

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

T: +852 2695 8318 F: +852 2695 3944 E: etl@ets-testconsult.com W: www.ets-testconsult.com

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.20

(AUGUST 2023)

Prepared by:

LAU, Wing Sam Assistant Environmental Officer

Checked by:

LAU, Chi Leung Environmental Team Leader

Issue Date: 12 September 2023

Report No.: ENA36032

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





Our Ref:

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

4 October 2023

Dear Mr. Lau,

RE: Contract No. CV/2021/09 Handling of Surplus Public Fill (2022-2023) Monthly EM&A Report (No. 20) for August 2023 for the Tuen Mun Area 38 Fill Bank

Reference is made to your submission of the Monthly EM&A Report for August 2023 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

cc. CEDD – Mr. T M YEUNG

Contract No.: CV/2021/09 Handling of Surplus Public Fill (2022-2023) – Tuen Mun Area 38 Fill Bank ENA36032 Monthly EM&A Report No.20

東業德勤測試顧問有限公司 ETS-TESTCONSULT LTD.

TABLE OF CONTENTS

Page

EXECUTIV	E SUMMARY	
1.0	INTRODUCTION	1
2.0	PROJECT INFORMATION	
	2.1 Construction Programme	1
	2.2 Project Organization and Management Structure	1
	2.3 Contact Details of Key Personnel	1
3.0	CONSTRUCTION PROGRESS IN THIS REPORTING MONTH	2
4.0	AIR QUALITY MONITORING	_
	4.1 Monitoring Requirement	2
	4.2 Monitoring Equipment	2
	4.3 Monitoring Parameters, Frequency and Duration	2
	4.4 Monitoring Locations and Schedule	2
	4.5 Monitoring Methodology	3
	4.0 Action and Limit levels	4
	4.7 Event-Action Flans 4.8 Results and Observations	4
5.0	MARINE WATER OLIALITY MONITORING	-
5.0	5.1 Monitoring Requirements	4
	5.2 Monitoring Locations	4
	5.3 Monitoring Parameters and Frequency	4
	5.4 Monitoring Methodology and Equipment Used	5 – 6
	5.5 Action and Limit Levels	6 – 7
	5.6 Event and Action Plan	7
	5.7 Monitoring Duration and Period in this reporting month	7
	5.8 Marine Water Monitoring Results	7
6.0	NOISE MONITORING	
	6.1 Monitoring Requirements	8
	6.2 Monitoring Equipment	8
	6.3 Monitoring Parameters, Duration and Frequency	8
	6.4 Monitoring Locations and Period	8
	6.5 Monitoring Procedures and Calibration Details	8 – 9
	6.6 Action and Limit levels	9
	6.7 Event-Action Plans	9
7.0		9
7.0	ENVIRONMENTAL AUDIT	0 10
	7.1 Weekly Sile Inspection and EPD's Sile Inspection	9 - 10
	7.2 Neview of Environmental Licensing and Permitting	10
	7.5 Status of Environmental Election g and r enrinning	11 - 12
8.0	I ANDSCAPE AND VISUAI	12
9.0	WASTE MANAGEMENT	12
5.0	9.1 Summary of Waste disposed of in this month	12
	9.2 Advice on the Solid and Liquid Waste Management Status	12
10.0		12
10.0	10.1 Summary of air guality, paiso and marino water guality	12
	10.2 Summary of Environmental Complaints	13
	10.3 Summary of Notification of Summons and Prosecution	13
11.0	CONCLUSIONS AND RECOMMENTATIONS	13 - 14
12.0	FUTURE KEY ISSUE	14

APPENDIX

A	Organization Chart and Lines of Communication
B1	Calibration Certificates for Impact Air Quality Monitoring Equipments
B2	Impact Air Quality Monitoring Results
B3	Graphical Plots of Impact Air Quality Monitoring Data
C1	Calibration Certificates for Impact Marine Water Quality Monitoring Equipments
C2	Impact Marine Water Quality Monitoring Results
C3	Graphical Plots of Impact Marine Water Quality Monitoring Data
D1	Calibration Certificates for Impact Noise Monitoring Equipments
D2	Impact Noise Monitoring Results
D3	Graphical Plots of Impact Noise Monitoring Data
E	Weather Condition
F	Event-Action Plans
G	Construction Programme
Н	Weekly ET's Site Inspection Record
1	Implementation Schedule of Mitigation Measures
J	Site General Layout Plan
К	Monthly Summary Waste Flow Table
L	Monitoring Schedule for the Coming Month
Μ	Reporting Month Monitoring Schedule
Ν	QA/QC Results of Laboratory Analysis
0	Complaint Log
-	

FIGURES

Figure 1	Locations of Air Quality Monitoring Stations – Tuen Mun Area 38 Fill Bank
Figure 2	Locations of Water Quality Monitoring Stations – Tuen Mun Area 38 Fill Bank
Figure 3	Locations of Noise Monitoring Stations – Tuen Mun Area 38 Fill Bank

TABLES

2.1	Contact Details of Key Personnel
4.1	Air Quality Monitoring Equipment
4.2	Monitoring parameters, duration and frequency of air quality monitoring
4.3	Action and Limit levels for 24-hr TSP and 1-hr TSP
5.1	Monitoring Parameters and Frequency of the marine water
5.2	Summary of testing procedure
5.3	Details of Water Quality Monitoring Equipment (In-site measurement)
5.4	Water Quality Action and Limit Levels
5.5	Time Schedule of Water Quality Monitoring
5.6	Summary of Marine Water Quality Exceedances in this reporting month
6.1	Noise Monitoring Equipment
6.2	Duration, Frequencies and Parameters of Noise Monitoring
6.3	Action and Limit Levels for noise monitoring
7.1	Key Findings of Weekly ET Site Inspections in this reporting month
7.2	Summary of environmental licensing and permit status
7.3	Summary of Environmental Complaints and Prosecutions
9.1	Actual amounts of waste generated in this reporting month

EXECUTIVE SUMMARY

This monthly Environmental Monitoring and Audit (EM&A) report No.20 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 August 2023.

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

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: 18 Occasions at 2 designated locations
- Noise, Daytime: 10 Occasions at 2 designated locations
- Marine Water Quality Monitoring: 14 Occasions at 4 designated locations
- Weekly-site inspection: 5 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

No complaint, 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/E) (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 August 2023.

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.

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;
- 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

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 M	Aonitorina	Equipment
		normorning	Lyuphion

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.

 Table 4.2
 Monitoring parameters, duration, frequency 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 TSP (μg/m³)		ıg 24-hr TSP (μg/m³) 1-hr TSP (μg		Ρ (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.

		_	
Monitoring Station	Parameter	Frequency	No. of Depths
	Depth (m)		
Control Stations:	Temperature (°C)		
	Dissolved Oxygen		3
IM-FC2 (Mid-flood)	(mg/L and % saturation)	3 days/week,	(Surface, mid-
Impact Stations:	Turbidity (NTU)	2 lides/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
-----------	------------------------------	---

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	02/06/23	01/09/23	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.

			August-20	23		
Sunday	Monday	Tuesday	Wednesda	y Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9 •	10	11	12
13	14	15	▼ 16	17	1 8 ▼	19
20	21	22	v ²³	24	v ²⁵	26
27	28	29	v ³⁰	31	•	

 Table 5.5
 Time Schedule of Marine Water Quality Monitoring

Remark: $(\mathbf{\nabla}) =$ Marine water quality monitoring carried out by ET

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.

		Evoodonoo	D	0				
Tide	Station	Level	Surface & Middle	Bottom	Turbidity	SS	Total	
		Action	0	0	0	0	0	
Mid Ebb	1101-1-1011	Limit	0	0	0	0	0	
ממש-בטט	TM-FM2	Action	0	0	0	0	0	
		Limit	0	0	0	0	0	
	TM-FM1	Action	0	0	0	0	0	
Mid- Flood		Limit	0	0	0	0	0	
		Action	0	0	0	0	0	
	I IVI-FIVIZ	Limit	0	0	0	0	0	
Т	otol	Action	0	0	0	0	0	
l Otal		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 Monitorina	Equipment
	Noise monitoring	Equipritorit

Equipment	Model
Sound Level Meter	Rion NL-52 / Rion NL-31
Calibrator	Rion NC-73

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

Time period	Duration/min	Parameters	Frequency
Day-time: 0700-1900 hrs on normal weekday	30	Leg, 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, five weekly site inspections were conducted on 03, 10, 17, 24 and 29 August 2023. Summaries of key findings of weekly ET site inspections in this month are described in Table 7.1.

Date	Key Findings	Action(s) Taken recommended by ET	Action(s) Taken by the Contractor	Rectification Status by ET				
			during the site audit					
03			·					
August	No defective work or obse	ervation was recorded durir	ng the weekly ET site i	nspection				
2023								
10								
August	No defective work or observation was recorded during the weekly ET site inspection							
2023								
17								
August	No defective work or observation was recorded during the weekly ET site inspection							
2023								
24								
August	No defective work or obse	ervation was recorded durii	ng the weekly ET site I	inspection				
2023								
29								
August	No defective work or observation was recorded during the weekly ET site inspection							
2023								

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 28 August 2023 in this reporting period.

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 Permit	EP- 210/2005/E	22/12/21	31/12/23	Issued
Chemical Waste Registration	5296-421- C1186-33	20/04/17		Spent battery containing heavy metals and spent lubricating oil
Effluent Discharge License	WT0004275 5-2022	21/02/23	29/02/28	Effluent arising from vehicle washing and dust suppression activities and contaminated surface runoff treated by screening facilities and sedimentation tanks (sedimentation and chemical precipitation).
Marine Dumping Permit	EP/MD/24- 019	03/07/23	31/08/23	Approval for dumping 499,999 tons (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

No complaint, 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.

Γ	Complaints logged		Summons	served	Successful Prosecution		
	August 2023	Cumulative	August 2023 Cumulative		August 2023	Cumulative	
	0	7	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.



	*	
Waste Type	Actual Amount	Disposal Locations
Public Fill ('000m³)	0	Tuen Mun 38 Fill Bank
C&D Waste (Others – e.g. general refuse) ('000kg)	36.1	WENT Landfill
Chemical Waste (kg)/(L)	0(L)	Collected by licensed collector

Table 9.1 Actual amounts of Waste generated in this reporting month

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

No complaint was received in this reporting period.

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.

No complaint, 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.



Appendix A

Project Organization Chart







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

Tisch Environmental, Inc. 145 South Miami Avenue

m: slope

Village of Cleves, OH 45002

www.tisch-env.com TOLL FREE: (877)263-7610 FAX: (513)467-9009



TEST REPORT

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

T; +852 2695 8318 F: +852 2695 3944 E: eti@ets-testconsult.com W; www.ets-testconsult.com

Calibration Report

of

High Volume Air Sampler

Manufacturer	:	Graseby GMW Da	Date of Calibration : 24 June 2023							
Serial No.	164	2484 (ET/EA/003/27) Ca	Calibration Due Date : 23 August 2023							
Method	1	Five-point calibration by using standard cal Manual	ibration ki	t Tisch TE-	502	5A ref	er to the O	perations		
Results		Flow recorder reading (cfm)	54	48		40	33	26		
		Qstd (Actual flow rate, m ³ /min)	1.50	1.28	1	.10	0.92	0.77		
	8	Pressure : 755.39 mm Hg		Temp. :	3	802	к	1		

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)



6/F Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fo Tan, Hong Kong

T: +652 2695 8318 F: +852 2695 3944 E: eti@ets-testconsult.com W: www.ets-testconsult.com

TEST REPORT

Calibration Report

of

High Volume Air Sampler



Qstd (m³/min) Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5-point calibration

1.10

1.20

1.00

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

Calibrated by

0.70

MAK, Kei Wai

(Assistant Supervisor)

0.80

0.90

Checked by ::

1.30

LAU, Chi Leung (Environmental Team Leader)

1.50

1.40

1.60



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

T: +852 2695 6318 F: +852 2695 3944 E: eti@ets-testconsult.com W: www.ets-testconsult.com

TEST REPORT

<u>Calibration Report</u> of <u>High Volume Air Sampler</u>											
Manufacturer		Graseby GMW Dat	e of Calib	ration <	8	24 Ju	ine 2023				
Serial No.		1180 (ET / EA / 003 / 04) Calibration Due Date : 23 August 2023									
Method	4	Based on Operations Manual for the 5-poin manufactured by Tisch TE-5025 A	t calibratio	on using sta	anda	urd ca	libration kit	a			
Results	2	Flow recorder reading (cfm)	51	44	Ξ.	40	31	22			
23	Qstd (Actual flow rate, m ³ /min) 1.59 1.46 1.27 1.07 0.77										
		Pressure : 755.39 mm Hg		Temp. :	3	302	К				



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

MAK, Kei Wai (Assistant Supervisor)

Checked by LAU, Chi Leung (Environmental Team Leader)



6/F Block B, Veristrong Industrial Centre, 34-36 Au Pul Wan Street, Fo Tan, Hong Kong

T: +852 2695 8318 F: +852 2695 3944 E: eti@ets-testconsult.com W: www.ets-testconsult.com

TEST REPORT

<u>Calibration Report</u> of <u>High Volume Air Sampler</u>

Manufacturer	:	Graseby GMW D	ate of Calib	ration	: _22	22 August 2023			
Serial No.	144	1180 (ET / EA / 003 / 04) C	alibration D	ue Date	: 21	21 October 2023			
Method	1	Based on Operations Manual for the 5-po manufactured by Tisch TE-5025 A	int calibratio	on using sta	andard	calibration kit			
Results	Į.	Flow recorder reading (cfm)	52	46	41	33	23		
		Qstd (Actual flow rate, m ³ /min)	1.60	1.47	1.2	3 1.08	0.80		
		Pressure: 754.64 mm Hg	3	Temp. :	303	3 K			

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 :

Wai

MAK, Kei Wai (Assistant Supervisor)

Checked by

LAU, Chi Leung (Environmental Team Leader)



Appendix B2

Impact Air Quality Monitoring Results



Summary of 24-hr TSP Monitoring Results

Sta	art	Fir	iish	Elaps	Elapse Time		Flow Rate (m ³ /min.)		Average	Filter W	C_{ana} (w_{a}/m^{3})	
Date	Time	Date	Time	Initial	Final	Time (hrs)	Initial	Final	(m³/min.)	Initial	Final	Conc. (µg/m)
05/08/23	11:00	06/08/23	11:00	16648.31	16672.31	24.00	1.0346	1.0346	1.0346	3.2094	3.3167	72
11/08/23	09:30	12/08/23	09:30	16675.31	16699.31	24.00	1.0087	1.0087	1.0087	3.2983	3.4087	76
17/08/23	08:50	18/08/23	08:50	16702.31	16726.31	24.00	0.9829	0.9829	0.9829	3.2069	3.3003	66
23/08/23	09:30	24/08/23	09:30	16729.31	16753.31	24.00	0.9995	0.9995	0.9995	3.3287	3.4338	73
29/08/23	09:30	30/08/23	09:30	16756.31	16780.31	24.00	0.9995	0.9995	0.9995	3.1175	3.2283	77

Monitoring Station : TM-A1

Monitoring Station

: TM-RA2

Sta	art	Fin	ish	Elapse	e Time	Sampling	Flow Rate	(m ³ /min.)	Average	Filter W	/eight (g)	$Conc.(u.g/m^3)$	
Date	Time	Date	Time	Initial	Final	Time (hrs)	Initial	Final	(m ³ /min.)	Initial	Final	Conc. (µg/m)	
05/08/23	11:10	06/08/23	11:10	31935.53	31959.53	24.00	1.2167	1.2167	1.2167	3.2095	3.3497	80	
11/08/23	09:30	12/08/23	09:30	31962.53	31986.53	24.00	1.1880	1.1880	1.1880	3.2033	3.3436	82	
17/08/23	09:00	18/08/23	09:00	31989.53	32013.53	24.00	1.1593	1.1593	1.1593	3.2002	3.3171	70	
23/08/23	09:40	24/08/23	09:40	32016.53	32040.53	24.00	1.1619	1.1619	1.1619	3.2129	3.3451	79	
29/08/23	09:40	30/08/23	09:40	32043.53	32067.53	24.00	1.1619	1.1619	1.1619	3.2164	3.3653	89	



Summary of 1-hr TSP Monitoring Results

Monitoring	g Station	:	ТМ	-A1							
Data	Tiı	me	Elapse	e Time	Sampling	Flow Rate (m ³ /min.)		Average	Filter Weight (g)		
Dale	Start	Finish	Initial	Final	Time (hrs)	Initial	Final	(m ³ /min.)	Initial	Final	Conc. (µg/m)
01/08/23	09:30	10:30	16645.31	16646.31	1.00	1.0087	1.0087	1.0087	3.2962	3.3073	184
01/08/23	11:00	12:00	16646.31	16647.31	1.00	1.0087	1.0087	1.0087	3.1922	3.2036	189
03/08/23	09:30	10:30	16647.31	16648.31	1.00	0.9829	0.9829	0.9829	3.3367	3.3469	173
08/08/23	09:00	10:00	16672.31	16673.31	1.00	1.0087	1.0087	1.0087	3.2720	3.2826	175
08/08/23	11:00	12:00	16673.31	16674.31	1.00	1.0087	1.0087	1.0087	3.2899	3.3007	179
10/08/23	09:30	10:30	16674.31	16675.31	1.00	1.0087	1.0087	1.0087	3.2196	3.2306	181
12/08/23	10:00	11:00	16699.31	16700.31	1.00	1.0087	1.0087	1.0087	3.3206	3.3314	178
12/08/23	13:00	14:00	16700.31	16701.31	1.00	1.0087	1.0087	1.0087	3.3365	3.3469	172
15/08/23	09:00	10:00	16701.31	16702.31	1.00	0.9829	0.9829	0.9829	3.1995	3.2093	167
19/08/23	10:00	11:00	16726.31	16727.31	1.00	1.0087	1.0087	1.0087	3.3550	3.3658	179
19/08/23	11:05	12:05	16727.31	16728.31	1.00	1.0087	1.0087	1.0087	3.3254	3.3364	181
22/08/23	09:30	10:30	16728.31	16729.31	1.00	0.9995	0.9995	0.9995	3.2167	3.2274	178
24/08/23	10:00	11:00	16753.31	16754.31	1.00	1.0240	1.0240	1.0240	3.1979	3.2091	183
24/08/23	13:00	14:00	16754.31	16755.31	1.00	1.0240	1.0240	1.0240	3.2966	3.3080	185
26/08/23	09:30	10:30	16755.31	16756.31	1.00	0.9995	0.9995	0.9995	3.1706	3.1812	177
31/08/23	09:30	10:30	16780.31	16781.31	1.00	0.9995	0.9995	0.9995	3.1445	3.1542	162
31/08/23	10:35	11:35	16781.31	16782.31	1.00	0.9995	0.9995	0.9995	3.1255	3.1358	172
31/08/23	13:00	14:00	16782.31	16783.31	1.00	0.9995	0.9995	0.9995	3.2228	3.2329	168



Summary of 1-hr TSP Monitoring Results

Monitoring	g Station	:	TM-	RA2								
Data	Tiı	me	Elapse Time		Sampling	Flow Rate	Flow Rate (m ³ /min.)		Filter W	C_{ana} $(u \sigma/m^3)$		
Dale	Start	Finish	Initial	Final	Time (hrs)	Initial	Final	(m ³ /min.)	Initial	Final		
01/08/23	09:40	10:40	31932.53	31933.53	1.00	1.1880	1.1880	1.1880	3.1822	3.1960	193	
01/08/23	11:10	12:10	31933.53	31934.53	1.00	1.1880	1.1880	1.1880	3.2481	3.2621	197	
03/08/23	09:40	10:40	31934.53	31935.53	1.00	1.1593	1.1593	1.1593	3.3077	3.3208	188	
08/08/23	09:00	10:00	31959.53	31960.53	1.00	1.1880	1.1880	1.1880	3.3066	3.3207	198	
08/08/23	11:00	12:00	31960.53	31961.53	1.00	1.1880	1.1880	1.1880	3.2372	3.2509	192	
10/08/23	09:40	10:40	31961.53	31962.53	1.00	1.1880	1.1880	1.1880	3.3368	3.3501	186	
12/08/23	10:00	11:00	31986.53	31987.53	1.00	1.1880	1.1880	1.1880	3.2993	3.3124	184	
12/08/23	13:00	14:00	31987.53	31988.53	1.00	1.1880	1.1880	1.1880	3.2409	3.2541	185	
15/08/23	09:00	10:00	31988.53	31989.53	1.00	1.1593	1.1593	1.1593	3.1627	3.1748	174	
19/08/23	10:10	11:10	32013.53	32014.53	1.00	1.1880	1.1880	1.1880	3.3852	3.3984	185	
19/08/23	11:15	12:15	32014.53	32015.53	1.00	1.1880	1.1880	1.1880	3.1982	3.2117	190	
22/08/23	09:40	10:40	32015.53	32016.53	1.00	1.1619	1.1619	1.1619	3.3132	3.3266	192	
24/08/23	10:00	11:00	32040.53	32041.53	1.00	1.1898	1.1898	1.1898	3.1805	3.1939	188	
24/08/23	13:00	14:00	32041.53	32042.53	1.00	1.1898	1.1898	1.1898	3.3272	3.3410	194	
26/08/23	13:50	14:50	32042.53	32043.53	1.00	1.1619	1.1619	1.1619	3.1772	3.1901	185	
31/08/23	09:40	10:40	32067.53	32068.53	1.00	1.1619	1.1619	1.1619	3.2207	3.2326	171	
31/08/23	10:45	11:45	32068.53	32069.53	1.00	1.1619	1.1619	1.1619	3.1828	3.1951	177	
31/08/23	13:10	14:10	32069.53	32070.53	1.00	1.1619	1.1619	1.1619	3.1169	3.1291	175	



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


Performance Check / Calibration of Multiparameter Water Quality Meter

Equipment Ref. No.	ET/EW/008/010	Manufacturer	1	YSI
Model No.	Pro DSS	Serial No.	:	18E105421
Date of Calibration :	2/6/2023	Calibration Due Date	•	1/9/2023
				<u></u>

<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	15.7	0.1
25.1	25,2	0.1
29.3	29.2	-0.1

Tolerance Limit (°C): ± 2.0

2. pH

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

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH 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	145.6	+0.3
1414	1423	+0.6
12892	13004	+0.8
56761	56393	-0.6

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	9.97	-0.3
20.0	19.68	-1.6
30.0	30.04	0.1

Tolerance Limit (g/L): ± 10.0%



Performance Check / Calibration of Multiparameter Water Quality Meter

Equipment Ref. No. :	ET/EW/008/010	Manufacturer		YSI	
Model No.	Pro DSS	Serial No.	1	18E105421	
Date of Calibration :	2/6/2023	Calibration Due Date	8	1/9/2023	

5. Dissolved Oxygen

(Method Reference: APHA 19ed 4500-O G)

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
1.73	1.81	+0.08
4.62	4.49	-0.13
5.91	5.86	-0.05

Tolerance Limit (mg/L): ± 0.20

6. Turbidity

(Method Reference: APHA 19ed 2130 B)

A CONTRACTOR OF THE								
Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)						
10	10.2	+2,0						
40	40.7	+1.75						
100	102.5	+2.5						
400	397.2	-0.70						

Tolerance Limit (NTU): ± 10.0%

The equipment complies # / does not comply # with the specified requirements and is deemed acceptable # / unacceptable # for use.

[#]Delete as appropriate

Calibrated by

4

Approved by :



Appendix C2

Impact Marine Water Quality Monitoring Results



Monitoring Station : TM-FC1

-		Ambient	1								D: 1	10				1		
Data	Time	Temp (°C) /	Monitori	ng Depth	Temp	Salinit	ty (ppt)	Dissolv	ed Oxygen	(mg/L)	Satura	a Oxygen tion (%)	Τι	urbidity (NT	U)	Susper	nded Solids	(mg/L) ډ
Dale	Time	Weather	(1	n)	(°C)	Value	Average	Value	Average	Depth-	Value	Average	Value	Average	Depth-	Value	Average	Depth-
		Condition				29.6		5.53		average	83.7		1.14		average	4.7		average
		27	Surface	1.0	28.3	29.6	29.6	5.54	5.54	5.05	83.9	83.8	1.13	1.14		3.2	4.0	ĺ
01/08/23	18.16.58		Middle	10.0	27.8	30.7	31.0	4.99	4 96	5.25	75.4	74.9	1.48	1.52	1 72	5.1	51	49
01/00/20	10.10.00		widdie	10.0	27.0	31.3	01.0	4.93	4.00		74.4	74.5	1.55	1.52	1.72	5.0	0.1	4.5
		/ Fine	Bottom	19.1	27.0	32.6	32.7	4.52	4.52	4.52	68.1	68.0	2.52	2.52		5.7	5.8	ĺ
						32.8		4.51			67.9 80.5		2.51			5.8	ł	
		27	Surface	1.0	28.3	30.1	30.1	5.26	5.28	79	79.9	80.2	2.02	2.04		6.6	6.7	ĺ
03/08/23	9.17.56		Middle	10.0	27.7	31.1	31.2	4.85	4.85	5.06	73.3	73.2	2.66	2.66	2.83	6.2	7.0	6.0
00/00/20	0.17.00		widdie	10.0	27.7	31.4	01.2	4.84	4.00		73.0	70.2	2.65	2.00	2.00	7.7	7.0	0.0
		/ Fine	Bottom	19.1	27.1	32.1	32.1	4.64	4.64	4.64	69.8	69.8	3.79	3.79		3.5	4.4	ĺ
						32.1 29.9		4.63			88.6		3.78			3.0		
		27	Surface	1.0	28.2	29.9	29.9	5.84	5.85	5 70	88.4	88.5	2.03	2.03		4.5	3.8	ĺ
05/08/23	9:48:00		Middle	10.2	27.9	30.2	30.2	5.62	5.61	5.73	84.8	84.6	2.35	2 36	2 35	3.1	27	2.8
00/00/20	5.40.00		widdie	10.2	27.5	30.2	00.2	5.59	0.01		84.4	04.0	2.36	2.00	2.00	2.3	2.7	2.0
		/ Fine	Bottom	19.3	27.7	30.4	30.5	5.36	5.35	5.35	80.7	80.4	2.64	2.66		2.1	2.0	ĺ
						26.1		5.34			80.9		0.37			3.0		
		27	Surface	1.0	29.5	26.1	26.1	5.35	5.35	5.00	81.0	81.0	0.37	0.37		2.8	2.9	ĺ
08/08/23	11:35:08		Middle	10.7	27.8	30.8	30.8	5.14	5.11	5.23	77.7	77.2	0.62	0.65	0.60	5.3	4.5	3.8
						30.8		5.08			76.8		0.68			3.7		
		/ Fine	Bottom	20.4	27.2	31.9	32.0	4.59	4.58	4.58	69.1	68.9	0.78	0.79		3.3	4.0	ĺ
						24.7		6.69			100.4		0.72			1.8		
		26	Surface	1.0	29.4	24.7	24.7	6.68	6.69	F 77	100.2	100.3	0.74	0.73		3.0	2.4	ĺ
10/08/23	14:34:13		Middle	9.7	26.3	32.5	32.5	4.86	4.86	5.77	72.3	72.3	1.44	1.45	1.27	1.5	2.5	2.1
10/00/20	11.01.10		maaro	0.1	20.0	32.5	02.0	4.86			72.3	72.0	1.46			3.4	2.0	
		/ Fine	Bottom	18.4	25.9	33.1	33.1	4.80	4.79	4.79	71.2	71.0	1.65	1.64		1.7	1.5	ĺ
						18.4		7.15			102.9		1.03			1.2	<u> </u>	
		26	Surface	1.0	29.0	18.6	18.5	7.22	7.19	6.01	104.0	103.5	1.22	1.25		2.8	2.1	ĺ
12/08/23	16:26:59		Middle	11.2	26.2	32.8	32.8	5.51	5 44	6.31	82.0	80.9	1.02	1.03	1 21	2.4	25	21
12/00/20	10.20.00		maaro		20.2	32.9	02.0	5.37	0.11		79.8	00.0	1.04	1.00		2.6	2.0	
		/ Fine	Bottom	21.4	25.2	34.5	34.6	4.67	4.66	4.66	69.0	68.7	1.35	1.36		1.5	1.7	ĺ
						25.7		6.18			91.6		0.56			2.0		
		25	Surface	1.0	28.3	25.7	25.7	6.19	6.19	5.00	91.6	91.6	0.59	0.58		1.5	1.8	
15/08/23	17:49:32		Middle	10.0	25.6	32.5	32.5	5.10	5.08	5.65	75.0	74.7	0.71	0.72	0.83	2.8	2.4	2.0
		(Fires				32.4		5.06			74.4		0.72	-		2.0		
		/ Fine	Bottom	18.9	24.9	34.1	34.1	4.27	4.24	4.24	62.6	62.2	1.20	1.21		1.9	1.9	ĺ
						27.7		5.38			79.9		0.38			1.8		
		25	Surface	1.0	27.8	27.7	27.7	5.39	5.39	5.00	80.1	80.0	0.38	0.38		2.0	1.9	ĺ
17/08/23	9:11:54		Middle	10.3	25.4	32.9	32.9	5.09	5.05	5.22	74.8	74.1	0.69	0.69	0.81	1.5	1.3	1.7
		/ Fine				32.9		5.00			73.5		0.68			1.1		4
		/ Fine	Bottom	19.5	25.1	33.5	33.5	4.49	4.48	4.48	65.9	65.7	1.34	1.36		1.8	1.8	ĺ
			o (07.0	26.6		6.25			92.3	00.4	1.12			2.7		<u> </u>
		27	Surface	1.0	27.8	26.7	26.6	6.23	6.24	6.04	91.9	92.1	1.14	1.13		1.8	2.3	
19/08/23	9:25:58		Middle	10.8	27.6	28.8	28.9	5.85	5.84	0.01	87.2	87.0	1.43	1.45	1.43	1.6	1.7	2.3
		/ Fino				28.9		5.82			86.7		1.46			1.8		4
		/ Fille	Bottom	20.6	27.4	29.1	29.1	5.36	5.39	5.39	80.5 79.6	80.0	1.72	1.73		2.5	3.1	ĺ
			Curtaaa	1.0	07.0	27.4	07.4	5.25	5.00		77.6	77.0	1.08	1.00		2.4		
		25	Surface	1.0	27.6	27.4	27.4	5.27	5.26	5.10	77.9	//.8	1.07	1.08		4.0	3.2	
22/08/23	10:35:06		Middle	10.4	26.8	30.2	30.3	4.94	4.94		73.2	73.0	1.18	1.17	1.28	5.1	5.4	3.9
		/ Fine				30.4		4.93			65.4		1.15			5.7	ł	1
			Bottom	19.7	25.0	33.2	33.1	4.47	4.48	4.48	65.3	65.4	1.57	1.59		2.7	3.1	ĺ
			Surface	1.0	29.5	24.9	24.9	5.41	5.41		80.0	80.0	1.14	1 12		1.4	16	
		25	Surface	1.0	20.5	24.8	24.0	5.40	5.41	5.23	79.9	00.0	1.12	1.15		1.7	1.0	
24/08/23	11:51:06		Middle	9.5	25.7	31.6	31.7	5.10	5.06		74.8	74.1	1.30	1.30	1.32	3.5	4.4	3.6
		/ Fine				31.7		5.01			73.5		1.29			5.2	ł	1
		/ 1 110	Bottom	17.9	24.9	33.5	33.4	4.44	4.49	4.49	64.9	65.6	1.55	1.55		5.8	5.0	ĺ
			Surface	1.0	29.2	23.7	22.7	6.29	6.25		92.1	01.5	0.71	0.72		2.0	1.0	
		25	Surface	1.0	20.3	23.8	23.7	6.20	0.25	5.61	90.9	91.5	0.74	0.73		1.6	1.0	1
26/08/23	15:56:01		Middle	9.4	25.0	33.0	33.1	5.00	4.97		73.0	72.5	1.27	1.26	1.21	1.5	1.7	1.7
		/ Fine				33.2		4.93			64.2		1.25			1.9		ĺ
		/ 1 110	Bottom	17.8	24.2	34.6	34.6	4.40	4.41	4.41	63.9	64.1	1.64	1.64		1.5	1.5	ĺ
			Surface	1.0	27.6	25.6	25.6	6.10	6.10		89.3	90.2	0.93	0.94		1.9	2.2	
		25	GundGe	1.0	21.0	25.6	20.0	6.10	0.10	5.51	89.3	33.3	0.94	0.54		2.4	£.£	1
29/08/23	17:18:47		Middle	10.1	25.5	31.7	31.7	4.94	4.91		72.2	71.8	1.78	1.77	1.47	3.5	3.7	3.1
		/ Fine				31./ 32.7		4.88			/1.3		1.75			3.9		1
			Bottom	19.2	25.1	33.2	33.0	4.43	4.45	4.45	64.6	64.9	1.71	1.71		3.4	3.5	1
			Surface	10	25.7	31.1	31.1	4.91	4 92		71.8	71 9	1.40	1.36		2.7	31	
		24	00.1000			31.0	01.1	4.93		4.84	72.0	. 1.0	1.32			3.5		
31/08/23	8:33:12		Middle	10.2	24.9	33.1	33.1	4.75	4.75		69.3	69.3	1.95	1.95	2.17	3.7	4.0	3.9
31/08/23 8:33:12	/ Fine				33.6		4.75			67.0		3,19			4.3 5.7	<u> </u>	1	
		/ Fine Bo	Bottom	19.4	24.7	33.7	33.7	4.56	4.58	4.58	66.4	66.7	3.22	3.21		3.7	4.7	1



Monitoring Station : TM-FM1

1		Ambient									Discolvo	d Owigon								
_		Temp (°C) /	Monitori	na Depth	Temp	Salinit	ty (ppt)	Dissolv	ed Oxygen	(mg/L)	Satura	tion (%)	Тι	urbidity (NT	U)	Susper	nded Solids	s (mg/L)		
Date	Time	Weather	1)	n)	(°C)					Depth-					Depth-			Depth-		
		Condition				Value	Average	Value	Average	average	Value	Average	Value	Average	average	Value	Average	average		
			Surfage	1.0	29.4	29.6	20 F	5.54	E E E		84.0	04.0	1.18	1 1 0		2.7	2.5			
		27	Surface	1.0	20.4	29.5	29.0	5.56	5.55	5.00	84.4	04.2	1.18	1.10		4.3	3.5			
						30.4		5.08		5.30	76.9		1.52			3.4				
01/08/23	17:58:06		Middle	9.2	28.0	30.9	30.6	5.03	5.06		76.1	/6.5	1.53	1.53	1./3	4.2	3.8	4.7		
		/ Fine				32.6		4.55			68.5		2.48			6.5				
			Bottom	17.4	27.0	32.8	32.7	4 53	4.54	4.54	68.2	68.4	2.50	2.49		6.8	6.7			
						20.9		5.06			76.5		2.00			5.2				
		27	Surface	1.0	27.8	20.9	30.8	5.00	5.06		76.5	76.5	2.23	2.30		5.0	5.6			
		21				30.8		5.00		5.01	76.5		2.30			0.9				
03/08/23	9:02:56		Middle	9.1	27.5	31.4	31.5	4.97	4.97		75.0	74.9	3.04	3.06	2.83	4.2	5.1	6.0		
						31.5		4.96			/4.8		3.08			6.0				
		/ Fine	Bottom	17.1	27.2	31.9	32.0	4.64	4.64	4.64	69.9	69.8	3.10	3.13		7.3	7.2			
						32.0		4.63			69.7		3.15			7.1				
			Surface	10	28.1	29.6	29.6	5.77	5.76		87.0	86.8	2.21	2.22		3.0	29			
		27				29.6		5.74		5.64	86.6		2.22			2.7				
05/09/22	0.22.01		Middle	92	27.8	29.8	29.8	5.53	5 52	0.01	83.1	82.8	2.39	2 39	2.49	3.7	39	2.2		
03/00/23	3.33.01		widdie	0.2	27.0	29.8	20.0	5.50	0.02		82.5	02.0	2.38	2.00	2.40	4.0	0.5	0.0		
		/ Fine	Dettern	17.4	07.0	30.0	00.0	5.21	E 10	5 10	78.1	77 7	2.81	0.00		3.7	0.1			
			Bollom	17.4	27.0	30.0	30.0	5.16	5.19	5.19	77.3	//./	2.84	2.83		2.5	3.1			
			a .			26.0		5.43			82.2		0.36			4.3				
		27	Surface	1.0	29.5	26.1	26.1	5.41	5.42		81.9	82.1	0.33	0.35		4.4	4.4			
						30.4		5.23		5.31	79.0		0.66			3.4				
08/08/23	11:17:07		Middle	9.6	27.9	30.4	30.4	5.17	5.20		78.2	78.6	0.67	0.67	0.64	4.2	3.8	3.7		
		/ Fine				31.8		4.64			69.9		0.90			3.1				
		,	Bottom	18.3	27.3	32.1	31.9	4.62	4.63	4.63	69.5	69.7	0.91	0.91		27	2.9			
						04.0		4.02 E 09			03.5		0.51			2.7				
		27	Surface	1.0	29.5	24.2	24.2	5.90	5.97		09.0	89.4	0.00	0.67		2.2	1.8			
		21				24.2		5.95		5.55	89.2		0.68			1.4				
10/08/23	15:07:08		Middle	8.9	26.9	31.8	31.9	5.15	5.13		//.1	76.8	1.40	1.42	1.26	1.5	1.4	1.8		
						31.9		5.10			76.4		1.43			1.3				
		/ Fine	Bottom	16.9	26.3	32.9	32.9	5.05	5.03	5.03	75.3	75.1	1.68	1.69		2.4	2.2			
						32.9		5.01			74.9	-	1.70			1.9				
			Surface	10	28.5	22.1	22.5	7.16	7 12		104.3	104.1	1.18	1 15		2.0	25			
		26	Ganace	1.0	20.0	23.0	22.0	7.08	7.12	6.26	103.8	104.1	1.12	1.10		3.0	2.5			
10/00/00	10.00.00		Middle		26 F	32.2	22.2	5.67	E 61	0.30	84.5	00.6	0.87	0.90	1.07	1.4	17	0.1		
12/00/23	10.00.00		Midule	0.0	20.5	32.2	32.2	5.54	3.01		82.6	00.0	0.91	0.03	1.07	1.9	1.7	2.1		
		/ Fine		10.0	05.0	33.7		4.75	4.70	4.70	70.3	70.0	1.18			3.0				
			Bottom	16.6	25.6	34.1	33.9	4.71	4.73	4.73	69.7	70.0	1.18	1.18		1.0	2.0			
						25.8		5.99			88.6		0.45			2.5				
		25	Surface	1.0	28.2	25.8	25.8	6.02	6.01		89.1	88.8	0.47	0.46		1.6	2.1			
						31.7		5.32		5.66	78.4		0.54			1.0				
15/08/23	17:32:07		Middle	9.3	26.0	31.7	31.7	5.29	5.31		77.9	78.1	0.56	0.55	0.79	1.7	1.4	1.9		
		/ Fine				34.0		4.30			63.0		1.32			2.0				
		, 1 110	Bottom	17.5	24.9	24.0	34.0	4.97	4.29	4.29	62.6	62.8	1.02	1.36		2.0	2.2			
						27.0		5.60					92.0		0.32			1.0		
		25	Surface	1.0	28.1	27.0	27.0	5.60	5.61		03.3	83.5	0.32	0.33		1.0	1.5			
		25				27.0		5.02		5.41	03.7		0.33			1.9				
17/08/23	8:52:05		Middle	9.2	25.5	32.9	32.9	5.27	5.21		77.6	76.7	0.88	0.87	0.84	3.5	3.2	2.8		
						32.9		5.15			/5.8		0.85			2.9				
		/ Fine	Bottom	17.4	25.3	33.1	33.2	4.59	4.57	4.57	67.4	67.1	1.32	1.34		3.9	3.8			
						33.2		4.54			66.7		1.35			3.6				
			Surface	1.0	27.6	26.8	26.8	6.47	6.46		95.3	95.2	1.28	1.30		2.9	2.6			
		26	Ganado	1.0	27.0	26.8	20.0	6.45	0.10	6.31	95.0	00.2	1.32	1.00		2.3	2.0			
10/09/22	0.06.10		Middle	8.6	27.4	29.0	29.0	6.17	6 16	0.01	91.7	91.5	1.62	1.60	1 5 9	3.2	37	2.2		
13/00/23	3.00.10		widdie	0.0	27.4	29.1	20.0	6.14	0.10		91.3	51.5	1.58	1.00	1.50	4.2	0.7	0.2		
		/ Fine	Battam	16.1	27.2	29.2	20.2	5.65	E CA	5.64	83.8	00 E	1.83	1.04		2.8	2.2			
			Dottom	10.1	21.2	29.3	23.5	5.62	3.04	3.04	83.2	00.0	1.85	1.04		3.6	0.2			
			a (27.4		5.33			78.8		1.05			1.5				
		26	Surface	1.0	27.6	27.4	27.4	5.34	5.34	5.40	78.9	78.8	1.02	1.04		2.4	2.0			
00/00/00	10.17.11		Me to		67.5	30.0	60 ·	5.00	4.05	5.16	74.2	70.5	1.13		1 0-	3.5	0.5			
22/08/23	10:17:08		widdle	9.3	27.0	30.2	30.1	4.98	4.99		73.6	/3.9	1.17	1.15	1.27	3.5	3.5	3.0		
		/ Fine				31.3		4.60			67.6	45.5	1.60			4.2		1		
		-	Bottom	17.7	26.0	31.8	31.5	4.57	4.59	4.59	67.0	67.3	1.62	1.61		2.6	3.4			
						24.1		5.69		l	84.0	1	1.06	1		3.6				
		25	Surface	1.0	28.6	24.2	24.2	5.00	5.70		84.3	84.1	1.06	1.06		22	2.9			
						317		4 07		5.30	72.0		1.00			5.1		1		
24/08/23	11:37:08		Middle	9.1	25.8	31./	31.7	4.3/	4.90		70.0	71.9	1.31	1.32	1.33	3.1	4.3	3.4		
		/ Eine				31./		4.82			70.8		1.33			3.4		1		
		/ Fine	Bottom	17.2	25.0	32.8	33.0	4.85	4.81	4.81	70.7	70.2	1.63	1.60		3.6	3.2			
						33.2		4.//			69.7		1.57			2.7				
			Surface	1.0	28.0	25.2	25.3	6.22	6.19		91.4	91.0	0.74	0.73		2.0	2.3			
		25				25.4		6.16		5.57	90.6		0.71			2.6				
26/08/23	15:35:59		Middle	8.9	25.0	32.9	33.0	4.98	4.94		72.7	72.1	1.12	1.14	1.17	1.5	1.6	1.6		
						33.1		4.90			71.6		1.15			1.6				
		/ Fine	Bottom	16.8	24.5	34.1	34.2	4.41	4.41	4.41	64.2	64 1	1.62	1.64		1.1	11			
			- 5.0011			34.3	JL	4.40			64.0	2	1.65			1.0				
			Quefe	10	07.0	25.7	05.7	5.99	6.01		87.7	00.0	0.90	0.01		4.9	26			
		25	Suriace	1.0	27.6	25.7	20.7	6.03	0.01	F 00	88.3	00.0	0.92	0.91		2.2	3.6			
00/07/77	17.05.57			0.5	05 -	31.7	or =	4.74	:	5.36	69.3	00.0	1.76			3.2	0.5			
29/08/23	17:02:29		Middle	8.9	25.5	31.7	31.7	4.67	4.71		68.3	68.8	1.73	1.75	1.44	3.3	3.3	3.4		
		/ Fine	-		-	32.5		4.44			64.8		1.64			3.8		1		
			Bottom	16.8	25.2	33.3	32.9	4,37	4.41	4.41	63.7	64.3	1,66	1.65		3,1	3.5			
	-			-	-	31.8		4 84			70.7		1.66		-	5.6				
		24	Surface	1.0	25.4	31.7	31.8	4 85	4.85		70.8	70.7	1.66	1.66		3.1	4.4			
		_ <u> </u>				32.5		4 70		4.81	60.9		2.11			30		1		
31/08/23	8:17:10	-	Middle	9.1	25.1	32.0	32.7	4.74	4.77		60.0	69.5	2.11	2.10	2.41	5.5	4.7	4.0		
31/08/23 8:17:10 -					32.9		4.74		4.60	67.0		2.09			0.0		1			
	, Fille	Bottom	17.2	24.7	33.0	33.6	4.01	4.60		4.60	66.7	66.9	3.44	3.47		3.3	3.1			
						JJ./		4.00			00./		0.00			2.0				



Monitoring Station : TM-FM2

Data	Time	Ambient Temp (°C) /	Monitori	ng Depth	Temp	Salini	ty (ppt)	Dissolv	red Oxygen	(mg/L)	Dissolve Satura	d Oxygen tion (%)	Т	urbidity (NT	U)	Susper	nded Solids	s (mg/L)
Dale	Time	Weather Condition	1)	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		07	Surface	1.0	28.2	29.7	29.7	5.45	5.46		82.4	82.5	1.12	1.13		4.3	4.7	
01/00/00	17:44:10	21	Mistella	7.0	07.0	29.7 31.9	01.0	4.89	4.00	5.17	73.8	70.0	1.13	1.01	4 77	3.0	0.4	4.6
01/08/23	17:44:10	/ Fire	widdle	7.9	27.3	31.8	31.9	4.87	4.88		73.4	/3.0	1.90	1.91	1.77	3.8	3.4	4.6
		/ Fine	Bottom	14.9	27.1	32.3	32.4	4.53	4.52	4.52	68.2 67.8	68.0	2.27	2.29		4.3	5.7	
			Surface	1.0	27.7	31.0	31.0	5.04	5.04		76.1	76.1	2.62	2.60		4.5	4.8	
		26				31.0 31.5		5.04 4.94		4.99	76.1 74.5		2.57 3.05			5.0 5.8		
03/08/23	8:46:06		Middle	8.2	27.4	31.5	31.5	4.94	4.94		74.5	74.5	3.01	3.03	2.90	6.0	5.9	5.2
		/ Fine	Bottom	15.3	27.3	31.7 31.8	31.8	4.64 4.65	4.65	4.65	69.9 70.1	70.0	3.07 3.08	3.08		4.3 5.7	5.0	
			Surface	1.0	28.2	29.7	29.7	6.07	6.05		91.8	91.5	2.26	2.27		3.4	4.6	
		27				29.8 30.1		6.03 5.83		5.93	91.2 88.1		2.27			5.8 1.3		
05/08/23	9:16:09		Middle	8.3	28.0	30.1	30.1	5.80	5.82		87.5	87.8	2.48	2.47	2.56	1.8	1.6	2.5
		/ Fine	Bottom	15.5	27.7	30.3 20.3	25.3	5.49 5.45	5.47	5.47	82.6 77.6	80.1	2.93 2.97	2.95		1.5	1.3	
			Surface	1.0	29.5	26.1	26.1	5.40	5.41		81.8	81.9	0.30	0.30		3.6	4.2	
		27				26.1 29.9		5.41 5.18		5.23	81.9 79.1		0.30			4.7		
08/08/23	11:06:11		Middle	8.4	28.7	30.1	30.0	4.92	5.05		74.8	76.9	0.64	0.62	0.59	2.7	3.0	3.4
		/ Fine	Bottom	15.8	27.2	31.9 32.0	32.0	4.69	4.65	4.65	70.6	70.0	0.86	0.87		1.8	3.0	
			Surface	1.0	29.6	23.9	23.9	6.82	6.82		102.2	102.2	0.68	0.70		3.1	3.0	
		27				24.0		6.81		6.77	102.1		0.72			2.9		
10/08/23	15:20:59		Middle	8.5	27.5	30.6	30.6	6.70	6.72		100.6	100.9	0.76	0.76	1.01	2.0	2.6	2.9
		/ Fine	Bottom	16.0	26.5	32.4	32.4	5.40	5.39	5.39	80.6	80.4	1.56	1.57		2.3	3.0	
			Surface	1.0	29.0	25.8	25.9	7.00	6.87		104.9	102.9	1.34	1.34		3.9	3.6	
		26	Gunace	1.0	20.0	26.1	20.0	6.74	0.07	6.41	100.9	102.0	1.33	1.04		3.2	0.0	
12/08/23	15:50:01		Middle	8.7	26.6	32.0	32.0	5.90	5.94		88.0	88.6	0.90	0.94	1.20	2.0	2.5	2.7
		/ Fine	Bottom	16.3	26.0	33.0	33.2	4.83	4.80	4.80	71.7	71.2	1.32	1.32		1.2	2.0	
			Surface	1.0	28.0	26.1	06.1	5.82	E 95		86.0	96.4	0.56	0.57		1.8	17	
		25	Surface	1.0	28.0	26.1	20.1	5.87	5.85	5.52	86.8	86.4	0.57	0.57		1.6	1.7	
15/08/23	17:16:09		Middle	8.4	26.0	31.7	31.6	5.22	5.19		76.9	76.4	0.67	0.67	0.78	2.2	2.4	2.2
	/ Fine	Bottom	15.7	25.4	32.8	33.1	4.44	4.43	4.43	65.2	65.0	1.10	1.11		2.6	2.5		
			0. (1.0	07.0	28.2		4.41 5.26	5.00		64.7 78.1	70.4	0.49	0.40		2.4		
		25	Surface	1.0	27.6	28.2	28.2	5.26	5.26	5.23	78.1	/8.1	0.48	0.49		2.8	2.4	
17/08/23	8:35:06		Middle	7.9	25.8	32.2	32.2	5.23	5.20		76.1	76.6	0.81	0.84	0.87	2.8	3.1	2.9
		/ Fine	Bottom	14.7	25.4	33.0	33.0	5.00	4.96	4.96	73.5	72.9	1.27	1.28		2.1	3.1	
			a (33.1 26.8		4.92 6.67			72.3 98.6		1.28			4.0 2.3		
		27	Surface	1.0	27.8	26.9	26.9	6.63	6.65	6.45	97.9	98.3	1.46	1.44		1.7	2.0	
19/08/23	8:49:10		Middle	8.7	27.5	29.1 29.1	29.1	6.26 6.25	6.26		93.2 93.1	93.2	1.65	1.67	1.68	3.2 2.5	2.9	2.9
		/ Fine	Bottom	16.3	27.3	29.3	29.3	5.74	5.72	5.72	85.3	85.0	1.92	1.93		2.9	3.9	
						29.3 27.4		5.70 5.38			84.6 79.5		1.93			4.8 4.6		
		26	Surface	1.0	27.6	27.4	27.4	5.37	5.38	5.20	79.4	79.4	1.08	1.09		3.5	4.1	
22/08/23	10:06:14		Middle	8.5	26.9	30.0 30.2	30.1	5.02 5.01	5.02		74.4 74.1	74.2	1.16	1.16	1.30	4.4 3.7	4.1	3.4
		/ Fine	Bottom	15.9	26.0	31.2	31.3	4.80	4.77	4.77	70.5	70.1	1.64	1.67		1.7	2.1	
						31.4 25.3		4.74 5.25			69.6 77.7		1.69 1.13			2.5 1.8		
		26	Surface	1.0	28.4	25.3	25.3	5.27	5.26	5.17	78.0	77.9	1.12	1.13		2.5	2.2	
24/08/23	11:18:11		Middle	8.0	25.9	31.5 31.6	31.5	5.11 5.03	5.07		75.1 73.8	74.5	1.19	1.20	1.33	2.7	2.2	2.3
		/ Fine	Bottom	15.1	25.4	32.5	32.7	4.61	4.60	4.60	67.6	67.4	1.65	1.66		1.2	2.5	
				-	-	32.9 23.5	-	4.59 6.21			67.2 91.2	-	1.67			3.7		
		25	Surface	1.0	28.5	23.9	23.7	6.20	6.21	5.56	90.9	91.1	0.70	0.71		1.7	1.6	
26/08/23	15:20:00		Middle	8.6	25.2	32.6 32.8	32.7	4.95	4.92		72.3	71.8	1.17	1.16	1.08	2.2	2.0	1.6
		/ Fine	Bottom	16.2	24.4	34.2	34.3	4.45	4.43	4.43	64.8	64.4	1.41	1.39		1.1	1.3	
						34.3 25.8		4.41 6.01			64.1 88.0		1.36			1.5		
		25	Surface	1.0	27.6	25.8	25.8	6.03	6.02	5.54	88.2	88.1	0.96	0.96		3.6	3.7	
29/08/23	16:46:10		Middle	8.0	25.7	31.3 31.2	31.3	5.07	5.07	0.04	74.2	74.1	1.59	1.60	1.39	4.6	4.8	3.9
		/ Fine	Bottom	14 9	25.0	32.9	33.1	4.61	4 60	4 60	67.3	67.0	1.62	1.62		2.4	33	
			Bottom		20.0	33.4	55.1	4.58			66.8 73.0	07.0	1.61			4.2	0.0	
		24	Surface	1.0	25.7	31.2	31.0	4.99	5.00	4 92	72.8	72.9	1.48	1.46		5.1	4.9	
31/08/23	8:01:09		Middle	7.9	25.1	32.4	32.6	4.88	4.85		71.1	70.7	2.18	2.18	2.38	2.6	4.2	4.4
		/ Fine	Botto	14.0	04 7	33.6		4.66	4.60	4.60	67.9	67.4	3.49	9.40		3.5	4.0	
			DOLIOM	14.8	24.7	33.7	33.6	4.60	4.03	4.03	67.0	07.4	3.48	3.49		5.0	4.3	



Monitoring Station : TM-FC2

-		Ambient									D: 1	10	1							
Data	Timo	Temp (°C) /	Monitori	ng Depth	Temp	Salinit	y (ppt)	Dissolv	ed Oxygen	(mg/L)	Satura	tion (%)	Τι	urbidity (NT	U)	Susper	nded Solids	s (mg/L)		
Date	Time	Weather	(1	n)	(°C)	Value	Average	Value	Average	Depth-	Value	Average	Value	Average	Depth-	Value	Average	Depth-		
		Condition	0.1			29.6		5.49	5.50	average	83.0		1.17		average	6.0	5.4	average		
		27	Surface	1.0	28.2	29.7	29.6	5.50	5.50	5.24	83.2	83.1	1.17	1.17		4.2	5.1	l		
01/08/23	17:30:07		Middle	8.1	27.5	31.2	31.4	5.00	4.99		75.4	75.3	1.75	1.76	1.83	4.0	4.9	4.4		
		/ Fine				31.6		4.98			75.1		2.55			5.8		ł		
		/1110	Bottom	15.2	27.1	32.4	32.5	4.53	4.54	4.54	68.3	68.4	2.60	2.58		2.8	3.2	ĺ		
			Surface	1.0	27.6	31.2	21.1	5.55	5 56		83.8	92.0	2.83	2.95		7.9	7.6			
		26	Sunace	1.0	27.0	31.0	51.1	5.56	5.50	5.23	84.0	03.5	2.86	2.05		7.2	7.0	1		
03/08/23	8:30:28		Middle	8.2	27.4	31.6	31.6	4.92	4.90		74.2	73.9	3.27	3.24	3.28	2.9	3.3	6.2		
		/ Fine				31.6		4.88			73.6		3.20			3.6		ł		
		/1110	Bottom	15.5	27.1	32.1	32.1	4.68	4.69	4.69	70.4	70.5	3.77	3.77		7.0	7.9	ĺ		
			Surface	1.0	29.1	29.7	20.7	6.17	6.16		93.1	02.0	2.36	2.29		2.6	2.9			
		27	Sunace	1.0	20.1	29.7	23.1	6.15	0.10	6.04	92.8	33.0	2.39	2.30		3.0	2.0	ļ		
05/08/23	9:00:33		Middle	8.4	27.9	29.9	29.9	5.94	5.93		89.5	89.2	2.53	2.54	2.60	2.5	2.5	2.9		
		/ Fine				29.9		5.52			82.9		2.90			2.4		ŀ		
			Bottom	15.7	27.6	30.2	30.2	5.48	5.50	5.50	82.1	82.5	2.87	2.89		3.8	3.3	ĺ		
			Surface	1.0	29.7	24.9	25.0	5.96	5.95		90.0	89.8	0.43	0.42		4.4	4.1			
		28				25.1		5.93		5.61	89.6		0.41	****		3.7		ļ		
08/08/23	10:48:16		Middle	8.5	28.9	29.5	29.6	5.28	5.27		80.7 79.9	80.3	0.58	0.60	0.62	5.5	4.8	4.8		
		/ Fine	D	10.0	07.5	31.3		4.76	4.75	4.75	71.8	74.0	0.82	0.04		5.4	5.0	ľ		
			Bottom	16.0	27.5	31.6	31.4	4.74	4.75	4.75	71.4	/1.6	0.86	0.84		5.8	5.6			
			Surface	1.0	29.5	24.1	24.1	5.91	5.90		88.5	88.3	0.74	0.77		2.6	2.5	ĺ		
		27				24.2		5.88		5.54	88.1		0.79			2.3		ł		
10/08/23	15:33:53		Middle	7.7	27.2	31.3	31.3	5.21	5.19		78.2	77.9	1.25	1.27	1.38	3.0	2.8	2.6		
		/ Fine	Dettern		00.0	33.6	00.0	4.67	4.07	4.07	69.6	60 F	2.10	0.11		2.5		1		
			Bottom	14.4	26.0	33.6	33.6	4.66	4.67	4.67	69.4	69.5	2.11	2.11		2.6	2.6			
			Surface	1.0	28.6	24.2	24.6	7.22	7.19		106.6	106.4	1.20	1.19		3.4	2.9	ĺ		
		26				25.0		7.15		6.49	106.2		1.17			2.3		ł		
12/08/23	15:31:00		Middle	8.2	26.8	31.6	31.6	5.76	5.79		86.0	86.4	1.03	1.07	1.19	2.4	2.2	2.6		
		/ Fine	Bottom	15.2	26.5	32.2	22.2	5.06	5.01	5.01	75.4	74.5	1.31	1 22		2.4	27	ſ		
			Douon	15.5	20.5	32.5	32.3	4.95	5.01	5.01	73.7	74.5	1.35	1.55		3.0	2.1			
		05	Surface	1.0	28.1	26.1	26.1	5.93	5.92		87.7	87.5	0.40	0.41		1.9	2.4	ĺ		
		25				26.2		5.91		5.51	87.3	-	0.41			2.8	<u>├</u> ───┤	ł		
15/08/23 17:00:06	17:00:06		Middle	8.1	25.9	31.7	31.7	5.05	5.09		74.3	74.9	0.72	0.75	0.82	2.6	2.3	1.9		
		/ Fine	Bottom	15.2	25.1	33.5	33.7	4.41	4 40	4 4 0	64.7	64.5	1.28	1.31		1.1	11	ĺ		
			Dottom	10.2	20.1	33.8	00.7	4.39	4.40	4.40	64.4	04.5	1.33	1.01		1.1		I		
		26	Surface	1.0	28.1	27.3	27.3	5.81	5.79		-	-	86.5	86.2	0.40	0.39		4.2	3.6	
		20				27.4		5.42		5.59	85.8 79.9		0.38			3.0		ŀ		
17/08/23	8:16:09		Middle	8.1	26.0	31.7	31.7	5.34	5.38		78.7	79.3	0.65	0.63	0.76	3.0	3.0	3.3		
		/ Fine	Bottom	15.2	25.5	32.7	32.8	5.03	5.00	5.00	74.0	73.5	1.27	1.27		2.6	3.2	Í		
						32.8		4.96			73.0		1.26			3.8		l		
		26	Surface	1.0	27.7	27.2	27.3	6.37	6.35		94.2	93.9	1.31	1.32		2.7	2.7	ĺ		
10/00/00	0.00.14				07.5	29.4	00.4	5.96	5.05	6.15	88.9	007	1.56	1.50	4 50	3.8				
19/08/23	8:30:14		Middle	8.3	27.5	29.5	29.4	5.93	5.95		88.4	88.7	1.59	1.58	1.58	3.2	3.5	2.8		
		/ Fine	Bottom	15.7	27.1	29.7	29.8	5.45	5.43	5.43	80.9	80.7	1.85	1.85		2.4	2.3	ĺ		
						29.8		5.41			80.4		1.84			2.2		l		
		26	Surface	1.0	27.6	27.4	27.4	5.43	5.43		80.3	80.2	1.09	1.10		5.0	4.9	ĺ		
22/08/22	0.48.20		Middlo	9.5	26.9	30.0	20.1	5.07	5.07	5.25	75.0	74.9	1.16	1 17	1 20	3.3	20	4.0		
22/00/20	5.40.20		wilddic	0.0	20.0	30.2	00.1	5.06	0.07		74.7	74.5	1.18	,	1.00	2.4	2.5	4.0		
		/ Fine	Bottom	16.0	26.0	31.2	31.3	4.82	4.79	4.79	70.8	70.4	1.88	1.91		5.1	4.3	ĺ		
						25.0		5.35			79.1		1.16			3.5				
		26	Surface	1.0	28.4	25.1	25.0	5.36	5.36	5.05	79.3	79.2	1.12	1.14		3.3	3.3	ĺ		
24/08/23	11:02:57		Middle	8.2	26.2	30.9	30.9	5.17	5.14	5.25	76.1	75.7	1.23	1.25	1.28	5.3	5.5	4.1		
						30.9		5.11			75.2		1.27			5.6		4		
		/ Fine	Bottom	15.3	25.6	32.1	32.4	4.67	4.67	4.67	68.5	68.4	1.42	1.45		2.9	3.4	ĺ		
			0.1	4.0		25.9	00.4	5.78	5 70		85.3	05.0	0.70	0.70		2.5				
		25	Surface	1.0	28.0	26.3	26.1	5.78	5.78	5.34	85.3	85.3	0.70	0.70		2.1	2.3	l		
26/08/23	15:01:01		Middle	8.0	25.0	32.9	33.0	4.94	4.91	0.01	72.1	71.6	1.23	1.24	1.18	2.0	1.7	1.7		
		/ Eino				33.1		4.87			/1.1		1.25			1.3		ł		
		/1110	Bottom	15.0	24.6	34.1	34.0	4.44	4.43	4.43	64.3	64.5	1.59	1.59		1.2	1.3	ĺ		
			Quefe	10	07 F	25.8	05.0	6.00	6.01		87.7	97.0	0.89	0.00		4.9	5.0			
		25	Surrace	1.0	21.5	25.8	20.8	6.02	0.01	5.49	88.0	87.9	0.89	0.89		5.5	5.2	ļ		
29/08/23	16:30:07		Middle	8.1	25.6	31.5	31.4	5.02	4.98		73.4	72.8	1.65	1.66	1.43	3.3	3.1	4.2		
		/ Fine				31.3		4.93			/2.1 67 1		1.67			2.8		ł		
		, . mo	Bottom	15.2	25.3	33.0	32.6	4.54	4.57	4.57	66.2	66.6	1.75	1.75		4.8	4.2	1		
			Surface	10	26.0	30.2	30.2	5.06	5.02		74.0	73.4	1.53	1.56		4.5	4.5			
		24	GundGe	1.0	20.0	30.3	30.3	4.99	0.00	4.95	72.9	/ J.4	1.58	1.30		4.4	4.3	ļ		
31/08/23	7:42:10		Middle	8.1	24.9	33.0	33.0	4.87	4.87		71.0	70.9	2.70	2.71	2.53	5.2	5.4	5.1		
		/ Fine				33.1 33.5		4.86			/U./ 67.9	<u> </u>	2.71			5.6 4 7	├ ──┤	ł		
		/ Fine B	Bottom	15.2	24.7	33.6	33.6	4.63	4.65	4.65	67.4	67.6	3.34	3.32		5.9	5.3	1		



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 (%)	Τι	urbidity (NT	U)	Susper	nded Solids	s (mg/L)
Dale	Time	Weather Condition	(r	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		07	Surface	1.0	28.3	29.6	29.6	5.74	5.73		86.9	86.7	1.34	1.35		4.2	4.7	
01/08/22	11:00:00	21	Middle	10.2	07.0	29.6 31.8	22.1	4.91	4 90	5.31	74.0	79.7	2.01	2.04	0.10	5.1 3.1	2.7	4.9
01/00/23	11.00.03	/ Fine	widdle	10.5	27.5	32.4	32.1	4.87	4.03		73.4	13.1	2.07	2.04	2.15	2.2	2.7	4.0
		, T IIIC	Bottom	19.5	26.9	32.9	32.9	4.42	4.42	4.42	66.3	66.5	3.00	2.99		7.3	7.1	
		27	Surface	1.0	28.2	30.2 30.2	30.2	5.10 5.10	5.10		77.3 77.3	77.3	2.16 2.13	2.15		6.1 4.3	5.2	
03/08/23	13:00:07		Middle	9.8	27.6	31.2	31.3	4.93	4.91	5.00	74.4	74.0	2.89	2.88	2.79	7.2	7.8	6.5
		/ Fine	Detterr	10.0	07.0	31.3 31.7	01.0	4.88	4.69	4.00	73.6	70.5	2.87 3.32	0.04		8.4 6.1	6.4	
			BOLIOITI	10.0	27.3	31.9	31.0	4.66	4.00	4.00	70.2	70.5	3.36	3.34		6.7	0.4	
		27	Surface	1.0	28.2	29.9	29.8	5.94	5.95	5.85	89.9	90.0	2.51	2.51		3.9	3.8	
05/08/23	14:00:10		Middle	10.0	27.9	30.1 30.2	30.2	5.76 5.74	5.75		86.9 86.5	86.7	2.78 2.82	2.80	2.86	2.7	2.3	3.5
		/ Fine	Bottom	18.9	27.6	30.3	30.4	5.29	5.28	5.28	79.5	79.3	3.29	3.28		5.2	4.5	
			Surface	1.0	29.5	30.4 26.3	26.3	5.26	5.27		79.0	79.8	0.67	0.67		4.2	4.2	
		27	ounace	1.0	20.0	26.3 30.0	20.0	5.27 4.84	0.27	5.05	79.9 73.3	75.0	0.66	0.07		4.2	7.2	
08/08/23	16:16:09		Middle	9.9	28.2	30.1	30.0	4.84	4.84		73.2	73.3	1.02	1.01	0.94	3.4	4.2	4.5
		/ Fine	Bottom	18.9	27.2	32.0 32.0	32.0	4.50 4.47	4.49	4.49	67.8 67.2	67.5	1.15	1.16		5.4 4.9	5.2	
		26	Surface	1.0	29.1	24.6	24.6	6.08	6.06		90.7	90.4	0.72	0.72		2.3	2.1	
10/08/23	9:56:47	20	Middle	9.6	26.2	33.2	33.2	4.65	4.65	5.36	90.1 69.4	69.4	1.32	1.33	1.26	2.1	2.4	2.3
10/00/20	0.00.17	/ Fine	-	0.0	20.2	33.2 33.2	00.2	4.65 4.75			69.4 71.0		1.33		1.20	2.6 2.7		2.0
			Bottom	18.1	26.3	33.3	33.2	4.71	4.73	4.73	70.4	70.7	1.75	1.74		2.2	2.5	
		26	Surface	1.0	29.1	18.3	18.3	7.75	7.77	6 50	111./	111.9	1.62	1.63		3.0 2.4	2.7	
12/08/23	10:01:14		Middle	10.6	26.4	32.4	32.5	5.45	5.42	0.55	81.2 80.2	80.7	1.72	1.73	1.60	6.2 5.0	5.6	3.8
		/ Fine	Bottom	20.3	25.1	34.6	34.6	4.52	4.51	4.51	66.7	66.5	1.42	1.44		4.1	3.1	
			o (00.4	34.6 25.9	05.0	4.49 6.20	0.10		66.3 91.6		1.45 0.54	0.50		2.1 2.2		
		25	Surface	1.0	28.1	25.9	25.9	6.17	6.19	5.62	91.2	91.4	0.51	0.53		2.1	2.2	
15/08/23	11:00:35		Middle	10.3	25.8	32.0	32.0	5.08	5.06		74.8	74.3	0.70	0.75	0.85	2.2	2.5	2.8
		/ Fine	Bottom	19.6	25.2	33.4 33.6	33.5	4.50 4.44	4.47	4.47	66.1 65.2	65.6	1.29	1.29		3.5 4.0	3.8	
		25	Surface	1.0	27.9	27.5	27.5	5.52	5.51		82.0	81.8	0.37	0.38		2.4	2.3	
17/08/23	13:00:07	20	Middle	9.8	25.3	33.1	33.1	4.90	4.88	5.19	72.0	71.7	1.39	1.42	1.61	1.6	1.8	2.4
		/ Fine	_			33.2 33.2		4.86 4.44			71.4 65.2		1.44 3.05			1.9 3.8		
			Bottom	18.6	25.3	33.4	33.3	4.43	4.44	4.44	65.0	65.1	3.03	3.04		2.8	3.3	
		27	Surface	1.0	27.8	26.9	26.9	6.08	6.10	5.91	90.4 89.9	90.1	1.33	1.34		1.4	1.5	
19/08/23	13:01:12		Middle	10.6	27.6	29.8 29.9	29.9	5.74 5.72	5.73		86.0 85.7	85.9	1.67	1.68	1.65	2.7 3.3	3.0	3.2
		/ Fine	Bottom	20.3	27.4	30.0	30.1	5.29	5.29	5.29	79.1	79.0	1.90	1.92		5.1	5.0	
			Surface	1.0	27.6	27.4	27.4	5.28	5.22		78.8	79.6	1.93	1.01		4.9	46	
		26	Sunace	1.0	27.0	27.4	27.4	5.32	5.52	5.14	78.6	70.0	1.01	1.01		5.0	4.0	
22/08/23	15:16:08		Middle	9.7	26.8	30.4	30.3	4.94	4.95		73.0	73.2	1.14	1.13	1.24	4.4	4.2	4.2
		/ Fine	Bottom	18.5	25.1	32.9 32.9	32.9	4.48 4.47	4.48	4.48	65.5 65.3	65.4	1.58	1.58		3.9 3.8	3.9	
		25	Surface	1.0	28.7	23.1	23.1	6.24	6.22		91.7	91.3	0.89	0.90		2.8	3.7	
24/08/23	7:30:41	20	Middle	9.9	25.6	32.0	32.1	4.96	4.94	5.58	72.8	72.4	1.37	1.39	1.49	5.5	5.4	4.6
		/ Fine		10.0		32.1 33.4	-	4.91 4.52	4.54	4.54	72.0 66.0	05.0	1.41 2.19	0.47		5.2 3.7		
			Bollom	18.9	24.9	33.5	33.4	4.49	4.51	4.51	65.6	05.8	2.14	2.17		5.9	4.8	
		25	Surface	1.0	28.5	25.2	25.1	6.22	6.25	5.67	91.9	92.4	0.72	0.71		2.7	3.1	
26/08/23	9:16:12		Middle	10.6	25.1	32.9 33.1	33.0	5.12 5.08	5.10		74.8 74.2	74.5	1.29	1.31	1.28	1.8 2.5	2.2	2.3
		/ Fine	Bottom	20.3	24.3	34.3	34.4	4.52	4.51	4.51	65.7	65.5	1.81	1.82		2.0	1.8	
			Surface	1.0	27.8	25.2	25.2	6.36	6.38		93.2	93.5	0.86	0.86		2.2	1.9	
00.000	0.07	25				25.2 30.8		6.40 4.92		5.64	93.7 72.0		0.85			1.6 3.4		
29/08/23	9:05:12	/ =:	Middle	9.3	25.9	31.1	31.0	4.88	4.90		71.3	71.7	1.74	1.72	1.45	2.2	2.8	2.7
		/ rine	Bottom	17.6	24.8	33.4 33.4	33.4	4.40	4.37	4.37	63.2	63.7	1.75	1.76		4.0	3.3	
		24	Surface	1.0	25.7	31.1 31.1	31.1	4.96	4.96		72.5	72.5	1.98	1.99		4.0	3.7	
31/08/23	13:06:12		Middle	10.1	25.1	32.7	33.0	4.79	4.75	4.86	69.9	69.3	2.44	2.45	2.58	2.8	2.9	3.5
		/ Fine	Det	16.1	047	33.3 33.6	00.0	4.71 4.59	4.50	4.50	68.6 66.9		2.45 3.26	0.00		2.9 3.1		
		1	DOLLOM	19.1	24./	33.7	33.6	4.56	4.58	4.58	66.4	00.0	3.33	3.30		4.7	3.9	



Monitoring Station : TM-FM1

		Ambiont									Disselute	d Owraan						
	-	Temp (°C) /	Monitorii	ng Depth	Temp	Salinit	y (ppt)	Dissolv	ed Oxygen	(mg/L)	Satura	tion (%)	Τι	rbidity (NT	U)	Susper	ided Solids	s (mg/L)
Date	Time	Weather	(r	n)	(°C)					Depth-					Depth-			Depth-
		Condition				Value	Average	Value	Average	average	Value	Average	Value	Average	average	Value	Average	average
			Surface	1.0	28.2	29.6	29.6	5.40	5.41		81.6	81.8	1.24	1 24		4.7	3.8	
		26	oundoo		20.2	29.6	20.0	5.42	0.11	5.17	81.9	01.0	1.23			2.9	0.0	
01/08/23	11:15:06		Middle	9.2	27.1	32.4	32.4	4.95	4.93	0.17	74.6	74.3	2.14	2.15	1.96	4.1	3.6	4.8
				=		32.4		4.91			74.0		2.16			3.0		
		/ Fine	Bottom	17.3	27.0	32.6	32.6	4.52	4 50	4 50	68.1	67.8	2.49	2 48		6.7	7.0	
			Dottom	17.0	27.0	32.7	02.0	4.48	4.50	4.00	67.4	07.0	2.47	2.40		7.3	7.0	
			Surface	1.0	28.3	30.0	30.0	5.19	5.18		78.8	78.6	2.37	2.37		5.2	5.5	
		27	oundoo		20.0	30.1	00.0	5.17	0.10	5.03	78.5	70.0	2.37	2.07		5.7	0.0	
03/08/23	13-15-55		Middle	85	27.6	31.2	313	4.90	4.88	0.00	74.0	73.7	2.67	2.68	2.76	3.9	4.8	59
00/00/20	10.10.00		Middle	0.0	27.0	31.3	01.0	4.86	4.00		73.3	70.7	2.69	2.00	2.70	5.7	4.0	0.0
		/ Fine	Bottom	16.0	27.2	31.9	32.0	4.66	4.62	4.62	70.3	60.7	3.21	2.22		7.9	7.5	
			Dottom	10.0	27.0	32.1	02.0	4.60	4.00	4.00	69.2	00.7	3.24	0.20		7.1	7.5	
			Surface	1.0	28.1	29.6	29.6	6.07	6.06		91.6	914	2.45	2.46		3.2	3.6	
		27	Sunace	1.0	20.1	29.6	23.0	6.05	0.00	5.93	91.1	31.4	2.47	2.40		4.0	3.0	
05/08/23	14-15-59		Middle	9.1	27.8	29.7	29.8	5.81	5.80	0.00	87.3	87.2	2.74	2 76	2 78	2.6	3.2	32
00/00/20	14.10.00		Wildore	5.1	27.0	29.8	20.0	5.79	5.00		87.0	07.2	2.77	2.70	2.70	3.8	0.2	0.2
		/ Fine	Bottom	173	27.6	30.0	30.0	5.34	5 3 2	5 32	80.1	79.7	3.10	3 11		3.0	2.8	
			Dottom	17.5	27.0	30.0	00.0	5.30	5.52	0.02	79.4	15.1	3.12	0.11		2.6	2.0	
			Surface	1.0	20.5	26.3	26.2	5.26	5.27		79.8	70.9	0.61	0.61		5.0	1.9	
		28	Sunace	1.0	23.5	26.3	20.5	5.27	5.27	5 17	79.9	73.0	0.60	0.01		4.6	4.0	
09/09/22	16:34:07		Middlo	90	20.1	29.3	20.4	5.11	5.09	5.17	78.3	77.6	0.80	0.92	0.97	2.0	24	12
00/00/23	10.54.07		Wildule	0.5	23.1	29.5	23.4	5.05	5.00		77.0	77.0	0.84	0.02	0.07	4.7	3.4	4.2
		/ Fine	Bottom	16.9	27.7	30.9	31.2	4.59	4 5 8	4 58	69.3	69.0	1.20	1 18		5.1	4.4	
			Dottom	10.5	21.1	31.4	01.2	4.56	4.50	4.00	68.7	00.0	1.16	1.10		3.7	4.4	
			Surface	1.0	20.6	23.7	22.7	6.39	6.27		95.7	95.4	0.58	0.50		2.6	24	
		26	Sunace	1.0	23.0	23.7	23.7	6.35	0.57	5 71	95.1	55.4	0.60	0.55		2.1	2.4	
10/08/00	0.27.02		Middle	0.6	26.4	32.7	20.7	5.06	E 05	5.71	75.5	75.4	1.22	1.00	1.01	2.2	2.7	26
10/06/23	9.37.03		Midule	9.0	20.4	32.7	32.1	5.04	5.05		75.2	73.4	1.23	1.23	1.21	3.2	2.7	2.0
		/ Fine	Pottom	10.0	25.0	33.1	22.1	4.93	4.02	4.00	73.0	70.0	1.81	1.00		2.8	2.0	
			DOLLOIN	10.2	23.0	33.2	33.1	4.91	4.92	4.92	72.7	12.9	1.83	1.02		2.7	2.0	
			Curtana	1.0	00.0	21.7	00.0	7.01	7.01		102.6	100.0	1.07	1.00		2.0	0.0	
		26	Surface	1.0	28.9	22.3	22.0	7.00	7.01	c 00	102.6	102.6	1.10	1.09		1.9	2.0	
10/00/00	10.01.00		Malalla	0.5	00.0	32.1	00.1	5.66	F 00	6.30	84.4	00.4	0.88	0.00	1.04	1.8	0.0	0.0
12/08/23	10:21:00		Middle	8.5	20.0	32.1	32.1	5.53	5.60		82.4	83.4	0.89	0.89	1.04	3.8	2.8	2.0
		/ Fine	Datter	10.1	05.1	33.7	00.0	4.99	4.05	4.05	73.2	70.0	1.14	1.15		3.3		
			Bollom	10.1	25.1	33.9	33.8	4.91	4.95	4.95	72.3	/2.8	1.16	1.15		3.0	3.2	
			Curtana	1.0	00.0	25.7	05.7	6.02	C 00		89.0	00.1	0.40	0.40		2.0	0.0	
		25	Surface	1.0	28.2	25.7	25.7	6.03	6.03	5 50	89.2	89.1	0.39	0.40		3.2	2.6	
15/00/00			A.C.L.B.		05.0	31.8		5.12	5.00	5.56	75.4	74.0	0.65	0.70	0.70	3.6	0.5	
15/08/23	11:17:06		Middle	9.0	25.9	31.7	31.8	5.06	5.09		74.5	/4.9	0.74	0.70	0.78	1.4	2.5	2.9
		/ Fine	Datter	17.0	05.0	33.9	00.0	4.33	4.00	4.00	63.5	<u> </u>	1.28	1.00		4.0	0.5	
			Bottom	17.0	25.0	33.8	33.9	4.30	4.32	4.32	63.1	63.3	1.23	1.26		3.0	3.5	
			a (26.6		5.67			84.6		0.30			1.6		
		25	Surface	1.0	28.4	26.6	26.6	5.70	5.69	E 15	84.9	84.7	0.28	0.29		1.9	1.8	
17/00/00	10 17 15		ACT III		05.5	32.8		4.64	4.00	5.15	68.2		1.35	4.00		3.2		
17/08/23	13:17:15		Middle	9.2	25.5	32.8	32.8	4.60	4.62		67.7	68.0	1.36	1.36	1.54	1.6	2.4	2.0
		/ Fine		47.0	05.0	33.2		4.53			66.6		2.95	0.00		1.7		
			Bottom	17.3	25.3	33.3	33.2	4.49	4.51	4.51	66.0	66.3	3.00	2.98		1.7	1.7	
			a (27.1		6.22			92.0		1.35			4.8		
		26	Surface	1.0	27.7	27.2	27.2	6.16	6.19	0.01	91.1	91.5	1.36	1.36		3.7	4.3	
10/00/00	10 17 10		AC LU		07.5	29.9		5.83	5.00	6.01	87.3	07.0	1.72	4.74		3.3		
19/08/23	13:17:18		Middle	8.4	27.5	30.0	30.0	5.81	5.82		86.8	87.0	1.76	1.74	1.71	2.7	3.0	2.9
		/ Fine	Detterre	15.0	07.1	30.2	00.0	5.27	5.00	F 00	78.5	70.0	2.03	0.00		1.7	1.5	
			Bollom	15.8	27.1	30.2	30.2	5.24	5.26	J.∠0	78.0	/8.2	2.01	2.02		1.2	1.5	
			Curtana	1.0	07.0	27.4	07.4	5.40	5.40		79.8	70.0	1.08	1.00		4.1		
		26	Surface	1.0	27.6	27.4	27.4	5.40	5.40	5.40	79.8	/9.8	1.10	1.09		4.6	4.4	
22/00/00	15-94-17		Midell -		06.7	30.3	20.0	4.97	4.07	5.18	73.5	70.0	1.12	1.10	1.05	3.7	4.9	40
22/08/23	15:34:17		Middle	8.9	20.7	30.4	30.3	4.96	4.97		73.1	/3.3	1.11	1.12	1.25	4.8	4.3	4.8
		/ Fine	Bottom	16.9	25.0	31.4	21.6	4.57	4.57	4.57	67.1	67.0	1.52	1.54		5.7	5.9	
			Bonom	10.0	20.0	31.9	51.0	4.56	+.37	+.37	66.8	07.0	1.56	1.04		5.8	0.0	
			Surface	1.0	29 F	24.6	24.6	5.27	5 20		77.8	70 1	1.05	1.05		5.0	10	
	1	25	Sunace	1.0	20.0	24.5	24.0	5.30	3.29	5 3 3	78.3	/0.1	1.04	1.00		4.5	4.0	
24/09/22	7.48.07		Middlo	80	25.7	31.9	31.0	5.44	5.97	0.00	79.9	78.9	1.26	1.95	1 99	3.6	4.6	4.9
27/00/20	7.40.07		mudie	0.9	£3.1	31.9	31.3	5.30	5.57		77.8	10.0	1.24	1.20	1.52	5.6	+.0	- + .J
		/ Fine	Bottom	16.8	25.1	33.1	33.2	4.60	4 59	4 59	67.3	67.1	1.68	1.65		3.8	35	
			Bottom	10.0	20.1	33.3	00.2	4.57	1.00		66.8	0/	1.62	1.00		3.1	0.0	
			Surface	1.0	28.3	25.3	25.4	5.95	5 90		87.9	87.1	0.68	0.71		1.6	1.6	
	1	25	Gundee	1.0	20.0	25.6	20.4	5.84	3.30	5.44	86.3	07.1	0.73	0.71		1.6	1.0	
26/09/22	0.36.03		Middlo	9.6	25.2	32.7	22.9	5.02	109	5.44	73.4	72.7	0.90	0.04	1.11	2.8	2.2	2.2
20/00/20	0.00.00		Middle	0.0	£J.2	32.9	32.0	4.93	+.30		72.0	12.1	0.98	0.54	1	1.7	د.ع	2.2
		/ Fine	Bottom	16.1	24 7	33.7	33.0	4.47	4 46	4 46	65.2	65.0	1.67	1.60		2.6	28	
			Bonom	10.1	24./	34.0	55.9	4.45	+.+0	+.+0	64.8	00.0	1.70	1.09		2.9	2.0	
			Surface	1.0	27 7	25.3	25.2	6.20	6.01		90.7	00.9	0.90	0.90		2.9	2.2	
		25	Surface	1.0	21.1	25.3	20.3	6.21	0.21	5 50	90.9	90.8	0.87	0.89		1.6	2.3	
20/00/22	0.22.00		Middle	0.0	2F 7	31.1	21.1	4.83	4 90	3.50	70.6	70.0	1.76	1 75	1 41	2.1	25	20
23/00/23	3.22.00		widdle	0.9	20.7	31.1	31.1	4.77	+.00		69.7	10.2	1.74	1.75	1.41	2.9	2.0	2.0
		/ Fine	Bottom	16.7	25.1	32.5	32.0	4.30	4 97	4 97	62.7	62.2	1.60	1.60		2.5	36	
			Bonom	10.7	£0.1	33.2	32.3	4.24	7.21	7.21	61.8	02.2	1.60	1.00		4.6	0.0	
			Surface	1.0	25.8	30.9	30.0	4.94	4 95		72.2	79.9	1.90	1 01		2.0	21	
	1	24	Gundee	1.0	20.0	30.9	30.9	4.95	+.50	4 85	72.4	12.0	1.91	1.31		2.2	2.1	
31/08/23	13.22.08		Middle	8.8	25.1	32.7	32 9	4.80	4 76		70.1	69.5	2.45	2 47	2 55	2.4	29	3.2
0./00/20			modie	0.0	20.1	33.1	32.3	4.72	1.70		68.8	33.5	2.49	L.7/	2.00	3.3	2.5	0.2
31/00/23 13:22:08	/ Fine	Bottom	16.6	24 7	33.5	33.6	4.62	4 59	4 59	67.3	66.8	3.24	3 29		3.7	4.8		
	1	1	- 34,0111			227	55.5	4.56			66.4	55.0	2.22	5.20		5.9		



Monitoring Station : TM-FM2

	-		r										r					
		Ambient	Monitori	na Denth	Temp	Salinit	ty (ppt)	Dissolv	ed Oxygen	(mg/L)	Dissolve	d Oxygen tion (%)	Τι	urbidity (NT	U)	Susper	nded Solids	s (mg/L)
Date	Time	Weather	1)	ng Dopin n)	(°C)	Value	A	Value	A	Depth-	Valua	au (78)	Malua	A	Depth-	Malua	A	Depth-
		Condition			. ,	value	Average	value	Average	average	value	Average	value	Average	average	value	Average	average
			Surface	1.0	28.2	29.7	29.7	5.30	5.32		80.1	80.4	1.13	1.13		4.2	3.3	ĺ
		27		-	-	29.7		5.34		5.09	80.7		1.12			2.4		1
01/08/23	11:32:55		Middle	8.3	27.6	31.0	31.3	4.88	4.87		73.6	73.4	1.84	1.83	1.77	3.7	4.5	4.3
		(31.6		4.85			73.1		1.82			5.3		4
		/ Fine	Bottom	15.5	27.1	32.4	32.5	4.46	4.45	4.45	67.2	67.1	2.33	2.35		4.9	5.2	ĺ
						32.6		4.44			66.9		2.37			5.5		l
		27	Surface	1.0	28.3	30.1	30.1	5.09	5.07		77.3	76.8	2.17	2.20		0.0	4.7	ĺ
		21				30.2		3.04		4.95	70.4		2.22			5.7		1
03/08/23	13:33:06		Middle	7.6	27.7	31.0	31.2	4.00	4.83		73.4	73.0	2.70	2.72	2.69	3.2	5.1	4.7
		/ Fine				31.6		4.00			71.2		3.14			3.6		
		, 1 110	Bottom	14.3	27.4	31.8	31.7	4.69	4.71	4.71	70.7	70.9	3.15	3.15		5.2	4.4	ĺ
						29.7		5.92			89.4		2.51			1.6		
		27	Surface	1.0	28.1	29.7	29.7	5.88	5.90		88.8	89.1	2.54	2.53		2.8	2.2	ĺ
						30.0		5.61		5.75	84.5		2.83			2.3		
05/08/23	14:33:09		Middle	7.8	27.9	30.0	30.0	5.57	5.59		83.9	84.2	2.88	2.86	2.86	2.5	2.4	2.7
		/ Fine	Pottom	14.6	07 G	30.3	20.2	5.05	E 04	5.04	75.8	75.6	3.19	2.20		3.0	24	ĺ
			BOLIOIII	14.0	27.0	30.3	30.3	5.02	5.04	5.04	75.4	75.6	3.20	3.20		3.7	3.4	ĺ
			Surface	1.0	20.5	26.3	26.2	5.27	5.29		79.9	80.0	0.65	0.65		3.2	27	
		28	ounace	1.0	20.0	26.3	20.0	5.29	0.20	5.25	80.2	00.0	0.65	0.00		4.1	0.7	
08/08/23	16:45:08		Middle	81	29.1	27.6	27.9	5.24	5.21	0.20	79.5	79.0	0.85	0.88	0.83	2.9	26	34
00/00/20	10.10.00		maaro	0.1	20.1	28.2	27.0	5.18	0.21		78.6	70.0	0.90	0.00	0.00	2.2	2.0	0.1
		/ Fine	Bottom	15.2	28.0	30.3	30.5	4.68	4.67	4.67	70.8	70.5	0.97	0.96		4.1	4.1	
						30.7		4.65			70.3		0.94			4.1		ļ
			Surface	1.0	29.6	23.8	23.8	6.13	6.11		91.8	91.4	0.50	0.51		2.1	2.8	ĺ
		26				23.8		6.08		5.61	91.1		0.51			3.4		1
10/08/23	9:21:08		Middle	9.5	26.5	32.5	32.5	5.15	5.12		76.9	76.4	1.40	1.44	1.26	2.1	2.5	2.7
		(32.5		5.09			76.0		1.47			2.8		1
		/ Fine	Bottom	17.9	26.2	33.2	33.3	4.72	4.75	4.75	70.4	70.8	1.84	1.85		2.9	2.8	ĺ
						33.3		4.77			/1.2		1.85			2.6		l
		26	Surface	1.0	28.9	25.8	25.9	6.93	6.93		103.8	103.7	0.75	0.76		4.4	3.9	ĺ
		20				26.0		6.92		6.16	103.6		0.76			3.4		4
12/08/23	10:36:12		Middle	8.1	26.5	32.1	32.1	5.43	5.40		80.9	80.5	0.99	0.99	1.04	4.8	3.5	3.6
		/ Eino				32.1		5.37			71.0		0.98			2.2		1
		/1116	Bottom	15.2	26.1	33.2	33.0	4.04	4.81	4.81	70.9	71.4	1.30	1.38		2.0	3.3	ĺ
						25.8		5.99			88.6		0.45			2.0		
		26	Surface	1.0	28.2	25.8	25.8	6.02	6.01		89.1	88.8	0.46	0.46		3.2	2.8	
						29.2		5.34		5.66	79.5		0.49			3.9		ĺ
15/08/23	11:35:56		Middle	8.0	27.4	29.4	29.3	5.29	5.32		78.6	79.0	0.50	0.50	0.65	2.3	3.1	3.1
		/ Fine	_			33.7		4.47			65.5		0.98			3.6		ĺ
			Bottom	15.1	25.0	33.8	33.7	4.38	4.43	4.43	64.2	64.9	0.99	0.99		2.9	3.3	ĺ
			0.1		07.0	27.6	07.5	5.45	5.47		81.0		0.42			1.4		
		25	Surface	1.0	27.9	27.5	27.5	5.49	5.47	5.01	81.7	81.4	0.39	0.41		1.1	1.3	ĺ
17/00/00	10-04-00		Malalla	7.0	05.0	32.1	00.1	5.19	5.14	5.31	76.6	75.0	0.96	0.00	1.00	1.3	4.5	
17/08/23	13:34:20		Middle	7.8	25.9	32.1	32.1	5.09	5.14		75.1	/5.8	1.02	0.99	1.39	1.6	1.5	2.4
		/ Fine	Bottom	14.6	25.3	33.1	33.2	4.57	4 57	4 57	67.1	67.0	2.76	2 79		6.7	4.4	ĺ
			Dottoin	14.0	20.0	33.2	00.2	4.56	4.57	4.07	67.0	07.0	2.81	2.75		2.0	4.4	
			Surface	1.0	27.8	27.3	27.3	6.05	6.04		89.7	89.4	1.45	1 47		3.3	3.8	
		27	oundoo		27.0	27.3	27.0	6.02	0.01	5.85	89.1	00.1	1.48			4.2	0.0	
19/08/23	13:35:25		Middle	8.5	27.5	30.1	30.1	5.67	5.67		84.9	84.9	1.76	1.77	1.77	4.0	3.5	3.6
						30.2		5.66			84.8		1.77			2.9		
		/ Fine	Bottom	16.1	27.3	30.3	30.3	5.14	5.13	5.13	76.8	76.5	2.08	2.09		3.2	3.6	
						30.3		5.11			76.3		2.10			4.0		
		00	Surface	1.0	27.4	27.5	27.5	5.14	5.15		75.8	76.0	1.11	1.11		3.8	3.5	ĺ
		26				27.4		5.16		5.04	76.3		1.10			3.2		4
22/08/23	15:45:27		Middle	7.7	27.0	30.0	30.1	4.94	4.93		73.4	73.1	1.12	1.12	1.17	4.0	4.9	4.8
		/ Fine				31.0		4,80			70.6		1.28			6.3		1
			Bottom	14.4	26.1	31.3	31.1	4.73	4.77	4.77	69.4	70.0	1.30	1.29		5.7	6.0	1
	-					25.1		5.19		1	76.7		1.05			2.6		
		26	Surface	1.0	28.4	25.2	25.1	5.16	5.18		76.4	76.6	1.05	1.05		3.4	3.0	1
						30.8		5.25		5.20	77.3		1.49			2.8		1
24/08/23	8:04:39		Middle	7.9	26.2	30.9	30.9	5.18	5.22		76.3	76.8	1.51	1.50	1.44	3.7	3.3	3.6
		/ Fine	Dettern	14.0	05.0	32.1	00.5	4.67	4.07	4.07	68.5	c0 4	1.79	4 77		4.1	4.0	ĺ
			Bollom	14.8	25.6	32.9	32.5	4.66	4.67	4.67	68.2	68.4	1.75	1.77		5.1	4.6	
			Surface	1.0	28.0	26.2	26.2	5.81	5 70		85.9	0E E	0.70	0.70		1.9	15	
		25	Surface	1.0	28.0	26.2	20.2	5.77	5.79	5.21	85.2	85.5	0.73	0.72		1.1	1.5	ĺ
26/09/22	0.50.50		Middle	9.6	25.2	32.6	22.7	4.86	4.92	5.31	71.0	70.5	1.18	1 17	1 10	1.1	1.0	2.1
20/00/23	9.00.09		Midule	0.0	20.2	32.8	32.7	4.79	4.03		70.0	70.5	1.15	1.17	1.19	2.6	1.9	2.1
		/ Fine	Bottom	16.3	24.6	33.8	33.0	4.55	4 52	4 52	66.3	65.8	1.70	1.69		3.7	3.1	ĺ
			BOUUIII	10.3	24.0	34.1	33.9	4.49	4.52	7.JC	65.4	55.0	1.68	1.09		2.4	5.1	L
			Surface	10	27.8	25.1	25.1	6.23	6.26		91.2	91.6	0.89	0.89		2.6	24	1
		25	Sanace	1.0	27.0	25.1	20.1	6.28	3.20	5,78	91.9	51.0	0.88	5.05		2.2	2.7	1
29/08/23	9:41:07		Middle	7.8	25.9	30.8	30.7	5.35	5.30		78.3	77.6	1.27	1.31	1.28	2.1	2.2	2.9
						30.7		5.25		L	76.8		1.35			2.2		1
		/ Fine	Bottom	14.7	25.4	31.9	32.4	4.70	4.67	4.67	68.6	68.1	1.62	1.64		4.4	4.0	1
						33.0		4.64			67.6		1.66			3.6		
		~ .	Surface	1.0	25.5	31.6	31.6	4.84	4.84		70.7	70.7	1.96	1.98		3.8	4.0	1
		24				31.6		4.84		4.80	70.7		2.00			4.1		1
31/08/23	13:40:07		Middle	8.4	25.2	32.3	32.5	4.78	4.76		69.7	69.4	2.31	2.34	2.52	4.3	3.5	4.0
		/ Ein-				32.7		4./3			69.1		2.36			2./		4
		/ Fine	Bottom	15.8	24.7	33.4	33.5	4.61	4.59	4.59	07.1 66 F	66.8	3.21	3.23		4.5	4.4	1
						JJ.0		4.07		i i	00.0		ა.∠ე	1		4.3		1



Monitoring Station : TM-FC2

	-																	
		Ambient Temp (°C) /	Monitori	ng Depth	Temp	Salinit	ty (ppt)	Dissolv	ved Oxygen	(mg/L)	Dissolve Satura	d Oxygen tion (%)	Τι	urbidity (NT	U)	Susper	nded Solids	s (mg/L)
Date	Time	Weather	(r	n)	(°C)	Value	Average	Value	Average	Depth-	Value	Average	Value	Average	Depth-	Value	Average	Depth-
			Surface	1.0	28.3	29.6	29.6	5.36	5.38	average	81.1	81.4	1.12	1.10	average	4.9	4.6	average
01/00/00		27			07.5	29.6 31.3	04.5	5.39 4.88	1.07	5.12	81.6 73.6	70.0	1.08	4.70		4.3 5.3		
01/08/23	11:47:08	/ Fine	Middle	8.4	27.5	31.7	31.5	4.85	4.87		73.1	/3.3	1.72	1.70	1./4	2.4	3.9	4.5
		/ Fille	Bottom	15.7	27.0	32.6	32.7	4.44	4.43	4.43	66.6	66.8	2.40	2.41		5.0	5.1	
		27	Surface	1.0	28.6	29.4 29.4	29.4	5.25 5.25	5.25		79.8 79.8	79.8	1.93	1.97		5.5 6.8	6.2	
03/08/23	13:48:14		Middle	7.9	27.9	30.7	30.9	4.82	4.81	5.03	72.9	72.7	2.37	2.39	2.47	8.4	7.3	6.9
		/ Fine	Datta ar	14.0	07.4	31.1 31.6	01.7	4.80 4.74	4 70	4 70	72.5 71.5	71.0	2.41 3.01	0.04		6.1 6.5	7.0	
			Bollom	14.8	27.4	31.8	31.7	4.71	4.73	4.73	71.0	/1.2	3.07	3.04		8.0	7.3	
		27	Surface	1.0	28.1	29.6	29.6	6.11	6.12	5.97	92.2	92.3	2.23	2.27		3.5	2.8	
05/08/23	14:48:17		Middle	8.0	27.8	29.8 29.8	29.8	5.83 5.80	5.82		87.6 87.2	87.4	2.54 2.55	2.55	2.56	3.9 1.2	2.6	2.7
		/ Fine	Bottom	15.0	27.6	30.0	30.0	5.43	5.42	5.42	81.4	81.2	2.86	2.87		2.6	2.6	
			Surface	1.0	29.5	30.1 26.2	26.2	5.41	5.22		81.0 80.5	90.5	2.88	0.62		4.5	4.5	
		28	Sunace	1.0	23.5	26.2	20.2	5.32	5.52	5.32	80.6 81.3	00.5	0.62	0.02		4.5	4.5	
08/08/23	17:03:07		Middle	7.9	29.2	28.3	28.2	5.30	5.32		80.7	81.0	0.84	0.82	0.84	2.2	2.0	3.3
		/ Fine	Bottom	14.8	27.5	31.4 31.5	31.4	4.67 4.64	4.66	4.66	70.5 69.9	70.2	1.10	1.09		2.6 3.9	3.3	
		27	Surface	1.0	29.5	24.7	24.8	5.79	5.78		87.0	86.8	0.60	0.62		4.2	3.2	
10/08/23	9-08-28	21	Middle	87	26.8	24.8 32.0	32.1	5.76	5.07	5.42	75.9	75.9	1.20	1.21	1 19	1.1	17	22
10/00/20	5.00.20	/ Fine	Wildure	0.7	20.0	32.1 33.1	02.1	5.07 5.08	5.07		75.9 75.9	70.0	1.22	1.21	1.15	2.2	1.7	2.2
			Bottom	16.3	26.3	33.1	33.1	5.05	5.07	5.07	75.4	75.6	1.76	1.76		1.6	1.9	
		26	Surface	1.0	28.6	23.9 25.8	24.8	7.03 6.94	6.99	c 00	103.6 103.4	103.5	0.69	0.67		1.0	1.4	
12/08/23	10:53:58		Middle	7.7	26.6	31.9	31.9	5.54	5.48	6.23	82.6	81.6	0.81	0.83	0.87	1.5	1.6	2.2
		/ Fine	Bottom	14.5	26.3	32.5	32.6	5.02	4.98	4.98	74.7	74.0	1.11	1.13		3.6	3.6	
						32.7 25.7		4.93 5.96			73.3 88.2		1.15 0.42			3.6 2.0		
		26	Surface	1.0	28.2	25.7	25.7	5.99	5.98	5.63	88.6	88.4	0.44	0.43		3.5	2.8	
15/08/23	11:51:54		Middle	8.2	26.2	31.0 31.1	31.0	5.35	5.29		78.8 76.9	77.9	0.50	0.54	0.68	4.7 3.4	4.1	3.0
		/ Fine	Bottom	15.3	25.5	32.8 33.4	33.1	4.34 4.29	4.32	4.32	63.8 63.0	63.4	1.05	1.07		2.7	2.3	
		05	Surface	1.0	28.2	27.0	27.0	5.58	5.60		83.1	83.4	0.44	0.43		2.3	2.2	
17/09/22	12.55.05	25	Middlo	8.2	25.7	26.9 32.3	22.2	5.62	5.14	5.37	83.7 76.5	75.7	0.42	0.97	1.24	2.1	16	1.9
17/00/20	10.00.00	/ Fine	Wildure	0.2	20.7	32.3 32.9	02.0	5.08 4.68	5.14		74.8 68.8	10.1	0.89	0.07	1.04	1.6	1.0	1.0
			Bottom	15.5	25.4	33.1	33.0	4.65	4.67	4.67	68.4	68.6	2.71	2.73		1.2	1.5	
		26	Surface	1.0	27.7	27.2	27.2	6.28	6.27	6.03	92.9	92.8	1.21	1.23		3.6	3.0	
19/08/23	13:54:00		Middle	8.2	27.5	30.0 30.0	30.0	5.80 5.78	5.79	0.00	86.9 86.6	86.7	1.55	1.57	1.52	6.7 5.5	6.1	3.6
		/ Fine	Bottom	15.5	27.2	30.3	30.4	5.23	5.23	5.23	78.1	77.9	1.77	1.78		1.9	1.7	
			Surface	1.0	27.5	30.4 27.5	07.4	5.22	5.14		77.8	75.0	1.79	1 1 1		1.5 3.8	4.0	
		26	Sunace	1.0	21.5	27.4	27.4	5.14	3.14	5.01	76.0	75.5	1.10	1.11		4.1	4.0	
22/08/23	16:03:28		Middle	7.9	26.5	30.5	30.4	4.88	4.88		71.8	71.9	1.17	1.19	1.20	5.8	5.4	5.0
		/ Fine	Bottom	14.7	25.9	31.3 31.6	31.4	4.72 4.66	4.69	4.69	69.3 68.4	68.9	1.26 1.33	1.30		5.2 6.3	5.8	
		26	Surface	1.0	28.4	25.0	25.0	5.31	5.31		78.5	78.5	1.09	1.09		4.3	4.8	
24/08/23	8:21:06	20	Middle	8.2	26.0	31.2	31.2	5.20	5.18	5.24	76.4	76.1	1.31	1.30	1.26	4.7	4.9	4.9
		/ Fine		45.0	05.5	31.2 32.3	-	5.15 4.63	1.00	1.00	75.7 67.9	07.0	1.29 1.36	4.00		5.0 5.0	5.0	
			Bollom	15.3	20.0	32.8	32.0	4.62	4.63	4.63	67.6	67.8	1.39	1.38		5.3	5.2	
		25	Surface	1.0	28.3	26.1	25.9	5.62	5.66	5.28	83.0	83.7	0.84	0.85		1.6	1.7	
26/08/23	10:09:06		Middle	7.7	25.1	32.9 33.0	32.9	4.94 4.87	4.91		72.2 71.1	71.6	1.11	1.14	1.17	2.2	1.9	2.2
		/ Fine	Bottom	14.5	24.6	33.8	33.9	4.45	4.44	4.44	64.8	64.7	1.53	1.53		2.3	3.1	
			Surface	1.0	27.6	25.7	25.7	5.98	6.00		87.5	87.7	0.93	0.90		2.4	2.9	
		25				25.8 31.5		6.01 5.10		5.55	87.9 74.6		0.87			3.4 3.2		
29/08/23	9:57:18	/ =:	Middle	7.8	25.6	31.4	31.5	5.09	5.10	<u> </u>	74.4	74.5	1.56	1.54	1.37	1.8	2.5	3.0
		/ rine	Bottom	14.6	25.4	32.0 33.0	32.5	4.53	4.51	4.51	65.3	65.7	1.67	1.66		3.4	3.7	
		24	Surface	1.0	25.7	31.1 31.3	31.2	4.90 4.89	4.90		71.6	71.5	1.98	2.00		3.2	2.7	
31/08/23	14:04:09		Middle	8.4	25.0	33.0	33.1	4.71	4.69	4.79	68.7	68.3	2.50	2.51	2.62	5.8	5.8	4.1
		/ Fine	Dette	15.0	04.0	33.3 33.7	00.7	4.66 4.54	4.50	4.50	67.9 66.1	05.0	2.51 3.36	0.05		5.8 4.2		
		1	DOLIOM	15.8	∠4.b	33.8	33./	4.51	4.53	4.53	65.7	05.9	3.34	3.35		3.3	3.8	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



6/F Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fo Tan, Hong Kong

T: +852 2695 6318 F: +652 2695 3944 E: etl@ets-testconsult.com W: www.ets-testconsult.com



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

Calibration Certificate

		Certificate No.	CSA27669
		Page	; 1 of 2
Information Provi	ided by Customer		
Customer	ETS - Testconsult Limited		
Address	: 8/F., Block B, Veristrong Industria	al Centre, 34 - 36 Au Pui Wan St	reet, Fotan, Shatin, Hong Kong
Information of Un	it-under-test (UUT)		
Description	: Sound Level Calibrator		
Manufacturer	: RION	Equipment I.D.	ET/EN/002/01
Туре	: NC-73	Serial No.	10196943
Laboratory Inform	nation		
Lab. Ref. No.	: Q/CAL/22/9442/I	Procedure	: CQS/002/A
Date of Calibration	; 7-Nov-2022	Date of Receipt	: 1-Nov-2022
Date of Issue	: 10-Nov-2022	Calibration Location	: Calibration Laboratory
Calibration Condi	ition	а	
Ambient Temperature	; (20±3) °C	Relative Humidity	: (50±20) %
Stabilizing Time Ambient Pressure	: 30 minutes : (1000±5) hPa	Sampling	: As received
Reference equiph	nent		
Multi-tunction sound	calibrator, E1/2801/01		
 Measuring Amplinet Signal generator, E 	T/2503/01		
Reference Oscilloso	соре, ЕТ/2502/01		
Calibration specif	fication		
- To perform the calib	pration of sound level calibrator.		
Calibration result			
 The results are detail 	ailed on the subsequent pages.		
<u>Remarks</u>		at anti-	٨
The calibration results	ins apply to the particular unit-under-te	ist only.	test & any undertainties austed will
 The values given in 	this calibration certificate only to the v	vifications with environmental ch	anges, wibration and shock during
not include allowand	ce for the equipment long term drift, va	infocations with environmental ch	t the measurement
transportation, over	ioauing, mis-nandling, or the capability	or any other laboratory to repea	the measurement

Calibrated By :

Tommy TAM & Tony MA (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.



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

T: +852 2695 8318 F: +852 2695 3944 E: eti@ets-testconsult.com W: www.ets-testconsult.com



Calibration Certificate

Certificate No. © CSA27669

Page 2 of 2

Calibration Result:

1. Measured Sound Pressure Level:

Nominal Frequency	Nominal Output	Measured Output (dB)	Expanded	Coverage
(Hz)	Sound Pressure (dB)		Uncertatiny (dB)	Factor
1000	94.0	94_0	0,13	2.0

2. Actual Output Frequency:

Nominal Frequency	Nominal Output	Measured Output (Hz)	Expanded	Coveragé
(Hz)	Sound Pressure (dB)		Uncertatiny (Hz)	Factor
1000	94.0	981.906	0.13	2.0

Remark:

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

- Measured output are mean of three measurements.

End of certificate



0/F Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fo Tan, Hong Kong

T: +852 2695 8318 F: +852 2695 3944 E: etl@ets-testconsult.com W: www.ets-testconsult.com



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

Calibration Certificate

Certificate No,	3.6	CSA3	80088	
Pane		1	of	

Page

1

; CQS/001/A

9-Jan-2023

Calibration Laboratory

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	RIÓN	RION	RION
Туре	NL-31	UC-53A	NH-21
Equipment I.D. no.	ET/EN/003/12	32	
Serial No.	00773032	01291	25043
Adaptors used	78.		
Resolution	0.1 dB		te de la companya de

Laboratory Information

: Q/CAL/23/0178/I Lab. Ref. No. Procedure : 11-Jan-2023 Date of Calibration Date of Receipt : 12-Jan-2023. Calibration Location Date of Issue

Calibration Condition

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

Reference equipment

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

- Signal generator, ET/2503/01

Calibration specification

To perform the calibration of linearity and frequecny 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 measuremen

Calibrated By:

Tommy TAM &. **Tony MA** (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.



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

T: +852 2695 8318 F: +852 2695 3944 E: etl@ets-testconsult.com W: www.ets-testconsult.com



Calibration Certificate

Page : 2 of 3

Certificate No. : CSA30088

Calibration Result:

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

Ra	nge / Mode		Reference Level	REF Frequency (kHz)	UUT Reading	Deviation	Expanded Uncertatiny	Coverage Factor
	Self-cal	Before	94.0		93.2	-0.8	0.13	2.0
	Range	40 to 130	104.0	1	103.2	-0.8	0.13	2.0
a salatakitan	Mode	Fast	114.0		113.2	-0.8	0.13	2.0
A-weighting	Self-cal	Before	94.0		93.1	-0.9	0.13	2.0
	Range	40 to 130	104.0	1	103.1	-0.9	0.13	2.0
	Mode	Slow	114.0		113.2	-0.8	0.13	2.0
	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	40 to 130	104.0	1	104.0	0.0	0.13	2.0
a salatakitan	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	40 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	40 to 130	104.0	1	104.0	0.0	0.13	2.0
O Misishilas	Mode	Fast	114.0		114.0	0.0	0.13	2.0
C-weighting	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	40 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

2 Measurement for other range on reference sound pressure level: (Unit in: dB)

Ra	nge / Mode		Reference Level	REF Frequency (kHz)	UUT Reading	Deviation	Expanded Uncertatiny	Coverage Factor
	Range	20 to 100	94.0	1	94.0	0.0	0.13	20
A Minishilun	Mode	Fast	54.0		54.0	0.0	0.10	
A-weighting	Range	0	94.0	1	0.0	-94.0	0.13	2.0
	Mode	0	5-4.0		0.0	04.0	0.10	210

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.

....



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

T: +852 2695 8318 F: +852 2695 3944 E: etl@ets-testconsult.com W: www.ets-testconsull.com



Calibration Certificate

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

Certificate No.		¢s/	1300	88
Page	12	3	of	3

Calibration Result:

Acoustic Sensitivity and Frequency Response:

3 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	68.0	0.2	-26.2 +/- 1.5
			125	77.9	78.1	0.2	-16.1 +/- 1.5
		94	250	85.4	85.6	0.2	-8.6 +/- 1.4
			500	90.8	90.9	0.1	-3.2 +/- 1.4
40 to 130	Fast		1000 (Ref.)	94.0	94.0	0.0	0 +/- 1.1
			2000	95.1	94.9	-0.2	+1.2 +/- 1.6
			4000	94.9	94.0	-0.9	+1.0 +/- 1.6
			8000	92.9	90.2	-2.7	-1.1 (+2.1 ; - 3.1)
			12500	89.7	85.3	-4.4	-4.3 (+3.0 ; -6.0)
			16000	87.5	79.4	-8.1	-6.6 (+3.5 ; -17.0)

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

Range	Mode	Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	EC 61672-1:2002 class 1 Specification	
			31.5	91.0	91.0	0.0	-3.0 +/- 2.0	
			63	93.2	93.3	0.1	-0.8 +/- 1.5	
			125	93.8	94.0	0.2	-0.2 +/- 1.5	
	Fast			250	94.0	94.2	0.2	0.0 +/- 1.4
		6 6	500	94.0	94.1	0.1	0.0 +/- 1.4	
40 to 130		94	94	1000 (Ref.)	94.0	94.0	0.0	0 +/- 1.1
			2000	93.7	93.5	-0.2	-0.2 +/- 1.6	
			4000	93.1	92.2	-0.9	-0.8 +/- 1.6	
				8000	91.0	88.3	-2.7	-3.0 (+2.1 ; -3.1)
			12500	87.8	83.4	-4.4	-6.2 (+3.0 ; -6.0)	
			16000	85.6	77.4	-8.2	-8.5 (+3.5 ; -17.0)	

- Expended uncertainty of measurement:

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

Remark:

IEC 61672 class 1 - Manufacturer specification:

- 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

End of certificate



8/F Block B, Veristrong Industrial Centre, 34-36 Au Pul Wan Street, Fo Tan, Hong Kong

T: +652 2695 8318 F: +852 2695 3944 E: etl@ets-testconsult.com W: www.ets-testconsult.com



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

Calibration Certificate

Certificate No.	
-----------------	--

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

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.

(50 ± 20) % As received



東業德勤測試顧問有限公司 **ETS-TESTCONSULT LTD.** #F Block 6. Veristrong Industrial Centre, 34-36 AU Pui Wan Street, Fo Tan, Horg Kong T:+0652 2695 8316 F:+0552 2695 9344 E: etK@ets-testconsult.com

6/F Block B,

F: +852 2695 3944 E: etl@ets-testconsult.com W; www.ets-testconsult.com



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
5	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		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		114.1	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
T M A A	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.



東業德勤測試顧問有限公司 **ETS-TESTCONSULT LTD**. **F** 1:952 2695 8318 F: 4552 2695 9344 E: ell@ets-testconsult.com

6/F Block B,

F: +852 2695 3944 E: eil@ets-testconsult.com W: www.ets-testconsult.com



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
		ast 94	250	85.4	83,6	-1.8	0.12	2.0
			5	500	90,8	90.9	0.1	0.12
30 to 130	Fast		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
			8000	92.9	85.4	-7.5	0.14	2.0
			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	2.0
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	250	94.0	92.2	-1.8	0.14	2.0											
															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



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

T: +852 2695 6316 F: +852 2695 3944 E: eti@ets-testconsult.com W: www.ets-testconsult.com



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

Calibration Certificate

Ċe	rtifi	cate	No.	

: CSA32590

Page

1 of

з

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.



8/F Block B, Veristrong Industrial Centre, 34-36 Au Pul Wan Street, Fo Tan, Hong Kong

T: +652 2695 8318 F: +852 2695 3944 E: et@ets-testconsult.com W: www.ets-testconsult.com



Form Q/AS/C/01 Issue 1(2/7) [09/21]

Page : 2 of 3

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	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		114.0	0.0	0.13	2.0
	Self-cal	After	94.0	1	94.0	0.0	0,13	2.0
	Range	30 to 130	104.0		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,



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

T: +852 2695 8318 F: +852 2695 3944 E: etl@ets-testconsult.com W: www.ets-testconsult.com



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

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	Fast	94	1000 (Ref.)	94.0	94.0	0.0	0 +/- 1.1
			2000	95.1	95.2	0.1	+1.2 +/- 1.6	
		1	4000	94,9	94.9	0.0	+1.0 +/- 1.6	
			0000	92.9	92.0	-0.9	-1.1 (+2.1 ; - 3.1)	
			12600	89.7	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
	Fasl	94	250	94.0	94.0	0.0	0.0 +/- 1.4
			500	94.0	94.0	0.0	0.0 +/- 1.4
30 lo 130			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	
			63	94.0	94.0	0.0	0.0 +/- 1.5	
		i i	125	94.0	94.0	0.0	0.0 +/- 1.5	
			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) Fest	Fast	94	1000 (Ref.)	94.0	94.0	0.0	0 +/- 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)
			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	Noise Level dB (A)		Wind	Major Noise	Weather	
Date	Time (hh:mm)	L _{eq(30min)}	L_{10}	L ₉₀	Speed (m/s)	Sources	Condition
01/08/2023	11:00	58.4	60.6	55.8	0.2	General site work	Fine
03/08/2023	11:00	58.6	60.5	55.2	0.2	General site work	Fine
08/08/2023	09:20	58.1	59.5	55.3	0.2	General site work	Cloudy
10/08/2023	11:00	59.4	61.0	56.2	0.2	General site work	Fine
15/08/2023	11:10	59.3	60.4	56.3	0.2	General site work	Cloudy
17/08/2023	08:30	57.7	59.4	53.8	0.2	General site work	Cloudy
22/08/2023	11:00	58.4	60.6	55.8	0.2	General site work	Fine
24/08/2023	09:00	56.7	58.5	53.9	0.2	General site work	Cloudy
29/08/2023	10:00	58.3	60.5	55.7	0.2	General site work	Fine
31/08/2023	10:00	59.4	61.6	56.2	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 Samplin		Noi	se Level dB	(A)	Wind Speed	Major Noise Sources	Weather Condition
	Time (hh:mm)	Leq(30min)	L ₁₀	L ₉₀	(m/s)		
01/08/2023	11:35	59.5	61.1	56.3	0.2	General site work	Fine
03/08/2023	11:35	59.8	61.4	56.0	0.2	General site work	Fine
08/08/2023	09:25	57.7	59.0	54.9	0.2	General site work	Cloudy
10/08/2023	11:35	58.3	60.5	55.7	0.2	General site work	Fine
15/08/2023	11:15	58.2	59.6	55.9	0.2	General site work	Cloudy
17/08/2023	08:35	58.4	59.9	54.3	0.2	General site work	Cloudy
22/08/2023	11:35	59.5	60.9	56.3	0.2	General site work	Fine
24/08/2023	09:05	57.4	59.3	54.5	0.2	General site work	Cloudy
29/08/2023	10:35	59.5	61.1	56.2	0.2	General site work	Fine
31/08/2023	10:35	58.4	60.6	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 Pressure (hPa)	Air Temperature		Mean Dew Point	Mean Relative Humidity	Total Rainfall (mm)	Prevailing Wind Direction	Mean Wind Speed	
Day		Absolute Daily Max (deg. C)	Mean (deg.C)	Absolute Daily Min (deg. C)	(deg. C)	(%)		(degrees)	(km/h)
1	1004.7	32.2	29.3	27.9	25.3	80	Trace	70	10.6
2	1003.7	34.6	30.4	27.9	24.1	70	-	60	9.4
3	1002.8	35.1	30.8	27.9	25.2	73	-	170	10.8
4	1004.7	33.5	30.5	28.3	26	77	2.6	220	28.3
5	1004.5	33	30.4	28.3	26.3	79	5.9	230	30.1
6	1002.4	33	30.3	29.2	26.1	78	Trace	230	28.8
7	1001.8	32.4	30.1	28	25.4	76	1.6	230	21.2
8	1003.6	33.3	30.3	28.9	25.2	74	-	230	18
9	1004.9	32.8	30.3	28.7	25.4	76	Trace	230	21.5
10	1004.7	32.1	29.2	27.5	25.7	82	11.1	250	14.3
11	1003.5	30.1	27.8	25.7	24.9	85	26.4	240	16.3
12	1003.5	32.1	29	26.6	24.9	79	0.9	190	15
13	1003.7	29.6	28.5	26.1	25.6	84	34.2	200	13.8
14	1005.2	32.2	29.4	27	25.9	82	3.6	200	15.7
15	1006.7	32.5	29.9	28.8	26.2	80	Trace	210	9.3
16	1006.8	34	30.6	28.8	26.2	78	-	230	16.6
17	1005.2	32	30	29	26.5	82	Trace	250	22
18	1004	30.6	29.2	27.2	26.6	86	9.3	240	16.5
19	1005.7	30.6	28.8	27.3	25.8	84	0.3	230	11.6
20	1007.7	31.5	29.7	28.4	26	80	0.6	120	2.8
21	1007.8	32.1	29.6	28.2	26.2	82	0.2	20	6.4
22	1006.1	33	30	28	25.8	79	0.3	180	5.5
23	1005.3	33.5	30.4	28.2	25.9	78	0.3	190	8.7
24	1006.7	31.4	29.1	27.5	26.1	85	5.7	30	11.7
25	1006.8	30.9	29.3	28.2	26.1	83	0.2	20	8.4
26	1005.2	32.8	29.7	27.9	26.4	83	-	110	5.7
27	1003.2	31.9	29.4	26.4	26.4	84	2.2	110	7.1
28	1002.6	33.4	29.9	28.1	26.2	81	0.5	110	5.3
29	1003.5	32.6	29	26.8	25.8	83	34.4	20	10.5
30	1003.9	32	28.9	26.7	23.3	72	-	360	20
31	1002.7	32.1	29.2	27.7	23.2	70	0.4	350	31.2

Daily Extract of Meteorological Observations , August 2023 - Tuen Mun

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



Appendix F

Event-Action Plans

				· · · · · · · · · · · · · · · · · · ·				
	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 	4 Toto Immediate action fo	 L. Lake intrineutate 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			1. Notify Contractor	 Confirm receipt of notification of failure in writing Notify the Contractor Ensure remedial measures property implemented 		 Confirm receipt of notinication of failure in writing Notify the Contractor Ensure remedtal measures properly implemented 		
/ENT/ACTION PLAN FOR AIR QUAL	ACTION	IC(E)	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 	LIMIT LEVEL	 Check monitoring data submitted by the ET Leader 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 Identify source, investigate the causes 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 for remedial actions 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 Ancrease monitoring frequency to daily Assess the effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results 		
EVENT		L	1. Exceedance for one sample	2. Exceedance for two or more consecutive samples		1. Exceedance for one sample		
EVENT			EVENT/ACTION PLAN FOR AIR	r qual	ITY EXCEEDANCE			<u>.</u>
-------------	-------	---	---	----------	---	----------	---	-----------
			ACTIO	z				
		ET Leader	I (C(E)		ER		Contractor	-
Exceedance	Ŀ	Identify source, investigate the causes	1. Discuss amondst ER. ET and Contra-	ctor on	 Confirm receipt of notificati 	ion I	 Take Immediate action to 	
for two or		of exceedance and propose remedial	the potential remedial actions		of failure in writing		avoid further exceedances	. <u></u>
more		measures	2. Review Contractor's remedial actions		2. Notify Contractor		2. Submit proposals for remediat	
consecutive	~	Notify IC(E), ER, EPD and Contractor	whenever necessary to assure their		In consultation with the IC(<u>ل</u>	actions to IC(E) within 3	
samples	có.	Repeat measurement to confirm	effectiveness and advise the ER acco	ordingly	agree with the Contractor (n N	working days of notification	
		finding	3. Supervise the implementation of rem	ediat	the remedial measures to I	<u>e</u>	Implement the agreed	
	4	Increase monitoring frequency to daily	measures		implemented		proposais	
	ۍ ا	Carry out analysis of contractor's		•	 Ensure remedial measures 	~	 Resubmit proposals if 	
	; 	working procedures to determine			are property implemented		problem still not under control	_
		possible mitigation to be implemented			If exceedances continues,		Stop the relevant activity of	
	g	Arrange meeting with IC(E) and ER to			consider what portion of th	e	works as determined by the	
	;	discuss the remedial actions to be			work is responsible and		ER until the exceedance is	
		taken			instruct the Contractor to s	top D	abated	
	~	Assess effectiveness of Contractor's			that portion of work until th	Ð	,	
		remedial actions and keep IC(E), EPD	•		exceedance is abated			
		and ER informed of the results						
	ŵ	If exceedance stops, cease additional						
		monitoring						Ē

5

ŗ

.

.

111

-

.

•

	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:	3. 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																			

۰. ۱

L

.

ŗ

.

•---

:

...

.

,

•

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.						

ш	
Z	
lä	
ij	
Ш	
≥	
ALI	
l D D	
Ř	
M	
Ň	
lõ	
L L	
Ž	
Ž	
₽	
¥C.	
Ð	
Ξ	
EN	
ł	

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			

:---:-· _ . 1 • -

-

:

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	0	Task Name	Baseline Start	Baseline Finish	Duratio	n Predeo	cetime risk allowa	a			Ju	'23			_		ł		Aug '2	3	
-	1		Contract duration of Contract CV/2021/9	Sat 1/1/22	Sun 31/12/23	730 days		_	26	703	3	10	1	7	24		31		7	14		21
-	2		Contract date , Date of the Letter of Acceptance (assumed)	Mon 20/12/2	Mon 20/12/21	0 days																
F	3		Starting Date of the Works	Sat 1/1/22	Sat 1/1/22	0 days																
F	4		Starting Date of Section 1 of the Works	Sat 1/1/22	Sat 1/1/22	0 days																
F	5	HE	Starting Date of Section 2 of the Works	Sat 1/1/22	Sat 1/1/22	0 days																
T	6		Starting Date of Section 3 of the Works	Sat 1/1/22	Sat 1/1/22	0 days																
F	7	100	Date for Completion of the Works	Sun 31/12/23	Sun 31/12/23	0 days																
	8		Completion Date of Section 1 of the Works	Sun 31/12/23	Sun 31/12/23	0 days																
	9		Completion Date of Section 2 of the Works	Sun 31/12/23	Sun 31/12/23	0 days																
	10		Completion Date of Section 3 of the Works	Sun 31/12/23	Sun 31/12/23	0 days																
	11		Planned completion dates	Sun 31/12/23	Sun 31/12/23	0 days																
	12		Planned competion date of Section 1	Sun 31/12/23	Sun 31/12/23	0 days				-												
	13	H	Planned competion date of Section 2	Sun 31/12/23	Sun 31/12/23	0 days																
	14	H	Planned competion date of Section 3	Sun 31/12/23	Sun 31/12/23	0 days																
	15	H	Access Date of the Site	Sat 1/1/22	Sat 1/1/22	0 days																
	16	√ ₽	Portion A2, A3a, A3b, A3c, A4, A5a, A5b, A7c2, A10 and (within 60 days after starting date)	A11 Sat 1/1/22	Sat 1/1/22	0 days												÷.				
	17		Portion B1, B3, B6a, B6b and B7 (within 60 days after sta date)	nting Sat 1/1/22	Sat 1/1/22	0 days																
	18	V	advance notice after starting date)	Sat 1/1/22	Sat 1/1/22	0 days																
1	19	~	Portion B6c (7 day's advance notice after starting date)	Sat 1/1/22	Sat 1/1/22	0 days																
-	20	-	Hand back of the Site	Sun 31/12/23	Sun 31/12/23	0 days																
	21		Portion A2, A3a, A3b, A3c, A4, A5a, A7c2, A10 and A11 at an earlier date notified by the Project Manager with 30 days' advance notice)	(or Sun 31/12/23	Sun 31/12/23	0 days																
	22	. 2	Portion A1, A7b, A7c1, A9 and A9a (or at an earlier date a notified by the Project Manager with 30 days' advance no	as Sun 31/12/23 tice)	Sun 31/12/23	0 days																
	23		Portion B1, B3, B6a, B6b and B7 (or at an earlier date as notified by the Project Manager with 30 days' advance not	Sun 31/12/23 tice)	Sun 31/12/23	0 days																
	24		Portion B6c (or at an earlier date as notified by the Projec Manager with 30 days' advance notice)	t Sun 31/12/23	Sun 31/12/23	0 days																
	25		Section 1 of the Works - Tseung Kwan O Area 137 Fill Bank	Sat 1/1/22	Sun 31/12/23	730 days	4SS															
	26	~	Taking over the existing facilities at the Tseung Kwan Area 137 Fill Bank within Portion A of the Site	O Sat 1/1/22	Sat 1/1/22	1 day	4SS	0														
	27		Operation of the the Tseung Kwan O Area 137 Fill Bar within Portion A of the Site	nk Sat 1/1/22	Sun 31/12/23	730 days	26SS	0			NCN/OR		NAME OF			PSI 611		en de la composition de la composition Composition de la composition de la comp			-94-44 	
	28		Operation and maintenance of the surveillance system within Portion A of the Site	Sat 1/1/22	Sun 31/12/23	730 days	2655	0			and the second		+ on the set	and the second	- 24 3		- Andrews	de lande				ACC OF
	29	P. C	the Tseung Kwan O Area 137 Fill Bank within Portion the Site	A of	Sun 31/12/23	730 days	2655	0			4-4						1.191.1					
	30	P.	Provision, operation and maintenance of the Crushing Plant at the Tseung Kwan O Area 137 Fill Bank within Portion A of the Site	Sat 1/1/22	Sun 31/12/23	730 days	26SS	0		-		ULX 金融					dia altr				and an	
	31		Operation and maintenance of the dewatering plant at Tseung Kwan O Area 137 Fill Bank within portion A of Site	the Sat 1/1/22 the	Sun 31/12/23	730 days	26SS	0		and the second						<u> </u>						1900-1900
	32	. 2	Collection and delivery of Public Fill by barges from the Chai Wan and Mui Wo Barging Points to the TKO Area 137 Fill Bank within Portion A of the Site	e Sat 1/1/22 a	Sun 31/12/23	730 days	26SS	0														*
			Tas	k	Starte etc.	Det Arras	Exte	rnal Tasl	ks	1	100 State 15		Di	Iratio	n-only						Evt	ernal
			-103 C=11	•			E.t.	mai Mil	osto						Currently)				LAL	- Indi
	Project:	3 month	h rolling Programme July23- Sept23 CV/2021/09	L			Exte		estone	<	/		M	anual	Summ	ary R	tonup	-			Ext	ernal
	Date: [2	2/07/202	23] Mile	estone	*		Inact	tive Mile	estone	L			M	anual	Summ	lary		•			Pro	gress
			Sun	nmary	W		Inact	tive Sum	nmary				Sta	art-or	nly			-	the set	and the second	Dea	adline
			Pro	ject Summary	\bigtriangledown	7	Man	ual Task	<	a,	2		Fir	nish-o	only			-				
F									934 				2019		,			125		(\$1). 		
										Pa	ge 1											

28	 3	4	9	Sep '23 11	18	25		2
						30/5	123	
								_
		0(19,04)		5 今 後3156				-4450
Tasks		0						
Milestor	ne	Ŷ						
		~				 	0	

O Construction of databar wall NA NA MA MA <t< th=""><th>ID</th><th></th><th>Task Name</th><th></th><th>Baseline Start</th><th>Baseline Finish</th><th>Duratio</th><th>n Prede</th><th>ecetime risk allowa</th><th></th><th></th><th></th><th>Iul 12</th><th>2</th><th></th><th>2.5</th><th></th><th></th><th>A</th><th></th></t<>	ID		Task Name		Baseline Start	Baseline Finish	Duratio	n Prede	ecetime risk allowa				Iul 12	2		2.5			A	
33 Construction of Sakin valid M <td< th=""><th></th><th>0</th><th></th><th></th><th></th><th></th><th></th><th></th><th>anowa</th><th>26</th><th>1</th><th>3 </th><th>10</th><th>17</th><th></th><th>24</th><th>31</th><th>1 7</th><th>Aug 2</th><th>23 4 21</th></td<>		0							anowa	26	1	3	10	17		24	31	1 7	Aug 2	23 4 21
34 V Percent of another in anisotic dimension for the set of	33		Construction of Gabion wall		NA	NA	681 days	5		1	123									
35 V Preparing adjust labeling the material administion 88.61002 Pit R0202 12 dogs 2 75 8 V Destination of Balan wait 88.61002 Pit R0202 2 dogs 0 76 8 V Rescuences and 141 TKOB Min 2002 Fit R0202 2 dogs 0 78 8 V Rescuences and 141 TKOB Min 2002 Fit R0202 2 dogs 0 78 V Submission of method statement of the social material transmitter for the social material material transmitter for the social material material transmitter for the social material material material transmitter for the social material mater	34	~	Preparing and submitting a method stateme approval	ent for	Sat 19/2/22	Fri 4/3/22	12 days		2											
8 M Obtaining account from the Project Manager M 9114022 11402 912402 801302 84 P 31 V Sector Manager M 912402 801302 84 P P 32 V Sector Manager M 912402 8103102 84 P <td>35</td> <td>~</td> <td>Preparing and submitting the material subm</td> <td>nission</td> <td>Sat 5/3/22</td> <td>Fri 18/3/22</td> <td>12 days</td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.1</td> <td></td> <td></td> <td></td>	35	~	Preparing and submitting the material subm	nission	Sat 5/3/22	Fri 18/3/22	12 days		2								1.1			
37 B Controlling of basic rought of dation wall Star 12/222 Star 12/22 Star 12/	36	~	Obtaining approval from the Project Manage	er	Sat 19/3/22	Fri 1/4/22	1 day	35,34	2											
38 V Re-sufficing of the access road if ANT INOFB Mon 20102 Fri 201022 30 dys 40 V Obtaining access road if ANT INOFB Mon 20102 Fri 201022 30 dys 0 40 V Obtaining access road Mon 20102 Fri 20102 5 dys 0 40 V Obtaining access road The access road The access road The access road The access road 41 V Philomatication of access road The access road 42 V Obtaining access road The access roa	37		Construction of Gabion wall		Sat 2/4/22	Sun 31/12/23	546 days		7											
33 V Submission framework statement or resultation free Jones Manager No. 21002 Fr. 212.02 8 days 0 40 V Ownershow and framework fr	38	~	Re-surfacing of the access road at A11 TKO	FB	Mon 21/3/22	Fri 22/4/22	33 days			5 11 mg	12.0						Link,			
40	39	~	Submission of method statement of re-surfa access road	facing the	Mon 21/3/22	Fri 25/3/22	5 days		0											
41 V Milling offlie existing existing existing of binarket layer nationality for the activity existing of the activity existin activity existing of th	40	~	Obtaining approval from the Project Manage	er	Thu 7/4/22	Thu 7/4/22	1 day	39	2	с – <i>р</i>	1.4	0.5					19-ik			
42 PMIno 3.1 Trip Production of blanks tayser maternal To 200/22 Wei 200/22 Submission of method statement To 200/22 Submission of method statement To 200/22 Submission of method statement To 200/22 Submission of method statement To 200/22	41	~	Milling off the existing pavement, overlaying pavement on the access road	new	Fri 15/4/22	Fri 22/4/22	8 days	40	1					1						
43 43 5 Submission of method statement 102 286/2 Fr / 32/7/2 32 30 days 1 45 6 6 7 Fraining approx dimental fragmentation of caracterial machine Fri 227/22 Fri / 11/8/2 2 1 days 2 46 7 Fraining approx dimentation of banket layer machine Fri 227/22 Fri / 11/8/2 2 1 days 2 47 Fraining approx dimentation of banket layer machine Fri 227/22 Fri / 11/8/2 2 1 days 4 2 48 7 Submission of mathod statement of responsel Mon 22/8/22 Su 18/2/2 Su 18/2/2/2 Su 1	42	~	PMI no.3 Trial Production of blanket layer m recycled from public fill	naterial	Tue 28/6/22	Wed 24/8/22	156 days	i 												
44 V Obtaining approval from the Friez Minager 5 at 307/22 5 at 3	43	~	Submission of method statement		Tue 28/6/22	Fri 29/7/22	32 days		1											
45 V Manufacturing and delivery of casey system at KOFB Mon 22002 Wed 24022 45 days 1 47 PMI no.24 implementation of Casey system at KOFB Mon 22002 Wed 24022 45 days 1 48 V Submission of method statement for approval Mon 22002 Ide 20122 1 day 1 48 V Submission of method statement for approval Mon 22002 Ide 20122 1 day 1 50 V Ordening approval for the Priod Manager Mon 19002 Ved 21102 8 days 2 51 V Installation the C Easy system Thu 91122 Ved 191122 9 days 5 2 52 V Trail an of the signe Maxen O. Area 117 for 311223 S m 311223 0 days 5 2 55 13 Planded completion Date Gescline 1) S m 311223 S m 311223 0 days 5 0 56 13 Planded the surplance as \$Fill Bank Stat 1/122 S m 311223 7 days 5S 0 57 13 Section w/th Case as \$Fill Bank Stat 1/122 S m 311223 7 days SS 0	44	~	Obtaining approval from the Project Manage	er	Sat 30/7/22	Sat 20/8/22	1 day		2		1.0									
46 Image: Trial Production of Denved layer material Mon 220022 Wed 248/22 45 days 1 47 PMI no.34 Implementation of C easy system at TKOFB Mon 220022 Tue 2711222 94 days 1 48 Submission of method statement for approval Mon 220022 Sub 280022 1 day 4 2 48 Submission of method statement for approval Mon 220022 Sub 280022 1 day 4 2 50 V Obdering and Below VI C easy system Thu 311122	45	~	Manufacturing and delivery of screening ma	achine	Fri 22/7/22	Thu 11/8/22	21 days		2								1.1			
41 PMI no 24 inglementation of C say system at TKOFP Mon 22/822 94 ays Image: Comparison of method statement for approval Mon 22/822 94 ays Image: Comparison of method statement for approval Mon 22/822 91 ays Image: Comparison of method statement for approval Mon 22/822 91 ays 48 Image: Comparison of method statement for approval Mon 22/822 91 ays 49 3 50 V Ordering and delivery of C easy system in Mon 22/822 Sun 36/822 1 ays 48 2 51 V Instaliation of the C Easy system in Mon 22/822 Sun 36/822 1 ays 50 2 52 V Trail run of the system Thu 311/22 Mon 22/822 0 ays 50 2 53 12 Operation with C Easy system individually Tue 27/1222 0 days 55 0 54 12 Operation and mathemates of the Site to the Emproyee Sun 31/1223 0 ays 55 0 57 13 Section 2 of the Works - Tuen Mun Area 38 Fill Bank Sut 1/122 1 ays 55 0 58 V Patilia and mathemane of the subilin Votion Sin 11/122 Sun 31/1223 730 days	46	V .	Trial Production of blanket layer material		Mon 22/8/22	Wed 24/8/22	45 days		1											
48 4 Submission of method statement for approval Mon 228/22 Sun 208/22 1 day 4 4 47 Obtaining approval from the Project Managar Mon 228/22 Sun 18/8/22 1 day 4 3 50 Obtaining approval from the Project Managar Mon 228/22 Sun 18/8/22 1 day 4 3 51 Obtaining approval from the Project Managar Mon 129/22 Vel 61/11/22 Hold 30/11/22 Hold 30/1	47		PMI no.24 Implementation of C easy system	at TKOFB	Mon 22/8/22	Tue 27/12/22	94 days													
1 Obtaining approval from the Project Manager Mon 298/22 Sun 198/22 1 div 48 2 50 0 Ordering and Genery of Case system hardware io Mon 198/22 Wed 21/122 8 day 49 3 51 0 Installation of the Casy system Thu 3/11/22 Wed 21/122 8 day 49 3 53 1 Installation of the Casy system Thu 3/11/22 Wed 21/122 6 day 51 2 53 1 Paralel run with he old system Thu 1/1/122 Wed 21/122 10 days 52 2 54 1 Paralel run with he old system Thu 1/1/122 Mon 28/1/222 0 days 55 0 56 12 Paralel run with he old system Thu 1/1/122 Mon 23/1/223 0 days 55 0 56 12 Parale run with works - Ture Mun Area 38 Fill Bank Stat 1/1/22 Sun 3/1/223 730 days 55 0 57 12 Section 2 of the Works - Ture Mun Area 38 Fill Bank with Portion 8 of the Site Sat 1/1/22 Sun 3/1/223 730 days 55 0 58 0 Op	48	1	Submission of method statement for approv	/al	Mon 22/8/22	Sun 28/8/22	1 day													
90 Ordering and delivery of C easy system hardware to Mon 19/9/22 Wed 2/11/22 8 days 49 3 91 V Installation of the C Easy system Thu 3/11/22 Wed 30/11/22 9 days 50 2 92 V Trail run of the system Thu 3/11/22 Wed 30/11/22 9 days 52 2 93 92 Panalel run with he old system Thu 1/11/22 Wed 30/11/22 9 days 52 2 94 93 94 93 9 95 94 Operation with C easy system hardware to Tue 27/12/22 tay 53 0 95 95 94 Panalel run with modio and the Site to the Employer 75 Non 31/1223 0 days 555 0 96 94 Panalel run with Area 38 Fill Bank within Portion A of the Site to the Employer 73 days 555 0 97 95 95 9 9 73 days 555 0 97 96 94 96 94 93 11/122 193 955 0 97 96 9 9 9 93 11/122 149 555 0 98 9 9 9 9 9 93 11/122 1	49	3	Obtaining approval from the Project Manage	er	Mon 29/8/22	Sun 18/9/22	1 day	48	2											
1 V Installation of the C Easy system Thu 3/11/22 Wed 16/11/22 19 days 50 2 22 V Trail run of the system Thu 1/11/12 Wed 30/11/22 0 days 51 2 54 10 Operation with c easy system individually Tue 2/1/222 Tue 2/1/223 So 10 So 10 55 10 Operation with c easy system individually Tue 2/1/223 So 30 31/1/223 So 30 31/1/223 <t< td=""><td>50</td><td>~</td><td>Ordering and delivery of C easy system hard site</td><td>dware to</td><td>Mon 19/9/22</td><td>Wed 2/11/22</td><td>8 days</td><td>49</td><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	50	~	Ordering and delivery of C easy system hard site	dware to	Mon 19/9/22	Wed 2/11/22	8 days	49	3											
32 V Trail run of the system Thu 17/11/22 Wed 30/11/22 9 days 51 2 33 33 34 Paralel run with the oid system Thu 17/11/22 Wed 30/11/22 9 days 52 2 34 13 Operation with the oid system Thu 17/11/22 Wed 30/11/22 9 days 53 0 55 23 Planed Completion Case system individually Tue 27/10/22 1 day 53 0 56 29 Planed Completion Date (Section 1) Sun 31/1/223 Sun 31/1/223 30 days 55 0 57 35 Section 2 of the Works - Tuen Mun Area 38 5at 11/1/22 Sun 31/1/223 730 days 55 0 58 V Taking over the existing facilities at the Toen Mun Area 38 5at 11/1/22 Sun 31/1/223 730 days 55 0 59 30 Operation af the Site Sat 11/1/22 Sun 31/1/223 730 days 55 0 61 30 Operation af maintenance of the existing tipping halls at Sat 11/1/22 Sun 31/1/223 730 days 55 0 62 Operation af maintenance of	51	1	Installation of the C Easy system		Thu 3/11/22	Wed 16/11/22	19 days	50	2		1.1									
33 33 Parallel run with the old system Thu 1/1/2/2 Mon 28/12/22 0 days 52 2 54 33 0 Operation with C easy system individually Tue 27/12/22 Tue 27/12/22 1 day 53 0 55 61 Planned Completion Date (Section Date (Sectin Date (Section Date (Section Date (Sectin Date (Sectin Date (Se	52	1	Trail run of the system		Thu 17/11/22	Wed 30/11/22	9 days	51	2											
4 1 Operation with C easy system individually Tue 27/1222 1 day 53 0 55 1 Handing over the facilities at the Teen (Nam Area 33 Fill Bank within Portion 5 at the Sile Sun 31/1223 0 days 855 0 56 1 Planned Completion Date (Section 1) Sun 31/1223 Sun 31/1223 0 days 855 0 57 1 Section 2 of the Works - Tuen Mun Area 38 Fill Bank within Portion 6 at the Sile Sun 31/1223 730 days 555 0 58 V Taking over the existing facilities at the Tuen Mun Area 38 Fill Bank within Portion 6 at the Sile Sun 31/1223 730 days 555 0 59 2 Operation and maintenance of the surveillance system Sat 1/1/22 Sun 31/1223 730 days 555 0 61 3 Operation and maintenance of the surveillance system Sat 1/1/22 Sun 31/1223 730 days 555 0 63 1 Operation and maintenance of the system lipsing hals at Sat 1/1/22 Sun 31/1223 730 days 555 0 64 V Poline AS fill Bank within Portion B of the Sile Sat 1/1/22 Sun 31/1223 730 days <t< td=""><td>53</td><td></td><td>Parallel run with the old system</td><td></td><td>Thu 1/12/22</td><td>Mon 26/12/22</td><td>0 days</td><td>52</td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	53		Parallel run with the old system		Thu 1/12/22	Mon 26/12/22	0 days	52	2											
55 II Harding over the facilities at the Tseung Kwan O Area 137 Sun 31/12/23 Sun 31/12/23 Sun 31/12/23 O days 6 56 II Planned Completion Date (Section 1) Sun 31/12/23 Sun 31/12/23 Sun 31/12/23 O days III 57 III Section 2 of the Works - Tuen Mun Area 38 Fill Bank Sat 11/122 Sun 31/12/23 Sun 31/12/23 Sun 31/12/23 Sun 31/12/23 O days IIII 58 V Taking over the existing activities at the Tuen Mun Area 38 Fill Bank Sat 11/122 Sun 31/12/23 Taking over the existing activities at the Tuen Mun Area 38 Fill Bank Sat 11/122 Sun 31/12/23 Taking over the existing activities at the Tuen Mun Area 38 Fill Bank within Portion S at 11/122 Sun 31/12/23 Taking over the existing activities at the Tuen Mun Area 38 Fill Bank within Portion S at 11/122 Sun 31/12/23 Taking the Tuen Mun Area 38 Fill Bank within Portion S at 11/122 Sun 31/12/23 Taking the Tuen Mun Area 38 Fill Bank within Portion S at 11/122 Sun 31/12/23 Taking the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sun 31/12/23 Sun 31/12/23 Taking the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sun 31/12/23 Sun 31/12/23 Taking the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sun 31/12/23 Sun 31/12/23 Sun 31/12/23	54		Operation with C easy system individually		Tue 27/12/22	Tue 27/12/22	1 day	53	0											
56 iii Planned Completion Date (Section 1) Sun 31/12/23 Sun 31/12/23 Odays Image: Section 2 of the Works - Tuen Mun Area 38 Fill Bank within Portion B of the Site 57 iii Section 2 of the Works - Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 11/122 Sun 31/12/23 730 days SS 0 59 site Operation of the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 11/122 Sun 31/12/23 730 days SSS 0 60 site Operation of the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 11/122 Sun 31/12/23 730 days SSS 0 61 site Operation and maintenance of the existing ficing hals at the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 11/122 Sun 31/12/23 730 days SSS 0 62 site Operation and maintenance of the existing ficing hals at 11/122 Sun 31/12/23 730 days SSS 0 Image: Site Site Site Site Site Site Site Site	55		Handing over the facilities at the Tseung Kwan Fill Bank within Portion A of the Site to the Emp	O Area 137 ployer	Sun 31/12/23	Sun 31/12/23	0 days	8SS	0											
77 III Section 2 of the Works - Tuen Mun Area 38 Fill Bank Sat 1/1/22 Sum 31/12/23 730 days 78 III Taking over the existing facilities at the Tuen Mun Area 38 Fill Bank within Portion S of the Site Sat 1/1/22 Sat 1/1/22 <td< td=""><td>56</td><td></td><td>Planned Completion Date (Section 1)</td><td></td><td>Sun 31/12/23</td><td>Sun 31/12/23</td><td>0 days</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	56		Planned Completion Date (Section 1)		Sun 31/12/23	Sun 31/12/23	0 days													
58 Image: Statistic statististic statistic statistist statistic statistic statis	57	H	Section 2 of the Works - Tuen Mun Area 38 Fill	Bank	Sat 1/1/22	Sun 31/12/23	730 days										-			1. 10 II. 10 III. 10 IIII. 10 IIII. 10 IIII. 10 IIII. 10 IIII. 10 IIII. 10 IIIIII. 10 IIIIIII. 10 IIIIIIIIII
59 ■ Operation of the Tuen Mun Area 38 Fill Bank within Portion Sat 1/1/22 Sun 31/12/23 730 days SSS 0 60 ■ Operation and maintenance of the existing tipping halls at the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 1/1/22 Sun 31/12/23 730 days SSS 0 61 ■ Operation and maintenance of the existing tipping halls at the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 1/1/22 Sun 31/12/23 730 days SSS 0 62 ■ Operation and maintenance of the existing tipping halls at the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 1/1/22 Sun 31/12/23 730 days SSS 0 63 ■ Operation and maintenance of the Scuthing house Sat 1/1/22 Sun 31/12/23 730 days SSS 0 64 ✓ PMI no.05 Construction of vehicle washing house Wed 6/4/22 Fri 2/9/22 180 days 1 1 65 ✓ Submission of method statement of vehicle washing Wed 6/4/22 Wed 6/4/22 1 day 1 1 66 ✓ Submission of method statement of vehicle washing Wed 6/4/22 Wed 6/4/22 1 day 1 1	58	~	Taking over the existing facilities at the Tuen M Fill Bank within Portion B of the Site	lun Area 38	Sat 1/1/22	Sat 1/1/22	1 day	5SS	0											
60 P: Operation and maintenance of the surveillance system within Portion B of the site site for the Num Area 38 Fill Bank within Portion B of the Site Sun 31/12/23 730 days SSS 0 61 P: Operation and maintenance of the existing tipping halls at the true Mun Area 38 Fill Bank within Portion B of the Site Sun 31/12/23 730 days SSS 0 62 P: Operation and maintenance of the Site Sat 11/1/22 Sun 31/12/23 730 days SSS 0 63 III Operation and maintenance of the Site Sat 11/1/22 Sun 31/12/23 730 days SSS 0 64 V PMI no.05 Construction of vehicle washing house facilities Wed 6/4/22 Fri 2/9/22 180 days Iaoy 1 65 V Submission of method statement of vehicle washing house facilities Wed 6/4/22 Ved 6/4/22 1 day 1 Project: 3 month rolling Programme July23- Sept23 CV//2021/09 Value: [22/07/2023] Task Split External Tasks Duration-only External Milestone Summary Project Summary Manual Task Sitat-only Manual Summary Progree Page 2 Page 2 P	59	-	Operation of the Tuen Mun Area 38 Fill Bank w B of the Site	ithin Portion	Sat 1/1/22	Sun 31/12/23	730 days	5SS	0		Real Property lies			and the second	A STATE	in the second	Notes Trans		in the second	The second second second
61 Image: Coperation and maintenance of the Site Sun 31/12/23 730 days SSS 0 62 Image: Coperation and Maintenance of the Crushing Plant at the Site Sat 1/1/22 Sun 31/12/23 730 days SSS 0 63 Image: Coperation and Maintenance of glass cullet storage compartment at the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 1/1/22 Sun 31/12/23 730 days SSS 0 64 Image: Compartment at the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 1/1/22 Sun 31/12/23 730 days SSS 0 65 Image: Compartment at the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 1/1/22 Sun 31/12/23 730 days SSS 0 661 Image: Compartment at the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 1/1/22 Sun 31/12/23 Talk Sun 31/12/23 Sudays SSS 0 67 Submission of method statement of vehicle washing house Wed 6/4/22 Fri 2/9/22 180 days 1 1 External Tasks Duration-only External Summary Rollup External Milestone Manual Summary Rollup External Milestone Manual Summary Progere Project Summary <	60		Operation and maintenance of the surveillance within Portion B of the Site	system	Sat 1/1/22	Sun 31/12/23	730 days	555	0				4	200	din terresta			-		AVERAL PROPERTY AND
02 Image: Section and maintenance of the Stite of	62	-	the Tuen Mun Area 38 Fill Bank within Portion B	B of the Site	Sat 1/1/22	Sun 31/12/23	730 days	555	0											
63 III Operation and maintemnance of glass cullet storage compartment at the Tuen Mun Area 38 Fill Bank within Portion B of the Site Sat 1/1/22 Sun 31/12/23 730 days 5SS 0 64 ✓ PMI no.05 Construction of vehicle washing house facilities Wed 6/4/22 Fri 2/9/22 180 days 1 65 ✓ Submission of method statement of vehicle washing house facilities Wed 6/4/22 Wed 6/4/22 I day 1 Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Task External Tasks Duration-only External Case Summary ✓ Inactive Milestone Manual Summary Nollup ◆ Progreet Summary ✓ Project Summary Manual Task Start-only Progreet	02	-1	Tuen Mun Area 38 Fill Bank within Portion B of	the Site	Sut 1/ 1/22	Jun J 1/ 12/23	100 days	555			and the second	and the second	1000		N NO. THE C		a sector of the	- 1. S. S. M.	and the second second	
64 PMI no.05 Construction of vehicle washing buse Wed 6/4/22 Fri 2/9/22 180 days 65 Submission of method statement of vehicle washing buse Wed 6/4/22 Wed 6/4/22 1 day 1 65 Submission of method statement of vehicle washing buse Wed 6/4/22 Wed 6/4/22 1 day 1 Image: Construction of vehicle washing buse External Tasks 65 Submission of method statement of vehicle washing buse Task External Tasks Duration-only External Statement of vehicle washing buse External Milestone 66 Split Image: Construction of vehicle washing buse Task External Tasks Manual Summary Rollup • External Kilestone 67 Summary Inactive Milestone Inactive Summary Manual Summary • Progree 68 Summary Manual Task Start-only Deadling Page 2	63	11	Operation and maintemnance of glass cullet sto compartment at the Tuen Mun Area 38 Fill Ban Portion B of the Site	orage k within	Sat 1/1/22	Sun 31/12/23	730 days	5SS	0	2078-A-1		2132an - 2								
65 Submission of method statement of vehicle washing Wed 6/4/22 Wed 6/4/22 1 day 1 Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Task External Tasks Duration-only External Summary Rollup External Summary Rollup External Summary Rollup External Summary Rollup External Summary Project: Summary Inactive Milestone Manual Summary Progress 9 Finish-only Manual Task Manual Task Finish-only Manual Summary Progress Page 2	64	~	PMI no.05 Construction of vehicle washing t facilities	house	Wed 6/4/22	Fri 2/9/22	180 days				1									
Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Date: [22/07/2023] Task Task Split Task Split Split Finish-only Task Split Task S	65	~	Submission of method statement of vehicle house facilities	washing	Wed 6/4/22	Wed 6/4/22	1 day		1											
Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Split External Milestone Manual Summary Rollup ◆ External Milestone Milestone Inactive Milestone Manual Summary Progress Summary Inactive Summary Start-only Deadling Project Summary Manual Task Finish-only Progress				Task			A CONTRACTOR OF	Exte	ernal Task	s	pa			Dura	ation-or	nlv				Externa
Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Date: [22/07/2023] Milestone Milestone Milestone Manual Summary Koliup Milestone Summary Inactive Milestone Inactive Summary Manual Summary Operation Deadline Progress Deadline Project Summary Manual Task Page 2 Pa				Split				Evt	arnal Mila	stone	_			Mar			Dellur	•		Externa
Date: [22/07/2023] Milestone Inactive Milestone Manual Summary Progress Summary Summary Inactive Summary Start-only Deadling Project Summary Manual Task Finish-only Progress	Project:	3 mon	th rolling Programme July23- Sept23 CV/2021/09	Spiit				EXTE		stone	0			ivian	ual Sun	nmary	копир	-		Externa
Summary Inactive Summary Start-only Deadlin Project Summary Manual Task Finish-only Page 2	Date: [2	2/07/20	023]	Milesto	ne	•		Inac	ctive Miles	stone]	Man	ual Sun	nmary		•		Progres
Project Summary V Manual Task Finish-only Page 2				Summa	iry	-	-	Inac	ctive Sumi	mary	3.3			Star	-only			and the second	Selected and	Deadlin
Page 2				Project	Summary	\bigtriangledown	- (Mar	nual Task		0			Finis	h-only			-	~	,
										P.	Pad	ge 2								

28	3	4		Sep '2 11	23	18	1	25	9/23	2
4						8	0			
			^а а.		-			1.14		
									÷.,	
									-	
						i.				
		11						_		N
				i Herbert Filertig						
						-				
- la					3					-
ilestor	ne									
		Ŷ								

ID		Task Name	Baseline Start	Baseline Finish	Duratio	nPredece	time risk	X #	a 26						5 B		ŝ		-
	6		6.	1.1.8		1 2	allowa	26	2	1	Jul '23	3	1	~		1	_	Aug '2	3
66	~	Obtaning approval from the Project Manager	Mon 25/4/22	Mon 25/4/22	1 day	65	2	1/1/23	3	1	0	1/		24	31		7	14	21
67	1	Fabrication and delivery of the vehicle washing house facilities materials on site	Fri 10/6/22	Mon 8/8/22	70 days		5												
68	~	Installation of the vehicle washing house facilities	Tue 9/8/22	Thu 1/9/22	17 days	67	2								10	*			
69	~	Trial run of vehicle washing house facilities	Fri 2/9/22	Fri 2/9/22	1 day	68	0												
70		PMI no.20 Implementation of C easy system at TMFB	Mon 22/8/22	Tue 27/12/22	118 days										120				
71	~	Submission of method statement for approval	Mon 22/8/22	Sun 28/8/22	1 day		1								1				1
72	1	Obtaining approval from the Project Manager	Mon 29/8/22	Sun 18/9/22	1 day	71	2												
73	~	Ordering and delivery of C easy system hardware to site	Mon 19/9/22	Wed 2/11/22	5 days	72	3												
74	1	Installation of the C Easy system	Thu 3/11/22	Wed 16/11/22	18 days	73	2												
75	1	Trail run of the system	Thu 17/11/22	Wed 30/11/22	0 days	74	2												
76		Parallel run with the old system	Thu 1/12/22	Mon 26/12/22	26 days	75	2												
77		Operation with C easy system individually	Tue 27/12/22	Tue 27/12/22	1 day	76	0												
78		Handing over the facilities at the Tuen Mun Area 38 Fill Bank within Portion B of the Site to the Employer	Sun 31/12/23	Sun 31/12/23	1 day	9SS	0												
79		Planned Completion Date (Section 2)	Sun 31/12/23	Sun 31/12/23	0 days														
80		Section 3 of the Works - Designated Reclamation Sites in the Mainland	Mon 20/12/21	Sun 31/12/23	755 days	C	-		a contra la contra c										
81		Collection and delivery of 2 million tonnes of Public Fill by vessels from Tseung Kwan O Area 137 Fill Bank and the Tuen Mun Area 38 Fill Bank to the Desiognated Reclamation Sites in the Mainland	Mon 20/12/21	Sun 31/12/23	744 days										-			-	
82	~	1st and 2nd quarter of first year	Mon 20/12/21	Thu 31/3/22	190 days		Sec.			÷.,					5				
83	~	Installing Front End Mobile Unit (FEMU) onto the proposed vessels	Mon 20/12/21	Sun 26/12/21	1 day		2												
84	~	Submitting application documents to EPD for application of dumping permits	Mon 20/12/21	Mon 20/12/21	1 day		0										±.		
85	V.	Obtaining the dumping permit from EPD	Tue 21/12/21	Fri 31/12/21	1 day	84	2					. 1							
86	~	for the application of the dumping permit of waste at the sea	Mon 20/12/21	Mon 20/12/21	1 day														
87	~	Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republic of China through the Employer	Tue 21/12/21	Fri 31/12/21	1 day		14												
88	~	Obtaining all necessary permits, licenses, approvals and concents	Mon 20/12/21	Fri 31/12/21	1 day		14								1				
89	~	Collection and delivery of 166666 tonnes of Public Fi	Sat 1/1/22	Thu 31/3/22	21 days		10								8 0				
90	~	3rd quarter of first year	Fri 20/5/22	Fri 30/9/22	168 days														
91	~	Submitting application documents to EPD for application of dumping permits	Fri 17/6/22	Fri 17/6/22	1 day		0		1.1						1.1				
92	1	Obtaining the dumping permit from EPD	Sat 18/6/22	Thu 30/6/22	1 day	91	14								1				
93	~	Submitting Application documents to the Employer for the application of the dumping permit of waste at	Fri 20/5/22	Fri 20/5/22	1 day		0												
94	~	the sea Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republic	Sat 21/5/22	Thu 30/6/22	1 day	93	14												
95	~	Obtaining all necessary permits, licenses, approvals and concents	Fri 17/6/22	Thu 30/6/22	1 day		0					-							
96	~	Collection and delivery of 499998 tonnes of Public Fi	Fri 1/7/22	Fri 30/9/22	1 day	95,92,94	14		2 - 2										
97	1	4th quarter of first year	Sat 20/8/22	Sat 31/12/22	71 days														

				Page 3			
	Project Summary	○	Manual Task	\diamond	Finish-only	~	
	Summary	÷	Inactive Summary		Start-only		Deadline
Date: [22/07/2023]	Milestone	*	Inactive Milestone	[]	Manual Summary	•	Progress
Project: 3 month rolling Programme July 23, Sent 23 (1)//2021/09	Split		External Milestone	\diamond	Manual Summary Rollup	•	External
	Task	and the second	External Tasks		Duration-only		External



ID		Task Name	Baseline Start	Baseline Finish	Duration	n Prede	cetime risk	а 1. разв			é ana		2 	5. OK - #				
	A		0 0	1.1			allowa	26	1	2	Jul	'23		24			Aug '2	23
98	~	Submitting application documents to EPI	D for Sat 17/9/22	Sat 17/9/22	14 days		0	26	<i>П</i> [23]	3	10	1,		24	31	1 /	12	1 21
99	~	Obtaining the dumping permits Obtaining the dumping permit from EPD	(assumed Sun 18/9/22	Fri 30/9/22	5 days	98	2											
100	~	Submiting Application documents to the I for the application of the dumping permit	Employer Sat 20/8/22 of waste at	Sat 20/8/22	1 day		0											
101	~	Obtaining the dumping permits from Mir Ecology and environment of the People's of China through the Employer (assumed	nistry of Sun 21/8/22 Republic	Fri 30/9/22	1 day	100	14		1000						i Segina			
102	~	Obtaining all necessary permits, licenses	s,approvals Sat 17/9/22	Fri 30/9/22	1 day		2											
103	~	Collection and delivery of 333332 tonnes	of Public Fil Sat 1/10/22	Sat 31/12/22	15 days	96,102	,1:14		1.4.1		2.2		1383		100			
104	~	1st quarter of second year	Sun 20/11/22	Fri 31/3/23	76 days													
105	~	Submitting application documents to EPE application of dumping permits	D for Sun 18/12/22	Sun 18/12/22	1 day		0								0.0			
106	~	Obtaining the dumping permit from EPD on 31/12/22)	(assumed Mon 19/12/22	Sat 31/12/22	1 day	105	2											18 A.
107	~	Submiting Application documents to the t for the application of the dumping permit the sea	Employer Sun 20/11/22 of waste at	Sun 20/11/22	1 day		0											
108	~	Obtaining the dumping permits from Mir Ecology and environment of the People's of China through the Employer	nistry of Mon 21/11/22 Republic	Sat 31/12/22	1 day	107	14						2					
109	v	Obtaining all necessary permits, licenses and concents	approvals Sun 18/12/22	Sat 31/12/22	1 day		2											
110	1	Collection and delivery of 250000 tonnes	s of Public F Sun 1/1/23	Fri 31/3/23	14 days	103,10	9, 14											
111	111	2nd quarter of second year	Sat 18/2/23	Fri 30/6/23	133 days													
112	H	Submitting application documents to EPE application of dumping permits	D for Sat 18/3/23	Sat 18/3/23	1 day		0											
113		Obtaining the dumping permit from EPD on 31/3/23)	(assumed Sun 19/3/23	Fri 31/3/23	13 days	112	2											
114		Submiting Application documents to the I for the application of the dumping permit the sea	Employer Sat 18/2/23 of waste at	Sat 18/2/23	1 day		0											
115		Obtaining the dumping permits from Mir Ecology and environment of the People's of China through the Employer (assumed	nistry of Sun 19/2/23 Republic d on	Fri 31/3/23	41 days	114	14											
116		Obtaining all necessary permits, licenses and concents	approvals Sat 18/3/23	Fri 31/3/23	14 days		2											
117		Collection and delivery of 250000 tonnes	s of Public F Sat 1/4/23	Fri 30/6/23	91 days	110,113	3, 14		1									
118		3rd quarter of second year	Sat 20/5/23	Sat 30/9/23	134 days			-		at Summer		and the state				-	-	and the second second
119	~	Submitting application documents to EPD application of dumping permits	D for Sat 17/6/23	Sat 17/6/23	1 day		0											
120		Obtaining the dumping permit from EPD on 30/6/23)	(assumed Sun 18/6/23	Fri 30/6/23	13 days	119	14						n ^S ei z					
121		Submiting Application documents to the E for the application of the dumping permit the sea	Employer Sat 20/5/23 of waste at	Sat 20/5/23	1 day		0											
122		Obtaining the dumping permits from Mir Ecology and environment of the People's of China through the Employer (assumed	nistry of Sun 21/5/23 Republic d on	Fri 30/6/23	41 days	121	14											
123		Obtaining all necessary permits, licenses and concents	approvals Sat 17/6/23	Fri 30/6/23	14 days		2											
124	n	Collection and delivery of 250000 tonnes	s of Public F Sat 1/7/23	Sat 30/9/23	92 days	117,123	3, 14					Sec.			CARACTER IN		all address of	and the second second
125		4th quarter of second year	Sun 20/8/23	Sun 31/12/23	123 days								-					
126		Submitting application documents to EPD	D for Sun 17/9/23	Sun 17/9/23	1 day		0											
127	-	Obtaining the dumping permit from EPD on 30/9/23)	(assumed Mon 18/9/23	Sat 30/9/23	13 days	126	2											
			Task			Exte	rnal Task	s	10			Du	iration-	only				Externa
			Split			. Exte	rnal Mile	stone	0	,		Ma	anual S	ummar	v Rollun	•		Externa
Project	: 3 mont	h rolling Programme July23- Sept23 CV/2021/09	Milestone	۵		Inac	tive Miler	stone	-			M		ummar	v			Drogree
Date: [2	22/07/20	23]	Summany	-	-		tive funes	mon						,	у	•		Flogres
-			Durinary	•		mac	uve sum	indry				- 50	art-only					Deadlin
1			Project Summary	V	V	Man	ual lask		0	2		Fin	Ish-on	y			V	

Page 4



Just Just <th< th=""><th>ID</th><th></th><th>Task Name</th><th>Baseline</th><th>Baseline</th><th>Duratio</th><th>n Prede</th><th>ecetime</th><th>2</th><th></th><th>2. X</th><th></th><th></th><th></th><th>÷</th><th></th><th></th><th></th><th></th></th<>	ID		Task Name	Baseline	Baseline	Duratio	n Prede	ecetime	2		2. X				÷				
B B	-			Start	FINISN		12.1	risk	~~~	î.		1.1	122			I.			122
128 Submits qualitation documents in the Employment 60.20023 98.20023 94.94 0 100<		0						anov	26	6	3	Jui 10	23	< E	24	21	1 7	Aug	1 23
120 21 Chaining in dumping permits from Unity of Concepts of an origination of the Packet Packe	128		Submiting Application documents to the Empl for the application of the dumping permit of wa the sea	oyer Sun 20/8/23 Iste at	Sun 20/8/23	1 day		0	[1/1/23]	5		/		24		/		<u>4 21</u>
100 100	129		Obtaining the dumping permits from Ministry Ecology and environment of the People's Rep of China through the Employer(assumed on 30	of Mon 21/8/23	3 Sat 30/9/23	41 days	128	14											
33.1 Bit Collection and define of 202000 toome of Phate F Bur 1/1020 Bur 3/1220 B G Bur 1/120 B Bur 1/1220 <	130	H	Obtaining all necessary permits, licenses, appr and concents	ovals Sun 17/9/23	Sat 30/9/23	14 days	-	0											
132 Image: Second Control of Control of Intercepted Product Of Inter	131		Collection and delivery of 250000 tonnes of P	ublic F Sun 1/10/23	Sun 31/12/23	80 days	124,13	30, 14	- 1 C -							1			
133 113 113 114 1	132	HB	Removal, excavation and deposition of stockpile and/or deposited Public Fill within the Designate Reclamation Sites in the Mainland	d Sat 1/1/22 d	Sun 31/12/23	3 730 days	6SS												E og mal
134 Image: Second maintenance of the soluting monigation second monitory of the Designate manual second monitory of the	133		Removal, excavation and deposition of stockpiled and/or deposited public fill	Sat 1/1/22	Sun 31/12/23	730 days	;	14	CENSOR	NE TURI		and a Merce				OTHE UT	LT IC: TANKIN		
135 ■ Cperation and mainformance of the existing navigation dama and numming basis. Sat 1/1/22 Sub 31/1/22 740 days 14 136 Design, construction, operation and mainformance of the Designated Reclamation States in the Mainford dubies to Project N inspect of the Seques Results in the Mainford Mainford Mainford Mainford Mainford end 31/1/221 Sub 31/1/22 1day 0 137 138 136 Chaining a measury design submission on 31/1/221 Fit 31/1/22 Main 31/1/22 1day 0 138 136 Chaining in construction, operation and mainformation on 31/1/221 Sub 31/1/22 30 days 137 7 138 139 130 Chaining in construction, completion certificate basin Sub 31/1/22 30 days 138 7 141 133 Chaining in construction, completion certificate basin Sub 31/1/22 Sub 32/1/22 30 days 140 7 143 139 130 Chaining in construction, completion certificate basin Sub 31/1/22 Sub 31/1/22 Sub 31/1/22 Sub 32/1/22 30 days 141 14 144 139 130 Chaining in construction, completion certificate basin Sub 31/1/22 Sub 31/1/22 Sub 31/1/22 <td>134</td> <td></td> <td>Operation and maintenance of the existing navig channel and turning basins in association with th existing berthing facilituy at Zone E of the Desiga Reclamation Sites in the Mainland</td> <td>ation Sat 1/1/22 ne inted</td> <td>Sun 31/12/23</td> <td>8 730 days</td> <td>6SS</td> <td></td>	134		Operation and maintenance of the existing navig channel and turning basins in association with th existing berthing facilituy at Zone E of the Desiga Reclamation Sites in the Mainland	ation Sat 1/1/22 ne inted	Sun 31/12/23	8 730 days	6SS												
136 Pesign, construction, operation and maintenance of mixing facility at Zone 3 of 12/12/10 set 12/12/12/10 set 12/12/10 set 12/12/10 set 12/12/12/10 set 12/12/10 set	135	.	Operation and maintenance of the existing naviga channel and turning basins	tion Sat 1/1/22	Sun 31/12/23	730 days		14	Lange and		and the second second		125 - 10	SUPERIOR I	Arreski,		1000		Superverse and
137 13 14 13 13 14 13 13 14 13 15 15 15 15 15 15 15 15 13 14 14 14 15 15 15 15 15 15 16 16 16 17 17 17 14 14 14 15 15 16 17 17 16 <	136		Design, construction, operation and maintenance the new navigation channel and turning basins ir association with the new berthing facility at Zone the Designated Reclamation Sites in the Mainlane (subject to Project's Manager's instruction)	e of Sat 12/12/09 B of	9 Sat 12/12/09	564 days	5					а Сести с ,							
138 iii Preparation of design submission Sat 1/1/22 Sun 30/1/22 30 days 137 7 139 iii Obtaining an excessary design approvale and concents Mon 31/1/22 Tot 10/22 30 days 138 7 141 iii Obtaining the construction completion certificate Sat 30/7/22 Sin 31/1/223 30 days 140 7 142 iii Operation and maintenance of maigtain channel and Mon 28/2/2 Sin 31/1/223 32 days 141 14 143 iii Obtaining the construction, operation and maintenance of maintenance of recomplex instruction Fri 31/1/221 Sin 31/1/223 564 days Iiii Iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	137		Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republi China through the Employer for Zone A & B (ass on 31/12/21)	Fri 31/12/21 c of umed	Mon 31/1/22	1 day		0											
139 11 Outsining all necessary design approvals and concents Mon 31/1/22 Tue 1/3/22 150 days 138 7 140 13 Construction of the new navigation channel and turning Wed 2/3/22 150 days 149 14 141 11 Operation and maintenance of navigation channel and turning basins Sin 30/7/22 Sin 30/7/22 150 days 140 7 142 13 Operation and maintenance of navigation channel and maintenance of meeb bring facilities at Zone 60 the Designate Recharation 5 ites in the Mainland (subject to Projects Recharation 5 ites in the Mainland (subject to Projects Groups and anonzoneme t) the receips is faguiD(c) or Groups	138	H	Preparation of design submission	Sat 1/1/22	Sun 30/1/22	30 days	137	7	-										
140 III Construction of the new analysis channel and turing Wed 2/3/22 150 days 140 7 141 III Obtaining the construction completion certificate Sati 307/22 Sun 28/8/22 30 days 140 7 142 III Obtaining the construction and maintenance of avigation channel and turing basins Mon 28/8/22 Sun 31/12/23 21 days 141 14 143 III Design, construction, operation and maintenance of fri 31/12/21 Fri 31/12/21 Sun 31/12/23 25 days 141 14 144 III Design, construction, operation and maintenance of fri 31/12/21 Fri 31/12/21 Sun 31/12/23 564 days 141 14 144 III Design, construction of the period same donneed and turing period same donneed and turing the construction of the period same donneed and turing the construction of the period same donneed and turing the construction of the period same donneed and turing the construction of the period same donneed and turing the construction of the period same donneed and turing the construction of the period same donneed and turing the construction of the period same donneed and turing the construction of the period same donneed and turing the construction of the period same donneed and turing the construction of the period same donneed and turing the construction of the period same donneed and turing the construction of the period same done turing the constructio	139		Obtaining all necessary design approvals and cor	cents Mon 31/1/22	Tue 1/3/22	30 days	138	7											
141 113 Obtaining the construction completion certificate Sis 30/7/22 Sin 20/7/22	140		Construction of the new navigation channel and to basins	urning Wed 2/3/22	Fri 29/7/22	150 days	139	14	2.5							1.17			
142 III Operation and maintenance of navigation channel and Mon 29/8/22 Sun 31/12/23 321 days 141 14 143 III Design, construction, operation and maintenance of mev berthing facilities at Zone B of the Designation for Ministry of China through the Employer for Zone A & B (assumed of China throug	141		Obtaining the construction completion certificate	Sat 30/7/22	Sun 28/8/22	30 days	140	7											
143 III Design, construction, operation and maintenance of the design and the maintenance of the Design and environment of the People's Republic of China through the Employer for Zone A & B (assumed on 31/221) Fri 31/12/21 I day IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	142		Operation and maintenance of navigation channe turning basins	el and Mon 29/8/22	Sun 31/12/23	321 days	141	14			8 196 C	- Caracia		in entre			and the second		
144 III Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republic of China through the Employer for Zone A & B (assumed on 31/12/21) Fri 31/12/21 I day I 145 III Preparation of design submission Sat 1/1/22 Sun 30/1/22 30 days 144 7 146 IIII Obtaining the construction of the berthing facilities Wed 2/3/22 Sun 30/1/22 30 days 145 7 147 IIIII Obtaining the construction completion certificate Mon 31/1/22 Sun 2/3/22 180 days 146 14 148 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	143	H	Design, construction, operation and maintenance new berthing facilities at Zone B of the Designate Reclamation Sites in the Mainland (subject to Pro Manager's instruction)	of Fri 31/12/21 d ject's	Sun 31/12/23	564 days	5		-										
145 III Preparation of design submission Sat 1/1/22 Sun 30/1/22 30 days 144 7 146 III Obtaining all necessary design approvals and concerts Mon 31/1/22 Tue 17/22 30 days 145 7 147 III Construction of the berthing facilities Wed 2/3/22 Sun 28/8/22 30 days 146 14 148 III Operation and maintenance of new berthing facilities Wed 28/9/22 Sun 31/1/22 293 days 148 14 150 III Design and construction of seawalls (approximate B of the Designated Reclamation Sites in the Mainland Fri 10/6/22 Sat 1/1/22 181 days III III IIII IIII Sat 1/1/22 Sat 1/1/22 Sat 1/1/22 181 days IIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	144		Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republi China through the Employer for Zone A & B (assi on 31/12/21)	Fri 31/12/21 c of umed	Fri 31/12/21	1 day													
146 III Obtaining all necessary design approvals and concents Mon 31/1/22 Tue 1/3/22 30 days 145 7 147 III Construction of the berthing facilities Wed 2/3/22 Su 2/1/22 30 days 146 14 148 III Obtaining the construction of the berthing facilities Wed 2/3/22 Su 2/1/22 30 days 147 7 149 Operation and maintenance of new berthing facilities Wed 2/3/22 Su 3/1/1/22 293 days 147 7 150 III Design and construction of seawalls (approximate 200m) in association with new berthing facilities Fri 10/6/22 Sat 1/1/22 181 days 0 151 IIII Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republic of China through the Employer for Zone A & B Sun 2/1/22 1 day 0 152 IIII Preparation of design submission (PMI no18) Sun 2/1/22 Non 31/1/22 30 days 151 7 152 IIIII Preparation of design submission (PMI no18) Sun 2/1/22 Non 31/1/22 30 days 151 7 Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Task E	145	H	Preparation of design submission	Sat 1/1/22	Sun 30/1/22	30 days	144	7											
147 12 Construction of the berthing facilities Wed 2/3/22 Sun 28/8/22 180 days 146 14 148 12 Obtaining the construction completion certificate Mon 29/8/22 Tue 27/9/22 30 days 147 7 149 Operation and maintenance of new berthing facilities Wed 2/3/22 Sun 31/12/23 293 days 148 14 150 12 Design and construction of seawalls (approximate 200m) in association with new berthing facility at Zong B of the Designated Reclamation Sites in the Mainland Fri 10/6/22 Sat 1/1/22 Sat 1/1/22 181 days 14	146	H	Obtaining all necessary design approvals and con	cents Mon 31/1/22	Tue 1/3/22	30 days	145	7											
148 124 Obtaining the construction completion certificate Mon 29/8/22 Tue 27/9/22 30 days 147 7 149 Operation and maintenance of new berthing facilities Wed 28/9/22 Sun 31/12/23 293 days 148 14 144	147		Construction of the berthing facilities	Wed 2/3/22	Sun 28/8/22	180 days	146	14											
149 Operation and maintenance of new berthing facilities Wed 28/9/22 Sun 31/12/23 293 days 148 14 150 Image: Design and construction of seawalls (approximate 200m) in association with new berthing facility at Zong B of the Designated Reclamation Sites in the Mainland Fri 10/6/22 Sat 4/2/23 181 days 148 14 148 14 148 <t< td=""><td>148</td><td>DB.</td><td>Obtaining the construction completion certificate</td><td>Mon 29/8/22</td><td>Tue 27/9/22</td><td>30 days</td><td>147</td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	148	DB.	Obtaining the construction completion certificate	Mon 29/8/22	Tue 27/9/22	30 days	147	7											
150 Image: Design and construction of seawalls (approximate B of the Designated Reclamation Sites in the Mainland Finite Designated Reclamation Sites Republic of China through the Employer for Zone A & B Sati 1/1/22 Sati 1/1/22 I day 0 152 Image: Preparation of design submission (PMI no18) Sun 2/1/22 Mon 31/1/22 30 days 151 7 Programme July23- Sept23 CV/2021/09 Task External Tasks Duration-only External Milestone Manual Summary Progres <td colspan="4</td> <td>149</td> <td></td> <td>Operation and maintenance of new berthing facilit</td> <td>ies Wed 28/9/22</td> <td>Sun 31/12/23</td> <td>293 days</td> <td>148</td> <td>14</td> <td>100000</td> <td>Designed and</td> <td></td> <td></td> <td>and the second second</td> <td></td> <td></td> <td>Contractory of</td> <td>State August</td> <td></td> <td></td>	149		Operation and maintenance of new berthing facilit	ies Wed 28/9/22	Sun 31/12/23	293 days	148	14	100000	Designed and			and the second second			Contractory of	State August		
151 Image: Collogy and environment of the People's Republic of China through the Employer for Zone A & B Sat 1/1/22 Sat 1/1/22 1 day 0 152 Preparation of design submission (PMI no18) Sun 2/1/22 Mon 31/1/22 30 days 151 7 Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Task External Tasks Duration-only External Milestone Milestone Inactive Milestone Inactive Milestone Manual Summary Program Program Summary Project Summary Manual Task Start-only Decadling Project Summary Manual Task Finish-only Manual Summary Program	150		Design and construction of seawalls (approxima 200m) in association with new berthing facility at B of the Designated Reclamation Sites in the Main	te Fri 10/6/22 Zone nland	Sat 4/2/23	181 days													
152 Preparation of design submission (PMI no18) Sun 2/1/22 Mon 31/1/22 30 days 151 7 Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Task External Tasks Duration-only External Tasks Date: [22/07/2023] Milestone Inactive Milestone Manual Summary Progree Summary Project Summary Inactive Summary Start-only Deadling Project Summary Manual Task Start-only Project Summary	151		Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republic China through the Employer for Zone A & B	Sat 1/1/22	Sat 1/1/22	1 day		0											
Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Task External Tasks Duration-only External Summary Rollup ◆ External Summary Rollup ◆ External Summary Rollup ◆ External Summary Programme July23- Sept23 CV/2021/09 Manual Summary Rollup ◆ External Summary Programme July23- Sept23 CV/2021/09 Milestone Inactive Milestone Manual Summary Programme July23- Sept23 CV/2021/09 Programme July23- Sept23 CV/2021/09 Programme July23- Sept23 CV/2021/09 Milestone Inactive Milestone Manual Summary Programme July23- Sept23 CV/2021/09 External Milestone Manual Summary Programme July23- Sept23 CV/2021/09 Programme July23- Sept23 CV/2021/09 <td>152</td> <td></td> <td>Preparation of design submission (PMI no18)</td> <td>Sun 2/1/22</td> <td>Mon 31/1/22</td> <td>30 days</td> <td>151</td> <td>7</td> <td></td>	152		Preparation of design submission (PMI no18)	Sun 2/1/22	Mon 31/1/22	30 days	151	7											
Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Date: [22/07/2023] Sept23 CV/2021/09 Milestone Summary Milestone Summary Inactive Milestone Summary Project Summary Project Summary Manual Task Start-only Deadline Start-only Project Summary Manual Task Page 5			Ta	sk			Exte	ernal Ta	asks				Dui	ration-o	only				. Externa
Project: 3 month rolling Programme July23- Sept23 CV/2021/09 Date: [22/07/2023] Milestone Milestone Manual Summary Progree Summary Project Summary Project Summary Manual Task Progree Project Summary Project Summary Manual Task Page 5			Sn	lit			. Exte	ernal M	ilestone		\diamond		Ma	nual Su	mman	Rollun	•		Externa
Date: [22/0/12023] Minestone Manual Summary Progre Summary Summary Inactive Milestone Manual Summary Deadline Project Summary Manual Task Finish-only Deadline	Project:	3 mont	th rolling Programme July23- Sept23 CV/2021/09	lectono	A		loc	ctive MA	iloctoric		-		N/a	nual C	mary	nonup			D
Summary Inactive Summary Start-only Deadlin Project Summary Manual Task Finish-only Page 5	Date: [2	2/07/20	J23]	lestone	•		inad	cuve M	liestone		1		Ma	nual Su	mmary				Progres
Project Summary V Manual Task A Finish-only Page 5			Su	mmary	V		Inad	ctive Su	immary				Sta	rt-only			1 C. 100 C.		 Deadlin
Page 5			Pr	oject Summary	\bigtriangledown	0	7 Mai	nual Ta	sk		¢.		Fini	sh-only	1		V		
						0.4		-		F	Page 5								

1 28	Sep '23 3 4 11 18 25 2 30/9/23
s a s ^a - a	
	n en en se Mariado Africa, en en esta servaren mento da Productiona Mariado Africa, en esta servaren mento da Productional Mariado Africa, en esta servaren mento da Productional de
al Tasks al Milestor ss ne	e ₽

ID	0	Task Name	Baseline Start	Baseline Finish	Duration	Predec	etime risk allowa	26		3	Ji 10	23' ונ	17	2	a	21	7	Aug	'23 14	21
153		Obtaining all necessary design approvals and concents	Tue 1/2/22	Wed 2/3/22	30 days	152	7	[]	<u>пі23</u>		10		1/	2	4	51			14	
154		instruction) Obtaining the construction completion certificate	Wed 1/6/22	Thu 30/6/22	30 days	153	7													
156		(subject to Project's Manager's instruction) Planned Completion Date (Section 3)	Sun 31/12/23	Sun 31/12/23	0 days	104														
150					o aujo	1														
																				5/
		e e és e e e e																		
		and a start of the																		

				Page 6			
	Project Summary		Manual Task	\$	Finish-only	~	
	Summary	~	Inactive Summary		Start-only		Deadline
Date: [22/07/2023]	Milestone	•	Inactive Milestone		Manual Summary	٠	Progress
Project: 3 month rolling Programme July 23, Sont 23, CV/2021/00	Split		External Milestone	\diamond	Manual Summary Rollup	٠	External
-	Task	No. 1 Contraction of the	External Tasks		Duration-only		External





Appendix H

Weekly ET's Site Inspection Record

CEDD Contract No.: CV/2021/09 Handling of Surplus Public Fill (2022-2023) - Tuen Mun Area 38 Fill Bank



		2 0 z
Inspection Date	ż	2= 8-7-2
Time	200	10:00
Weather		Sunny / Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy
A Fin al		Color (Light / Droops / Stroops
VVIDQ		Calm/ Light/ Breeze / Strong
Temperature		52C
Humidity	*	High / Moderate / Low
rioring .		right modelate / com

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:	M	d-i	
Name:	C.KH6	KWOK WINT LAM	chan Hon Com
Title	Alow	EO	Tochnician



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

Environmental Checklist	Imple	ment	ation *	Remark
Environmental checklist	Yes	No	N/A	
Fugitive Dust Emission				
Dust control / mitigation measures shall be provided to prevent dust nuisance.	1			
Water sprays shall be provided and used to dampen materials.	1			
All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition.	4			
 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. 	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.	1			
 Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site. 	V			
 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. 	V			
Vehicle and equipment should be switched off while not in use.	4			
 All plant and equipment should be well maintained e.g. without black smoke emission. 	V			
Open burning should be prohibited.	7			
 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			
Noise Impact				
The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	1			
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. 	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.	Y			
Compressors and generators should operate with door closed.	7			
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.	4			

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



Environmental Checklist	Imple S	ementa tages'	tion	Remark
	Yes	No	N/A	
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 state of the s	
 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. 	V			
 The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water. 	7			
 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. 	Å			
 A wheel washing bay shall be provided at the site exit and wash-water shall have sand and sit 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. 	1			
 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. 	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. 	1			
 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. 	7			
Landscape and Visual				
 The maximum stockpilling 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. 	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. 	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. 	4			
Lighting shall be set to minimise night-time glare.	V			



Environmental Checklist	Imple S	nplementation Remark 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. 	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. 	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. 	1			
 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			
 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. 	7			
 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. 	V			
 Chemical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility. 	V			
 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				
 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. 	4			
Have adequate ventilation.	1			
 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. 	V		1	





	Environmental Checklist	Imple	ement	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			
5	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.	4			
	The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place.	V			
Go	od 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.	~			
•	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.	4			
	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.	1			
	To encourage collection of aluminium cans by individual collectors.	4			
	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			



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

.

(VIII) WILL			
1			

	Name	Title	Signature	Date
Checked by	June Lau	ET Representative	The	03 August 2023
Checked by	June Lau	ET Representative	Ju	03 August 2023

CEDD Contract No.: CV/2021/09

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



Inspection Date	: 10-8-23
Time	: 10:00
Weather Wind	: Sunny / Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy : Calm / Light / Breeze / Strong
Temperature	: 30
Humidity	: High / Moderate / Low

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:	A	d-i <	£.
Name:	K - C. Utung	KWOK WINH LAM	chan too Go
Title	10~	ED	Technician



	Environmental Checklist			ation *	Remark
		Yes	No	N/A	
Fug	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			
• 1	All stockpile of aggregate or spoil should be enclosed or covered and water applied in dry or windy condition.	4			
•	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.	7			
•	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.	1			
•	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.	V			
	The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water.	V			
E.	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 (APCO Cap.311).	7			
Noi	se Impact			1012	
•	The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	1			
	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.	7			
	Air compressors and hand held breakers should have noise labels.	1			
•	Compressors and generators should operate with door closed.	7			
•	Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	4			
	Noisy equipment and mobile plant shall always be site away from NSRs.	V			



Environmental Checklist			ation	Remark
	Yes	No	N/A	
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. 	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 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. 	7			
 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. 	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. 	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.	4			
 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. 	4			
 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. 	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.	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. 	1			
Lighting shall be set to minimise night-time glare.	1			



Environmental Checklist				ation *	Remark
Wa	aste Management				
Co	Instruction Waste Management				
	Relevant licence / permits for disposal of construction waste or excavated materials available for inspection.	7			
	Excavated material to be generated from construction works to be re-used on-site as far as practicable to reduce off-site disposal.	4			
	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.	1			
	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.	V			
•	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.	Y			
•	Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials.	V			
Cł	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.	7	5		
•	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			
•	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.	4			
•	Chemical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility.	V			
	Chemical wastes including waste oil should be stored properly in designated areas, e.g. chemical waste storage area.	7			
	The designated chemical waste storage area should only be used for storing chemical wastes.	4			
	The set-up of chemical waste storage area should	200			
	 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.	1			
	 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			





Environmental Checklist		Implementation Stages*		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. 	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. 	1			
 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. 	1			
 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. 	1			
 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. 	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. 	1			
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			



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

Remark

17				

	Name	Title	Signature	Date
Checked by	June Lau	ET Representative	/20	10 August 2023
Air			0	



Inspection Date	Inspection Date	:	17/8/23
-----------------	-----------------	---	---------

Time |0:00

- Weather Sunny / Fine / Coudy / Overcast / Drizzle / Rain / Storm / Hazy
- Wind

: Calm / (ight) Breeze / Strong

Temperature : 31°C

Humidity : High / Moderate / w

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:	L	.06	Mak
Name:	CKho	Philip 1to	Mak tei Wai
Title	Azars	S.M.	ЕŢ



Environmental Checklist		Implementation Stages*		Remark
		No	N/A	
Fugitive Dust Emission				
Dust control / mitigation measures shall be provided to prevent dust nuisance.	4			
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. 	4			
 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.	4			
 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.	4			
 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. 	1			
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). 	~			
Noise Impact				
The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	1			
 The constructions works should be scheduled to minimize noise nuisance. 	4			
 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.	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. 	V			
 Noisy equipment and mobile plant shall always be site away from NSRs. 	V			

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



Environmental Checklist		Implementation Stages*		Remark
	Yes	No	N/A	-
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. 	7			and a second
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			
 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. 	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. 	7			
 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. 	1			
 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. 	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. 	Y			
 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. 	1			
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.	1			
Lighting shall be set to minimise night-time glare.	1			



Environmental Checklist		ement 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. 	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. 	1			
 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. 	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. 	7			
 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		THE REAL		
 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. 	7			
 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			
 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. 	7			
 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. 	V			
 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			14
Have adequate ventilation.	1			
 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			





Environmental Checklist		impi S	Implementation Stages*		Remark	
		Yes	No	N/A		
8 8	Warning panels should be displayed at the waste storage area.	V				
•	Waste storage area should be cleaned and maintained regularly.	V				
10	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.	7			4	
•	The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place.	1				
Go	od 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.	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.	1				
•	The Environmental Permit should be displaced conspicuously on site.	V	-			
•	Construction noise permits should be posted at site entrance or available for site inspection.	1				
	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				
٠	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.	V				
	Separate labelled bins should be provided to segregate this waste from other general refuse generated by the workforce.	1				
1.0	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				
2, 4 ,0	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.	Ą				



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

Remark

	Name	Title	Signature		Date
Checked by	June Lau	ET Representative		~~	17 August 2023
L			0		



2418/23 Inspection Date . 14=30 Time 5 : Sunny / Fine / (oudy) Overcast / Drizzle / Rain / Storm / Hazy Weather : Calm / Light Breeze / Strong Wind 300 Temperature • Humidity High / Moderate / (ow) 1

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:	A	4-i	Mak
Name:	K.C. Sung	Knok WINH LAM	Make Kei War
Title	10~	Εo	E.T





	Environmental Checklist		ment	ation	Remark	
		Yes	No	N/A		
Fug	itive Dust Emission					
	Dust control / mitigation measures shall be provided to prevent dust nuisance.	1				
	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.	7				
	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.	V				
a9 9 0	Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	V				
1943	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.	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 (APCO Cap.311).	4				
Noi	se 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.	V				
	Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	1				
•	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.	1				
*	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		Implementation Stages*		Remark	
	Yes	No	N/A		
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. 	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. 	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. 	4				
 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. 	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.	1				
Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water.	V			G	
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.	4				
 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. 	1				
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.	V				
 A waste collection vessel shall be deployed to remove floating debris. 	1				
Landscape and Visual					
The maximum stockpiling height at the fill bank shall be limited to a maximum of +40mPD.	V				
 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.	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. 	1				
 Lighting shall be set to minimise night-time glare. 	1				



Environmental Checklist	Imple	ement stages	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. 	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. 	4			
 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. 	1			
 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. 	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			
 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 observe and complied with for control of chemical wastes. 				
 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. 	e V			
 Spent chemicals should be stored and collected by an approved operator for disposal at the Chemical Waste Treatment Facility or other license facility in accordance with the Chemical Waste (General) Regulation. 	1 1			
 Chemical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility. 	V			
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.	\checkmark			
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. 	V			
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. 	√			
Have adequate ventilation.	1			
 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			
CEDD Contract No.: CV/2021/09

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



強いたちの

Environmental Checklist Yes		ement Stages	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		
Chemical waste should be transported regularly by a registered chemical waste collector to a facility licensed to receive chemical waste.	1			
 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. 	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.	1			
 Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. 	1	1		
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	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. 	~			



Summary of the Weekly Site Inspection:

Item	Details	of defective works or observation:	\$	Proposed Follow U	p Action	Photo Ref.	Further Action Required (Yes/No)	Target Completion Date
					L.S. LODAN			
Rema	rk							
				_	and the second			
ł								
		Name	Title		Signature ,		Date	
Cheo	cked by	June Lau	ET Representa	tive	A	غره	24 August 202	3



Inspection Date	29-8-23
Time	14:30
Weather Wind	 Sunny / Fine / Cloudy / Overcast / Drizzle / Rain / Storm / Hazy Calm / Kight / Breeze / Strong
Temperature	30°C
Humidity	High / Moderate / Low

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:	U	·	< <u>`</u> ```````````````````````````````````
Name:	C.KM	KWOK WINH LAM	dan Hon Can
Title	Alon	Εo	Technician



Environmental Checklist		ment tages	ation *	Remark
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.	1			
 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.	1			
The designated site main haul road shall be paved or regular watering.	~			
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. 	V			
 Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank. 	7			
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. 	V			
 All plant and equipment should be well maintained e.g. without black smoke emission. 	1			
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.	7			
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			
 Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials. 	4			
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. 	V			

CEDD Contract No.: CV/2021/09

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



Environmental Checklist		Implementation Stages*		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. 	~			
 The storm water intercepting system shall be effective to collect of runoff and remove suspended solids before discharge. 	4			
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 N			
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. 	× 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. 	N N			
 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. 	SERVICE SERVICE			
 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 soit 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. 	1			
 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. 	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. 	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 property collected and treated before disposal. 	1			
 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				
 The maximum stockpiling height at the fill bank shall be limited to a maximum of +40mPD. 	4			
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. 	1			
Lighting shall be set to minimise night-time glare.	1			

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



Environmontal Chooklist		Implementation Stages*		Remark
Environmental Checklist			N/A	
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. 	1			
 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. 	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			
 Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials. 				
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. 	7			
 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 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. 	V			
The set-up of chemical waste storage area should			1933	
 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. 	1			
Have adequate ventilation.	1			
 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			

CEDD Contract No.: CV/2021/09

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



TANKING SUBARING

蒙

Environmental Checklist		ement Stages	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.	V			
Chemical waste should be transported regularly by a registered chemical waste collector to a facility licensed to receive chemical waste.	1			
 All generators, fuel and oil storage should be within bundle areas. 	V			
 Oil leakage from machinery, vehicle and plant should be prevented. 	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. 	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.	1			
Construction noise permits should be posted at site entrance or available for site inspection.	1			
 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. 	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.	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. 	~			
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.	4			



Summary of the Weekly Site Inspection:

Item Deta	ails of defective works or observatior	is	Proposed Follow	Up Action	Photo Ref.	Further Action Required (Yes/No)	Target Completion Date
<i>i</i>							
Remark				Star Pa			
				535 (File) (File)			
	A.						
				the life is so in a			
				and the second			
	Name	Title		Signature		Date	
Checked by	June Lau	ET Representative		v	29 August 202	3	



Appendix I

Implementation Schedule of Mitigation Measures



Environmental Mitigation Implementation Schedule

	Location	Implementation Status					
Environmental Protection Measures		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						
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						
 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	\checkmark					
 All plant and equipment should be well maintained e.g. without black smoke emission. 	All areas	\checkmark					
Open burning should be prohibited.	All areas	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 (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					



	Location	Implementation Status				
Environmental Protection Measures		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			
Cł	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	\checkmark				
•	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	\checkmark				
•	The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place.	All areas	\checkmark				
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	\checkmark				
•	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	\checkmark				
٠	Construction noise permits should be posted at site entrance or available for site inspection.	Site Entrance				\checkmark	
•	Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	All areas	\checkmark				
•	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	\checkmark				
•	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	\checkmark				
•	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					
•	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	\checkmark				



Appendix J

Site General Layout plan







Appendix K

Monthly Summary Waste Flow Table

Monthly Summary Waste Flow Table for 2023

	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	158.46	0	0	0.071	100.72	
Feb	0	0	0	0	0	0	267.41	0	0	0	470.82	
Mar	0	0	0	0	0	0	264.10	0	0	0	1339.48	
Apr	0	0	0	0	0	0	140.31	0	0	0	89.08	
May	0	0	0	0	0	0	153.19	0	0	0	87.17	
Jun	0	0	0	0	0	0	145.63	0	0	0	118.30	
Sub-total	0	0	0	0	0	0	1129.10	0	0	0	2205.57	
Jul	0	0	0	0	0	0	182.88	0	0	0	140.63	
Aug	0	0	0	0	0	0	174.89	0	0	0	101.76	
Sep												
Oct												
Nov												
Dec												
Total	0	0	0	0	0	0	1486.87	0	0	0.071	2447.96	

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



Contract No. CV/2021/09 Handling of Surplus Public Fill (2022-2023) Tuen Mun 38

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 September 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27-Aug	l 28-Aug	29-Aug	30-Aug	31-Aug	1-Sep	2-Sep
		24-hr TSP 24-hr RSP NM Weekly SI (pm) WQM Mid-ebb (09:00-10:30) Mid-flood (16:30-18:00)		1-hr TSP x 3 NM WQM Mid-flood (07:30-09:00) Mid-ebb (11:00-12:30)		
3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep	9-Sep
WQM Mid-flood (09:30-11:00) Mid-ebb (14:00-15:30)	24-hr TSP 24-hr RSP	1-hr TSP x 1 NM WQM Mid-flood (09:00-10:30) Mid-ebb (15:00-16:30)		1-hr TSP x 1 MM Weekly SI (am) WQM Mid-ebb (08:30-10:00) Mid-flood (13:00-14:30)		1-hr TSP x 1 WQM Mid-ebb (09:00-10:30) Mid-flood (15:00-16:30)
10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep
24-hr TSP 24-hr RSP		1-hr TSP x 2 NM WQM Mid-ebb (10:00-11:30) Mid-flood (16:30-18:00)		1-hr TSP x 1 M Weekly SI (am) WQM Mid-flood (07:30-09:00) Mid-ebb (11:00-12:30)		24-hr TSP 24-hr RSP WQM Mid-flood (08:30-10:00) Mid-ebb (13:00-14:30)
17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep
		1-hr TSP x 2 NM WQM Mid-flood (09:00-10:30) Mid-ebb (14:00-15:30)		1-hr TSP x 1 NM Weekly SI (am) WQM Mid-flood (09:30-11:00) Mid-ebb (15:30-17:00)	24-hr TSP 24-hr RSP	1-hr TSP x 2 WQM Mid-ebb (08:30-10:00) Mid-flood (13:00-14:30)
24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep
	WQM Mid-ebb (09:30-11:00) Mid-flood (15:00-16:30)	1-hr TSP x 1 NM	WQM Mid-ebb (10:00-11:30) Mid-flood (16:00-17:30)	124-nr ISP 24-hr RSP NM Weekly SI (am)	1-hr TSP x 2 WQM Mid-flood (07:30-09:00) Mid-ebb (13:00-14:30)	

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. 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).



-0.5

14/09/2023

Contract No. CV/2021/09 Handling of Surplus Public Fill (2022-2023) Tuen Mun 38

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



-0.5

08/09/2023

09/09/2023

10/09/2023

11/09/2023

Hong Kong Time (Hour)

12/09/2023

13/09/2023

September 2023



Contract No. CV/2021/09 Handling of Surplus Public Fill (2022-2023) Tuen Mun 38

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



September 2023





Contract No. CV/2021/09 Handling of Surplus Public Fill (2022-2023) Tuen Mun 38

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



September 2023



Appendix M

Reporting Month Monitoring Schedule



Contract No. CV/2021/09 Handling of Surplus Public Fill (2022-2023) Tuen Mun 38

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 August 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30-Jul	31-Jul	1-Aug	2-Aug	3-Aug	4-Aug	5-Aug
24-hr TSP 24-hr RSP		1-hr TSP x 2 NM WQM Mid-ebb (11:00-12:30) Mid-flood		1-hr TSP x 1 MM Weekly SI (am) WQM Mid-flood (08:30-10:00) Mid-ebb		24-hr TSP 24-hr RSP WQM Mid-flood (09:00-10:30) Mid-ebb
0.4	7 4	(17:30-19:00)	0.4	(13:00-14:30)	44 Aug	(14:00-15:30)
o-Aug	∕-Aug	8-Aug 1-hr TSP x 2 NM WQM Mid-flood (10:30-12:00) Mid-ebb	9-Aug	1-hr TSP x 1 Set 24 hr (11/8) NM Weekly SI (am) WQM Mid-ebb (09:00-10:30) Mid-flood	24-hr TSP 24-hr RSP	12-Aug 1-hr TSP x 2 WQM Mid-ebb (10:00-11:30) Mid-flood
		(16:00-17:30)		(14:00-15:30)		(15:30-17:00)
13-Aug	I4-Aug	1-hr TSP x 1 NM WQM Mid-ebb (11:00-12:30) Mid-flood (17:00-18:30)	IO-AUG	24-hr TSP 24-hr RSP NM Weekly SI (am) WQM Mid-flood (08:00-09:30) Mid-ebb (13:00-14:30)	Io-Aug	1-hr TSP x 2 WQM Mid-flood (08:30-10:00) Mid-ebb (13:00-14:30)
20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug
		1-hr TSP x 1 Set 24 hr (23/8) NM WQM Mid-flood (09:30-11:00) Mid-ebb (15:00-16:30)	24-hr TSP 24-hr RSP	1-hr TSP x 2 NM Weekly SI (pm) WQM Mid-ebb (07:00-08:30) Mid-flood (11:00-12:30)		1-hr TSP x 1 WQM Mid-ebb (09:00-10:30) Mid-flood (15:00-16:30)
27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	1-Sep	2-Sep
		24-11 ISF NM Weekly SI (pm) WQM Mid-ebb (09:00-10:30) Mid-flood (16:30-18:00)		1-hr TSP x 3 NM WQM Mid-flood (07:30-09:00) Mid-ebb (11:00-12:30)		

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.



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
Compling Data	0/ Decovery *	Sample ID	0/ Error #	Somela ID	% Recovery
Sampling Date	96 3	FC1-S	% EII01 **	EM2-M	107.5
	101.2	FM2-B	2 30	FM1-S	111.1
2023/8/1	99.6	FM1-M	7.06	EC2-B	80.6
2023/0/1	96.3	EC1-S	2.94	E02 D	96.7
	99.8	FM2-B	4 76	FM1-S	106.9
2023/8/3	101.2	FM1-M	5.00	EC2-B	92.1
2020/0/0	97.1	FC1-S	0.00	FM2-M	94.0
	96.7	FM2-B	6.90	EM1-S	98.5
2023/8/5	98.3	EM1-M	3.77	EC2-B	93.0
	98.1	FC1-S	3.39	FM2-M	99.2
	100.1	FM2-B	0.00	EM1-S	88.6
2023/8/8	96.5	EM1-M	9.52	EC2-B	106.2
	97.5	FC1-S	0.00	FM2-M	100.5
	96.9	FM2-B	4.44	EM1-S	99.9
2023/8/10	99.1	EM1-M	4.44	EC2-B	87.3
	98.1	FC1-S	8.00	FM2-M	111.8
	96.6	FM2-B	8.00	EM1-S	90.6
2023/8/12	100.2	EM1-M	0.00	EC2-B	92.2
	99.1	FC1-S	4.88	FM2-M	91.4
	98.5	FM2-B	8.00	EM1-S	84.9
2023/8/15	96.6	EM1-M	0.00	EC2-B	91.6
	97.2	FC1-S	5.41	FM2-M	106.1
	99.4	FM2-B	9.09	EM1-S	89.9
2023/8/17	97.6	EM1-M	3.08	EC2-B	90.8
	98.3	FC1-S	7.14	FM2-M	83.9
	98.7	FM2-B	3.51	EM1-S	93.3
2023/8/19	95.4	EM1-M	2.99	EC2-B	104.5
	99.3	FC1-S	4.08	FM2-M	99.0
	102.0	FM2-B	6.06	EM1-S	102.8
2023/8/22	98.4	EM1-M	2.67	EC2-B	117.2
	95.2	FC1-S	7.41	FM2-M	99.4
	99.3	FM2-B	8.00	EM1-S	102.7
2023/8/24	102.1	EM1-M	0.00	EC2-B	90.3
	99.9	FC1-S	0.00	FM2-M	86.6
	95.8	FM2-B	9.52	EM1-S	111.7
2023/8/26	99.4	EM1-M	3.64	EC2-B	83.0
	97.2	FC1-S	5.13	FM2-M	114.7
	100.3	FM2-B	8.00	EM1-S	115.2
2023/8/29	98.2	EM1-M	0.00	EC2-B	91.4
	96.4	FC1-S	7.14	FM2-M	91.0
	97.5	FM2-B	8.22	EM1-S	108.4
2023/8/31	100.9	EM1-M	8.00	EC2-B	92.9

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

東業德勤測試顧問有限公司 ETS-TESTCONSULT LTD.	
as compleinent showed that there	

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



Figures









