

東業德勤測試顧問有限公司 ETS-TESTCONSULT LTD.

TEST REPORT

8/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: etl@ets-testconsult.com W: www.ets-testconsult.com



China Harbour Engineering Co Ltd

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

TSEUNG KWAN O AREA 137 FILL BANK
MONTHLY EM&A REPORT NO.30

(JUNE 2024)

Prepared by:

LAU, Wing Sum

Assistant Environmental Officer

Checked by:

LAU, Chi Leung

Environmental Team Leader

Issue Date: 08 July 2024

Report No.: ENA43756



UMWELT CONSULTING LIMITED

23/F, On Hong Commercial Building, 145 Hennessy Road, Wan Chai, Hong Kong

By Post

Our Ref : P231104-EMA-TKOFB-202406-V

Date : 11th July 2024

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

Attn: Mr. LAU Chi Leung

Environmental Permit (EP) No. EP-134/2002/Q

Fill Bank at Tseung Kwan O Area 137

Monthly EM&A Report for June 2024

Dear Sir,

Pursuant to Condition 3.4 of Environmental Permit (EP) No. EP-134/2002/Q, please note the report "Tseung Kwan O Area 137 Fill Bank Monthly EM&A Report No. 30 (June 2024)" dated 8 July 2024 submitted under the EP, certified by the Environmental Team Leader on 8 July 2024, had been reviewed and is hereby verified.

Should you have any query, please feel free to contact the undersigned at 3756 9590 or ivanting@umwelt.consulting.

Your faithfully,

For and on behalf of:

Umwelt Consulting Limited

Ting/o Chung Ivan

Independent Environmental Checker



ENA43756 Monthly EM&A Report No.30

TABLE O	F CONTENTS	Page
EXECUTI	VE SUMMARY	
1.0	INTRODUCTION	1
2.0	PROJECT INFORMATION	·
2.0	2.1 Scope of the Project	1
	2.2 Site Description	1
	2.3 Work Programme	2
	2.4 Project Organization and Management Structure	2
	2.5 Contact Details of Key Personnel	2
3.0	WORK PROGRESS IN THIS REPORTING PERIOD	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	3
	4.5 Monitoring Methodology	3
	4.6 Action and Limit levels	3-4
	4.7 Event-Action Plans 4.8 Results and Observation	4 4
5.0	NOISE MONITORING	4
3.0	5.1 Monitoring Requirements	4
	5.2 Monitoring Equipment	4
	5.3 Monitoring Parameters, Duration and Frequency	4-5
	5.4 Monitoring Locations	5
	5.5 Monitoring Procedures and Calibration Details	5
	5.6 Action and Limit levels	5
	5.7 Event-Action Plans	5
	5.8 Results and Observation	5-6
6.0	MARINE WATER QUALITY MONITORING	
	6.1 Monitoring Requirements	6
	6.2 Monitoring Locations	6
	6.3 Monitoring Parameters	6-7
	6.4 Monitoring Frequency	7
	6.5 Monitoring Methodology and Equipment Used	7 - 8
	6.6 Action and Limit Level 6.7 Event and Action Plan	9 9
	6.8 Monitoring Duration in this reporting period	9
	6.9 Marine Water Monitoring Results	10
7.0	ENVIRONMENTAL AUDIT	.0
	7.1 Weekly ET Site Inspections and EPD's Site Inspection	10-11
	7.2 Review of Environmental Monitoring Procedures	11
	7.3 Assessment of Environmental Monitoring Results	11
	7.4 Advice on the Solid and Liquid Waste Management Status	11 -12
8.0	STATUS OF ENVIRONMENTAL LICENSING AND PERMITTING	12-13
9.0	ENVIRONMENATL NON-CONFORMANCE	
	9.1 Summary of air quality, noise and marine water quality	13
	9.2 Summary of Environmental Complaints	13
	9.3 Summary of Notification of Summons and Prosecution	13
10.0	IMPLEMENTATION STATUS	4.0
	10.1 Implementation Status of Environmental Mitigation Measures	13
	10.2 Implementation Status of Event and Action Plan	13
	10.3 Implementation Status of Environmental Complaint, Notifications of Summons and	13
11.0	Successful Prosecutions Handling	40 44
11.0 12.0	CONCLUSION AND RECOMMENTATIONS	13-14
12.0	FUTURE KEY ISSUE	15
	12.1 Work Programme for the Coming Month	15 15 16
	12.2 Key Issues for the Coming Month 12.3 Monitoring Schedule for the Coming Month	15-16 16
	TELO INOTITO HIN CONTRUITE TOT THE CONTINU MONTH	10



ENA43756 Monthly EM&A Report No.30

APPENDIX

A	Organization Chart and Lines of Communication
B1	Calibration Certificates for Impact Air Quality Monitoring Equipment
B2	Impact Air Quality Monitoring Results
B3	Graphical Plots of Impact Air Quality Monitoring Data
C1	Calibration Certificates for Impact Noise Monitoring Equipment
C2	Impact Noise Monitoring Results
C3	Graphical Plots of Impact Noise Monitoring Data
D1	Calibration Certificates for Impact Marine Water Quality Monitoring Equipment
D2	Impact Marine Water Quality Monitoring Results
D3	Graphical Plots of Impact Marine Water Quality Monitoring Data
D4	Impact Marine Water Quality Monitoring Results (3RS project)
D5	Graphical Plots of Impact Marine Water Quality Monitoring Data (3RS project)
E	Weather Condition
F	Event-Action Plans
G	Work Programme
Н	Weekly ET's Site Inspection Record
I	Implementation Schedule of Mitigation Measures
J	Site General Layout Plan
K	Monthly Summary Waste Flow Table
L	Monitoring Schedule for the Coming Month
M	Reporting Month Monitoring Schedule
N	Complaint Log
	•

FIGURES

6.11 7.1

7.2

8.1

10.1

Figure 1 Figure 2 Figure 3 Figure 4	Locations of Water Quality Monitoring Stations – Tseung Kwan O Area 137 Fill Bank Location of Noise Monitoring Station – Tseung Kwan O Area 137 Fill Bank Locations of Air Quality Monitoring Stations – Tseung Kwan O Area 137 Fill Bank Locations of Water Quality Monitoring Stations (3RS project) – Tseung Kwan O Area 137 Fill
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	Air Quality Monitoring Locations
4.4	Action and Limit levels for 24-hr TSP and 1-hr TSP
4.5	Summary of 1-hour TSP monitoring results
4.6	Summary of 24-hour TSP monitoring results
5.1	Noise Monitoring Equipment
5.2	Duration, Frequency and Parameters of noise monitoring
5.3	Noise Monitoring Location
5.4	Action and Limit levels for noise monitoring
6.1	Locations of Marine Water Monitoring Stations
6.2	Locations of Additional Marine Water Monitoring Stations (3RS project)
6.3	Marine Water Quality Monitoring Parameters
6.4	Monitoring frequency of the marine water
6.5	Summary of testing procedures
6.6	Details of Marine Water Quality Monitoring Equipment (In-site measurement)
6.7	Water Quality Action and Limit Levels
6.8	Water Quality Action and Limit Levels (3RS project)
6.9	Time Schedule of Impact Marine Water Quality Monitoring
6.10	Summary of Impact Marine Water Quality Exceedances
6.11	Summary of Impact Marine Water Quality Exceedances (3RS project)

Key Findings of Weekly ET Site Audits in this reporting period

Actual amounts of Waste generated in this reporting period Summary of environmental licensing and permit status

Summary of Environmental Complaints and Prosecutions



ENA43756 Monthly EM&A Report No.30

EXECUTIVE SUMMARY

This monthly Environmental Monitoring and Audit (EM&A) report No.30 was prepared by ETS-Testconsult Ltd (ET) for "Contract No: CV/2021/09 – Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O (TKO) Area 137 Fill Bank" (The Project).

This report documented the findings of EM&A Works conducted during the operation phase of Fill Bank at TKO Area 137 in June 2024.

Site Activities

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

- 1. Operation of the Public Fill Reception Facilities at Tseung Kwan O Fill Bank (TKOFB);
- 2. Operation of dewatering plant at TKOFB;
- 3. Operation and Maintenance of Artificial Intelligent System for Crushing Number 2, 3 and 4 (Model QJ241) at TKOFB;
- 4. Operation of the Integrated Public Fill Reception (Fixed Rigid Platform) at TKOFB;
- 5. Operation and maintenance of Wheel Washing Bays and Facilities at TKOFB;
- 6. Operation and Maintenance of the Wash House at TKOFB;
- 7. Personnel Position Tracking and Proximity Detection System of Moving Plant at TKOFB;
- 8. Operation and Maintenance a Digital Works Supervision System (DWSS) for TKOFB;
- 9. Maintenance of the Drainage Systems at TKOFB;
- 10. Operation and Maintenance of crushing plants at TKOFB;
- 11. Delivery of Public Fill to Taishan at TKOFB:
- 12. Construction of Gabion Wall at TKOFB:
- 13. Implementation of C Easy system at TKOFB (Phase 1)
- 14. Carry out GCO Probe test and SRT
- 15. Operation of recycling public fill as blanket layer material of reclamation projects PMI No.70
- 16. PMI No. 94 Post Geotechnical Monitoring at TKOFB
- 17. Relocation works of soil platforms
- 18. PMI No. 89 Ground Investigation Works at TKOFB

Environmental Monitoring Progress

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

- Noise Monitoring (Day-time): 1 Occasion at 1 designated location
- 24-hour TSP Monitoring: 5 Occasions at 2 designated locations
- 1-hour TSP Monitoring: 16 Occasions at 2 designated locations
- Marine Water Quality Monitoring: 12 Occasions at 2 designated locations
- Weekly-site inspection: 4 Occasions

Noise Monitoring

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

Air Monitoring

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

Marine Water Quality Monitoring

According to the summary of marine water monitoring results, no exceedance of Action and Limit levels was recorded in this reporting period.

Weekly Site Inspections

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 summons or successful prosecutions with respect to environmental issues was received in this reporting period.



ENA43756 Monthly EM&A Report No.30

Future Key Issues

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

- Noise and air quality impact due to site works;
- Maintain wheel washing facilities properly;
- Maintain all drainage and desilting facilities properly;
- Use and maintain silt curtain properly;
- Clean up the fill material on concrete pavement along the BHA frequently;
- Sufficient drip trays for all oil drums / chemical containers;
- Implement all necessary preventive measures to avoid oil leakage. In the event an oil leakage happens, the Contractor should properly remove the leaked oil and handle the contaminated soil and all materials using for this cleaning works as chemical waste;
- Maintain good site practice and waste management to minimize environmental impacts at the site; and
- Follow-up improvements on waste management issues.

Monthly EM&A Report No.30

FNIA43756

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) – Tseung Kwan O (TKO) Area 137 Fill Bank" (The Project).

In accordance with the Environmental Permit (No.: EP-134/2002/Q) (the EP), an EM&A programme should be implemented in accordance with the procedures and requirements in the EM&A Manual of the approved EIA report (Registration No. AEIAR-060/2002). The EM&A programme for this study as stated in Section 2.3.1 of the EM&A Manual covers the following environmental aspects during the establishment, operation and removal phases of the Fill Bank at Tseung Kwan O Area 137:

- Fugitive Dust;
- Noise generation from onsite activities;
- Water Quality: and
- Landscape and Visual.

The EM&A programme requires environmental monitoring for air quality, noise and water quality and environmental site inspections for air quality, noise, 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 period and the next reporting period;
- Action and Limit levels for all environmental parameters;
- Event/Action Plans:
- Environmental mitigation measures, as recommended in the Project EIA study final report; and
- Environmental requirements in contract documents.

Baseline monitoring was completed in August and October 2002 by MateriaLab. 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 Tseung Kwan O Area 137 in June 2024.

2.0 PROJECT INFORMATION

2.1 Scope of the Project

The scale and scope of the Project as stated in the EP include:

- Site clearance;
- Construction of a temporary storm water system;
- Stockpiling of 6 million m³ of public fill;
- Setting up two barging points: one at the TKO Basin and one at the Construction and Demolition Material Sorting Facility (C&DMSF) for transporting the stockpiled public fill by barges;
- Setting up a temporary barging point at the existing Explosive Off-loading Barging Point located in the south-eastern part of Area 137 for the month of May 2004 to December 2004 for transporting the stockpiled public fill by barge;
- Construction and operation of a Construction and Demolition Material Sorting Facility (C&DMSF);
- Setting up a Construction and Demolition Material Crushing Facility at the TKO Basin; and
- Remove the temporary fill bank.

2.2 Site Description

TKO Area 137 Fill Bank is located at the southern end of Wan Po Road. In the vicinity of the site are other industrial uses such as SENT landfill, TKO Industrial Estate, etc. Both Island Resort and Fullview Garden are also situated at more than 1.8km from the site. Other existing Air Sensitive Receivers (ASRs) and Noise Sensitive Receivers (NSRs), including resident developments and schools, are located at a further distance away from TKO Area 137.

June 2024 Page 1 of 16

ENA43756

Contract No.: CV/2021/09 Handling of Surplus Public Fill (2022-2023) - Tseung Kwan O Area 137 Fill Bank

Monthly EM&A Report No.30

2.3 **Work Programme**

Details of work programme are shown in Appendix G.

2.4 **Project Organization and Management Structure**

The project organization chart is shown in Appendix A.

2.5 **Contact Details of Key Personnel**

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

Table 2.1 Contact Details of Key Personnel

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 (Umwelt)	Mr. Ivan Ting	IEC	3756 9590	3582 3310
Contractor (CHZH-JV)	Zhou Chang Ying	Senior Project Manager	9626 6299	2247 4108
ET (ETL)	C. L. Lau	ET Leader	2946 7791	2695 3944

WORK PROGRESS IN THIS REPORTING PERIOD 3.0

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

- Operation of the Public Fill Reception Facilities at Tseung Kwan O Fill Bank (TKOFB): 1.
- 2. Operation of dewatering plant at TKOFB:
- 3. Operation and Maintenance of Artificial Intelligent System for Crushing Number 2, 3 and 4 (Model QJ241) at TKOFB:
- 4. Operation of the Integrated Public Fill Reception (Fixed Rigid Platform) at TKOFB:
- 5. Operation and maintenance of Wheel Washing Bays and Facilities at TKOFB;
- 6. Operation and Maintenance of the Wash House at TKOFB:
- 7. Personnel Position Tracking and Proximity Detection System of Moving Plant at TKOFB;
- 8. Operation and Maintenance a Digital Works Supervision System (DWSS) for TKOFB;
- 9. Maintenance of the Drainage Systems at TKOFB;
- Operation and Maintenance of crushing plants at TKOFB: 10.
- Delivery of Public Fill to Taishan at TKOFB; 11.
- 12. Construction of Gabion Wall at TKOFB;
- 13. Implementation of C Easy system at TKOFB (Phase 1)
- 14. Carry out GCO Probe test and SRT
- Operation of recycling public fill as blanket layer material of reclamation projects PMI No.70 15.
- PMI No. 94 Post Geotechnical Monitoring at TKOFB 16.
- Relocation works of soil platforms 17.
- PMI No. 89 Ground Investigation Works at TKOFB

4.0 AIR QUALITY MONITORING

4.1 **Monitoring Requirement**

TSP levels were monitored in the reporting period in accordance with the EM&A Manual. Table 4.4 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. A copy of the calibration certificates for the HVS and calibrator are attached in Appendix B1.

Table 4.1 Air Quality Monitoring Equipment

Equipment	Model and Make	
HVS	Graseby 105, Andersen G1051	
Calibrator	Tisch TE-5025A	

June 2024 Page 2 of 16

Monthly EM&A Report No.30

FNIA43756

Contract No.: CV/2021/09

Handling of Surplus Public Fill (2022-2023) - Tseung Kwan O Area 137 Fill Bank

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 every six days		
1-hr TSP	1 hr	Three times per every six days		

4.4 **Monitoring Locations**

Table 4.3 tabulates the air quality monitoring locations of this project.

Table 4.3 Air quality monitoring locations

Monitoring station	Location
TKO-A1	Site Egress
TKO-A2a	CREO

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 EM&A Manual.

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 was indicated on the flow rate chart.
- For TSP sampling, fiberglass filters (Whatman G653) 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 month of 1 hour or 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 desiccator for 24 hour with the temperature of 25°C + 3°C and the relative humidity (RH) <50% +5%.
- All measurement procedures in Section 2.3 of the EM&A Manual were followed during the reporting period.

June 2024 Page 3 of 16

ENA43756 Monthly EM&A Report No.30

Maintenance & Calibration

- 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 (wind speed and wind direction) were directly extracted from Tseung Kwan O Station of Hong Kong Observatory. All wind data during this reporting period are shown in Appendix E.

4.6 Action and Limit Levels

Table 4.4 shows the Action and Limit levels for 24-hr TSP and 1-hr TSP monitoring.

Table 4.4 Action and Limit Levels for 24-hr TSP and 1-hr TSP

Monitoring Location	24-hr TSP (μg/m³)		1-hr TSP (μg/m³)	
	Action Level	Limit Level	Action Level	Limit Level
TKO-A1	210	260	376	500
TKO-A2a *	210	260	376	500

Remark (*): Since dust monitoring stations TKO-A2 and TKO-A2a are located close to the major dust emission sources and also close to the same sensitive receptor and no significant difference between them on the prevailing meteorological conditions, the baseline data from TKO-A2 (August and September 2002 by MateriaLab) can also be valid in the case of TKO-A2a.

4.7 Event-Action Plans

Please refer to Appendix F for details.

4.8 Results and Observation

4.8.1 1-hour and 24-hour TSP Monitoring results

Monitoring data of both 1-hour and 24-hour TSP monitoring carried out in this reporting period are summarized in Appendix B2. Graphical presentation of 1-hour and 24-hour TSP monitoring results for the reporting period is shown in Appendix B3. Wind data included wind speed and wind direction was extracted from Tseung Kwan O Station of Hong Kong Observatory during this reporting period and is presented in Appendix E.

No exceedance of Action and Limit Level of 1-hr TSP and 24-hour TSP monitoring results was recorded during the reporting period.

The monitoring results for 1-hour TSP and 24-hour TSP are summarized in Table 4.5 and 4.6 respectively.

Table 4.5 Summary of 1-hr TSP monitoring results

Monitoring Location	Average (μg/m3)	Range (μg/m3)	Action Level (μg/m3)	Limit Level (μg/m3)
TKO-A1	254	229-276	276	500
TKO-A2a	257	232-279	376	500

Table 4.6 Summary of 24-hr TSP monitoring results

Monitoring Location	Average (µg/m3)	Range (µg/m3)	Action Level (µg/m3)	Limit Level (µg/m3)
TKO-A1	140	127-154	210	260
TKO-A2a	143	130-158	210	260

June 2024 Page 4 of 16

Monthly EM&A Report No.30

ENA43756

4.8.2 Observation

Generally, the Contractor implemented sufficient dust mitigation measures, including operation of the mist spraying systems at the CEDD Combined Reception Office and crushing plants. And the site egress area provided wheel washing facilities; Road dampening, water bowsers and automatic water sprinklers on the main haul roads. Other dust sources near TKO Area 137 also included operation of the temporary Construction Waste Sorting Facilities (CWSF) and dumping activities at the SENT Landfill.

5.0 Noise Monitoring

5.1 Monitoring Requirements

Noise monitoring was conducted at 1 monitoring station as specified in the approved EM&A Monitoring Proposal for good site practice. The equipment, parameter, frequency, duration, methodology, calibration details, results and observations of the noise monitoring for the reporting period are presented in this section.

5.2 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 (L_{x}). 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 5.1 summarizes noise monitoring equipment model being used. A copy of the calibration certificate for noise meter and calibrator are attached in Appendix C1

Table 5.1 Noise Monitoring Equipment

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

5.3 Monitoring Parameters, Duration and Frequency

Duration, frequencies and parameters of noise measurement are presented in Table 5.2.

Table 5.2 Duration, Frequencies and Parameters of Noise Monitoring

Time	Duration/min	Parameters	Frequency
Day-time: 0700-1900 hrs on normal weekday	30	L _{eq} , L ₁₀ , L ₉₀	Once per month

5.4 Monitoring Locations

One Noise monitoring was conducted at the noise monitoring location, TKO-N1 as shown in Figure 2 during the reporting period. Table 5.3 describes the location of the monitoring station.

Table 5.3 Noise Monitoring Location

Monitoring station	Location	Type of Measurement
TKO-N1	Outside site Egress along Wan Po Road	Free Field

5.5 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: ATime weighting : Fast

June 2024 Page 5 of 16

ENA43756 Monthly EM&A Report No.30

- Time measurement: 30 mins
- 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.
- 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.

5.6 Action and Limit Levels

The Action and Limit levels for noise levels derived as illustrated in Table 5.4.

Table 5.4 Action and Limit Levels for noise monitoring

Time Period	Time Period Action	
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A)

5.7 Event-Action Plans

Please refer to the Appendix F for details.

5.8 Results and Observation

5.8.1 Results

Only Day-time noise monitoring was carried out at monitoring station TKO-N1 in this reporting period. The detail of the noise monitoring is provided in Appendix C2. Graphical presentation of the monitoring result for the reporting period is shown in Appendix C3.

Since no documented complaints on noise issue were 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 monitoring.

5.8.2 Observation

The major noise source during the monitoring event was the dump truck traffic and crushing plant.

6.0 MARINE WATER QUALITY MONITORING

6.1 Monitoring Requirements

In accordance with the EM&A Manual, 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 Control Station, C1 & C1a and Monitoring Station, M4 & M4a & M5.

6.2 Monitoring Locations

For the Reclamation Project, there were 4 Designated Monitoring Stations and 2 Designated Control Stations specified in the EM&A Manual. Upon the completion of the monitoring programme under Stage 2 reclamation works, the ET started monitoring events at the impact station M4 and the control station C1 from 18 May 2004 onwards.

June 2024 Page 6 of 16

Contract No.: CV/2021/09 ENA43756
Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O Area 137 Fill Bank Monthly EM&A Report No.30

Figure 1 shows the location of the marine water quality monitoring stations. Table 6.1 describes the locations of the monitoring stations in the reporting period.

Table 6.1 Locations of Marine Water Monitoring Stations

Station Description	Code	HK Metric Grid E	HK Metric Grid N
Control Station (Ebb tide)	TKO-C1	844 740.208	815 371.502
Monitoring Station, Tung Lung Chau Fish Culture Zone	TKO-M4	847 741.029	812 977.878

Due to "Hong Kong International Airport, Three Runway System Project Contract 3206 – Main Reclamation Works "(3RS project) operation of the additional barging point at TKO Area 137, the ET started monitoring events at the impact station M4a, M5 and the control station C1a from 14 May 2018 onwards. The water quality survey/monitoring frequency and parameters at stations C1a, M4a and M5 shall be same as the requirements set out in the EM&A Manual and the monitoring results shall be incorporated in the monthly EM&A reports.

Figure 4 shows the location of water control station C1a and water monitoring station M4a and M5.

Table 6.2 describes the locations of the additional marine water monitoring stations

Table 6.2 Locations of Additional Marine Water Monitoring Stations (3RS project)

Station Description	Code	HK Metric Grid E	HK Metric Grid N
Control Station (Ebb tide)	C1a	845647	814146
Immost Manitarian Otation	M4a	845922	813973
Impact Monitoring Station	M5	847005	813678

6.3 Monitoring Parameters

Monitoring of the marine water quality parameters are listed in Table 6.3.

Table 6.3 Marine Water Quality Monitoring Parameters

In-situ measurement	Laboratory analysis
Depth (m)	Suspended solids (mg/L)
Temperature (°C)	
Dissolved Oxygen (mg/L and % saturation)	
Turbidity (NTU)	
Salinity (ppt)	

6.4 Monitoring Frequency

The monitoring frequency of the marine water monitoring is summarized in Table 6.4.

Table 6.4 Monitoring frequency of the marine water

Parameter	Frequency	No. of Location	No. of Depths
Temperature		2	
Salinity		(TKO-C1 and TKO-	3
Dissolved Oxygen (DO)	3 days/week,	M4)	(Surface, mid-depth
Turbidity	2 tides/day	and 3	& bottom)
Suspended solids (SS)		(C1a, M4a and M5)	

6.5 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.

June 2024 Page 7 of 16

Monthly EM&A Report No.30

FNA43756

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, 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, labelled 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 6.5.

Table 6.5 Summary of testing procedures

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.

June 2024 Page 8 of 16

Monthly EM&A Report No.30



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 6.6 shows the equipment used for in-situ monitoring of water quality. The calibration certificates are attached in Appendix D1.

Table 6.6 Details of Marine Water Quality Monitoring Equipment (In-site measurement)

	,	0 1 1		,
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	16/4/24	15/7/24	ET/EW/008/011*
Water Depth	Speedtech SM-5			ET/EW/002/08

Remark: (*) indicates the instrument should be calibrated on use.

6.6 **Action and Limit Level**

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

Water Quality Action and Limit Levels Table 6.7

Parameter	Action Level	Limit Level
DO (mg/L)	Surface & Middle <5.45 mg/L (5%-ile of baseline data) Bottom <4.72 mg/L (5%-ile of baseline data)	Surface & Middle <5.10 mg/L (1%-ile of baseline data) Bottom <2.00 mg/L
SS (mg/L)	>6.74 mg/L (95%-ile of baseline data) or	>7.67 mg/L (99%-ile of baseline data) or
(Depth-	>120% of the upstream control station's	>130% of the upstream control station's
averaged)	SS at the same tide on the same day	SS at the same tide on the same day
Turbidity	>4.28 NTU (95%-ile of baseline data) or	>4.58 NTU (99%-ile of baseline data) or
(NTU) (Depth-	>120% of the upstream control station's	>130% of the upstream control station's
averaged)	turbidity at the same tide on the same day	turbidity at the same tide on the same day

The water quality Action and Limit Levels (3RS project) are presented in the table below.

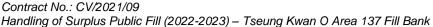
Water Quality Action and Limit Levels (3RS project) Table 6.8

		10 [5:0]001/
Parameter	Action Level	Limit Level
DO (mg/L)	Surface & Middle <5.5 mg/L Bottom <5.2 mg/L	Surface & Middle <4.00 mg/L (1%-ile of baseline data) Bottom <2.00 mg/L
SS (mg/L) (Depth- averaged)	>4.9 mg/L or >120% of the upstream control station's SS at the same tide on the same day	>5.2 mg/L or >130% of the upstream control station's SS at the same tide on the same day
Turbidity (NTU) (Depth- averaged)	>3.9NTU or >120% of the upstream control station's turbidity at the same tide on the same day	>4.2 NTU or >130% of the upstream control station's turbidity at the same tide on the same day

June 2024 Page 9 of 16

東業德勤測試顧問有限公司

Monthly EM&A Report No.30



Handling of Surplus Public Fill (2022-2023) - Tseung Kwan O Area 137 Fill Bank

6.7 **Event and Action Plan**

Please refer to the Appendix F for details.

6.8 Monitoring Duration in this reporting period

Below is the time schedule for the marine water quality monitoring events that were conducted in this reporting period:

Table 6.9 Time Schedule of Impact Marine Water Quality Monitoring

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

Remark: (∇) = Marine water quality monitoring carried out by ET.

6.9 **Marine Water Quality Monitoring Results**

The impact water quality measurement results are detailed in Appendix D2. Appendix D3 presents the water quality monitoring data and graphical presentations of monitoring results. The summary of marine water quality exceedances is shown in Table 6.10.

Summary of Impact Marine Water Quality Exceedances Table 6.10

Station	Exceedance	D	0	Turk	oidity	S	S	To	tal
	Level	Flood	Ebb	Flood	Ebb	Flood	Ebb	Flood	Ebb
TKO-M4	Action	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0

The impact water quality measurement results (3RS project) are detailed in Appendix D4. Appendix D5 presents the water quality monitoring data and graphical presentations of monitoring results. The summary of marine water quality exceedances (3RS project) is shown in Table 6.11.

Table 6.11 Summary of Impact Marine Water Quality Exceedances (3RS project)

-		Carriery of impact mainter water waters and extensions (of the project)								
	Station	Exceedance	DO		Turbidity		SS		Total	
	Station	Level	Flood	Ebb	Flood	Ebb	Flood	Ebb	Flood	Ebb
	M4a	Action	0	0	0	0	0	0	0	0
	IVI4a	Limit	0	0	0	0	0	0	0	0
	ME	Action	0	0	0	0	0	0	0	0
	M5	Limit	0	0	0	0	0	0	0	0

According to the summary of marine water monitoring results, no exceedance of Action and limit levels was recorded for this reporting period.

June 2024 Page 10 of 16

ENA43756 Monthly EM&A Report No.30

7.0 ENVIRONMENTAL AUDIT

7.1 Weekly ET Site Inspections and EPD's Site Inspection

7.1.1 Weekly ET Site Inspections

Weekly ET 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 period, four weekly site inspections were conducted (05, 12, 19, and 24 June 2024). Table 7.1 presents the key findings of weekly ET site inspection in this reporting period.

Table 7.1 Key Findings of Weekly ET Site Audits in this reporting period

			p 0 · · · · · g p 0 · · · 0 u					
Date	Key Findings	Action(s) Taken recommended by ET	Action(s) Taken by the Contractor during the ET weekly site audit	Rectification Status by ET				
05 June 2024	No defective work or observation was recorded during the weekly ET site inspection							
12 June 2024	No defective work or obs	No defective work or observation was recorded during the weekly ET site inspection						
19 June 2024	No defective work or obs	No defective work or observation was recorded during the weekly ET site inspection						
24 June 2024	No defective work or observation was recorded during the weekly ET site inspection							

7.1.2 EPD's Site Inspection

EPD's site inspection was carried out on 20 June 2024 in this reporting period.

7.2 Review of Environmental Monitoring Procedures

The monitoring works conducted by the Environmental Team were inspected regularly. The observations for the monitoring works were recorded and summarized as follows:

Air Quality Monitoring

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

Noise Monitoring

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

Water Quality Monitoring

 The monitoring team recorded the observations around the monitoring stations, which might affect the results.

7.3 Assessment of Environmental Monitoring Results

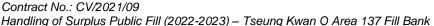
All monitoring results were audited against the Action and Limit levels and any exceedance would be validated.

No exceedance was recorded in water quality, air quality and noise monitoring in this reporting period.

The monitoring results in this reporting period were comparable with those of baseline month. Detailed discussions were given in Section 4, 5 and 6 of this Report.

June 2024 Page 11 of 16

Monthly EM&A Report No.30



Handling of Surplus Public Fill (2022-2023) - Tseung Kwan O Area 137 Fill Bank

7.4 Advice on the Solid and Liquid Waste Management Status

The Contractor usually disposed of non-inert waste, including general refuse and materials segregated from the existing stockpiles, to SENT landfill. Table 7.2 summarizes data on offsite waste disposal in this reporting period and the Monthly Summary Waste Flow Table is shown in Appendix

Table 7.2 Actual amounts of Waste generated in this reporting period

Waste Type	Actual Amount	Disposal Locations
Public Fill ('000m³)	0	TKO 137 Fill Bank
C&D Waste ('000kg)	102.09	SENT Landfill / Refuse Collection Point
Chemical Waste (kg/L)	0 (L)	Collected by licensed collector

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.

Concrete bunding has erected outside the CEDD combined reception office and near the automatic wheel washing facilities for storing generator sets and oil drums. 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 were 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, DP3 and DP4 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.

8.0 Status of Environmental Licensing and Permitting

All permits/licenses valid in this reporting period are summarized in Table 8.1.

Table 8.1 Summary of environmental licensing and permit status

Table 0.1 Summary of environmental licensing and permit status								
Description	Permit No.	Valid	Period	Section				
		From	То					
Environmental Permit	EP- 134/2002/ Q	31/10/23	01/01/20 27	 Site clearance Construction of a temporary storm water system Stockpiling of 12 million m3 of public fill Setting up two barging points for transporting the stockpiled public fill by barges Setting up a temporary barging point at the existing Explosive Off-loading Barging Point for the month of May 2004 to December 2004 for transporting the stockpiled public fill by barge Construction of operation of a construction and Demolition Material Sorting Facility (C&DMSF) Setting up a Construction and Demolition Material Crushing Facility at the TKO Basin Remove the temporary fill bank 				
Chemical Waste Registration	5213-839- C3750-04	19/04/17		Spent battery cell containing heavy metals and spent lubricating oil				

June 2024 Page 12 of 16



Contract No.: CV/2021/09 ENA43756
Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O Area 137 Fill Bank Monthly EM&A Report No.30

Effluent Discharge License	WT000411 69-2022	06/06/22	30/06/27	 Effluent, Surface Run-off, and all other wastewater discharges from screen and sedimentation tank
Marine Dumping Permit	EP/MD/24- 078	02/03/24	30/06/24	 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
Billing Account for Waste Disposal	7042821	22/05/17	End of project	
Notification Pursuant to Section 3(3) of the Air Pollution Control (Construction Dust)	475209	12/04/17	End of project	

9.0 ENVIRONMENTAL NON-CONFORMANCE

9.1 Summary of air quality, noise and marine water quality

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

Since no documented complaints on noise issue were 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 monitoring.

According to the summary of marine water monitoring results, no exceedance of Action and Limit levels was recorded for this reporting period.

9.2 Summary of Environmental Complaints

No complaint was received in this reporting period.

9.3 Summary of Notification of Summons and successful Prosecution

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

10.0 IMPLEMENTATION STATUS

10.1 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. Any deficiencies were noted in the remarks of the schedule.

10.2 Implementation Status of Event and Action Plan

Since no exceedance of Action and Limit level of air quality, noise and marine water monitoring results was recorded for this reporting period, no further action was required.

10.3 Implementation Status of Environmental Complaint, Notifications of Summons and Successful Prosecutions Handling

A summary of environmental complaints, notifications of summons and successful prosecutions was given in Table 10.1 and further details of the complaint could be found in the Complaint Log (Appendix N).

June 2024 Page 13 of 16

Monthly EM&A Report No.30

FNΔ43756

Contract No.: CV/2021/09 Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O Area 137 Fill Bank

Table 10.1 Summary of Environmental Complaints and Prosecutions

Complaints logged		Summon	s served	Successful prosecution received		
June 2024	Cumulative	June 2024	Cumulative	June 2024	Cumulative	
0	18	0	0	0	0	

11.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Impact monitoring of air quality, noise and water quality were carried out at designated locations in accordance with the EM&A Manual in this reporting period.

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

Since no documented complaints on noise issue were 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 monitoring.

According to the summary of marine water monitoring results, no exceedance of Action and Limit levels was recorded for this reporting period.

No complaint, prosecutions and notifications of summons were received in this reporting period.

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

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, crushing plant, 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;
- Provide continuously water spraying system for crushing plant including receiving point and unloading point;
- Provide enclosed conveyor belt for transporting the crushed material directly to the unloading point
- Provide dust screen fenced for crushing plant, and the receiving point of crushing facility would be situated inside an enclosure with one side opening for vehicular access;
- 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 site 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, permanent desilting chambers, regularly;
- Operate and maintain the silt curtains regularly;

June 2024 Page 14 of 16



Contract No.: CV/2021/09 ENA43756
Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O Area 137 Fill Bank Monthly EM&A Report No.30

- Operate the cleaning vessel within the TKO Basin regularly;
- Clean up the fill material on the concrete pavement at BHA frequently; and
- Remove the stagnant water or provide approved pesticides for the stagnant water in the permanent desilting chambers, 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 in accordance with the Landscape Plan.

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 mesh screen on top of the additional drainage to avoid improper dumping of rubbish;
- 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

12.0 FUTURE KEY ISSUES

12.1 Work Programme for the Coming Month

- 1. Operation of the Public Fill Reception Facilities at Tseung Kwan O Fill Bank (TKOFB);
- 2. Operation of dewatering plant at TKOFB:
- 3. Operation and Maintenance of Artificial Intelligent System for Crushing Number 2, 3 and 4 (Model QJ241) at TKOFB:
- 4. Operation of the Integrated Public Fill Reception (Fixed Rigid Platform) at TKOFB:
- 5. Operation and maintenance of Wheel Washing Bays and Facilities at TKOFB;
- 6. Operation and Maintenance of the Wash House at TKOFB;
- 7. Personnel Position Tracking and Proximity Detection System of Moving Plant at TKOFB;
- 8. Operation and Maintenance a Digital Works Supervision System (DWSS) for TKOFB;
- 9. Maintenance of the Drainage Systems at TKOFB;
- 10. Operation and Maintenance of crushing plants at TKOFB;
- 11. Delivery of Public Fill to Taishan at TKOFB:
- 12. Construction of Gabion Wall at TKOFB;
- 13. Implementation of C Easy system at TKOFB (Phase 1)
- 14. Carry out GCO Probe test and SRT
- 15. Operation of recycling public fill as blanket layer material of reclamation projects PMI No.70
- 16. Relocation works of soil platforms
- 17. PMI No. 89 Ground Investigation Works at TKOFB

12.2 Key Issues for the Coming Month

Key issues to be considered in the coming month include:

- Chemical and waste management;
- Treatment of runoff and wastewater prior to discharge;
- Dust generated from loading and unloading activities;
- Dust generated from dump trucks traffic;
- Regular checking of the drainage system;
- Flood prevention; and
- Noise from operation of the crushing plant.

Mitigation measures to be required in the coming month:

Air Quality Impact

- To provide adequate water spraying on haul roads and working platform;
- To operate and maintain automatic wheel washing facilities properly;
- To dampen the fill material prior to unloading or movement;
- To provide road sweeping on haul road near site egress and public roads outside site egress;
- To ensure implementation of the dust mitigation measures for the site activities;
- To maintain proper operation of the mist spraying system;

June 2024 Page 15 of 16



Contract No.: CV/2021/09 ENA43756
Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O Area 137 Fill Bank Monthly EM&A Report No.30

- To provide proper maintenance for vehicles and machines on site; and
- To investigate any other dust sources around the air sensitive receivers

Noise

- To switch off equipment if not in use;
- To operate silent equipment;
- To identify the noise sources inside and outside of the site;
- To follow up any exceedance caused by the Fill Bank operation; and
- To re-schedule the work activities in the event of valid noise exceedance.

Water Quality Impact

- To maintain the drainage system in the Fill Bank;
- To ensure the cleanliness of oil interceptor bypass tanks and all the drainage channels;
- To maintain the existing silt trap to ensure good efficiency of wheel wash facilities;
- To repair, inspect and maintain the silt curtains regularly;
- To provide covers for the drip trays to avoid stagnant water pond due to rainfall;
- To deploy a cleaning vessel to remove floating rubbish in the TKO Basin;
- To clean up the concrete paved area at Portion I every night to avoid fill materials from being washed into the sea;
- To avoid any stagnant water or provide insecticide to avoid mosquito breeding in the Fill Bank.
- To prevent untreated wastewater directly discharge into nullahs; and
- To provide desilting facilities such as granular rock filter and geotextile filter at nullah.

Chemical and Waste Management

- To remove waste from the site regularly;
- To properly store and handle chemical wastes on site;
- To implement trip ticket system for all the imported public fill and general refuse disposal;
- To provide and manage sufficiently sized drip trays for diesel drums or chemical containers;
- To remove existing unwanted material in the stockpiles and avoid improper disposal at the Fill Bank through inspection of imported truckloads;
- To maintain proper housekeeping at the workshop area;
- To remove the oil stains in the event of leakage and handle all materials using for this cleaning works as chemical waste:
- To maintain mesh screen on top of the additional drainage, DP3 opening to avoid improper dumping of rubbish into this channel; and
- To identify C&D material by packaging, labeling, storage, transportation and disposal in accordance with statutory regulations.

12.3 Monitoring Schedule for the Coming Month

The proposed EM&A program of the coming month and predicted tide schedule from the Hong Kong Observatory are attached in Appendix L.

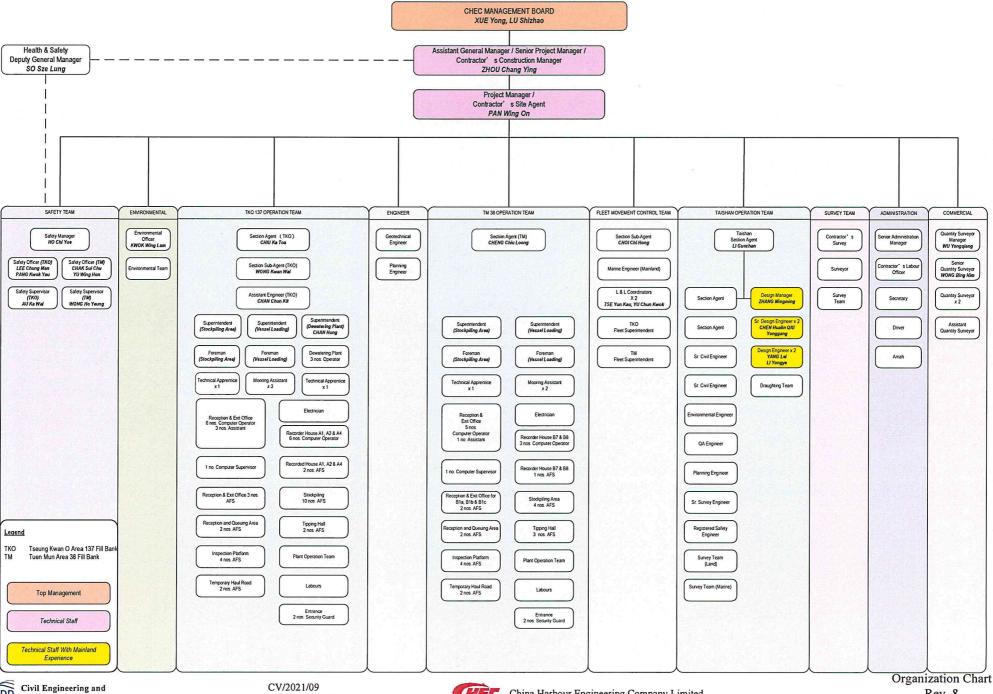
- END OF REPORT -

June 2024 Page 16 of 16



Appendix A

Project Organization Chart









Appendix B1

Calibration Certificates for Impact Air Quality Monitoring Equipment



RECALIBRATION DUE DATE:

January 15, 2025

Certificate of Calibration

Calibration Certification Information

Cal. Date: Ja

Calibration Model #:

January 15, 2024

TE-5025A

Rootsmeter S/N: 438320

Ta: 295
Pa: 756.4

°K

Operator:

Jim Tisch

Calibrator S/N: 4228

mm Hg

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4400	3.3	2.00
2	3	4	1	1.0250	6.4	4.00
3	5	6	1	0.9240	8.0	5.00
4	7	8	1	0.8780	8.9	5.50
5	9	10	1	0.7230	12.8	8.00

	Data Tabulation								
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	√∆H(Ta/Pa)				
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)				
1.0010	0.6951	1.4180	0.9956	0.6914	0.8832				
0.9969	0.9726	2.0054	0.9915	0.9674	1.2490				
0.9948	1.0766	2.2421	0.9894	1.0708	1.3964				
0.9936	1.1316	2.3515	0.9882	1.1256	1.4646				
0.9884	1.3671	2.8361	0.9831	1.3597	1.7664				
	m= 2.11633			m=	1.32521				
QSTD[b=	-0.04857	QA	b=	-0.03025				
	r=	0.99987		r=	0.99987				

	Calculation	ns					
$Vstd = \Delta Vol((Pa-\Delta P)/Pstd)(Tstd/Ta) Va = \Delta Vol((Pa-\Delta P)/Pa)$							
Qstd=	Vstd/ΔTime	Qa= Va/ΔTime					
	For subsequent flow rat	e calculatio	ns:				
$\mathbf{Qstd} = \frac{1}{m} \left(\left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right) - b \right) \qquad \mathbf{Qa} = \frac{1}{m} \left(\left(\sqrt{\Delta H \left(Ta/Pa \right)} \right) - b \right)$							

	Standard Conditions
Tstd:	298.15 ° _K
Pstd:	760 mm Hg
	Key
ΔH: calibrator	manometer reading (in H2O)
ΔP: rootsmete	er manometer reading (mm Hg)
Ta: actual abs	olute temperature (°K)
Pa: actual bar	ometric pressure (mm Hg)
b: intercept	
m: slope	

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30



東業德勤測試顧問有限公司

ETS-TESTCONSULT LTD.

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

TEST REPORT

Calibration Report **High Volume Air Sampler**

Manufacturer

Graseby 105

Date of Calibration

15 April 2024

Serial No.

9795 (ET/EA/003/18)

Calibration Due Date

14 June 2024

Method

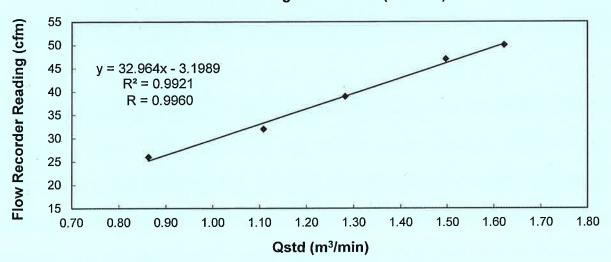
Five-point calibration by using standard calibration kit Tisch TE-5025A refer to the

Operations Manual

Results

Flow recorder rea	50	47	39	32	26	
Qstd (Actual flow	1.62	1.50	1.28	1.11	0.86	
Pressure: 759.81 mm Hg			Temp.:	301	K	

Sampler 9795 Calibration Curve Site: Tseung Kwan O 137 (TKO-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:

(Assistant Supervisor)

Checked by :

LAU, Chi Leung

(Environmental Team Leader)



東業德勤測試顧問有限公司 ETS-TESTCONSULT LTD.

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

8/F Block B.

Verlstrong Industrial Centre, 34-36 Au Pul Wan Street, Fo Tan, Hong Kong

TEST REPORT

Calibration Report of High Volume Air Sampler

Manufacturer

Graseby 105

Date of Calibration

14 June 2024

Serial No.

9795 (ET/EA/003/18)

Calibration Due Date

13 August 2024

Method

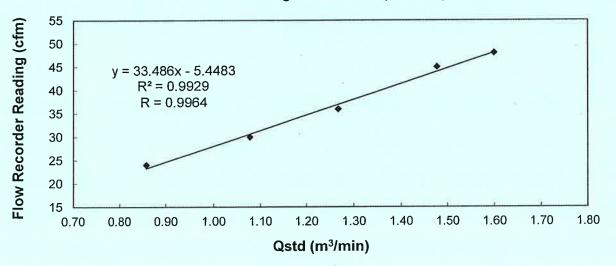
Five-point calibration by using standard calibration kit Tisch TE-5025A refer to the

Operations Manual

Results

Flow recorder rea	48	45	36	30	24	
Qstd (Actual flow	1.60	1.48	1.27	1.08	0.86	
Pressure: 753.14 mm Hg			Temp.:	303	K	

Sampler 9795 Calibration Curve Site: Tseung Kwan O 137 (TKO-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)



東業德勤測試顧問有限公司

ETS-TESTCONSULT LTD.

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: ett@ets-testconsult.com W: www.ets-testconsult.com

TEST REPORT

Calibration Report of

High Volume Air Sampler

Manufacturer

Andersen G1051

Date of Calibration

15 April 2024

Serial No.

: 1176 (ET/EA/003/05)

Calibration Due Date

14 June 2024

Method

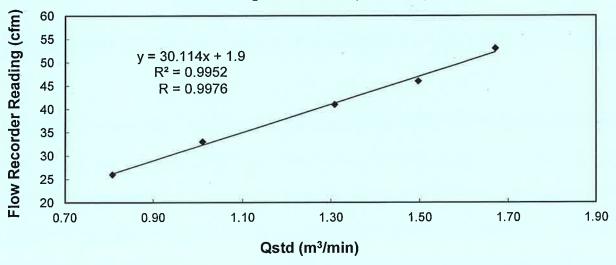
Based on Operations Manual for the 5-point calibration using standard calibration kit

manufactured by Tisch TE-5025 A

Results

Flow recorder read	ling (cfm)		53	46	41	33	26
Qstd (Actual flow r	ate, m³/min)		1.67	1.50	1.31	1.01	0.81
Pressure :	759.81	mm Hg		Temp.:	301	K	

Sampler 1176 Calibration Curve Site: Tseung Kwan O 137 (TKO-A2a)



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)



東業德勤測試顧問有限公司 ETS-TESTCONSULT LTD.

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

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

TEST REPORT

Calibration Report of

High Volume Air Sampler

Manufacturer

Andersen G1051

Date of Calibration

14 June 2024

Serial No.

1176 (ET/EA/003/05)

Calibration Due Date

13 August 2024

Method

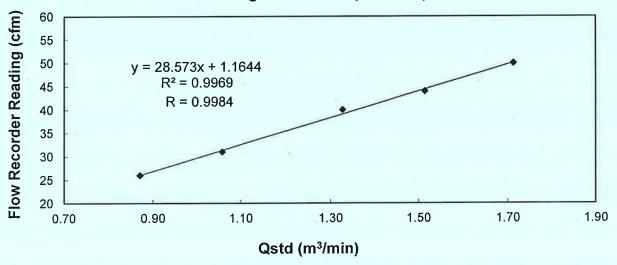
Based on Operations Manual for the 5-point calibration using standard calibration kit

manufactured by Tisch TE-5025 A

Results

Flow recorder read	ding (cfm)		50	44	40	31	26
Qstd (Actual flow r	rate, m³/min)		1.71	1.51	1.33	1.06	0.87
Pressure:	753.14	mm Hg		Temp. :	303	K	

Sampler 1176 Calibration Curve Site: Tseung Kwan O 137 (TKO-A2a)



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)



Appendix B2

Impact Air Quality Monitoring Results

Summary of 24-hr TSP Monitoring Results



Monitoring Station : TKO-A1

Location : Site Egress

Sta	art	Finish		Elapse Time		Sampling	Flow Rate (m ³ /min.)		Average	Filter Weight (g)		2 (3)
Date	Time	Date	Time	Initial	Final	Time (hrs)	Initial	Final	(m³/min.)	Initial	Final	Conc. (μg/m³)
4/6/2024	08:00	5/6/2024	08:00	28778.74	28802.74	24.00	1.0981	1.0981	1.0981	2.7352	2.9360	127
10/6/2024	08:00	11/6/2024	08:00	28805.74	28829.74	24.00	1.0981	1.0981	1.0981	2.7340	2.9427	132
15/6/2024	08:00	16/6/2024	08:00	28832.74	28856.74	24.00	1.1482	1.1482	1.1482	2.8208	3.0424	134
21/6/2024	13:00	22/6/2024	13:00	28859.74	28883.74	24.00	1.1183	1.1183	1.1183	2.7661	3.0109	152
27/6/2024	08:30	28/6/2024	08:30	28886.74	28910.74	24.00	1.1183	1.1183	1.1183	2.8385	3.0865	154

Monitoring Station : TKO-A2a

Location : CREO

Sta	art	Fin	Finish		Elapse Time		Flow Rate (m ³ /min.)		Average	Filter W		
Date	Time	Date	Time	Initial	Final	Sampling Time (hrs)	Initial	Final	(m ³ /min.)	Initial	Final	Conc. (μg/m³)
4/6/2024	08:00	5/6/2024	08:00	30782.71	30806.71	24.00	0.9995	0.9995	0.9995	2.7211	2.9082	130
10/6/2024	08:00	11/6/2024	08:00	30809.71	30833.71	24.00	0.9995	0.9995	0.9995	2.7411	2.9340	134
15/6/2024	08:00	16/6/2024	08:00	30836.71	30860.71	24.00	1.0792	1.0792	1.0792	2.8617	3.0731	136
21/6/2024	13:00	22/6/2024	13:00	30863.71	30887.71	24.00	1.0442	1.0442	1.0442	2.7927	3.0288	157
27/6/2024	08:30	28/6/2024	08:30	30890.71	30914.71	24.00	1.0442	1.0442	1.0442	2.7712	3.0088	158

Summary of 1-hr TSP Monitoring Results

東業德勤測試顧問有限公司 ETS-TESTCONSULT LIMITED

Monitoring Station: TKO-A1

Location : Site Egress

Sta	art	Fin	ish	Elapse Time		Sampling	Flow Rate (m ³ /min.)		Average	Filter Weight (g)		Conc. (μg/m³)
Date	Time	Date	Time	Initial	Final	Time (hrs)	Initial	Final	(m ³ /min.)	Initial	Final	(μg/π)
3/6/2024	09:30	3/6/2024	10:30	28777.74	28778.74	1.00	1.0981	1.0981	1.0981	2.7197	2.7348	229
5/6/2024	08:50	5/6/2024	9:50	28802.74	28803.74	1.00	1.0981	1.0981	1.0981	2.7146	2.7299	232
5/6/2024	09:50	5/6/2024	10:50	28803.74	28804.74	1.00	1.0981	1.0981	1.0981	2.7463	2.7619	237
7/6/2024	09:00	7/6/2024	10:00	28804.74	28805.74	1.00	1.0981	1.0981	1.0981	2.7523	2.7675	231
12/6/2024	09:50	12/6/2024	10:50	28829.74	28830.74	1.00	1.0981	1.0981	1.0981	2.7341	2.7505	249
12/6/2024	10:50	12/6/2024	11:50	28830.74	28831.74	1.00	1.0981	1.0981	1.0981	2.7352	2.7519	253
14/6/2024	10:30	14/6/2024	11:30	28831.74	28832.74	1.00	1.1482	1.1482	1.1482	2.7737	2.7905	244
17/6/2024	09:40	17/6/2024	10:40	28856.74	28857.74	1.00	1.1482	1.1482	1.1482	2.7352	2.7528	255
17/6/2024	10:45	17/6/2024	11:45	28857.74	28858.74	1.00	1.1482	1.1482	1.1482	2.7134	2.7312	258
19/6/2024	10:30	19/6/2024	11:30	28858.74	28859.74	1.00	1.1183	1.1183	1.1183	2.7384	2.7556	256
26/6/2024	09:20	26/6/2024	10:20	28883.74	28884.74	1.00	1.1183	1.1183	1.1183	2.7287	2.7463	262
26/6/2024	10:50	26/6/2024	11:50	28884.74	28885.74	1.00	1.1183	1.1183	1.1183	2.7301	2.7482	270
26/6/2024	13:30	26/6/2024	14:30	28885.74	28886.74	1.00	1.1183	1.1183	1.1183	2.7340	2.7518	265
28/6/2024	13:00	28/6/2024	14:00	28910.74	28911.74	1.00	1.1183	1.1183	1.1183	2.7364	2.7548	274
28/6/2024	14:05	28/6/2024	15:05	28911.74	28912.74	1.00	1.1183	1.1183	1.1183	2.7627	2.7812	276
28/6/2024	15:05	28/6/2024	16:05	28912.74	28913.74	1.00	1.1183	1.1183	1.1183	2.7242	2.7424	271

Monitoring Station: TKO-A2a

Location : CREO



Sta	art	Fin	ish	Elapse	e Time	Sampling	Flow Rate (m³/min.)		Average	Filter Weight (g)		0 (3)
Date	Time	Date	Time	Initial	Final	Time (hrs)	Initial	Final	(m³/min.)	Initial	Final	Conc. (μg/m³)
3/6/2024	09:40	3/6/2024	10:40	30781.71	30782.71	1.00	0.9995	0.9995	0.9995	2.8427	2.8566	232
5/6/2024	08:55	5/6/2024	9:55	30806.71	30807.71	1.00	0.9995	0.9995	0.9995	2.7369	2.7510	235
5/6/2024	09:55	5/6/2024	10:55	30807.71	30808.71	1.00	0.9995	0.9995	0.9995	2.7880	2.8024	240
7/6/2024	09:10	7/6/2024	10:10	30808.71	30809.71	1.00	0.9995	0.9995	0.9995	2.7544	2.7684	233
12/6/2024	10:00	12/6/2024	11:00	30833.71	30834.71	1.00	0.9995	0.9995	0.9995	2.7431	2.7583	253
12/6/2024	11:00	12/6/2024	12:00	30834.71	30835.71	1.00	0.9995	0.9995	0.9995	2.7534	2.7687	255
14/6/2024	10:40	14/6/2024	11:40	30835.71	30836.71	1.00	1.0792	1.0792	1.0792	2.7884	2.8044	247
17/6/2024	09:50	17/6/2024	10:50	30860.71	30861.71	1.00	1.0792	1.0792	1.0792	2.7832	2.7999	258
17/6/2024	10:55	17/6/2024	11:55	30861.71	30862.71	1.00	1.0792	1.0792	1.0792	2.7328	2.7498	263
19/6/2024	10:40	19/6/2024	11:40	30862.71	30863.71	1.00	1.0442	1.0442	1.0442	2.7499	2.7662	260
26/6/2024	09:30	26/6/2024	10:30	30887.71	30888.71	1.00	1.0442	1.0442	1.0442	2.7230	2.7396	265
26/6/2024	11:00	26/6/2024	12:00	30888.71	30889.71	1.00	1.0442	1.0442	1.0442	2.7397	2.7568	273
26/6/2024	13:40	26/6/2024	14:40	30889.71	30890.71	1.00	1.0442	1.0442	1.0442	2.8475	2.8643	268
28/6/2024	13:00	28/6/2024	14:00	30914.71	30915.71	1.00	1.0442	1.0442	1.0442	2.7206	2.7380	278
28/6/2024	14:10	28/6/2024	15:10	30915.71	30916.71	1.00	1.0442	1.0442	1.0442	2.7151	2.7326	279
28/6/2024	15:10	28/6/2024	16:10	30916.71	30917.71	1.00	1.0442	1.0442	1.0442	2.7618	2.7791	276

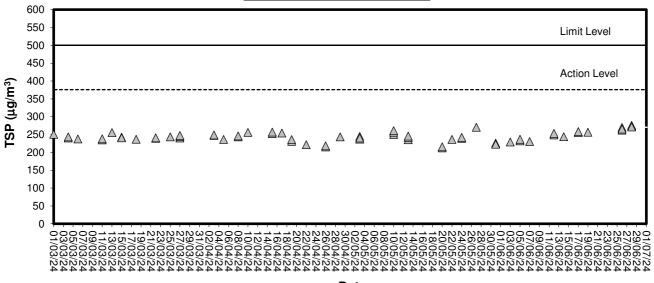


Appendix B3

Graphical Plots of Impact Air Quality Monitoring Data

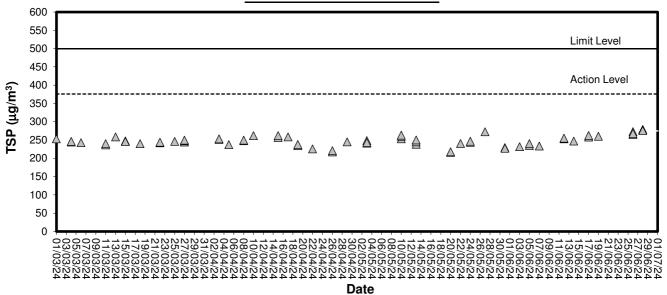


1-hour TSP level at TKO-A1



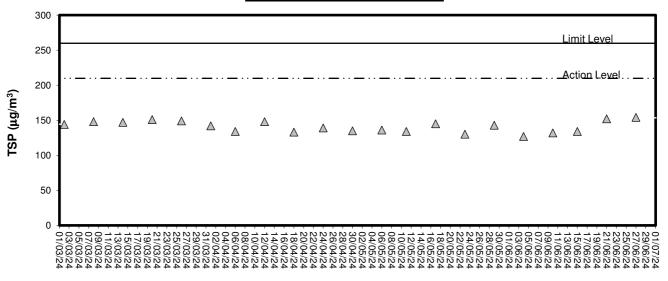
Date

1-hour TSP level at TKO-A2a



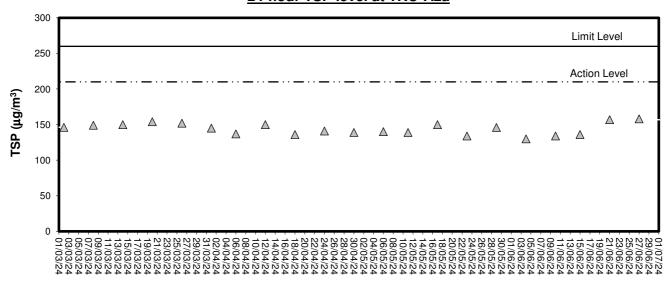


24-hour TSP level at TKO-A1



Date

24-hour TSP level at TKO-A2a



Date



Appendix C1

Calibration Certificates for Impact Noise Monitoring Equipment



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

F: +852 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.

: CSA38446

Page

of

2

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)

Description

Sound Level Calibrator

Manufacturer

RION

Equipment I.D.

ET/EN/002/01

Type

NC-73

Serial No.

10196943

Laboratory Information

Lab. Ref. No.

Q/CAL/23/9463/I

Procedure

: CQS/002/A

Date of Calibration

23-Nov-2023

Date of Receipt

15-Nov-2023

Date of Issue

24-Nov-2023

Calibration Location

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
- Measuring Amplifier, ET/2702/01/01
- Signal generator, ET/2503/01
- Reference Oscilloscope, ET/2502/01

Calibration specification

- To perform the calibration of sound level 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)

CHAN Chi Wai



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

Certificate No. : CSA38446

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	93.9	0.13	2.0

2. Actual Output Frequency:

Nominal Frequency	Nominal Output	Measured Output (Hz)	Expanded	Coverage
(Hz)	Sound Pressure (dB)		Uncertatiny (Hz)	Factor
1000	94.0	980.783	0.057	2.0

Remark:

- The uncertainty quoted is based on 95 % confidence level.
- Measured output are mean of three measurements.

End of certificate



8/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: 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

3

Information Provided by 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	RION
Туре	NL-52	UC-59	NH-25
Equipment I.D. no.	ET/EN/003/17	2	
Serial No.	00264519	03558	64644
Adaptors used	*		
Resolution	0.1 dB	4	

Laboratory Information

Lab. Ref. No.

Q/CAL/23/5141/I

Procedure

CQS/001/A

Date of Calibration

28-Jun-2023

Date of Receipt

21-Jun-2023

Date of Issue

28-Jun-2023

Calibration Location

Calibration Laboratory

Calibration Condition

Ambient Temperature : (20 ± 3) °C

: 30 minutes

Relative Humidity

(50 ± 20) %

Stabilizing Time

; (1000 ± 50) hPa

Sampling

As received

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 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



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

Certificate No. : CSA34546

Page : 2 of 3

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		93.7	-0.3	0.13	2.0
A-Weighting	Range	30 to 130	104.0	1	103.7	-0.3	0.13	2.0
	Mode	Fast	114.0		113.7	-0.3	0.13	2.0
	Self-cal	After	94.0		94.0	0.0	0.13	2.0
	Range	30 to 130	104.0	1	104.1	0.1	0.13	2.0
A 144-1-515	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	¥.	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
0.141-1-1-1	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
77.341.1.1.1	Mode	Fast	114.0		114.1	0.1	0.13	2.0
Z-Weighting	Self-cal	21	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

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 Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fo Tan. Hong Kong ETS-TESTCONSULT LTD.

8/F Block B, Fo Tan, Hong Kong

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



Calibration Certificate

Certificate No.

CSA34546

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	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																			
		8	125	77.9	72.2	-5.7	0.13	2.0																			
			250	85.4	83,6	-1.8	0.12	2.0																			
			500	90,8	90.9	0.1	0.12	2.0																			
30 to 130	Fast	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	1000 (Ref.)	94.0	94.0	0,0	0.13	2.0
				2000	95.1	94.0	-1.1	0.13	2.0																		
			4000	94,9	92,3	-2.6	0.13	2.0																			
- V			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																			

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							
			63	93.2	82,4	-10.8	0.15	2.0							
		1 1	125	93.8	88.1	-5.7	0.15	2.0							
			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	Fast	94	94	94	94	94	94	94	94	1000 (Ref.)	94.0	94.0	0.0	0.13	2.0
1				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	85.6	69.8	-15.8	0,20	2.2							

Frequency Response Z-Weighting (Unit in: dB)

Range	Mode	Applied Level	Frequency (Hz)	Reference Level	UUT Reading	Deviation	Expanded Uncertainty	Coverage Factor			
			31.5	94.0	77.6	-16.4	0.14	2.0			
			63	94.0	83.2	-10.8	0.15	2.0			
			125	94.0	88,3	-5.7	0.13	2.0			
		i	250	94.0	92.2	-1.8	0.14	2.0			
			500	94.0	94.0	0.0	0.12	2.0			
30 to 130	Fast	94	94	94	94	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



Appendix C2

Impact Noise Monitoring Results



Day-time Noise Monitoring

Monitoring Location: TKO-N1 (Site Egress)

Data	Start Sampling Time		Noise Level dB (A)			Weather	Major Noise	
Date (hh:mm)		L _{eq(30min)}	L ₁₀	L ₉₀	Speed (m/s)	Condition	Source	
03/06/2024	14:30	57.7	59.4	53.5	0.3	Rain	Dump Truck passing by	

Remark: 3dB(A) correction was added to the results during the free-field noise measurements



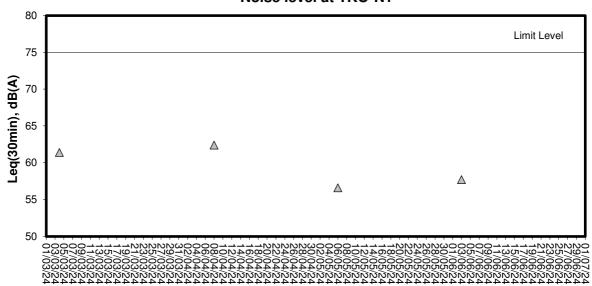
Appendix C3

Graphical Plots of Impact Noise Monitoring Data



Noise Monitoring (Day-time)

Noise level at TKO-N1



Date



Appendix D1

Calibration Certificates for Impact Marine Water Quality Monitoring Equipments



Performance Check / Calibration of Multiparameter Water Quality Meter

Equipment Ref. No. : ET/EW/008/011

Manufacturer

YSI

Model No.

Pro DSS

Serial No.

18M101760

Date of Calibration

16/4/2024

Calibration Due Date

15/7/2024

Results

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)
20.2	20.1	+0.1
25.5	25.5	+0.0
28.6	28.8	-0.2

Tolerance Limit (°C): ± 2.0

2. pH

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

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH unit)

Tolerance Limit (pH unit): ± 0.10

3. Conductivity

(Method Reference: APHA 19ed 2510 B)

Expected Reading (µS/cm)	Displayed Reading (μS/cm)	Tolerance (%)
146.9	148.2	+0.9
1412	1441	+2.1
12890	13050	+1.2
58760	59840	+1.8

Tolerance Limit (μS/cm): ± 10.0%

4. Salinity

(Method Reference: APHA 19ed 2520 B)

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)
10.0	10.14	+1.4
20.0	20.53	+2.7
30.0	30.39	+1.3

Tolerance Limit (g/L): ± 10.0%



	Manufacturer	: YSI
Model No. Pro DSS	Serial No.	: 18M101760
Date of Calibration : 17/1/2024	Calibration Due D	eate : 16/4/2024
5. Dissolved Oxygen Method Reference: APHA 19ed 4500-O (3)	
Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
1.98	2.12	+0.14
4.45	4.38	-0.07
6.24	6.09	-0.15
Folerance Limit (mg/L): ± 0.20	0.07	0.10
5. Turbidity		
Method Reference: APHA 19ed 2130 B)		
Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
10	9.8	-2.0
40	40.6	+1.5
100	103.0	+3.0
400	389.0	-2.8
	1. #	d acceptable # / unacceptable # for i
The equipment complies # / does not comp	ly " with the specified requirements and is deeme	
The equipment complies # / does not comp Delete as appropriate	ty" with the specified requirements and is deeme	
	ly " with the specified requirements and is deeme	
	ly " with the specified requirements and is deeme	
	ty with the specified requirements and is deeme	



Appendix D2

Impact Marine Water Quality Monitoring Results

Monitoring Station: TKO-C1



Date	Time	Ambient Temp	Monitorir		Temp	Salinit	ty (ppt)	Dissolv	ed Oxyger	n (mg/L)		d Oxygen tion (%)	Τι	ırbidity (NT	Ū)	Susper	nded Solids	s (mg/L)
Date	Time	Condition	(n	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		24	Surface	1.0	22.4	32.0 31.5	31.7	6.76 6.77	6.77		93.6 93.7	93.7	0.97	0.84		2.4	2.5	
3/6/2024	15:17:53	24	Middle	11.7	22.3	32.6 32.5	32.6	6.75 6.75	6.75	6.76	93.8 93.7	93.8	1.54	1.47	1.27	4.5	3.8	2.8
		/ Cloudy	Bottom	22.5	22.3	32.6	32.7	6.71	6.72	6.72	93.2	93.3	1.46	1.50		2.3	2.2	
			Surface	1.0	22.2	32.7 31.7	31.7	6.72 6.94	6.94		93.4 95.8	95.8	1.53 1.22	1.22		2.0 1.4	1.7	
5/6/2024	16:48:59	24	Middle	10.8	22.2	31.7 31.8	31.8	6.93 6.92	6.92	6.93	95.7 95.5	95.5	1.21 1.13	1.14	1.16	1.9 1.5	1.7	2.1
0, 0, =0 = 1		/ Cloudy	Bottom	20.7	22.2	31.8 31.8	31.8	6.92 6.92	6.92	6.92	95.5 95.5	95.5	1.15 1.11	1.13		1.8 3.4	3.1	
			Surface	1.0	23.4	31.8 31.7	31.7	6.92 7.15	7.14		95.5 100.8	100.6	1.14	1.15		2.8 1.5	1.9	
7/6/2024	18:00:58	25	Middle	10.0	23.1	31.7 32.0	32.0	7.12 6.81	6.79	6.96	100.4 95.6	95.4	1.16 1.22	1.23	1.25	2.2 1.5	2.0	1.7
		/ Cloudy	Bottom	19.0	22.8	32.0 32.1	32.1	6.77 6.54	6.53	6.53	95.1 91.4	91.3	1.24 1.37	1.36		2.5 1.6	1.4	
			Surface	1.0	23.0	32.1 31.8	31.8	6.52 7.00	7.00		91.1 98.0	98.0	1.35 0.47	0.47		1.1 6.3	6.4	
11/6/2024	7:00:46	28	Middle	11.2	22.8	31.8 31.9	31.9	7.00 6.99	7.00	7.00	98.0 97.6	97.7	0.47 0.47	0.48	0.56	6.4 5.7	5.4	6.0
		/ Cloudy	Bottom	21.5	22.8	31.9 32.0	32.0	7.00 6.97	6.98	6.98	97.7 97.4	97.5	0.49 0.71	0.73		5.0 5.7	6.3	
			Surface	1.0	23.2	32.0 31.4	31.4	6.98 6.98	6.98		97.5 97.8	97.8	0.75 0.35	0.35		6.9 2.3	3.4	
13/6/2024	8:11:29	29	Middle	10.9	22.8	31.4 31.8	31.8	6.97 6.54	6.53	6.75	97.7 91.3	91.2	0.35 0.56	0.58	0.63	4.5 2.6	2.7	3.3
		/ Cloudy	Bottom	20.9	22.6	31.8 32.2	32.2	6.52 6.23	6.22	6.22	91.0 86.8	86.6	0.59 0.94	0.96		2.8 4.0	3.7	
			Surface	1.0	22.8	32.2 29.8	29.8	6.20	6.64		86.4 91.7	91.6	0.98 1.16	1.15		3.3 4.4	3.5	
15/6/2024	11:00:14	28	Middle	11.1	22.7	29.8 31.1	31.1	6.63 6.23	6.22	6.43	91.5 86.4	86.3	1.13 1.64	1.65	1.65	2.5 1.1	1.3	2.1
		/ Cloudy	Bottom	21.1	22.6	31.2 32.2	32.2	6.21 5.97	5.96	5.96	86.2 83.2	83.1	1.65 2.14	2.15		1.5	1.6	
		00	Surface	1.0	23.6	32.3 23.9	23.9	5.95 6.52	6.53		83.0 88.1	88.3	2.16 0.12	0.13		3.2	2.7	
17/6/2024	15:21:08	29	Middle	10.9	22.4	23.8	33.2	6.54	6.02	6.27	83.8	84.0	0.13	0.67	0.71	2.2	2.8	2.8
		/ Cloudy	Bottom	21.0	22.2	33.3 33.5 33.5	33.5	6.03 6.02 5.99	6.01	6.01	84.2 83.9 83.5	83.7	0.69 1.31 1.38	1.35		3.7	3.0	
		30	Surface	1.0	23.8	20.5	20.5	7.12 7.09	7.11		94.8 94.4	94.6	1.16	1.16		2.2 2.6 5.5	4.1	
19/6/2024	16:03:36	30	Middle	10.8	22.8	33.4 33.5	33.5	6.66 6.63	6.65	6.88	93.8 93.4	93.6	1.03	1.04	1.20	2.1	2.8	2.9
		/ Cloudy	Bottom	20.5	22.5	34.0 34.0	34.0	6.58 6.54	6.56	6.56	92.5 91.9	92.2	1.39	1.42		2.1	1.8	
		30	Surface	1.0	24.2	24.4	24.4	7.38 7.35	7.37		101.1	100.9	0.77	0.79		3.6 3.7	3.7	
21/6/2024	17:33:38		Middle	10.6	22.8	32.6 32.6	32.6	6.42	6.40	6.88	90.0	89.8	0.94	0.96	0.99	3.8	4.2	3.9
		/ Fine	Bottom	20.3	22.5	33.7 33.8	33.8	5.92 5.89	5.91	5.91	83.1 82.7	82.9	1.23	1.24		4.8	4.0	-
		29	Surface	1.0	24.1	26.3 26.3	26.3	8.43 8.35	8.39		117.0 116.0	116.5	0.17	0.18		5.4 4.6	5.0	
25/6/2024	7:16:13		Middle	11.8	20.2	33.4 33.4	33.4	5.67 5.68	5.68	7.03	76.2 76.4	76.3	0.30 0.25	0.28	0.27	4.5 5.5	5.0	4.9
		/ Fine	Bottom	21.4	20.1	33.5 33.5	33.5	5.81 5.76	5.79	5.79	78.0 77.3	77.7	0.32	0.36		4.8	4.8	1
		30	Surface	1.0	24.1	25.5 25.5	25.5	8.59 8.56	8.58		118.0 118.0	118.0	0.16 0.18	0.17		4.2	3.8	
27/6/2024	8:00:51		Middle	11.6	20.6	32.3 32.3	32.3	5.78 5.74	5.76	7.17	77.7 77.2	77.5	0.18	0.25	0.25	4.8	4.3	4.2
		/ Fine	Bottom	22.0	20.1	33.5 33.5	33.5	5.53 5.52	5.53	5.53	74.2 74.0	74.1	0.32	0.33	1	4.1	4.5	
		29	Surface	1.0	24.2	23.4	23.5	9.11	9.08		124.0 123.0	123.5	0.01	0.02		3.7	4.1	
29/6/2024	10:02:32		Middle	10.6	20.9	32.1 32.2	32.1	5.76 5.74	5.75	7.41	77.8 77.4	77.6	0.02	0.02	0.15	4.9	4.4	4.0
		1	.		 	33.3		5.23			70.3	1	0.38	-		3.5	 	1

Monitoring Station: TKO-M4



Monitoring	Station .	Ambient Temp				Salinii	ty (ppt)	Dissolv	ed Oxyger	(ma/L)		d Oxygen	Tı	ırbidity (NT	10	Susper	nded Solids	s (ma/l)
Date	Time	(°C) / Weather Condition	Monitorir (n		Temp (°C)	Value	Average	Value	Average	Depth-	Satura Value	tion (%) Average	Value	Average	Depth-	Value	Average	Depth-
			Surface	1.0	22.4	31.8	31.6	6.74	6.75	average	93.3	93.3	0.74	0.69	average	2.1	2.4	average
3/6/2024	16:45:53	24	Middle	4.9	22.3	31.5 32.0	32.0	6.75 6.72	6.73	6.74	93.3 93.1	93.2	0.63 0.90	0.90	0.75	2.7 1.9	2.1	2.3
		/ Cloudy	Bottom	7.4	22.4	31.9 31.5	31.6	6.73 6.71	6.71	6.71	93.2 92.9	92.9	0.90	0.68		2.3 1.8	2.4	
			Surface	1.0	22.2	31.8 31.7	31.7	6.71 6.92	6.92	•	92.9 95.5	95.5	0.72 1.16	1.18		2.9	1.9	
5/6/2024	18:20:54	24	Middle	4.2	22.2	31.7 31.7	31.7	6.92 6.92	6.92	6.92	95.5 95.5	95.5	1.19 1.22	1.23	1.20	1.6 1.1	1.4	1.8
0/0/2024	10.20.04	/ Cloudy	Bottom	7.3	22.2	31.7 31.7	31.7	6.92 6.91	6.91	6.91	95.5 95.4	95.4	1.23	1.19	1.20	1.6 1.2	2.2	1.0
			Surface	1.0	23.3	31.7 31.9	31.9	6.91 6.95	6.94		95.4 97.9	97.7	1.18	1.06		3.2 1.4	1.3	
7/6/2024	19:08:25	25	Middle	4.2	23.0	31.9 32.1	32.1	6.93 6.77	6.76	6.85	97.4 95.0	94.8	1.06	1.14	1.16	1.1	1.8	1.7
		/ Cloudy	Bottom	7.4	23.0	32.2 32.2	32.2	6.74 6.55	6.55	6.55	94.6	91.9	1.13	1.28		1.7 2.8	2.2	
		28	Surface	1.0	23.0	32.3 31.8 31.8	31.8	6.54 6.99 6.99	6.99		91.7 97.9 97.9	97.9	1.28 0.48 0.49	0.49		1.5 5.3 4.8	5.1	
11/6/2024	8:29:20	20	Middle	5.5	22.8	31.8 31.8	31.8	7.00 6.99	7.00	6.99	97.7 97.6	97.7	0.49	0.49	0.49	6.1	5.6	5.6
		/ Cloudy	Bottom	9.6	22.8	31.8 31.9	31.9	6.98 6.98	6.98	6.98	97.4 97.4	97.4	0.51	0.51		6.5	6.1	
		29	Surface	1.0	23.2	31.3 31.4	31.3	6.94	6.94		97.3 97.1	97.2	0.44	0.44		2.4	3.0	
13/6/2024	9:19:44		Middle	5.1	23.1	31.6 31.6	31.6	6.57 6.56	6.57	6.75	92.0 91.9	92.0	0.48 0.46	0.47	0.52	3.6 5.6	4.6	3.7
		/ Cloudy	Bottom	9.2	23.0	31.8 31.8	31.8	6.23 6.21	6.22	6.22	87.3 87.0	87.2	0.63 0.66	0.65		3.7 3.0	3.4	
		28	Surface	1.0	22.9	29.8 29.9	29.9	6.62 6.59	6.61	6.42	91.5 91.1	91.3	1.17 1.16	1.17		1.4	1.3	
15/6/2024	12:15:37		Middle	4.7	22.8	30.5 30.6	30.5	6.23 6.22	6.23	0.42	86.3 86.2	86.3	1.46 1.48	1.47	1.53	1.5 2.5	2.0	1.9
		/ Cloudy	Bottom	8.2	22.8	31.6 31.6	31.6	5.99 5.96	5.98	5.98	83.5 83.1	83.3	1.93 1.95	1.94		2.8 1.9	2.4	
		29	Surface	1.0	23.5	24.3 24.4	24.3	6.46 6.44	6.45	6.24	87.4 87.2	87.3	0.08	0.08		2.9 2.7	2.8	
17/6/2024	16:30:15		Middle	5.6	22.4	33.3	33.3	6.02	6.03		84.2	84.3	0.65	0.66	0.53	3.3 4.3	3.8	3.4
		/ Cloudy	Bottom	10.2	22.3	33.4	33.5	6.04	6.04	6.04	84.3	84.3	0.86	0.87		3.6	3.5	
		30	Surface	1.0	23.8	20.4 20.4 33.3	20.4	6.91 6.88 6.54	6.90	6.72	91.9 91.5 92.5	91.7	1.16 1.18 1.04	1.17		1.8 1.4 2.1	1.6	
19/6/2024	17:02:28	/ Cloudy	Middle	5.3	23.1	33.3 33.7	33.3	6.53 6.49	6.54		92.4 91.4	92.5	1.06	1.05	1.20	3.0	2.6	2.1
		/ Cloudy	Bottom	9.6	22.7	33.7	33.7	6.45	6.47	6.47	90.8	91.1	1.37	1.37		2.4	2.2	
		30	Surface	1.0	24.1	24.4	24.4	7.05 6.20	7.07	6.63	96.5 87.2	96.7	0.72	0.72		2.2	2.4	
21/6/2024	18:41:23	/ Fine	Middle	5.1	23.0	32.5 33.8	32.5	6.17 5.73	6.19		86.8	87.0	0.88	0.87	0.88	3.5	3.5	3.0
			Bottom	9.3	22.7	33.8 27.3	33.8	5.72 8.21	5.73	5.73	80.6 113.0	80.7	1.05	1.05		2.8	3.0	
05/0/0004	0.45.00	29	Surface	1.0	23.7	27.4 33.0	27.3	8.15 5.81	8.18	6.98	113.0 79.8	113.0	0.11 0.17	0.10		3.5 6.2	3.8	
25/6/2024	8:45:08	/ Fine	Middle	4.7	21.5	33.1 33.3	33.0	5.74 5.92	5.78	F 0.1	78.9 79.5	79.4	0.16 0.27	0.17	0.18	6.4 4.5	6.3	5.0
			Bottom	9.0	20.2	33.4 25.2	33.4 25.2	5.90 8.55	5.91 8.54	5.91	79.3 117.0	79.4	0.30	0.29		5.2 3.0	4.9	
27/6/2024	9:01:54	30	Middle	5.0	24.0	25.2 32.4	32.4	8.52 5.79	5.77	7.15	117.0 79.8	79.5	0.12 0.18	0.11	0.18	4.0	4.9	4.6
£110/2024	3.01.04	/ Fine	Bottom	8.8	20.6	32.4 33.7	33.7	5.74 5.54	5.77	5.53	79.1 75.1	74.9	0.19 0.22	0.19	0.10	4.9 6.4	5.5	4.0
			Surface	1.0	24.0	33.7 25.6	25.6	5.52 9.34	9.35	0.00	74.7 129.0	129.0	0.25 0.01	0.02		4.5 5.9	4.5	
29/6/2024	11:08:59	29	Middle	4.9	22.9	25.5 28.6	28.7	9.36 8.80	8.83	9.09	129.0 121.0	121.5	0.02	0.02	0.01	3.0 4.8	5.1	4.5
25, 5, 2027		/ Fine	Bottom	8.7	20.5	28.7 32.7	32.6	8.85 5.66	5.65	5.65	122.0 76.2	76.0	0.02	0.02	0.01	5.3 5.1	4.1	
			20110111	5.7	20.0	32.5	32.0	5.63	3.00	3.00	75.8	7 0.0	0.01	3.01		3.0	7.1	<u></u>

Monitoring Station: TKO-C1



Date	Time	Ambient Temp	Monitorir	ng Depth	Temp	Salinit	y (ppt)	Dissolv	ed Oxyger	n (mg/L)		d Oxygen tion (%)	Τι	ırbidity (NT	Ū)	Susper	nded Solids	ه (mg/L)
Date	Time	Condition	(n	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		24	Surface	1.0	22.5	31.4 31.8	31.6	6.76 6.76	6.76		93.6 93.7	93.7	0.84	0.87		1.9	2.1	
3/6/2024	9:18:15		Middle	11.6	22.4	32.3	32.4	6.79	6.77	6.77	94.4	94.2	1.45	1.47	1.29	2.8	3.0	2.7
		/ Cloudy	Bottom	22.8	22.4	32.5 32.6	32.6	6.75 6.73	6.74	6.74	93.9 93.7	93.7	1.49 1.54	1.55		3.2 2.6	3.0	•
						32.6 31.7		6.74 6.92			93.7 95.6		1.55 1.30			3.3 2.6		-
		24	Surface	1.0	22.3	31.7 31.7	31.7	6.91 6.90	6.92	6.91	95.5 95.4	95.6	1.33	1.32		1.5 1.5	2.1	
5/6/2024	10:18:40	(0)	Middle	10.4	22.3	31.7	31.7	6.90	6.90		95.4	95.4	1.12	1.11	1.13	1.7	1.6	2.8
		/ Cloudy	Bottom	20.0	22.3	31.7 31.7	31.7	6.88 6.90	6.89	6.89	95.1 95.4	95.3	0.98 0.94	0.96		4.4	4.7	
		25	Surface	1.0	23.4	31.8 31.8	31.8	7.32 7.28	7.30	7.13	103.2 102.7	103.0	1.06	1.07		1.8	2.1	
7/6/2024	12:05:33		Middle	10.3	23.0	31.9 32.0	31.9	6.96 6.95	6.96	7.13	97.5 97.4	97.5	1.13 1.16	1.15	1.19	4.1 5.0	4.6	2.9
		/ Cloudy	Bottom	19.4	22.8	32.1 32.1	32.1	6.71 6.68	6.70	6.70	93.8 93.4	93.6	1.34	1.35		2.3	2.0	
			Surface	1.0	23.0	31.7	31.7	6.99	6.99		97.8	97.8	0.51	0.52		5.3	5.5	
11/6/2024	14:30:21	28	Middle	11.5	22.9	31.7 31.8	31.8	6.99 6.97	6.98	6.98	97.8 97.4	97.5	0.52 0.57	0.56	0.56	5.7 5.2	5.1	5.6
11/0/2024	14.50.21	/ Cloudy				31.8 31.8		6.98 7.00			97.6 97.7		0.54 0.61		0.50	5.0 6.7		3.0
		, 5.555,	Bottom	22.1	22.8	31.8	31.8	6.97	6.99	6.99	97.1	97.4	0.63	0.62		5.5	6.1	
		29	Surface	1.0	23.2	31.3 31.3	31.3	6.87 6.84	6.86	6.66	96.2 95.8	96.0	0.46 0.42	0.44		3.0 5.4	4.2	
13/6/2024	16:00:38		Middle	11.3	22.8	31.7 31.7	31.7	6.49 6.45	6.47		90.5 90.0	90.3	0.63 0.65	0.64	0.74	3.2 5.1	4.2	3.9
		/ Cloudy	Bottom	21.4	22.6	32.0 32.0	32.0	6.16 6.16	6.16	6.16	85.7 85.8	85.8	1.12 1.14	1.13		3.8 2.8	3.3	
		28	Surface	1.0	22.9	30.0	30.0	6.58 6.55	6.57		91.0 90.6	90.8	1.12	1.14		1.4	1.3	
15/6/2024	18:00:47	20	Middle	11.4	22.8	30.6	30.6	6.16	6.16	6.36	85.4	85.3	1.78	1.79	1.69	1.6	1.4	1.6
		/ Cloudy	Bottom	21.7	22.6	30.6 31.2	31.3	6.15 5.88	5.86	5.86	85.2 81.5	81.3	1.79 2.14	2.16		2.0	2.1	
						31.3 24.1		5.84 6.50		3.00	81.0 88.1		2.18 0.14			2.2 3.3		
		29	Surface	1.0	23.7	24.1 33.4	24.1	6.49 6.06	6.50	6.28	87.9 84.8	88.0	0.14 0.74	0.14		1.8	2.6	
17/6/2024	8:17:12	(0)	Middle	10.4	22.4	33.4	33.4	6.07	6.07		84.9	84.9	0.77	0.76	0.73	2.1	3.0	2.4
		/ Cloudy	Bottom	19.4	22.2	33.5 33.5	33.5	5.99 5.99	5.99	5.99	83.5 83.5	83.5	1.30 1.28	1.29		1.8	1.8	
		30	Surface	1.0	23.8	20.4	20.4	7.03 6.98	7.01	6.77	93.5 92.8	93.2	1.24 1.26	1.25		4.6 3.3	4.0	
19/6/2024	9:00:16		Middle	10.6	22.6	33.1 33.1	33.1	6.54 6.53	6.54	6.77	91.6 91.5	91.6	1.06 1.08	1.07	1.28	2.9 2.7	2.8	3.1
		/ Cloudy	Bottom	20.4	22.4	33.7	33.7	6.42	6.41	6.41	89.9	89.8	1.49	1.51		2.5	2.4	1
			Surface	1.0	24.1	33.7 24.6	24.6	6.40 7.26	7.25		89.7 99.5	99.4	1.52 0.81	0.82		2.3 1.9	2.9	
21/6/2024	11:00:52	30	Middle	10.9	22.8	24.7 32.9	32.9	7.24 6.23	6.22	6.73	99.2 87.5	87.3	0.82 0.95	0.96	1.01	3.8 2.5	2.5	2.5
21/0/2024	11.00.32	/ Fine				32.9 33.5		6.20 5.87			87.1 82.3		0.97 1.23		1.01	2.4		2.5
			Bottom	20.7	22.5	33.5	33.5	5.84 8.14	5.86	5.86	81.7 112.0	82.0	1.26 0.20	1.25		2.5	2.3	
		29	Surface	1.0	23.8	26.7 26.8	26.8	8.06	8.10	6.86	111.0	111.5	0.13	0.17		4.1 2.4	3.3	
25/6/2024	13:17:56		Middle	11.9	20.1	33.4 33.4	33.4	5.62 5.63	5.63		75.4 75.7	75.6	0.42	0.41	0.33	3.0	2.9	3.5
		/ Fine	Bottom	21.2	20.0	33.6 33.6	33.6	5.81 5.73	5.77	5.77	77.9 76.8	77.4	0.38	0.40		2.8 5.8	4.3	
		30	Surface	1.0	24.1	25.3 25.3	25.3	8.37 8.36	8.37		115.0 115.0	115.0	0.15	0.16		5.1 6.0	5.6	
27/6/2024	15:00:38	- 50	Middle	11.8	20.6	32.6	32.6	5.66	5.65	7.01	76.3	76.0	0.22	0.23	0.25	6.6	5.7	5.0
		/ Fine	Bottom	22.6	20.1	32.6 33.7	33.8	5.63 5.42	5.41	5.41	75.7 72.9	72.7	0.24 0.36	0.37		4.8 3.6	3.8	1
						33.8 25.4		5.39 8.27		5.71	72.5 113.0		0.38			4.0 3.7		-
		29	Surface	1.0	23.8	25.5 32.4	25.5	8.19 5.70	8.23	6.96	112.0 76.7	112.5	0.05	0.05		3.2	3.5	
29/6/2024	17:01:02	. =:	Middle	10.3	20.6	32.5	32.4	5.66	5.68		76.4	76.6	0.07	0.08	0.17	3.6	3.2	3.2
		/ Fine	Bottom	20.4	20.1	33.3 33.3	33.3	5.22 5.20	5.21	5.21	70.0 69.7	69.9	0.35 0.41	0.38		2.8 3.0	2.9	

Remark

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

Monitoring Station: TKO-M4



Dete	Ti	Ambient Temp	Manitanian F	D = +4h (-+)	Temp	Salinit	ty (ppt)	Dissolv	ed Oxygen	(mg/L)		d Oxygen tion (%)	Τι	urbidity (NT	Ū)	Susper	nded Solids	s (mg/L)
Date	Time	(°C) / Weather Condition	Monitoring [Jeptn (m)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		24	Surface	1.0	22.4	31.5 31.5	31.5	6.75 6.75	6.75		93.4 93.4	93.4	0.65	0.64		4.0 4.2	4.1	
3/6/2024	10:55:54		Middle	4.8	22.3	32.3 32.1	32.2	6.73	6.73	6.74	93.3	93.4	1.20	1.20	1.02	2.4	2.8	3.1
		/ Cloudy	Bottom	8.4	22.3	32.3	32.3	6.72	6.72	6.72	93.2	93.2	1.24	1.24		2.1	2.5	
			Surface	1.0	22.2	32.3 31.7	31.7	6.72 6.90	6.90		93.2 95.2	95.2	1.23	1.38		2.8 1.0	1.4	1
		24	Surface			31.7 31.7		6.90 6.89	6.90	6.90	95.2 95.1		1.39 1.22	1.30		1.8 2.7	1.4	-
5/6/2024	11:41:50	/ 01	Middle	4.5	22.2	31.7	31.7	6.89	6.89		95.1	95.1	1.25	1.24	1.29	2.0	2.4	1.8
		/ Cloudy	Bottom	7.9	22.2	31.7 31.7	31.7	6.88 6.88	6.88	6.88	95.0 95.0	95.0	1.24 1.26	1.25		1.5 2.0	1.8	
		25	Surface	1.0	23.5	31.7 31.7	31.7	7.18 7.15	7.17	6.97	101.4	101.2	1.11	1.11		1.7 1.5	1.6	
7/6/2024	13:12:11		Middle	4.5	23.1	31.9 31.9	31.9	6.77 6.78	6.78	0.57	95.0 95.2	95.1	1.18	1.20	1.20	2.2 1.6	1.9	2.0
		/ Cloudy	Bottom	7.8	23.0	32.0 32.1	32.0	6.59 6.56	6.58	6.58	92.4 92.0	92.2	1.28 1.29	1.29		2.1 2.6	2.4	
		28	Surface	1.0	23.0	31.7 31.7	31.7	6.99	6.99		97.9 97.8	97.9	0.46	0.46		4.6 5.1	4.9	
11/6/2024	15:53:16	20	Middle	4.9	22.9	31.8	31.8	7.00	7.00	7.00	97.9	97.9	0.47	0.46	0.47	5.7	5.8	5.3
		/ Cloudy	Bottom	8.5	22.9	31.8 31.9	31.9	7.00 6.99	7.00	7.00	97.9 97.8	97.9	0.45 0.51	0.50		5.9 5.2	5.1	-
						31.9 31.4		7.00 6.77		7.00	97.9 94.8		0.49			5.0 4.5		
		29	Surface	1.0	23.1	31.4	31.4	6.76	6.77	6.56	94.6	94.7	0.40	0.40		2.3	3.4	-
13/6/2024	17:10:07		Middle	4.9	23.0	31.5 31.6	31.6	6.36 6.34	6.35		88.9 88.7	88.8	0.58 0.61	0.60	0.66	5.0 2.9	4.0	4.1
		/ Cloudy	Bottom	8.9	23.0	31.7 31.7	31.7	6.15 6.14	6.15	6.15	86.1 85.9	86.0	0.97 1.00	0.99		3.4 6.5	5.0	
		28	Surface	1.0	23.0	30.0 30.1	30.1	6.48 6.45	6.47	0.07	89.8 89.4	89.6	1.13	1.16		1.4	1.3	
15/6/2024	19:07:40		Middle	4.8	23.0	31.2 31.2	31.2	6.09 6.06	6.08	6.27	85.0 84.6	84.8	1.46 1.49	1.48	1.51	2.2 2.5	2.4	1.7
		/ Cloudy	Bottom	8.5	22.9	32.0 32.1	32.0	5.86 5.83	5.85	5.85	82.0 81.6	81.8	1.87	1.91		1.5	1.3	1
		29	Surface	1.0	23.5	24.5 24.5	24.5	6.37	6.38		86.3 86.6	86.5	0.10	0.11		1.5	1.6	
17/6/2024	9:27:09	29	Middle	5.1	23.1	31.5	31.6	5.89	5.90	6.14	82.6	82.5	0.39	0.39	0.43	3.3	2.7	2.6
		/ Cloudy	Bottom	9.0	22.5	31.6 33.0	33.1	5.90 5.94	5.96	5.96	82.3 83.0	83.3	0.38 0.76	0.80		2.1 3.2	3.7	=
			Surface	1.0	23.5	33.2 20.4	20.4	5.98 6.82	6.81		83.6 90.2	90.1	0.83 1.18	1.20		4.1 3.3	3.4	
19/6/2024	10.12.21	30	Middle	4.8	23.1	20.4 33.2	33.2	6.80 6.37	6.37	6.59	90.0 90.1	89.8	1.22	1.04	1.21	3.5 2.9	3.5	3.6
19/6/2024	10:13:21	/ Cloudy				33.2 33.8		6.36 6.28			89.5 88.2		1.05 1.37		1.21	4.1 3.7		3.6
		,	Bottom	8.7	22.5	33.9	33.8	6.24	6.26	6.26	87.5	87.9	1.39	1.38		3.8	3.8	
		30	Surface	1.0	24.1	24.3 24.3	24.3	7.11 7.06	7.09	6.68	97.2 96.5	96.9	0.76 0.79	0.78		1.0	1.5	
21/6/2024	12:10:36		Middle	4.6	22.9	32.5 32.5	32.5	6.29 6.26	6.28	0.00	88.3 87.9	88.1	0.83	0.84	0.92	2.4 3.5	3.0	2.6
		/ Fine	Bottom	8.3	22.6	33.7 33.7	33.7	5.87 5.85	5.86	5.86	82.5 82.1	82.3	1.14 1.16	1.15		2.6 3.8	3.2]
		29	Surface	1.0	23.4	28.0 28.1	28.1	7.97 7.95	7.96		110.0 109.0	109.5	0.13 0.12	0.13		4.7	3.9	
25/6/2024	14:55:53		Middle	4.6	20.6	32.4	32.5	5.33	5.32	6.64	71.8	71.8	0.40	0.37	0.29	4.8	5.6	4.1
		/ Fine	Bottom	8.2	20.3	32.5 33.3	33.3	5.30 5.40	5.40	5.40	71.8 72.7	72.6	0.34 0.35	0.38		6.3 2.4	2.8	
			Surface	1.0	24.1	33.3 25.6	25.6	5.39 8.62	8.61	-	72.5 119.0	118.5	0.40	0.10		3.1 5.6	4.9	
27/6/2024	16:00:50	30				25.7 32.8		8.60 5.84		7.22	118.0 80.2		0.11 0.16		0.10	4.1 4.2		4.0
27/6/2024	16:09:59	/ Fine	Middle	4.8	21.6	32.8 34.0	32.8	5.81 5.63	5.83		79.8 76.6	80.0	0.18 0.25	0.17	0.18	5.1 5.6	4.7	4.8
		-	Bottom	8.7	20.7	34.0 25.5	34.0	5.61 9.21	5.62	5.62	76.2 126.0	76.4	0.27	0.26		4.4	5.0	
		29	Surface	1.0	23.8	25.4	25.5	9.16	9.19	8.65	126.0	126.0	0.02	0.02		2.8	3.7	
29/6/2024	18:11:00		Middle	4.3	23.7	27.7 27.8	27.7	8.14 8.10	8.12		113.0 112.0	112.5	0.08	0.08	0.04	2.4	2.7	3.6
		/ Fine				31.3	1	6.53			88.5	1	0.02	1	1	4.4		1

Remark

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

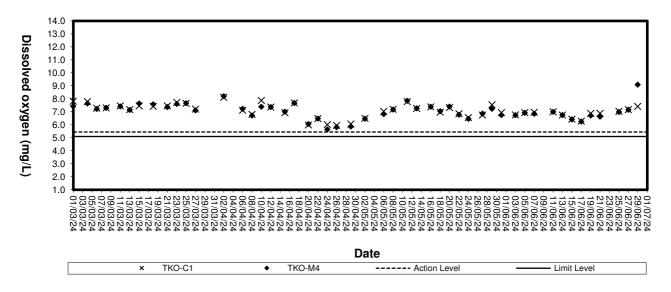


Appendix D3

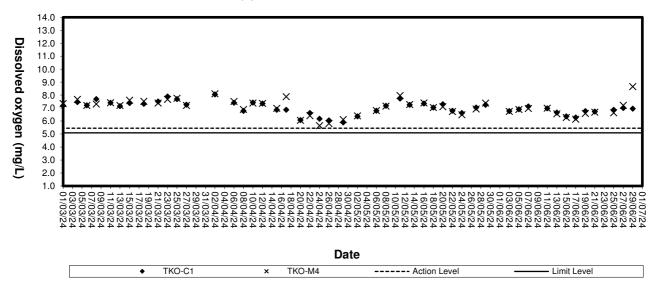
Graphical Plots of Impact Marine Water Quality Monitoring Data



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

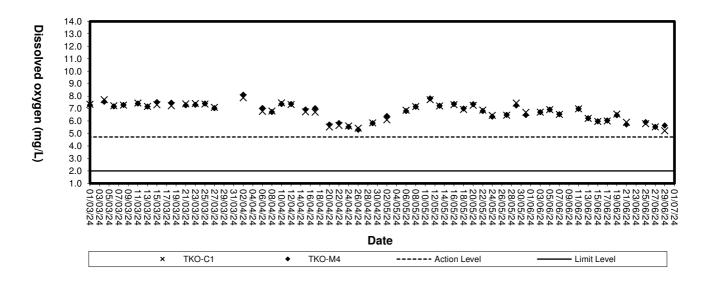


Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide

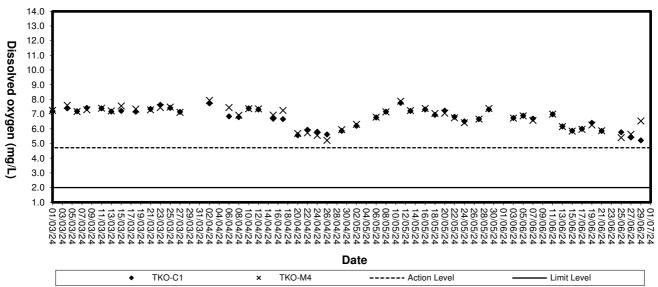




Dissolved Oxygen (Bottom) at Mid-Flood Tide

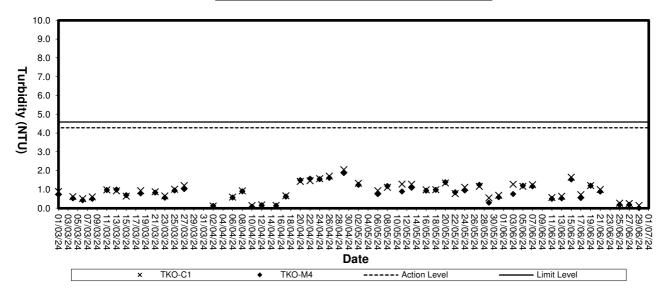


Dissolved Oxygen (Bottom) at Mid-Ebb Tide

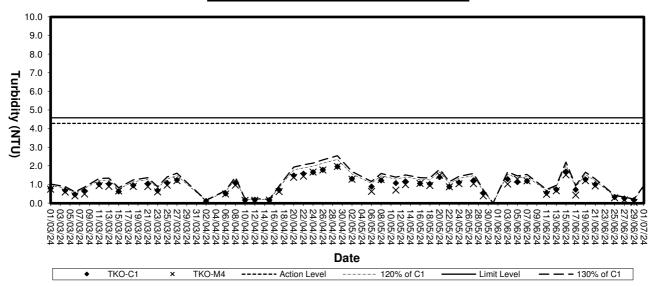




Turbidity (Depth-average) at Mid-Flood Tide

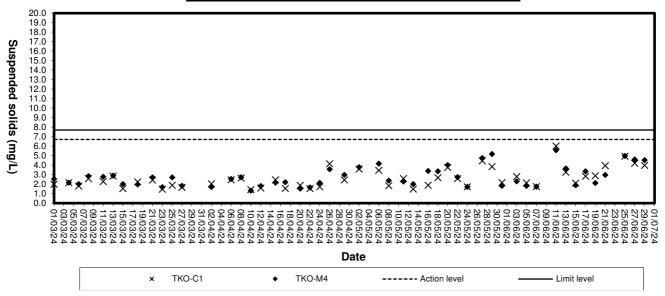


Turbidity(Depth-average) at Mid-Ebb Tide

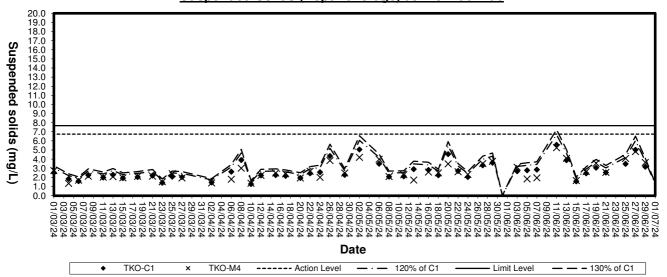




Suspended solids (Depth-average) at Mid-Flood Tide



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





Appendix D4

Impact Marine Water Quality Monitoring Results (3RS Project)

Monitoring Station: TKO-C1a



Date	Time	Ambient Temp	Monitorir		Temp	Salinit	ty (ppt)	Dissolv	ed Oxyger	n (mg/L)		d Oxygen tion (%)	Τι	urbidity (NT	ΓU)	Susper	nded Solids	s (mg/L)
Date	Time	Condition	(n	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		24	Surface	1.0	22.3	32.1 31.9	32.0	6.75 6.75	6.75		93.6 93.5	93.6	1.08 0.92	1.00		3.0	3.1	
3/6/2024	15:36:53		Middle	10.7	22.3	32.6 32.5	32.5	6.75 6.75	6.75	6.75	93.8	93.8	1.46	1.44	1.31	2.1	2.4	2.6
		/ Cloudy	Bottom	20.4	22.3	32.6	32.6	6.72	6.73	6.73	93.3	93.4	1.50	1.49		2.1	2.4	
			Surface	1.0	22.2	32.7 31.7	31.7	6.73 6.91	6.91		93.5 95.4	95.4	1.47 1.14	1.15		2.7 3.2	3.2	
5/6/2024	17:02:58	24	Middle	10.3	22.2	31.7 31.7	31.7	6.91 6.91	6.91	6.91	95.4 95.4	95.4	1.15 1.12	1.13	1.14	3.1 4.9	4.4	4.0
5/6/2024	17.02.56	/ Cloudy				31.8 31.8		6.91 6.91			95.4 95.4		1.14 1.14		1.14	3.9 4.1		4.0
			Bottom	19.4	22.2	31.8 31.7	31.8	6.91 7.03	6.91	6.91	95.4 98.9	95.4	1.17	1.16		4.8 1.3	4.5	
		25	Surface	1.0	23.3	31.7	31.7	7.01 6.74	7.02	6.88	98.8 94.7	98.9	1.23	1.21		1.6	1.5	İ
7/6/2024	18:19:58	/ Olavido	Middle	10.2	23.1	32.0	32.0	6.72	6.73		94.4	94.6	1.36	1.35	1.32	2.0	2.8	1.9
		/ Cloudy	Bottom	19.3	22.8	32.2 32.2	32.2	6.52 6.49	6.51	6.51	91.2 90.8	91.0	1.41 1.42	1.42		1.5	1.5	
		28	Surface	1.0	23.0	31.8 31.8	31.8	6.99 6.99	6.99	6.99	97.9 97.9	97.9	0.46 0.47	0.47		3.5 5.0	4.3	
11/6/2024	7:18:26		Middle	10.7	22.8	31.9 31.9	31.9	6.99 7.00	7.00	0.55	97.6 97.7	97.7	0.61 0.50	0.56	0.56	4.0	4.0	3.9
		/ Cloudy	Bottom	20.8	22.8	32.0 32.0	32.0	6.98 6.97	6.98	6.98	97.5 97.4	97.5	0.65 0.66	0.66		3.8 3.2	3.5	
		29	Surface	1.0	23.1	31.4	31.4	6.84	6.83		95.7 95.5	95.6	0.39	0.41		2.6	3.5	
13/6/2024	8:35:29		Middle	10.8	22.9	31.6 31.7	31.6	6.47 6.45	6.46	6.65	90.3	90.2	0.55 0.57	0.56	0.63	1.7	2.1	2.4
		/ Cloudy	Bottom	20.6	22.7	31.9	32.0	6.21	6.19	6.19	86.6 86.0	86.3	0.91	0.92		1.5	1.7	
			Surface	1.0	22.9	32.0 29.8	29.8	6.62	6.61		91.5	91.4	1.13	1.14		1.9	1.9	
15/6/2024	11:19:16	28	Middle	10.7	22.7	29.9 31.2	31.2	6.60 6.27	6.27	6.44	91.2 87.0	87.0	1.15 1.44	1.45	1.60	2.0	3.7	2.7
		/ Cloudy	Bottom	20.4	22.6	31.2 32.2	32.2	6.26 6.04	6.03	6.03	86.9 84.2	84.1	1.46 2.18	2.20	1	3.3	2.7	
					23.6	32.2 23.8	23.8	6.02 6.54		0.00	83.9 88.4		2.21 0.10			2.1 1.8		
		29	Surface	1.0		23.8 32.7		6.55 5.94	6.55	6.26	88.5 83.5	88.5	0.12 0.43	0.11		3.1 3.0	2.5	
17/6/2024	15:38:07	/ Cloudy	Middle	9.9	22.9	33.0 33.6	32.8	5.99 5.99	5.97		83.7 83.4	83.6	0.57 1.34	0.50	0.65	2.7	2.9	2.6
		, cloudy	Bottom	18.8	22.1	33.6	33.6	5.99 7.06	5.99	5.99	83.4	83.4	1.35	1.35		2.7	2.4	
		30	Surface	1.0	23.9	20.3	20.3	7.05	7.06	6.81	94.0	93.9	1.18	1.20		2.1	2.8	
19/6/2024	16:24:53		Middle	9.8	23.0	33.3 33.3	33.3	6.58 6.55	6.57		93.0 92.5	92.8	1.07	1.06	1.23	4.6 4.1	4.4	3.1
		/ Cloudy	Bottom	18.7	22.6	33.8 33.8	33.8	6.44	6.43	6.43	90.6	90.4	1.42	1.43		1.8 2.2	2.0	
		30	Surface	1.0	24.2	24.4 24.5	24.4	7.14 7.13	7.14	0.00	97.9 97.8	97.9	0.76 0.78	0.77		2.4 3.0	2.7	
21/6/2024	17:52:52		Middle	9.9	22.8	32.8 31.8	32.3	6.25 6.22	6.24	6.69	87.7 86.8	87.3	0.95 0.94	0.95	1.00	2.7 3.9	3.3	3.2
		/ Fine	Bottom	18.8	22.6	33.6 33.6	33.6	5.76 5.75	5.76	5.76	80.9 80.6	80.8	1.26	1.27		3.2	3.6	
		00	Surface	1.0	24.1	26.2	26.3	8.43 8.42	8.43		117.0	116.5	0.17	0.16		3.5	4.6	
25/6/2024	7:36:53	29	Middle	10.8	20.1	26.4 33.5	33.5	5.68	5.69	7.06	116.0 76.2	76.4	0.15	0.41	0.39	5.6 4.6	4.7	4.4
		/ Fine	Bottom	20.5	20.1	33.5 33.6	33.6	5.69 5.92	5.88	5.88	76.5 79.5	78.9	0.42 0.60	0.61		4.7 3.7	4.0	
				1.0	24.1	33.6 25.3	25.3	5.84 8.46	8.46	3.00	78.3 116.0	116.0	0.62 0.12	0.13		4.2 3.7	4.8	
07/0/000	0.4.00	30	Surface			25.3 32.2		8.45 5.76		7.10	116.0 77.5		0.13 0.24			5.8 3.1		
27/6/2024	8:14:39	/ Fine	Middle	10.9	20.6	32.3 33.4	32.2	5.73 5.48	5.75	_	77.1 73.5	77.3	0.25 0.36	0.25	0.25	3.0 5.5	3.1	4.1
			Bottom	20.7	20.1	33.4 25.3	33.4	5.46 9.05	5.47	5.47	73.3 124.0	73.4	0.39	0.38		3.7	4.6	
		29	Surface	1.0	23.9	25.2	25.2	9.01	9.03	7.50	124.0	124.0	0.01	0.02]	3.1	3.6	
29/6/2024	10:18:01		Middle	10.8	20.4	32.7 32.7	32.7	5.98 5.94	5.96		80.3 79.8	80.1	0.06 0.07	0.07	0.16	5.2 4.1	4.7	3.6
		/ Fine	Bottom	20.1	20.2	33.2 33.2	33.2	5.41 5.37	5.39	5.39	72.6 72.1	72.4	0.38	0.39		2.3	2.6	

Monitoring Station: TKO-M4a



Data	Time	Ambient Temp	Monitorir	ng Depth	Temp	Salinit	ty (ppt)	Dissolv	ed Oxyger	(mg/L)		d Oxygen tion (%)	Tu	ırbidity (NT	Ū)	Susper	nded Solids	s (mg/L)
Date	Time	(°C) / Weather Condition	(n	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		24	Surface	1.0	22.4	31.9 31.5	31.7	6.76 6.76	6.76		93.6 93.6	93.6	1.00 0.69	0.85		3.3	3.5	
3/6/2024	15:58:55		Middle	10.3	22.3	32.6 32.5	32.5	6.75 6.75	6.75	6.76	93.8 93.7	93.8	1.43 1.42	1.43	1.23	3.8	3.6	3.3
		/ Cloudy	Bottom	20.4	22.3	32.7 32.7	32.7	6.73 6.74	6.74	6.74	93.6 93.7	93.7	1.44	1.43	•	3.2	2.7	
			Surface	1.0	22.2	31.7	31.7	6.91	6.92		95.4	95.5	1.10	1.12		2.9	2.0	
5/6/2024	17:30:50	24	Middle	10.3	22.2	31.7 31.8	31.8	6.92 6.90	6.90	6.91	95.5 95.2	95.2	1.13 1.15	1.16	1.15	1.1 1.6	1.8	2.1
0/0/2024	17.00.00	/ Cloudy				31.8 31.7		6.90 6.89		2.00	95.2 95.1		1.17 1.17		1.10	2.0 3.4		
			Bottom	19.6	22.2	31.8 31.8	31.7	6.89 7.08	6.89	6.89	95.1 99.7	95.1	1.16 1.22	1.17		1.5 1.0	2.5	
		25	Surface	1.0	23.3	31.9 32.1	31.8	7.05 6.78	7.07	6.92	99.3 95.3	99.5	1.24	1.23		2.5 1.2	1.8	
7/6/2024	18:38:59	/ Cloudy	Middle	9.2	23.1	32.2	32.1	6.76 6.54	6.77		95.0	95.2	1.41	1.40	1.36	1.6	1.4	1.4
		/ Cloudy	Bottom	17.4	22.9	32.3 32.3	32.3	6.53	6.54	6.54	91.7 91.5	91.6	1.45 1.46	1.46		1.0	1.0	
		28	Surface	1.0	22.9	31.8 31.8	31.8	6.99 6.99	6.99	6.99	97.7 97.7	97.7	0.49	0.50		4.1 4.9	4.5	
11/6/2024	7:40:39		Middle	10.2	22.8	31.9 31.8	31.8	6.99 6.99	6.99	0.00	97.6 97.6	97.6	0.57 0.48	0.53	0.53	4.7 5.0	4.9	4.5
		/ Cloudy	Bottom	19.8	22.8	31.9 31.9	31.9	6.98 6.97	6.98	6.98	97.4 97.3	97.4	0.54 0.61	0.58		3.8 4.4	4.1	
		29	Surface	1.0	23.1	31.4 31.5	31.4	6.81 6.78	6.80		95.3 94.8	95.1	0.42	0.43		1.3 1.4	1.4	
13/6/2024	8:45:50		Middle	10.5	22.9	31.7 31.7	31.7	6.44	6.42	6.61	90.0	89.7	0.58	0.59	0.68	1.3	2.9	2.4
		/ Cloudy	Bottom	19.9	22.7	32.0	32.0	6.19	6.17	6.17	86.3	86.1	1.02	1.04		2.2	3.0	
			Surface	1.0	22.8	32.0 29.7	29.7	6.15 6.59	6.59		85.8 90.9	90.8	1.05 1.12	1.13		3.8 2.8	2.7	
15/6/2024	11:31:50	28	Middle	10.6	22.7	29.7 30.9	30.9	6.58 6.16	6.15	6.37	90.7 85.3	85.2	1.13 1.36	1.38	1.52	2.6 2.5	2.2	2.7
10/0/2024	11.01.00	/ Cloudy	Bottom	20.1	22.6	30.9 31.9	31.9	6.14 5.84	5.83	5.83	85.1 81.2	81.1	1.39 2.03	2.06		1.9 3.7	3.1	
						31.9 24.2		5.81 6.47		5.63	80.9 87.6		2.08 0.13			2.5 1.8		
		29	Surface	1.0	23.5	24.4 33.2	24.3	6.45 6.00	6.46	6.24	87.4 84.1	87.5	0.13 0.61	0.13		1.9 1.2	1.9	
17/6/2024	15:51:07	/ Cloudy	Middle	8.0	22.6	33.3 33.5	33.3	6.03	6.02		84.3 84.0	84.2	0.57	0.59	0.63	2.4	1.8	2.0
		/ Gloudy	Bottom	15.1	22.2	33.5	33.5	6.01	6.02	6.02	83.8	83.9	1.18	1.17		2.1	2.4	
		30	Surface	1.0	24.0	20.1	20.1	6.87 6.85	6.86	6.62	91.6 91.2	91.4	1.14 1.16	1.15		3.1	3.1	
19/6/2024	16:40:28		Middle	8.5	23.0	33.1 33.1	33.1	6.39 6.35	6.37		90.1 89.6	89.9	1.04	1.05	1.16	3.6 4.2	3.9	3.7
		/ Cloudy	Bottom	15.9	22.7	33.6 33.6	33.6	6.25 6.23	6.24	6.24	88.0 87.7	87.9	1.27 1.28	1.28		3.8 4.7	4.3	
		30	Surface	1.0	24.1	24.2 24.2	24.2	7.20 7.18	7.19		98.4 98.1	98.3	0.81 0.83	0.82		3.6 3.9	3.8	
21/6/2024	18:08:06		Middle	8.6	22.9	32.4 32.4	32.4	6.34 6.31	6.33	6.76	88.9 88.4	88.7	0.98	1.00	1.04	4.3 3.6	4.0	3.9
		/ Fine	Bottom	16.2	22.6	33.5 33.5	33.5	5.86 5.83	5.85	5.85	82.3 81.9	82.1	1.30	1.30		4.3	4.1	
		00	Surface	1.0	24.1	26.1	26.2	8.19	8.13		113.0	112.5	0.15	0.14		4.6	4.5	
25/6/2024	8:01:06	29	Middle	9.3	20.1	33.5	33.5	8.06 5.67	5.68	6.90	76.1	76.3	0.12	0.27	0.26	3.4	3.8	4.3
		/ Fine	Bottom	18.8	20.1	33.5 33.5	33.5	5.68 5.75	5.73	5.73	76.4 77.2	76.9	0.25 0.35	0.38		4.2 4.4	4.6	
			Surface	1.0	24.1	33.5 25.7	25.7	5.70 8.45	8.45		76.5 117.0	116.5	0.41 0.15	0.14		4.8 2.3	3.5	
07/0/0004	0.05.40	30				25.8 32.4		8.44 5.75		7.09	116.0 77.6		0.13 0.25		0.04	4.6 2.9		
27/6/2024	8:25:18	/ Fine	Middle	9.6	20.7	32.5 33.6	32.5	5.72 5.43	5.74		77.0 73.0	77.3	0.25	0.25	0.24	4.9	3.9	3.7
		, .	Bottom	18.3	20.1	33.6	33.6	5.43 9.49	5.43	5.43	73.0 131.0	73.0	0.32	0.32		3.9	3.8	
		29	Surface	1.0	24.2	26.1	26.1	9.48	9.49	7.79	132.0	131.5	0.06	0.06		4.3	3.5	
29/6/2024	10:35:02		Middle	9.7	20.7	32.5 32.6	32.5	6.12 6.08	6.10		82.6 81.9	82.3	0.04	0.05	0.15	3.5 2.8	3.2	3.5
		/ Fine	Bottom	18.4	20.2	33.1 33.4	33.2	5.53 5.47	5.50	5.50	74.2 73.2	73.7	0.31 0.35	0.33		3.3 4.5	3.9	

Monitoring Station: TKO-M5



	Station :	T KO-M5	1		ı	ı					D' l	10			\			
Data	T	Ambient Temp	Monitoria	ng Depth	Temp	Salini	ty (ppt)	Dissolv	ed Oxyger	(mg/L)		d Oxygen tion (%)	Τι	urbidity (NT	U)	Susper	nded Solids	s (mg/L)
Date	Time	(°C) / Weather Condition	(n	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		24	Surface	1.0	22.4	31.9 31.9	31.9	6.75 6.75	6.75	0.75	93.5 93.5	93.5	0.99 1.03	1.01		3.0 4.0	3.5	
3/6/2024	16:20:57		Middle	7.8	22.3	32.5 32.4	32.4	6.74 6.74	6.74	6.75	93.6 93.5	93.6	1.43 1.40	1.42	1.28	2.4 2.1	2.3	3.1
		/ Cloudy	Bottom	14.4	22.3	32.5	32.5	6.71	6.72	6.72	93.2	93.3	1.39	1.42		2.4	3.4	1
			Surface	1.0	22.2	32.5 31.7	31.7	6.72 6.92	6.92		93.3 95.5	95.5	1.45 1.10	1.11		4.4 4.6	4.4	
F /0 /000 4	17.50.05	24				31.7 31.7		6.92 6.91		6.92	95.5 95.4		1.11			4.1 3.1		-
5/6/2024	17:53:05	/ Cloudy	Middle	7.1	22.2	31.7 31.7	31.7	6.91 6.91	6.91		95.4 95.4	95.4	1.19 1.17	1.19	1.16	4.6 3.3	3.9	3.8
		/ Gloudy	Bottom	13.5	22.2	31.7	31.7	6.90	6.91	6.91	95.2	95.3	1.20	1.19		2.9	3.1	ļ
		25	Surface	1.0	23.3	31.9 32.0	31.9	6.99 6.98	6.99	6.83	98.5 98.4	98.5	1.15	1.17		1.7	1.6	
7/6/2024	18:49:54		Middle	7.3	23.1	32.2 32.2	32.2	6.67 6.66	6.67	0.00	93.8 93.7	93.8	1.27	1.29	1.27	3.0 4.5	3.8	2.1
		/ Cloudy	Bottom	13.7	22.9	32.3 32.3	32.3	6.48 6.47	6.48	6.48	90.8 90.7	90.8	1.37 1.36	1.37		1.0	1.0	
			Surface	1.0	23.0	31.8	31.8	7.00	7.00		98.0	97.9	0.45	0.45		4.6	4.8	
11/6/2024	08:00:33	28	Middle	8.9	22.8	31.8 31.8	31.8	6.99 6.98	6.98	6.99	97.7 97.4	97.4	0.45	0.44	0.46	5.0 5.3	4.4	4.3
11/0/2024	00.00.33	/ Cloudy				31.9 31.9		6.98 6.97			97.4 97.3		0.45		0.40	3.5 4.4		- 4.5
		,	Bottom	16.9	22.8	31.9 31.5	31.9	6.97 6.92	6.97	6.97	97.3 96.9	97.3	0.48 0.46	0.49		3.2 2.7	3.8	
		29	Surface	1.0	23.1	31.5	31.5	6.88	6.90	6.71	96.3	96.6	0.48	0.47		2.9	2.8	
13/6/2024	08:55:44		Middle	8.8	23.0	31.6 31.6	31.6	6.53 6.52	6.53		91.3 91.2	91.3	0.67 0.65	0.66	0.68	3.7	3.4	3.1
		/ Cloudy	Bottom	16.5	22.8	31.9 31.9	31.9	6.26 6.23	6.25	6.25	87.4 87.0	87.2	0.89	0.90		3.3 3.2	3.3	
		28	Surface	1.0	22.9	29.8 29.8	29.8	6.56 6.54	6.55		90.7	90.5	1.15	1.17		2.5	3.1	
15/6/2024	11:51:56	20	Middle	8.6	22.7	30.8	30.9	6.17	6.16	6.35	85.5	85.3	1.47	1.48	1.59	1.7	2.1	2.4
		/ Cloudy	Bottom	16.3	22.6	30.9 31.8	31.8	6.14 5.88	5.87	5.87	85.1 81.8	81.7	1.49 2.13	2.14		2.4	2.2	-
					23.5	31.8 24.1		5.86 6.49			81.5 87.8	88.0	2.14 0.14			1.4		-
		29	Surface	1.0		24.0 33.2	24.1	6.51 6.00	6.50	6.26	88.1 84.2		0.14 0.51	0.14		1.9 2.8	1.8	1
17/6/2024	16:12:09	/ Cloudy	Middle	8.1	22.6	33.4	33.3	6.05	6.03		84.5	84.4	0.47	0.49	0.58	2.1	2.5	2.4
		/ Cloudy	Bottom	15.4	22.2	33.5	33.5	6.02	6.02	6.02	84.0	84.0	1.13	1.12		3.1	2.9	ļ
		30	Surface	1.0	23.9	20.5 20.5	20.5	6.94 6.92	6.93	6.77	92.5 92.3	92.4	1.20	1.21		3.5 2.3	2.9	
19/6/2024	16:52:34		Middle	8.3	22.9	33.4 33.4	33.4	6.62 6.58	6.60	0.77	93.4 92.8	93.1	1.11	1.12	1.24	3.2 4.7	4.0	3.5
		/ Cloudy	Bottom	15.6	22.5	33.9 33.9	33.9	6.45 6.44	6.45	6.45	90.6 90.5	90.6	1.38	1.39		3.5 3.9	3.7	
			Surface	1.0	24.1	24.2	24.2	7.17	7.16		98.0	98.0	0.74	0.73		4.2	3.9	
21/6/2024	18:24:50	30	Middle	8.3	22.9	24.3 32.4	32.4	7.15 6.26	6.26	6.71	97.9 87.8	87.8	0.72 0.86	0.88	0.92	3.6 3.1	3.5	3.8
21/0/2024	10.24.00	/ Fine				32.4 33.6		6.25 5.88			87.7 82.6		0.89		0.02	3.8		-
			Bottom	15.6	22.6	33.6 26.2	33.6	5.84 8.07	5.86	5.86	82.1 112.0	82.4	1.17 0.13	1.16		4.0	3.9	
		29	Surface	1.0	24.1	26.2	26.2	8.03	8.05	6.89	111.0	111.5	0.11	0.12		5.0	5.0	
25/6/2024	08:18:57		Middle	7.4	20.2	33.4 33.4	33.4	5.72 5.73	5.73		76.9 77.2	77.1	0.24	0.27	0.24	4.2 4.1	4.2	4.6
		/ Fine	Bottom	13.3	20.1	33.5 33.5	33.5	5.89 5.78	5.84	5.84	79.1 77.6	78.4	0.35	0.32		4.8 4.5	4.7	
		30	Surface	1.0	24.1	25.5 25.6	25.5	8.32 8.29	8.31		115.0 114.0	114.5	0.14	0.14		4.2	4.5	
27/6/2024	08:43:23		Middle	7.6	20.6	32.4	32.4	5.61	5.60	6.95	75.5	75.5	0.26	0.27	0.25	5.6	4.8	4.3
		/ Fine	Bottom	14.2	20.2	32.4 33.4	33.4	5.59 5.38	5.37	5.37	75.4 72.3	72.1	0.28	0.34		4.0 3.6	3.6	1
						33.5 23.9		5.36 8.91		5.57	71.9 122.0		0.35 0.01			3.5 4.9		
		29	Surface	1.0	24.1	24.0	23.9	8.94 5.91	8.93	7.41	122.0 79.8	122.0	0.05	0.03		4.6	4.8	1
00/0/0004	10:51:02	-	Middle	7.5	21.3	30.8	30.8	5.91	5.89		79.8	79.6	0.01	0.01	0.12	4.4 3.3	3.9	4.1
29/6/2024		/ Fine				32.9		5.43			72.5		0.30			2.5		

Monitoring Station: TKO-C1a



Date	Time	Ambient Temp	Monitorir		Temp	Salinit	ty (ppt)	Dissolv	ed Oxyger	(mg/L)		d Oxygen tion (%)	Τι	rbidity (NT	U)	Susper	nded Solids	(mg/L)
Date	Time	Condition	(n	n)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		24	Surface	1.0	22.4	31.8 31.8	31.8	6.75 6.75	6.75		93.6 93.6	93.6	0.98 1.00	0.99		1.7 2.8	2.3	
3/6/2024	9:36:55		Middle	10.6	22.3	32.5	32.5	6.75	6.75	6.75	93.9	93.9	1.54	1.55	1.37	2.6	2.4	2.8
		/ Cloudy		00.0	00.0	32.5 32.6		6.75 6.72		0.70	93.8 93.5		1.55 1.59			2.2		
			Bottom	20.3	22.3	32.6	32.6	6.74	6.73	6.73	93.7	93.6	1.58	1.59		4.4	3.6	
		24	Surface	1.0	22.2	31.7 31.7	31.7	6.91	6.91	6.91	95.3 95.2	95.3	1.32	1.33		3.8 4.1	4.0	
5/6/2024	10:36:53		Middle	10.3	22.2	31.7 31.7	31.7	6.91 6.92	6.92	6.91	95.4 95.5	95.5	1.18	1.19	1.17	4.5 4.5	4.5	4.3
		/ Cloudy	Bottom	19.9	22.2	31.7	31.7	6.91	6.91	6.91	95.4	95.3	1.01	1.00		4.5	4.6	1
						31.7 31.8		6.90 7.14			95.2 100.7		0.99 1.05			4.6 3.8		
		25	Surface	1.0	23.4	31.9	31.9	7.12	7.13	6.95	100.5	100.6	1.08	1.07	1	4.3	4.1	
7/6/2024	12:20:59		Middle	10.2	23.0	32.0 32.1	32.1	6.79 6.75	6.77		95.2 94.7	95.0	1.17	1.17	1.17	2.6 1.8	2.2	3.3
		/ Cloudy	Bottom	19.4	22.9	32.1 32.2	32.1	6.55 6.53	6.54	6.54	91.8 91.3	91.6	1.25 1.28	1.27		4.1 3.2	3.7	
			Surface	1.0	23.0	31.8	31.7	6.99	6.99		97.9	97.9	0.49	0.49		4.5	3.8	
		28				31.7 31.8		6.99		6.99	97.8 97.6		0.49 0.55		İ	3.0		
11/6/2024	14:48:20		Middle	10.6	22.9	31.8	31.8	6.98	6.98		97.4	97.5	0.55	0.55	0.52	4.3	4.0	4.0
		/ Cloudy	Bottom	20.3	22.8	31.8	31.8	6.96	6.96	6.96	97.1 97.2	97.2	0.52 0.53	0.53		4.3	4.3	
			Surface	1.0	23.1	31.4	31.4	6.93	6.92		97.0	96.9	0.44	0.45		1.9	2.2	
		29				31.4 31.8	21.2	6.91 6.54	0.54	6.73	96.7 91.1	211	0.45 0.66			2.5 3.6		
13/6/2024	16:16:51	(Olavete	Middle	10.8	22.7	31.8	31.8	6.53	6.54		91.0	91.1	0.66	0.66	0.75	3.3	3.5	2.9
		/ Cloudy	Bottom	20.5	22.5	32.1 32.1	32.1	6.28 6.25	6.27	6.27	87.3 86.9	87.1	1.15	1.14		2.6 3.5	3.1	
		28	Surface	1.0	23.0	30.0	30.0	6.49	6.48		89.9 89.5	89.7	1.23 1.26	1.25		1.3 2.6	2.0	
15/6/2024	18:16:02		Middle	10.9	22.8	31.3	31.3	6.03	6.03	6.25	83.9	83.9	1.84	1.83	1.76	1.4	2.1	2.1
.0,0,202.	10.10.02	/ Cloudy				31.3 32.2		6.02 5.78			83.8 80.7		1.82 2.19			2.8		
		,	Bottom	20.9	22.7	32.2	32.2	5.79	5.79	5.79	80.7	80.7	2.22	2.21		2.5	2.4	
		29	Surface	1.0	23.6	23.6	23.5	6.55 6.58	6.57		88.4 88.7	88.6	0.15 0.17	0.16		3.0	2.6	
17/6/2024	8:34:08		Middle	8.6	22.4	33.3 33.3	33.3	6.04 6.08	6.06	6.31	84.5 85.1	84.8	0.62 0.62	0.62	0.60	2.9 4.5	3.7	3.1
		/ Cloudy	Bottom	16.2	22.3	33.5	33.5	6.05	6.04	6.04	84.5	84.4	1.00	1.02		2.2	3.0	1
			Dottom	10.2		33.5 20.2		6.03 6.95		0.04	84.2 92.2		1.03 1.25			3.7 2.9		
		30	Surface	1.0	23.7	20.2	20.2	6.92	6.94	6.70	91.8	92.0	1.28	1.27		3.3	3.1	
19/6/2024	9:22:39		Middle	10.0	22.6	32.9 32.9	32.9	6.48	6.47	0.70	90.7	90.5	1.07	1.08	1.29	4.2 3.0	3.6	3.3
		/ Cloudy	Bottom	19.1	22.4	33.4	33.4	6.36	6.35	6.35	89.0	88.8	1.51	1.53		2.7	3.3	
						33.5 24.5		6.33 7.19			88.6 98.5		1.54 0.87			3.8		
		30	Surface	1.0	24.1	24.5	24.5	7.18	7.19	6.76	98.2	98.4	0.89	0.88		4.4	3.9	
21/6/2024	11:20:12		Middle	10.3	22.8	32.9 32.9	32.9	6.35 6.33	6.34		89.2 88.9	89.1	0.96 0.97	0.97	1.03	4.6	4.7	4.2
		/ Fine	Bottom	19.5	22.4	33.3 33.4	33.3	5.91 5.88	5.90	5.90	82.6 82.2	82.4	1.24 1.25	1.25		3.3 4.5	3.9	
			Surface	1.0	23.8	26.8	26.8	8.12	8.10		112.0	111.5	0.23	0.20		3.8	4.4	
		29		1.0		26.9 33.3		8.07 5.67		6.88	111.0 76.1		0.17 0.33		 	4.9		
25/6/2024	13:36:55		Middle	10.7	20.1	33.4	33.3	5.67	5.67		76.2	76.2	0.27	0.30	0.29	4.5	4.7	4.3
		/ Fine	Bottom	20.2	20.1	33.5 33.6	33.5	5.81 5.75	5.78	5.78	78.0 77.1	77.6	0.36	0.37		3.2 4.3	3.8	
		20	Surface	1.0	24.1	25.7	25.7	8.48	8.47		117.0	117.0	0.16	0.17		4.5	4.7	
27/6/2024	15:21:45	30	Middle	10.0	20.6	25.7 32.7	32.7	8.45 5.77	5.76	7.11	117.0 77.8	77 7	0.17 0.24	0.25	0.25	4.9 4.2	A 1	12
21/0/2024	15.21:45	/ Fine	iviluale	10.9	20.6	32.7		5.75	5.76		77.5	77.7	0.26	0.25	0.25	4.0 3.4	4.1	4.3
		/ i lile	Bottom	20.9	20.1	33.9 34.0	33.9	5.56 5.51	5.54	5.54	74.8 74.2	74.5	0.32	0.33		4.5	4.0	
		29	Surface	1.0	24.0	25.9 25.8	25.8	9.43 9.48	9.46		130.0 131.0	130.5	0.01 0.05	0.03		3.0 4.7	3.9	
29/6/2024	17:18:01	23	Middle	10.2	20.4	32.8	32.8	6.08	6.06	7.76	81.7	81.5	0.06	0.10	0.19	4.8	4.8	4.1
_0, J, LULT		/ Fine				32.8 33.2		6.04 5.44			81.2 72.9		0.13 0.43		5.15	4.7		7.1
		,	Bottom	20.4	20.1	33.4	33.3	5.39	5.42	5.42	72.9	72.6	0.45	0.44		3.0	3.8	

Remark

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

Monitoring Station: TKO-M4a



		Ambient Temp			Temp	Salinit	ty (ppt)	Dissolv	red Oxyger	n (mg/L)		d Oxygen tion (%)	Tu	urbidity (NT	U)	Susper	nded Solids	s (mg/L)
Date	Time	(°C) / Weather Condition	Monitoring I	Depth (m)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		04	Surface	1.0	22.5	31.2 31.9	31.6	6.78 6.76	6.77		93.8 93.7	93.8	0.75 0.77	0.76		2.2	2.2	
3/6/2024	9:55:59	24	Middle	9.5	22.3	32.5	32.5	6.75	6.75	6.76	93.8	93.8	1.53	1.52	1.24	2.7	2.4	2.3
3/6/2024	9.55.59	/ Cloudy	Middle	9.5	22.3	32.5 32.6	32.5	6.75 6.75	6.75		93.7 93.9	93.0	1.51	1.52	1.24	2.0	2.4	- 2.3
		/ Gloudy	Bottom	17.3	22.3	32.7	32.7	6.74	6.75	6.75	93.9	93.8	1.43	1.43		2.1	2.2	
		24	Surface	1.0	22.2	31.7 31.7	31.7	6.91 6.90	6.91		95.3 95.2	95.3	1.31	1.32		4.6	4.6	
5/6/2024	10:58:58		Middle	9.1	22.2	31.7	31.7	6.91	6.91	6.91	95.4	95.4	1.20	1.21	1.22	4.4	4.1	4.2
		/ Cloudy				31.8 31.7		6.91 6.87			95.4 94.8		1.22			3.7 4.9		''-
		,	Bottom	17.4	22.2	31.7	31.7	6.89	6.88	6.88	95.1	95.0	1.15	1.14		3.1	4.0	
		25	Surface	1.0	23.5	31.7 31.7	31.7	7.26 7.25	7.26	7.04	102.5 102.2	102.4	1.10	1.11		1.7 2.5	2.1	
7/6/2024	12:37:12		Middle	9.2	23.0	32.0	32.0	6.83	6.82	7.04	95.8	95.6	1.23 1.25	1.24	1.22	3.3	3.7	2.8
		/ Cloudy	Bottom	17.3	22.8	32.0 32.1	32.1	6.80 6.64	6.63	6.63	95.3 92.8	92.7	1.31	1.31		4.0 2.3	2.6	-
			Bottom	17.3	22.0	32.1 31.8	32.1	6.62 7.00	0.03	0.03	92.5 98.2	52.7	1.30 0.47	1.31		2.9 3.3	2.0	
		28	Surface	1.0	23.1	31.7	31.8	7.00	7.00	7.00	98.0	98.1	0.46	0.47		5.5	4.4	
11/6/2024	15:10:23		Middle	9.7	22.8	31.9 31.9	31.9	6.99 6.99	6.99	7.00	97.6 97.6	97.6	0.59	0.56	0.54	3.8 4.5	4.2	4.4
		/ Cloudy	Bottom	18.5	22.8	31.9	31.9	6.97	6.97	6.97	97.3	97.3	0.61	0.60		4.4	4.5	1
						31.9 31.3		6.97 6.92			97.3 97.0		0.59			4.6 3.5		
		29	Surface	1.0	23.2	31.3	31.3	6.90	6.91	6.73	96.7	96.9	0.49	0.49		2.4	3.0	_
13/6/2024	16:30:36		Middle	10.2	23.0	31.4 31.5	31.4	6.56 6.52	6.54		91.7 91.1	91.4	0.67	0.67	0.75	2.6 3.6	3.1	2.8
		/ Cloudy	Bottom	19.5	22.7	31.9 31.9	31.9	6.22 6.19	6.21	6.21	86.7 86.3	86.5	1.08 1.10	1.09		3.0 1.6	2.3	
			Surface	1.0	23.0	30.0	30.0	6.53	6.52		90.5	90.3	1.20	1.21		1.9	1.6	
		28	Curiace			30.0 30.8		6.50 6.11	0.02	6.31	90.1 84.8		1.21	1.2.		1.3 2.5	1.0	1
15/6/2024	18:34:52		Middle	10.7	22.8	30.8	30.8	6.08	6.10		84.4	84.6	1.66	1.66	1.70	3.0	2.8	2.0
		/ Cloudy	Bottom	20.3	22.7	31.5 31.5	31.5	5.74 5.72	5.73	5.73	79.8 79.5	79.7	2.24	2.24		1.5	1.6	
			Surface	1.0	23.5	24.2	24.3	6.42	6.43		87.0	87.0	0.13	0.12		2.6	3.2	
17/6/2024	0.40.44	29	NA: Julia	7.8	22.7	24.3 33.1	00.1	6.43 5.97	F 00	6.21	87.0 83.8	83.9	0.11	0.49	0.48	3.7 2.8	2.7	3.2
17/6/2024	8:48:11	/ Cloudy	Middle	7.0	22.1	33.2 33.4	33.1	6.00 6.02	5.99		83.9 84.1	65.9	0.47 0.83	0.49	0.46	2.6 4.7	2.1	3.2
		/ Gloudy	Bottom	14.7	22.3	33.4	33.4	6.04	6.03	6.03	84.3	84.2	0.86	0.85		2.7	3.7	
		30	Surface	1.0	23.7	20.1	20.1	6.91 6.88	6.90		91.6 91.1	91.4	1.22	1.23		3.8	3.5	
19/6/2024	9:32:17		Middle	8.3	22.7	32.9	32.9	6.35	6.34	6.62	89.0	88.9	1.10	1.10	1.27	4.3	4.2	3.7
		/ Cloudy				32.9 33.2		6.33 6.26			88.7 87.5		1.09			4.0 3.1		1
		,	Bottom	15.6	22.4	33.3	33.2	6.25	6.26	6.26	87.5	87.5	1.49	1.49		4.0	3.6	-
		30	Surface	1.0	24.1	24.8 24.8	24.8	7.16 7.13	7.15	6.76	98.2 97.8	98.0	0.75 0.73	0.74		3.7 4.1	3.9	
21/6/2024	11:35:21		Middle	8.7	22.8	33.0 33.0	33.0	6.39 6.35	6.37	6.76	89.8 89.2	89.5	0.84	0.85	0.91	4.4 3.5	4.0	4.0
		/ Fine	Bottom	16.2	22.5	33.6	33.6	5.94	5.93	5.93	83.3	83.2	1.13	1.15		4.6	4.1	-
						33.6 26.3		5.92 8.31		0.00	83.0 115.0		1.16 0.19			3.6 4.0		
		29	Surface	1.0	24.1	26.3	26.3	8.28	8.30	6.98	114.0	114.5	0.15	0.17		3.9	4.0	
25/6/2024	13:56:59		Middle	10.7	20.1	33.5 33.4	33.5	5.68 5.66	5.67		76.3 76.1	76.2	0.39	0.37	0.30	4.6 5.0	4.8	4.1
		/ Fine	Bottom	20.9	20.1	33.5	33.5	5.85	5.82	5.82	78.6	78.1	0.34	0.37		2.5	3.6	
			Surface	1.0	24.0	33.6 25.4	25.5	5.79 8.64	8.63		77.6 119.0		0.40	0.14		4.6 4.2	3.5	
		30	Surface	1.0	24.2	25.5 32.5	25.5	8.62 5.91	6.63	7.26	119.0 79.6	119.0	0.13 0.28	U.14		2.7	3.5	-
27/6/2024	15:33:05		Middle	10.3	20.6	32.5	32.5	5.88	5.90		79.6	79.4	0.26	0.27	0.25	4.9 3.7	4.3	3.8
		/ Fine	Bottom	19.7	20.1	33.8 33.8	33.8	5.64 5.62	5.63	5.63	75.9 75.5	75.7	0.35 0.36	0.36		3.4 4.1	3.8	
			Surface	1.0	24.0	24.4	24.4	8.71	8.69		119.0	118.5	0.07	0.06		3.3	3.0	<u> </u>
		29				24.4 31.5		8.67 6.14		7.40	118.0 82.8		0.05			2.6 3.7		-
29/6/2024	17:37:00	/ Fine	Middle	9.1	21.0	31.6	31.6	6.09	6.12		82.4	82.6	0.11	0.07	0.22	2.9	3.3	3.2
i						33.3	i	5.49	i	1	73.6		0.53	1	1	3.7	1	1

Remark:

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

Monitoring Station: TKO-M5



Date	Time	Ambient Temp	Monitoring [Denth (m)	Temp	Salinit	y (ppt)	Dissolv	ed Oxyger	(mg/L)		d Oxygen tion (%)	Τι	urbidity (NT	U)	Susper	nded Solids	s (mg/L)
Date	Time	(°C) / Weather Condition	Worldoning t	Deptii (iii)	(°C)	Value	Average	Value	Average	Depth- average	Value	Average	Value	Average	Depth- average	Value	Average	Depth- average
		24	Surface	1.0	22.4	31.7 31.8	31.8	6.72 6.75	6.74		93.0 93.5	93.3	0.85	0.90		2.6 2.1	2.4	
3/6/2024	10:18:56	24	Middle	7.5	22.3	32.5	32.4	6.74	6.74	6.74	93.6	93.6	1.59	1.57	1.35	3.2	2.3	2.1
0,0,2021	10.10.00	/ Cloudy				32.3 32.5		6.74 6.72			93.6 93.4		1.54		1.00	1.4 2.1		
		/ Glodaly	Bottom	14.1	22.3	32.6	32.5	6.73	6.73	6.73	93.5	93.5	1.58	1.59		1.3	1.7	
		24	Surface	1.0	22.2	31.7 31.7	31.7	6.89 6.89	6.89		95.1 95.1	95.1	1.13	1.14		4.9 3.7	4.3	
5/6/2024	11:17:54	24	Middle	7.5	22.2	31.7	31.7	6.88	6.88	6.89	94.9	94.9	1.13	1.28	1.28	4.2	4.5	4.2
3/0/2024	11.17.54	/ Cloudy	Wildale	7.5	22.2	31.7 31.7	31.7	6.88 6.88	0.00		94.9 95.0	34.3	1.30	1.20	1.20	4.8 4.1	4.5	7.2
		7 Glodaly	Bottom	13.6	22.2	31.7	31.7	6.88	6.88	6.88	95.0	95.0	1.42	1.41		3.2	3.7	
		25	Surface	1.0	23.4	31.7 31.8	31.8	7.23 7.22	7.23		101.9 102.0	102.0	1.16	1.17		3.8 4.0	3.9	
7/6/2024	12:54:42		Middle	7.4	23.1	32.0 32.0	32.0	6.87	6.85	7.04	96.5	96.2	1.25 1.27	1.26	1.26	4.1	4.0	3.4
		/ Cloudy	Bottom	13.8	23.0	32.0	32.0	6.82 6.65	6.64	6.64	95.8 93.2	93.0	1.36	1.36		3.9 2.4	2.3	
			Bottom	13.0	23.0	32.1	32.0	6.62	0.04	0.04	92.8	93.0	1.35	1.30		2.2	2.3	
		28	Surface	1.0	23.0	31.8 31.7	31.8	7.00 7.00	7.00	7.00	98.0 98.0	98.0	0.45	0.47		3.9 3.7	3.8	
11/6/2024	15:30:21		Middle	8.3	22.8	31.9 31.8	31.9	6.99 7.00	7.00	7.00	97.6 97.7	97.7	0.51 0.45	0.48	0.50	4.0 3.7	3.9	3.9
		/ Cloudy	Bottom	15.5	22.8	31.9	31.9	7.00	7.00	7.00	97.7	97.7	0.45	0.54		3.8	4.1	
			Bottom	15.5	22.0	31.9 31.4	31.9	6.99 6.85	7.00	7.00	97.6 95.9	57.7	0.56 0.45	0.54		4.3 4.1	4.1	
		29	Surface	1.0	23.1	31.4	31.4	6.85	6.85	6.64	95.7	95.8	0.43	0.46		1.6	2.9	
13/6/2024	16:41:23		Middle	8.5	22.9	31.7 31.7	31.7	6.44 6.42	6.43	0.04	90.0 89.7	89.9	0.55	0.55	0.69	4.2 3.2	3.7	2.8
		/ Cloudy	Bottom	16.0	22.7	31.9	31.9	6.10	6.09	6.09	85.0	84.9	1.06	1.08		2.1	1.7	
						31.9 30.0		6.08 6.44	2.12		84.8 89.3		1.09			1.3		
		28	Surface	1.0	23.0	30.0	30.0	6.42	6.43	6.24	89.0	89.2	1.23	1.23		1.8	1.5	
15/6/2024	18:46:53		Middle	8.6	22.9	30.4 30.4	30.4	6.05 6.03	6.04		83.9 83.5	83.7	1.73	1.74	1.68	1.3 2.0	1.7	1.9
		/ Cloudy	Bottom	16.2	22.8	31.3 31.4	31.3	5.77 5.76	5.77	5.77	80.3 80.2	80.3	2.05 2.08	2.07		2.5 2.8	2.7	
			Surface	1.0	23.5	23.9	23.9	6.58	6.58		88.9	88.9	0.16	0.17		3.0	2.6	
		29	Juliace	1.0	20.0	23.9 32.5	20.0	6.58 5.93	0.50	6.27	88.9 83.3	00.5	0.17	0.17		2.1 2.6	2.0	
17/6/2024	9:11:08		Middle	7.5	22.9	32.8	32.7	5.97	5.95		83.5	83.4	0.46	0.47	0.52	1.5	2.1	2.2
		/ Cloudy	Bottom	13.9	22.4	33.4 33.4	33.4	6.04 6.05	6.05	6.05	84.4 84.6	84.5	0.92	0.93		2.3 1.8	2.1	
			Surface	1.0	23.8	20.4	20.4	7.04	7.03		93.7	93.5	1.33	1.33		3.3	2.7	
		30				20.4 33.2		7.02 6.60		6.81	93.2 93.2		1.32			2.0 3.9		
19/6/2024	9:52:28	/ 01	Middle	8.3	23.0	33.3	33.3	6.59	6.60		93.1	93.2	1.07	1.06	1.29	4.4	4.2	3.5
		/ Cloudy	Bottom	15.4	22.5	33.8 33.8	33.8	6.47 6.45	6.46	6.46	90.8 90.4	90.6	1.46	1.48		4.0 3.3	3.7	
		30	Surface	1.0	24.2	24.5 24.6	24.5	7.08 7.06	7.07		97.1 96.7	96.9	0.80 0.81	0.81		3.3	3.8	
21/6/2024	11:50:48	30	Middle	8.3	22.9	32.8	32.8	6.28	6.28	6.67	88.3	88.2	0.92	0.94	0.98	4.2 4.2	4.3	3.9
21/0/2024	11.50.40	/ Fine	Wildale	0.0	22.3	32.8 33.7	32.0	6.27 5.82	0.20		88.0 81.7	00.2	0.95 1.19	0.34	0.30	4.4 3.2	4.5	0.0
		/ Tille	Bottom	15.6	22.5	33.7	33.7	5.78	5.80	5.80	81.1	81.4	1.22	1.21		4.2	3.7	
		29	Surface	1.0	24.0	26.4 26.4	26.4	8.43 8.39	8.41	7	117.0 116.0	116.5	0.16 0.13	0.15		4.1 4.2	4.2	
25/6/2024	14:20:53		Middle	8.0	20.2	33.3	33.3	5.85	5.83	7.12	78.6	78.4	0.32	0.35	0.25	4.4	4.4	4.2
		/ Fine		147		33.4 33.5		5.81 6.10		6.05	78.2 81.9		0.37	0.07		4.4	4.0	
			Bottom	14.7	20.1	33.5	33.5	6.00	6.05	6.05	80.6	81.3	0.27	0.27		4.0	4.0	
		30	Surface	1.0	24.1	25.3 25.3	25.3	8.35 8.34	8.35	7.06	115.0 115.0	115.0	0.15 0.15	0.15		2.7 4.1	3.4	
27/6/2024	15:51:53		Middle	7.5	20.7	32.6 32.7	32.7	5.78 5.75	5.77	7.00	78.1 77.7	77.9	0.26 0.29	0.28	0.26	4.4 2.8	3.6	4.0
		/ Fine	Bottom	14.0	20.3	33.8	33.8	5.58	5.56	5.56	75.3	75.0	0.34	0.34		5.5	4.9	•
						33.8 25.3		5.54 9.01			74.7 124.0		0.34			4.2 2.5		
		29	Surface	1.0	24.0	25.2	25.2	9.06	9.04	8.16	124.0	124.0	0.01	0.01		3.6	3.1	
29/6/2024	17:55:01		Middle	6.8	21.6	30.6 29.7	30.2	7.31 7.24	7.28		99.2 98.9	99.1	0.07	0.07	0.08	5.3 5.4	5.4	3.8
		/ Fine	Bottom	12.7	20.3	32.8	32.9	5.52	5.52	5.52	74.1	74.0	0.14	0.16		3.1	2.9	
		<u> </u>				33.1		5.51			73.9	ــــــــــا	0.17	<u> </u>	<u> </u>	2.6		

Remark:

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

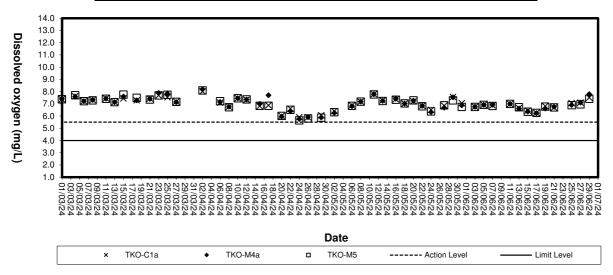


Appendix D5

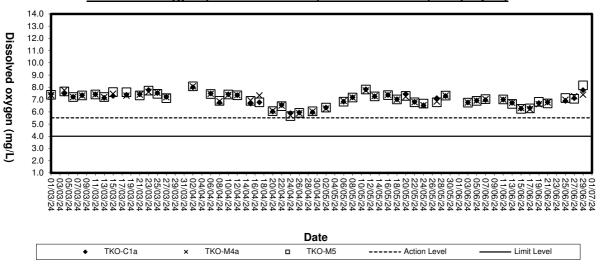
Graphical Plots of Impact Marine Water Quality Monitoring Data (3RS Project)



Dissolved Oxygen (Surface & Middle) at Mid-Flood Tide (3RS project)

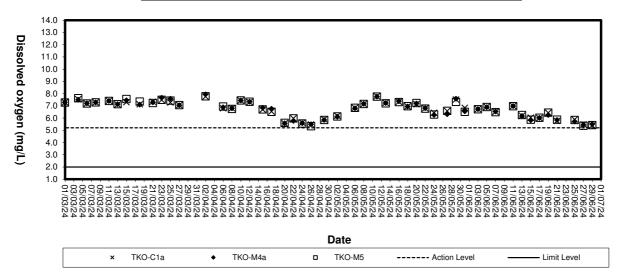


Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide (3RS project)

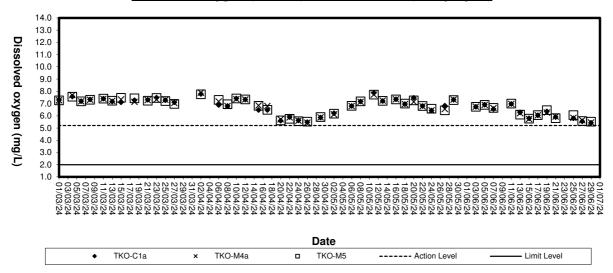




Dissolved Oxygen (Bottom) at Mid-Flood Tide (3RS project)

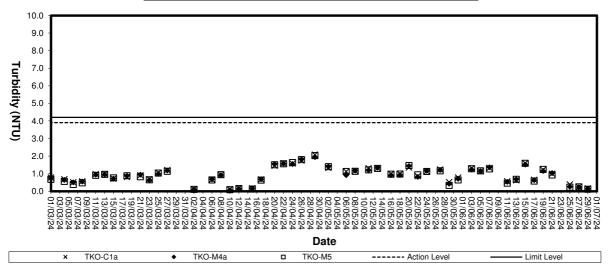


Dissolved Oxygen (Bottom) at Mid-Ebb Tide (3RS project)

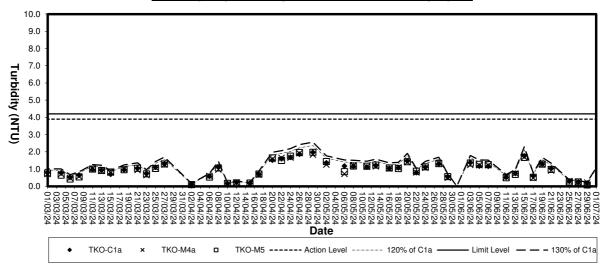




Turbidity (Depth-average) at Mid-Flood Tide (3RS project)

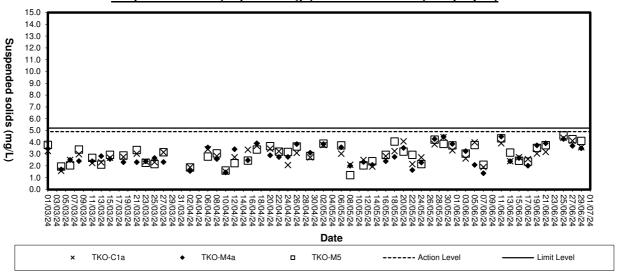


Turbidity(Depth-average) at Mid-Ebb Tide (3RS project)

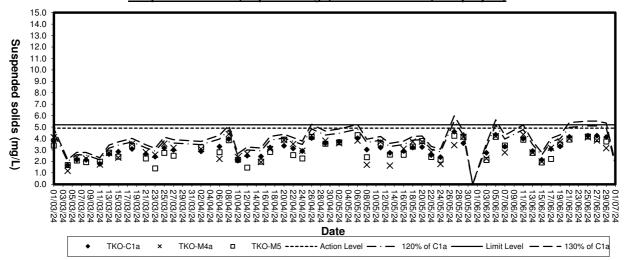




Suspended solids (Depth-average) at Mid-Flood Tide (3RS project)



Suspended Solids (Depth-average) at Mid-Ebb Tide (3RS project)





Appendix E

Weather Condition

Daily Extract of Meteorological Observations , June 2024 - Tseung Kwan O

	Mean		teorologi		Mean	Mean	Total	Prevailing	Mean
	Pressure	Ai	r Temperatu	ıre	Dew		Rainfall	Wind	Wind
			P			Relative			
Dani	(hPa)				Point	Humidity	(mm)	Direction	Speed
Day		Absolute	Mean	Absolute	(deg. C)	(%)		(degrees)	(km/h)
		Daily	(deg.C)	Daily					
		Max		Min					
		(deg. C)		(deg. C)					
1	1007.8	29.8	27.1	25.6	24.9	88	54.2	50	10.1
2	1007.3	30.3	28	25.8	25	84	3.2	70	33.8
3	1008.4	28.2	25.3	23.8	23.6	91	8.6	80	38.4
4	1009.9	24.9	24.1	22.9	21.5	86	2.9	90	28.3
5	1010.2	25.4	24.4	23.4	22.7	90	8.5	60	11
6	1009.4	28.7	26.5	24.7	24.4	88	Trace	160	5.3
7	1007.9	26.6	25.6	25.1	24.2	92	1.6	70	11.3
8	1006.9	28.9	26.3	24.8	24.5	90	6.8	50	15.3
9	1008.3	27.5	26.6	25.3	25.3	93	33.5	70	37.9
10	1008.9	30.7	28.5	26.5	25.6	85	0.2	80	34.5
11	1008.1	30.8	29.1	28.2	26.1	84	0.6	50	17.3
12	1006.9	31.8	29.5	28.1	26.4	83	8.3	40	5.6
13	1004.7	32	29.9	28.7	26.8	83	4.9	80	20.5
14	1004.1	30.4	29.7	27.7	26.4	82	32	80	26.4
15	1004.6	30	28.2	25	25.6	86	28.3	70	17.4
16	1006.2	30.9	28.8	26.1	26.1	86	17.5	80	33.8
17	1006.6	32.7	30.1	28.6	26.2	80	Trace	60	19.6
18	1005.9	32.1	29.9	27.6	26.3	81	4.6	70	23.7
19	1005.7	32.2	30	28	26.2	80	9.4	80	31.8
20	1005.6	33	30	27.3	26.5	82	5	70	42.2
21	1006	34	30.8	28.7	25.9	76	-	80	18.3
22	1006.4	33.8	31.2	29.5	26.3	75	-	50	8
23	1006.7	33.9	30.5	27.9	26.1	78	4.7	60	15.8
24	1007.3	33.4	30.8	28.8	26.2	77	0.3	50	14.9
25	1009.2	33.2	30.1	26.5	26	79	19	80	13.9
26	1011.3	34	30.4	27.9	26.2	79	-	40	8.2
27	1010.9	34.4	30.7	28.4	26.5	79	1.4	210	23.4
28	1008.9	34.2	31	28.9	26	75	1.6	70	15.1
29	1007.6	31.5	29.2	26.8	25.8	82	15.5	70	51.1
30	1006.6	32	30.3	27.7	26.3	79	8.7	60	41.8

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



Appendix F

Event-Action Plans

-				dia C		dial
	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 proposals Amend proposal if appropriate	of acitor of circumstant and F	avoid further exceedance 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.
			. 2	-, -, -, -, -, -, -, -, -, -, -, -, -, -,	ļ	÷ 2, €, 4,
ITY EXCEEDANCE	0		1. Notify Contractor	Confirm receipt of notification of failure in writing Notify the Contractor Ensure remedial measures property implemented		 Confirm receipt of notification of failure in writing Notify the Contractor Ensure remedial measures properly implemented
UAL	-			e e ible		e sible
EVENT/ACTION PLAN FOR AIR QUALITY EXCEEDANCE	ACTION	IC(E)	Check monitoring data submitted by the ET	Check monitoring data submitted by the ET Leader 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
EVE			- ' α'	÷ 5.6. 4. 7.		∸. ડાધ, 4. rž
		ET Leader	Identify source, investigate the causes of exceedance and propose remedial measures. Inform ER, IC(E) and Contractor. Repeat measurement to confirm finding. Increase monitoring frequency to daily	Identify source, investigate the causes of exceedance and propose remedial measures Inform IC(E) and Contractor Repeat measurements to confirm finding Increase monitoring frequency to daily biscuss 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 Increase monitoring frequency to daily horses the effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results
			- 4. 4.		-	
EVENT			for one sample	2. Exceedance for two or more consecutive samples		1, Exceedance for one sample
ш.				1		1

EVENT		EVENT/ACTION PLAN FOR AIR QUALITY EXCEEDANCE	LITY EXCEEDANCE		
'93		ACTION			
	ET Leader	IC(E)	ER	Contractor	
2. Exceedance	1. Identify source, investigate the causes	1. Discuss amongst ER, ET and Contractor on	1. Confirm receipt of notification	1. Take immediate action to	<u>۔</u>
for two or	of exceedance and propose remedial	the potential remedial actions	of failure in writing		ces
more	measures	2. Review Contractor's remedial actions	2. Notify Contractor	2. Submit proposals for remedial	medial
consecutive	2. Notify IC(E), ER, EPD and Contractor	whenever necessary to assure their	In consultation with the IC(E),	actions to IC(E) within 3	~
sambles	3. Repeat measurement to confirm	effectiveness and advise the ER accordingly	agree with the Contractor on	working days of notification	tion
•	findina	3. Supervise the implementation of remedial	the remedial measures to be	Implement the agreed	
	4. Increase monitoring frequency to daily	measures	implemented	proposals	
	5. Carry out analysis of contractor's		Ensure remedial measures	4. Resubmit proposals if	
	working procedures to determine		are properly implemented	problem still not under control	control
	possible mitigation to be implemented		5. If exceedances continues,	Stop the relevant activity of	ty of
	6. Arrange meeting with IC(E) and ER to		consider what portion of the	works as determined by the	y the
	_		work is responsible and	ER until the exceedance is	s is
	taken		instruct the Contractor to stop	abated	
-	7. Assess effectiveness of Contractor's		that portion of work until the	•	
	remedial actions and keep IC(E), EPD		exceedance is abated		
<u>™</u>	and ER informed of the results				
	8. If exceedance stops, cease additional				-
	monitoring				

				EVENT/ACTION PLAN FOR NOISE EXCEEDANCE	N N	OISE EXCEEDANCE			
EVENT				ACTION	Z				
	_	ET Leader		IC(E)		ER		Contractor	7
Action Level	+ 4 € + 4 €	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	3. 2. 1.	Review the analysed results submitted by the ET. Review the proposed remedial measures by the Contractor and advise the ER accordingly. Supervise the implementation of remedial measures.	÷ 2.6. 4.	Confirm receipt of notification of failure in writing. Notify the Contractor. Require the Contractor to propose remedial measures for the analysed noise problem. Ensure remedial measures are properly implemented.	.	Submit noise mitigation proposals to IC(E). Implement noise mitigation proposals.	
Limit	<u> -</u>	Notify the IC(E), the ER, the EPD		Discuss amongst the ER, the ET	<u> </u>	Confirm receipt of notification of	-:	Take immediate action to avoid	777
Level		and the Contractor.		Leader and the Contractor on the	•	failure in writing.		Turther exceedance	
2.00 2 70	٧i			potential remedial actions.	٠į	Notify the Contractor.	N.	Submit proposals for remedial	
	લ	Repeat measurement to confirm	۲,	Review the Contractor's remedial	က်	Require the Contractor to propose		actions to IC(E) within 3	
-1-0-410		findings.		actions whenever necessary to		remedial measures for the		working days of notification.	
	4	Increase monitoring frequency.		assure their effectiveness and		analysed noise problem.	က်	Implement the agreed	
	က်			advise the ER accordingly.	4.	Ensure remedial measures are	•	proposals.	
	-	working procedures to determine	က်	Supervise the implementation of	ı	properly implemented.	4.	Resubmit proposals if problem	_
		possible mitigation to be		remedial measures.	ဂံ	If exceedances continue, consider	Ľ	Still flot dilder conflict.	
		_				what activity of the work is	က်	Stop the relevant activity of	~
	ဖ					responsible and instruct the		works as determined by the ER	
		EPU the causes & actions taken for				כטונומכוטן וט פוטף ווומר מכוואונץ טו			-
		•				work until the exceedances is		abated.	
	۲.					abated.			
		Contractor's remedial actions and							
	•	keep the IC(E), the EPD and the							
		ER informed of the results							
	ထ								-
		construction works stops, cease							-
		additional monitoring							

Event		EVEN.	IT A	EVENT AND ACTION PLAN FOR WATER QUALITY EXCEEDANCE	ATE	ER QUALITY EXCEEDANC	Ж	
uçı sılı				ACTION	z			
		ET Leader		Contractor		ER		IEC
Action level	-	Identify source(s) of impact:	<u> -</u>	Notify the ER and IEC in writing	<u>-</u> :	Notify EPD and other relevant	-	Check monitoring data
heing exceeded	د د	Reneat in-situ measurement to		within 24 hours of identification of	,	governmental agencies in writing		submitted by ET
by one	i	confirm findings:		exceedance		within 24 hours of the	2	Confirm ET assessment if
sampling day	•		7			identification of the exceedance		exceedance is due / not due
Con Standards	; 		က်		2.	Discuss with IEC, ET and		to the works
		exceedance	4			Contractor on the proposed	က်	Discuss with ET, ER and
	4			and ER within 3 working days of		mitigation measures;		Contractor on the mitigation
				the identification of an	က	Require contractor to propose		measures
		working methods:		exceedance		remedial measures for the	4.	Review contractor's
	ď		က်			analysed problem if related to the		mitigation measures
	(c)			method if exceedance is due to		construction works		whenever necessary to
	; 	_		the construction works	4.	Ensure remedial measures are		ensure their effectiveness
·		days of identification of	9			properly implemented		and advise the ER
		exceedance and advise		propose mitigation measures to	ů.	Assess the effectiveness of the		accordingly
		contractor if exceedance is due to		IEC and ER if exceedance is due		mitigation measure	ri,	Supervise the
		contractor's construction works		to the construction works within 4				implementation of mitigation
	7.			working days of identification of	_			measures
		Contractor if exceedance is due		an exceedance				
		to the construction works within 4	7.	Implement the agreed mitigation				
		working days		measures within reasonable time				
	ω.	Repeat measurement on next day		scale				
		of exceedance if exceedance is						
		due to the construction works	_				_	

. . ._

Event	<u> </u>		1"	EVENT AND ACTION PLAN FOR WATER QUALITY	FO	R WATER QUALITY	1	
				ACTION	×			
	Ŀ	ET Leader		Contractor		ER		IEC
Action level	7	Identify source(s) of impact;	Ŀ	Notify IEC and ER in writing	~	Notify EPD and other relevant	+	Check monitoring data
being	2	Repeat in-situ measurement		within 24 hours of		governmental agencies in		
exceeded by		to confirm findings		identification of exceedance		writing within 24 hours of the	તં	_
more than one	က်	Notify Contractor in writing	2	٠		identification of the		if exceedance is due /
consecutive		within 24 hours of	က	Check all plant and		exceedance		_
sampling days		identification		equipment;	7	Discuss with IEC, ET and	က	_
	4.	Check monitoring data, all	4.	U		Contractor on the proposed		Contractor on the
		plant, equipment and		methods;	· · ·	mitigation measures;		mitigation measures.
		Contractor's working methods;	က်	UJ	က	Require contractor to propose	4.	
	ry.	Carry out investigation		investigation to IEC and ER		remedial measures for the		mitigation measures
	9			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
horio		within 3 working days of		exceedance	4.	Ensure remedial measures		effectiveness and advise
		identification of exceedance	ဖ်	Discuss with ET, IEC and ER		are properly implemented		_
		and advise contractor if		and propose mitigation	r.	Assess the effectiveness of	က်	•
		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.
				identification of an				
	7.			exceedance				
		with IEC and Contractor within	7.	Implement the agreed				
		4 working of identification of		mitigation measures within				
•		an exceedance		reasonable time scale				
- of the last	ထ	. Ensure mitigation measures						
		are implemented;						
	<u>o</u>	. Prepare to increase the						
· · · · · · · · · · · · · · · · · · ·		monitoring frequency to daily;						
	~	10. Repeat measurement on next						
		day of exceedance.						

.

Event		EVENT AND	Ϋ́		ATE	ACTION PLAN FOR WATER QUALITY EXCEEDANCE	Щ		
الانتخا م و ر				ACTION	Z				
		ET Leader		Contractor		ER		IEC	Υ
Limit level	Υ-	Repeat in-situ measurement	1.	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 E.I.	
exceeded by	7	_		identification of the		writing within 24 hours of	7	Confirm ET assessment	
one sampling	"			exceedance		identification of exceedance		if exceedance is due /	
8		_	2	Rectify unacceptable practice;	2	Discuss with IEC, ET and		not due to the works	
5		identification of the	က	Check all plant and		Contractor on the proposed	က်	Discuss with ET, ER and	
		exceedance		equipment;		mitigation measures;	•	Contractor on the	
	4	_	4	Consider changes of working	က	Request Contractor to critically		mitigation measures.	
		_		methods:		review the working methods;	4.	Review proposals on	
		Contractor's working methods:	ιc	Submit the results of the	4	Ensure remedial measures		mitigation measures	
•	rc.	_	:	investigation to IEC and ER		are properly implemented		submitted by Contractor	
				within 3 working days of the	ည်	Assess the effectiveness of		and advise the ER	
-		-		identification of an		the implemented mitigation		accordingly.	
		within 3 working days of		exceedance		measures.	က်	Assess the effectiveness	
		identification of exceedance	6	Discuss with ET, IEC and ER				of the implemented	
		and advise contractor if	i	and propose mitigation				mitigation measures	<u></u>
	•	exceedance is due to		measures to IEC and ER					
4		contractor's construction		within 4 working days of the					
		works		identification of an					
1 2	7			exceedance					
		with IEC, ER and Contractor	۲.						
نىچەسى <u>ت</u>		within 4 working of		mitigation measures within					
		identification of an		reasonable time scale					
		exceedance							
	<u></u>	Ensure mitigation measures							
		are implemented;							
	0	Increase the monitoring							
		frequency to daily until no							
	-	exceedance of Limit Level.							

Event		EVEN	 	EVENT AND ACTION PLAN FOR WATER QUALITY EXCEEDANCE	'ATE	R QUALITY EXCEEDANC	ш	
* 				ACTION	Ž			
-		ET Leader		Contractor		ER		IEC
Limit Level	-	Repeat in-situ measurement	-	Notify ER and IEC in writing	- -		- -	Check monitoring data
being		to confirm findings;		within 24 hours of the		governmental agencies in	_	submitted by E.I
exceeded by	2			identification of the		writing within 24 hours of	۲,	Confirm ET assessment
more than one	i m			exceedance and		identification of exceedance		if exceedance is due /
consecutive	;	•	2	Rectify unacceptable practice;	7	Discuss with IEC, ET and		not due to the works
sampling days		identification of the	က်	Check all plant and		Contractor on the proposed	က	Discuss with ER, ET and
		exceedance		equipment;		mitigation measures;		Contractor on the
	4		4.	Consider changes of working	က	Request Contractor to critically		mitigation measures.
~~~	:			methods;		review the working methods;	4.	Review proposals on
	_	Contractor's working methods:	<u></u>	Submit the results of the	ô,	Ensure remedial measures		mitigation measures
نث ج	ιC			investigation to IEC and ER		are properly implemented		submitted by Contractor
	<b>ф</b>			within 3 working days of the	4.	Assess the effectiveness of		and advise the ER
	;	· -		identification of an		the implemented mitigation		accordingly.
		within 3 working days of		exceedance		measures;	က်	Assess the effectiveness
		identification of exceedance	က်	Discuss with ET, IEC and ER	က်	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	6	Implement the agreed		exceedance of Limit Level.		
	۲.	Discuss mitigation measures		mitigation measures within				
		with IEC, ER and Contractor;		reasonable time scale				
	ω.		7.	As directed by the Engineer,				
34.14.50		are implemented;		to slow down or to stop all or				
	<u>ග</u>			part of the marine work or				
		frequency to daily until no		construction actives.				
		exceedance of Limit Level for						
		two consecutive days.						



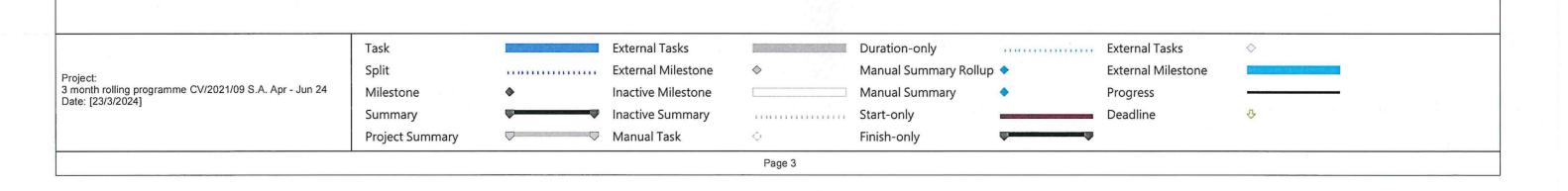
# Appendix G

**Works Programme** 

ID	A	Task Name	Start	Finish	Duration	Predecesso time risk allowances	Actual Start	Actual Finish	% Complet	25	1	Apr '24		May '24	20   27		un '24	J
1		Contract duration of Contract CV/2021/9	Mon 1/1/24	Wed 31/7/24	213 days		NA	NA	Complet 0%	25		8   15	)   22	29 6 13	20   27	3   1	0 17 24	1 8
2	THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE S	Contract date, Date of Letter of Acceptance	Mon 1/1/24		1 day		NA	NA	0%									
3		Starting Date of the Works	Mon 1/1/24		1 day		NA	NA	0%									
		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	Mon 1/1/24	Mon 1/1/24	1 day		NA	NA	0%									
5		Starting Date of Section 2 of the Works	Mon 1/1/24	Mon 1/1/24	1 day		NA	NA	0%									
6	H	Starting Date of Section 3 of the Works	Mon 1/1/24	Mon 1/1/24	1 day		NA	NA	0%									
7		Date for Completion of the Works		Sun 31/12/23			NA	NA	0%									
8		Completion Date of Section 1 of the Works		Wed 31/7/24			NA	NA	0%									
9	(SECON)	Completion Date of Section 2 of the Works			1 day		NA	NA	0%									
10		Completion Date of Section 3 of the Works		Mon 30/9/24			NA	NA	0%									
11		Planned completion dates		Wed 31/7/24			NA	NA	0%									
12		Planned competion date of Section 1		Wed 31/7/24			NA	NA	0%									
13		Planned competion date of Section 2	Wed 31/7/24		1 day		NA	NA	0%									
		Planned competion date of Section 3			1 day		NA	NA	0%				-			9.4		7
14		Access Date of the Site	Mon 1/1/24	Mon 1/1/24	1 day		NA	NA	0%									7
		Portion A2, A3a, A3b, A3c, A4, A5a, A5b, A7c2, A10 and	Mon 1/1/24	Mon 1/1/24	1 day			Mon 1/1/24	100%									
16	<b>√</b> □	A11 (within 60 days after starting date)																
17	<b>√</b> □	Portion B1, B3, B6a, B6b and B7 (within 60 days after starting date)	Mon 1/1/24	Mon 1/1/24	1 day		Mon 1/1/24	Mon 1/1/24	100%									
18	<b>√</b> Ÿ	Portion A1. A7a, A7b, A7c1, A9, A9a and B6c (7 day's advance notice after starting date)	Mon 1/1/24	Mon 1/1/24	1 day		Mon 1/1/24	Mon 1/1/24	100%									
19	1	Portion B6c	Mon 1/1/24	Mon 1/1/24	1 day		Mon 1/1/24	Mon 1/1/24	100%									
20		Hand back of the Site	Wed 31/7/24	Wed 31/7/24	1 day		NA	NA	0%									
21	<b>√</b> ₽	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 Mon 1/1/24	Mon 1/1/24	1 day		Mon 1/1/24	Mon 1/1/24	100%									,
22	<b>√</b> \$	Portion A1, A7b, A7c1, A9 and A9a (or at an earlier date a notified by the Project Manager with 30 days' advance noti	Mon 1/1/24 ce)	Mon 1/1/24	1 day		Mon 1/1/24	Mon 1/1/24	100%									
23	<b>√</b> \$	Portion B1, B3, B6a, B6b and B7 (or at an earlier date as notified by the Project Manager with 30 days' advance notion	Mon 1/1/24 ce)	Mon 1/1/24	1 day		Mon 1/1/24	Mon 1/1/24	100%									
24	<b>√</b> ∰	Portion B6c (or at an earlier date as notified by the Project Manager with 30 days' advance notice)	Mon 1/1/24	Mon 1/1/24	1 day		Mon 1/1/24	Mon 1/1/24	100%									et a
25		Section 1A of the Works - Tseung Kwan O Area 137 Fil Bank	Mon 1/1/24	Wed 31/7/24	213 days	4SS	Mon 1/1/24	NA	33%							***************************************		
26	1	Taking over the existing facilities at the Tseung Kwan C Area 137 Fill Bank within Portion A of the Site	Mon 1/1/24	Mon 1/1/24	1 day	4SS 0	Mon 1/1/24	Mon 1/1/24	100%							-		
27		Operation of the the Tseung Kwan O Area 137 Fill Ban within Portion A of the Site	Mon 1/1/24	Mon 1/1/24	1 day	26SS 0	Mon 1/1/24	NA	33%									
28		Operation and maintenance of the surveillance system within Portion A of the Site	Mon 1/1/24	Mon 1/1/24	1 day	26SS 0	Mon 1/1/24	NA	33%									
29	<u> </u>	Operation and maintenance of the existing tipping halls the Tseung Kwan O Area 137 Fill Bank within Portion A	at Mon 1/1/24 of	Mon 1/1/24	1 day	26SS 0	Mon 1/1/24	NA	33%									
30	-	the Site  Provision, operation and maintenance of the Crushing Plant at the Tseung Kwan O Area 137 Fill Bank within	Mon 1/1/24	Wed 31/7/24	213 days	26SS 0	Mon 1/1/24	NA	33%		54,55							
31	<b>-1</b>	Portion A of the Site  Operation and maintenance of the dewatering plant at t Tseung Kwan O Area 137 Fill Bank within portion A of t		Wed 31/7/24	213 days	26SS 0	Mon 1/1/24	NA	33%									
32	<u>,</u> 0	Site  Chai Wan and Mui Wo Barging Points to the TKO Area	Mon 1/1/24	Wed 31/7/24	213 days	26SS 0	Mon 1/1/24	NA	33%		Si in calan		S 6 1 1 1 1 1 1 1 1 1				Y WEST STORY	
33		137 Fill Bank within Portion A of the Site Handing over the facilities at the Tseung Kwan O Area	Wed 31/7/24	Wed 31/7/24		0	NA	NA	0%									
		137Fill Bank within Portion A of the Site to the Employe	r							Total Control								
		Task				External Tasks		Dura	ation-only		111		Ex	ternal Tasks	$\Diamond$			
Project:		Split			l	External Milestone	$\Diamond$	Man	nual Summa	ry Rollu	р 🔷		Ex	ternal Milestone	mp eAt a se			
3 month		programme CV/2021/09 S.A. Apr - Jun 24 Milestor	ie	<b>•</b>	1	nactive Milestone		Man	nual Summa	iry	•		Pr	ogress				
Date: [2	3/3/2024	I] Summai				nactive Summary			t-only	,		4.0.00		eadline	₽			
			Summary				• • • • • • • • • • • • • • • • • • •		sh-only					adii i	~			-
		rioject	outilitial y	~	<b>V</b>	viailuai 1a5K		FIIIIS	STI-OTHY		~	_		-				
							Page 1								-			

ID	^	Task Name		Start	Finish	Duration	Predecesso		Actual	Actual	%		. Apr '24	1	May '	24	. Jun'	24	
24	U	Planned Completion Date (Section 1)		Med 31/7/24	Wed 31/7/24	1 day		allowances	Start Wed 31/7/24	Finish	Complete 0%	25 1/4/24		22   2	29   6   13	20 27	3 10	17   24   30/6/2	1 8
34		Section 2A of the Works - Tuen Mun Area 38							Mon 1/1/24		33%	1/4/24						[30/6/2	<i>2</i> 4
35	<b>III</b>					0 days	500	0	Mon 1/1/24		100%								
36	~	Taking over the existing facilities at the Tuer Fill Bank within Portion B of the Site																1. 1.	
37		Operation of the Tuen Mun Area 38 Fill Ban Portion B of the Site			Wed 31/7/24			0	Mon 1/1/24		33%			Dental State			CARRESTA DE CEDA		
38		Operation and maintenance of the surveillar within Portion B of the Site	nce system	Mon 1/1/24	Wed 31/7/24	213 days	5SS	0	Mon 1/1/24	NA	33%	951 SA (		1315					
39		Operation and maintenance of the existing t the Tuen Mun Area 38 Fill Bank within Porti	tipping halls at I	Mon 1/1/24	Wed 31/7/24	213 days	5SS	0	Mon 1/1/24	NA	33%	and the second	Market (E)	17 (F) N					
40		Operation and Maintenance of the Crushing Tuen Mun Area 38 Fill Bank within Portion E	Plant at the B of the Site	Mon 1/1/24	Wed 31/7/24	213 days	5SS	0	Mon 1/1/24	NA	33%			al Paristra					
41		Operation and maintemnance of glass culler compartment at the Tuen Mun Area 38 Fill E Portion B of the Site	et storage Bank within	Mon 1/1/24	Wed 31/7/24	213 days	5SS	0	Mon 1/1/24	NA	33%			AVEAS					
42		Planned Completion Date (Section 2)	\	Wed 31/7/24	Wed 31/7/24	1 day			NA	NA	0%								
43		Section 3A of the Works - Designated Recla in the Mainland	amation Sites	Sat 18/11/23	Mon 30/9/24	318 days			Sat 18/11/23	NA	15%							201211	
44		Collection and delivery of Public Fill by v Tseung Kwan O Area 137 Fill Bank and th Area 38 Fill Bank to the Desiognated Rec Sites in the Mainland	he Tuen Mun	Sat 18/11/23	Mon 30/9/24	318 days			Sat 18/11/23	NA	22%	***************************************							
45	1	1st quarter of year 2024	,	Sat 18/11/23	Sun 18/2/24	93 days			Sat 18/11/23	Sun 18/2/24	100%							-	
46	V	Submitting application documents to application of dumping permits	EPD for	Tue 28/11/23	Tue 28/11/23	0 days		0	Tue 28/11/23	Tue 28/11/23	100%	-							
47	. 3	Obtaining the dumping permit from El	:PD	Thu 28/12/23	Thu 28/12/23	1 day	46	1	Thu 28/12/23	Thu 28/12/23	100%								
48	~	Submitting Application documents to for the application of the dumping per the sea	the Employer				,	0	Sat 18/11/23	Sun 19/11/23	100%	des services de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de							
49	<b>V</b>	Obtaining the dumping permits from N Ecology and environment of the Peop of China through the Employer		Thu 28/12/23	Thu 28/12/23	1 day	48	1	Thu 28/12/23	Thu 28/12/23	100%	Albertains on the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the statement of the state							
50	V	Obtaining all necessary permits, licen approvals and concents	nses,	Thu 28/12/23	Thu 28/12/23	0 days		0	Thu 28/12/23	Thu 28/12/23	100%							-	
51	1	Collection and delivery of public Fill to	o Taishan	Wed 3/1/24	Sun 18/2/24	47 days	50		Wed 3/1/24	Sun 18/2/24	100%								
52		2nd quarter of year 2024	-	Tue 23/1/24	Sat 29/6/24	159 days			Tue 23/1/24	NA	23%								
53	Va.	Submitting application documents to application of dumping permits	EPD for	Tue 23/1/24	Tue 23/1/24	0 days		0	Tue 23/1/24	Tue 23/1/24	100%	-							
54	3	Obtaining the dumping permit from E	PD F	Fri 1/3/24	Fri 1/3/24	1 day	53		Fri 1/3/24	Fri 1/3/24	100%							-	
55	V	Submitting Application documents to for the application of the dumping per the sea		Fri 26/1/24	Fri 26/1/24	1 day			Fri 26/1/24	Fri 26/1/24	100%	***************************************							
56	<b>V</b>	Obtaining the dumping permits from N Ecology and environment of the Peop of China through the Employer	Ministry of Figure 19 Ple's Republic	Fri 1/3/24	Fri 1/3/24	1 day	55	3	Fri 1/3/24	Fri 1/3/24	100%	***************************************							
57	V	Obtaining all necessary permits, licen and concents	nses,approvals	Fri 1/3/24	Fri 1/3/24	1 day		0	Fri 1/3/24	Fri 1/3/24	100%	Accession and the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Con						1.00	
58		Collection and delivery of Public Fill to	to Taishan	Sat 2/3/24	Sat 29/6/24	120 days	54	0	Sat 2/3/24	NA	20%		e edition to the first of the Color			PORTES DE LA MERI			
59		3rd quarter of year 2024		Tue 14/5/24	Mon 30/9/24	140 days			NA	NA	0%								
60		Submitting application documents to application of dumping permits	EPD for	Sat 1/6/24	Sat 1/6/24	1 day			NA	NA	0%	Andrewson the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control					ή		
61		Obtaining the dumping permit from E	EPD \$	Sun 2/6/24	Sat 29/6/24	28 days	60		NA	NA	0%	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s					<u> </u>		
			Task				External Task				ion-only	<u>.</u>			nal Tasks				
Project	:		Split				External Mile	stone	$\Diamond$	Manu	al Summary	y Rollup	•	Exter	nal Milestone				
3 montl	h rolling	programme CV/2021/09 S.A. Apr - Jun 24	Milestone		<b>•</b>	1	nactive Mile	stone		Manu	al Summary	y	•	Prog	ress				
⊔ate: [2	23/3/202	24]	Summary				nactive Sum	marv		Chart				Deac		₽.			
			Project Sum	nmary	$\nabla$		Manual Task	•			-only		-	<b>T</b>		*			
				•												39-			

ID	0	Task Name	Start	Finish	Duration	Predecesso	time risk allowances	Actual Start	Actual Finish	% Complete	25	1	Apr':	24 15   22	29	Ma	ıy '24 13   20	   27	3   10	1 '24   17   :	24 1
62		Submiting Application documents to the Employer for the application of the dumping permit of waste at the sea	Tue 14/5/24	Tue 14/5/24	1 day		0	NA	NA	0%		1/24				B-					30/6/24
63	п	Ecology and environment of the People's Republic of China through the Employer (assumed on		Sun 23/6/24		62	7	NA	NA	0%											
54		Obtaining all necessary permits, licenses, approvals and concents	Sat 1/6/24	Sun 30/6/24	30 days			NA	NA	0%											
55	E	Collection and delivery of public fill to Taishan	Mon 1/7/24	Mon 30/9/24	92 days	64	0	NA	NA	0%								28 27			No. of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of
66		Removal, excavation and deposition of stockpiled and/or deposited Public Fill within the Designated Reclamation Sites in the Mainland	Mon 1/1/24	Wed 31/7/24	213 days			Mon 1/1/24	NA	33%											
58		Operation and maintenance of the existing navigation channel and turning basins in association with the existing berthing facilituy at Zone E of the Desiganted Reclamation Sites in the Mainland	Mon 1/1/24	Wed 31/7/24	213 days			Mon 1/1/24	NA	33%											
59		Design and construction of seawalls in association with new berthing facilities at zone B	Thu 1/2/24	Sat 28/9/24	241 days			NA	NA	0%											
70		Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republic of China through the Employer for Zone B	Thu 1/2/24	Thu 1/2/24	1 day		0	NA	NA	0%											4
1	THE STATE OF	Preparation of design submission	Fri 2/2/24	Fri 16/2/24	15 days	70		NA	NA	0%											
2		Obtaining all necessary design approvals and concents	Sat 17/2/24	Sun 17/3/24	30 days	71		NA	NA	0%								× -			
3		Construction of the berthing facilities	Mon 18/3/24	Fri 13/9/24	180 days	72		NA	NA	0%	70000000		Self Property Colo	BARNAT WATER			On the lates	ar von Millerin Bellin		Market Printers	
4		Obtaining the construction completion certificate	Sat 14/9/24	Sat 28/9/24	15 days	73	2	NA	NA	0%											
5	,	Design and construction of seawalls (approximate 200m) in association with new berthing facility at Zone B of the Designated Reclamation Sites in the Mainland	Thu 1/2/24	Tue 30/7/24	181 days			NA	NA	0%											
6		Obtaining the permits from Ministry of Ecology and environment of the People's Republic of China through the Employer for Zone B	Thu 1/2/24	Thu 1/2/24	1 day			NA	NA	0%											
7		Preparation of design submission	Fri 2/2/24	Sat 2/3/24	30 days	76	2	NA	NA	0%								4 7 - 5			
8		Obtaining all necessary design approvals and concents	Sun 3/3/24	Mon 1/4/24	30 days	77	2	NA	NA	0%											
9		Construction of seawalls	Tue 2/4/24	Sun 30/6/24	90 days	78	14	NA	NA	0%					Same a light					al expedit services	100 (a) (a)
0		Obtaining the construction completion certificate (subject to Project's Manager's instruction)	Mon 1/7/24	Tue 30/7/24	30 days	79		NA	NA	0%											Page 10 Free
1	HE	Site Formation works at Tsang Tsui site	Mon 1/1/24	Wed 31/7/24	213 days			NA	NA	0%					_						
2		Carrying out of general site clearance and initial survey	Mon 1/1/24	Tue 30/1/24	30 days		T	NA	NA	0%		- 8									
3	H	Construction of a haul road leading to the site	Wed 31/1/24	Thu 29/2/24	30 days	82	2	NA	NA	0%											
4		Collection of fill material deliviered by marine transportation through the berthing facility and disposal of the fill material collected to areas within the site	Fri 1/3/24	Wed 31/7/24	153 days		0	NA	NA	0%										12.5.555 (Sp.	
35	п	Planned Completion Date (Section 3)	Mon 30/9/24	Mon 30/9/24	1 day			NA	NA	0%											-





# Appendix H

Weekly ET's Site Inspection Record



Inspection Date

5/6/24

Time

.

14=30

Weather

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

Wind

: Calm / (ight) Breeze / Strong

Temperature

28%

Humidity

High / Moderate / Lov

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:	A	4	Hak
Name:	LLW ony	W-L. Kwok	Nak Kei Wai
Title	Ajow.	E.O	EIT



	Implementat Stages*		Remark
Environmental Checklist		No	
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.	1		<del>(**)</del>
Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	1		
Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	1		
The designated site main haul road shall be paved or regular watering.	1		
Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	1		X X
Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	1		
All plant and equipment should be well maintained e.g. without black smoke emission.	1		
Open burning should be prohibited.	1		3 3 3 3 3 3
' The temporary slope surfaces, shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	1		
<ul> <li>When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.</li> </ul>	√		
<ul> <li>The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.</li> </ul>	√		
The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing point is maintained at no more than 1m.	1		
<ul> <li>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).</li> </ul>	1		
Noise Impact	D. H.		
<ul> <li>The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.</li> </ul>	1		
The constructions work should be scheduled to minimize noise nuisance.	1		
<ul> <li>Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.</li> </ul>	1		
<ul> <li>Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.</li> </ul>	1		
Air compressors and hand held breakers should have noise labels.	1		
<ul> <li>Compressors and generators should operate with door closed.</li> </ul>	1		
<ul> <li>Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.</li> </ul>	1		
Noisy equipment and mobile plant shall always be site away from NSRs.	1		



Environmental Checklist		emen Stage:		Remark
			N/A	
Nater Quality				
Drainage system should be adequate and well maintained to prevent flooding and overflow, especially after rain storms.	1			
The permanent drainage channels should have sediment basin, traps and baffles and maintain properly.	V			
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.	V			11
Manholes should be covered and sealed.	√			
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 stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	V			
The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	<b>√</b>			
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.	<b>√</b>			
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. The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	V			
Oil interceptor shall be provided at the car parking areas and workshop.	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.	٧			
Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	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.	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			
Existing silt curtain at the outward side of the basin near the Barging Handling Area throughout the period shall be repair, maintain and service when there is public fill intake by barges to the Fill Bank in accordance with PS Clause 1.68. The total length of the silt curtains shall not be less than 160m, and a gap of about 80m shall be left open for access of barges. The silt curtain shall be properly maintained such that it can also serve the function of refuse containment boom to confine floating refuse.	1			
A waste collection vessel shall be deployed to remove floating debris.	V			



Environmental Checklist		ement Stages	Remark
		No	1
Landscape and Visual			
The design of the fill bank and platform heights adopted should allow the fill bank to fit into the general topography of the surrounding land. Straight edged slopes should be avoided.	1		
<ul> <li>The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.</li> </ul>	V		
<ul> <li>Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green / brown) once completed.</li> </ul>	<b>√</b>		
The barging point and the C&DMSF at the fill bank shall not be in operation from 07:00 pm to 08:00 am daily to avoid potential visual impact from glare.	1		
Waste Management			
Construction Waste Management		10 %	
<ul> <li>Relevant licence / permits for disposal of construction waste or excavated materials available for inspection.</li> </ul>	1		
<ul> <li>Excavated material to be generated from construction works to be re-used on-site as far as practicable to reduce off-site disposal.</li> </ul>	1		
<ul> <li>Mud and debris should be removed from waterworks access roads and associated drainage systems.</li> </ul>	√		
<ul> <li>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.</li> </ul>	1		
<ul> <li>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.</li> </ul>	1		
<ul> <li>Prior to disposal of C&amp;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.</li> </ul>	1		
<ul> <li>In order to monitor the disposal of C&amp;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.</li> </ul>	V		
Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials.	√		
Chemical Waste Management			
<ul> <li>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.</li> </ul>	1		
<ul> <li>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.</li> </ul>	√		
<ul> <li>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.</li> </ul>	1		
<ul> <li>Chemical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility.</li> </ul>	1		
<ul> <li>Chemical wastes including waste oil should be stored properly in designated areas, e.g. chemical waste storage area.</li> </ul>	√		
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.	1		
Be enclosed on at least 3 sides and securely closed.	V		



	Environmental Checklist		ement Stages	ation	Remark
		Yes	No	N/A	
•	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.	V			
	Be covered to prevent rainfall entering (water collected within the bund must be tested and disposal as chemical waste if necessary).	V			
•	Be arranged so that incompatible materials are adequately separated.	1			
•	Warning panels should be displayed at the waste storage area.	V			
•	Waste storage area should be cleaned and maintained regularly.	1			
•	Chemical waste should be transported by a registered chemical waste collector to a facility licensed to receive chemical waste.	V			
•	All generators, fuel and oil storage should be within bundle areas.	V			
•	Oil leakage from machinery, vehicle and plant should be prevented.	V			
•	In the event of chemical waste / dangerous goods / chemicals spillage or leakage, the procedures as outlined in the Spillage Response Plan should be followed.	V			
	The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place.	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.	√			
	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.	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.	V			^ *
	Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	V			7 11-11-11-11-11-11-11-11-11-11-11-11-11-
	Chemical storage area provided with lock and located on sealed areas.	1			
	All chemicals should be placed at the banded area with adequate band capacity (>110% of largest tank).	1			
Ħ,	Any unused chemicals or those with remaining functional capacity should be recycled.	1			
	Regular cleaning and maintenance programme for waste storage area, drainage systems, silt traps, sumps and oil interceptors.	7			
#:	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.	1			
Ĭ.	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.	7			



#### Summary of the Weekly Site Inspection

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

Remark		

	Name	Title	Signature	Date	
Checked by	June Lau	ET Representative		05 June 2024	



Inspection Date : 12-6-101

Time : \4:30

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

Wind : Calm (Light)/ Breeze / Strong

Temperature : ) 9

Humidity : High Moderate Low

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:	36		TEC 3 AV
Name:	K. C. Hung	W.L. Knok	IE (Chris
Title	Ion	ΕO	IE( 5 FT



	Environmental Checklist		Implementatio Stages*				Remark
				N/A			
Fugitive	e Dust Emission						
■ Du	st control / mitigation measures shall be provided to prevent dust nuisance.	1					
* Wa	ater sprays shall be provided and used to dampen materials.	1					
■ Re	gular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	<b>√</b>					
an	y vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side d 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 vered by a clean tarpaulin.	1			15:		
• Th	e designated site main haul road shall be paved or regular watering.	1					
• W	neel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	V					
• Ev	ery vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	1					
· All	plant and equipment should be well maintained e.g. without black smoke emission.	1					
. Or	en buming should be prohibited.	1					
	e temporary slope surfaces, shall be covered with impermeable sheet or sprayed with water or protected by other method approved by EDD.	1	l.				
• W	hen fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.	1					
∗ Th	e belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.	4					
	e level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing int is maintained at no more than 1m.	1					
ro	proval or exemption Non-road Mobile Machinery (NRMM) labels should be painted or securely fixed on regulated machines and non- ad vehicles at a conspicuous position according to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation (APCO ap.311).	1					
Noise I	mpact						
• Th	e approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	1					
	ne constructions work should be scheduled to minimize noise nuisance.	1					
• O	nly well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	1					
• Po	owered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	1					
<ul> <li>Ai</li> </ul>	r compressors and hand held breakers should have noise labels.	√					
• C	ompressors and generators should operate with door closed.	1					
- M	achines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	1					
• N	pisy equipment and mobile plant shall always be site away from NSRs.	1					



Environmental Checklist		ementati Stages*	n Remark	
		No N	/A	
Water Quality				
Drainage system should be adequate and well maintained to prevent flooding and overflow, especially after rain storms.	V			
The permanent drainage channels should have sediment basin, traps and baffles and maintain properly.	V			
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.	٧			
Manholes should be covered and sealed.	V			
Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding.	<b>√</b>			
The material shall be properly covered to prevent washed away especially before rainstorm	V			
The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	J			
The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	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.	٧			
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.	<b>V</b>			
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. The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	٧		n	
Oil interceptor shall be provided at the car parking areas and workshop.	<b>√</b>			
Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water.	-√			
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			
Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	√			
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			
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			
Existing silt curtain at the outward side of the basin near the Barging Handling Area throughout the period shall be repair, maintain and service when there is public fill intake by barges to the Fill Bank in accordance with PS Clause 1.68. The total length of the silt curtains shall not be less than 160m, and a gap of about 80m shall be left open for access of barges. The silt curtain shall be properly maintained such that it can also serve the function of refuse containment boom to confine floating refuse.	V			
A waste collection vessel shall be deployed to remove floating debris.	<b>V</b>			



Environmental Checklist		ement Stages		Remark
	Yes	No	N/A	
Landscape and Visual				
<ul> <li>The design of the fill bank and platform heights adopted should allow the fill bank to fit into the general topography of the surrounding land. Straight edged slopes should be avoided.</li> </ul>	V			
<ul> <li>The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.</li> </ul>	V			
<ul> <li>Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green / brown) once completed.</li> </ul>	1			
<ul> <li>The barging point and the C&amp;DMSF at the fill bank shall not be in operation from 07:00 pm to 08:00 am daily to avoid potential visual impact from glare.</li> </ul>	4			3.5-1-7-2
Waste Management				
Construction Waste Management				
<ul> <li>Relevant licence / permits for disposal of construction waste or excavated materials available for inspection.</li> </ul>	1			
<ul> <li>Excavated material to be generated from construction works to be re-used on-site as far as practicable to reduce off-site disposal.</li> </ul>	1			
<ul> <li>Mud and debris should be removed from waterworks access roads and associated drainage systems.</li> </ul>	1			
<ul> <li>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.</li> </ul>	1			
<ul> <li>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.</li> </ul>	1			
<ul> <li>Prior to disposal of C&amp;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.</li> </ul>	1			
<ul> <li>In order to monitor the disposal of C&amp;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.</li> </ul>	1			
<ul> <li>Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials.</li> </ul>	1			
Chemical Waste Management				
It is required to register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	7			
<ul> <li>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.</li> </ul>	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.	√			
<ul> <li>Chemical wastes including waste oil should be stored properly in designated areas, e.g. chemical waste storage area.</li> </ul>	V			
<ul> <li>The designated chemical waste storage area should only be used for storing chemical wastes.</li> </ul>	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.	1			
Be enclosed on at least 3 sides and securely closed.  **  **  **  **  **  **  **  **  **	1			



Environmental Checklist		ement Stages	ation	Remark
	Yes	No	N/A	
<ul> <li>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.</li> </ul>	1			
Have adequate ventilation.	1			
<ul> <li>Be covered to prevent rainfall entering (water collected within the bund must be tested and disposal as chemical waste if necessary).</li> </ul>	V			
<ul> <li>Be arranged so that incompatible materials are adequately separated.</li> </ul>	1			
<ul> <li>Warning panels should be displayed at the waste storage area.</li> </ul>	1			
Waste storage area should be cleaned and maintained regularly.	1			
<ul> <li>Chemical waste should be transported by a registered chemical waste collector to a facility licensed to receive chemical waste.</li> </ul>	1			
<ul> <li>All generators, fuel and oil storage should be within bundle areas.</li> </ul>	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.	1			
<ul> <li>The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place.</li> </ul>	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			
<ul> <li>Training of site personnel in proper waste management and chemical handling procedures should be provided.</li> </ul>	1			
<ul> <li>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</li> </ul>	1			
<ul> <li>Proper storage and site practices to minimise the potential for damage or contamination of construction materials.</li> </ul>	1			
The Environmental Permit should be displaced conspicuously on site.	1			
Construction noise permits should be posted at site entrance or available for site inspection.	7			
<ul> <li>Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.</li> </ul>	V			
Chemical storage area provided with lock and located on sealed areas.	1			
<ul> <li>All chemicals should be placed at the banded area with adequate band capacity (&gt;110% of largest tank).</li> </ul>	<b>√</b>			
<ul> <li>Any unused chemicals or those with remaining functional capacity should be recycled.</li> </ul>	V			
Regular cleaning and maintenance programme for waste storage area, drainage systems, silt traps, sumps and oil interceptors.	1			
<ul> <li>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.</li> </ul>	1			
A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods.	1			- 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.	V			



#### Summary of the Weekly Site Inspection

Item	Details of defective works or observations	Proposed Follow Up Action	Photo Ref.	Further Action Required (Yes/No)	Follow up Date
		(96)			

Remark			

	Name	Title	Signature	Date
Checked by	June Lau	ET Representative		12 June 2024



Inspection Date

: 19/6/24

Time

14=30

Weather

Sunny / Fine / Cloudy / Overcast / Drizzle / Rain ) Storm / Hazy

Wind

: Calm / Light Breeze / Strong

Temperature

32°(

Humidity

: High / Moderate / www

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:			Mak
Name:			
	LIM of	W.L. KWOK	Nak Kei War
Title	Grow	E.D	E.T



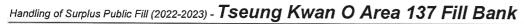
Environmental Checklist		ement Stages	tation s*	Remark
	Yes	No	N/A	0.629
Fugitive Dust Emission				
<ul> <li>Dust control / mitigation measures shall be provided to prevent dust nuisance.</li> </ul>	1			
Water sprays shall be provided and used to dampen materials.	V			
<ul> <li>Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.</li> </ul>	1			
Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	1			
The designated site main haul road shall be paved or regular watering.	1			
Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	V			
<ul> <li>Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.</li> </ul>	V			
All plant and equipment should be well maintained e.g. without black smoke emission.	1			
Open burning should be prohibited.	1			
The temporary slope surfaces, shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	V			
<ul> <li>When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.</li> </ul>	√			
<ul> <li>The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.</li> </ul>	√.			
The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing point is maintained at no more than 1m.	V			
<ul> <li>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).</li> </ul>	1			
Noise Impact				
<ul> <li>The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.</li> </ul>	1			
<ul> <li>The constructions work should be scheduled to minimize noise nuisance.</li> </ul>	1			
<ul> <li>Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.</li> </ul>	1			
<ul> <li>Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.</li> </ul>	1			
Air compressors and hand held breakers should have noise labels.	1			
Compressors and generators should operate with door closed.	1			
<ul> <li>Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.</li> </ul>	V			
Noisy equipment and mobile plant shall always be site away from NSRs.	1			,



Environmental Checklist		ement Stages		Remark
		No		
Nater Quality				
<ul> <li>Drainage system should be adequate and well maintained to prevent flooding and overflow, especially after rain storms.</li> </ul>	1			
The permanent drainage channels should have sediment basin, traps and baffles and maintain properly.	<b>√</b>			7
<ul> <li>Temporary intercepting drains should be used at the stockpilling 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.</li> </ul>	1			
Manholes should be covered and sealed.	1			
<ul> <li>Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding.</li> </ul>	√			
<ul> <li>The material shall be properly covered to prevent washed away especially before rainstorm</li> </ul>	1			
<ul> <li>The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.</li> </ul>	1			
<ul> <li>The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.</li> </ul>	٧			
Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	1			
Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	V			
<ul> <li>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.</li> </ul>	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. The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	<b>V</b>			W
Oil interceptor shall be provided at the car parking areas and workshop.	_√			
<ul> <li>Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water.</li> </ul>	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			
<ul> <li>All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport.</li> </ul>	٧			
Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	V			
<ul> <li>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.</li> </ul>	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			
Existing silt curtain at the outward side of the basin near the Barging Handling Area throughout the period shall be repair, maintain and service when there is public fill intake by barges to the Fill Bank in accordance with PS Clause 1.68. The total length of the silt curtains shall not be less than 160m, and a gap of about 80m shall be left open for access of barges. The silt curtain shall be properly maintained such that it can also serve the function of refuse containment boom to confine floating refuse.	V			
A waste collection vessel shall be deployed to remove floating debris.	V			



Environmental Checklist				Remark
		Stages No		
Landscape and Visual				
• The design of the fill bank and platform heights adopted should allow the fill bank to fit into the general topography of the surrounding land. Straight edged slopes should be avoided.	1			
<ul> <li>The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.</li> </ul>	1			
Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green / brown) once completed.	1			
<ul> <li>The barging point and the C&amp;DMSF at the fill bank shall not be in operation from 07:00 pm to 08:00 am daily to avoid potential visual impact from glare.</li> </ul>	√			
Waste Management				
Construction Waste Management				
<ul> <li>Relevant licence / permits for disposal of construction waste or excavated materials available for inspection.</li> </ul>	V			
<ul> <li>Excavated material to be generated from construction works to be re-used on-site as far as practicable to reduce off-site disposal.</li> </ul>	√		14	
<ul> <li>Mud and debris should be removed from waterworks access roads and associated drainage systems.</li> </ul>	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			
<ul> <li>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.</li> </ul>	1			
<ul> <li>Prior to disposal of C&amp;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.</li> </ul>	1			
<ul> <li>In order to monitor the disposal of C&amp;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.</li> </ul>	√			
<ul> <li>Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials.</li> </ul>	√			
Chemical Waste Management				
It is required to register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	1			
<ul> <li>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.</li> </ul>	V			
<ul> <li>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.</li> </ul>	1			
<ul> <li>Chemical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility.</li> </ul>	1			
<ul> <li>Chemical wastes including waste oil should be stored properly in designated areas, e.g. chemical waste storage area.</li> </ul>	1			
<ul> <li>The designated chemical waste storage area should only be used for storing chemical wastes.</li> </ul>	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.	1			





Environmental Checklist		ement Stages		Remark
	Yes	No	N/A	
<ul> <li>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.</li> </ul>	1			
<ul> <li>Have adequate ventilation.</li> </ul>	√			
Be covered to prevent rainfall entering (water collected within the bund must be tested and disposal as chemical waste if necessary).	√			
Be arranged so that incompatible materials are adequately separated.	√			
<ul> <li>Warning panels should be displayed at the waste storage area.</li> </ul>	1			
Waste storage area should be cleaned and maintained regularly.	1			
<ul> <li>Chemical waste should be transported by a registered chemical waste collector to a facility licensed to receive chemical waste.</li> </ul>	1			
All generators, fuel and oil storage should be within bundle areas.	1			
Oil leakage from machinery, vehicle and plant should be prevented.	√			
In the event of chemical waste / dangerous goods / chemicals spillage or leakage, the procedures as outlined in the Spillage Response Plan should be followed.	<b>V</b>			1000
<ul> <li>The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place.</li> </ul>	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		X=17000	
<ul> <li>Training of site personnel in proper waste management and chemical handling procedures should be provided.</li> </ul>	V			
<ul> <li>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</li> </ul>	1			
<ul> <li>Proper storage and site practices to minimise the potential for damage or contamination of construction materials.</li> </ul>	√			
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			· · · · · · · · · · · · · · · · · · ·
<ul> <li>Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.</li> </ul>	V			
Chemical storage area provided with lock and located on sealed areas.	V			
<ul> <li>All chemicals should be placed at the banded area with adequate band capacity (&gt;110% of largest tank).</li> </ul>	V			
<ul> <li>Any unused chemicals or those with remaining functional capacity should be recycled.</li> </ul>	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, separate labelled bins should be provided to segregate this waste from other general refuse generated by the workforce.	<b>V</b>			
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**

Item	Details of defective works or observations	Proposed Follow Up Action	Photo Ref.	Further Action Required (Yes/No)	Follow up Date
			1		

Re	mark								

	Name	Title	Signature		Date
Checked by	June Lau	ET Representative	1	12	19 June 2024



Inspection Date

20-06-2024 124:30

Time

Weather

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

Wind

Calm / Light / Breeze / Strong

Temperature

Humidity

High / Moderate / Low

Inspected by	CEDD	Contractor / Sub-Contactor	ET
Signature:	4		IEC Rep.
Name:	ALWorg	W.L. Kwo K	IEC Rep. Lan Words
Title	Dow.	E-0	IECREP.



Environmental Checklist	Implementat Stages*			Remark
			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.	√			
Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	√			
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			
The designated site main haul road shall be paved or regular watering.	√			
Wheel washing facilities including high-pressure water jet shall be provided at the entrance of work site.	1			
<ul> <li>Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.</li> </ul>	V			
<ul> <li>All plant and equipment should be well maintained e.g. without black smoke emission.</li> </ul>	1			
Open burning should be prohibited.	1			
The temporary slope surfaces, shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	1			
<ul> <li>When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.</li> </ul>	1			
<ul> <li>The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.</li> </ul>	1			
The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing point is maintained at no more than 1m.	1			
<ul> <li>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).</li> </ul>	1			
Noise Impact				
<ul> <li>The approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.</li> </ul>	√			
The constructions work should be scheduled to minimize noise nuisance.	1			
<ul> <li>Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.</li> </ul>	1			
<ul> <li>Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.</li> </ul>	1			
Air compressors and hand held breakers should have noise labels.	V			
Compressors and generators should operate with door closed.	1			
• Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	√			
Noisy equipment and mobile plant shall always be site away from NSRs.	1			



Environmental Checklist	Implementation Stages*			Remark
			N/A	
Water Quality				
<ul> <li>Drainage system should be adequate and well maintained to prevent flooding and overflow, especially after rain storms.</li> </ul>	V			
The permanent drainage channels should have sediment basin, traps and baffles and maintain properly.	1			
<ul> <li>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.</li> </ul>	1			* *
Manholes should be covered and sealed.	1			
<ul> <li>Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding.</li> </ul>	1			
The material shall be properly covered to prevent washed away especially before rainstorm	1			
<ul> <li>The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.</li> </ul>	V			
The temporary slope surfaces shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	1			
Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	1			
Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	V			
A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains.	1			
<ul> <li>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.</li> </ul>	7			
Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided. The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.	7			
Oil interceptor shall be provided at the car parking areas and workshop.	1			
<ul> <li>Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water.</li> </ul>	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.	7			
Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	1			
<ul> <li>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.</li> </ul>	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			
Existing silt curtain at the outward side of the basin near the Barging Handling Area throughout the period shall be repair, maintain and service when there is public fill intake by barges to the Fill Bank in accordance with PS Clause 1.68. The total length of the silt curtains shall not be less than 160m, and a gap of about 80m shall be left open for access of barges. The silt curtain shall be properly maintained such that it can also serve the function of refuse containment boom to confine floating refuse.	1			
A waste collection vessel shall be deployed to remove floating debris.	<b>√</b>			



Environmental Checklist		ement Stages		Remark	
	Yes	No	N/A		
Landscape and Visual					
<ul> <li>The design of the fill bank and platform heights adopted should allow the fill bank to fit into the general topography of the surrounding land. Straight edged slopes should be avoided.</li> </ul>	√				
<ul> <li>The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.</li> </ul>	1				
<ul> <li>Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green / brown) once completed.</li> </ul>	<b>√</b>				
<ul> <li>The barging point and the C&amp;DMSF at the fill bank shall not be in operation from 07:00 pm to 08:00 am daily to avoid potential visual impact from glare.</li> </ul>	V		***************************************		
Waste Management					
Construction Waste Management					
<ul> <li>Relevant licence / permits for disposal of construction waste or excavated materials available for inspection.</li> </ul>	V				
<ul> <li>Excavated material to be generated from construction works to be re-used on-site as far as practicable to reduce off-site disposal.</li> </ul>	√				
<ul> <li>Mud and debris should be removed from waterworks access roads and associated drainage systems.</li> </ul>	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				
<ul> <li>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.</li> </ul>	7				
<ul> <li>Prior to disposal of C&amp;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.</li> </ul>	1				
<ul> <li>In order to monitor the disposal of C&amp;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.</li> </ul>	V				
<ul> <li>Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials.</li> </ul>	V				
Chemical Waste Management					
It is required to register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	V				
<ul> <li>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.</li> </ul>	V				
<ul> <li>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.</li> </ul>	√				
<ul> <li>Chemical wastes should be separated for special handling and appropriate treatment at the Chemical Waste Treatment Facility.</li> </ul>	1				
<ul> <li>Chemical wastes including waste oil should be stored properly in designated areas, e.g. chemical waste storage area.</li> </ul>	1				
<ul> <li>The designated chemical waste storage area should only be used for storing chemical wastes.</li> </ul>	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.	1				
Be enclosed on at least 3 sides and securely closed.	V				



Environmental Checklist		ement stages	ation *	Remark
	Yes	No	N/A	
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.	7			
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			
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 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.	7	/===-		
The dangerous goods / chemical spillage or leakage procedures (including equipments) should be in place.	1			
Sood 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			<del>&gt;</del>
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.	7			
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.	1			
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.	1			
A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be used, e.g. trip ticket system for chemical waste disposal. Quantities could be determined by weighing each load or other suitable methods.	V			
A collection area should be provided where waste can be stored and loaded prior to removal from site. An enclosed and covered area is preferred to reduce the occurrence of 'wind blown' light material. If an open area is unavoidable for the storage or loading/unloading of wastes, then the area should be bunded and all the polluted surface run-off collected within this area should be diverted into wastewater treatment system.	V			



### Summary of the Weekly Site Inspection

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

Remark			

	Name	Title	Signature		Date
Checked by	June Lau	ET Representative		Je .	24 June 2024



## Appendix I

**Implementation Schedule of Mitigation Measures** 



Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O Area 137 Fill Bank Contract No.: CV/2021/09

**Environmental Mitigation Implementation Schedule** 

				Implementati	ion Status	
	Environmental Protection Measures	Location	Implemented	Partially implemented	Not implemented	Not Applicable
Λ.	r Quality	All areas  Northern Site Boundary  All areas  All haul roads  All areas  Site Egress  Site Egress  All areas				
AI	r Quality	AU		1		
•	Dust control / mitigation measures shall be provided to prevent dust nuisance.	All areas		٧		
•	A buffer zone of at least 100m shall be maintained between the edge of the stockpiling area and the nearest ASRs at the TKO Industrial Estate. Within the buffer zone, no dusty material shall be stockpiled and no loading / unloading and similar activities should be allowed.		$\sqrt{}$			
•	Water sprays shall be provided and used to dampen materials.	All areas	$\sqrt{}$			
•	Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	All areas	V			
•	All vehicles shall be restrict to a maximum speed of 10 km per hour.	All areas	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.	Site Egress	V			
•	The designated site main haul rout shall be paved or regular watering.	All haul roads	$\sqrt{}$			
•	Frequent watering of work site shall be at least three times per day.	All areas				
•	Wheel washing facilities including high pressure water jet shall be provided at the entrance of work site.	Site Egress	<b>√</b>			
•	Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	Site Egress	V			
•	The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.	All areas	√			
•	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.	All areas	$\checkmark$			
•	When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.	C&DMSF	$\sqrt{}$			
•	The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.	C&DMFS	V			
•	The level of stockpiling belt conveyor shall be adjustable such that the vertical distance between the belt conveyor and the material landing point is maintained at no more than 1m.	C&DMFS	V			
•	All plant and equipment should be well maintained e.g. without black smoke emission.	All areas	$\sqrt{}$			
•	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		V		
No	pise Impact					
•	Approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	All areas	V			
•	Only well maintained plant should be operated on-site and plant should be serviced regularly during the site works.	All areas	V			
•	Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	All areas	V			
•	Air compressors and hand held breakers should have noise labels.	All areas	V			
•	Machines and plants that may be in intermittent use should be shut down between work months or should be throttled down to a minimum.	All areas	V			
	Noisy equipment and mobile plant shall always be site away from NSRs.	All areas	V			



Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O Area 137 Fill Bank Contract No.: CV/2021/09

		Implementation Status				
Environmental Protection Measures	Location	Implemented	Partially implemented	Not implemented	Not Applicable	
Water Quality						
<ul> <li>Drainage system should be adequate and well maintained to prevent flooding and overflow, especially after rain storms.</li> </ul>	All areas	$\sqrt{}$				
The permanent drainage channels should have sediment basin, traps and baffles and maintain properly.	All areas	$\checkmark$				
<ul> <li>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.</li> </ul>	All areas	V				
Manholes should be covered and sealed.	All areas	$\sqrt{}$				
<ul> <li>Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding.</li> </ul>	All areas		$\sqrt{}$			
A buffer distance of at least 100m shall be maintained between the boundary of the public fill stockpiling area and the sea front.	Public fill stockpiling area	V				
<ul> <li>A buffer distance of at least 20m shall be maintained between the boundary of the C&amp;DMSF and the seafront.</li> </ul>	C&DMFS	$\sqrt{}$				
The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	All areas	$\checkmark$				
<ul> <li>The temporary slope surfaces, especially those facing to the north of the site shall be covered with impermeable sheet or sprayed with water or protected by other method approved by CEDD.</li> </ul>	Temporary Slopes	V				
<ul> <li>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.</li> </ul>	Temporary Slopes	√				
<ul> <li>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.</li> </ul>	All areas	V				
<ul> <li>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.</li> </ul>	Wheel Washing facility	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.	Wheel Washing facility	V				
<ul> <li>Sewage from toilets shall be discharged in to a foul sewer, or chemical toilets shall be provided. The chemical toilets (if use) shall be provided by a licensed contractor, who will be responsible for disposal and maintenance of these facilities.</li> </ul>	All areas	V				
Oil intercept in addition of sand / silt removal facilities shall be provided at the car parking areas and work shop.	All areas	V				
Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water.	Barge Handling Area (BHA)	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.	Barge Handling Area (BHA)	V				
<ul> <li>All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport.</li> </ul>	Barge Handling Area (BHA)	V				
Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer.	Along the seafront	√				
<ul> <li>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.</li> </ul>	Barge Handling Area (BHA)	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.	Along the seafront	V				
Existing silt curtain at the outward side of the basin near the Barging Handling Area throughout the period shall be repair, maintain and service when there is public fill intake by barges to the Fill Bank in accordance with PS Clause 1.68. The total length of the silt curtains shall not be less than 160m, and a gap of about 80m shall be left open for access of barges. The silt curtain shall be properly maintained such that it can also serve the function of refuse containment boom to confine floating refuse.	Along the seafront	V				
A waste collection vessel shall be deployed to remove floating debris.	Along the seafront	$\sqrt{}$				



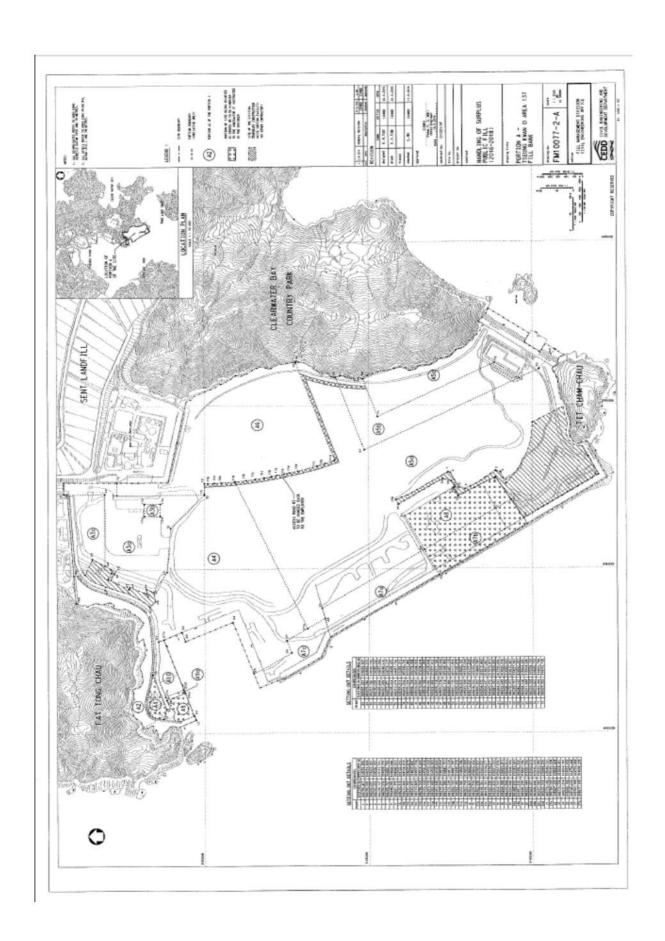
Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O Area 137 Fill Bank Contract No.: CV/2021/09

		_	Implementation Status				
	Environmental Protection Measures	Location	Implemented	Partially implemented	Not implemented	Not Applicable	
Lá	ndscape and Visual						
•	The design of the fill bank and platform heights adopted should allow the fill bank to fit into the general topography of the surrounding land. Straight edged slopes should be avoided.	All areas	$\checkmark$				
•	The maximum stockpiling height at the fill bank shall be limited to a maximum of +35.2mPD.	Completed slopes	$\sqrt{}$				
•	Surface of outer slopes of the fill bank shall preferably be hydroseeded or covered with geo-textile matting of appropriate colour (e.g. dark green / brown) once completed.	Site boundary	$\checkmark$				
•	The barging point and the C&DMSF at the fill bank shall not be in operation from 07:00 pm to 08:00 am daily to avoid potential visual impact from glare.	All areas	V				
0	her Environmental Factors						
•	C&D waste sorted from mixed C&D material shall be transfer to SENT landfill for disposal.	All areas	$\sqrt{}$				
•	Plan and stock construction materials carefully to minimise generation of waste.	All areas	$\sqrt{}$				
•	Any unused materials or those with remaining functional capacity should be recycled.	All areas	$\sqrt{}$				
•	All generators, fuel and oil storage are within bunded areas.	All areas	$\sqrt{}$				
•	Oil leakage from machinery, vehicle and plant is prevented.	All areas		√			
•	The Environmental Permit should be displaced conspicuously on site.	All areas	√				
•	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	√				
•	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	V				



## Appendix J

Site General Layout plan





## Appendix K

**Monthly Summary Waste Flow Table** 

### **Monthly Summary Waste Flow Table for 2024**

		Actual Quantitie	es of Inert C&I	Materials Gene	erated Monthly		Actual Quantities of C&D Wastes Generated Monthly				
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³ )	(in '000m ³ )	(in '000m ³ )	(in '000m ³ )	(in '000m ³ )	(in '000m ³ )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
Jan	0	0	0	0	0	0	167.18	0	0	0	449.88
Feb	0	0	0	0	0	0	147.63	0	0	0	65.28
Mar	0	0	0	0	0	0	172.64	0	0	0	45.64
Apr	0	0	0	0	0	0	156.97	0	0	0	112.76
May	0	0	0	0	0	0	160.95	0	0	0	138.16
Jun	0	0	0	0	0	0	147.13	0	0	0	135.95
Sub-total	0	0	0	0	0	0	952.5	0	0	0	947.67
Jul											
Aug											
Sep				_					_		
Oct											
Nov											
Dec											
Total	0	0	0	0	0	0	952.5	0	0	0	947.67

#### 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.
- (5) This waste flow table is under Contract (No. CV/2021/09) and the quantities of materials shown in the table is the sum of the material quantities generated by TKO137 Fill Bank and TM38 Fill Bank



## Appendix L

**Monitoring Schedule for the Coming Month** 



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

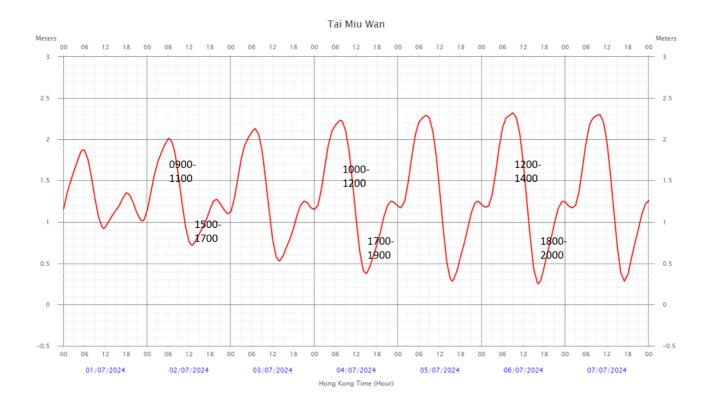
July 2024

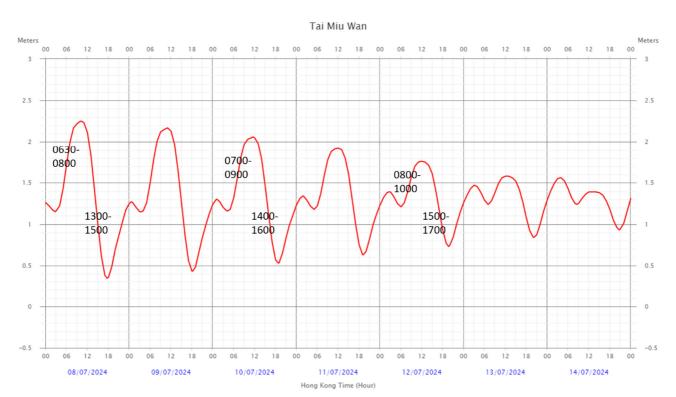
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30-Jun	1-Jul		3-Jul	4-Jul	5-Jul	6-Jul
			24 hr TSP 24-hr RSP Weekly SI (pm)		1-hr TSP x 2	
		Mid-ebb (09:00-11:00) Mid-flood (15:00-17:00)		Mid-ebb (10:00-12:00) Mid-flood (17:00-19:00)		Mid-ebb (12:00-14:00) Mid-flood (18:00-20:00)
7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Ju
	1-hr TSP x 1 Set 24 hr (09/07) NM	24 hr TSP 24-hr RSP	1-hr TSP x 2 Weekly SI (pm)		1-hr TSP x 1	
	Mid-flood (06:30-08:00) Mid-ebb (13:00-15:00)		Mid-flood (07:00-09:00) Mid-ebb (14:00-16:00)		Mid-flood (08:00-10:00) Mid-ebb (15:00-17:00)	
14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul
	24 hr TSP 24-hr RSP		1-hr TSP x 2 Weekly SI (pm)		1-hr TSP x 1 Set 24 hr (20/07)	24 hr TSP 24-hr RSP
		Mid-ebb (07:00-09:00) Mid-flood (15:30-17:30)		Mid-ebb (09:00-11:00) Mid-flood (16:00-18:00)		Mid-ebb (11:00-13:00) Mid-flood (17:30-19:30)
21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Ju
	1-hr TSP x 2		1-hr TSP x 1 Weekly SI (pm)		24 hr TSP 24-hr RSP	
	Mid-ebb (12:00-14:00) Mid-flood (18:30-20:30)		Mid-flood (07:00-09:00) Mid-ebb (13:00-15:00)		Mid-flood (08:00-10:00) Mid-ebb (15:00-17:00)	
28-Jul	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug	3-Aug
	1-hr TSP x 2		1-hr TSP x 1 Set 24 hr (01/08) Weekly SI (pm)	24 hr TSP 24-hr RSP	1-hr TSP x 2	
		Mid-ebb (07:30-09:30) Mid-flood (15:00-17:00)		Mid-ebb (09:00-11:00) Mid-flood (17:00-19:00)		Mid-ebb (11:00-13:00) Mid-flood (18:00-20:00)

 1. RSP measurement is not required in the EM&A manual and RSP would not presented in EM&A report.
 2. TKO 137 Fill Bank is closed on General Holidays. Remark:



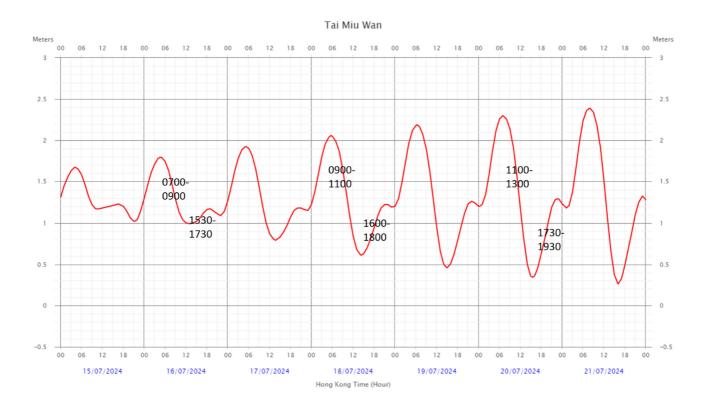
# Predicted tide schedule from the Hong Kong Observatory for Impact Water Quality Monitoring (WQM) July 2024

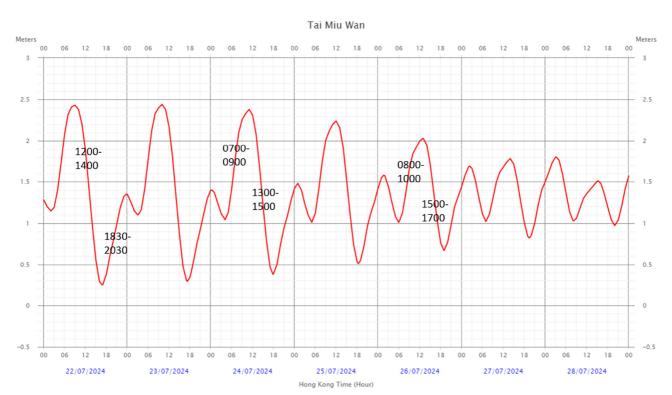






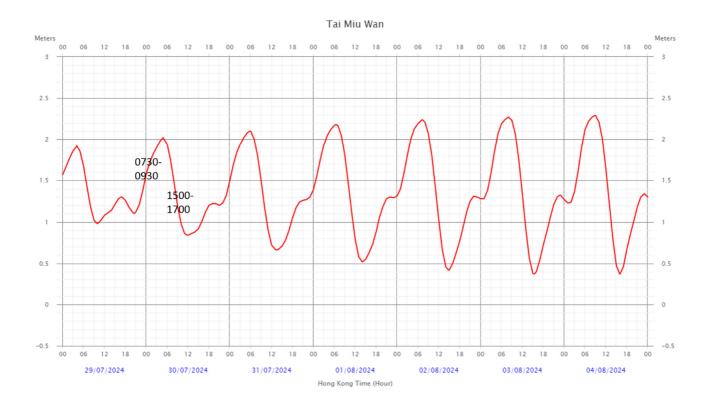
# Predicted tide schedule from the Hong Kong Observatory for Impact Water Quality Monitoring (WQM) July 2024







# Predicted tide schedule from the Hong Kong Observatory for Impact Water Quality Monitoring (WQM) July 2024





### Appendix M

**Reporting Month Monitoring Schedule** 



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

#### June 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26-May		28-May	29-May	30-May	31-May	1-Jun
	1-hr TSP x 1		24 hr TSP 24-hr RSP Weekly SI (pm)		1-hr TSP x 2	
	Mid-flood (07:00-09:00) Mid-ebb (14:00-16:00)		Mid-flood (08:00-10:00) Mid-ebb (15:00-17:00)		Mid-flood (10:30-12:30) <del>Mid-ebb</del> (17:00-19:00)	
2-Jun		4-Jun	5-Jun	6-Jun	7-Jun	8-Jun
	1-hr TSP x 1 Set 24 hr (04/06) NM	24 hr TSP 24-hr RSP	1-hr TSP x 2 Weekly SI (pm)		1-hr TSP x 1 Set 24 hr (10/06)	
	Mid-ebb (09:00-11:00) Mid-flood (15:00-17:00)		Mid-ebb (10:00-12:00) Mid-flood (16:30-18:30)		Mid-ebb (12:00-14:00) Mid-flood (18:00-20:00)	
9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun
	24 hr TSP 24-hr RSP		1-hr TSP x 2 Weekly SI (pm)		1-hr TSP x 1 Set 24 hr (15/06)	24 hr TSP 24-hr RSP
		Mid-flood (07:00-09:00) Mid-ebb (14:30-16:30)		Mid-flood (08:00-10:00) Mid-ebb (16:00-18:00)		Mid-flood (11:00-13:00) Mid-ebb (18:00-20:00)
16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun	22-Jun
	1-hr TSP x 2		1-hr TSP x 1 Weekly SI (pm)		24 hr TSP 24-hr RSP	
	Mid-ebb (08:00-10:00) Mid-flood (15:00-17:00)		Mid-ebb (09:00-11:00) Mid-flood (16:00-18:00)		Mid-ebb (11:00-13:00) Mid-flood (17:30-19:30)	
23-Jun		25-Jun	26-Jun	27-Jun	28-Jun	29-Jun
	Weekly SI (pm)		1-hr TSP x 3 Set 24 hr (27/06)	24 hr TSP 24-hr RSP	1-hr TSP x 3	
		Mid-flood (07:00-09:00) Mid-ebb (13:00-15:00)		Mid-flood (08:00-10:00) Mid-ebb (15:00-17:00)		Mid-flood (10:00-12:00) Mid-ebb (17:00-19:00)
30-Jun	1-Jul	2-Jul	3-Jul	(13:00 17:00) 4-Jul	5-Jul	(17.00 13.00) 6-Jul
			24 hr TSP 24-hr RSP Weekly SI (pm)		1-hr TSP x 2	
		Mid-ebb (09:00-11:00) Mid-flood (15:30-17:30)		Mid-ebb (10:30-12:30) Mid-flood (17:00-18:00)		Mid-ebb (12:00-14:00) Mid-flood (18:00-20:00)

 I (15:30-17:30) | I(17:00-18:00)

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

2. TKO 137 Fill Bank is closed on General Holidays. Remark:



Appendix N

**Complaint Log** 



**Complaint Logs** 

				<u>Jompianit Logo</u>	
Log Ref.	Location	Received Date	Details of Complaint	Investigation / Mitigation Action	Status
001	Barge handling area (BHA) at Tseung Kwan O 137	15 May 2017	One complaint received on 15 May 2017, which was forwarded to ET on 11 August 2017, from CEDD (Complaint NCF-N08/RE/00014875-17 Sent By CSO[RN]3 [CASE#2-3943858817 Int.Comm. – WS170513A57354] against illegal dumping at sea without permit in TKO137 fill bank.	Refer to the ET site investigation on 14 August 2017, the contractor clarified that the contractor conducted vessel loading test at Tseung Kwan O 137 Fill bank on 13 May 2017 and the material was then unloaded from the vessels.  Follow up action to complaint by ET and contractor: Contractor under the valid dumping permit to dump fill materials and the site works shall be complied with the relevant environmental protection and pollution control ordinances.  ET reminded contractor that the dump fill material under the valid dumping permit should be checked and confirmed. In addition, record should be kept for ET reference.  Details of Action(s) Taken by the Contactor:  The contractor started to dump fill materials from 19 May 2017 after receiving the valid dumping permit.  The contractor dump fill materials were followed by the valid dumping permit and the permit was kept apply every three month  The contractor kept the permit for ET reference.	Closed
002	Tseung Kwan O 137 Fill Bank	12 Oct 2017	One complaint received on 12 October 2017, which was forwarded to ET on 18 October 2017, from public against dust emission at the fill bank and discharge of muddy water to the seafront.	<ul> <li>Refer to the ET weekly site inspection on 18 October 2017, no defective observation related to dust emission and discharge of water was recorded during the investigation.</li> <li>Details of Action(s) Taken by the Contactor: <ul> <li>Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank;</li> <li>Mist spraying systems at the site entrance are operated properly;</li> <li>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;</li> <li>All dusty material is sprayed with water prior to loading, unloading or transfer so as to maintain the material wet;</li> <li>Site vehicle for transporting materials are covered properly by using clean tarpaulin sheets;</li> <li>Regular cleaning at the site haul road is provided to minimize the fugitive dust emission;</li> <li>Silt curtains are provided at the outward side of the basin near the Fill Bank;</li> <li>Drainage systems are adequate and maintained to prevent flooding and overflow;</li> <li>Catchpits, sand and silt removal facilities and intercepting channels are maintained and functioning properly.</li> </ul> </li> </ul>	Closed



003	Tseung Kwan O 137 Fill Bank	09 April 2018	One complaint received on 09 April 2018, which was forwarded to ET on 18 April 2018, from public against the rocks and debris deposited on the road surface along Wan Po Road near TKO137 Fill Bank. The complainant complained that waste generated caused an environmental nuisance.	<ul> <li>Refer to the ET site investigation on 20 April 2018, the condition of Wan Po Road near TKO137 Fill Bank was found satisfactory. (Photos on ET follow-up investigation at TKO137 Fill Bank on 20 April 2018).</li> <li>Details of Action(s) Taken by the Contactor: <ul> <li>Regular cleaning on Wan Po Road and the access road at the site exit by haul road cleaning team to remove mud and gravel is arranged eight times per month;</li> <li>Regular water spraying by water lorries is provided for road cleaning at Wan Po Road;</li> <li>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;</li> <li>Site vehicles for transporting materials are covered properly by using clean tarpaulin sheets;</li> <li>Regular cleaning at the site haul road is provided.</li> </ul> </li> </ul>	Closed
004	Tseung Kwan O 137 Fill Bank	13 January 2019	One complaint received on 13 January 2019, which was forwarded to ET on 16 January 2019, from EPD (NCF-N08/RE/00001348-19) against 將軍澳 137 堆填區內,紅車池污水,不經處理,直接排到河道,河道係直接流出大海,極度嚴重影響周遭環境生態,污染程度極為嚴重,促請政府有關部門嚴正跟進!	After received the details of the complaint from the Contractor on 16 January 2019, ET have performed a site investigation on 21 January 2019 to investigate this event. During the site inspection, no muddy water was observed discharged from the Fill Bank to nearby environment.  Besides, refer to the marine water monitoring results during that period, no exceedance was recorded on Turbidity and Suspended Solids. This reflects that this occurrence did not affect the condition of marine water near the TKO137Filll Bank.  Details of Action(s) Taken by the Contactor:  Drainage system were adequate and well maintained to prevent flooding and overflow;  Sand and silt removal facilities, e.g. silting screen, were provided before the discharge point;  Temporary intercepting drains were used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bay barriers were used to assist the diversion of polluted stormwater to the intercepting channels;  Catchpits and intercepting channels were maintained, and the deposited silt and grit were 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;	Closed



			T =	\	T
005	Tseung Kwan O 137 Fill Bank	14 May 2019	One complaint received on 14 May 2019, which was forwarded to ET on 14 May 2019, from public against 投訴將軍澳第 137 區填料庫,有車出入沒有灑水傳出大量沙塵,破壞環境,帶出大量沙泥到馬路,造成污染及嚴重滋擾,要求跟進。要求改善,停止滋擾	<ul> <li>Refer to the ET site investigation on 15 May 2019, the condition of Wan Po Road near TKO137 Fill Bank was found satisfactory. (Photos on ET follow-up investigation at TKO137 Fill Bank on 15 May 2019).</li> <li>Details of Action(s) Taken by the Contactor: <ul> <li>Regular cleaning on Wan Po Road and the access road at the site exit by haul road cleaning team to remove mud and gravel is arranged eight times per month;</li> <li>Regular water spraying by water lorries is provided for road cleaning at Wan Po Road;</li> <li>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;</li> <li>Site vehicles for transporting materials are covered properly by using clean tarpaulin sheets;</li> <li>Regular cleaning at the site haul road is provided.</li> </ul> </li> </ul>	Closed
006	Tseung Kwan O 137 Fill Bank	11 June 2019	One complaint received on 04 June 2019, which was forwarded to ET on 11 June 2019, from public regarding the muddy water problem at 137 fill bank.	After received the details of the complaint from the Contractor on 11 June 2019, ET have performed a site investigation on 14 June 2019 to investigate this event. During the site inspection, no muddy water was observed discharged from the Fill Bank to nearby environment.  Besides, refer to the marine water monitoring results during that period, no exceedance was recorded on Turbidity and Suspended Solids during the concerning period. This reflects that this occurrence did not affect the condition of marine water near the TKO137Filll Bank.  Details of Action(s) Taken by the Contactor:  • Drainage system were adequate and well maintained to prevent flooding and overflow;  • Sand and silt removal facilities, e.g. silting screen, were provided before the discharge point;  • Temporary intercepting drains were used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bay barriers were used to assist the diversion of polluted stormwater to the intercepting channels;  • Catchpits and intercepting channels were maintained, and the deposited silt and grit were 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;	Closed



				1	
007	Tseung Kwan O 137 Fill Bank	27 June 2019	One complaint received on 27 June 2019, which was forwarded to ET on 28 June 2019, from public against dust emission at the fill bank. The complainant complained that the dust caused an environmental nuisance.	Refer to the ET site investigation on 02 July 2019, no defective observation related to dust emission was recorded during the investigation.  No impact air quality monitoring result of 1-hr TSP and 24-hr TSP was exceeded Action and Limit Level at all monitoring stations from 24 to 28 June 2019.  Details of Action(s) Taken by the Contactor:  Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank;  Mist spraying systems at the site entrance are operated properly;  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;  All dusty material is sprayed with water prior to loading, unloading or transfer so as to maintain the material wet;  Truck speed within the site is limited within 10 km/h;  Regular cleaning at the site haul road is provided to minimize the fugitive dust emission;	Closed
008	Tseung Kwan O 137 Fill Bank	17 July 2019	One complaint received on 17 July 2019, which was forwarded to ET on 17 July 2019, from public against 投訴將軍澳堆填 137 區及收 泥頭區,於運作時產生大量 沙塵,嚴重污染周圍環境及 影響行人,情況已持續發生 了幾日	Refer to the ET site investigation on 19 July 2019, no defective observation related to dust emission was recorded during the investigation.  No impact air quality monitoring result of 1-hr TSP and 24-hr TSP was exceeded Action and Limit Level at all monitoring stations from 2 to 17 July 2019.  Details of Action(s) Taken by the Contactor:  Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank;  Mist spraying systems at the site entrance are operated properly;  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;  All dusty material is sprayed with water prior to loading, unloading or transfer so as to maintain the material wet;  Truck speed within the site is limited within 10 km/h;  Regular cleaning at the site haul road is provided to minimize the fugitive dust emission;	Closed



009	Tseung Kwan O 137 Fill Bank	26 July 2019	One complaint received on 26 July 2019, which was forwarded to ET on 26 July 2019, from public against 投訴將軍澳第 137 區填料庫,大風吹起引致塵埃飛揚,更吹到 TVB,造成嚴重滋擾,要求跟進及回覆。	Refer to the ET site investigation on 29 July 2019, no defective observation related to dust emission was recorded during the investigation.  No impact air quality monitoring result of 1-hr TSP and 24-hr TSP was exceeded Action and Limit Level at all monitoring stations from 23 to 29 July 2019.  Details of Action(s) Taken by the Contactor:  Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank;  Mist spraying systems at the site entrance are operated properly;  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;  All dusty material is sprayed with water prior to loading, unloading or transfer so as to maintain the material wet;  Truck speed within the site is limited within 10 km/h;  Regular cleaning at the site haul road is provided to minimize the fugitive dust emission;	Closed
010	Tseung Kwan O 137 Fill Bank	09 September 2019	One complaint received on 09 September 2019, which was forwarded to ET on 09 September 2019, from public against 投訴將軍澳第 137 區填料庫,大風吹起引致塵埃飛揚,更吹到日出康城,造成嚴重滋援,要求跟進及回覆。	Refer to the ET site investigation on 11 September 2019, no defective observation related to dust emission was recorded during the investigation.  No impact air quality monitoring result of 1-hr TSP and 24-hr TSP was exceeded Action and Limit Level at all monitoring stations from 1 to 13 September 2019.  Details of Action(s) Taken by the Contactor:  Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank;  Mist spraying systems at the site entrance are operated properly;  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;  All dusty material is sprayed with water prior to loading, unloading or transfer so as to maintain the material wet;  Truck speed within the site is limited within 10 km/h;  Regular cleaning at the site haul road is provided to minimize the fugitive dust emission;	Closed



011	Tseung Kwan O 137 Fill Bank	10 September 2019	One complaint received on 10 September 2019, which was forwarded to ET on 10 September 2019, from public against 投訴將軍澳137 區經常於處理建築廢料時沒有灑水,導致沙塵滾滾,嚴重污染環境,要求環保署跟進及回覆。	Refer to the ET site investigation on 11 September 2019, no defective observation related to dust emission was recorded during the investigation.  No impact air quality monitoring result of 1-hr TSP and 24-hr TSP was exceeded Action and Limit Level at all monitoring stations from 1 to 13 September 2019.  Details of Action(s) Taken by the Contactor:  Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank;  Mist spraying systems at the site entrance are operated properly;  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;  All dusty material is sprayed with water prior to loading, unloading or transfer so as to maintain the material wet;  Truck speed within the site is limited within 10 km/h;  Regular cleaning at the site haul road is provided to minimize the fugitive dust emission;	Closed
012	Tseung Kwan O 137 Fill Bank	24 August 2021	One complaint received on 24 August 2021, which was forwarded to ET on 30 August 2021, from public against 投訴將軍澳第 137 區公眾填料庫,灑水不足,泥頭車引起大量塵埃。	Refer to the ET site investigation on 30 August 2021, no defective observation related to dust emission was recorded during the investigation.  No impact air quality monitoring result of 1-hr TSP and 24-hr TSP was exceeded Action and Limit Level at all monitoring stations from 20 August 2021 to 30 August 2021.  Details of Action(s) Taken by the Contactor:  Repairing work on water truck was conducted.  Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank;  Mist spraying systems at the site entrance are operated properly;  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;  All dusty material is sprayed with water prior to loading, unloading or transfer so as to maintain the material wet;  Truck speed within the site is limited within 10 km/h;  Regular cleaning at the site haul road is provided to minimize the fugitive dust emission;	Closed



				<u> </u>	
013	Tseung Kwan O 137 Fill Bank	25 November 2021	A complaint was received on 25 November 2021, which was forwarded to ET by email on 26 November 2021, from public against 投訴將軍澳 137 公眾填料庫 地盤灑水不足, 大量塵埃, 吹到 TVB 電視城一帶, 問題一直無改善, 要求環保署跟進及電郵回覆	Refer to the ET site investigation on 29 November 2021, no defective observation related to dust emission was recorded during the investigation.  No impact air quality monitoring result of 1-hr TSP and 24-hr TSP was exceeded Action and Limit Level at all monitoring stations from 24 November 2021 to 29 November 2021.  Details of Action(s) Taken by the Contactor:  Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank;  Mist spraying systems at the site area are operated properly;  Regular cleaning at the site haul road is provided to minimize the dust emission	Closed
014	Tseung Kwan O 137 Fill Bank	18 July 2022	A complaint was received on 18 July 2022, which was forwarded to ET by email on 18 July 2022, from public against "投訴將軍 澳第 137 區填料庫的塵埃很大,吹向四周,影響附近工作的人,要求跟進及回覆"	Refer to the ET site investigation on 20 July 2022, no defective observation related to dust emission was recorded during the investigation.  No impact air quality monitoring result of 1-hr TSP and 24-hr TSP was exceeded Action and Limit Level at all monitoring stations from 15 July 2022 to 20 July 2022.  Details of Action(s) Taken by the Contactor:  Regular water spraying by water lorries is provided for dust suppression inside the Fill Bank;  Mist spraying systems at the site area are operated properly;  Regular cleaning at the site haul road is provided to minimize the dust emission	Closed



015	Tseung Kwan O 137 Fill Bank	08 August 2022	A complaint was received on 08 August 2022, which was forwarded to ET by email on 08 August 2022, from public regarding muddy discharge near the Area 137 Fill Bank and Sorting Facility.	Refer to the EPD inspection on 09 August 2022, a large area of exposed soil was observed next to the surface channel connecting to the outfall. Soil may be washed down the surface channel and causes muddy discharge.  Refer to the ET site investigation on 12 August 2022, no defective observation related to muddy discharge was recorded during investigation.  Details of Action(s) Taken by the Contactor:  Filers or baffles were added to the outfall to intercept soil and other pollutants in the water before discharge.  Regular cleaning, especially the drainage system, was provided to prevent the runoff of muddy water.	Closed
016	Tseung Kwan O 137 Fill Bank	12 August 2022	A complaint was received on 12 August 2022, which was forwarded to ET by email on 15 August 2022, from public against "I recently observed yellowish water flowing out to the sea, near the shore of the Tseung Kwan O Area 137 Fill Bank after rain in this week. Looking from outside the Area 137, there are a lot of soil exposed at the site. Could that be the source of soil being washed off to the sea?"	Refer to the EPD inspection on 09 August 2022, a large area of exposed soil was observed next to the surface channel connecting to the outfall. Soil may be washed down the surface channel and causes muddy discharge.  Refer to the ET site investigation on 12 and 17 August 2022, no defective observation related to muddy discharge was recorded during investigation.  Details of Action(s) Taken by the Contactor:  Filers or baffles were added to the outfall to intercept soil and other pollutants in the water before discharge.  Regular cleaning, especially the drainage system, was provided to prevent the runoff of muddy water.	Closed



017	Tseung Kwan O 137 Fill Bank	25 October 2022	A complaint was received on 25 October 2022, which was forwarded to ET by email on 25 October 2022, from public against "投訴將軍澳 137區填料庫今日早上出現小龍捲風將泥塵吹向小西灣一帶"	Refer to the ET site investigation on 26 October 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
018	Tseung Kwan O 137 Fill Bank	14 November 2022	A complaint was received on 14 November 2022, which was forwarded to ET by email on 14 November 2022, from public against "complained the dust nuisance (the dark dust blowing around the sky and high PM 2.5) at Tseung Kwan O Area 137 Fill Bank, this has been going for a while."	Refer to the ET site investigation on 14 November 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



**Figures** 

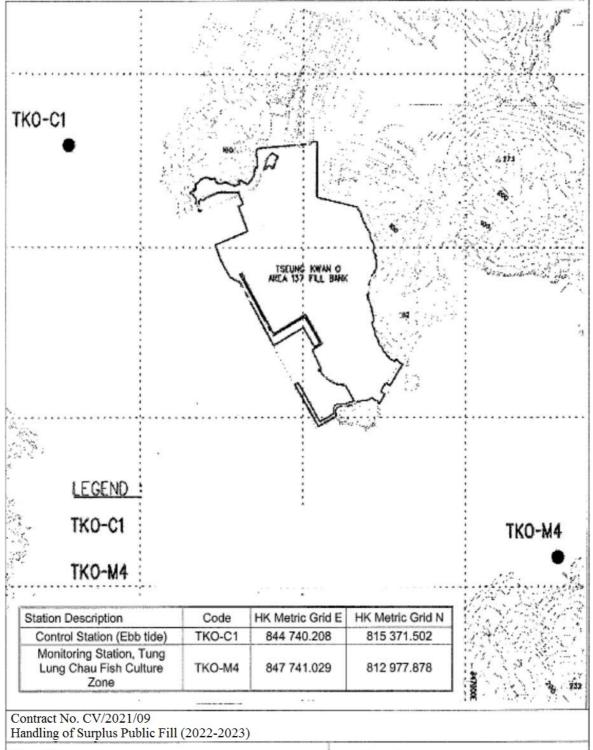
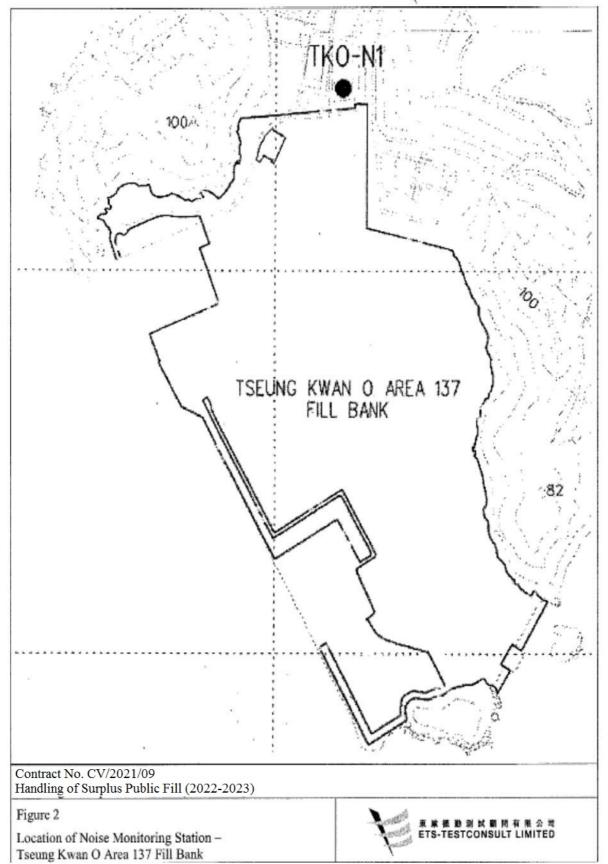


Figure 1

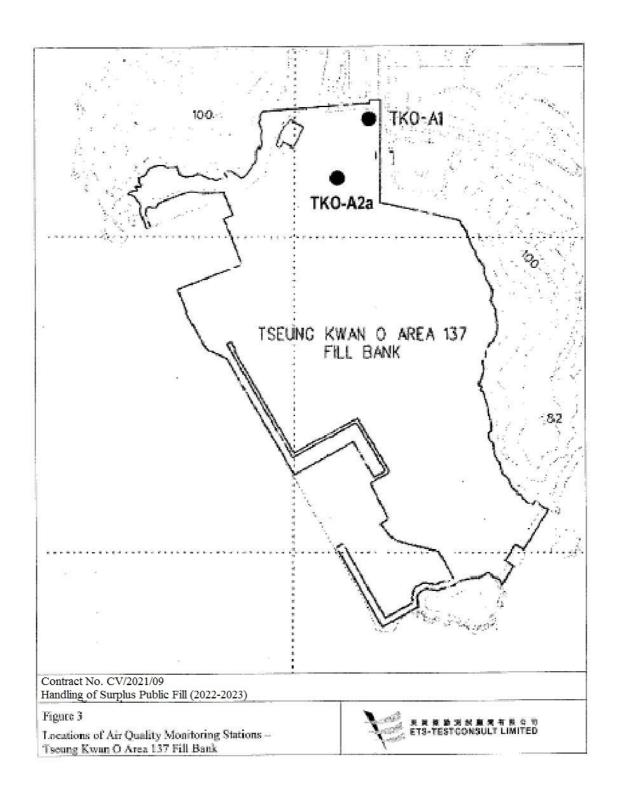
Locations of Water Quality Monitoring Stations -Tseung Kwan O Area 137 Fill Bank

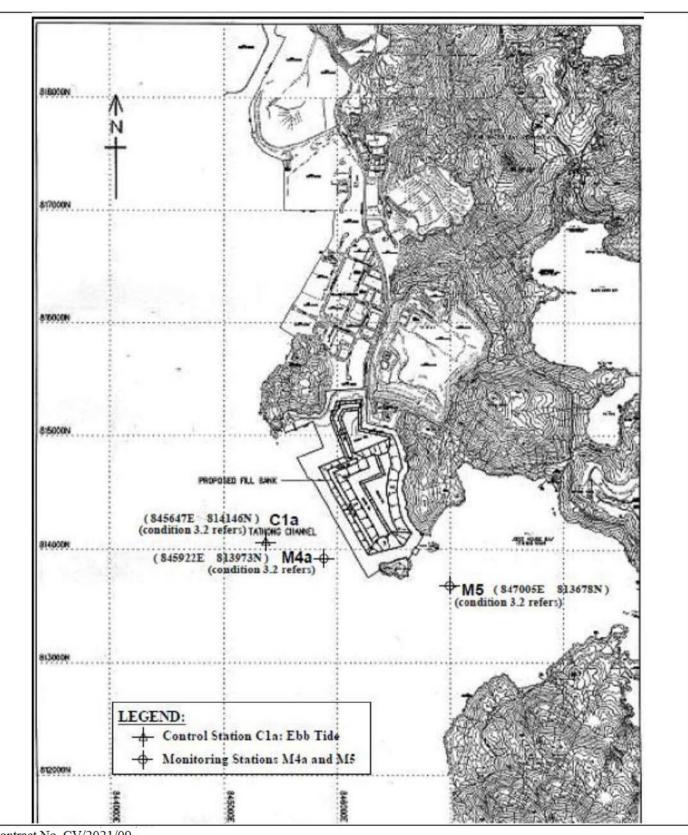


表象物面测试期间有准公司 ETS-TESTCONSULT LIMITED









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

Figure 4 Locations of Additional Water Quality Monitoring Stations (3RS project) Tseung Kwan O Area 137 Fill Bank

