage area. The Contractor should collect and dispose of any stagnant water accumulated in the concrete bunding and drip trays and handle them as chemical waste.

The Contractor should use suitable containers with proper labels to store chemical wastes in accordance with Code of Practice on the Packaging, Labeling and Storage of Chemical Waste. The Contractor should also advise their workers of the proper procedures in handling the chemical waste. All the trip tickets for chemical waste disposal should be properly kept in the site office.

The Contractor was reminded to increase the frequency of inspection and cleaning of the site drainage system, including permanent desilting chambers, desilting facilities, oil interceptor bypass tank and all the trapezoidal channels. Moreover, the Contractor should apply approved pesticides in the stagnant water ponds.

All the runoff from the parking area should be pumped to the desilting facilities and oil interceptors to remove suspended solids and oil & grease prior to discharge.

All the discharge measures were managed under Effluent Discharge License. No discharge is allowed before the approval of discharge permit.

10.0 ENVIRONMENTAL NON-CONFORMANCE

10.1 Summary of air quality, noise and marine water quality

No exceedance of Action and Limit level was recorded for 1-hr and 24-hr TSP monitoring in the reporting period.

According to the marine water monitoring results, no action-level and limit-level exceedance was recorded in the reporting period.

The noise level measured at the monitoring station complied with the Limit Level of 65dB(A). No complaint was received regarding noise issue in this reporting period.

10.2 Summary of Environmental Complaints

A complaint was received on 25 January 2024 regarding the dust nuisance.



10.3 Summary of Notification of Summons and Prosecution

There was no notification of summon and prosecution respect to environmental issues registered in this reporting period.

11.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Impact monitoring of air quality, noise and water quality were carried out at designated locations in this reporting period.

According to the summary of air monitoring results, no exceedance of Action and Limit levels was recorded for 1-hr and 24-hr TSP monitoring in the reporting period.

According to the marine water monitoring results, no action-level and limit-level exceedance was recorded in the reporting period.

The noise level measured at the monitoring station complied with the Limit Level of 65dB(A). No complaint was received regarding noise issue in this reporting period.

According to the weekly site inspections carried out in this reporting period, the Contractor generally implemented sufficient dust mitigation measures, including operation of the mist spraying systems and automatic wheel washing facilities, dampening of haul roads and stockpiling areas.

A complaint was received on 25 January 2024. No prosecution or notification of summons was received in this reporting period.

Recommendations

According to the environmental site inspections performed in the reporting period, the following recommendations were provided:

Air Quality

- Ensure the frequency of water spraying on haul roads, unloading areas and stockpiles to be sufficient to suppress the dust sources;
- Provide proper maintenance for the powered mechanical equipment and barges to avoid emission of dark smoke;
- Provide water spraying onto the truckloads during inspection of fill material;
- Conduct road sweeping on all paved haul roads and public roads especially outside and near the site egress by the road sweeper. Undertake water spraying on stockpiling area by water bowser;
- Erect adequate speed limit signs to advise the truck drivers of the speed limit;
- Operate mist spraying systems and automatic water sprinklers in the Fill Bank;
- Implement the dust mitigation measures for the construction activities;
- Designate proper haul roads to ensure effective water spraying; and
- Ensure all vehicles to be washed before leaving the site egress by provision, operation and maintenance of automatic wheel washing facilities.

Noise

- Conduct noisy activities at a farther location from the NSRs.
- Proper schedule of noisy operation and use of quiet machineries on site.

Water Quality

- Maintain the drainage system, including the trapezoidal channels and permanent desilting chambers regularly; and
- Remove the stagnant water or provide approved pesticides for the stagnant water in the permanent desilting chambers, if any.

Chemical and Waste Management

- Remove waste materials from the site to avoid accumulation regularly;
- Handle and store chemical wastes properly;



- Remove unwanted material in the existing stockpiles and avoid further dumping of such material;
- Provide and maintain sufficient drip trays for diesel drums, chemical containers, chemical waste storage drums and diesel operated generator set;
- Maintain good housekeeping at the workshop area;
- Ensure sufficient tarpaulin sheets are provided to cover drip trays; and
- Avoid soil being polluted during oil filling and equipment maintenance; hence, properly remove and store the contaminated soil, if any.

Landscape and Visual

- Provide hydroseeding on the exposed slopes, on which the final profile has been formed;
- Erect all the site hoarding/chaining fences in accordance with agreed design at proper location;
- Maintain the hydroseeded slopes properly.

12.0 FUTURE KEY ISSUES

Based on the site inspections and forecast of engineering works in the coming month, key issues to be considered are as follows:

- Dust generation from activities on site, such as vehicular movements along unpaved area and rock crushing activities;
- Noise impact from operating equipment and machinery on site;
- Wastewater and surface runoff from the site discharged into nearby water body;
- Regular checking of the drainage system;
- Flood prevention; and
- Noise from operation of the crushing plant.

- END OF REPORT -



Appendix A

Project Organization Chart



Handling of Surplus Public Fill

an

(20231218)



Appendix B1

Calibration Certificates for Impact Air Quality Monitoring Equipments



RECALIBRATION DUE DATE:

January 17, 2024

i*ficate d* Salibration **Calibration Certification Information** °К Ta: 294 Rootsmeter S/N: 438320 Cal. Date: January 17, 2023 Pa: 741.4 mm Hg Operator: Jim Tisch Calibrator S/N: 4128 Calibration Model #: TE-5025A ΔH Vol. Init Vol. Final ΔVol. **ATime** ΔΡ (in H2O) (mm Hg) (m3) (min) Run (m3) (m3) 2.00 1.4370 3.2 1 2 1 1 4.00 3 4 1 1.0170 6.4 2 0.9140 8.0 5.00 3 6 1 5 5.50 0.8640 8.8 4 7 8 1 5 9 10 1 0.7170 12.8 8.00 **Data Tabulation** ΔH(Pa)(Tstd) /ΔH(Ta/Pa Qa Qstd Vstd (y-axis) (x-axis) Va (x-axis) (m3) (y-axis) 0.9957 0.6929 0.8905 0.6852 1.4063 0.9846 0.9914 0.9748 1.2594 0.9803 0.9639 1.9888 1.4081 1.0702 2.2235 0.9892 1.0823 0.9782 1.4768 0.9881 1.1437 0.9771 1.1309 2.3321 1.7811 0.9718 1.3553 2.8126 0.9827 1.3706 1.31296 2.09676 m= m= -0.01917 -0.03027b= b= OA OSTD 0.999910.99991 r= r= Calculations $Va=\Delta Vol((Pa-\Delta P)/Pa)$ Vstd= $\Delta Vol((Pa-\Delta P)/Pstd)(Tstd/Ta)$ Qa= Va/ATime Qstd= Vstd/ATime For subsequent flow rate calculations: Pa Tstd ΔH(Ta/Pa Qa= 1/m Qstd= 1/m AH Pstd Ta **Standard Conditions** RECALIBRATION 298.15 °K Tstd: Pstd: 760 mm Hg US EPA recommends annual recalibration per 1998 Key 40 Code of Federal Regulations Part 50 to 51, ΔH: calibrator manometer reading (in H2O) Appendix B to Part 50, Reference Method for the ΔP: rootsmeter manometer reading (mm Hg) Ta: actual absolute temperature (°K) Determination of Suspended Particulate Matter in Pa: actual barometric pressure (mm Hg) the Atmosphere, 9.2.17, page 30 b: intercept

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m: slope

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TEST REPORT

Calibration Report

of

High Volume Air Sampler



Sampler 2484 Calibration Curve Site: Tuen Mun 38 (TM-A1)



Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5-point calibration

The high volume sampler complies* / does not comply* with the specified requirements and is deemed acceptable*/ unacceptable* for use.

Calibrated by

MAK, Kei Wai (Assistant Supervisor)

Checked by LAU, Chi Leung (Environmental Team Leader)

- END OF REPORT -



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TEST REPORT

of	Calibra	tion Report
I Parts Malances Alla Communication		of
High volume Air Samplei	High Volur	me Air Sampler

Manufacturer		Graseby GMW	Date of Calibration			20 De	cember 20	23			
Serial No.		1180 (ET/EA/003/04)	alibration D	ue Date	:	19 February 2024					
Method	1	ased on Operations Manual for the 5-point calibration using standard calibration kit anufactured by Tisch TE-5025 A									
Results		Flow recorder reading (cfm)	55	50		44	36	26			
		Qstd (Actual flow rate, m ³ /min)	1.68	1.55		1.34	1.10	0.86			
		Pressure : 767.54 mm Hg	1	Temp. :		287	К				

Sampler 1180 Calibration Curve Site: Tuen Mun (TM-RA2)



Qstd (m3/min)

Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5-point calibration

The high volume sampler complies* / does not comply* with the specified requirements and is deemed acceptable* unacceptable * for use.

Calibrated by : 1VnA

MAK, Kei Wai (Assistant Supervisor)

Checked by LAU, Chi Leung (Environmental Team Leader)

- END OF REPORT -



Appendix B2

Impact Air Quality Monitoring Results



Summary of 24-hr TSP Monitoring Results

Sta	art	Fir	iish	Elaps	e Time	Sampling	Flow Rate	(m ³ /min.)	Average	rage Filter Weight (g)		$Come \left(u \pi / m^3 \right)$
Date	Time	Date	Time	Initial	Final	Time (hrs)	Initial	Final	(m³/min.)	Initial	Final	Conc. (µg/m)
02/01/24	09:30	03/01/24	09:30	17323.31	17347.31	24.00	0.9277	0.9277	0.9277	2.8397	2.9305	68
08/01/24	09:30	09/01/24	09:30	17350.31	17374.31	24.00	0.8979	0.8979	0.8979	2.8654	2.9559	70
14/01/24	09:30	15/01/24	09:30	17377.31	17401.31	24.00	0.9277	0.9277	0.9277	2.5357	2.6305	71
20/01/24	09:30	21/01/24	09:30	17404.31	17428.31	24.00	0.9277	0.9277	0.9277	2.6764	2.7659	67
26/01/24	10:00	27/01/24	10:00	17431.31	17455.31	24.00	0.8979	0.8979	0.8979	2.8312	2.9165	66

Monitoring Station : TM-A1

Monitoring Station

: TM-RA2

Sta	art	Fin	ish	Elapse	e Time	Sampling	Flow Rate	(m ³ /min.)	Average	Filter W	$C_{a} = c_{a} + c_{a$		
Date	Time	Date	Time	Initial	Final	Time (hrs)	Initial	Final	(m ³ /min.)	Initial	Final	Conc. (µg/m)	
02/01/24	09:40	03/01/24	09:40	32610.53	32634.53	24.00	1.0375	1.0375	1.0375	2.6793	2.7869	72	
08/01/24	09:40	09/01/24	09:40	32637.53	32661.53	24.00	1.0084	1.0084	1.0084	2.6047	2.7107	73	
14/01/24	09:40	15/01/24	09:40	32664.53	32688.53	24.00	1.0375	1.0375	1.0375	2.6588	2.7723	76	
20/01/24	09:40	21/01/24	09:40	32691.53	32715.53	24.00	1.0375	1.0375	1.0375	2.5130	2.6176	70	
26/01/24	10:10	27/01/24	10:10	32718.53	32742.53	24.00	1.0084	1.0084	1.0084	2.9588	3.0634	72	



Summary of 1-hr TSP Monitoring Results

Monitoring	g Station	:	ТМ	-A1							
Data	Tii	me	Elapse	e Time	Sampling	Flow Rate	ə (m ³ /min.)	Average	Filter W	eight (g)	C_{ana} $(u \sigma/m^3)$
Dale	Start	Finish	Initial	Final	Time (hrs)	Initial	Final	(m ³ /min.)	Initial	Final	Conc. (µg/m)
04/01/24	09:30	10:30	17347.31	17348.31	1.00	0.8979	0.8979	0.8979	2.4258	2.4346	163
04/01/24	10:30	11:30	17348.31	17349.31	1.00	0.8979	0.8979	0.8979	2.3245	2.3334	165
06/01/24	10:30	11:30	17349.31	17350.31	1.00	0.8979	0.8979	0.8979	2.5931	2.6021	167
09/01/24	10:00	11:00	17374.31	17375.31	1.00	0.8979	0.8979	0.8979	2.6158	2.6252	174
09/01/24	11:00	12:00	17375.31	17376.31	1.00	0.8979	0.8979	0.8979	2.5402	2.5494	171
11/01/24	10:30	11:30	17376.31	17377.31	1.00	0.8979	0.8979	0.8979	2.8699	2.8790	169
16/01/24	09:30	10:30	17401.31	17402.31	1.00	0.9277	0.9277	0.9277	2.4801	2.4899	176
16/01/24	10:30	11:30	17402.31	17403.31	1.00	0.9277	0.9277	0.9277	2.7931	2.8027	172
18/01/24	10:30	11:30	17403.31	17404.31	1.00	0.9277	0.9277	0.9277	2.5616	2.5713	175
23/01/24	09:30	10:30	17428.31	17429.31	1.00	0.9277	0.9277	0.9277	2.5978	2.6069	163
23/01/24	10:30	11:30	17429.31	17430.31	1.00	0.9277	0.9277	0.9277	2.4436	2.4524	158
25/01/24	09:00	10:00	17430.31	17431.31	1.00	0.8979	0.8979	0.8979	2.4383	2.4469	160
27/01/24	10:30	11:30	17455.31	17456.31	1.00	0.8979	0.8979	0.8979	2.7153	2.7248	176
27/01/24	13:00	14:00	17456.31	17457.31	1.00	0.8979	0.8979	0.8979	2.6150	2.6244	174
30/01/24	10:00	11:00	17457.31	17458.31	1.00	0.8979	0.8979	0.8979	2.8931	2.9022	169



Summary of 1-hr TSP Monitoring Results

Monitorin	g Station	:	TM-	RA2							
Dete	Ti	me	Elapse	e Time	Sampling	Flow Rate	e (m ³ /min.)	Average	Filter W	Queres (
Dale	Start	Finish	Initial	Final	Time (hrs)	Initial	Final	(m ³ /min.)	Initial	Final	Conc. (µg/m ⁺)
04/01/24	09:40	10:40	32634.53	32635.53	1.00	1.0084	1.0084	1.0084	2.9713	2.9813	165
04/01/24	10:40	11:40	32635.53	32636.53	1.00	1.0084	1.0084	1.0084	2.6993	2.7095	168
06/01/24	10:40	11:40	32636.53	32637.53	1.00	1.0084	1.0084	1.0084	2.3873	2.3976	170
09/01/24	10:10	11:10	32661.53	32662.53	1.00	1.0084	1.0084	1.0084	2.7475	2.7583	179
09/01/24	11:10	12:10	32662.53	32663.53	1.00	1.0084	1.0084	1.0084	2.5947	2.6053	175
11/01/24	10:40	11:40	32663.53	32664.53	1.00	1.0084	1.0084	1.0084	2.6203	2.6308	174
16/01/24	09:40	10:40	32688.53	32689.53	1.00	1.0375	1.0375	1.0375	2.3419	2.3531	180
16/01/24	10:40	11:40	32689.53	32690.53	1.00	1.0375	1.0375	1.0375	2.7748	2.7859	178
18/01/24	10:40	11:40	32690.53	32691.53	1.00	1.0375	1.0375	1.0375	2.7986	2.8098	180
23/01/24	09:40	10:40	32715.53	32716.53	1.00	1.0375	1.0375	1.0375	2.4730	2.4834	167
23/01/24	10:40	11:40	32716.53	32717.53	1.00	1.0375	1.0375	1.0375	2.3802	2.3903	163
25/01/24	09:10	10:10	32717.53	32718.53	1.00	1.0084	1.0084	1.0084	2.9754	2.9853	164
27/01/24	10:40	11:40	32742.53	32743.53	1.00	1.0084	1.0084	1.0084	2.5571	2.5681	182
27/01/24	13:10	14:10	32743.53	32744.53	1.00	1.0084	1.0084	1.0084	2.3374	2.3482	179
30/01/24	10:10	11:10	32744.53	32745.53	1.00	1.0084	1.0084	1.0084	2.4845	2.4950	174



Appendix B3

Graphical Plots of Impact Air Quality Monitoring Data





1-hour TSP level at TM-A1

1-hour TSP level at TM-RA2







24-hour TSP level at TM-A1







Appendix C1

Calibration Certificates for Impact Marine Water Quality Monitoring Equipments



<u>Performa</u>	nce Check / Calibration of	f Multiparameter Water	r Qu	nality Meter
Equipment Ref. No. 🗄	ET/EW/008/010	Manufacturer	5	YSI
Model No.	Pro DSS	Serial No.		18E105421
Date of Calibration	30/11/2023	Calibration Due Date	D	29/2/2024

<u>Results</u>

1. Temperature

(Method Reference: Section 6 of internation Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure)

Reading of Reference Thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)
15.6	15.8	+0.2
25.1	25.5	+0.4
29.3	29.1	-0.2

Tolerance Limit (°C): ± 2.0

2. pH

(Method Reference: APHA 19ed 4500-H⁺ B)

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pl-1 unit)
4.00		
6.86		
9.18		

Tolerance Limit (pH unit): ± 0.10

3. Conductivity

(Method Reference: APHA 19ed 2510 B)

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)
145.2	146.1	+0.6
1414	1425	+0.8
12892	12883	-0.1
56761	56895	+0.2

Tolerance Limit (µS/cm): ± 10.0%

4. Salinity

(Method Reference: APHA 19ed 2520 B)

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)
10.0	10.40	+4.0
20.0	20.50	+2.5
30.0	29.87	-0.4

Tolerance Limit (g/L): ± 10.0%



quipment Ref. No. : ET	T/EW/008/010	Manufacture	r : <u>YSI</u>
odel No. : Pr	o DSS	Serial No.	: 18E105421
ate of Calibration 30	0/11/2023	Calibration E	Due Date : 29/2/2024
Dissolved Oxygen Aethod Reference: APHA	19ed 4500-O G)		
Expected Reading (n	ng/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
1.73	<i></i>	1.69	-0.04
4.62		4.67	+0.05
5.91		5.84	-0.07
Aethod Reference: APHA Expected Reading ()	19ed 2130 B)	Displayed Reading (NTU)	Tolerance (%)
10		9.7	-3.00
40		40.4	+1.00
100		00.0	• • • • • • • • • • • • • • • • • • • •
dou 400 blerance Limit (NTU): ± 10	0.0%	99.2 402.1	-0.80 +0.53
100 400 olerance Limit (NTU): ± 10 ne equipment complies [#] / 4	0.0%	99.2 402.1 h the specified requirements and is do	+0.53 +0.53
400 blerance Limit (NTU): ± 10 1e equipment complies [#] / 4 Delete as appropriate	does not comply " wit	99.2 402.1 h the specified requirements and is de	eemed acceptable [#] / unacceptable. [#] for use.


Appendix C2

Impact Marine Water Quality Monitoring Results



Monitoring Station : TM-FC1

Data	Time	Ambient Temp (°C) /	Monitori	ng Depth	Temp	Salinit	ty (ppt)	Dissolv	ved Oxygen	(mg/L)	Dissolve Satura	d Oxygen tion (%)	Tu	ırbidity (NT	U)	Susper	nded Solids	s (mg/L)
Date	Time	Weather Condition	(r	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		18	Surface	1.0	19.3	33.4	33.4	8.05	8.04		106.4	106.2	1.53	1.55		1.2	2.0	
02/01/24	10.19.57	10	Middle	11.6	19.4	33.5	33.5	7.65	7 64	7.84	101.4	101.2	1.64	1.65	1 65	3.0	3.6	26
02/01/24	10.10.07	/ Fine	Wilduic	11.0	10.4	33.5 33.6	00.0	7.63	7.04		101.1	101.2	1.65	1.00	1.00	4.2	0.0	2.0
		,	Bottom	22.2	19.4	33.6	33.6	7.54	7.55	7.55	100.2	100.1	1.77	1.76		2.3	2.3	
		18	Surface	1.0	19.0	33.6 33.6	33.6	7.40	7.41		97.6 97.8	97.7	0.66	0.66		3.5 6.0	4.8	
04/01/24	12:13:07		Middle	10.7	19.2	34.2	34.2	7.34	7.31	7.36	97.2	96.9	0.61	0.60	0.61	3.5	3.4	3.6
		/ Fine	_			34.3 34.4		7.27			96.6 94.6		0.59 0.57			3.3 2.2		
			Bottom	20.5	19.3	34.4	34.4	7.08	7.10	7.10	94.3	94.5	0.55	0.56		3.0	2.6	
		18	Surface	1.0	19.2	33.9 33.8	33.9	7.79	7.79	7.00	103.1 103.1	103.1	0.31	0.29		3.4 5.0	4.2	
06/01/24	13:56:03		Middle	11.2	19.4	34.2	34.3	7.48	7.45	7.02	99.7 98.9	99.3	0.37	0.37	0.36	4.0	3.8	4.1
		/ Fine	Bottom	21.4	19.5	34.6	34.6	7.08	7.07	7.07	94.7	94.5	0.42	0.43		5.6	4.4	
						34.6 34.1		7.05 8.48			94.2 113.4		0.44			3.1 2.3		
		19	Surface	1.0	19.7	34.1	34.1	8.47	8.48	8.28	113.3	113.3	0.69	0.69		1.9	2.1	
09/01/24	15:01:28		Middle	11.7	19.7	34.3 34.3	34.3	8.09 8.07	8.08		108.3 108.0	108.2	0.56	0.57	0.63	1.5 1.9	1.7	2.1
		/ Fine	Bottom	22.4	19.7	34.4	34.4	7.87	7.86	7.86	105.5	105.3	0.62	0.63		2.1	2.4	
			Curfood	1.0	20.0	34.5 33.7	22.7	7.84 9.19	0.00		105.1	102.0	0.64	0.60		2.6	0.7	
		19	Surrace	1.0	20.0	33.7	33.7	9.20	9.20	9.11	123.4	123.3	0.68	0.69		4.8	3.7	
11/01/24	10:14:06		Middle	10.6	19.9	33.9	33.9	9.05	9.03		121.4	121.2	0.86	0.85	0.83	2.4	2.6	3.2
		/ Fine	Bottom	20.3	19.9	34.0	34.0	8.86	8.85	8.85	119.0	118.9	0.95	0.97		2.5	3.3	
			Surface	1.0	19.9	33.4	33.2	8.66	8.68		114.9	115.5	1.40	1 40		1.7	23	
		19	Ganado		10.0	33.1 33.2	00.2	8.70 8.97	0.00	8.83	116.1 119.8	110.0	1.40			2.8	2.0	
13/01/24	9:58:19		Middle	11.0	20.0	33.2	33.2	8.97	8.97		119.8	119.8	1.43	1.44	1.41	2.1	2.0	2.5
		/ Fine	Bottom	21.1	20.0	33.3 33.3	33.3	8.93 8.93	8.93	8.93	119.4 119.4	119.4	1.39 1.38	1.39		4.5 2.1	3.3	
		10	Surface	1.0	20.0	32.5	32.5	8.36	8.36		111.4	111.4	1.59	1.60		1.5	1.5	
16/01/24	10:07:35	15	Middle	11.7	10.0	32.5	32.6	8.26	8.26	8.31	109.9	109.8	1.65	1.64	1 72	1.4	12	14
10/01/24	10.07.55	/ Fine	Widdle	11.7	13.3	32.6	52.0	8.25	0.20		109.7	103.0	1.63	1.04	1.72	1.0	1.2	1.4
		, T IIIC	Bottom	22.4	19.8	32.8	32.8	8.16	8.16	8.16	108.5	108.6	1.93	1.92		1.5	1.6	
		19	Surface	1.0	20.0	32.5 32.5	32.5	7.90	7.91		105.2 105.4	105.3	1.28	1.27		2.9 3.8	3.4	
18/01/24	12:13:23		Middle	9.9	20.0	32.6	32.7	7.90	7.90	7.90	105.3	105.3	1.33	1.32	1.31	6.1	6.6	4.9
		/ Fine		10.0		32.7 33.0		7.89 7.78	7 70	7 70	105.2 103.9	400.0	1.31 1.36	4.05		7.1 5.5	1.0	
			Bottom	18.8	20.0	33.0	33.0	7.78	7.78	7.78	103.8	103.9	1.34	1.35		4.0	4.8	
		19	Surface	1.0	19.6	33.5 33.3	33.4	7.88	7.89	7 07	104.7	105.0	0.67	0.65		3.6 4.2	3.9	
20/01/24	13:57:57		Middle	11.4	20.2	33.1	33.1	7.86	7.85	7.07	105.5	105.4	0.55	0.56	0.58	4.8	4.1	4.0
		/ Fine	Bottom	21.8	20.2	33.9	33.9	7.60	7 59	7 59	102.4	102.2	0.57	0.52		5.0	41	
			Bottom	21.0	20.2	33.9 34.2	00.0	7.57	7.00	7.00	101.9 104.8	102.2	0.52	0.02		3.1 4.6		
		19	Surface	1.0	19.9	34.2	34.2	7.79	7.80	7.69	104.6	104.7	0.52	0.53		2.3	3.5	
22/01/24	14:58:15		Middle	10.9	20.0	34.5 34.5	34.5	7.61 7.57	7.59		102.5 102.0	102.3	0.49	0.49	0.49	4.3 3.5	3.9	3.9
		/ Fine	Bottom	20.8	20.0	34.7	34.7	7.38	7.37	7.37	99.5	99.4	0.47	0.47		3.0	4.2	
			Surface	1.0	10.6	34.7 35.4	25.4	7.35	7 74		99.2 102.4	102.2	0.46	1.00		5.4 3.4	2.5	
		17	Sunace	1.0	10.0	35.5	55.4	7.72	7.74	7.65	102.0	102.2	1.20	1.22		3.5	5.5	
25/01/24	10:11:47		Middle	11.0	18.4	35.5	35.5	7.55	7.57		99.4	99.6	1.38	1.40	1.74	4.5 2.8	3.7	3.6
		/ Fine	Bottom	20.9	18.4	35.5 35.5	35.5	7.53	7.53	7.53	99.1 99.0	99.1	2.58	2.60		2.9 4.5	3.7	
			Surface	1.0	17.8	35.5	35.5	8.27	8.21		107.6	106.8	1.36	1.38		4.3	5.1	
07/04/04		17			47.0	35.5 35.5	05.0	8.14 7.80		7.98	105.9 101.6	400.0	1.39 1.40			5.9 3.3		
27/01/24	10:01:29	/ =:	Middle	11.8	17.8	35.6	35.6	7.69	7.75		100.2	100.9	1.42	1.41	1.54	3.2	3.3	4.5
		/ Fine	Bottom	22.6	17.9	35.6 35.6	35.6	7.54 7.53	7.54	7.54	98.4 98.4	98.4	1.82 1.85	1.84		6.2 4.1	5.2	
		16	Surface	1.0	17.4	35.5	35.5	7.54	7.53		97.4	97.2	1.55	1.54		5.3	5.5	
30/01/24	10:20:50	10	Middle	11.3	17.5	35.6	35.6	7.47	7 46	7.49	96.7	96.6	2.11	2 10	2 03	3.1	3.5	4.8
55/01/24		/ Fine				35.6 35.6	55.0	7.45	0.70		96.5 96.2	50.0	2.08		2.00	3.8 6 1	0.0	4.0
			Bottom	21.6	17.5	35.6	35.6	7.43	7.43	7.43	96.2	96.2	2.48	2.46		4.9	5.5	



Monitoring Station : TM-FM1

		Ambient Temp (°C) /	Monitori	ng Depth	Temp	Salinit	ty (ppt)	Dissolv	red Oxygen	(mg/L)	Dissolve Satura	d Oxygen tion (%)	Tu	rbidity (NT	U)	Susper	nded Solids	s (mg/L)
Date	lime	Weather Condition	(r	n)	(°C)	Value	Average	Value	Average	Depth-	Value	Average	Value	Average	Depth-	Value	Average	Depth-
			Surface	1.0	19.4	33.4	33.4	7.61	7.60	average	100.8	100.6	1.55	1.56	average	3.4	3.1	average
		18				33.4 33.5		7.58 7.55		7.57	100.4		1.57 1.60			2.7 4.9		
02/01/24	10:35:04		Middle	11.5	19.4	33.6	33.6	7.54	7.55		100.0	100.0	1.63	1.62	1.64	4.6	4.8	3.9
		/ Fine	Bottom	22.0	19.4	33.6 33.6	33.6	7.53 7.51	7.52	7.52	99.9 99.6	99.7	1.75 1.74	1.75		4.5 3.4	4.0	
			Surface	1.0	19.1	33.6	33.6	7.37	7.39		97.2	97.4	0.63	0.63		2.1	2.7	
		18			-	33.6 34.1		7.40		7.36	97.5 97.5	-	0.62			3.2 5.3		
04/01/24	11:52:06		Middle	9.7	19.2	34.2	34.1	7.32	7.34		97.0	97.3	0.64	0.63	0.61	3.5	4.4	3.8
		/ Fine	Bottom	18.4	19.3	34.4 34.4	34.4	7.11	7.10	7.10	94.6 94.3	94.5	0.57	0.57		4.1 4.8	4.5	
			Surface	1.0	19.2	33.9	33.9	7.68	7.68		101.7	101.8	0.32	0.33		4.2	4.0	
		18				33.9 34.3		7.68 7.39		7.52	101.8 98.5		0.33			3.7 3.9		
06/01/24	13:36:00		Middle	8.8	19.5	34.3	34.3	7.34	7.37		97.9	98.2	0.30	0.30	0.34	4.1	4.0	3.9
		/ Fine	Bottom	16.7	19.5	34.5 34.6	34.5	7.08	7.07	7.07	94.6 94.2	94.4	0.40	0.40		4.3 3.1	3.7	
			Surface	1.0	19.7	34.4	34.4	8.02	8.00		107.4	107.1	0.65	0.67		2.5	2.4	
		19				34.4 34.4		7.97		7.87	106.8 103.2		0.69			2.2		
09/01/24	15:23:32		Middle	8.8	19.7	34.4	34.4	7.77	7.74		104.1	103.6	0.55	0.58	0.62	2.8	2.5	2.9
		/ Fine	Bottom	16.7	19.7	34.5 34.5	34.5	7.66	7.66	7.66	102.7 102.7	102.7	0.63	0.62		3.8 3.8	3.8	
			Surface	1.0	20.0	33.7	33.7	9.18	9.19		123.1	123.3	0.73	0.73		2.9	2.9	
		19				33.7 33.8		9.20 9.18		9.18	123.4 123.2		0.72			2.9 4.5		
11/01/24	9:52:07		Middle	9.7	20.0	33.8	33.8	9.14	9.16		122.6	122.9	0.81	0.79	0.82	3.0	3.8	3.3
		/ Fine	Bottom	18.4	19.9	34.0 34.0	34.0	8.87 8.85	8.86	8.86	119.0 118.8	118.9	0.92	0.94		4.0 2.2	3.1	
			Surface	1.0	19.9	33.1	33.1	9.04	9.05		120.7	120.8	1.47	1.47		4.0	3.3	
		19		-		33.1 33.2		9.05 9.03		9.04	120.8 120.6		1.46 1.51			2.6 1.8		
13/01/24	9:37:26		Middle	9.3	19.9	33.2	33.2	9.02	9.03		120.5	120.6	1.48	1.50	1.52	2.0	1.9	2.4
		/ Fine	Bottom	17.6	20.0	33.3 33.3	33.3	8.96 8.95	8.96	8.96	119.8 119.8	119.8	1.59	1.61		2.1 2.1	2.1	
			Surface	1.0	20.0	32.5	32.5	8.31	8.33		110.7	111.0	1.53	1.54		1.6	1.5	
		19				32.5 32.6		8.35 8.26		8.29	111.2 109.9		1.55 1.62			1.3 3.3		
16/01/24	9:49:35		Middle	9.4	19.9	32.6	32.6	8.25	8.26		109.8	109.9	1.61	1.62	1.71	1.8	2.6	1.8
		/ Fine	Bottom	17.8	19.9	32.7 32.7	32.7	8.20 8.19	8.20	8.20	109.1 109.0	109.1	1.96 2.00	1.98		1.1 1.4	1.3	
			Surface	1.0	20.0	32.6	32.5	7.89	7.90		105.1	105.2	1.31	1.29		4.7	4.4	
10/01/01		19	Mistella.	0.5	00.0	32.5	00.7	7.91	7.00	7.91	105.3	405.5	1.26	1.00		4.1 6.9	5.0	
18/01/24	11:52:22	(Fire -	widdie	9.5	20.0	32.7	32.7	7.91	7.92		105.4	105.5	1.30	1.29	1.31	4.3	5.6	4.9
		/ Fine	Bottom	18.0	20.0	32.8	32.8	7.85	7.85	7.85	104.7	104.6	1.34	1.35		4.4	4.6	
		10	Surface	1.0	20.0	33.1	33.1	7.89	7.90		105.3	105.5	0.66	0.69		4.1	3.7	
00/01/01	40.07.07	19	Mistella.	0.5	00.0	33.0	00.0	7.90	7.00	7.86	105.7	405.4	0.71	0.00	0.00	3.3 5.1	4.0	4.0
20/01/24	13:37:07	/ Fire -	widdie	8.5	20.2	33.2	33.2	7.81	7.82		104.9	105.1	0.61	0.63	0.60	3.5	4.3	4.2
		/ Fine	Bottom	15.9	20.2	33.6	33.6	7.70	7.69	7.69	103.6	103.4	0.50	0.49		4.1 5.3	4.7	
		10	Surface	1.0	19.9	34.2	34.2	7.70	7.70		103.4	103.4	0.46	0.46		2.6	3.9	
00/01/01	4.4.00.00	19	Mistella.		00.0	34.2 34.4	04.4	7.69	7.50	7.64	103.3	400.4	0.46	0.40	0.44	5.2 3.1		4.0
22/01/24	14.30.09	/ Fine	widdle	9.0	20.0	34.4	34.4	7.56	7.56		101.9	102.1	0.42	0.43	0.44	4.4	3.0	4.2
		/ Fille	Bottom	17.1	20.0	34.6	34.6	7.42	7.41	7.41	99.7	99.9	0.42	0.42		5.1 4.6	4.9	
		17	Surface	1.0	18.4	35.5	35.5	7.52	7.52		99.0	99.0	1.29	1.31		2.0	2.7	
25/01/24	0.42.05	17	Middle	9.4	18.4	35.5	35.5	7.52	7 / 8	7.50	99.0 98.5	98.5	1.52	1.54	1 00	5.0	4.4	4.0
23/01/24	9.42.05	/ Fine	Widdle	3.4	10.4	35.5	33.5	7.48	7.40		98.5	30.5	1.56	1.54	1.00	3.8	4.4	4.0
		/ Fille	Bottom	17.8	18.3	35.5	35.5	7.47	7.47	7.47	98.1	98.1	2.78	2.79		4.7 5.2	5.0	
		17	Surface	1.0	17.9	35.5	35.5	7.51	7.52		97.9	97.9	1.28	1.28		5.7	6.0	
27/01/24	0.20.20	17	Middle	9.4	17.9	35.6	35.6	7.50	7 50	7.51	97.9	97.8	1.42	1 / 2	1.51	4.6	4.8	5.0
21/01/24	9.30.3 U	/ Fino	widdle	5.4	17.9	35.6	33.0	7.49	7.50		97.8	31.0	1.41	1.42	1.01	5.0	4.0	ວ.Ծ
		/ Fille	Bottom	17.9	17.9	35.6	35.6	7.46	7.46	7.46	97.4	97.4	1.84	1.82		6.9	6.7	
		16	Surface	1.0	17.4	35.5	35.5	7.53	7.53		97.3	97.2	1.60	1.58		4.8	4.9	
30/01/24	9-55-40	10	Middle	95	175	35.6	35.6	7.49	7 40	7.51	97.0	96.9	1.74	1 76	1 70	4.1	42	16
30/01/24	9.00.46	/ Fino	windule	3.0	17.5	35.6	55.0	7.48	7.43		96.9	30.9	1.78	1.70	1./9	4.3	7.2	4.0
		/ 1 1110	Bottom	18.0	17.5	35.6	35.6	7.40	7.46	7.46	96.5	96.5	2.01	2.04		4.6	4.6	



Monitoring Station : TM-FM2

Data	Time	Ambient Temp (°C) /	Monitori	ng Depth	Temp	Salinit	ty (ppt)	Dissolv	ed Oxygen	(mg/L)	Dissolve Satura	d Oxygen tion (%)	Tu	ırbidity (NT	U)	Susper	nded Solids	s (mg/L)
Date	Time	Weather Condition	(r	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		18	Surface	1.0	19.3	33.4	33.4	7.64	7.63		101.0	100.8	1.53	1.54		3.8	3.7	
02/01/24	10-52-01	10	Middlo	0 0	10.4	33.4	22.4	7.61	7 50	7.61	100.6	100.5	1.66	1.66	1 66	5.3	5.2	2.0
02/01/24	10.55.01	/ Eino	windle	0.0	15.4	33.5	33.4	7.58	7.55		100.4	100.5	1.65	1.00	1.00	5.2	5.5	3.5
		/ Fine	Bottom	16.5	19.4	33.5	33.5	7.54	7.55	7.55	100.1	100.0	1.80	1.79		2.9	2.9	
		18	Surface	1.0	19.1	33.6	33.6	7.42	7.43		97.7	97.9	0.62	0.62		5.5	4.3	
04/01/24	11.40.06	10	Middle	84	19.2	33.9	34.0	7.43	7 40	7.41	98.0	97.9	0.59	0.59	0.58	2.1	2.5	3.3
0 0 0 0 0 2 1		/ Fine	inidalo	0.1	10.2	34.0 34.4	01.0	7.38 7.18			97.7 95.5	07.0	0.58	0.00	0.00	2.9 2.1	2.0	0.0
			Bottom	15.9	19.3	34.4	34.4	7.14	7.16	7.16	95.0	95.3	0.53	0.54		4.1	3.1	
		18	Surface	1.0	19.3	33.7 33.7	33.7	7.69 7.69	7.69	7.04	101.8 101.8	101.8	0.34	0.34		3.7 3.1	3.4	
06/01/24	13:20:54		Middle	8.5	19.4	34.0	34.0	7.60	7.58	7.64	100.9	100.7	0.31	0.31	0.37	3.2	3.1	3.5
		/ Fine	Bottom	15.9	19.5	34.0	34.4	7.24	7 22	7 22	96.7	96.4	0.31	0.45		3.4	4.0	
			Dottom	10.0	10.0	34.5 34.2	0	7.19		7.22	96.1 108.0	00.1	0.47	0.10		4.5		
		19	Surface	1.0	19.7	34.2	34.2	8.06	8.07	7.89	107.8	107.9	0.61	0.61		3.2	2.9	
09/01/24	15:43:08		Middle	8.8	19.7	34.4 34.4	34.4	7.72	7.71		103.4 103.2	103.3	0.53	0.54	0.58	2.7 2.1	2.4	2.7
		/ Fine	Bottom	16.6	19.7	34.5	34.5	7.67	7.67	7.67	102.8	102.7	0.61	0.60		2.6	2.7	
			o (34.5 33.7		7.66 9.20			102.7 123.4	100.5	0.59 0.79	0.70		2.8 3.0		
		19	Surrace	1.0	20.0	33.7	33.7	9.21	9.21	9.17	123.5	123.5	0.78	0.79		3.6	3.3	
11/01/24	9:40:08		Middle	8.5	19.9	33.8	33.9	9.15	9.13		122.7	122.4	0.85	0.88	0.84	4.4 5.6	5.0	4.4
		/ Fine	Bottom	16.0	19.9	33.9 33.9	33.9	8.86 8.85	8.86	8.86	119.0 118.8	118.9	0.86	0.87		4.8 5.2	5.0	
			Surface	1.0	19.9	33.1	33.1	9.00	9.00		120.1	120.1	1.45	1.43		2.8	3.3	
		19				33.1 33.1		9.00 9.01		9.00	120.1 120.4		1.40 1.50			3.8 4.2		
13/01/24	9:21:33	(Fine	Middle	9.2	19.9	33.2	33.1	9.00	9.01		120.2	120.3	1.47	1.49	1.42	2.2	3.2	3.2
		/ Fine	Bottom	17.5	20.0	33.3 33.3	33.3	8.95 8.95	8.95	8.95	119.7 119.7	119.7	1.35	1.34		2.4 3.5	3.0	
		19	Surface	1.0	20.0	32.4 32.4	32.4	8.35 8.35	8.35		111.2	111.3	1.48	1.48		1.4	1.6	
16/01/24	9:35:37		Middle	9.6	19.9	32.6	32.6	8.30	8.29	8.32	110.5	110.3	1.61	1.63	1.64	1.2	1.8	1.9
		/ Fine			10.0	32.6 32.7		8.28 8.23			110.1 109.5	100 5	1.64 1.80	4.00		2.3 1.3		
			Bottom	18.1	19.9	32.7	32.7	8.22	8.23	8.23	109.4	109.5	1.84	1.82		3.4	2.4	
		19	Surface	1.0	20.0	32.5	32.5	7.93	7.95	7 94	105.7	105.9	1.12	1.10		4.2	5.1	
18/01/24	11:40:24		Middle	8.7	20.0	32.6 32.6	32.6	7.95 7.93	7.94		105.9 105.6	105.8	1.28	1.30	1.26	3.6 3.1	3.4	4.0
		/ Fine	Bottom	16.4	20.0	32.8	32.9	7.85	7.84	7.84	104.7	104.6	1.40	1.40		3.3	3.5	
			Quitara	1.0	00.0	32.9 32.9	00.0	7.83	7.00		104.4 104.8	101.0	1.39 0.56	0.57		3.7 4.4		
		19	Surface	1.0	20.2	32.9	32.9	7.83	7.02	7.82	105.0	104.9	0.58	0.57		4.4	4.4	
20/01/24	13:21:02		Middle	8.9	20.2	33.0	33.1	7.83	7.83		105.0	105.1	0.53	0.55	0.55	4.6	5.0	4.7
		/ Fine	Bottom	16.8	20.2	33.5 33.6	33.5	7.73	7.72	7.72	104.0	103.8	0.54	0.55		4.2 4.9	4.6	
			Surface	1.0	19.9	34.2	34.2	7.65	7.65		102.9	102.9	0.46	0.48		4.3	4.9	
00/04/04		19				34.2 34.4		7.65 7.57	7.50	7.60	102.8 101.9	1017	0.49			5.4 2.9		
22/01/24	14:21:17	/ Eino	widdie	8.6	20.0	34.4	34.4	7.54	7.56		101.5	101.7	0.49	0.49	0.48	3.3	3.1	4.1
		/ Fine	Bottom	16.1	20.0	34.6	34.6	7.42	7.41	7.41	99.8	99.9	0.49	0.48		4.3	4.2	
		17	Surface	1.0	18.3	35.5 35.5	35.5	7.57 7.55	7.56		99.4 99.2	99.3	1.14	1.15		4.9 2.5	3.7	
25/01/24	9:23:54		Middle	9.8	18.3	35.5	35.5	7.55	7.55	7.56	99.2	99.2	1.38	1.37	1.66	2.6	2.8	3.5
		/ Fine	Detterre	40.7	10.0	35.5 35.5	05.5	7.55	7.40	7.40	99.2 98.4	00.4	1.35 2.43	0.40		3.0 3.8		
			Bottom	18.7	18.3	35.5	35.5	7.49	7.49	7.49	98.4	98.4	2.49	2.46		3.9	3.9	
		17	Surface	1.0	17.7	35.7	35.7	7.54	7.55	7.53	98.1 98.2	98.2	1.27	1.26		4.4 6.3	5.4	
27/01/24	9:21:55		Middle	9.3	17.9	35.6 35.6	35.6	7.52 7.51	7.52		98.1 98.0	98.1	1.37 1.39	1.38	1.49	5.2 4.1	4.7	4.9
		/ Fine	Bottom	17.6	17.9	35.6	35.6	7.45	7.45	7.45	97.3	97.3	1.85	1.84		3.8	4.7	
			Curta	10	17 4	35.6 35.5	0F F	7.45 7.56	7 55		97.2 97.7	075	1.83	1 50		5.6 4.9	4.0	
		16	Surrace	1.0	17.4	35.5	35.5	7.53	7.55	7.52	97.3	97.5	1.57	1.59		3.4	4.2	
30/01/24	9:34:50		Middle	8.6	17.5	35.6	35.6	7.49	7.49		97.0	97.0	1.85	1.84	1.85	4.6	4.5	4.4
		/ Fine	Bottom	16.2	17.5	35.6 35.6	35.6	7.45	7.45	7.45	96.5 96.4	96.4	2.12 2.14	2.13		4.6 4.3	4.5	

Remark: The SS value below 1.0 mg/L is reported as 1.0 mg/L and highlighted in yellow in the table.



Monitoring Station :

TM-FC2

Data	Timo	Ambient Temp (°C) /	Monitori	ng Depth	Temp	Salini	ty (ppt)	Dissolv	ed Oxygen	ı (mg/L)	Dissolve Satura	d Oxygen tion (%)	Τι	ırbidity (NT	U)	Susper	ided Solids	s (mg/L)
Date	Time	Weather Condition	(r	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		10	Surface	1.0	19.4	33.4	33.4	7.58	7.57		100.4	100.2	1.72	1.73		2.8	2.6	
02/01/24	11-13-56	10	Middle	77	19.4	33.4	33.5	7.55	7.53	7.55	99.7	00.7	1.74	1.82	1.84	2.4 5.4	5.0	37
02/01/24	11.13.30	/ Eino	Wildule	1.1	15.4	33.5	33.5	7.53	7.55		99.8	55.7	1.84	1.02	1.04	4.6	5.0	3.7
		/ Fille	Bottom	14.4	19.4	33.5	33.5	7.51	7.51	7.51	99.5	99.5	1.95	1.96		3.3	3.6	
		18	Surface	1.0	19.0	33.6	33.6	7.42	7.43		97.7	97.9	0.66	0.65		3.7	3.3	
04/01/24	11-21-08	10	Middle	8.5	10.3	34.2	34.3	7.44	7 29	7.36	97.1	96.8	0.61	0.60	0.63	6.0	4.8	36
04/01/24	11.21.00	/ Fine	Wilduic	0.0	10.0	34.3 34.4	04.0	7.26	7.20		96.5 94.5	50.0	0.59	0.00	0.00	3.6	4.0	0.0
		/ T IIIC	Bottom	16.0	19.3	34.4	34.4	7.09	7.10	7.10	94.3	94.4	0.64	0.63		2.0	2.6	
		18	Surface	1.0	19.2	34.0 34.0	34.0	7.86	7.85		104.1	103.9	0.35	0.36		5.4	5.3	
06/01/24	13:01:02		Middle	8.3	19.4	34.0	34.0	7.62	7.60	7.72	101.3	101.0	0.33	0.33	0.38	3.4	3.8	4.0
		/ Fine				34.1 34.3		7.58			100.7 98.6		0.32			4.2		
			Bottom	15.7	19.5	34.3	34.3	7.35	7.38	7.38	98.0	98.3	0.49	0.46		2.5	2.8	
		19	Surface	1.0	19.7	34.1 34.1	34.1	8.48 8.46	8.47		113.4 113.1	113.3	0.65	0.66		1.6	1.7	
09/01/24	16:01:22		Middle	8.1	19.7	34.2	34.2	8.40	8.40	8.43	112.4	112.3	0.62	0.62	0.62	3.6	4.0	2.6
		/ Fine				34.2 34.4	-	8.39 7.88			112.3 105.6		0.62			4.4		-
			Bottom	15.3	19.7	34.4	34.4	7.86	7.87	7.87	105.3	105.5	0.60	0.59		2.4	2.2	
		19	Surface	1.0	20.0	33.7 33.7	33.7	9.12 9.13	9.13		122.3 122.4	122.4	0.78	0.78		4.8 5.8	5.3	
11/01/24	9:21:11		Middle	8.7	19.9	33.9	33.9	9.08	9.06	9.09	121.8	121.6	0.78	0.78	0.82	5.7	5.6	5.2
		/ Fine	_			33.9 33.9		9.04 8.85			121.3 118.8		0.77			5.4 4.8		
			Bottom	16.3	19.9	33.9	33.9	8.83	8.84	8.84	118.6	118.7	0.89	0.91		4.4	4.6	
		19	Surface	1.0	19.9	33.0 33.0	33.0	8.43 8.48	8.46		112.4 113.1	112.8	1.58 1.65	1.62		3.1 3.0	3.1	
13/01/24	9:03:27		Middle	8.8	19.9	33.2	33.2	8.87	8.88	8.67	118.4	118.5	1.56	1.56	1.52	2.5	3.1	3.0
		/ Fine	Dettern	40.0	00.0	33.2 33.3	00.0	8.88 8.89	0.00	0.00	118.6 118.9	440.0	1.55 1.41	4.00		3.7 2.8	0.7	
			Bottom	16.6	20.0	33.3	33.3	8.89	8.89	8.89	118.9	118.9	1.36	1.39		2.6	2.7	
		19	Surface	1.0	20.0	32.5	32.5	8.32	8.32	0.04	110.8	110.8	1.57	1.58		1.9 1.1	1.5	
16/01/24	9:11:31		Middle	8.8	19.9	32.6	32.6	8.29	8.29	8.31	110.3	110.3	1.64	1.65	1.74	1.9	1.9	1.8
		/ Fine	Dettern	40.5	10.0	32.6 32.7	00.7	8.29 8.21	0.01	0.01	110.3 109.3	400.0	1.66	0.01		1.8 2.4	0.4	
			Bottom	16.5	19.9	32.7	32.7	8.21	8.21	8.21	109.2	109.3	2.03	2.01		1.7	2.1	
		19	Surface	1.0	20.0	32.5	32.5	7.94	7.95	7.00	105.8	105.8	1.16	1.17		5.6 5.8	5.7	
18/01/24	11:21:30		Middle	8.5	20.0	32.7	32.7	7.90	7.90	7.92	105.2	105.2	1.32	1.32	1.27	5.7	6.3	5.0
		/ Fine	Pottom	16.1	20.0	32.7	22.0	7.89	7.96	7 96	105.1	104.7	1.32	1.01		6.8 3.3	2.1	
			Dottom	10.1	20.0	32.8	52.0	7.85	7.00	7.00	104.6	104.7	1.31	1.51		2.8	5.1	
		19	Surface	1.0	20.1	33.0	33.0	7.82	7.81	7.83	104.7	104.5	0.65	0.64		4.5 3.8	4.2	
20/01/24	13:00:59		Middle	8.1	20.2	33.0 33.0	33.0	7.85	7.85	1.00	105.4	105.3	0.54	0.54	0.57	3.9	4.0	4.6
		/ Fine	Bottom	15.2	20.2	33.3	33.4	7.78	7.77	7.77	104.6	104.4	0.53	0.53		5.3	5.6	
						33.4 34.8		7.75			104.2 104.5		0.52			5.8		
		19	Surface	1.0	19.2	34.7	34.8	7.83	7.85	7.73	104.4	104.5	0.46	0.45		5.1	5.4	
22/01/24	14:00:59		Middle	8.0	19.9	34.3 34.4	34.4	7.64 7.60	7.62		102.8 102.3	102.6	0.52	0.51	0.47	2.4 2.9	2.7	3.8
		/ Fine	Bottom	15.0	20.0	34.6	34.6	7.44	7.43	7.43	100.3	100.2	0.46	0.46		3.3	3.3	
						34.6 35.4		7.42 8.97			100.0 117.6		0.46			3.3 5.3		
		17	Surface	1.0	18.2	35.4	35.4	8.95	8.96	8.55	117.3	117.5	1.28	1.28		5.2	5.3	
25/01/24	9:04:23		Middle	8.4	18.3	35.4 35.4	35.4	8.14 8.14	8.14		106.9 106.9	106.9	1.36 1.39	1.38	1.76	3.9 4.4	4.2	4.6
		/ Fine	Bottom	15.9	18.4	35.5	35.5	7.60	7.60	7.60	100.0	100.0	2.61	2.63		4.6	4.5	
			o (17.0	35.5 35.6	05.0	7.59	7.5.4		99.9 98.2		2.64 1.45			4.3 5.5	5.0	
		17	Surface	1.0	17.8	35.6	35.6	7.54	7.54	7.53	98.2	98.2	1.42	1.44		6.1	5.8	
27/01/24	9:04:27		Middle	8.8	17.9	35.6 35.6	35.6	7.53 7.52	7.53		98.2 98.1	98.2	1.35 1.38	1.37	1.62	3.1 4.2	3.7	5.2
		/ Fine	Bottom	16.6	17.9	35.6	35.6	7.48	7.48	7.48	97.7	97.7	2.06	2.07		6.7	6.0	
			C	10	17.0	35.6 35.5	05.0	7.56	7 50		97.7 98.1	00.0	2.08	1.00		5.3 5.1	4.0	
		17	Sunace	1.0	٥.١١	35.6	30.0	7.55	dc. 1	7.52	97.9	90.U	1.65	1.03		4.6	4.9	
30/01/24	9:21:04		Middle	8.5	17.6	35.6	35.6	7.49	7.49		97.2	97.2	2.08	2.09	2.20	3.2 4.2	3.7	4.1
		/ Fine	Bottom	16.0	17.5	35.6 35.6	35.6	7.47	7.47	7.47	96.8 96.8	96.8	2.87	2.88		3.6	3.7	



Monitoring Station :

TM-FC1

r																		
Data	Time	Ambient Temp (°C) /	Monitori	ng Depth	Temp	Salini	ty (ppt)	Dissolv	ved Oxygen	(mg/L)	Dissolve Satura	ed Oxygen tion (%)	Τι	urbidity (NT	U)	Suspe	nded Solids	s (mg/L)
Date	Time	Weather	1)	m)	(°C)	Value	Average	Value	Average	Depth-	Value	Average	Value	Average	Depth-	Value	Average	Depth-
		Condition	Surface	1.0	10.3	33.4	33.4	7.58	7 57	average	100.2	100.1	1.55	1.56	average	2.4	23	average
		18	Sunace	1.0	15.5	33.4	33.4	7.56	1.51	7.55	99.9	100.1	1.57	1.50		2.1	2.5	
02/01/24	17:11:05		Middle	11.1	19.4	33.5	33.5	7.52	7.52		99.7 99.7	99.7	1.70	1.68	1.66	2.1	2.7	3.4
		/ Fine	Bottom	21.2	19.4	33.6	33.6	7.49	7.49	7.49	99.3	99.3	1.74	1.75		4.5	5.2	
						33.6 33.6		7.48			99.2 100.6		1.75 0.78			5.9 2.1		
		18	Surface	1.0	19.1	33.6	33.6	7.63	7.64	7 45	100.5	100.6	0.76	0.77		2.9	2.5	
04/01/24	7:49:15		Middle	9.9	19.3	34.4	34.4	7.28	7.27	7.40	96.8	96.6	0.57	0.58	0.64	3.8	3.3	3.2
		/ Fine	Detterre	40.0	40.0	34.4	04.5	7.03	7.00	7.00	96.4 93.5	00.5	0.59	0.50	-	3.0		
			Bottom	18.8	19.3	34.5	34.5	7.02	7.03	7.03	93.5	93.5	0.60	0.58		4.7	3.9	
		18	Surface	1.0	19.3	33.9 33.9	33.9	7.87	7.86		104.4 104.1	104.3	0.34	0.35		3.4 3.0	3.2	
06/01/24	8:31:04		Middle	10.7	19.5	34.3	34.3	7.39	7.36	7.61	98.6	98.2	0.36	0.37	0.40	4.5	5.1	3.7
		/ Fine		-		34.4 34.6		7.32			97.7 93.6		0.37			5.6 2.5	-	-
		, T IIIC	Bottom	20.4	19.5	34.6	34.6	6.99	7.00	7.00	93.4	93.5	0.40	0.48		3.4	3.0	
		10	Surface	1.0	19.7	34.1	34.1	8.23	8.22		110.1	109.9	0.63	0.65		3.1	2.7	
		19				34.1 34.4		8.20 7.68		7.94	109.7		0.66			2.2		
09/01/24	11:41:01		Middle	11.3	19.7	34.4	34.4	7.66	7.67		102.7	102.8	0.66	0.66	0.67	2.6	2.6	2.7
		/ Fine	Bottom	21.6	19.7	34.5 34.5	34.5	7.65	7.65	7.65	102.5	102.5	0.69	0.71		3.3 2.5	2.9	
			Surface	1.0	20.0	33.7	33.7	9.19	9.20		123.2	123.4	0.76	0.75		6.8	5.7	
		19	Ganado	1.0	20.0	33.7	00.7	9.21	5.20	9.19	123.5	120.4	0.73	0.70		4.5	0.7	
11/01/24	12:49:06		Middle	10.2	20.0	33.0	33.8	9.19	9.17		123.3	123.0	0.78	0.77	0.79	5.7	6.1	5.4
		/ Fine	Bottom	19.4	19.9	33.9	33.9	8.94	8.93	8.93	120.0	119.8	0.84	0.85		3.8	4.5	
						33.9 33.1		8.91 9.05			119.5 120.8		0.86			5.1 2.5		
		19	Surface	1.0	19.9	33.1	33.1	9.05	9.05	9.05	120.8	120.8	1.56	1.57		4.3	3.4	
13/01/24	14:01:39		Middle	10.8	20.0	33.2	33.2	9.05	9.04	0.00	120.9	120.8	1.45	1.45	1.50	3.7	3.3	3.2
		/ Fine				33.2		9.03 8.94			120.7		1.45			3.2		
			Bottom	20.7	20.0	33.3	33.3	8.94	8.94	8.94	119.6	119.6	1.50	1.50		2.9	3.1	
		19	Surface	1.0	20.0	32.5 32.5	32.5	8.35 8.36	8.36		111.3 111.4	111.4	1.61	1.60		2.0	1.7	
16/01/24	14.02.21		Middle	11.6	19.9	32.7	32.7	8.24	8 24	8.30	109.6	109.6	1.70	1.68	1.84	3.3	25	22
10/01/21	11102121	/ Fino			10.0	32.7	02.7	8.24	0.21		109.6		1.66			1.7	2.0	
		/ Fille	Bottom	22.3	19.8	32.7	32.7	8.16	8.17	8.17	108.5	108.6	2.25	2.24		3.6	2.4	
			Surface	1.0	20.0	32.5	32.5	7.98	7.98		106.4	106.4	1.27	1.22		5.2	4.2	
		19				32.5 32.6		7.98 7.93		7.95	106.3 105.6		1.17			3.2 3.5		
18/01/24	7:49:12		Middle	10.1	20.0	32.7	32.6	7.91	7.92		105.4	105.5	1.31	1.32	1.35	5.2	4.4	4.3
		/ Fine	Bottom	19.1	20.0	32.8	32.8	7.82	7.82	7.82	104.3	104.3	1.50	1.52		4.3	4.4	
			Surface	1.0	20.2	32.9	22.0	7.90	7.00		105.9	105.0	0.61	0.62		5.0	5.0	
		19	Sunace	1.0	20.2	32.9	32.9	7.90	7.90	7.85	105.9	105.9	0.62	0.02	-	4.9	5.0	
20/01/24	8:01:11		Middle	10.9	20.3	33.2 33.2	33.2	7.81	7.80		104.9	104.8	0.55	0.54	0.55	5.7	5.6	5.2
		/ Fine	Bottom	20.7	20.2	33.7	33.8	7.67	7.65	7.65	103.3	103.0	0.50	0.50		5.6	5.2	
						33.9 34.3		7.63			102.7 103.7		0.50			4.7		
		19	Surface	1.0	19.9	34.3	34.3	7.71	7.72	7.64	103.6	103.7	0.69	0.72		3.3	2.9	
22/01/24	19:01:02		Middle	10.7	20.0	34.4	34.5	7.58	7.56	7.04	102.0	101.8	0.52	0.52	0.56	4.5	5.5	4.2
		/ Fine	Detterre	00.4	00.0	34.5	047	7.54	7.00	7.00	99.4		0.51	0.45		3.9	4.0	
			Bottom	20.4	20.0	34.7	34.7	7.34	7.36	7.36	99.1	99.3	0.44	0.45		4.5	4.2	
		18	Surface	1.0	18.6	35.6	35.6	7.46	7.46		98.6 98.5	98.5	1.39	1.39		5.7 4.5	5.1	
25/01/24	13-12-12		Middle	7.6	18.6	35.6	35.6	7.43	7.43	7.44	98.2	98.2	1.66	1.67	1.83	3.3	39	4 1
20/01/24	10.12.12	/ Fino	Wilddie	7.0	10.0	35.6	00.0	7.43	7.40		98.2	00.2	1.68	1.07	1.00	4.5	0.0	
		/ Fine	Bottom	14.2	18.6	35.6	35.6	7.42	7.42	7.42	98.1 98.1	98.1	2.39	2.42		3.0	3.2	
			Surface	1.0	17.8	35.5	35.5	7.51	7.51		97.8	97.8	1.36	1.33		5.4	5.2	
		17	<u> </u>			35.5 35.6		7.51		7.50	97.8 97.6		1.30		-	4.9		
27/01/24	13:01:33		Middle	11.2	17.9	35.6	35.6	7.48	7.49		97.6	97.6	1.37	1.37	1.51	3.7	3.6	4.0
		/ Fine	Bottom	21.4	18.0	35.6	35.6	7.44	7.44	7.44	97.2	97.2	1.80	1.82		3.5	3.3	
<u> </u>			Cumber	10	47.4	35.5	05.5	7.54	7.50		97.4	07.0	1.58	4 57		3.8	0.5	
		16	Surface	1.0	17.4	35.5	30.5	7.52	7.53	7.51	97.2	97.3	1.56	1.57		3.1	3.5	
30/01/24	14:45:52		Middle	11.6	17.5	35.6 35.6	35.6	7.48	7.48		96.9 96.9	96.9	1.81 1.79	1.80	1.83	5.0 5.3	5.2	4.4
		/ Fine	Bottom	22.3	17.5	35.6	35.6	7.45	7.45	7.45	96.5	96.5	2.10	2.12	1	4.3	4.5	
Î						35.6		7.45			96.5		2.14	1	1	4.7		1



Monitoring Station :

TM-FM1

Data	Timo	Ambient Temp (°C) /	Monitori	ng Depth	Temp	Salinit	y (ppt)	Dissolv	ved Oxygen	(mg/L)	Dissolve Satura	d Oxygen tion (%)	Tu	rbidity (NT	U)	Susper	nded Solids	(mg/L)
Date	Time	Weather Condition	(r	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		18	Surface	1.0	19.3	33.3	33.4	7.62	7.61		100.7	100.6	1.46	1.47		4.6	4.1	
02/01/24	16:49:01	10	Middle	9.5	19.4	33.4	33.5	7.57	7.56	7.58	100.3	100 1	1.47	1.57	1.58	3.0	3.5	3.8
		/ Fine				33.5 33.6		7.54 7.51			99.9 99.6		1.56 1.70			3.9 4.1		
			Bottom	17.9	19.4	33.6	33.6	7.50	7.51	7.51	99.5	99.5	1.72	1.71		3.8	4.0	
		18	Surface	1.0	19.0	33.5 33.5	33.5	7.49 7.50	7.50	7.44	98.6 98.7	98.7	0.64	0.65		2.3 2.5	2.4	
04/01/24	8:06:11		Middle	8.9	19.2	34.0	34.1	7.42	7.39	7.44	98.2	97.9	0.60	0.59	0.58	2.5	2.6	3.2
		/ Fine	Bottom	16.8	19.3	34.2	34.4	7.30	7.15	7.15	97.8	95.1	0.52	0.52		4.6	4.6	
			Bottom	10.0	10.0	34.4 33.9	0	7.12 7.64			94.8 101.3	00.1	0.52	0.02		4.5 4.6		
		18	Surface	1.0	19.3	33.9	33.9	7.65	7.65	7.53	101.4	101.4	0.33	0.34		4.7	4.7	
06/01/24	8:51:00		Middle	8.5	19.4	34.2 34.2	34.2	7.44	7.42		99.0 98.6	98.8	0.31	0.30	0.36	4.5 2.8	3.7	4.1
		/ Fine	Bottom	16.0	19.5	34.5 34.5	34.5	7.19	7.17	7.17	96.0 95.5	95.8	0.42	0.44		3.1	3.9	
			Surface	1.0	19.7	34.1	34.1	8.46	8.45		113.1	113.0	0.68	0.68		1.8	2.3	
		19				34.1 34.2		8.44 8.40		8.42	112.9 112.4		0.67			2.8 2.9		
09/01/24	11:20:12	(=:	Middle	9.3	19.7	34.2	34.2	8.39	8.40		112.3	112.3	0.64	0.64	0.67	2.7	2.8	2.6
		/ Fine	Bottom	17.6	19.7	34.4 34.5	34.4	7.96	7.95	7.95	106.7	106.5	0.68	0.69		2.6	2.7	
		19	Surface	1.0	20.0	33.7 33.7	33.7	9.25	9.26		124.0	124.1	0.79	0.77		5.1	5.3	
11/01/24	13:06:06		Middle	9.0	20.0	33.8	33.8	9.22	9.20	9.23	123.7	123.4	0.76	0.75	0.78	5.6	4.4	4.3
		/ Fine	Detterre	40.0	40.0	33.9 33.9	00.0	9.18 8.99	0.07	0.07	123.1 120.6	400.4	0.74	0.00		3.1 2.3		
			Bottom	16.9	19.9	33.9	33.9	8.95	8.97	8.97	120.1	120.4	0.84	0.82		3.9	3.1	
		19	Surface	1.0	19.9	33.1 33.1	33.1	9.06	9.06	9.04	121.0	121.0	1.53	1.55		3.6 1.7	2.7	
13/01/24	14:21:40		Middle	8.8	20.0	33.2 33.2	33.2	9.03 9.02	9.03	0.04	120.6 120.6	120.6	1.46	1.46	1.50	5.2 3.3	4.3	3.5
		/ Fine	Bottom	16.5	20.0	33.2	33.2	9.00	9.00	9.00	120.3	120.3	1.48	1.50		2.7	3.5	
			Curfooo	10	20.0	33.3 32.5	20 E	8.99 8.31	0.00		120.2 110.7	110.0	1.52	1.00		4.3	1.5	
		19	Sunace	1.0	20.0	32.5	32.5	8.32	0.32	8.28	110.9	110.0	1.64	1.03		1.8	1.5	
16/01/24	14:23:22		Middle	8.6	19.9	32.7	32.7	8.25	8.25		109.7	109.8	1.59	1.62	1.81	1.8	2.0	1.7
		/ Fine	Bottom	16.3	19.8	32.7 32.7	32.7	8.18 8.18	8.18	8.18	108.8 108.8	108.8	2.17 2.18	2.18		1.5 1.7	1.6	
		10	Surface	1.0	20.0	32.5	32.5	7.94	7.95		105.8	105.9	1.09	1.11		3.8	3.7	
18/01/24	8.06.06	15	Middle	9.0	20.0	32.5 32.6	32.6	7.95	7 91	7.93	105.9	105.3	1.13	1.28	1 24	3.5 4.9	41	42
		/ Fine				32.6 32.8		7.90 7.82			105.2 104.3		1.27			3.3 5.9		
			Bottom	17.0	20.0	32.8	32.8	7.82	7.82	7.82	104.2	104.3	1.34	1.34		3.6	4.8	
		19	Surface	1.0	20.2	32.9 32.9	32.9	7.88	7.88	7.96	105.6	105.6	0.77	0.75		5.1 5.0	5.1	
20/01/24	8:20:59		Middle	8.6	20.2	33.1 33.1	33.1	7.85	7.84	7.00	105.4	105.3	0.59	0.58	0.62	4.9	5.1	5.4
		/ Fine	Bottom	16.1	20.2	33.6	33.6	7.69	7.68	7.68	103.5	103.3	0.52	0.52		6.2	6.2	
			0	4.0	40.0	33.7 34.2	04.0	7.66 7.70	7 70		103.1 103.5	400.5	0.51 0.84	0.00		6.1 5.0	5.0	
		19	Surrace	1.0	19.9	34.2	34.2	7.69	7.70	7.64	103.4	103.5	0.87	0.86		5.0	5.0	
22/01/24	19:19:08		Middle	8.4	20.0	34.4	34.4	7.57	7.59		102.3	102.2	0.51	0.51	0.60	2.5	3.6	4.7
		/ Fine	Bottom	15.7	20.0	34.7 34.7	34.7	7.35 7.33	7.34	7.34	99.2 98.9	99.1	0.44	0.45		5.5 5.6	5.6	
		10	Surface	1.0	18.6	35.6	35.6	7.46	7.46		98.6	98.6	1.20	1.22		4.2	4.0	
25/01/24	12:56:00	18	Middle	8.2	18.6	35.6 35.6	35.6	7.46	7.45	7.46	98.6 98.5	08.5	1.24	1.42	1.46	3.7 6.2	4.8	12
25/01/24	12.50.00	/ Fine	Wildule	0.2	10.0	35.6 35.6	35.0	7.45	7.40		98.5 98.2	30.0	1.43	1.42	1.40	3.3	4.0	4.2
		71110	Bottom	15.3	18.6	35.6	35.6	7.42	7.43	7.43	98.1	98.1	1.77	1.75		4.2	3.8	
		17	Surface	1.0	17.7	35.7 35.7	35.7	7.57 7.57	7.57		98.5 98.5	98.5	1.28	1.28		2.7 3.2	3.0	
27/01/24	13:37:37		Middle	8.4	17.9	35.6	35.6	7.50	7.50	7.53	97.8	97.8	1.30	1.31	1.53	2.8	4.1	3.6
		/ Fine	Bottom	15.9	19.0	35.6 35.6	35.e	7.49 7.46	7 / 0	7 / 4	97.7 97.5	07 5	1.31 1.99	2.02		5.4 3.6	37	ļ
			Boliom	15.6	10.0	35.6	30.0	7.46	7.40	7.40	97.5 97.7	51.5	2.05	2.02		3.8 4 9	3./	
		16	Surface	1.0	17.4	35.5	35.5	7.52	7.54	7.51	97.2	97.4	1.52	1.52		5.1	5.0	
30/01/24	15:03:45		Middle	8.5	17.4	35.6 35.6	35.6	7.49 7.48	7.49		96.8 96.7	96.7	1.56 1.58	1.57	1.57	3.9 6.3	5.1	4.7
		/ Fine	Bottom	15.9	17.4	35.6	35.6	7.47	7.47	7.47	96.5 96.5	96.5	1.62	1.64		4.4	4.0	
		L	L				L			·		L		L	L		L	



Monitoring Station : TM-FM2

Data	Time	Ambient Temp (°C) /	Monitori	ng Depth	Temp	Salinit	ty (ppt)	Dissolv	ved Oxygen	(mg/L)	Dissolve Satura	d Oxygen tion (%)	Tu	ırbidity (NT	U)	Susper	nded Solids	s (mg/L)
Date	Time	Weather Condition	(1	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		10	Surface	1.0	19.3	33.4	33.4	7.60	7.58		100.5	100.2	1.54	1.56		3.5	3.2	
		18				33.4 33.5		7.56 7.54		7.55	99.9 99.9		1.57 1.63			2.9 2.3		
02/01/24	16:26:58		Middle	9.7	19.4	33.5	33.5	7.51	7.53		99.5	99.7	1.65	1.64	1.66	3.3	2.8	2.9
		/ Fine	Bottom	18.4	19.4	33.5 33.6	33.5	7.50	7.50	7.50	99.4 99.3	99.4	1.76	1.77		2.9	2.7	
			Surface	1.0	19.0	33.5	33.5	7.48	7.49		98.5	98.6	0.65	0.65		2.9	3.5	
		18				33.5		7.49		7.46	98.6 98.5		0.64			4.1		
04/01/24	8:18:12		Middle	8.0	19.1	34.0	33.9	7.42	7.44		98.1	98.3	0.59	0.60	0.62	2.9	2.9	3.5
		/ Fine	Bottom	15.0	19.3	34.4	34.4	7.16	7.14	7.14	95.2	95.0	0.60	0.62		3.4	4.0	
			Curfooo	1.0	10.0	33.9	22.0	7.72	7 70		103.0	102.0	0.36	0.24		3.8	2.0	
		18	Surface	1.0	19.2	33.9	33.9	7.77	1.10	7.67	103.0	103.0	0.32	0.34		3.8	3.0	
06/01/24	9:06:01		Middle	8.5	19.4	34.0	34.0	7.57	7.56		100.6	100.4	0.39	0.39	0.39	4.5 3.5	4.0	4.0
		/ Fine	Bottom	15.9	19.5	34.3	34.4	7.33	7.31	7.31	97.8	97.5	0.41	0.43		4.7	4.2	
						34.4 34.1		7.28 8.29			97.2 110.9		0.44			3.7 2.0		
		19	Surface	1.0	19.7	34.1	34.1	8.28	8.29	8.03	110.7	110.8	0.65	0.65		2.1	2.1	
09/01/24	10:58:07		Middle	9.2	19.7	34.4 34.4	34.4	7.80	7.77		104.5 103.7	104.1	0.51	0.51	0.58	3.4 2.4	2.9	3.0
		/ Fine	Bottom	17.4	19.7	34.5	34.5	7.70	7.70	7.70	103.2	103.1	0.56	0.58		3.9	4.1	
						34.5	••	7.69			103.1		0.59			4.2		
		19	Surface	1.0	20.0	33.7	33.7	9.22	9.21	9.21	123.7	123.6	0.99	1.00		3.1	4.4	
11/01/24	13:18:06		Middle	8.1	20.0	33.8	33.8	9.23	9.21	0.21	123.7	123.5	0.80	0.77	0.88	4.0	3.8	4.8
		/ Fine	Pottom	15.0	10.0	33.9	22.0	9.03	0.01	0.01	121.2	120.0	0.87	0.97		8.7	6.2	
			Bollom	15.2	19.9	33.9	33.9	8.99	9.01	9.01	120.6	120.9	0.87	0.07		3.7	0.2	
		19	Surface	1.0	19.9	33.1 33.1	33.1	8.39	8.44		111.9	112.5	1.54	1.55		4.4 3.3	3.9	
13/01/24	14:37:09		Middle	8.7	19.9	33.1	33.1	8.82	8.84	8.64	117.8	118.1	1.50	1.49	1.51	3.6	3.4	3.6
		/ Fine				33.2 33.3		8.86 8.93			118.3 119.5		1.47			3.2 4.2		
			Bottom	16.4	20.0	33.3	33.3	8.93	8.93	8.93	119.5	119.5	1.49	1.50		2.6	3.4	
		19	Surface	1.0	20.0	32.5 32.5	32.5	8.32 8.32	8.32		110.9 110.9	110.9	1.64	1.64		1.4	1.3	
16/01/24	14:44:01		Middle	8.7	19.9	32.7	32.7	8.23	8.23	8.28	109.5	109.5	1.53	1.55	1.79	1.6	2.3	1.8
		/ Fine				32.7 32.7		8.23 8.18			109.5 108.8		1.56			2.9		
			Bottom	16.4	19.8	32.7	32.7	8.18	8.18	8.18	108.8	108.8	2.17	2.19		1.5	1.9	
		19	Surface	1.0	20.0	32.5	32.5	7.97	7.98		106.3	106.3	1.11	1.14		4.8	4.1	
18/01/24	8-18-05	10	Middle	8.1	20.0	32.5	32.6	7.95	7.94	7.96	105.9	105.8	1.32	1 33	1 27	5.4	1.8	46
10/01/24	0.10.05	/ Eino	Wildule	0.1	20.0	32.6	52.0	7.93	7.34		105.7	105.0	1.33	1.55	1.27	4.1	4.0	4.0
		/1110	Bottom	15.1	20.0	32.8	32.7	7.86	7.87	7.87	104.9	104.9	1.30	1.35		5.6	4.9	
		10	Surface	1.0	20.2	32.9	32.9	7.85	7.86		105.2	105.3	0.53	0.55		5.5	5.7	
00/01/01	0.00.05	15	Ministration	0.5	00.0	32.9	00.0	7.86	7.00	7.86	105.3	405.4	0.56	0.50	0.54	4.5	4.0	
20/01/24	8:36:05	/ Fire	widdie	8.5	20.2	33.0	33.0	7.85	7.86		105.3	105.4	0.55	0.56	0.54	5.1	4.8	5.1
		/ Fine	Bottom	16.0	20.2	33.6	33.6	7.70	7.69	7.69	103.6	103.4	0.50	0.51		4.2 5.5	4.9	
		10	Surface	1.0	19.9	34.2	34.2	7.71	7.71		103.6	103.6	0.56	0.54		4.8	4.7	
		19				34.2 34.4		7.70 7.57		7.63	103.5 102.0		0.51 0.47			4.5 5.8		
22/01/24	19:33:00		Middle	8.4	20.0	34.5	34.4	7.54	7.56		101.6	101.8	0.46	0.47	0.50	5.4	5.6	4.8
		/ Fine	Bottom	15.7	20.0	34.6 34.7	34.6	7.41	7.40	7.40	99.9 99.6	99.8	0.50	0.50		4.3	4.3	
			Surface	1.0	18.6	35.6	35.6	7.47	7.47		98.7	98.7	1.39	1.41		3.2	4.1	
		18				35.6		7.46		7.45	98.6		1.42			4.9		
25/01/24	12:23:06		Middle	8.7	18.6	35.6	35.6	7.44	7.44		98.3	98.3	1.86	1.86	1.91	6.0	5.3	4.6
		/ Fine	Bottom	16.4	18.6	35.6	35.6	7.42	7.42	7.42	98.1	98.1	2.45	2.46		4.2	4.4	
			Surface	1.0	17.0	35.6	25.6	7.51	7.50		97.9	00.0	1.46	1.45		4.4	2.6	
		17	Sunace	1.0	17.0	35.6	35.0	7.52	7.52	7.51	98.0	90.0	1.44	1.45		2.8	3.0	
27/01/24	13:22:45		Middle	8.7	17.9	35.6	35.6	7.50	7.50		97.8 97.7	97.8	1.29	1.31	1.40	4.6	4.1	3.7
		/ Fine	Bottom	16.4	17.9	35.6	35.6	7.47	7.47	7.47	97.5	97.5	1.44	1.44		3.8	3.3	
			Quefe	10	474	35.6 35.5	0F F	7.55	7 5 4		97.5 97.5	07.0	1.44	4 5 4		2.7	0.0	
		16	Surrace	1.0	17.4	35.5	35.5	7.52	/.54	7.51	97.2	97.3	1.54	1.54		3.1	2.0	
30/01/24	15:23:47		Middle	8.7	17.4	35.5 35.5	35.5	7.50	7.49		96.9 96.7	96.8	1.56	1.57	1.58	2.6	2.7	2.8
		/ Fine	Bottom	16.4	17.5	35.6	35.6	7.46	7.46	7.46	96.6	96.6	1.61	1.62	1	2.8	3.2	1
1						35.6		(.46	1		96.6	1	1.63			3.6		



Monitoring Station : TM-FC2

	.	Ambient Temp (°C) /	Monitori	ng Depth	Temp	Salinit	ty (ppt)	Dissolv	ed Oxygen	(mg/L)	Dissolve Satura	d Oxygen tion (%)	Τι	rbidity (NT	U)	Susper	nded Solids	s (mg/L)
Date	Time	Weather Condition	(r	n)	(°C)	Value	Average	Value	Average	Depth-	Value	Average	Value	Average	Depth-	Value	Average	Depth-
			Surface	1.0	19.3	33.4	33.4	7.62	7.61	avolugo	100.7	100.5	1.53	1.56	aronago	1.2	1.5	urorago
00/01/01		18			10.1	33.4 33.4		7.59		7.59	100.3	400.0	1.58			1.7 2.3		
02/01/24	16:10:23	/ Fine	widdie	8.9	19.4	33.4	33.4	7.57	7.57		100.3	100.3	1.62	1.61	1.61	1.3	1.8	1.5
		/ Fille	Bottom	16.8	19.4	33.5 33.5	33.5	7.53	7.52	7.52	99.8 99.6	99.7	1.67	1.68		1.5	1.3	
		18	Surface	1.0	19.0	33.5	33.5	7.44	7.45		98.0	98.1	0.64	0.63		2.7	2.9	
04/01/24	8:38:06	10	Middle	82	19.2	33.9	34.0	7.40	7 40	7.42	98.1	97 9	0.63	0.62	0.60	4.4	4.6	37
0 0 0 0 2 1	0.00.00	/ Fine	maalo	0.2	10.2	34.1 34.4	01.0	7.37			97.7 95.0	07.0	0.61	0.02	0.00	4.7		0.1
			Bottom	15.3	19.3	34.4	34.4	7.12	7.14	7.14	94.7	94.9	0.54	0.55		3.3	3.8	
		18	Surface	1.0	19.1	34.0 33.9	33.9	7.89 7.87	7.88		104.2 104.1	104.2	0.29	0.28		3.1 4.1	3.6	
06/01/24	9:24:03		Middle	8.0	19.3	34.0	34.0	7.67	7.65	1.11	101.8	101.6	0.44	0.43	0.37	4.7	4.7	4.2
		/ Fine	Bottom	15.1	19.4	34.2	34.2	7.49	7.47	7.47	99.6	99.3	0.39	0.41		5.1	4.4	
			Curfage	1.0	10.7	34.3 34.3	24.2	7.44 8.18	0.17		99.0 109.5	100.4	0.42	0.50		3.6 2.9	0.0	
		19	Surface	1.0	19.7	34.3	34.3	8.16	0.17	8.15	109.3	109.4	0.55	0.56		2.7	2.0	
09/01/24	10:36:33		Middle	8.2	19.7	34.3 34.3	34.3	8.13	8.13		108.9	108.9	0.55	0.56	0.56	3.4	3.3	3.1
		/ Fine	Bottom	15.3	19.7	34.4 34.5	34.4	7.82	7.81	7.81	104.8	104.7	0.57	0.57		3.1	3.2	
			Surface	1.0	20.0	33.7	33.7	9.27	9.28		124.3	124.4	0.76	0.78		3.2	4.2	
11/01/04	10,00,05	19	Middle	7.0	20.0	33.7 33.8	22.0	9.29 9.27	0.05	9.27	124.5 124.3	104.1	0.79	0.95	0.90	5.2 3.6	4.5	4.0
11/01/24	13.36.05	/ Eino	widdle	7.9	20.0	33.8	33.0	9.23	9.25		123.8	124.1	0.86	0.65	0.62	5.4	4.5	4.2
		/ Fille	Bottom	14.8	19.9	33.9 33.9	33.9	9.05	9.03	9.03	121.5	121.2	0.85	0.85		3.0	4.0	
		19	Surface	1.0	19.9	33.1 33.1	33.1	9.03	9.04		120.5	120.7	1.39	1.39		2.0	3.4	
13/01/24	15:00:36		Middle	7.8	19.9	33.2	33.2	9.04	9.04	9.04	120.8	120.8	1.37	1.36	1.39	5.0	4.1	3.2
		/ Fine				33.2 33.2		9.03 9.00			120.7 120.3		1.35 1.42			3.1 2.0		
			Bottom	14.6	20.0	33.2	33.2	9.00	9.00	9.00	120.3	120.3	1.43	1.43		2.1	2.1	
		19	Surface	1.0	19.9	32.7 32.7	32.7	8.24 8.24	8.24	8 23	109.7	109.7	1.74	1.73		1.9 3.4	2.7	
16/01/24	15:09:27		Middle	8.0	19.9	32.7 32.7	32.7	8.23 8.22	8.23	0.20	109.5	109.5	1.86	1.86	1.89	2.5	2.1	2.0
		/ Fine	Bottom	14.9	19.8	32.7	32.7	8.19	8.19	8.19	109.0	109.0	2.05	2.08		1.1	1.2	
			Surface	1.0	20.0	32.7 32.5	32.5	8.19 7.96	7 96		108.9	106.1	2.10	1 31		1.2 6.9	73	
		19	Gundee	1.0	20.0	32.5 32.7	02.0	7.96 7.88	7.50	7.92	106.1 105.0	100.1	1.31 1.36	1.01		7.7	7.0	
18/01/24	8:38:06		Middle	8.0	20.0	32.7	32.7	7.87	7.88		104.9	105.0	1.35	1.36	1.34	2.6	2.4	4.2
		/ Fine	Bottom	14.9	20.0	32.7 32.7	32.7	7.85	7.85	7.85	104.7	104.7	1.36	1.36		2.3	3.0	
		19	Surface	1.0	20.2	33.0 33.0	33.0	7.86	7.86		105.3	105.4	0.60	0.62		4.6	4.6	
20/01/24	8:54:01		Middle	7.9	20.2	33.0	33.0	7.86	7.86	7.86	105.5	105.4	0.57	0.55	0.56	4.5	4.7	4.5
		/ Fine				33.0 33.3		7.85 7.78			105.3 104.6		0.53			4.8		
			Bottom	14.9	20.2	33.4	33.4	7.75	7.77	7.77	104.2	104.4	0.51	0.51		3.6	4.2	
		19	Surface	1.0	19.3	34.8 34.6	34.7	7.87	7.85	7 73	104.9	104.8	0.49	0.50		3.7	3.8	
22/01/24	19:48:58		Middle	7.6	19.9	34.4 34.4	34.4	7.63	7.61	7.75	102.6	102.4	0.49	0.49	0.50	4.2	4.9	4.3
		/ Fine	Bottom	14.2	20.0	34.5	34.5	7.50	7.49	7.49	101.0	100.9	0.50	0.51		4.5	4.3	
			Surface	1.0	10.6	34.5 35.6	25.6	7.48 7.52	7.51		100.7 99.4	00.2	0.51	1.20		4.1	4.2	
		18	Sunace	1.0	10.0	35.6 35.6	33.0	7.50	7.51	7.49	99.1 98.7	55.5	1.30	1.29		4.6	4.5	
25/01/24	12:01:00		Middle	11.1	18.6	35.6	35.6	7.46	7.47		98.6	98.7	1.74	1.76	1.94	4.0	4.2	4.7
		/ Fine	Bottom	21.1	18.6	35.6 35.6	35.6	7.44 7.43	7.44	7.44	98.4 98.2	98.3	2.76 2.77	2.77		5.1 5.9	5.5	
		17	Surface	1.0	17.9	35.6 35.6	35.6	7.50	7.50		97.9 97.9	97.9	1.38	1.40		4.8	4.4	
27/01/24	14:01:38	.,	Middle	7.7	18.0	35.6	35.6	7.48	7.48	7.49	97.7	97.7	1.46	1.48	1.46	3.1	3.8	3.7
		/ Fine	Bottom	14.4	18.0	35.6 35.6	35 C	7.48 7.46	7 46	7 10	97.7 97.4	07 4	1.50 1.50	1.51		4.4 3.1	20	
			Donom	,4.4	10.0	35.6 35.5	55.0	7.45 7.51	7.40	7.70	97.4 97.0	37.4	1.51	1.01		2.6 4.1	2.3	
		16	Surface	1.0	17.4	35.5	35.5	7.51	7.51	7.50	97.0	97.0	1.53	1.55		2.7	3.4	
30/01/24	15:46:41		Middle	7.9	17.4	35.5 35.5	35.5	7.49 7.49	7.49		96.8 96.8	96.8	1.59 1.62	1.61	1.62	2.8 3.4	3.1	3.2
		/ Fine	Bottom	14.9	17.5	35.6	35.6	7.46	7.46	7.46	96.6	96.5	1.69	1.71		3.4	3.0	
1			1			00.0	1	7.40			30.0	1	1.73			د.ي	1	



Appendix C3

Graphical Plots of Impact Marine Water Quality Monitoring Data





Dissolved Oxygen (Surface & Middle) at Mid-Flood Tide

Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide





Dissolved Oxygen (Bottom) at Mid-Flood Tide



Dissolved Oxygen (Bottom) at Mid-Ebb Tide





Turbidity (Depth-average) at Mid-Flood Tide



Turbidity (Depth-average) at Mid-Ebb Tide





Suspended solids (Depth-average) at Mid-Flood Tide



Suspended Solids (Depth-average) at Mid-Ebb Tide





Appendix D1

Calibration Certificates for Impact Noise Monitoring Equipments



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Form Q/AS/C/02 Issue 1(1/4) [02/22]

Calibration Certificate

		Certificate No.	CSA33530
		Page	; 1 of 2
Information Prov	ided by Customer		
Customer	: ETS - Testconsult Limited		
Address	: 8/F., Block B, Veristrong Industr	ial Centre, 34 - 36 Au Pui Wan St	reet, Fotan, Shatin, Hong Kong
Information of U	nit-under-test (UUT)		
Description	: Sound Level Calibrator		
Manufacturer	; Castle	Equipment I.D.	ET/EN/002/07
Туре	: GA607	Serial No.	038641
Laboratory Infor	mation		
Lab. Ref. No.	: Q/CAL/23/4006/I	Procedure	: CQ\$/002/A
Date of Calibration	: 19-May-2023	Date of Receipt	: 17-May-2023
Date of Issue	: 19-May-2023	Calibration Location	: Calibration Laboratory
Calibration Cond	lition		
Ambient Temperature	: (20 ± 3) °C	Relative Humidity	; (50±20) %
Stabilizing Time	: 30 minutes	Sampling	: As received
Ambient Pressure	; (1000 ± 50) hPa		
Reference equip	ment		
 Multi-function source 	ad calibrator, ET/2801/01		
 Measuring Amplifie 	er, ET/2702/01/01		
 Signal generator, E 	ET/2503/01		
 Reference Oscillos 	scope, ET/2502/01		
Calibration speci	ification		
- To perform the cali	ibration of sound level calibrator.		
Callbration requil	4		
- The results are det	siled on the subsequent pages.		
<u>Remarks</u>			N
- The calibration res	ults apply to the particular unit-under-	lest only.	Δ
 The values given in 	n this calibration certificate only to the	values measureed at the time of	test & any uncertainties quoted will
not include allowar	nce for the equipment long term drift, v	arifications with environmental ch	nanges, vibration and shock during
transportation, ove	rloading, mis-handling, or the capabili	ty of any other laboratory to repea	at the measurement
			*
	5		Jun Jun
			4
Calibrated By :	Tony MA	Approved By:	
çanoracoa oy r	(Technician)		CHAN Chi Wai

The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. This report shall not be reproduced unless with prior written approval from this laboratory.



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Form Q/AS/C/02 Issue 1(2/4) [02/22]

Calibration Certificate

Certificate No. : CSA33530

Page ; 2 of 2

Calibration Result:

1. Measured Sound Pressure Level:

Nominal Frequency (Hz)	Nominal Output Sound Pressure (dB)	Measured Output (dB)	Expanded Uncertatiny (dB)	Coverage Factor
1000	94.0	94.1	0.13	2.0
1000	104.0	104.0	0.13	2.0

2. Actual Output Frequency:

Nominal Frequency (Hz)	Nominal Output Sound Pressure (dB)	Measured Output (Hz)	Expanded Uncertatiny (Hz)	Coverage Factor
1000	94.0	1000.020	0.057	2.0
1000	104.0	1000.017	0.057	2.0

Remark:

- The uncertainty quoted is based on 95 % confidence level.

- Measured output are mean of three measurements.

End of certificate



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Form Q/AS/C/01 Issue 1(1/7) [09/21]

Calibration Certificate

Certificate No.	
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CSA34546

Page

1 of

3

Information Provided by Customer

ETS - Testconsult Limited Customer ;

Address

8/F., Block B, Veristrong Industrial Centre, 34 - 36 Au Pui Wan Street, Fotan, Shatin, Hong Kong :

Information of Unit-under-test (UUT)

	Sound Level Meter	Microphone	Pre-amplifier
Manufacturer	RION	RION	RION
Туре	NL-52	UC-59	NH-25
Equipment I.D. no.	ET/EN/003/17	-	•
Serial No.	00264519	03558	64644
Adaptors used			
Resolution	0.1 dB	4	

Laboratory Information

CQS/001/A Q/CAL/23/5141/I Procedure Lab. Ref. No. 21-Jun-2023 : 28-Jun-2023 Date of Calibration Date of Receipt Calibration Laboratory Date of Issue • 28-Jun-2023 **Calibration Location**

Calibration Condition

Ambient Temperature : (20 ± 3) °C Relative Humidity Stabilizing Time : 30 minutes Sampling Ambient Pressure ; (1000 ± 50) hPa

Reference equipment

- Multi-function sound calibrator, ET/2801/01

- Signal generator, ET/2503/01

Calibration specification

To perform the calibration of linearity and frequency response by multi-function sound calibrator.

Calibration result

- The results are detailed on the subsequent pages.

Remarks

- The calibration results apply to the particular unit-under-test only.
- The values given in this calibration certificate only to the values measureed at the time of test & any uncertainties quoted will not include allowance for the equipment long term drift, varifications with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement

Calibrated By :

Tony MA (Technician)

Approved By: CHAN Chi Wai

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(50 ± 20) % As received



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Calibration Certificate

Certificate No. : CSA34546

Page : 2 of 3

Calibration Result:

Reference Sound Pressure Level : (Unit in: dB) 1

Range / Mode			Reference Level	REF Frequency (kHz)	UUT Reading	Deviation	Expanded Uncertatiny	Coveragé Factor
	Self-cal	Before	94.0		93.7	-0.3	0.13	2.0
A-Weighting	Range	30 to 130	104.0	1	103.7	-0.3	0.13	2.0
	Mode	Fast	114.0		113.7	-0.3	0.13	2.0
	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
	Mode	Fast	114.0		114.1	0.1	0.13	2.0
A-weighting	Self-cal	After	94.0	1	94.0	0.0	0.13	2.0
	Range	30 to 130	104.0		104.1	0.1	0.13	2.0
	Mode	Slow	114.0		114.1	0.1	0.13	2.0
	Self-cal	10	94.0	1	94.0	0.0	0.13	2.0
	Range	30 to 130	104.0		104.1	0.1	0.13	2.0
A.W. 1.17	Mode	Fast	114.0		114.0	0.0	0.13	2.0
C-Weighting	Self-cal	-	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
	Mode	Slow	114.0		114.0	0.0	0.13	2.0
	Self-cal	-	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
	Mode	Fast	114.0		114.1	0.1	0.13	2.0
Z-Weighting	Self-cal	-	94.0		94.0	0.0	0.13	2.0
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
	Mode	Slow	114.0		114.0	0.0	0.13	2.0

Remark:

- The uncertainty quoted is based on 95 % confidence level.

- UUT reading are mean of three measurements.

- Deviation = UUT Reading - Reference Level

- Laboratory reference multi-function sound calibrator was used to adjust the "Self cal" reading of UUT.



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Form Q/AS/C/01 Issue 1(3/7) [09/21]

Calibration Certificate

CSA34546 Certificate No. 3 of 3 Page

Calibration Result:

Acoustic Sensitivity and Frequency Response:

2 Frequency Response A-Weighting (Unit in: dB)

Range	Mode	Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	Expanded Uncertainty	Coverage Factor				
			31.5	54.6	40.5	-14.1	0.29	2.6				
			63	67.8	57.2	-10.6	0.22	2,3				
			125	77.9	72.2	-5.7	0.13	2.0				
						250	85.4	83,6	-1.8	0.12	2.0	
		94	500	90,8	90.9	0.1	0.12	2.0				
30 to 130	Fast		94	1000 (Ref.)	94.0	94.0	0.0	0.13	2.0			
				2000	95.1	94.0	-1,1	0.13	2.0			
			4000	94,9	92,3	-2.6	0.13	2.0				
v	P						8000	92.9	85.4	-7.5	0.14	2.0
- V			12500	89.7	76.0	-13,7	0.14	2.0				
		16000	87.5	71.6	-15,9	0.16	2.0					

3 Frequency Response C-Weighting (Unit in: dB)

Range	Mode	Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	Expanded Uncertainty	Coverage Factor				
			31.5	91.0	74.6	-16.4	0.22	2.3				
1					63	93.2	82.4	-10.8	0.15	2.0		
			125	93.8	. 88.1	-5.7	0.15	2.0				
		94		250	94.0	92.2	-1.8	0.14	2.0			
								500	94.0	94.1	0.1	0.12
30 to 130	Fasl		1000 (Ref.)	94.0	94.0	0.0	0.13	2.0				
			2000	93.7	92.6	-1.1	0,13	2.0				
			4000	93.1	90.5	-2.6	0.13	2.0				
				8000	91.0	83.5	-7.5	0.14	2.0			
			12500	87.8	74.1	-13.7	0,16	2.0				
			16000	65.6	69.8	-15.8	0.20	2.2				

Frequency Response Z-Weighting (Unit in: dB) 4

Range	Mode	Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	Expanded Uncertainly	Coverage Factor													
			31.5	94.0	77.6	-16.4	0.14	2.0													
			63	94.0	63.2	-10.8	0.15	2.0													
			125	94.0	88.3	-5.7	0.13	2.0													
			94	94	94	94	94	94	94		250	94.0	92.2	-1.8	0.14	2.0					
		94										S	N 11		1.0	1	500	94.0	94.0	0.0	0.12
30 to 130	Fast									1000 (Ref.)	94.0	94.0	0.0	0.13	2.0						
			2000	94.0	92.8	-1.2	0.13	2.0													
							4000	94.0	91.3	-2.7	0.13	2.0									
							8000	94.0	86.4	-7.6	0.14	2.0									
				12500	94.0	80.7	-13.3	0.14	2.0												
			16000	94.0	79.4	-14.6	0.14	2.0													

Remark:

- Signal level at 1000 Hz is set as indication of reference sound pressure level.

- The uncertainty quoted is based on 95 % confidence level with coverage factor k=2.0.

- UUT reading are mean of three measurements.

- Deviation = UUT Reading - Reference Level



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Form Q/AS/C/01 Issue 1(1/7) [09/21]

Calibration Certificate

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: CSA32590

Page

1 of

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Information Provided by Customer Customer : ETS - TESTCONSULT LIMITED

Address

: 8/F., Block B, Veristrong Industrial Centre, 34 - 36 Au Pui Wan Street, Fotan, Shatin, Hong Kong

Information of Unit-under-test (UUT)

	Sound Level Meter	Microphone	Pre-amplifier
Manufacturer	RION	RION	
Туре	NL-52	UC-59	NH-25
Equipment I.D. no.	ET/EN/003/18		
Serial No.	00264520	09668	64646
Adaptors used	86	-	1 (H)
Resolution	0.1 dB		

Laboratory Information

Lab. Ref. No. : Q/CAL/23/2956/I Date of Calibration : 19-Apr-2023 Date of Issue : 20-Apr-2023

Procedure	
Date of Receipt	
Calibration Location	

: CQS/001/A : 13-Apr-2023

: Calibration Laboratory

Calibration Condition

Ambient Temperature	: (20 ± 3) °C	Relative Humidity	: (50 ± 20) %
Stabilizing Time	: 30 minutes	Sampling	; As received
Ambient Pressure	: (1000 ± 50) hPa		

Reference equipment

Multi-function sound calibrator, ET/2801/01

- Signal generator, ET/2503/01

Calibration specification

- To perform the calibration of linearity and frequency response by multi-function sound calibrator.

Calibration result

- The results are detailed on the subsequent pages.

Remarks

- The calibration results apply to the particular unit-under-test only.
- The values given in this calibration certificate only to the values measureed at the time of test & any uncertainties quoted will
 not include allowance for the equipment long term drift, varifications with environmental changes, vibration and shock during
 transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement

Calibrated By :

Tommy TAM (Technician)

Approved By:

CHAN Chi Wai

The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. This report shall not be reproduced unless with prior written approval from this laboratory.



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Calibration Certificate

Certificate No. :: CSA32590

Calibration Result:

1 Reference Sound Pressure Level : (Unit in: dB)

Range / Mode			Reference Level	REF Frequency (kHz)	UUT Reading	Deviation	Expanded Uncertatiny	Coverage Factor
	Self-cal	Before	94.0		94.8	0.8	0.13	2.0
A-Weighting	Range	30 to 130	104.0	1	104.8	0.8	0.13	2.0
	Mode	Fast	114.0		114.8	0.8	0.13	2.0
	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
	Mode	Fast	114.0		114.0	0.0	0.13	2.0
A-Weighting	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104,1	0.1	0.13	2.0
	Mode	Slow	114.0	Í	114.0	0.0	0.13	2.0
	Self-cal	After	94.0		94.0	0.0	0,13	2.0
	Range	30 to 130	104.0	1	104.0	0.0	0.13	2.0
	Mode	Fast	114.0		114.0	0.0	0.13	2.0
C-Weighling	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.0	0.0	0.13	2.0
	Mode	Slow	114.0		114.0	0.0	0.13	2.0
	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.0	0.0	0.13	2.0
	Mode	Fast	114.0		114.0	0.0	0.13	2.0
∠-weighting	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.0	0.0	0.13	2.0
	Mode	Slow	114.0		114.0	0.0	0.13	2.0

Remark:

- The uncertainty quoted is based on 95 % confidence level.

- UUT reading are mean of three measurements.

- Deviation = UUT Reading - Reference Level

- Laboratory reference multi-function sound calibrator was used to adjust the "Self cal" reading of UUT,



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Calibration Certificate

Certificate No.	2	CS/	1325	90
Page	÷	3	of	3

Calibration Result:

Acoustic Sensitivity and Frequency Response:

2 Frequency Response A-Weighting (Unit in: dB)

Range	Mode	Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	IEC 61672-1:2002 class 1 Specification
			31.5	54,6	54.7	0.1	-39.4 +/- 2.0
			63	67.8	67.9	0.1	-26.2 +/- 1.5
			125	77.9	78.0	0.1	-16.1 +/- 1.5
			250	86.4	85.4	0.0	-8.6 +/- 1.4
			500	90.8	90.8	0.0	-3.2 */- 1.4
30 to 130	Fast	94	1000 (Ref.)	94.0	94.0	0.0	0 +/- 1.1
			2000	95.1	95.2	0.1	+1.2 +/- 1.6
		4000 94.9 94.9 0.0 6000 92.9 92.0 -0.9 12500 89.7 85.1 -4.6	94.9	0.0	+1.0 +/- 1.6		
			-0.9	-1.1 (+2.1 ; - 3.1)			
			85.1	-4.6	-4.3 (+3.0 ; -6.0)		
			16000	87.5	79.8	-7.7	-6.6 (+3.5 ; -17.0)

3 Frequency Response C-Weighting : (Unit in: dB)

Range	Mode	Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	IEC 61672-1:2002 class 1 Specification		
			31.5	91.0	90.9	-0.1	-3.0 +/- 2.0		
			63	93.2	93.2	0.0	-0.8 +/- 1.5		
			125	93.8	93.9	0.1	-0.2 +/- 1.5		
			250	94.0	94.0	0.0	0.0 +/- 1.4		
			500	94.0	94.0	0.0			
30 to 130	Fast	94	1000 (Ref.)	94.0	94.0	0.0	0 +/- 1.1		
			2000	93.7	93.8	0.1	-0.2 +/- 1.6		
		4000	93.1	93.1	0.0	-0.0 +/- 1.6			
			0000	91.0	90.1	+0.9	-3.0 (+2.1 ; -3.1)		
		12500	87.8	83.2	-4.6	-6.2 (+3.0 ; -6.0)			
		16000	85.6	77.9	-7.7	-8.5 (+3.5 ; -17.0)			

4 Frequency Response Z-Weighting : (Unit in: dB)

Range Mode		Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	IEC 61672-1:2002 class 1 Specification
			31.5	94.0	94.0	0.0	0.0 +/- 2.0
		1	63	94.0	94.0	0.0	0.0 +/- 1.5
		1 1	125	94.0	94.0	0.0	0.0 +/- 1.5
		1	250	94.0	94.0	0.0	0.0 +/- 1.4
		i I	500	94.0	94.0	0.0	0.0 +/- 1.4
30 to 130	Fast	94	1000 (Ref.)	94.0	94.0	0.0	0 +/- 1.1
		1 1	2000	94.0	94.0	0.0	0.0 +/- 1.6
		1	4000	94.0	93.9	0.0	0.0 +/- 1.6
			8000	94.0	93.0	-1.0	0.0 (+2.1 ; -3.1)
		1	12500	94.0	89.7	-4.3	0.0 (+3.0 ; -6.0)
			16000	94.0	87.6	+6.4	0.0 (+3.5 ; -17.0)

- Expended uncertainty of measurement:

	Range (Hz)	(dB)	Range (Hz)	(dB)
	31.5	0.15	2000	0.13
	63	0.15	4000	0.13
	125	0.15	8000	0.14
94 08	250	0.14	12500	0.14
	500	0.12	16000	0.14
	1000	0.13		

Remark:

- Signal level at 1000 Hz is set as indication of reference sound pressure level.

- The uncertainty quoted is based on 95 % confidence level with coverage factor k=2.0.

IEC 61672 class 1

- OUT reading are mean of three measurements.

- Deviation = UUT Reading - Reference Level

Manufacturer specification:



Appendix D2

Impact Noise Monitoring Results



Day-time Noise Monitoring`

Monitoring Location: TM-RN1 *

Data	Start Sampling	Noi	se Level dB	dB (A) W L ₉₀ (r	Wind	Major Noise	Weather
Date	Time (hh:mm)	L _{eq(30min)}	L_{10}	L ₉₀	(m/s)	Sources	Condition
2/1/2024	11:00	58.5	60.1	55.3	0.2	General site work	Fine
4/1/2024	11:00	60.4	62.9	57.1	0.2	General site work	Fine
9/1/2024	15:30	63.3	65.5	53.2	0.2	General site work	Fine
11/1/2024	11:00	60.5	62.2	57.8	0.2	General site work	Fine
16/1/2024	11:00	59.5	61.1	56.3	0.2	General site work	Fine
18/1/2024	9:35	58.2	59.4	55.6	0.2	General site work	Fine
23/1/2024	13:00	58.5	60.7	55.6	0.2	General site work	Cloudy
25/1/2024	11:00	57.7	59.0	54.8	0.2	General site work	Cloudy
30/1/2024	13:00	60.5	62.4	57.0	0.2	General site work	Fine

Remark: Since Lands Department did not approve us to enter their own area where the noise monitoring stations TM-N1 located due to the security, noise monitoring was carried out at noise monitoring stations TM-RN1 (refer to the figure 3 attached) in this reporting month.

Monitoring Location: TM-RN2 *

Date	Start Sampling	Noi	ise Level dB	(A)	Wind Speed	Major Noise Sources	Weather Condition
	Time (hh:mm)	L _{eq(30min)}	L_{10}	L ₉₀	(m/s)		
2/1/2024	11:35	57.4	59.6	54.8	0.2	General site work	Fine
4/1/2024	11:35	59.3	62.6	52.3	0.2	General site work	Fine
9/1/2024	15:35	60.8	63.2	54.3	0.2	General site work	Fine
11/1/2024	11:35	59.4	61.6	56.8	0.2	General site work	Fine
16/1/2024	11:35	58.4	60.6	55.8	0.2	General site work	Fine
18/1/2024	9:40	57.7	58.8	55.1	0.2	General site work	Fine
23/1/2024	13:35	57.8	59.9	54.2	0.2	General site work	Cloudy
25/1/2024	11:05	58.2	59.6	55.2	0.2	General site work	Cloudy
30/1/2024	13:35	59.4	61.9	55.8	0.2	General site work	Fine

Remark: Since Lands Department did not approve us to enter their own area where the noise monitoring stations TM-N2 located due to the security, noise monitoring was carried out at noise monitoring stations TM-RN2 (refer to the figure 3 attached) in this reporting month.



Appendix D3

Graphical Plots of Impact Noise Monitoring Data



Noise Monitoring (Day-time)





Appendix E

Weather Condition

	Mean				Mean	Mean	Total	Prevailing	Mean
	Pressure	Ai	ir Temperatı	ıre	Dew	Relative	Rainfall	Wind	Wind
	(hPa)				Point	Humidity	(mm)	Direction	Sneed
Day	(111 4)	41 1 4	2.5				(11111)		
5		Absolute	Mean	Absolute	(deg. C)	(%)		(degrees)	(km/h)
		Daily	(deg.C)	Daily					
		Max		Min					
		(deg. C)		(deg. C)					
1	1019.9	22	19.9	18.8	15.4	75	-	80	34.1
2	1019.1	20.5	18.7	17.8	14.3	76	-	70	26
3	1020	21.6	18.8	15.7	11.7	64	-	10	26.4
4	1020.9	19.6	17	15.4	10.8	67	-	50	22.8
5	1020.2	22	18.8	16.6	14.2	75	-	60	15.5
6	1020.1	23.8	20.2	17.8	15.6	76	-	30	6.8
7	1021	21.8	19.9	18.6	14.4	71	-	80	33.4
8	1019.6	20.6	19.1	17.7	14.1	73	Trace	70	30.9
9	1017.2	23.9	20.5	18.1	16.2	77	Trace	40	11.8
10	1018.6	23.2	20.3	17.9	13.7	67	-	10	19
11	1020	21.5	18.9	17.6	13	69	Trace	60	21.3
12	1019.1	21.8	18.9	17.1	14.2	75	-	60	16
13	1019.9	22	19.6	17.8	10.5	57	-	70	27.9
14	1021.1	23.8	20.7	18.5	11.2	56	-	50	22
15	1021.2	24.8	20.9	18.8	15.2	71	-	70	24.3
16	1022.1	20.5	18.7	17.5	14.1	75	-	70	38.5
17	1020.4	20.6	19.2	17.7	14	72	0.1	60	29.3
18	1017.7	24.2	21.2	19.1	16.3	74	-	50	20.6
19	1016.3	24.2	21.1	19.2	16.5	76	-	30	15.3
20	1016.3	24.6	21.4	19.5	16.8	75	-	360	12.3
21	1020.3	21.3	19.1	16.3	12.9	68	Trace	360	23.9
22	1023.3	18.5	15	9.8	10	72	0.5	360	36.4
23	1028.5	10.4	7.9	6.3	3.5	75	2.7	360	41.3
24	1029.2	12.5	9.2	6.5	1.6	59	-	360	25.5
25	1028.7	15.5	12.3	9.5	3.8	56	-	360	17.7
26	1027.3	17.8	15	13.1	7.6	61	-	40	22.2
27	1025.8	18.8	15.5	13.1	9.2	67	1	30	19.5
28	1026.4	15.7	13.7	11.7	11	83	2.4	40	20.1
29	1023.4	17.8	15.9	14.3	12.8	82	Trace	60	26.1
30	1020.7	20.2	18.3	16.8	16.2	88	Trace	50	19.8
31	1019.4	20.2	19.3	17.9	17.9	92	Trace	40	16.5

Daily Extract of Meteorological Observations , January 2024 - Tuen Mun

Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected



Appendix F

Event-Action Plans

					1	
	Contractor		 Rectify any unacceptable practise Amend working methods if appropriate 	 Submit proposals for remedial actions to IC(E) within 3 working days of notification Implement the agreed Amend proposals Amend proposal if appropriate 		 Take Immediate action to avoid further exceedance Submit proposals for remedial actions to IC(E) within 3 working days of notification Implement the agreed proposals Amend proposal If appropriate.
ITY EXCEEDANCE	Cu		1. Notify Contractor	 Confirm receipt of notification of fallure in writing Notify the Contractor Ensure remedial measures property implemented 		 Confirm receipt of notification of faiture in writing Notify the Contractor Ensure remedial measures properly implemented
/ENT/ACTION PLAN FOR AIR QUAL	ACTION		ACTION LEVEL Check monitoring data submitted by the ET Check contractor's working method	 Check monitoring data submitted by the ET Leader Check the Contractor's working method Check the Contractor's working method Discuss with ET and Contractor on possible remedial measures Advise the ER on the effectiveness of the proposed remedial measures Supervise implementation of remedial measures 		 Check monitoring data submitted by the ET Leader Check Contractor's working method Check Contractor's working method Discuss with ET and Contractor on possible remedial measures Advise the ER on the effectiveness of the proposed remedial measures Supervise implementation of remedial measures
E		ET Leader	 Identify source, investigate the causes of exceedance and propose remedial measures Inform ER, IC(E) and Contractor Repeat measurement to confirm finding Increase monitoring frequency to daily 	 Identify source, investigate the causes of exceedance and propose remedial measures Inform IC(E) and Contractor Repeat measurements to confirm finding Increase monitoring frequency to daily increase monitoring frequency to daily Discuss with IC(E) and Contractor on remedial actions If exceedance continues, arrange meeting with IC(E) and ER. If exceedance stops, cease additional monitoring 		 Identify source, investigate the causes of exceedance and propose remedial measures Inform ER, Contractor and EPD Repeat measurement to confirm finding A. Increase monitoring frequency to daily Assess the effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results
EVENT			1. Exceedance for one sample	2. Exceedance for two or more consecutive samples		1. Exceedance for one sample

EVENT		-	EVENT/ACTION PLAN FOR AIR QUA	LITY	EXCEEDANCE		
			ACTION				
		ET Leader	(C(E)		ER		Contractor
2. Exceedance	-	Identify source, investigate the causes	1. Discuss amongst ER, ET and Contractor on	- 0	onfirm receipt of notification	+	Take Immediate action to
for two or		of exceedance and propose remedial	the potential remedial actions	5	f fallure in writing		avoid further exceedances
more		measures	Review Contractor's remedial actions	2. Z	otify Contractor	ci.	Submit proposals for remediai
consecutive	~	Notify IC(E), ER, EPD and Contractor	whenever necessary to assure their	Б	consultation with the IC(E),		actions to IC(E) within 3
samples	e de la constante de la consta	Repeat measurement to confirm	effectiveness and advise the ER accordingly	້ສັ	gree with the Contractor on		working days of notification
L L		finding	Supervise the implementation of remediat	£	he remedial measures to be	ന്	Implement the agreed
	4	Increase monitoring frequency to daily	measures	<u> </u>	nplemented		proposats
	ۍ ا	Carry out analysis of contractor's		4.	insure remedial measures	¥	Resubmit proposals if
	i	working procedures to determine		3	re property implemented		problem still not under control
		possible mitigation to be implemented		5. If	exceedances continues,	പ്	Stop the relevant activity of
	<u>.</u>	Arrance meeting with IC(E) and ER to		5	onsider what portion of the		works as determined by the
	;	discuss the remedial actions to be		3	ork is responsible and		ER until the exceedance is
		laken		3.	Istruct the Contractor to stop		abated
	~	Assess effectiveness of Contractor's		÷	nat portion of work until the		,
		remedial actions and keep IC(E), EPD	•	ë	xceedance is abated		
		and ER informed of the results					
	ŵ	If exceedance stops, cease additional					
		monitoring					

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	T			r								·					
Contractor		Submit noise mitigation proposals to IC(E). Implement noise mitigation	proposals.		Take immediate action to avoid further exceedance	Submit proposals for remedial artime to IC/E) within 3	working days of notification.	Implement the agreed	Resubmit proposals if problem	still not under control. Stop the relevant activity of	works as determined by the ER	unul the exceedances is abated.					
	ŀ	~-			÷	<u>vi</u>			4.	വ്							
IOISE EXCEEDANCE		Confirm receipt of notification of failure in writing. Notify the Contractor.	Require the Contractor to propose remedial measures for the analysed noise problem.	Ensure remediar measures are properly implemented.	Confirm receipt of notification of failure in writing.	Notify the Contractor.	remedial measures for the	analysed noise problem. Ecoury remedial measures are	properly implemented.	If exceedances continue, consider what activity of the work is	responsible and instruct the	Contractor to stop that activity of work until the exceedances is	abated.				
		<u>-</u>	ი, კ	4.	<u>-</u>	<u> </u>	i .	-	ŕ	പ്						·	
EVENT/ACTION PLAN FC ACTI		 Review the analysed results submitted by the ET. Review the proposed remedial 	measures by the Contractor and advise the ER accordingly. 3. Supervise the implementation of	remedial measures.	 Discuss amongst the ER, the ET Leader and the Contractor on the 	potential remedial actions.	 Review the Contractor's remained actions whenever necessary to 	assure their effectiveness and	3. Supervise the Implementation of	remedial measures.							
		 Notify the IC(E) and the Contractor. Carry out investigation. Report the results of investigation to 	 the IC(E) and the Contractor. Discuss with the Contractor and formulate remedial measures. 	 Increase monitoring frequency to check mitigation effectiveness 	 Notify the IC(E), the ER, the EPD and the Contractor. 	. Identify source.	 Repeat measurement to continuation findings. 	1. Increase monitoring frequency.	 Carry out analysis of contractor s working procedures to determine 	possible mitigation to be implemented	3. Inform the IC(E), the ER and the	EPD the causes & actions taken for the exceedances.	7. Assess effectiveness of Contractoric remedial actions and	keep the IC(E), the EPD and the	ER informed of the results	3. If exceedance due to the	construction works stups, cease additional monitoring
L E		(v (v) -	V.	····	•					<u> </u>	<u> </u>					<u> </u>	
EVEN		Action Level			Limit I evel	2											

		IEC	Check monitoring data	submitted by E1	Confirm ET assessment if	exceedance is due / not due	to the works	Discuss with ET, ER and	Contractor on the mitigation	measures	Review contractor's	mitigation measures	whenever necessary to	ensure their effectiveness	and advise the ER	accordingly	Supervise the	implementation of mitigation	measures						
щ			. :		4			ല്			4						ດ່								
ER QUALITY EXCEEDANC		ER	Notify EPD and other relevant	governmental agencies in writing	within 24 hours of the	identification of the exceedance	Discuss with IEC, ET and	Contractor on the proposed	mitigation measures;	Require contractor to propose	remedial measures for the	analysed problem if related to the	construction works	Ensure remedial measures are	property implemented	Assess the effectiveness of the	mitigation measure								
IAT	×		÷.				r,			с,				4		ഗ്									_
ND ACTION PLAN FOR V	ACTIC	Contractor	Notify the ER and IEC in writing	within 24 hours of identification of	exceedance	Rectify unacceptable practice;	Check all plant and equipment;	Submit investigation report to IEC	and ER within 3 working days of	the identification of an	exceedance	Consider changes of working	method if exceedance is due to	the construction works	Discuss with ET, IEC and ER and	propose mitigation measures to	IEC and ER if exceedance is due	to the construction works within 4	working days of identification of	an exceedance	Implement the agreed mitigation	measures within reasonable time	scale		
T A					_	2	ന്	4				ശ്			ဖ						~				_
EVEN		ET Leader	 Identify source(s) of impact; 	Repeat in-situ measurement to	confirm findings:	Notify Contractor in writing within	24 hours of Identification of the	exceedance	Check monitoring data, all plant,	equipment and Contractor's	working methods:	5. Carry out investigation	6. Report the results of investigation	to the Contractor within 3 working	davs of identification of	exceedance and advise	contractor if exceedance is due to	contractor's construction works	Discuss mitigation measures with	Contractor if exceedance is due	to the construction works within 4	working days	8. Repeat measurement on next day	of exceedance if exceedance is	due to the construction works
		E		þ	 }																				
Event			Action level	heing exceede	by one	sampling day																			

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Event				EVENT AND ACTION PLAN	I FC	IR WATER QUALITY		
				ACTIO	Ň			
	Ŀ	ET Leader		Contractor		ER		IEC
Action level	÷	Identify source(s) of impact;	-	Notify IEC and ER in writing	~ :	Notify EPD and other relevant	,	Check monitoring data
being	R	Repeat in-situ measurement		within 24 hours of		governmental agencies in		submitted by ET
exceeded by		to confirm findings		identification of exceedance		writing within 24 hours of the	<u>~i</u>	Confirm ET assessment
more than one	က်	Notify Contractor in writing	2	Rectify unacceptable practice;		identification of the		If exceedance is due /
consecutive		within 24 hours of	ကဲ	Check all plant and		exceedance		not due to the works
sampling days		identification		equipment;	<u>~</u> ;	Discuss with IEC, ET and	ભં	Discuss with ET, ER and
	4.	Check monitoring data, all	4	Consider changes of working	-	Contractor on the proposed		Contractor on the
		plant, equipment and		methods;		mitigation measures;		mitigation measures.
		Contractor's working methods;	ഗ	Submit the results of the	က်	Require contractor to propose	4	Review contractor's
	ມີ	Carry out investigation		investigation to IEC and ER		remedial measures for the	_	mitigation measures
	ശ	Report the results of		within 3 working days of the		analysed problem if related to		whenever necessary to
		investigation to the Contractor		identification of an		the construction works		ensure their
		within 3 working days of		exceedance	4	Ensure remedial measures		effectiveness and advise
		identification of exceedance	ö	Discuss with ET, IEC and ER		are properly implemented		the ER accordingly
		and advise contractor if		and propose mitigation	ທ່	Assess the effectiveness of	ഗ്	Assess the effectiveness
		exceedance is due to		measures to IEC and ER		the mitigation measure		of the implemented
		contractor's construction		within 4 working days of				mitigation measures.
		works		identification of an				
	~	Discuss mitigation measures		exceedance				
		with IEC and Contractor within	~	Implement the agreed				
		4 working of identification of		mitigation measures within				
		an exceedance		reasonable time scale				
	æ	Ensure mitigation measures						
		are implemented;						
	တ်	Prepare to increase the						
		monitoring frequency to daily;						
	0). Repeat measurement on next						
		day of exceedance.						

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Event		EVENI	L L	ND ACTION PLAN FOR W	ATE	ER QUALITY EXCEEDANC	Щ	
				ACTIO	N		ļ	
1		ET Leader		Contractor		ER		IEC
Limit level	-	Repeat in-situ measurement	<u> </u>	Notify IEC and ER in writing;	.	Notify EPD and other relevant		Check monitoring data
being		to confirm findings;		within 24 hours of the		governmental agencies in		submitted by EI
exceeded by	ų	Identify source(s) of impact;		identification of the		writing within 24 hours of	N	
one sampling	с,	Notify Contractor in writing		exceedance		identification of exceedance		it exceedance is due /
dav		within 24 hours of	2 N	Rectify unacceptable practice;	N	Discuss with IEC, ET and		not due to the works
•		identification of the	т.	Check all plant and		Contractor on the proposed	ຕ່	Discuss with ET, ER and
		exceedance		equipment;		mitigation measures;		
	4	Check monitoring data, all	4	Consider changes of working	<u>က်</u>	Request Contractor to critically		mitigation measures.
		plant, equipment and		methods;		review the working methods;	4	Review proposals on
		Contractor's working methods;	ഗ	Submit the results of the	4	Ensure remedial measures		
	ທີ	Carry out investigation		investigation to IEC and ER		are properly implemented		submitted by Contractor
	<u>ن</u>	Report the results of		within 3 working days of the	ъ,	Assess the effectiveness of		and advise the ER
		investigation to the Contractor		identification of an		the implemented mitigation		accordingly.
		within 3 working days of		exceedance		measures.	റ്	Assess the effectiveness
		identification of exceedance	ம்	Discuss with ET, IEC and ER				of the implemented
		and advise contractor if		and propose mitigation				mingauon measures
		exceedance is due to		measures to IEC and ER				
		contractor's construction		within 4 working days of the			-	
		works		identification of an				
	~	Discuss mitigation measures		exceedance				
		with IEC, ER and Contractor	<u>~</u>	implement the agreed				
		within 4 working of		mitigation measures within				
		identification of an		reasonable time scale				
		exceedance						
	တ်	Ensure mitigation measures						
		are implemented;						
	റ്	Increase the monitoring						
		frequency to daily until no						
		exceedance of Limit Level.			ļ			

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Event		EVEN	Ě	AND ACTION PLAN FOR W	ATE	R QUALITY EXCEEDANC	Щ	
				ACTIO	N.			
· ••••••••••••••••••••••••••••••••••••		ET Leader		Contractor		ER		IEC
Limit Level	F	. Repeat in-situ measurement	-	Notify ER and IEC in writing	÷	Notify EPD and other relevant	÷	Check monitoring data
beina		to confirm findings;		within 24 hours of the		governmental agencies in		submitted by ET
exceeded by	2	Identify source(s) of impact		Identification of the		writing within 24 hours of	N	Confirm ET assessment
more than one	i ei	Notify Contractor in writing		exceedance and		identification of exceedance		if exceedance is due /
	;	within 24 hours of	ц.	Rectify unacceptable practice;	r,	Discuss with IEC, ET and		not due to the works
samoling days		identification of the	က်	Check all plant and		Contractor on the proposed	က်	Discuss with ER, ET and
a faa Ruuduura		exceedance		equipment;		mitigation measures;		Contractor on the
	4	Check monitoring data, all	4	Consider changes of working	ń	Request Contractor to critically		mitigation measures.
		plant equipment and		methods:		review the working methods;	4	Review proposals on
		Contractor's working methods:	<u></u>	Submit the results of the	ശ്	Ensure remedial measures		mitigation measures
	<u>ي</u>	Carry out investigation		investigation to IEC and ER		are properly implemented		submitted by Contractor
- 1	Ó	Report the results of		within 3 working days of the	4	Assess the effectiveness of		and advise the ER
	,	investigation to the Contractor		identification of an		the implemented mitigation		accordingly.
		within 3 working days of		exceedance		measures;	ശ്	Assess the effectiveness
		identification of exceedance	ပ်	Discuss with ET, IEC and ER	ശ്	Consider and instruct, if		of the implemented
		and advise contractor if	-	and propose mitigation		necessary, the Contractor to		mitigation measures.
		exceedance is due to		measures to IEC and ER		slow down or to stop all or part		
		contractor's construction		within 4 working days;		of the marine work until no		
		works	ن ف	. Implement the agreed		exceedance of Limit Level.		
	~	. Discuss mitigation measures		mitigation measures within				
		with IEC, ER and Contractor,		reasonable time scale				
-	ထံ	 Ensure mitigation measures 	~	. As directed by the Engineer,				
_		are implemented;		to slow down or to stop all or				
	Ø	 Increase the monitoring 		part of the marine work or				
		frequency to daily until no		construction actives.				
		exceedance of Limit Level for						
		two consecutive days.						



Appendix G

Construction Programme

ID	A	Task Name	Start	Finish	Duratio	n Predecess	o time risk	Actual	Actu	al % Complete	25		Jan '24	22	20
1		Contract duration of Contract CV/2021/9	Mon 1/	1/24 Wed 31/7/24	213 days		unovunces	NA	NA	0%	[]	/1/24		22	25
2		Contract date, Date of Letter of Acceptance	Mon 1/	1/24 Mon 1/1/24	1 day			NA	NA	0%					
3		Starting Date of the Works	Mon 1/	1/24 Mon 1/1/24	1 day			NA	NA	0%					
4		Starting Date of Section 1 of the Works	Mon 1/1	1/24 Mon 1/1/24	1 day	1.1.1.1.1.1		NA	NA	0%	T				-
5		Starting Date of Section 2 of the Works	Mon 1/1	1/24 Mon 1/1/24	1 day			NA	NA	0%	-	4		0.00	
6		Starting Date of Section 3 of the Works	Mon 1/1	1/24 Mon 1/1/24	1 day	1		NA	NA	0%					
7		Date for Completion of the Works	Sun 31	/12/23 Sun 31/12/2	3 1 day			NA	NA	0%					
8		Completion Date of Section 1 of the Works	Wed 31	/7/24 Wed 31/7/24	1 day			NA	NA	0%					
9		Completion Date of Section 2 of the Works	Wed 31	/7/24 Wed 31/7/24	1 day		1	NA	NA	0%					
10	H	Completion Date of Section 3 of the Works	Mon 30	/9/24 Mon 30/9/24	1 day			NA	NA	0%					
11		Planned completion dates	Wed 31	1/7/24 Wed 31/7/24	1 day		1.6.7.7.8	NA	NA	0%				3 3 4	
12		Planned competion date of Section 1	Wed 31	/7/24 Wed 31/7/24	1 day	1	100000	NA	NA	0%					
13		Planned competion date of Section 2	Wed 31	/7/24 Wed 31/7/24	1 day			NA	NA	0%					
14		Planned competion date of Section 3	Mon 30	/9/24 Mon 30/9/24	1 day			NA	NA	0%					
15		Access Date of the Site	Mon 1/	1/24 Mon 1/1/24	1 day			NA	NA	0%		-			
16		Portion A2, A3a, A3b, A3c, A4, A5a, A5b, A7c2 A11 (within 60 days after starting date)	2, A10 and Mon 1/1	1/24 Mon 1/1/24	1 day			NA	NA	0%					
17	•	Portion B1, B3, B6a, B6b and B7 (within 60 day starting date)	vs after Mon 1/1	1/24 Mon 1/1/24	1 day			NA	NA	0%					
18		Portion A1. A7a, A7b, A7c1, A9, A9a and B6c (advance notice after starting date)	7 day's Mon 1/1	1/24 Mon 1/1/24	1 day			NA	NA	0%					
19		Portion B6c	Mon 1/1	1/24 Mon 1/1/24	1 day			NA	NA	0%					
20		Hand back of the Site	Wed 31	1/7/24 Wed 31/7/24	1 day			NA	NA	0%					
21		Portion A2, A3a, A3b, A3c, A4, A5a, A7c2, A10 at an earlier date notified by the Project Manage days' advance notice)) and A11 (or Mon 1/1 er with 30	1/24 Mon 1/1/24	0 days			NA	NA	0%		• 1	/1/2024		
22		Portion A1, A7b, A7c1, A9 and A9a (or at an ea notified by the Project Manager with 30 days' ac	arlier date as Mon 1/1 dvance notice)	1/24 Mon 1/1/24	0 days			NA	NA	0%		• 1	L/1/2024		
23	•	Portion B1, B3, B6a, B6b and B7 (or at an earlinotified by the Project Manager with 30 days' ac	ier date as Mon 1/1 dvance notice)	1/24 Mon 1/1/24	0 days		10000	NA	NA	0%		• 1	L/1/2024		
24	-9	Portion B6c (or at an earlier date as notified by Manager with 30 days' advance notice)	the Project Mon 1/1	1/24 Mon 1/1/24	0 days	1.200	A Section	NA	NA	0%		• 1	L/1/2024		
25		Section 1A of the Works - Tseung Kwan O A Bank	rea 137 Fill Mon 1/	1/24 Wed 31/7/24	213 days	4SS		NA	NA	0%	4	-			
26	III	Taking over the existing facilities at the Tseu	ung Kwan O Mon 1/1	1/24 Mon 1/1/24	1 day	4SS	0	NA	NA	0%	+				
27		Operation of the the Tseung Kwan O Area 1 within Portion A of the Site	37 Fill Bank Mon 1/1	1/24 Wed 31/7/24	213 days	26SS	0	NA	NA	0%	+				
28		Operation and maintenance of the surveillan within Portion A of the Site	nce system Mon 1/1	1/24 Wed 31/7/24	213 days	26SS	0	NA	NA	0%	•			100	
29		Operation and maintenance of the existing to the Tseung Kwan O Area 137 Fill Bank withi the Site	ipping halls at Mon 1/1 in Portion A of	1/24 Wed 31/7/24	213 days	2688	0	NA	NA	0%	*				
30		Provision, operation and maintenance of the Plant at the Tseung Kwan O Area 137 Fill Ba Portion A of the Site	Crushing Mon 1/1 ank within	1/24 Wed 31/7/24	213 days	26SS	0	NA	NA	0%	+				
31		Operation and maintenance of the dewaterin Tseung Kwan O Area 137 Fill Bank within po	ng plant at the Mon 1/1 ortion A of the	1/24 Wed 31/7/24	213 days	26SS	0	NA	NA	0%	•			<u>. 1958 (19.</u>	
32	•	Chai Wan and Mui Wo Barging Points to the 137 Fill Bank within Portion A of the Site	TKO Area Mon 1/1	1/24 Wed 31/7/24	213 days	26SS	0	NA	NA	0%	1			1	
33		Handing over the facilities at the Tseung Kw 137Fill Bank within Portion A of the Site to the	an O Area Wed 31 ne Employer	/7/24 Wed 31/7/24	1 day		0	NA	NA	0%		10			
			Task			External Ta	sks			Duration-only		20		Extern	al Tas
			Split			External Mi	lestone	•		Manual Summar	y Roll	aul 🗸	•	Extern	al Mil
Project: 3 mont	: n rollina r	programme CV/2021/09 S.A., Jan - Mar 24	Milestono	A		Inactive Mil	lectono	1		Manual Summar				Drogra	200
Date: [1	5/1/2024	4]	winestone	•		mactive MI	lestone				1		S	Flogre	:55
			Summary	-		Inactive Su	mmary			Start-only				Deadli	ne
			Project Summary	\bigtriangledown	\bigtriangledown	Manual Tas	sk	¢.		Finish-only		4			
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ID	0	Task Name	S	Start	Finish	Duration	Predece	sso time risk allowances	Actual Start	Actual Finish	% Complet	25	1	8	lan '24 15	22	29	
34	-	Planned Completion Date (Section 1)	V Fill Damb	ved 31///24	Wed 31///24	1 day	13.3.5.2		vved 31///24	NA	0%		1/1/24					
35		Section 2A of the works - Tuen Mun Area 3	S8 Fill Bank	Mon 1/1/24	Wed 31///24	213 days	500		NA	NA	0%							1
36		Fill Bank within Portion B of the Site	en Mun Area 38 N	vion 1/1/24	vved 31///24	213 days	555	U	NA	NA	0%			and the second second	an a		to stake o	
37		Operation of the Tuen Mun Area 38 Fill Bar Portion B of the Site	nk within N	Mon 1/1/24	Wed 31/7/24	213 days	5SS	0	NA	NA	0%		*				1995 (1993)	
38		Operation and maintenance of the surveilla within Portion B of the Site	ance system N	Mon 1/1/24	Wed 31/7/24	213 days	5SS	0	NA	NA	0%				10 Jan / 1993			-
39		Operation and maintenance of the existing the Tuen Mun Area 38 Fill Bank within Port	tipping halls at V tion B of the	Wed 31/7/24	Wed 31/7/24	0 days	5SS	0	NA	NA	0%		4					
40		Operation and Maintenance of the Crushing Tuen Mun Area 38 Fill Bank within Portion	g Plant at the V B of the Site	Wed 31/7/24	Wed 31/7/24	0 days	5SS	0	NA	NA	0%							
41		Operation and maintemnance of glass culle compartment at the Tuen Mun Area 38 Fill Portion B of the Site	et storage M Bank within	Mon 1/1/24	Wed 31/7/24	213 days	5SS	0	NA	NA	0%							
42	1	Planned Completion Date (Section 2)	v	Wed 31/7/24	Wed 31/7/24	1 day			NA	NA	0%							
43		Section 3A of the Works - Designated Recla in the Mainland	amation Sites	Sat 18/11/23	Mon 30/9/24	317 days			Sat 18/11/23	NA	0%							-
44		Collection and delivery of Public Fill by Tseung Kwan O Area 137 Fill Bank and t Area 38 Fill Bank to the Desiognated Ree Sites in the Mainland	vessels from S the Tuen Mun clamation	Sat 18/11/23	Mon 30/9/24	317 days			Sat 18/11/23	NA	0%							
45		1st quarter of year 2024	S	Sat 18/11/23	Sun 18/2/24	92 days			Sat 18/11/23	NA	0%	-				-		
46		Submitting application documents to application of dumping permits	EPD for F	Fri 1/12/23	Fri 1/12/23	1 day		0	NA	NA	0%							
47		Obtaining the dumping permit from E	EPD S	Sat 2/12/23	Sun 31/12/23	30 days	46	1	NA	NA	0%							
48		Submitting Application documents to for the application of the dumping pe the sea	o the Employer S ermit of waste at	Sat 18/11/23	Sun 19/11/23	1 day		0	Sat 18/11/23	NA	0%							
49		Obtaining the dumping permits from Ecology and environment of the Peo of China through the Employer	Ministry of Mople's Republic	Mon 20/11/23	Fri 29/12/23	40 days	48	1	NA	NA	0%							
50		Obtaining all necessary permits, lice approvals and concents	nses, S	Sat 30/12/23	Sat 30/12/23	0 days		0	Sat 30/12/23	NA	99%	•	30/1	2/2023				
51		Collection and delivery of public Fill t	to Taishan M	Mon 1/1/24	Sun 18/2/24	49 days	50		NA	NA	0%		+				and the second	
52		2nd quarter of year 2024	n	Mon 15/1/24	Sun 30/6/24	168 days	15.15		NA	NA	0%				-			-
53		Submitting application documents to application of dumping permits	EPD for T	Tue 30/1/24	Wed 31/1/24	1 day		0	NA	NA	0%						•	
54		Obtaining the dumping permit from E	EPD T	Thu 1/2/24	Sun 18/2/24	18 days	53		NA	NA	0%						*	
55		Submitting Application documents to for the application of the dumping pe the sea	o the Employer Mermit of waste at	Mon 15/1/24	Mon 15/1/24	1 day			NA	NA	0%							
56		Obtaining the dumping permits from Ecology and environment of the Peo of China through the Employer	Ministry of Tople's Republic	Tue 16/1/24	Wed 14/2/24	30 days	55	3	NA	NA	0%							
57		Obtaining all necessary permits, lice and concents	nses,approvals V	Wed 14/2/24	Wed 14/2/24	1 day		0	NA	NA	0%							
58		Collection and delivery of Public Fill	to Taishan N	Mon 19/2/24	Sun 30/6/24	133 days	54	0	NA	NA	0%					- 6 -		
59		3rd quarter of year 2024	Т	Tue 14/5/24	Mon 30/9/24	140 days			NA	NA	0%							
60		Submitting application documents to application of dumping permits	EPD for S	Sat 1/6/24	Sat 1/6/24	1 day			NA	NA	0%						21	
61		Obtaining the dumping permit from E	EPD S	Sun 2/6/24	Sat 29/6/24	28 days	60		NA	NA	0%	4		2.45				
Project 3 monti Date: [′	: h rolling 15/1/202	g programme CV/2021/09 S.A. Jan - Mar 24 24]	Task Split Milestone Summary Project Sum	imary	* *		External T External N Inactive N Inactive S Manual Ta	asks Ailestone Ailestone ummary ask	♦		Duration-only Manual Summar Manual Summar Start-only Finish-only	ry Ro ry	llup ♦ ●			Externation Externation Pro Dea	ernal Tas ernal Mil gress adline	e

Page 2



ID	0	Task Name	Start	Finish	Duration	Predecesso	time risk allowances	Actual Start	Actual Finish	% Complet	25	Ja 1 8	in '24 15 :	22 2	9
62		Submiting Application documents to the Employer for the application of the dumping permit of waste at the sea	Tue 14/5/24	Tue 14/5/24	1 day		0	NA	NA	0%	1/1/24	Ō			
63		Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republic of China through the Employer (assumed on	Wed 15/5/24	Sun 23/6/24	40 days	62	7	NA	NA	0%					
64	0	Obtaining all necessary permits, licenses, approvals and concents	Sat 1/6/24	Sun 30/6/24	30 days			NA	NA	0%					
65		Collection and delivery of public fill to Taishan	Mon 1/7/24	Mon 30/9/24	92 days	64	0	NA	NA	0%					
66	1	Removal, excavation and deposition of stockpiled and/or deposited Public Fill within the Designated Reclamation Sites in the Mainland	Mon 1/1/24	Wed 31/7/24	213 days			NA	NA	0%					
68		Operation and maintenance of the existing navigation channel and turning basins in association with the existing berthing facilituy at Zone E of the Desiganted Reclamation Sites in the Mainland	Mon 1/1/24	Wed 31/7/24	213 days			NA	NA	0%					
69		Design and construction of seawalls in association with new berthing facilities at zone B	Thu 1/2/24	Sat 28/9/24	241 days		1222	NA	NA	0%				-	
70		Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republic of China through the Employer for Zone B	Thu 1/2/24	Thu 1/2/24	1 day		0	NA	NA	0%					η
71		Preparation of design submission	Fri 2/2/24	Fri 16/2/24	15 days	70		NA	NA	0%					1
72		Obtaining all necessary design approvals and concents	Sat 17/2/24	Sun 17/3/24	30 days	71	Carl and The Internation	NA	NA	0%					
73		Construction of the berthing facilities	Mon 18/3/24	Fri 13/9/24	180 days	72		NA	NA	0%					
74	1000	Obtaining the construction completion certificate	Sat 14/9/24	Sat 28/9/24	15 days	73	2	NA	NA	0%					
75		Design and construction of seawalls (approximate 200m) in association with new berthing facility at Zone B of the Designated Reclamation Sites in the Mainland	Thu 1/2/24	Tue 30/7/24	181 days			NA	NA	0%					
76		Obtaining the permits from Ministry of Ecology and environment of the People's Republic of China through the Employer for Zone B	Thu 1/2/24	Thu 1/2/24	1 day			NA	NA	0%					
77		Preparation of design submission	Fri 2/2/24	Sat 2/3/24	30 days	76	2	NA	NA	0%					*
78	30000	Obtaining all necessary design approvals and concents	Sun 3/3/24	Mon 1/4/24	30 days	77	2	NA	NA	0%					
79	1	Construction of seawalls	Tue 2/4/24	Sun 30/6/24	90 days	78	14	NA	NA	0%					
80	1	Obtaining the construction completion certificate (subject to Project's Manager's instruction)	Mon 1/7/24	Tue 30/7/24	30 days	79	Caraciantia	NA	NA	0%					
81		Site Formation works at Tsang Tsui site	Mon 1/1/24	Wed 31/7/24	213 days			NA	NA	0%	-	_		_	_
82		Carrying out of general site clearance and initial survey	Mon 1/1/24	Tue 30/1/24	30 days		C-DP-R.S.	NA	NA	0%		Sale 12			
83		Construction of a haul road leading to the site	Wed 31/1/24	Thu 29/2/24	30 days	82	2	NA	NA	0%					1
84		Collection of fill material deliviered by marine transportation through the berthing facility and disposal of the fill material collected to areas within the site	Fri 1/3/24	Wed 31/7/24	153 days		0	NA	NA	0%					
85		Planned Completion Date (Section 3)	Mon 30/9/24	Mon 30/9/24	1 day			NA	NA	0%					

	Task		External Tasks		Duration-only		External Task
Project	Split		External Milestone	\$	Manual Summary Rollup	٠	External Mile
3 month rolling programme CV/2021/09 S.A. Jan - Mar 24	Milestone	•	Inactive Milestone		Manual Summary	 Double sheet 	Progress
Date: [15/1/2024]	Summary		Inactive Summary		Start-only		Deadline
	Project Summary	\bigtriangledown	Manual Task	Ŷ	Finish-only		
				Page 3			





Appendix H

Weekly ET's Site Inspection Record



Inspection Date : 4 - 1 - 33 - 4Time : 7 - 1 - 33 - 4Weather : 7 - 1 - 33 - 4Wind : 7 - 1 - 33 - 4Wind : 7 - 1 - 33 - 4Temperature : 7 - 1 - 33 - 4High / Moderate / Low

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:	h	di	tail
Name:	Clebo	W.L. KWOK	chan Hen Con
Title	Alan	ED	E.T



	Environmental Checklist	Imple S	ment tages	ation *	Remark
		Yes	No	N/A	
Fug	itive Dust Emission				
•	Dust control / mitigation measures shall be provided to prevent dust nuisance.	V			
	Water sprays shall be provided and used to dampen materials.	V			
8	All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition.	1			
: .	Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	1			
•	Unpaved areas should be watered regularly to avoid dust generation.	1			
•	The designated site main haul road shall be paved or regular watering.	V			
•	The haul road inside the site and public road around the site entrance should be kept clean and free from dust.	V			
	Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	1			
	Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	V			
	The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water.	1			
•	Vehicle and equipment should be switched off while not in use.	1			
	All plant and equipment should be well maintained e.g. without black smoke emission.	V			
	Open burning should be prohibited.	1			
	Approval or exemption Non-road Mobile Machinery (NRMM) labels should be painted or securely fixed on regulated machines and non-road vehicles at a conspicuous position according to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation (APCO Cap.311).	V			
Noi	se Impact		日本		
•	The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	V			
٠	The constructions works should be scheduled to minimize noise nuisance.	V			
•	Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	V			
٠	Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	V			
	Air compressors and hand held breakers should have noise labels.	1			
	Compressors and generators should operate with door closed.	V			
0700	Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	V			
1.00	Noisy equipment and mobile plant shall always be site away from NSRs.	1			

Handling of Surplus Public Fill (2022 – 2023) - Tuen Mun Area 38 Fill Bank



Environmental Checklist	Imple	ment tages	ation	Remark
	Yes	No	N/A	1
Water Quality				
 Drainage system and the sand / silt removal facilities should be adequate and well maintained to prevent flooding and overflow, especially after rain storms. 	V			
 The storm water intercepting system shall be effective to collect of runoff and remove suspended solids before discharge. 	V			
 Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding. 	V			
 The material shall be properly covered to prevent washed away especially before rainstorm. 	1			
 The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water. 	V			
 Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD. 	1			
 Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. 	V			
 A wheel washing bay shall be provided at the site exit and wash-water shall have sand and sitt settled out or removed before being discharged into storm drains. 	V			
 The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains. 	1			
 Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided. 	V			
 The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities. 	V			
 Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water. 	V			
 The barges shall be in right size such that adequate clearance in maintained between the vessels and the seabed at all states of the tide to ensure the undue turbidity is not generated by turbulence from vessel movement or propeller wash. 	V			
 All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport. 	1			
 Barges shall not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents shall be properly collected and treated before disposal. 	4			
 Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer. 	1			
 The work activities shall not cause any visible foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging facilities. 	1			
 A waste collection vessel shall be deployed to remove floating debris. 	1			
Landscape and Visual	l lape			
 The maximum stockpiling height at the fill bank shall be limited to a maximum of +40mPD. 	1	8		
 Surface of outer slopes of the Fill Bank shall preferably be hydroseeded. 	1			
 Stockpile of public fill shall be removed in a sequence to allow the outer hydrseeded to be removed later than other portions as far as practicable. 	\checkmark			
 Casuarina equisetifolia were planted as buffer tree along the northern perimeter of the Site. The height of Casuarina equisetifolia was maintained at bleast 3m above soil level. 	V			
 Lighting shall be set to minimise night-time glare. 	V			



		Environmental Checklist	lmple S	ement tages	ation	Remark
			Yes	No	N/A	1
Wa	iste l	lanagement				
Co	nstru	ction Waste Management				
•	Relev	ant licence / permits for disposal of construction waste or excavated materials available for inspection.	1			
•	Exca	vated material to be generated from construction works to be re-used on-site as far as practicable to reduce off-site disposal.	Ą			
•	Mud	and debris should be removed from waterworks access roads and associated drainage systems.	4			
•	Provi litter	sion of sufficient waste disposal points and regular collection for disposal. Appropriate measures should be employed to minimise windblown and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	V			
•	Segr prope	egation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their er disposal.	V			
	Prior minir	to disposal of C&D waste, recyclable materials should be salvaged for reuse (such as wood and metal) and inert waste utilised as public fill to nise the quantity of waste to be disposed of to landfill.	V			
•	In on shou	der to monitor the disposal of C&D material and solid wastes at public filling areas and landfills, and to control fly-tipping, a trip-ticket system Id be included as one of the contractual requirements.	1			
•	Any	soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials.	V			
Cł	emic	al Waste Management				
•	lt is r Ordir and o	equired to register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal nance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed complied with for control of chemical wastes.	V			
٠	After Pack	use, chemical wastes (e.g. cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the aging, Labelling and Storage of Chemical Wastes.	V			
•	Sper facili	t chemicals should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other licensed y in accordance with the Chemical Waste (General) Regulation.	4			
	Cher	nical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility.	V			
	Cher	nical wastes including waste oil should be stored properly in designated areas, e.g. chemical waste storage area.	V			
	The	designated chemical waste storage area should only be used for storing chemical wastes.	1			
	The	set-up of chemical waste storage area should	45.30			
	۲	Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition.	1			
	٠	Be enclosed on at least 3 sides and securely closed.	1			
		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.	V			
	٠	Have adequate ventilation.	V			
		Be covered to prevent rainfall entering (water collected within the bund must be tested and disposal as chemical waste if necessary).	V			
		Be arranged so that incompatible materials are adequately separated.	1			



Handling of Surplus Public Fill (2022 – 2023) - Tuen Mun Area 38 Fill Bank

Environmental Checklist	Imple S	menta tages	ation *	Remark
	Yes	No	N/A	
 Warning panels should be displayed at the waste storage area. 	1			
 Waste storage area should be cleaned and maintained regularly. 	1			
 Chemical waste should be transported regularly by a registered chemical waste collector to a facility licensed to receive chemical waste. 	V			
 All generators, fuel and oil storage should be within bundle areas. 	1			
 Oil leakage from machinery, vehicle and plant should be prevented. 	V			
 In the event of chemical waste / dangerous goods / chemicals spillage or leakage, the procedures as outlined in the Spillage Response Plan should be followed. 	V			
 The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place. 	1			
Good Site Practices				
 Nomination of approved personnel, such as site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site. 	4			
 Training of site personnel in proper waste management and chemical handling procedures should be provided. 	1			
 Good site practices should be adopted to clean the rubbish and litter on a regular basis so as to prevent the rubbish and litter from dropping into the nearby environment. 	V			
 Proper storage and site practices to minimise the potential for damage or contamination of construction materials. 	V			
The Environmental Permit should be displaced conspicuously on site.	1			
Construction noise permits should be posted at site entrance or available for site inspection.	V			
 Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. 	V			
 Chemical storage area provided with lock and located on sealed areas. 	1			
 All chemicals should be placed at the banded area with adequate band capacity (>110% of largest tank). 	1			1411
 Any unused chemicals or those with remaining functional capacity should be recycled. 	V			
 Regular cleaning and maintenance programme for waste storage area, drainage systems, silt traps, sumps and oil interceptors. 	1			
 To encourage collection of aluminium cans by individual collectors. 	V			
 Separate labelied bins should be provided to segregate this waste from other general refuse generated by the workforce. 	V			
 A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods. 	V			
A collection area should be provided where waste can be stored and loaded prior to removal from site. An enclosed and covered area is preferred to reduce the occurrence of wind blown' light material. If an open area is unavoidable for the storage or loading/unloading of wastes, then the area should be bunded and all the polluted surface run-off collected within this area should be diverted into wastewater treatment system.	V			



Summary of the Weekly Site Inspection:

Item	Details of defective works or observations	Proposed Follow Up Action	Photo Ref.	Further Action Required (Yes/No)	Target Completion Date

Remark

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	Name	Title	Signature	Date
Checked by	June Lau	ET Representative	1~~~	04 January 2024

Handling of Surplus Public Fill (2022-2023) - Tuen Mun Area 38 Fill Bank



: 11 - 1 - 24	
10:00	
: Sunny / Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy	
: Calm / Light / Breeze / Strong	
: 17	
: High / Moderate / Low	2 1
	 11 - 1 - 2 + 10 : • 0 Sunny / Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy Calm / Light / Breeze / Strong 17 High / Moderate / Low

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:	M	d.	
Name:	Ckh	W.L. Kurok	cha Hon La
Title	Row	EO	E. 7



Environmental Checklist		menta	ation *	Remark
		No	N/A	
Fugitive Dust Emission				
 Dust control / mitigation measures shall be provided to prevent dust nuisance. 	V			
Water sprays shall be provided and used to dampen materials.	V			
 All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition. 	V			
 Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. 	V			
 Unpaved areas should be watered regularly to avoid dust generation. 	V			
 The designated site main haul road shall be paved or regular watering. 	V			
 The haul road inside the site and public road around the site entrance should be kept clean and free from dust. 	V			
 Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site. 	1			
 Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank. 	V			
The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water.	7			
 Vehicle and equipment should be switched off while not in use. 	V			
 All plant and equipment should be well maintained e.g. without black smoke emission. 	V			
Open burning should be prohibited.	V			
 Approval or exemption Non-road Mobile Machinery (NRMM) labels should be painted or securely fixed on regulated machines and non-road vehicles at a conspicuous position according to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation (APCC Cap.311). 	V			
Noise Impact				
The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted	V			
The constructions works should be scheduled to minimize noise nuisance.	V			
 Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works. 	7			
 Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials. 	V			
Air compressors and hand held breakers should have noise labels.	1			
Compressors and generators should operate with door closed.	1			
Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum	1			
 Noisy equipment and mobile plant shall always be site away from NSRs. 	√			



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Environmental Checklist		ement Stages	ation	Remark
2	Yes	No	N/A	
Water Quality			a in	
 Drainage system and the sand / silt removal facilities should be adequate and well maintained to prevent flooding and overflow, especially after rain storms. 	V			
 The storm water intercepting system shall be effective to collect of runoff and remove suspended solids before discharge. 	1			
 Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding. 	V			
 The material shall be properly covered to prevent washed away especially before rainstorm. 	1			
 The lemporary slope surfaces shall be covered with impermeable sheet or sprayed with water. 	1			
 Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD. 	1			
 Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. 	V			
 A wheel washing bay shall be provided at the site exit and wash-water shall have sand and sitt settled out or removed before being discharged into storm drains. 	V			
 The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains. 	V			
 Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided. 	V			
 The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities. 	1			
 Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water. 	V			
 The barges shall be in right size such that adequate clearance in maintained between the vessels and the seabed at all states of the tide to ensure the undue turbidity is not generated by turbulence from vessel movement or propeller wash. 	V			
 All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport. 	1			
 Barges shall not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents shall be properly collected and treated before disposal. 	V			
 Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer. 	V			
 The work activities shall not cause any visible foam, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging facilities. 	V			
 A waste collection vessel shall be deployed to remove floating debris. 	V			
Landscape and Visual				
 The maximum stockpiling height at the fill bank shall be limited to a maximum of +40mPD. 	1			
Surface of outer slopes of the Fill Bank shall preferably be hydroseeded.	V			
 Stockpile of public fill shall be removed in a sequence to allow the outer hydrseeded to be removed later than other portions as far as practicable. 	V			
 Casuarina equisetifolia were planted as buffer tree along the northern perimeter of the Site. The height of Casuarina equisetifolia was maintained at bleast 3m above soil level. 	V			
 Lighting shall be set to minimise night-time glare. 	V			



	Environmental Checklist	mple St	menta ages'	tion	Remark
			Ňo	N/A	
Wa	ste Management				
Co	nstruction Waste Management				
	Relevant licence / permits for disposal of construction waste or excavated materials available for inspection.	\checkmark			
	Excavated material to be generated from construction works to be re-used on-site as far as practicable to reduce off-site disposal.	1			
	Mud and debris should be removed from waterworks access roads and associated drainage systems.	1			
	Provision of sufficient waste disposal points and regular collection for disposal. Appropriate measures should be employed to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.	V			
•	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.	4			
•	Prior to disposal of C&D waste, recyclable materials should be salvaged for reuse (such as wood and metal) and inert waste utilised as public fill to minimise the quantity of waste to be disposed of to landfill.	1			
	In order to monitor the disposal of C&D material and solid wastes at public filling areas and landfills, and to control fly-tipping, a trip-ticket system should be included as one of the contractual requirements.	1			
۲	Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials.	1			
Cł	emical Waste Management				
	It is required to register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	1			
•	After use, chemical wastes (e.g. cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	1			
٠	Spent chemicals should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other licensed facility in accordance with the Chemical Waste (General) Regulation.	1			
•	Chemical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility.	1			
•	Chemical wastes including waste oil should be stored properly in designated areas, e.g. chemical waste storage area.	1			
	The designated chemical waste storage area should only be used for storing chemical wastes.	4			
	The set-up of chemical waste storage area should				
	 Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition. 	1			
	 Be enclosed on at least 3 sides and securely closed. 	1			
	 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. 	4			
	Have adequate ventilation.	V			
	 Be covered to prevent rainfall entering (water collected within the bund must be tested and disposal as chemical waste if necessary). 	1			
	Be arranged so that incompatible materials are adequately separated.	1			



Handling of Surplus Public Fill (2022 – 2023) - Tuen Mun Area 38 Fill Bank

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Environmental Checklist		ernent tages	ation	Remark
		No	N/A	
 Warning panels should be displayed at the waste storage area. 	V			
 Waste storage area should be cleaned and maintained regularly. 	1	1		101
 Chemical waste should be transported regularly by a registered chemical waste collector to a facility licensed to receive chemical waste. 	V			
 All generators, fuel and oil storage should be within bundle areas. 	V			
 Oil leakage from machinery, vehicle and plant should be prevented. 	V			
 In the event of chemical waste / dangerous goods / chemicals spillage or leakage, the procedures as outlined in the Spillage Response Plan should be followed. 	V			
 The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place. 	V			
Good Site Practices				
 Nomination of approved personnel, such as site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site. 	V			
 Training of site personnel in proper waste management and chemical handling procedures should be provided. 	V			
Good site practices should be adopted to clean the rubbish and litter on a regular basis so as to prevent the rubbish and litter from dropping into the nearby environment.	V			
 Proper storage and site practices to minimise the potential for damage or contamination of construction materials. 	V			
The Environmental Permit should be displaced conspicuously on site.	V			
Construction noise permits should be posted at site entrance or available for site inspection.	V			
 Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. 	V			
 Chemical storage area provided with lock and located on sealed areas. 	V			
 All chemicals should be placed at the banded area with adequate band capacity (>110% of largest tank). 	V			
 Any unused chemicals or those with remaining functional capacity should be recycled. 	1			
 Regular cleaning and maintenance programme for waste storage area, drainage systems, silt traps, sumps and oil interceptors. 	1			
To encourage collection of aluminium cans by individual collectors.	V			
 Separate labelled bins should be provided to segregate this waste from other general refuse generated by the workforce. 	V			
 A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods. 	V			
 A collection area should be provided where waste can be stored and loaded prior to removal from site. An enclosed and covered area is preferred to reduce the occurrence of wind blown' light material. If an open area is unavoidable for the storage or loading/unloading of wastes, then the area should be bunded and all the polluted surface run-off collected within this area should be diverted into wastewater treatment system. 	1			

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Summary of the Weekly Site Inspection:

Item	Details of defective works or observations	Proposed Follow Up Action	Photo Ref.	Further Action Required (Yes/No)	Target Completion Date

Remark

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	Name	Title	Signature	Date
Checked by	June Lau	ET Representative	1	11 January 2024
			J	······



EΤ

Inspection Date)	18/1124
Time		10=00
Weather	: . :	Sunny / Eine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy

Wind : Calm / (ight / Breeze / Strong

Temperature : 22°(Humidity : High / Moderate / Kow

Inspected by CEDD Contractor / Sub-Contactor
Signature:

Signature:	A	È	Mak
Name:	Off a	Stere charj	Mak Kei War
Title	H2nu	Seitri Agent	EJ

Handling of Surplus Public Fill (2022 – 2023) - Tuen Mun Area 38 Fill Bank

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Environmental Checklist			ation *	Remark
	Yes	No	N/A	
Fugitive Dust Emission			意情如	
 Dust control / mitigation measures shall be provided to prevent dust nuisance. 	V			
Water sprays shall be provided and used to dampen materials.	A			
 All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition. 	V			
 Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. 	1			
 Unpaved areas should be watered regularly to avoid dust generation. 	1			
The designated site main haul road shall be paved or regular watering.	1			
The haul road inside the site and public road around the site entrance should be kept clean and free from dust.	1			
 Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work sile. 	1			
 Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank. 	1			
The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water.	V			
Vehicle and equipment should be switched off while not in use.	1			
 All plant and equipment should be well maintained e.g. without black smoke emission. 	V			
Open burning should be prohibited.	1			
 Approval or exemption Non-road Mobile Machinery (NRMM) labels should be painted or securely fixed on regulated machines and non-road vehicles at a conspicuous position according to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation (APCO Cap.311). 	1			
Noise Impact				
The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	V			
 The constructions works should be scheduled to minimize noise nuisance. 	1			
 Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works. 	V			
 Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials. 	V			
Air compressors and hand held breakers should have noise labels.	V			
 Compressors and generators should operate with door closed. 	1			
 Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum. 	V			
 Noisy equipment and mobile plant shall always be site away from NSRs. 	1			





Handling of Surplus Public Fill (2022 - 2023) - Tuen Mun Area 38 Fill Bank

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Environmental Checklist		ment tages	ation	Remark
		No	N/A	1
Water Quality				
 Drainage system and the sand / silt removal facilities should be adequate and well maintained to prevent flooding and overflow, especially after rain storms. 	V			
 The storm water intercepting system shall be effective to collect of runoff and remove suspended solids before discharge. 	V			
 Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding. 	1	1		
 The material shall be properly covered to prevent washed away especially before rainstorm. 	V			
 The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water. 	V			
 Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD. 	V			
 Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. 	V			
 A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains. 	1			
 The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains. 	V			
 Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided. 	V			
 The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities. 	V			
 Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water. 	V			
 The barges shall be in right size such that adequate clearance in maintained between the vessels and the seabed at all states of the tide to ensure the undue turbidity is not generated by turbulence from vessel movement or propeller wash. 	1			
 All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport. 	V			
 Barges shall not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents shall be properly collected and treated before disposal. 	V			
 Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer. 	V	1		
 The work activities shall not cause any visible foarn, oil, grease, scum, litter or other objectionable matters to be present on the water in the vicinity of the barging facilities. 	1			
 A waste collection vessel shall be deployed to remove floating debris. 	V			
Landscape and Visual				
 The maximum stockpiling height at the fill bank shall be limited to a maximum of +40mPD. 	1			
 Surface of outer slopes of the Fill Bank shall preferably be hydroseeded. 	V			
 Stockpile of public fill shall be removed in a sequence to allow the outer hydrseeded to be removed later than other portions as far as practicable. 	1			
 Casuarina equisetifolia were planted as buffer tree along the northern perimeter of the Site. The height of Casuarina equisetifolia was maintained at bleast 3m above soil level. 	V			_
Lighting shall be set to minimise night-time glare.	V			

Handling of Surplus Public Fill (2022 - 2023) - Tuen Mun Area 38 Fill Bank



Environmental Checklist		tages	ation *	Remark
	Yes	No	N/A	1
Waste Management				
Construction Waste Management				
 Relevant licence / permits for disposal of construction waste or excavated materials available for inspection. 	V			
 Excavated material to be generated from construction works to be re-used on-site as far as practicable to reduce off-site disposal. 	V			
 Mud and debris should be removed from waterworks access roads and associated drainage systems. 	V			
 Provision of sufficient waste disposal points and regular collection for disposal. Appropriate measures should be employed to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers. 	V			
 Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal. 	1			
 Prior to disposal of C&D waste, recyclable materials should be salvaged for reuse (such as wood and metal) and inert waste utilised as public fill to minimise the quantity of waste to be disposed of to landfill: 	V			
 In order to monitor the disposal of C&D material and solid wastes at public filling areas and landfills, and to control fly-tipping, a trip-ticket system should be included as one of the contractual requirements. 	V			
 Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials. 	1			
Chemical Waste Management				
 It is required to register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes. 	1			
 After use, chemical wastes (e.g. cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. 	V			
 Spent chemicals should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other licensed facility in accordance with the Chemical Waste (General) Regulation. 	1			
 Chemical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility. 	1			
 Chemical wastes including waste oil should be stored properly in designated areas, e.g. chemical waste storage area. 	1			
 The designated chemical waste storage area should only be used for storing chemical wastes. 	1			
The set-up of chemical waste storage area should		Tores		
 Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition. 	V			
Be enclosed on at least 3 sides and securely closed.	V			
 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. 	V			
Have adequate ventilation.	V			
 Be covered to prevent rainfall entering (water collected within the bund must be tested and disposal as chemical waste if necessary). 	V			
 Be arranged so that incompatible materials are adequately separated. 	1			



Handling of Surplus Public Fill (2022 - 2023) - Tuen Mun Area 38 Fill Bank

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Environmental Checklist		ment	ation *	Remark
	Yes	No	N/A	
Warning panels should be displayed at the waste storage area.	V			
Waste storage area should be cleaned and maintained regularly.	V			
Chemical waste should be transported regularly by a registered chemical waste collector to a facility licensed to receive chemical waste.	V			
All generators, fuel and oil storage should be within bundle areas.	\checkmark			
Oil leakage from machinery, vehicle and plant should be prevented.	V	1		
In the event of chemical waste / dangerous goods / chemicals spillage or leakage, the procedures as outlined in the Spillage Response Plan should be followed.	1			
The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place.	1			
Good Site Practices				
Nomination of approved personnel, such as site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.	1			
Training of site personnel in proper waste management and chemical handling procedures should be provided.	1			
Good site practices should be adopted to clean the rubbish and litter on a regular basis so as to prevent the rubbish and litter from dropping into the nearby environment.	V			
Proper storage and site practices to minimise the potential for damage or contamination of construction materials.	V			
The Environmental Permit should be displaced conspicuously on site.	V			
Construction noise permits should be posted at site entrance or available for site inspection.	V			
Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	V			
Chemical storage area provided with lock and located on sealed areas.	1	1		
All chemicals should be placed at the banded area with adequate band capacity (>110% of largest tank).	V			
Any unused chemicals or those with remaining functional capacity should be recycled.	V			
Regular cleaning and maintenance programme for waste storage area, drainage systems, silt traps, sumps and oil interceptors.	V			
To encourage collection of aluminium cans by individual collectors.	1			
Separate labelled bins should be provided to segregate this waste from other general refuse generated by the workforce.	1			
A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods.	7			
A collection area should be provided where waste can be stored and loaded prior to removal from site. An enclosed and covered area is preferred to reduce the occurrence of 'wind blown' light material. If an open area is unavoidable for the storage or loading/unloading of wastes, then the area should be bunded and all the polluted surface run-off collected within this area should be diverted into wastewater treatment system.	1			

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Summary of the Weekly Site Inspection:

ltem	Details of defective works or observations	Proposed Follow Up Action	Photo Ref.	Further Action Required (Yes/No)	Target Completion Date
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	Name	3 T	Title	Signature	Date
Checked by	June Lau		ET Representative		18 January 2024
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Inspection Date : 25/1/24

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Time :

Weather : Sunny / Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy

Wind

: Calm / (ight)/ Breeze / Strong

10°C

Temperature

Humidity

High / Moderate (Low)

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:		÷	
	14/10	¢	Mak
Name:	1-150	W.L. KNOK	Make Kei Wai
Title	ALOW	ED	E,T

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Environmental Checklist		lmple S	ement tages	ation	Remark
		Yes	No	N/A	
Fug	itive Dust Emission				
	Dust control / mitigation measures shall be provided to prevent dust nuisance.	V			
•	Water sprays shall be provided and used to dampen materials,	4			
•	All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition.	V			
•	Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	4			
	Unpaved areas should be watered regularly to avoid dust generation.	V			
•	The designated site main haul road shall be paved or regular watering.	1			
	The haul road inside the site and public road around the site entrance should be kept clean and free from dust.	7			
•	Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	4			
*	Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	4			
()	The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water.	1			
	Vehicle and equipment should be switched off while not in use.	Y			
•	All plant and equipment should be well maintained e.g. without black smoke emission.	V			
	Open burning should be prohibited.	V			
101	Approval or exemption Non-road Mobile Machinery (NRMM) labels should be painted or securely fixed on regulated machines and non-road vehicles at a conspicuous position according to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation (APCO Cap.311).	V			
Noi	se Impact				The second s
•	The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	1			2
•	The constructions works should be scheduled to minimize noise nuisance.	V			
	Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	1			
•	Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	V			
•	Air compressors and hand held breakers should have noise labels.	V			
•	Compressors and generators should operate with door closed.	V			
	Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	7			
800	Noisy equipment and mobile plant shall atways be site away from NSRs.	V			



Handling of Surplus Public Fill (2022 – 2023) - Tuen Mun Area 38 Fill Bank

Environmental Checklist		ment	ation	Remark
		No	N/A	
Nater Quality				
 Drainage system and the sand / silt removal facilities should be adequate and well maintained to prevent flooding and overflow, especially after rain storms. 	1			
 The storm water intercepting system shall be effective to collect of runoff and remove suspended solids before discharge. 	1			
 Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding. 	1			
 The material shall be properly covered to prevent washed away especially before rainstorm. 	V			
The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water.	1			
 Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD. 	V			
 Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. 	V			
 A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains. 	V			
 The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains. 	V			
 Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided. 	1			
 The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities. 	V			
 Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water. 	1			
 The barges shall be in right size such that adequate clearance in maintained between the vessels and the seabed at all states of the tide to ensure the undue turbidity is not generated by turbulence from vessel movement or propeller wash. 	1			
 All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport. 	1			
 Barges shall not be filled to a level which may cause the overflow of material during loading or transportation. Barge effluents shall be properly collected and treated before disposal. 	V			
 Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer. 	1			
 The work activities shall not cause any visible foam, oil, grease, scurn, litter or other objectionable matters to be present on the water in the vicinity of the barging facilities. 	V			
 A waste collection vessel shall be deployed to remove floating debris. 	V			
Landscape and Visual				
 The maximum stockpiling height at the fill bank shall be limited to a maximum of +40mPD. 	1			
 Surface of outer slopes of the Fill Bank shall preferably be hydroseeded. 	V			
Stockpile of public fill shall be removed in a sequence to allow the outer hydrseeded to be removed later than other portions as far as practicable.	1			
 Casuarina equisetifolia were planted as buffer tree along the northern perimeter of the Site. The height of Casuarina equisetifolia was maintained at bleast 3m above soil level. 	V			
Lighting shall be set to minimise night-time glare.	V			



Environmental Checklist		Implemental Stages*		Remark
	Yes	No	N/A	1
Waste Management				
Construction Waste Management				
 Relevant licence / permits for disposal of construction waste or excavated materials available for inspection. 	1			
 Excavated material to be generated from construction works to be re-used on-site as far as practicable to reduce off-site disposal. 	1			
 Mud and debris should be removed from waterworks access roads and associated drainage systems. 	1			
 Provision of sufficient waste disposal points and regular collection for disposal. Appropriate measures should be employed to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers. 	4			
 Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal. 	4			
 Prior to disposal of C&D waste, recyclable materials should be salvaged for reuse (such as wood and metal) and inert waste utilised as public fill to minimise the quantity of waste to be disposed of to landfill. 	V			
In order to monitor the disposal of C&D material and solid wastes at public filling areas and landfills, and to control fly-tipping, a trip-ticket system should be included as one of the contractual requirements.	V			
 Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials. 	V			
Chemical Waste Management				
 It is required to register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes. 	V			
 After use, chemical wastes (e.g. cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. 	4			
 Spent chemicals should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other licensed facility in accordance with the Chemical Waste (General) Regulation. 	V			
Chemical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility.	1			
Chemical wastes including waste oil should be stored property in designated areas, e.g. chemical waste storage area.	1			
 The designated chemical waste storage area should only be used for storing chemical wastes. 	V			
 The set-up of chemical waste storage area should 				
 Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition. 	1			
 Be enclosed on at least 3 sides and securely closed. 	V			
 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. 	4			
Have adequate ventilation.	V			
Be covered to prevent rainfall entering (water collected within the bund must be tested and disposal as chemical waste if necessary).	V			
 Be arranged so that incompatible materials are adequately separated. 	V			

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	Environmental Checklist Warning panels should be displayed at the waste storage area.		Implementa Stages*		Remark
			No	N/A	
•	Warning panels should be displayed at the waste storage area.	1			
٠	Waste storage area should be cleaned and maintained regularly.	V			
-	Chemical waste should be transported regularly by a registered chemical waste collector to a facility licensed to receive chemical waste.	V			
	All generators, fuel and oil storage should be within bundle areas.	V			
•	Oil leakage from machinery, vehicle and plant should be prevented.	1	1		
	In the event of chemical waste / dangerous goods / chemicals spillage or leakage, the procedures as outlined in the Spillage Response Plan should be followed.	V			
•	The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place.	1			
Go	ood Site Practices				
•	Nomination of approved personnet, such as site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.	4			
	Training of site personnel in proper waste management and chemical handling procedures should be provided.	V			
•	Good site practices should be adopted to clean the rubbish and litter on a regular basis so as to prevent the rubbish and litter from dropping into the nearby environment.	1			
•	Proper storage and site practices to minimise the potential for damage or contamination of construction materials,	V			
•	The Environmental Permit should be displaced conspicuously on site.	V			
•	Construction noise permits should be posted at site entrance or available for site inspection.	4			
	Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	4			
•	Chemical storage area provided with lock and located on sealed areas.	V			
	All chemicals should be placed at the banded area with adequate band capacity (>110% of largest tank).	1			
	Any unused chemicals or those with remaining functional capacity should be recycled.	V			
•	Regular cleaning and maintenance programme for waste storage area, drainage systems, silt traps, sumps and oil interceptors.	V			
•	To encourage collection of aluminium cans by individual collectors.	1			
	Separate labelled bins should be provided to segregate this waste from other general refuse generated by the workforce.	1			
•	A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods.	V			
•	A collection area should be provided where waste can be stored and loaded prior to removal from site. An enclosed and covered area is preferred to reduce the occurrence of wind blown' light material. If an open area is unavoidable for the storage or loading/unloading of wastes, then the area should be bunded and all the polluted surface run-off collected within this area should be diverted into wastewater treatment system.	V			





Summary of the Weekly Site Inspection:

Item	Details of defective works or observations	Proposed Follow Up Action	Photo Ref.	Further Action Required (Yes/No)	Target Completion Date

Remark

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	Name	Title	Signature	Date	
Checked by	June Lau	ET Representative		25 January	/ 2024
			· (



Appendix I

Implementation Schedule of Mitigation Measures



Environmental Mitigation Implementation Schedule

Environmental Protection Measures		Implementation Status			
		Implemented	Partially implemented	Not implemented	Not Applicable
Air Quality					
Dust control / mitigation measures shall be provided to prevent dust nuisance.	All areas				
 Water sprays shall be provided and used to dampen materials. 	All areas				
All stockpile of aggregate or soil should be enclosed or covered and water applied in dry or windy condition.	All areas				
 Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. 	All areas	\checkmark			
 Unpaved areas should be watered regularly to avoid dust generation. 	Site Egress	\checkmark			
The designated site main haul road shall be paved or regular watering.	All haul roads				
The public road around the site entrance should be kept clean and free from dust.	All areas	V			
 Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site and wash-water shall have sand and silt settled out or removed before being discharged into storm drains. 	Site Egress	\checkmark			
• Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	Site Egress				
The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water.	All areas				
 Vehicle and equipment should be switched off while not in use. 	All areas	V			
All plant and equipment should be well maintained e.g. without black smoke emission.	All areas	V			
Open burning should be prohibited.	All areas	\checkmark			
 Approval or exemption Non-road Mobile Machinery (NRMM) labels should be painted or securely fixed on regulated machines and non-road vehicles at a conspicuous position according to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation (APCO Cap.311). 	All areas	\checkmark			
Noise Impact					
 The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted. 	All areas	\checkmark			
Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	All areas	\checkmark			
Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	All areas				
Air compressors and hand held breakers should have noise labels.	All areas				
Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	All areas	\checkmark			
 Noisy equipment and mobile plant shall always be site away from NSRs. 	All areas	\checkmark			



Environmental Protection Measures		Implementation Status			
		Implemented	Partially implemented	Not implemented	Not Applicable
Water Quality					
 The existing / realigned intercepting channels and the sand / silt removal facilities shall be used and maintained. 	All areas	\checkmark			
 Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bay barriers shall be used to assist the diversion of polluted stormwater to the intercepting channels. 	All areas	\checkmark			
The storm water intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	All areas	\checkmark			
 The material shall be properly covered to prevent washed away especially before rainstorm. 	All areas	\checkmark			
 Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding. 	All areas		\checkmark		
 The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water. 	Temporary Slopes	\checkmark			
 Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. 	All areas	\checkmark			
• A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains.	Wheel Washing facility	\checkmark			
The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	Site Egress	\checkmark			
 Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided. 	Site Office	\checkmark			
The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	All areas	\checkmark			
 Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water. 	All areas	\checkmark			
 Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer. 	Along the seafront	\checkmark			
 A waste collection vessel shall be deployed to remove floating debris. 	Along the seafront	\checkmark			
Landscape and Visual					
The maximum stockpiling height at the fill bank shall be limited to a maximum of +40mPD.	All areas	\checkmark			
Surface of outer slopes of the Fill Bank shall preferably be hydroseeded.	Completed slopes	\checkmark			
• Stockpile of public fill shall be removed in a sequence to allow the outer hydrseeded to be removed later than other portions as far as practicable.	Completed slopes	\checkmark			
Casuarina equisetifolia were planted as buffer tree along the northern perimeter of the Site. The height of Casuarina equisetifolia was maintained at least 3m above soil level.	Site boundary	\checkmark			
Lighting shall be set to minimise night-time glare.	All areas	\checkmark			
Waste Management					
Construction Waste Management					
Relevant licence / permits for disposal of construction waste or excavated materials available for inspection.	All areas	\checkmark			



		Location	Implementation Status			
	Environmental Protection Measures		Implemented	Partially implemented	Not implemented	Not Applicable
•	Excavated material to be generated from construction works to be re-used on-site as far as practicable to reduce off-site disposal.	All areas	\checkmark			
•	Mud and debris should be removed from waterworks access roads and associated drainage systems.	All areas	\checkmark			
•	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.	All areas	\checkmark			
•	Prior to disposal of C&D waste, recyclable materials should be salvaged for reuse (such as wood and metal) and inert waste utilised as public fill to minimise the quantity of waste to be disposed of to landfill.	All areas	\checkmark			
•	In order to monitor the disposal of C&D material and solid wastes at public filling areas and landfills, and to control fly-tipping, a trip-ticket system should be included as one of the contractual requirements.	All areas	\checkmark			
-	Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials.	All areas	\checkmark			
Ch	nemical Waste Management					
•	It is required to register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	Waste Storage Area	\checkmark			
•	After use, chemical wastes (e.g. cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	Waste Storage Area	\checkmark			
•	Spent chemicals should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other licensed facility in accordance with the Chemical Waste (General) Regulation.	Waste Storage Area	\checkmark			
•	Chemical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility.	Waste Storage Area	\checkmark			
•	Chemical wastes including waste oil should be stored properly in designated areas, e.g. chemical waste storage area.	Waste Storage Area	\checkmark			
•	The designated chemical waste storage area should only be used for storing chemical wastes.	Waste Storage Area	\checkmark			
Th	e set-up of chemical waste storage area should					
•	Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition.	Waste Storage Area	\checkmark			
•	Be enclosed on at least 3 sides and securely closed.	Waste Storage Area	\checkmark			
•	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.	Waste Storage Area	\checkmark			
•	Have adequate ventilation.	Waste Storage Area	\checkmark			
•	Be covered to prevent rainfall entering (water collected within the bund must be tested and disposal as chemical waste if necessary).	Waste Storage Area	\checkmark			
•	Be arranged so that incompatible materials are adequately separated.	Waste Storage Area	\checkmark			
•	Warning panels should be displayed at the waste storage area.	Waste Storage Area	\checkmark			



		Location	Implementation Status			
	Environmental Protection Measures		Implemented	Partially implemented	Not implemented	Not Applicable
•	Waste storage area should be cleaned and maintained regularly.	Waste Storage Area	\checkmark			
•	Chemical waste should be transported by a registered chemical waste collector to a facility licensed to receive chemical waste.	All areas	\checkmark			
•	All generators, fuel and oil storage should be within bundle areas.	All areas	\checkmark			
•	Oil leakage from machinery, vehicle and plant should be prevented.	All areas				
•	In the event of chemical waste / dangerous goods / chemicals spillage or leakage, the procedures as outlined in the Spillage Response Plan should be followed.	All areas	V			
•	The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place.	All areas				
G	ood Site Practices					
•	Nomination of approved personnel, such as site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.	All areas				
•	Training of site personnel in proper waste management and chemical handling procedures should be provided.	All areas	\checkmark			
•	Good site practices should be adopted to clean the rubbish and litter on a regular basis so as to prevent the rubbish and litter from dropping into the nearby environment.	All areas	\checkmark			
•	Proper storage and site practices to minimise the potential for damage or contamination of construction materials.	All areas	\checkmark			
٠	The Environmental Permit should be displaced conspicuously on site.	Site Entrance				
•	Construction noise permits should be posted at site entrance or available for site inspection.	Site Entrance				
•	Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	All areas	V			
•	Chemical storage area provided with lock and located on sealed areas.	Chemical Storage Area	\checkmark			
•	All chemicals should be placed at the banded area with adequate band capacity (>110% of largest tank).	Chemical Storage Area	\checkmark			
•	Any unused chemicals or those with remaining functional capacity should be recycled.	All areas				
•	Regular cleaning and maintenance programme for waste storage area, drainage systems, silt traps, sumps and oil interceptors.	All areas	\checkmark			
•	To encourage collection of aluminium cans by individual collectors, separate labelled bins should be provided to segregate this waste from other general refuse generated by the workforce.	All areas				
•	A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods.	All areas	\checkmark			
•	A collection area should be provided where waste can be stored and loaded prior to removal from site. An enclosed and covered area is preferred to reduce the occurrence of 'wind blown' light material. If an open area is unavoidable for the storage or loading/unloading of wastes, then the area should be bunded and all the polluted surface run-off collected within this area should be diverted into wastewater treatment system.	All areas	\checkmark			
•	Remove wastes in a timely manner.	All areas				



Appendix J

Site General Layout plan






Appendix K

Monthly Summary Waste Flow Table

Monthly Summary Waste Flow Table for 2024

		Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly			
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
Jan	0	0	0	0	0	0	167.18	0	0	0	449.88
Feb											
Mar											
Apr											
May											
Jun											
Sub-total											
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Total	0	0	0	0	0	0	167.18	0	0	0	449.88

Notes: (1) The performance targets are given in **PS Clause 1.108(14)**.

(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

(4) The *Contractor* shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the *works*, together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the *works* is equal to or exceeding 50,000 m³.



Appendix L

Monitoring Schedule for the Coming Month



Time Schedule for Impact Water Quality Monitoring (WQM), Impact Air Monitoring (1-hrTSP, 24-hr TSP and 24-hr RSP), Weekly Site Inspection (Weekly SI) and Impact Noise Monitor February 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28-Jan	29-Jan	30-Jan	31-Jan	1-Feb	2-Feb	3-Feb
		1-hr TSP x 1 NM WQM		24-hr TSP 24-hr TSP Weekly SI (am) NM WQM Mid-flood		1-hr TSP x 2 WQM
		(09:00-10:30) Mid-ebb		(10:00-11:30) Mid-ebb		(10:30-12:00) Mid-ebb
4 Eob	5 Eob	(14:30-16:00) 6 Eeb	7 Eab	(15:00-16:30) 8 Eeb	0 Ech	(10:30-18:00) 10 Eeb
4760	WQM Mid-flood (13:00-14:30) Mid-ebb (17:30-19:00)	1-hr TSP x 1 Set 24 hr (07/02) NM	24-hr TSP 24-hr TSP WQM Mid-ebb (10:00-11:30) Mid-flood (14:00-15:30)	1-hr TSP x 3 Set 24 hr (13/02) NM Weekly SI (am)	WQM Mid-flood (08:30-10:00) Mid-ebb (12:00-13:30)	104760
11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb
				1-hr TSP x 2 NM Weekly SI (am) WQM Mid-flood (09:00-10:30) Mid-ebb (15:00-16:30)		1-hr TSP x 1 Set 24 hr (19/02) WQM Mid-flood (10:00-11:30) Mid-ebb (16:00-17:30)
18-Feb	19-Feb	20-Feb	21-Feb	22-Feb	23-Feb	24-Feb
	24-hr TSP 24-hr TSP	1-hr TSP x 2 NM WQM Mid-flood (10:00-11:30) Mid-ebb (18:30-20:00)		1-hr TSP x 1 Set 24 hr (25/02) NM Weekly SI (am) WQM Mid-flood (08:30-10:00) Mid-ebb (12:00-13:30)		WQM Mid-flood (08:30-10:00) Mid-ebb (13:00-14:30)
25-Feb	26-Feb	27-Feb	28-Feb	29-Feb	1-Mar	2-Mar
24-hr TSP 24-hr TSP		1-hr TSP x 2 NM WQM Mid-flood (09:00-10:30) Mid-ebb (14:00-15:30)		1-hr TSP x 1 Weekly SI (am) NM WQM Mid-flood (09:00-10:30) Mid-ebb (14:00-15:30)		24-hr TSP 24-hr TSP WQM Mid-flood (09:00-10:30) Mid-ebb (15:00-16:30)

Remarks:

1. The monitoring schedule may be changed due to unforeseen circumstances such as adverse weather.

2. RSP measurement is not required in the EM&A manual and RSP would not presented in EM&A report.

3. TM38 Fill bank is closed on Lunar New Year Eve, Lunar New Year Day, 2nd day and 3rd Day.



Predicted tide schedule from the Hong Kong Observatory for Impact Water Quality Monitoring (WQM)



February 2024





Predicted tide schedule from the Hong Kong Observatory for Impact Water Quality Monitoring (WQM)



February 2024





Predicted tide schedule from the Hong Kong Observatory for Impact Water Quality Monitoring (WQM)



February 2024



Appendix M

Reporting Month Monitoring Schedule



Time Schedule for Impact Water Quality Monitoring (WQM), Impact Air Monitoring (1-hrTSP, 24-hr TSP and 24-hr RSP), Weekly Site Inspection (Weekly SI) and Impact Noise Monitor January 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31-Dec	1-Jan	ı 2-Jan	3-Jan	4-Jan	5-Jan	6-Jan
		24-hr TSP 24-hr TSP NM WQM Mid-flood (10:00-11:30) Mid-ebb		1-hr TSP x 2 NM Weekly SI (am) WQM Mid-ebb (07:30-09:00) Mid-flood		1-hr TSP x 1 Set 24 hr (08/01) WQM Mid-ebb (08:30-10:00) Mid-flood
		(16:00-17:30)		(11:00-12:30)		(13:00-14:30)
7-Jan	8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan
	24-hr TSP 24-hr TSP	1-hr TSP x 2 NM WQM Mid-ebb (10:30-12:00) Mid-flood (14:30-16:00)		1-hr TSP x 1 NM Weekly SI (am) WQM Mid-flood (09:00-10:30) Mid-ebb (12:30-14:00)		Set 24 hr (14/01) WQM Mid-flood (09:00-10:30) Mid-ebb (14:00-15:30)
14-Jan	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan
24-hr TSP 24-hr TSP		1-hr TSP x 2 NM WQM Mid-flood (09:00-10:30) Mid-ebb (15:30-17:00)		1-hr TSP x 1 NM Weekly SI (am) WQM Mid-ebb (07:30-09:00) Mid-flood (11:00-12:30)		24-hr TSP 24-hr TSP WQM Mid-ebb (08:00-09:30) Mid-flood (13:00-14:30)
21-Jan	22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan
	WQM Mid-flood (14:00-15:30) Mid-ebb (19:00-20:00)	1-hr TSP x 2 NM		1-hr TSP x 1 Set 24 hr (26/01) NM Weekly SI (am) WQM Mid-flood (09:00-10:30) Mid-ebb (12:00-13:30)	24-hr TSP 24-hr TSP	1-hr TSP x 2 WQM Mid-flood (09:00-10:30) Mid-ebb (13:00-14:30)
28-Jan	29-Jan	30-Jan	31-Jan	1-Feb	2-Feb	3-Feb
		1-hr TSP x 1 NM WQM Mid-flood (09:00-10:30) Mid-ebb (14:30-16:00)		24-hr TSP 24-hr TSP Weekly SI (am) NM WQM Mid-flood (10:00-11:30) Mid-ebb (15:00-16:30)		1-hr TSP x 2 WQM Mid-flood (10:30-12:00) Mid-ebb (16:30-18:00)

Remarks:

1. The monitoring schedule may be changed due to unforeseen circumstances such as adverse weather.

2. RSP measurement is not required in the EM&A manual and RSP would not presented in EM&A report.



Appendix N

QA/QC Results of Laboratory Analysis



QA/QC Results of Laboratory Analysis of Total Suspended Solids

	QC Sample Analysis	Sample Duplicate		Sample	Spike
Sampling Date	% Recovery *	Sample ID	% Error #	Sample ID	% Recovery @
	101.1	FC1-S	8.00	FM2-M	93.2
	98.6	FM2-B	9.84	EM1-S	111.5
2024/1/2	101.0	EM1-M	6.45	EC2-B	98.5
	100.0	FC1-S	8.22	FM2-M	95.1
	103.0	FM2-B	4.88	EM1-S	109.2
2024/1/4	101.1	EM1-M	4.08	EC2-B	102.6
	102.2	FC1-S	8.45	FM2-M	97.5
	100.1	FM2-B	6.06	EM1-S	112.0
2024/1/6	101.5	EM1-M	6.90	EC2-B	115.4
	102.0	FC1-S	8.33	FM2-M	108.4
	100.4	FM2-B	0.00	EM1-S	100.3
2024/1/9	100.1	EM1-M	6.67	EC2-B	109.9
	98.6	FC1-S	0.00	FM2-M	104.5
	101.7	FM2-B	8.00	EM1-S	107.0
2024/1/11	102.0	EM1-M	7.41	EC2-B	100.3
	99.2	FC1-S	6.06	FM2-M	103.9
	98.4	FM2-B	8.00	EM1-S	98.9
2024/1/13	99.1	EM1-M	3.77	EC2-B	96.7
	95.8	FC1-S	6.90	FM2-M	101.6
	99.5	FM2-B	7.41	EM1-S	92.1
2024/1/16	104.9	EM1-M	9.09	EC2-B	107.0
	99.4	FC1-S	7.14	FM2-M	102.9
	96.6	FM2-B	8.70	EM1-S	105.8
2024/1/18	104.1	EM1-M	4.17	EC2-B	88.7
	103.2	FC1-S	2.82	FM2-M	93.7
	103.3	FM2-B	2.41	EM1-S	95.4
2024/1/20	103.4	EM1-M	7.84	EC2-B	110.6
	102.5	FC1-S	4.44	FM2-M	104.9
	100.0	FM2-B	4.76	EM1-S	97.2
2024/1/22	98.4	EM1-M	2.15	EC2-B	88.4
	103.4	FC1-S	0.00	FM2-M	109.9
	96.6	FM2-B	5.13	EM1-S	99.4
2024/1/25	101.7	EM1-M	1.63	EC2-B	112.4
	101.7	FC1-S	2.35	FM2-M	97.7
	101.5	FM2-B	2.60	EM1-S	91.3
2024/1/27	100.3	EM1-M	3.51	EC2-B	102.0
	102.6	FC1-S	9.01	FM2-M	91.7
	103.7	FM2-B	9.09	EM1-S	83.3
2024/1/30	96.6	EM1-M	2.53	EC2-B	82.7

Note: (*)% Recovery of QC sample should be between 80% to 120%. (#)% Error of Sample Duplicate should be between -10% to 10%. (@)% Recovery of Sample Spike should be between 80% to 120%.



Appendix O

Complaint Log



Complaint Log

Log Ref.	Location	Received Date	Details of Complaint	Investigation / Mitigation Action	Status
001	Lung Mun Road near Tuen Mun Area 38 Fill Bank	24 May 2017	One complaint received on 24 May 2017, which was forwarded to ET on 03 June 2017, from public against the rocks and debris deposited on the road surface along Lung Mun Road near Tuen Mun Area 38 Fill Bank. The complainant complained that waste generated caused an environmental nuisance.	 Refer to the ET site investigation on 06 June 2017, the condition of Lung Mun Road near Tuen Mun Area 38 Fill Bank was found satisfactory. Details of Action(s) Taken by the Contactor: Regular water spraying by water lorries is provided for road cleaning at Lung Mun Road; Regular cleaning on Lung Mun Road and the access road at the site exit by road sweeper to remove mud and gravel is arranged four times on each working day; Site vehicles are washed to remove any dusty materials from their bodies and wheels by using high pressure water jet manually at the entrance of work site before leaving; Site vehicle for transporting materials are covered properly by using clean tarpaulin sheets; Regular cleaning at the site haul road is provided to minimize the fugitive dust emission. 	Closed
002	Lung Mun Road near Tuen Mun Area 38 Fill Bank	16 April 2018	One complaint received on 16 April 2018 from public and forwarded to ET by email at 10:51 on 25 May 2018. The complaint detail was"來往屯門第 38 區填料庫的龍 門路沿路有很多泥頭車出入,泥頭會從車上掉至路面 上,要求部門跟進及回覆。"	 Refer to the ET site investigation on 26 May 2018, the condition of Lung Mun Road near Tuen Mun Area 38 Fill Bank was found satisfactory. Details of Action(s) Taken by the Contactor: Regular cleaning on Lung Mun Road and the access road at the site exit by road sweeper to remove mud and gravel is arranged four times on each working day; Regular water spraying by water lorries is provided for road cleaning at Lung Mun Road; Site vehicles are washed to remove any dusty materials from their bodies and wheels by using high pressure water jet manually at the entrance of work site before leaving; Site vehicles for transporting materials are covered properly by using clean tarpaulin sheets; Regular cleaning at the site haul road is provided. 	Closed



003	Lung Mun Road near Tuen Mun Area 38 Fill Bank	26 June 2018	One complaint received on 26 June 2018 from public and forwarded to ET by email at 13:58 on 03 July 2018. The complaint detail was" 當天水車於 6 時出動洗街,導 致交通阻塞."	 Refer to the ET site investigation on 07 July 2018, the condition of Lung Mun Road near Tuen Mun Area 38 Fill Bank was found satisfactory. Details of Action(s) Taken by the Contactor: Improve the road washing plan to avoid washing in traffic peak peroid Revised the road washing schedule as soon as possible once there is traffic jam 	Closed
004	Tuen Mun Area 38 Fill Bank	06 October 2021	A complaint was received on 06 October 2021 from public regarding dust nuisance within TM38 Fill Bank and was forwarded to ET by email on 06 October 2021 for investigation.	 Refer to the ET site investigation on 12 October 2021, no defective observation related to dust emission was recorded during the investigation. Details of Action(s) Taken by the Contactor: Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank. Regular cleaning at the site haul road is provided to minimize the dust emission. 	Closed



005	Tuen Mun Area 38 Fill Bank	28 June 2022	A complaint was received on 28 June 2022, which was forwarded to ET by email on 28 June 2022 for investigation, from public against "土木工程署屯門第 38 區填料庫經常發出異味,致現場的空氣及環境被受污 染,土木工程拓展署難辭其咎,環保署亦應就現場大量 大型車輛造成的空氣污染作出跟進。"	 Refer to the ET site investigation on 30 June 2022, no defective observation related to dust emission was recorded during the investigation Details of Action(s) Taken by the Contactor: Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank; Regular cleaning at the site haul road is provided to minimize the dust emission; Site vehicles are washed to remove any dusty materials from their bodies and wheels by using high pressure water jet manually at the entrance of work site before leaving; 	Closed
006	Tuen Mun Area 38 Fill Bank	05 July 2022	A complaint was received on 05 July 2022, which was forwarded to ET by email on 15 July 2022 for investigation, from an environmental group against "為 何 TM38 區之斜坡不同蓋上帆布".	 Refer to the ET site investigation on 14 July 2022, no defective observation related to dust emission was recorded during the investigation. Details of Action(s) Taken by the Contactor: Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank. Regular cleaning at the site haul road is provided to minimize the dust emission. 	Closed



007	Tuen Mun Area 38 Fill Bank	30 September 2022	A complaint was received on 30 September 2022, which was forwarded to ET by email on 03 October 2022 for investigation, against "In recent days, we found that there was significant dust emission from the fill bank. As you are aware that we need to conduct RSP and TSP monitoring at the site boundary with very tight limits. We worry that these situations might affect our measurement. Please see the videos attached. They are taken on 21 Sept and one on 26 Sept. Grateful if you could investigate the cases and ensure dust is properly controlled.".	 The video provided by the complainant showed that there was serious dust emission in 3RS collection area of public fill. Based on this situation, mitigation measures implemented in TM38 Fill Bank were reviewed and enhanced to avoid dust emission. A joint site inspection and meeting was carried out on 06 October 2022 to discuss the dust emission at TM38 Fill Bank. The location of 3RS and discharge point would be inspected in every weekly environmental audit. The status of 3RS location would be recorded to monthly EM&A report. Details of Action(s) Taken by the Contactor: 1. Increasing the frequency of water spraying by water lorries inside the Fill Bank. 2. Setting up water spraying machine in the 3RS area 3. Regular cleaning at the site haul road is provided to minimize the dust emission. 	Closed
008	Tuen Mun Area 38 Fill Bank	25 January 2024	A complaint was received on 25 January 2024, which was forwarded to ET by email on 26 January 2024 for investigation, from public against dust nuisance and lack of lighting facilities "投訴屯門 38 區填料庫,沙塵四 起,要求加強灑水。要求增加石屎路。夜間增加照明。"	 Refer to the ET site investigation on 14 July 2022, no defective observation related to dust emission was recorded during the investigation. Details of Action(s) Taken by the Contactor: Increasing the frequency of water spraying by water lorries to suppress dust emission inside the Fill Bank. Regular cleaning at the site haul road is provided to minimize the dust emission. 	Closed



Figures









