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TEST REPORT



China Harbour Engineering Co Ltd

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

TSEUNG KWAN O AREA 137 FILL BANK

QUARTERLY EM&A SUMMARY REPORT NO.05

(FROM JANUARY 2023 TO MARCH 2023)

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Environmental Team Leader

Issue Date: 12 May 2023

Report No: ENA32249

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Our Ref: PL-202306016

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

Attention: Mr. C L Lau

14 June 2023

Dear Mr. Lau,

RE: Contract No. CV/2021/09

Handling of Surplus Public Fill (2022-2023)

Quarterly EM&A Report (No. 5) for January to March 2023 for the Tseung Kwan O Area 137 Fill Bank

Reference is made to your submission of the Quarterly EM&A Report for January to March 2023 for the Tseung Kwan O Area 137 Fill Bank, we are pleased to inform you that we have no adverse comment on the captioned report.

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

Yours faithfully,

Tour Sauldery

F. C. Tsang

Independent Environmental Checker

CEDD - Mr. T M YEUNG cc.



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EXECUTIVE SUMMARY

This is Quarterly Environmental Monitoring and Audit (EM&A) Summary Report No.05 prepared by ETS-Testconsult Ltd (ET) for the "Contract No: CV/2021/09 –Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O (TKO) Area 137 Fill Bank" (The Project).

This report documents the findings of EM&A Works conducted during the operation phase of Fill Bank at Tseung Kwan O Area 137 from 01 January 2023 to 31 March 2023.

Site Activities

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

January 2023

- 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 crushing plants at TKOFB;
- 4. Operation and Maintenance of Artificial Intelligent System for Crushing Plant at TKOFB;
- 5. Operation of the Integrated Public Fill Reception 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. Modification and Operation a Digital Works Supervision System (DWSS) for TKOFB;
- 9. Operation and maintenance of Wheel Washing Bays and Facilities at TKOFB;
- 10. Maintenance of the Drainage Systems at TKOFB;
- 11. Construction of Gabion Wall at TKOFB;
- 12. Upgrade of Integrated Public Fill Reception Platform at TKOFB
- 13. Trial Production of Blanket Layer Material Recycled from Public Fill at TKOFB
- 14. Upgrading and Repairing Works for Lightning Protection System at TKOFB
- 15. Replacement of Steel Decking near Main Entrance at TKOFB
- 16. Replacement of concrete pavement at TKOFB
- 17. Trial sorting of 37.5mm products by screen machine and testing
- 18. Modification works of existing containers for trial operation for receiving slurry at TKOFB
- 19. Implementation of C Easy system at TKOFB (Phase 1)

February 2023

- 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 crushing plants at TKOFB;
- 4. Operation and Maintenance of Artificial Intelligent System for Crushing Plant at TKOFB;
- 5. Operation of the Integrated Public Fill Reception 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. Modification and Operation a Digital Works Supervision System (DWSS) for TKOFB;
- 9. Operation and maintenance of Wheel Washing Bays and Facilities at TKOFB:
- 10. Maintenance of the Drainage Systems at TKOFB;
- 11. Construction of Gabion Wall at TKOFB;
- 12. Upgrade of Integrated Public Fill Reception Platform at TKOFB
- 13. Trial Production of Blanket Layer Material Recycled from Public Fill at TKOFB
- 14. Replacement of concrete pavement at TKOFB
- 15. Implementation of C Easy system at TKOFB (Phase 1)
- 16. Carry out GCO Probe test and SRT
- 17. Preparation works for temporary storage of containers

March 2023

- 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 crushing plants at TKOFB;
- 4. Operation and Maintenance of Artificial Intelligent System for Crushing Plant at TKOFB;
- 5. Operation of the Integrated Public Fill Reception 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. Modification and Operation a Digital Works Supervision System (DWSS) for TKOFB;
- 9. Operation and maintenance of Wheel Washing Bays and Facilities at TKOFB;
- 10. Maintenance of the Drainage Systems at TKOFB;
- 11. Construction of Gabion Wall at TKOFB;
- 12. Replacement of concrete pavement at TKOFB
- 13. Implementation of C Easy system at TKOFB (Phase 1)
- 14. Carry out GCO Probe test and SRT
- 15. Preparation works for temporary storage of containers)



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Dump truck traffic and hauling activities at Barge Handling Area (BHA) were the major dust sources. Barge delivery of fill material was also undertaken in the reporting quarter. Besides the Fill Bank operation, the other dust sources near TKO Area 137 also included operation of C&DMSF and dumping activities at the SENT Landfill.

The desilting facilities were in proper operation to avoid silt discharge and the silt curtains were properly installed. There was no sediment plume observed during the monitoring events.

The major noise sources during the reporting quarter were the dump truck traffic and construction activities near the site egress. Noise impact on the sensitive receivers was insignificant in the reporting quarter according to the results of noise monitoring and site inspections.

Environmental Monitoring Works

Noise Monitoring

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

Air Monitoring

No exceedance of Action and Limit levels was recorded for 1-hr and 24-hr TSP monitoring in this quarter.

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 quarter.

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 quarter.



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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/P) (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 month and forthcoming months;
- 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 September 2002 by MateriaLab. Action and Limit Levels were established for air and water quality parameters based on the baseline monitoring results.

This quarterly report documented the findings of EM&A Works conducted during the operation phase of Fill Bank at Tseung Kwan O Area 137 from January 2023 to March 2023.

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 Tseung Kwan O Basin (TKO Basin) and one at the Construction and Demolition Material Sorting Facility (C&DMSF) for transporting the stockpiled public fill by barges;
- 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

Tseung Kwan O Area 137 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 ASRs and NSRs, including resident developments and schools, are located at a further distance away from TKO Area 137.

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2.3 Work Programme

Details of work programme in this quarter 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 (Acuity)	Mr. F C Tsang	IEC	2698 9097	2333 1316
Contractor (CHZH-JV)	Zhou Chang Ying	Senior Project Manager	96266299	22474108
ET (ETL)	C. L. Lau	ET Leader	2946 7791	2695 3944

3.0 SUMMARY OF EM&A REQUIREMENTS

3.1 EM&A Programme

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

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

The advice on implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 5 of the Report.

3.2 Monitoring Stations and Parameters

The EM&A Manual designates several locations to monitor environmental impacts in terms of air quality, noise and water quality due to the Project. The description and detailed locations of monitoring stations for air quality, noise and marine water quality are shown in Figures 1, 2 and 3 and relevant sections of this Report.

3.3 Monitoring Methodology and Calibration Details

All monitoring works were conducted and monitoring equipment was calibrated in according with the EM&A Manual.

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3.4 Environmental Quality Performance Limits (Action/Limit Levels)

The environmental quality performance limits, i.e. Action/Limit Levels (AL Levels) were derived from the baseline monitoring results. If the measured environmental quality parameters exceed the AL Levels, the respective action plan will be implemented. The AL Levels for each monitoring parameter are given in Appendix E. The event action plan is given in Appendix F.

3.5 Environmental Mitigation Measures

Relevant mitigation measures were recommended in the EM&A Manual for the Contractor to implement. A list of mitigation measures is given in Appendix H.

4.0 MONITORING RESULTS

4.1 Air Quality

In accordance with the EM&A Manual, 1-hr and 24-hr TSP air quality monitoring were conducted three times and once per six days correspondingly.

No exceedance of Action and Limit levels was recorded for 1-hr and 24-hr TSP monitoring in this quarter. The trend of air quality during the reporting quarter is present in Appendix B. Wind data included wind speed and wind direction were extracted from Tseung Kwan O Station of Hong Kong Observatory and presented in Appendix K.

Major dust sources in the Fill Bank were dump truck traffic and hauling activities at BHA.

Table 4.1 presents the number of exceedances recorded in each month of the reporting quarter. The number of monitoring event included regular monitoring events and additional ones.

Table 4.1 Summary of Number of Exceedances for 1-hr and 24-hr TSP Monitoring

1	Table 111 Canimary of Hamber of Exceedantees for 1 in and 2 i in 101 informering				
Monitoring	Level of	January 2023	February 2023	March 2023	
Parameter	Exceedance				
24-hr TSP	No of monitoring	5	5	5	
	events				
	Action Level	0	0	0	
	Limit Level	0	0	0	
1-hr TSP	No of monitoring	15	15	16	
	events				
	Action Level	0	0	0	
	Limit Level	0	0	0	

Table 4.2 presents the 1-hr and 24-hr TSP averages in the baseline period and for each month in the reporting quarter. It was found that the 1-hr TSP averages at both stations in the reporting quarter were higher than the baseline levels but they were within the AL Levels. Besides, the 24-hr TSP average results were below the baseline level and within the AL Levels. As a result, the Contractor should provide more mitigation measures refer to the EM&A Manual to avoid dust generation.

Table 4.2 Comparison of Baseline and Various Period of Averaged 1-hr and 24-hr TSP Impact monitoring Results

Period	1-hr TS	P (μg/m³)	24-hr TSF	^Ο (μg/m³)
renou	TKO-A1	TKO-A2a	TKO-A1	TKO-A2a
Baseline (29/08 – 13/09)	1	95	12	3
January 2023	231	236	135	141
February 2023	228	233	131	136
March 2023	244	248	139	144

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4.2 Noise

Noise monitoring was required to be conducted at least once per month. Only daytime noise was monitored in the reporting quarter.

All recorded noise levels complied with the AL Levels. The registered noise levels in the past three months are plotted in Appendices C. Table 4.3 presents the limit level and average impact noise monitoring results during the reporting quarter.

Table 4.3 Summary of Impact Monitoring results of Noise Daytime Monitoring

Monitoring	Limit Level	January 2023	February 2023	March 2023
Location		Leq, dB(A)		
TKO-N1	75	65.2	65.1	64.3

The major noise sources in the reporting quarter were dump truck traffic and construction activities near the site egress. The noise impact was insignificant as the Fill Bank was remote from sensitive receivers.

4.3 Marine Water Quality

In accordance with the EM&A Manual, the marine water quality monitoring was conducted at the monitoring station (M4) and the control station (C1) in the reporting guarter.

Impact marine water quality monitoring was conducted three days per week. Measurements were taken at both mid-ebb and mid-flood tides at three depths (i.e. 1m below surface, mid depth and 1m above seabed). The AL Levels are included in Appendix E.

According to Environmental Permit (Permit no.:EP-134/2002/N) Condition 3.2, water quality survey/monitoring shall be conducted at control station C1a, monitoring stations M4a and M5 for the period from two weeks before commencement of operation of the additional 5 barging points to 4 weeks after cessation of their operation. 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.

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.

Table 4.4 presents the total number of marine water quality exceedances in the reporting quarter. The trend of marine water quality in the past three months is depicted in Appendix D1.

Table 4.4 Total Number of Marine Water Quality Exceedances in the Quarter

Parameter	Exceedance Level	January 2023	February 2023	March 2023
Number of monitor	ing days	12	12	14
Dissolved	Action	0	0	0
Oxygen, DO (S&M)	Limit	О	О	0
Dissolved	Action	0	0	0
Oxygen, DO (B)	Limit	0	0	0
Turbidity	Action	0	0	0
Turbially	Limit	0	0	0
Suspended	Action	0	0	0
Solids, SS	Limit	0	0	0
Total Number	Action	0	0	0
Exceedances	Limit	0	0	0

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Table 4.5 presents the total number of marine water quality exceedances (3RS project) in the reporting quarter. The trend of marine water quality in the past three months is depicted in Appendix D2.

Table 4.5 Total Number of Marine Water Quality Exceedances (3RS project) in the Quarter

Parameter	Exceedance Level	January 2023	February 2023	March 2023
Number of monitor	ing days	12	12	14
Dissolved	Action	0	0	0
Oxygen, DO (S&M)	Limit	0	0	0
Dissolved	Action	0	0	0
Oxygen, DO (B)	Limit	0	0	0
Turbidity	Action	0	0	0
	Limit	0	0	0
Suspended	Action	0	0	0
Solids, SS	Limit	0	0	0
Total Number	Action	0	0	0
Exceedances	Limit	0	0	0

A comparison between the quarterly mean/median of SS and the 1.3 times of the baseline mean was made for each tide at each station. The statistical analysis results are given in Appendix I1 and it shows that a generally better marine quality was recorded in the reporting quarter in respect to 130% of the baseline mean. Monitoring stations with significant difference (p<0.05) is summarized in Table 4.6.

Table 4.6 Summary of Statistically Significant Results of SS

Monitoring Station	Significant difference?		
	Mid-ebb	Mid-flood	
C1	0	0	
M4	0	0	

A comparison between the quarterly mean/median of SS and the 1.3 times of the baseline mean was made for each tide at each station. The statistical analysis results (3RS project) are given in Appendix I2 and it shows that a generally better marine quality was recorded in the reporting quarter in respect to 130% of the baseline mean. Monitoring stations with significant difference (p<0.05) is summarized in Table 4.7.

Table 4.7 Summary of Statistically Significant Results of SS (3RS project)

Monitoring Station	Significant difference?		
	Mid-ebb	Mid-flood	
C1a	X	X	
M4a	X	X	
M5	X	X	

5.0 INSPECTION RESULTS

5.1 Implementation Status of Environmental Mitigation Measures

ET conducted weekly site inspections to monitor the Contractor's implementation of environmental mitigation measures. In this reporting period, thirteen weekly site inspections were conducted. After each site inspection, the Contractor was notified of ET's observations and recommendations. A corrective action plan detailing the environmental observations was prepared by ET and the Contractor then completed this plan to propose/report their remedial works.

Air quality was the major environmental issue in the reporting quarter. The Contractor generally implemented most of the environmental mitigation measures in the reporting quarter. Dump truck traffic was the major dust source in the Fill Bank. Generally, the Contractor implemented adequate



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dust mitigation measures in the reporting quarter including dampening of haul roads, water spraying on the truckloads, operation of automatic wheel washing facilities and mist spraying systems, dampening of fill material prior to handling or stockpiling, etc.

Dump truck traffic and construction activities near the site egress were the major noise sources. As the Fill Bank was remote from the nearby NSRs, the noise impact was minimal. The powered mechanical equipment were generally operated and maintained properly.

Regarding the observations about the damaged silt curtain, the Contractor was reminded to maintain the silt curtain properly to serve the function of refuse containment boom to confine floating refuse. Furthermore, Dust emission was found upward trend, the Contractor was reminded to increase the watering to avoid dust emission.

Although there were a few observations regarding dust control, such as fugitive dust emission and accumulation of fill materials, the Contractor rectified most of these problems. Besides, the Contractor should increase the site watering in order to minimize the fugitive dust emissions.

The germination rate on the panel was satisfactory in this reporting quarter. The Contractor was reminded to maintain the panel properly.

5.2 Status of Environmental Licensing and Permitting

The status of licences and permits is summarized in Table 5.1.

Table 5.1 Summary of environmental licensing and permit status

Description	Permit No.	Valid	Month	Section	
		From	То		
Environmental Permit	EP- 134/2002/P	14/02/23	01/01/27	 Site clearance Construction of a temporary storm water system Stockpiling of 6 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 Producer	5919-839- C3750-04	19/04/17	20/06/27	Spent battery cell containing heavy metals and spent lubricating oil	
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/22- 083	07/02/23	31/03/23	Approval for dumping 499,999 tons (approximately equal to 277,777 cu.m. bulked quantity) of Public Fill (Reclamation Materials) from Tseung Kwan O Area 137 Fill Bank and Tuen Mun Area 38 Fill Bank to designated dumping area at Guanghaiwan of Taishan	



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Billing Account for Waste Disposal	7042821	22/05/17	End of Contract	
Notification Pursuant to Section 3(1) of the Air Pollution Control (Construction Dust)	475209	12/04/17	End of Contract	

5.3 Advice on Solids 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 5.2 summarizes data on offsite waste disposal in the quarter.

Table 5.2 Estimated Offsite Waste Disposal in the Reporting Quarter

Waste Type	January 2023	February 2023	March 2023
Public Fill ('000m³)	0	0	0
C&D Waste (general refuse) ('000kg)	67.28	436.56	1294.10
Chemical Waste (kg/L)	0 (L)	0 (L)	0 (L)

The site toilet and shower room and several chemical toilets were in use throughout the reporting quarter. Discharge from the site toilet and shower room was made to the additional drainage DP4 after passing through the sewage treatment system. A licensed collector also regularly collected waste from the chemical toilets.

6.0 NON-COMPLIANCE OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMITS

6.1 Summary of Non-compliance

In this reporting quarter, no exceedance of Action and limit levels on marine water quality was recorded.

No exceedances on 1-hour and 24-hour TSP monitoring results were recorded in this guarter.

Besides, no day-time noise level measured at the monitoring station exceeded the Action and Limit Level in this guarter.

6.2 Review of the Reasons for and the Implications of Non-compliance

Since there was no exceedance recorded in this quarter, the review of the reasons for the non-compliance was not required.

6.3 Summary of Actions Taken

Since there was no exceedance recorded in this quarter, no further action was not required to be taken.

6.4 Summary of Environmental Complaint, Notifications of Summons and Successful Prosecutions Handling

No complaint, notification of summon and successful prosecution was received in this quarter.

A summary of environmental complaints and prosecutions was given in Table 6.1.



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Table 6.1 Summary of Environmental Complaints and Prosecutions

Period	Complaints logged	Summon served	Successful Prosecution
January 2023	0	0	0
February 2023	0	0	0
March 2023	0	0	0
Cumulative	18	0	0

7.0 COMMENTS, CONCLUSIONS AND RECOMMENDATION

In this quarter, major activity in the Fill Bank was the import and dumping of fill material. Air quality was the major environmental issue in the Fill Bank. Generally, the Contractor implemented most of the mitigation measures to minimize the dust impact.

No exceedance of Action and Limit levels was recorded for 1-hour and 24-hour TSP monitoring in this quarter.

No exceedance of Action and Limit Level of noise was recorded in this reporting quarter.

No exceedance of Action and limit level on marine water quality was recorded in this quarter

No complaint, notification of summon and successful prosecution was received in this quarter.

According to the ET weekly site inspection and IEC site audits carried out in this quarter, it was indicated that site practices of the Contractor were generally undertaken in an environmentally acceptable manner and the overall site environmental performance was up to standard. 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.

According to the environmental site inspections performed in this quarter, the following recommendations were provided:

Air Quality

- Ensure the frequency of water spraying on haul roads, unloading areas and stockpiles to be sufficient to suppress the dust sources;
- Provide proper maintenance for the powered mechanical equipment and barges to avoid emission of dark smoke;
- Provide water spraying onto the truckloads during inspection of fill material;
- 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 boswer:
- 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.



Handling of Surplus Public Fill (2022-2023) Tseung Kwan O Area 137 Fill Bank ENA32249 Quarterly EM&A Summary Report No.05

Water Quality

- Maintain the drainage system, including the trapezoidal channels, permanent desilting chambers, DP3 & DP4 regularly;
- Operate and maintain the silt curtains regularly;
- Operate the cleaning vessel within the TKO Basin regularly;
- Provide proper treatment for the oil discharge from the area near air monitoring station TKO-A1;
- 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.

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, DP3 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.

Landscape and Visual

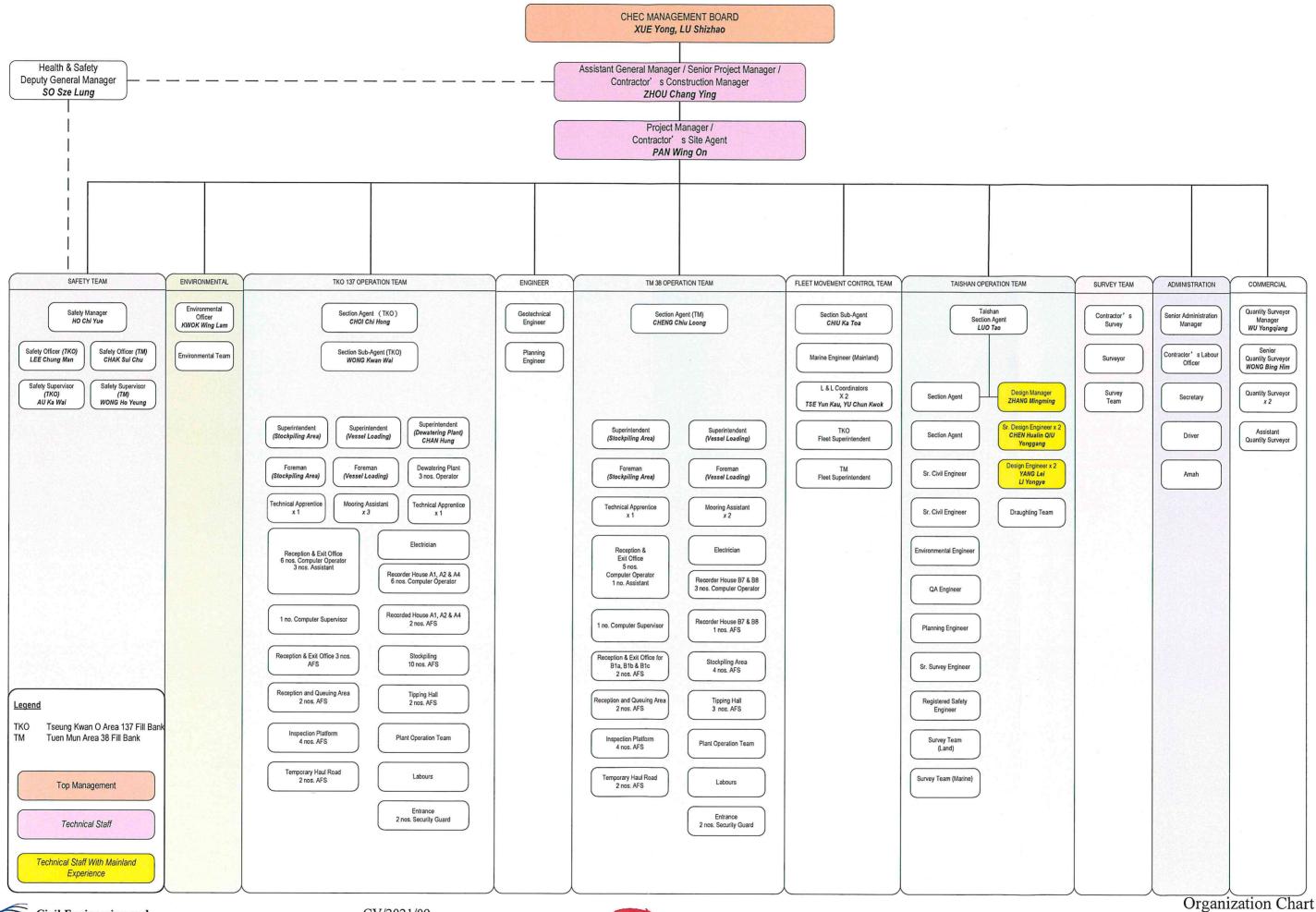
- Provide hydroseeding on the exposed slopes, on which the final profile has been formed;
- Erect all the site hoarding/chaining fences in accordance with agreed design at proper location;
- Maintain the hydroseeding slopes in accordance with the Landscape Plan.

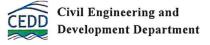
- END OF REPORT -



Α

Organization Chart







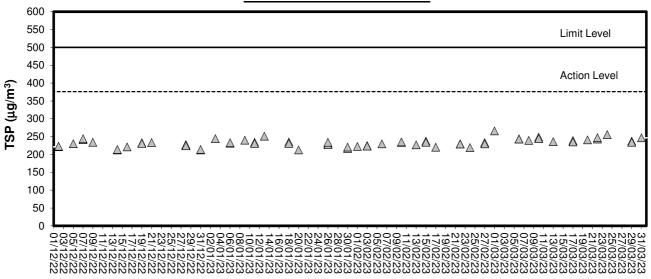


В

Graphical Plots of Air Quality Monitoring Data

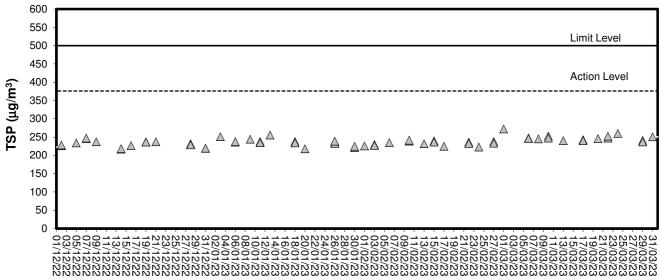


1-hour TSP level at TKO-A1



Date

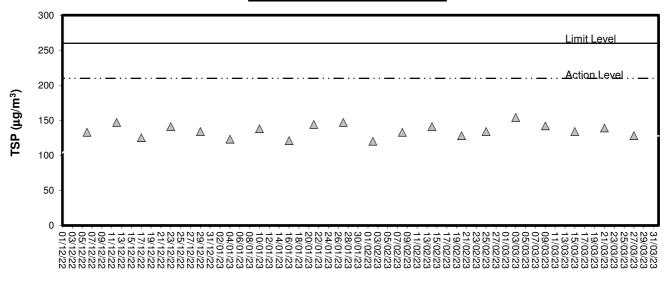
1-hour TSP level at TKO-A2a



Date

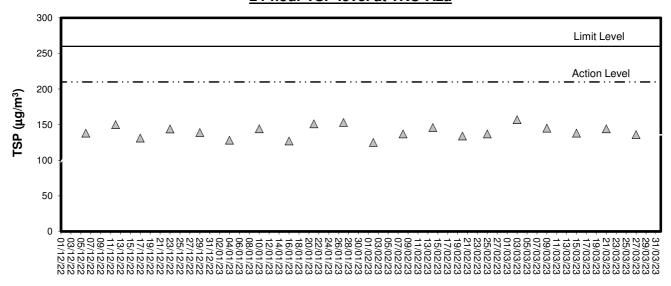


24-hour TSP level at TKO-A1



Date

24-hour TSP level at TKO-A2a



Date



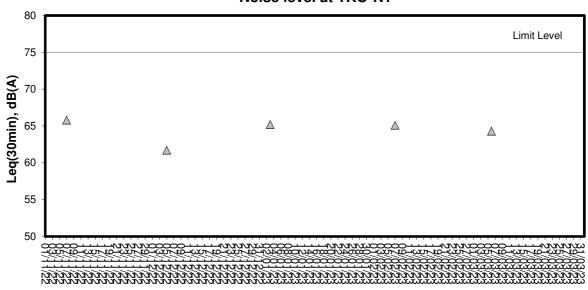
C

Graphical Plots of Noise Monitoring Data



Noise Monitoring (Day-time)

Noise level at TKO-N1



Date

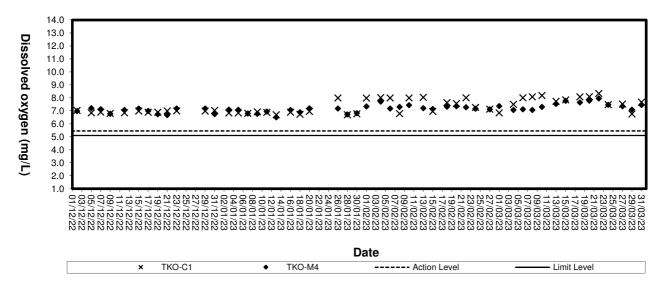


D1

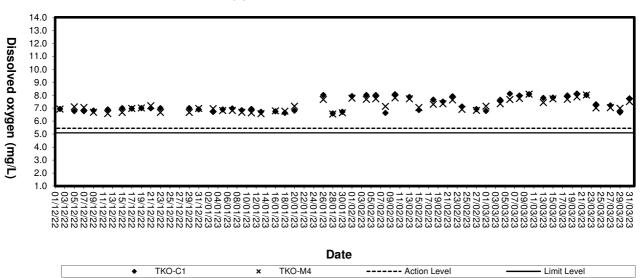
Graphical Plots of Impact Marine Water Quality Monitoring Data



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

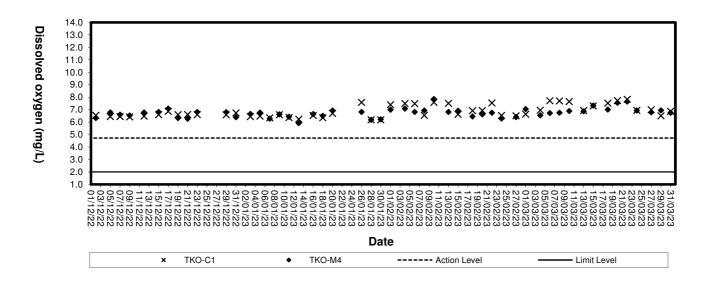


Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide

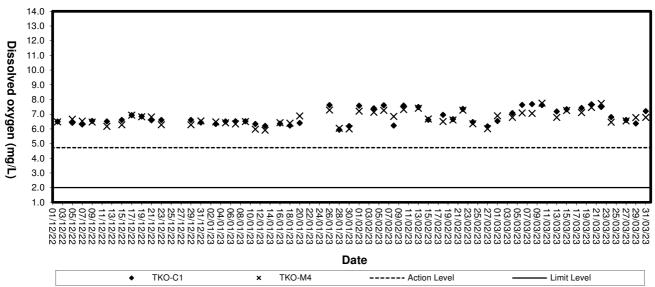




Dissolved Oxygen (Bottom) at Mid-Flood Tide

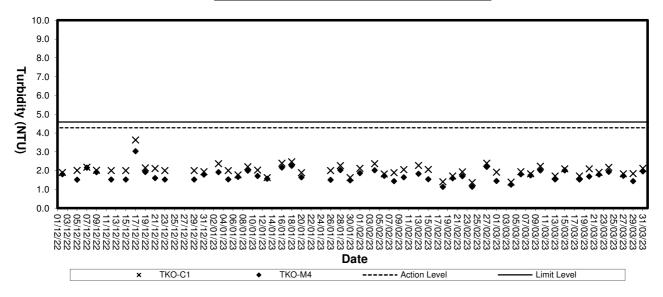


Dissolved Oxygen (Bottom) at Mid-Ebb Tide

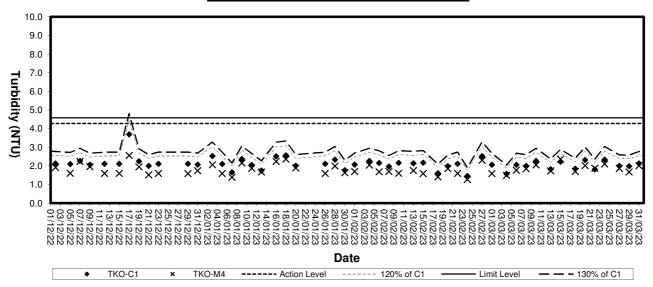




Turbidity (Depth-average) at Mid-Flood Tide

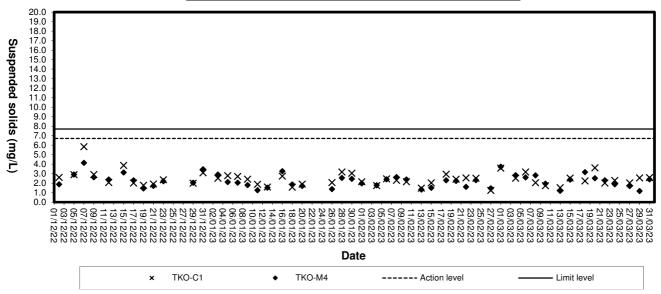


Turbidity(Depth-average) at Mid-Ebb Tide

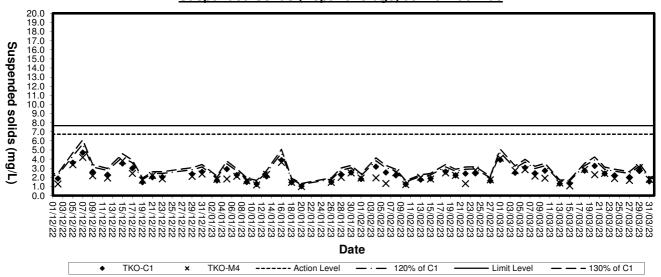




Suspended solids (Depth-average) at Mid-Flood Tide



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



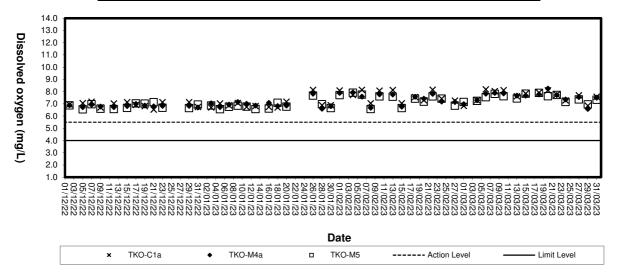


D2

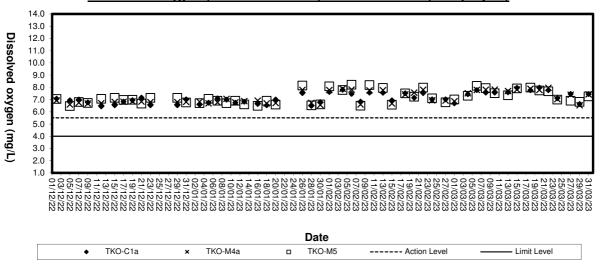
Graphical Plots of Impact Marine Water Quality Monitoring Data (3RS project)



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

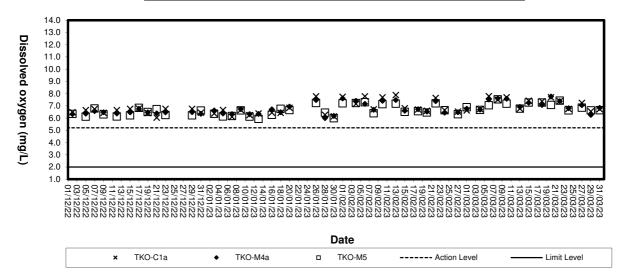


Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide (3RS project)

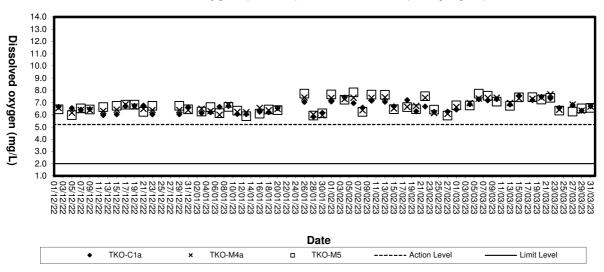




Dissolved Oxygen (Bottom) at Mid-Flood Tide (3RS project)

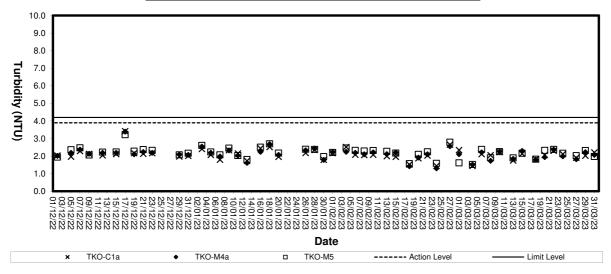


Dissolved Oxygen (Bottom) at Mid-Ebb Tide (3RS project)

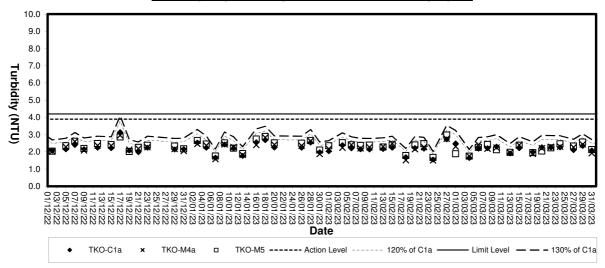




Turbidity (Depth-average) at Mid-Flood Tide (3RS project)

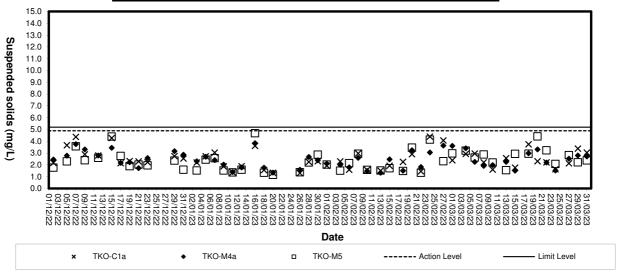


Turbidity(Depth-average) at Mid-Ebb Tide (3RS project)

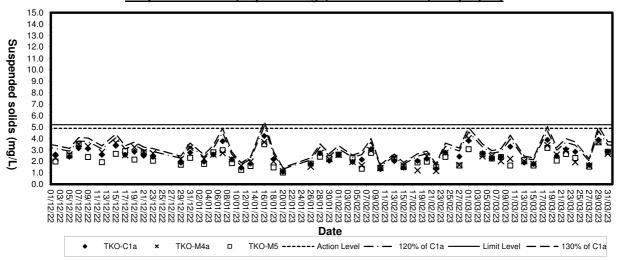




Suspended solids (Depth-average) at Mid-Flood Tide (3RS project)



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





Ε

Environmental Quality Performance (Action / Limit Levels)



Action and Limit Levels for Air Quality

Action and Limit Levels for 1-Hour TSP

Location	Action Level, µg/m³	Limit Level, µg/m³
A1	270	
A2	376	500

Action and Limit Levels for 24-Hour TSP

Location	Action Level, µg/m3	Limit Level, µg/m3	
A1	210	200	
A2	7 210	260	

Action and Limit Levels for Noise

Time Period	Action	Limit
0900-2100 hrs on all days	When one documented complaint is received	75*dB(A)

Action and Limit Levels for Water Quality

Parameters	Action	Limit
Dissolved oxygen, DO mg/L (Surface, Middle & Bottom)	Surface & Middle DO < 5.45 (5%-ile of baseline data) Bottom DO < 4.72 (5%-ile of baseline data)	Surface & Middle DO < 5.10 (1%-life of baseline data) Bottom 2 mg/L
Suspended solids, SS mg/l, (Depth-averaged)	SS > 6,74 (95%-like of baseline data or SS > 120% of upstream control stations SS at the same tide of the same day)	SS > 7.67 (99%-le of baseline data or SS > 130% of upstream control stations SS at the same tide of the same day)
Turbidity, Tby NTU (Depth-averaged)	Tby > 4.28 (95%-ite of baseline data or Tby > 120% of upstream control stations Tby at the same tide of the same day)	Tby > 4.58

Action and Limit Levels for Water Quality (3RS project) +

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₽



F

Event-Action Plans

	Contractor		Rectify any unacceptable practise Amend working methods if appropriate	1. Submit proposals for remedial actions to IC(E) within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate	,	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IC(E) within 3 working days of notification 3. Implement the agreed proposals 4. Amend proposal if appropriate.
ITY EXCEEDANGE	83		1. Notify Contractor	Confirm receipt of notification of failure in writing Notify the Contractor Ensure remedial measures properly implemented		Confirm receipt of notification of failure in writing Notify the Contractor Ensure remedial measures properly implemented
EVENT/ACTION PLAN FOR AIR QUALITY EXCEEDANCE	ACTION	IC(E)	1. Check monitoring data submitted by the ET 2. Check contractor's working method	1. Check monitoring data submitted by the ET Leader 2. Check the Contractor's working method 3. Discuss with ET and Contractor on possible remedial measures 4. Advise the ER on the effectiveness of the proposed remedial measures 5. 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
ū		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	1. Identify source, investigate the causes of exceedance and propose remedial measures 2. Inform IC(E) and Contractor 3. Repeat measurements to confirm finding 4. Increase monitoring frequency to daily 5. Discuss with IC(E) and Contractor on remedial actions 6. If exceedance continues, arrange meeting with IC(E) and ER. 7. If exceedance stops, cease additional		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 Assess the effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results
EVENT			1. Exceedance for one sample	2. Exceedance for two or more consecutive samples		1, Exceedance for one sample

EVENT		EVENT/ACTION PLAN FOR AIR 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				1
	_	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	
20070	4			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	_				_	

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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.						

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Event		EVENT AND	Ϋ́		ATE	ACTION PLAN FOR WATER QUALITY EXCEEDANCE	Щ		
ان المعادمة والمعادمة				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	
<u> </u>		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:	ιĊ	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	<u>ب</u>	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.						



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**Work Programme** 

ID	A	Task Name	Baseli Start	ne Baseline Finish	Start	Finish	Duratio	on Prede	risk allowa	Total Slack	Actual Start	Actual Finish	% Complete	2   19   26   2	Jan '23   9   16   23	Feb '23	Mar '23   27   6   13   20	Ap
1		Contract duration of Contract CV/2021/9	Sat 1/1	/22 Sun 31/1	2/23 Sat 1	/1/22 Sun 31/	12/23 730 day	s		0 days	NA	NA	0%	1/1/23	9   10   23	30   6   13   20	27   6   15   20	31/3/23
		Contract date, Date of the Letter of Acceptance (assumed)	Mon 20	0/12/21 Mon 20/	2/21 Mon 20/12		12/21 0 days			742 days	s NA	NA	0%					
3		Starting Date of the Works	Sat 1/1	/22 Sat 1/1/2	2 Sat 1/	/1/22 Sat 1/1/	22 0 days			729 days	s NA	NA	0%					
4		Starting Date of Section 1 of the Works	Sat 1/1	/22 Sat 1/1/2	Sat 1	/1/22 Sat 1/1/	22 0 days			0 days	NA	NA	0%					
		Starting Date of Section 2 of the Works	Sat 1/1	/22 Sat 1/1/2	Sat 1	/1/22 Sat 1/1/	22 0 days			0 days	NA	NA	0%					
6		Starting Date of Section 3 of the Works	Sat 1/1	/22 Sat 1/1/2	2 Sat 1	/1/22 Sat 1/1/	22 0 days			0 days	NA	NA	0%					
7		Date for Completion of the Works	Sun 31	/12/23 Sun 31/1	2/23 Sun 3	31/12/23 Sun 31/	12/23 0 days			1 day	NA	NA	0%					
8		Completion Date of Section 1 of the Works	Sun 31	/12/23 Sun 31/1	2/23 Sun 3	31/12/23 Sun 31/	12/23 0 days			0 days	NA	NA	0%	1				
9	1	Completion Date of Section 2 of the Works	Sun 31	/12/23 Sun 31/1	2/23 Sun 3	31/12/23 Sun 31/	12/23 0 days			0 days	NA	NA	0%			And the second s		
10		Completion Date of Section 3 of the Works	Sun 31	/12/23 Sun 31/1	2/23 Sun 3	31/12/23 Sun 31/	12/23 0 days			0 days	NA	NA	0%					
11	<b>E</b>	Planned completion dates	Sun 31	/12/23 Sun 31/1	2/23 Sun 3	31/12/23 Sun 31/	12/23 0 days			0 days	NA	NA	0%					
12	н	Planned competion date of Section 1	Sun 31	/12/23 Sun 31/1	2/23 Sun 3	31/12/23 Sun 31/	12/23 0 days			0 days	NA	NA	0%	1 1 1 1				
13		Planned competion date of Section 2	Sun 31	/12/23 Sun 31/1	2/23 Sun 3	31/12/23 Sun 31/	12/23 0 days			0 days	NA	NA	0%	# 10 mm				
14	1	Planned competion date of Section 3	Sun 31	/12/23 Sun 31/1	2/23 Sun 3	31/12/23 Sun 31/	12/23 0 days			0 days	NA	NA	0%				**	
15		Access Date of the Site	Sat 1/1	/22 Sat 1/1/2	2 Sat 1	/1/22 Sat 1/1/	22 0 days			729 days	s NA	NA	0%	4				
16	<b>√</b> ©	Portion A2, A3a, A3b, A3c, A4, A5a, A5b, A7c2, A10 (within 60 days after starting date)			2 Sat 1	/1/22 Sat 1/1/	22 0 days			0 days	Sat 1/1/22	Sat 1/1/22	100%	orania de la constitución de la				
17	<b>√</b> ②	Portion B1, B3, B6a, B6b and B7 (within 60 days after date)	er starting Sat 1/1	/22 Sat 1/1/2	2 Sat 1	/1/22 Sat 1/1/	22 0 days			0 days	Sat 1/1/22	Sat 1/1/22	100%					
18	<b>√</b> [2]	Portion A1. A7a, A7b, A7c1, A9, A9a and B6c (7 day advance notice after starting date)		/22 Sat 1/1/2	2 Sat 1	/1/22 Sat 1/1/	22 0 days			0 days	Sat 1/1/22	Sat 1/1/22	100%			the same of the sa		e.
19	4	Portion B6c (7 day's advance notice after starting dat	te) Sat 1/1	/22 Sat 1/1/2	2 Sat 1	/1/22 Sat 1/1/	22 0 days			0 days	Sat 1/1/22	Sat 1/1/22	100%					
20		Hand back of the Site		/12/23 Sun 31/1	2/23 Sun 3	31/12/23 Sun 31/	12/23 0 days			0 days	NA	NA	0%					
21		Portion A2, A3a, A3b, A3c, A4, A5a, A7c2, A10 and at an earlier date notified by the Project Manager with days' advance notice)	A11 (or Sun 31 n 30	/12/23 Sun 31/1	2/23 Sun 31/12	Sun 31/ 2/23	12/23 0 days			0 days	NA	NA	0%					
22	1	Portion A1, A7b, A7c1, A9 and A9a (or at an earlier of notified by the Project Manager with 30 days' advance	e notice)	/12/23 Sun 31/1	2/23 Sun 31/12	Sun 31/ 2/23	12/23 0 days			0 days	NA	NA	0%					
23		Portion B1, B3, B6a, B6b and B7 (or at an earlier dat notified by the Project Manager with 30 days' advance	e notice)	/12/23 Sun 31/1	31/12					0 days	NA	NA	0%					
24		Portion B6c (or at an earlier date as notified by the Primary Manager with 30 days' advance notice)		/12/23 Sun 31/1	31/12			100		0 days	NA	NA	0%					
25		Section 1 of the Works - Tseung Kwan O Area 137 Bank			2/23 Sat 1		12/23 730 day			0 days	Sat 1/1/22	NA	47%					
26	~	Taking over the existing facilities at the Tseung Kv Area 137 Fill Bank within Portion A of the Site				/1/22 Sat 1/1/	•	488	0	0 days		Sat 1/1/22	100%					-
sure and the second		Operation of the the Tseung Kwan O Area 137 Fil within Portion A of the Site				/1/22 Sun 31/				0 days	Sat 1/1/22		49%	The second secon				
		within Portion A of the Site				/1/22 Sun 31/				0 days	Sat 1/1/22	NA	49%	THE STATE OF THE S				
29	<u>.</u> Q	Operation and maintenance of the existing tipping the Tseung Kwan O Area 137 Fill Bank within Por the Site	tion A of	122 Sun 31/1	2123 Sat 11	/1/22 Sun 31/	12123 130 day	2000	U	0 days	Sat 1/1/22	INA	49%					
30	<u> </u>	Provision, operation and maintenance of the Crus Plant at the Tseung Kwan O Area 137 Fill Bank w Portion A of the Site	hing Sat 1/1 ithin	/22 Sun 31/1	2/23 Sat 1/	/1/22 Sun 31/	12/23 730 day	s 26SS	0	0 days	Sat 1/1/22	NA	49%	100				
31	-	Operation and maintenance of the dewatering plant Tseung Kwan O Area 137 Fill Bank within portion Site.	nt at the Sat 1/1 A of the	/22 Sun 31/1	2/23 Sat 1/	/1/22 Sun 31/	12/23 730 day	s 26SS	0	0 days	Sat 1/1/22	NA	49%	111111111111111111111111111111111111111				
32	<u>.</u>		m the Sat 1/1	/22 Sun 31/1	2/23 Sat 1/	/1/22 Sun 31/	12/23 730 day	s 26SS	0	0 days	Sat 1/1/22	NA	49%	100 mm m m m m m m m m m m m m m m m m m				
	1	1	Task			Externa	l Tasks				Duration-only	!		Exte	ernal Tasks	□	ì	1
			Split	0.0		Externa	l Milestone	$\Diamond$		1	Manual Sumn	nary Rollup	<b>•</b>	Exte	rnal Milestone			
		h rolling programme Jan23-mar 23 CV/2021/09	Milestone	•			Milestone				Manual Sumn		•		gress			
Date: [3	0/12/20	722]		_								шу	*				<del>.</del>	
			Summary	-		■ Inactive	Summary	1111		5	Start-only			Dea	dline	介		
			Project Summ	ary 🛡		Manua	Task	<b>\$</b>		F	Finish-only			Slad	k			
								Page 1	1								72 73 31 31	

ID	A	Task Name	Baseline Start	Baseline Finish	Start	Finish	Duration		risk allowa	Total Slack		Actual Finish	% Complete	Jan '23
33	U	Construction of Gabion wall	NA NA	NA	Sat 19/2/22	Sun 31/12/23	681 days			0 days	Sat 19/2/22	NA	14%	9   26   2   9   16   23   30   6   13   20   27   6   13   20   27 1/1/23
34	V	Preparing and submitting a method statemen	t for Sat 19/2/22	Fri 4/3/22	Sat 19/2/22	Wed 2/3/22	12 days		2	0 days	Sat 19/2/22	Wed 2/3/22	100%	
35		approval  Preparing and submitting the material submis	ssion Sat 5/3/22	Fri 18/3/22	Sat 19/2/22	Wed 2/3/22	12 days		2	0 days	Sat 19/2/22	Wed 2/3/22	100%	
36	*	Obtaining approval from the Project Manager		Fri 1/4/22		Tue 26/4/22	V 100 100 100 100 100 100 100 100 100 10	35,34	2	0 days	Tue 26/4/22			
37		Construction of Gabion wall	Sat 2/4/22			Sun 31/12/23	546 days		7	0 days	Mon 4/7/22		10%	
38		Re-surfacing of the access road at A11 TKOF		NA	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW	Fri 22/4/22	33 days			0 days	Mon 21/3/22		14 0000	
39	~	Submission of method statement of re-surface access road		NA	Mon 21/3/22		5 days		0	0 days	Mon 21/3/22		<b>美加州市市</b>	
40	1	Obtaining approval from the Project Manager	NA	NA	Thu 7/4/22	Thu 7/4/22	1 day	39	2	0 days	Thu 7/4/22	Thu 7/4/22	100%	
41	V	Milling off the existing pavement, overlaying r pavement on the access road	new NA	NA	Fri 15/4/22	Fri 22/4/22	8 days	40	1	0 days	Fri 15/4/22	Fri 22/4/22	100%	
42	<b>*</b>	PMI no.3 Trial Production of blanket layer ma recycled from public fill	terial Tue 28/6/22	Wed 24/8/22	Tue 28/6/22	Wed 30/11/22	156 days			0 days	Tue 28/6/22	Wed 30/11/22	100%	
43	V.	Submission of method statement	Tue 28/6/22	Fri 29/7/22	Tue 28/6/22	Fri 29/7/22	32 days		1	0 days	Tue 28/6/22	Fri 29/7/22	100%	
44	1	Obtaining approval from the Project Manager	Sat 30/7/22	Sat 20/8/22	Wed 17/8/22	2 Wed 17/8/22	1 day		2	0 days	Wed 17/8/22	Wed 17/8/22	100%	
45	V	Manufacturing and delivery of screening mad	hine Fri 22/7/22	Thu 11/8/22	Fri 22/7/22	Thu 11/8/22	21 days		2	0 days	Fri 22/7/22	Thu 11/8/22	100%	
46	<b>√</b> =	Trial Production of blanket layer material	Mon 22/8/22	Wed 24/8/22	Mon 17/10/22	Wed 30/11/22	45 days		1	0 days		Wed 30/11/22	100%	
47		PMI no.24 Implementation of C easy system a	at TKOFB Mon 22/8/22	Tue 27/12/22	Tue 30/8/22	Mon 23/1/23	147 days			8 days	Tue 30/8/22	NA	70%	<u> </u>
48	- J	Submission of method statement for approva	Mon 22/8/22	Sun 28/8/22	Tue 30/8/22	Tue 30/8/22	1 day			0 days	Tue 30/8/22	Tue 30/8/22	100%	
49	3	Obtaining approval from the Project Manager		Sun 18/9/22		Wed 31/8/22	1 day	48	2	0 days	Wed 31/8/22			
50	~	Ordering and delivery of C easy system hard site		Wed 2/11/22	Thu 1/9/22	Thu 8/9/22	8 days	49	3	0 days		Thu 8/9/22		
51	V.	Installation of the C Easy system	Thu 3/11/22	Wed 16/11/22	2 Fri 9/9/22	Tue 27/9/22	19 days	50	2	0 days	Fri 9/9/22	Tue 27/9/22	100%	
52	No.	Trail run of the system	Thu 17/11/22	Wed 30/11/22	2 Tue 22/11/2	2 Wed 30/11/22	9 days	51	2	0 days	Tue 22/11/22	Wed 30/11	100%	
53	p.	Parallel run with the old system	Thu 1/12/22	Mon 26/12/22	2 Thu 1/12/22	Sun 22/1/23	53 days	52	2	8 days	Thu 1/12/22	NA	50%	
54		Operation with C easy system individually	Tue 27/12/22	Tue 27/12/22	Mon 23/1/23	Mon 23/1/23	1 day	53	0	8 days	NA	NA	0%	<u> </u>
55		Handing over the facilities at the Tseung Kwan ( Fill Bank within Portion A of the Site to the Empl	oyer		31/12/23	Sun 31/12/23		8SS	0	0 days	NA	NA	0%	
56		Planned Completion Date (Section 1)				3 Sun 31/12/23				1 day	NA	NA	0%	
57		Section 2 of the Works - Tuen Mun Area 38 Fill B								0 days	Sat 1/1/22		51%	
58 59	<b>✓</b>	Taking over the existing facilities at the Tuen Mu Fill Bank within Portion B of the Site  Operation of the Tuen Mun Area 38 Fill Bank with		Sat 1/1/22 Sun 31/12/23	Sat 1/1/22 Sat 1/1/22	Sat 1/1/22 Sun 31/12/23		5SS 5SS	0	0 days	Sat 1/1/22 Sat 1/1/22		100%	
60		B of the Site Operation and maintenance of the surveillance s				Sun 31/12/23			0	0 days	Sat 1/1/22		49%	
61	P	within Portion B of the Site  Operation and maintenance of the existing tippir the Tuen Mun Area 38 Fill Bank within Portion B	ng halls at Sat 1/1/22 of the Site	Sun 31/12/23	Sat 1/1/22	Sun 31/12/23	730 days	5SS	0	0 days	Sat 1/1/22	NA	49%	
	n.	Operation and Maintenance of the Crushing Plan Tuen Mun Area 38 Fill Bank within Portion B of t	he Site			Sun 31/12/23			0	0 days	Sat 1/1/22		49%	
63		Operation and maintemnance of glass cullet sto compartment at the Tuen Mun Area 38 Fill Bank Portion B of the Site		Sun 31/12/23	Sat 1/1/22	Sun 31/12/23	730 days	5SS	0	0 days	Sat 1/1/22	NA	49%	
64	V	PMI no.05 Construction of vehicle washing h facilities				Sun 2/10/22	180 days			0 days	Wed 6/4/22			
65	~	Submission of method statement of vehicle house facilities	washing Wed 6/4/22	Wed 6/4/22	Wed 6/4/22	Wed 6/4/22	1 day		1	0 days	Wed 6/4/22	Wed 6/4/22	100%	
			Task			External Task	s				Duration-only			External Tasks
			Split	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		External Mile	stone	$\Diamond$			Manual Summ	ary Rollup	•	External Milestone
Project: Date: [3		th rolling programme Jan23-mar 23 CV/2021/09	Milestone	•		Inactive Miles	stone				Manual Summ	arv	•	Progress
Date: [3	JUI 1212(	المحدا						-				,		_
			Summary			Inactive Sum	,				Start-only	,		Deadline &
			Project Summary			Manual Task		$\Diamond$			Finish-only	,		Slack

ID		Task Name	Baseline Start	Baseline Finish	Start	Finish	Duration	Predec		Total Slack		Actual Finish	% Complete	Jan '23	Feb '23	Mar '23	A
	0_													26 2 9 16 23		27   6   13   20   2	
56	<b>V</b>	Obtaning approval from the Project Manager		Mon 25/4/22				65		0 days	Mon 25/4/22			1/1/23		[31]	1/3/23
67	<b>V</b>	Fabrication and delivery of the vehicle washing facilities materials on site	g house Fri 10/6/22	Mon 8/8/22			70 days		5	0 days	Fri 10/6/22						
58	4	Installation of the vehicle washing house facili	ties Tue 9/8/22	Thu 1/9/22	Tue 13/9/22	Thu 29/9/22	17 days	67	2	0 days	Tue 13/9/22	Thu 29/9/22	100%				
69	<b>√</b> 🦷	Trial run of vehicle washing house facilities	Fri 2/9/22	Fri 2/9/22	Sun 2/10/22	Sun 2/10/22	1 day	68	0	0 days	Sun 2/10/22	Sun 2/10/22	100%				
70		PMI no.20 Implementation of C easy system a		Tue 27/12/22			146 days			8 days	Wed 31/8/22		68%		<b>\</b>		
71	V	Submission of method statement for approval		Sun 28/8/22			1 day			0 days	Wed 31/8/22						
72	1	Obtaining approval from the Project Manager		Sun 18/9/22				71		0 days	Thu 1/9/22		1				
73	<b>*</b>	Ordering and delivery of C easy system hardw site	vare to Mon 19/9/22	Wed 2/11/22	Sat 17/9/22	Wed 21/9/22	5 days	72	3	0 days	Sat 17/9/22	Wed 21/9/22	2 100%				
74	1	Installation of the C Easy system	Thu 3/11/22	Wed 16/11/22	Thu 22/9/22	Sun 9/10/22	18 days	73	2	0 days	Thu 22/9/22	Sun 9/10/22	100%				
75	1	Trail run of the system	Thu 17/11/22	Wed 30/11/22	Thu 24/11/22	Thu 1/12/22	8 days	74	2	0 days	Thu 24/11/22	Thu 1/12/22	100%				
76	Pi	Parallel run with the old system	Thu 1/12/22				53 days	75	2	8 days	Thu 1/12/22	NA	50%				
77		Operation with C easy system individually		Tue 27/12/22	Mon 23/1/23	Mon 23/1/23	1 day	76	0	8 days	NA	NA	0%		•		
78	-	Handing over the facilities at the Tuen Mun Area Bank within Portion B of the Site to the Employer		Sun 31/12/23	Sun 31/12/23	Sun 31/12/23	1 day	9SS	0	0 days	NA	NA	0%				
79	H	Planned Completion Date (Section 2)	Sun 31/12/23	Sun 31/12/23	Sun 31/12/23	Sun 31/12/23	0 days			0 days	NA	NA	0%				
80		Section 3 of the Works - Designated Reclamation the Mainland	Sites in Mon 20/12/2	1 Sun 31/12/23	Tue 7/12/21	Sun 31/12/23	755 days			0 days	Tue 7/12/21	NA	6%				
81		Collection and delivery of 2 million tonnes of Fill by vessels from Tseung Kwan O Area 137 and the Tuen Mun Area 38 Fill Bank to the Des Reclamation Sites in the Mainland	Fill Bank	1 Sun 31/12/23	Tue 7/12/21	Wed 20/12/23	744 days			11 days	Tue 7/12/21	NA	10%				
82	J	1st and 2nd quarter of first year	Mon 20/12/2	1 Thu 31/3/22	Tue 7/12/21	Tue 14/6/22	190 days			0 days	Tue 7/12/21	Tue 14/6/22	100%				
83	1	Installing Front End Mobile Unit (FEMU) or	nto the Mon 20/12/21	Sun 26/12/21	Fri 20/5/22	Fri 20/5/22	1 day		2	0 days	Fri 20/5/22	Fri 20/5/22	100%				
84	<b>V</b>	proposed vessels  Submitting application documents to EPD application of dumping permits	for Mon 20/12/21	Mon 20/12/21	Tue 28/12/21	Tue 28/12/21	1 day		0	0 days	Tue 28/12/21	Tue 28/12/2	1 100%				
85	. 1	Obtaining the dumping permit from EPD	Tue 21/12/21	Fri 31/12/21	Wed 25/5/22	Wed 25/5/22	1 day	84	2	0 days	Wed 25/5/22	Wed 25/5/22	2 100%				
86	1	Submitting Application documents to the E for the application of the dumping permit or	mployer Mon 20/12/21 f waste at	Mon 20/12/21	Tue 7/12/21	Tue 7/12/21	1 day			0 days	Tue 7/12/21	Tue 7/12/21	100%				
87	<b>&gt;</b>	the sea  Obtaining the dumping permits from Minis  Ecology and environment of the People's F  of China through the Employer		Fri 31/12/21	Tue 26/4/22	Tue 26/4/22	1 day		14	0 days	Tue 26/4/22	Tue 26/4/22	100%				
88	<b>√</b>	Obtaining all necessary permits, licenses, a and concents	pprovals Mon 20/12/21	Fri 31/12/21	Wed 25/5/22	Wed 25/5/22	1 day		14	0 days	Wed 25/5/22	Wed 25/5/22	2 100%				
89	1	Collection and delivery of 166666 tonnes of	f Public Fil Sat 1/1/22	Thu 31/3/22	Wed 25/5/22	Tue 14/6/22	21 days		10	0 days	Wed 25/5/22	Tue 14/6/22	100%				
90	1	3rd quarter of first year	Fri 20/5/22	Fri 30/9/22	Tue 28/12/21	Mon 13/6/22	168 days			0 days	Tue 28/12/	Mon 13/6/22	2 100%				
91	1	Submitting application documents to EPD	for Fri 17/6/22	Fri 17/6/22	Tue 28/12/21	Tue 28/12/21	1 day		0	0 days	Tue 28/12/21	Tue 28/12/2	1 100%				
02	,	application of dumping permits Obtaining the dumping permit from EPD	Sat 18/6/22	Thu 30/6/22	Wed 25/5/22	Wed 25/5/22	1 day	91	14	0 days	Wed 25/5/22	Med 25/5/22	2 100%				
92 93	✓ ✓	Submitting Application documents to the E for the application of the dumping permit of	mployer Fri 20/5/22	Fri 20/5/22	Fri 8/4/22		1 day	91		0 days	Fri 8/4/22						
94	<b>~</b>	the sea  Obtaining the dumping permits from Minis  Ecology and environment of the People's F	stry of Sat 21/5/22	Thu 30/6/22	Tue 26/4/22	Tue 26/4/22	1 day	93	14	0 days	Tue 26/4/22	Tue 26/4/22	100%				
95	<u></u>	of China through the Employer Obtaining all necessary permits, licenses,a	pprovals Fri 17/6/22	Thu 30/6/22	Wed 25/5/22	Wed 25/5/22	1 day		0	0 days	Wed 25/5/22	Wed 25/5/22	2 100%				
96	. 1	and concents  Collection and delivery of 499998 tonnes o	f Public Fil Fri 1/7/22	Fri 30/9/22	Mon 13/6/22	Mon 13/6/22	1 day	95,92,9	4 14	0 days	Mon 13/6/22	Mon 13/6/22	100%	***************************************			
97	¥**	4th quarter of first year		Sat 31/12/22			71 days	, -,•		0 days	Fri 22/7/22						
			Task			External Task	S				Duration-only			External Tasks	♦		
		,	Split	21/11/20/11		External Mile		$\Diamond$			Manual Summ			External Milestone			
roject:	3 mont	th rolling programme Jan23-mar 23 CV/2021/09	•					~				, ,					
	0/12/20		Milestone	•		Inactive Miles					Manual Summ	ary	•	Progress			
			Summary			Inactive Sum	mary	71111		me	Start-only			Deadline	û.		
			Project Summary		$\nabla$	Manual Task		<b>\( </b>			Finish-only	)	<b>V</b>	▼ Slack		and the same of th	

ID		Task Name	Baseline Start	Baseline Finish	Start	Finish	Duration	Predec		Total Slack	Actual Start	Actual Finish	% Complete	Jan '23	Feb '23	Mar '23	Ι, ,
98	0	Submitting application documents to EPD for	r Sat 17/9/22	Sat 17/9/22	Fri 22/7/22	Thu 4/8/22	14 days		0	0 days	Fri 22/7/22	Thu 4/8/22		6 2 9 16 23 30 1/1/23	0 6 13 20 2	27   6   13   20   27 31/3	7 3
	,	application of dumping permits  Obtaining the dumping permit from EPD (as			Thu 1/9/22			98	2	0 days		Mon 5/9/22					
99	<b>Y</b>	on 30/9/22)						30									
.00	<b>V</b>	Submiting Application documents to the Emp for the application of the dumping permit of w the sea		! Sat 20/8/22	Wed 10/8/22	Wed 10/8/22	1 day		0	0 days	Wed 10/8/22	Wed 10/8/22	2 100%				
01	<b>*</b>	Obtaining the dumping permits from Ministr Ecology and environment of the People's Re of China through the Employer (assumed on	public	2 Fri 30/9/22	Mon 5/9/22	Mon 5/9/22	1 day	100	14	0 days	Mon 5/9/22	Mon 5/9/22	100%				
02	V	Obtaining all necessary permits, licenses,app and concents		Fri 30/9/22	Mon 5/9/22	Fri 30/9/22	1 day		2	0 days	Mon 5/9/22	Fri 30/9/22	100%				
03	1	Collection and delivery of 333332 tonnes of F	Public Fil Sat 1/10/22	Sat 31/12/22	Mon 5/9/22	Mon 19/9/22	15 days	96,102,	1:14	0 days	Mon 5/9/22	Mon 19/9/22	100%	100 TO		_	
04		1st quarter of second year	Sun 20/11/	22 Fri 31/3/23	Sun 20/11/2	2 Fri 31/3/23	132 days			12 days	NA	NA	0%				
05		Submitting application documents to EPD for application of dumping permits	r Sun 18/12/	22 Sun 18/12/22	Sun 18/12/22	Sun 18/12/22	1 day		0	12 days	NA	NA	0%				
06		Obtaining the dumping permit from EPD (as	sumed Mon 19/12	22 Sat 31/12/22	Mon	Sat 31/12/22	13 days	105	2	12 days	NA	NA	0%				
07	<b>H</b>	on 31/12/22)  Submiting Application documents to the Empfor the application of the dumping permit of w		22 Sun 20/11/22	19/12/22 Sun 20/11/22	Sun 20/11/22	1 day		0	12 days	NA	NA	0%				
08		the sea  Obtaining the dumping permits from Ministr Ecology and environment of the People's Re		22 Sat 31/12/22	Mon 21/11/22	Sat 31/12/22	41 days	107	14	12 days	NA	NA	0%				
09	<b>=</b>	of China through the Employer  Obtaining all necessary permits, licenses,app	provals Sun 18/12/	22 Sat 31/12/22		Sat 31/12/22	14 days		2	12 days	NA	NA	0%				
10		and concents  Collection and delivery of 250000 tonnes of	Public F Sun 1/1/23	Fri 31/3/23	18/12/22 Sun 1/1/23	Fri 31/3/23	90 days	103,109	), 14	12 days	NA	NA	0%				
11		2nd guarter of second year	Sat 18/2/2		Sat 18/2/23	Fri 30/6/23	133 days			12 days	NA	NA	0%				
_		Submitting application documents to EPD for application of dumping permits	r Sat 18/3/23	Sat 18/3/23	Sat 18/3/23	Sat 18/3/23	1 day		0	12 days	NA	NA	0%		·	Ь	
13		Obtaining the dumping permit from EPD (as on 31/3/23)	sumed Sun 19/3/2	3 Fri 31/3/23	Sun 19/3/23	Fri 31/3/23	13 days	112	2	12 days	NA	NA	0%				
.14		Submiting Application documents to the Emp for the application of the dumping permit of v	ployer Sat 18/2/23 vaste at	Sat 18/2/23	Sat 18/2/23	Sat 18/2/23	1 day		0	12 days	NA	NA	0%		5		
15		Obtaining the dumping permits from Ministr Ecology and environment of the People's Re of China through the Employer (assumed or	public	3 Fri 31/3/23	Sun 19/2/23	Fri 31/3/23	41 days	114	14	12 days	NA	NA	0%				
16	H	Obtaining all necessary permits, licenses, apparent concents		Fri 31/3/23	Sat 18/3/23	Fri 31/3/23	14 days		2	12 days	NA	NA	0%				
17		Collection and delivery of 250000 tonnes of	Public F Sat 1/4/23	Fri 30/6/23	Sat 1/4/23	Fri 30/6/23	91 days	110,113	3, 14	12 days	NA	NA	0%				
18		3rd quarter of second year	Sat 20/5/2	Sat 30/9/23	Sat 20/5/23	Sat 30/9/23	134 days			12 days	NA	NA	0%				
19		Submitting application documents to EPD fo application of dumping permits	r Sat 17/6/23	Sat 17/6/23	Sat 17/6/23	Sat 17/6/23	1 day		0	12 days	NA	NA	0%				
.20		Obtaining the dumping permit from EPD (as on 30/6/23)	sumed Sun 18/6/2	3 Fri 30/6/23	Sun 18/6/23	Fri 30/6/23	13 days	119	14	12 days	NA	NA	0%				
.21	HB	Submiting Application documents to the Emp for the application of the dumping permit of v the sea	ployer Sat 20/5/23 vaste at	Sat 20/5/23	Sat 20/5/23	Sat 20/5/23	1 day		0	12 days	NA	NA	0%				
L22		Obtaining the dumping permits from Ministr Ecology and environment of the People's Re of China through the Employer (assumed or	public	3 Fri 30/6/23	Sun 21/5/23	Fri 30/6/23	41 days	121	14	12 days	NA	NA	0%				
23		Obtaining all necessary permits, licenses, apparent concents		Fri 30/6/23	Sat 17/6/23	Fri 30/6/23	14 days		2	12 days	NA	NA	0%				
24	110	Collection and delivery of 250000 tonnes of	Public F Sat 1/7/23	Sat 30/9/23	Sat 1/7/23	Sat 30/9/23	92 days	117,123	3, 14	12 days	NA	NA	0%				
.25		4th quarter of second year	Sun 20/8/2	3 Sun 31/12/23	Sun 20/8/23	Wed 20/12/23	123 days			11 days	NA	NA	0%				
26		Submitting application documents to EPD fo	r Sun 17/9/2	3 Sun 17/9/23	Sun 17/9/23	Sun 17/9/23	1 day		0	12 days	NA	NA	0%				
27		application of dumping permits  Obtaining the dumping permit from EPD (as on 30/9/23)	ssumed Mon 18/9/2	3 Sat 30/9/23	Mon 18/9/23	Sat 30/9/23	13 days	126	2	12 days	NA	NA	0%				
			Task			External Task	S				Duration-only			External Tasks	$\Diamond$		
			Split			External Mile	stone	$\Diamond$			Manual Summ	ary Rollup	•	External Milestone	Marketine of Anima		
	3 moi 0/12/2	nth rolling programme Jan23-mar 23 CV/2021/09	Milestone	•		Inactive Miles	stone				Manual Summ	ary	•	Progress		_	
. [3			Summary			Inactive Sum	mary				Start-only			Deadline	Ŷ		
			Project Summary		$\bigcirc$	Manual Task		<b>♦</b>			Finish-only			Slack			
								Page 4									

ID	<b>A</b>	Task Name		Baseline Start	Baseline Finish	Start	Finish	Duration			Total Slack	Actual Start	Actual Finish	% Complete	2	Jan '23	Feb '23	Mar '23	
128		Submiting Application documents to the Er		Sun 20/8/23	Sun 20/8/23	Sun 20/8/23	Sun 20/8/23	1 day		0	12 days	NA	NA	0%	19 26	2   9   16   23   3 1/23	0   6   13   20	27   6   13   20	31/3/23
120		for the application of the dumping permit of the sea  Obtaining the dumping permits from Minis		Mon 21/8/23	Sat 30/0/23	Mon 21/8/23	Sat 30/0/23	41 days	128	14	12 days	NA	NA	0%					
129	ш	Ecology and environment of the People's F of China through the Employer(assumed o	Republic in 30/9/23)			WIOTI 2 170723	Oat 30/3/23	41 days	120	17	12 days	IVA	IVA	0,0					
L30	<b>III</b>	Obtaining all necessary permits, licenses, and concents	approvals	Sun 17/9/23	Sat 30/9/23	Sun 17/9/23	Sat 30/9/23	14 days		0	12 days	NA	NA	0%					-
L31	111	Collection and delivery of 250000 tonnes of	of Public F	Sun 1/10/23	Sun 31/12/23	Mon 2/10/23	Wed 20/12/23	80 days	124,130,	, 14	11 days	NA	NA	0%					
132	<u></u>	Removal, excavation and deposition of stock and/or deposited Public Fill within the Design Reclamation Sites in the Mainland		Sat 1/1/22	Sun 31/12/23	Sat 1/1/22	Sun 31/12/23	730 days	6SS		0 days	NA	NA	0%					
L33	iii	Removal, excavation and deposition of stockp and/or deposited public fill	oiled	Sat 1/1/22	Sun 31/12/23	Sat 1/1/22	Sun 31/12/23	730 days		14	0 days	NA	NA	0%					
134		Operation and maintenance of the existing na channel and turning basins in association wit existing berthing facility at Zone E of the Des Reclamation Sites in the Mainland	th the	Sat 1/1/22	Sun 31/12/23	Sat 1/1/22	Sun 31/12/23	730 days	6SS		0 days	Sat 1/1/22	NA	20%	2				
135		Operation and maintenance of the existing na channel and turning basins	vigation	Sat 1/1/22	Sun 31/12/23	Sat 1/1/22	Sun 31/12/23	730 days		14	0 days	Sat 1/1/22	NA	20%					
136		Design, construction, operation and maintenathe new navigation channel and turning basin association with the new berthing facility at Z the Designated Reclamation Sites in the Main (subject to Project's Manager's instruction)	ns in one B of	Sat 12/12/09	Sat 12/12/09	Thu 16/6/22	Sun 31/12/23	564 days			0 days	NA	NA	0%					
137		Obtaining the dumping permits from Ministry Ecology and environment of the People's Rep China through the Employer for Zone A & B (on 31/12/21)	oublic of	Fri 31/12/21	Mon 31/1/22	Thu 16/6/22	Thu 16/6/22	1 day		0	2 days	NA	NA	0%					
.38	1	Preparation of design submission		Sat 1/1/22	Sun 30/1/22	Fri 17/6/22	Sat 16/7/22	30 days	137	7	2 days	NA	NA	0%					
39		Obtaining all necessary design approvals and	concents	Mon 31/1/22	Tue 1/3/22	Sun 17/7/22	Mon 15/8/22	30 days	138	7	2 days	NA	NA	0%					
.40		Construction of the new navigation channel are basins	nd turning	Wed 2/3/22	Fri 29/7/22	Tue 16/8/22	Thu 12/1/23	150 days	139	14	2 days	NA	NA	0%					
L41	H	Obtaining the construction completion certification	ate	Sat 30/7/22	Sun 28/8/22	Fri 13/1/23	Sat 11/2/23	30 days	140	7	2 days	NA	NA	0%					
L42		Operation and maintenance of navigation chaturning basins	annel and	Mon 29/8/22	Sun 31/12/23	Tue 14/2/23	Sun 31/12/23	321 days	141	14	0 days	NA	NA	0%					
143		Design, construction, operation and maintena new berthing facilities at Zone B of the Design Reclamation Sites in the Mainland (subject to Manager's instruction)	nated		Sun 31/12/23	Thu 16/6/22	Sun 31/12/23	564 days			0 days	NA	NA	0%					
144		Obtaining the dumping permits from Ministry Ecology and environment of the People's Rep China through the Employer for Zone A & B (on 31/12/21)	oublic of	Fri 31/12/21	Fri 31/12/21	Thu 16/6/22	Thu 16/6/22	1 day			0 days	NA	NA	0%					
.45		Preparation of design submission		Sat 1/1/22	Sun 30/1/22	Fri 17/6/22	Sat 16/7/22	30 days	144	7	0 days	NA	NA	0%					
46		Obtaining all necessary design approvals and	concents	Mon 31/1/22	Tue 1/3/22	Sun 17/7/22	Mon 15/8/22	30 days	145	7	0 days	NA	NA	0%					
47	H	Construction of the berthing facilities		Wed 2/3/22	Sun 28/8/22	Tue 16/8/22	Sat 11/2/23	180 days	146	14	0 days	NA	NA	0%					
48	111	Obtaining the construction completion certification	ate	Mon 29/8/22	Tue 27/9/22	Sun 12/2/23	Mon 13/3/23	30 days	147	7	0 days	NA	NA	0%			Description of the second		
49		Operation and maintenance of new berthing fa	acilities	Wed 28/9/22	Sun 31/12/23	Tue 14/3/23	Sun 31/12/23	293 days	148	14	0 days	NA	NA	0%					
150		Design and construction of seawalls (approx 200m) in association with new berthing facilit B of the Designated Reclamation Sites in the	y at Zone	Fri 10/6/22	Sat 4/2/23	Sun 1/1/23	Fri 30/6/23	181 days			184 days	NA	NA	0%		**************************************			
151		Obtaining the dumping permits from Ministry Ecology and environment of the People's Rep China through the Employer for Zone A & B	of of oublic of	Sat 1/1/22	Sat 1/1/22	Sun 1/1/23	Sun 1/1/23	1 day		0	184 days	NA	NA	0%					
152		Preparation of design submission (PMI no18)	)	Sun 2/1/22	Mon 31/1/22	Mon 2/1/23	Tue 31/1/23	30 days	151	7	184 days	NA	NA	0%					
			Task		and develop		External Task	s				Ouration-only	/		33333	External Tasks	♦		
			Split				External Mile	stone	$\Diamond$		N	/Janual Sumn	nary Rollup	•		External Milestone			
		th rolling programme Jan23-mar 23 CV/2021/09	Milestor	ne	•		Inactive Mile	stone				/lanual Sumn		•		Progress			
ne: [3	0/12/20	022]			¥				*							-	JL.		
			Summa				Inactive Sum					tart-only				Deadline	V		
			Project !	Summary		$\bigcirc$	Manual Task		<b>\circ}</b>		F	inish-only		Contract of the last		Slack			

ID		Task Name	Baseline	Baseline	Start	Finish	Duration	Predec			Actual	Actual	%					
			Start	Finish						Slack	Start	Finish	Complet					
-									allowa					22	Jan '23	Feb '23	Mar '23	Ι, ,Δ
	0													19 26	2 9 16 23	30 6 13 20	27 6 13 20	27 3 1
.53	H	Obtaining all necessary design approvals and concents	Tue 1/2/22	Wed 2/3/22	Wed 1/2/23	Thu 2/3/23	30 days	152	7	184 days	NA	NA	0%	1/1/2	3			31/3/23
54		Construction of seawalls (subject to Project's Manager's instruction)	Thu 3/3/22	Tue 31/5/22	Fri 3/3/23	Wed 31/5/23	90 days	153	14	184 days	NA	NA	0%			100000000000000000000000000000000000000	Y	
5		Obtaining the construction completion certificate (subject to Project's Manager's instruction)	Wed 1/6/22	Thu 30/6/22	Thu 1/6/23	Fri 30/6/23	30 days	154	7	184 days	NA	NA	0%					
56	11 15	Planned Completion Date (Section 3)	Sun 31/12/23	Sun 31/12/23	Sun 31/12/2	3 Sun 31/12/23	0 days			1 day	NA	NA	0%	1				

**External Tasks** Task Duration-only External Tasks Split Manual Summary Rollup 🔷 External Milestone External Milestone Project: 3 month rolling programme Jan23-mar 23 CV/2021/09 Date: [30/12/2022] Manual Summary Milestone Inactive Milestone Progress Summary Start-only Deadline Inactive Summary Project Summary Manual Task Finish-only Slack Page 6



Н

Implementation Schedule of Environmental Mitigation Measures (EMIS)



# **Environmental Mitigation Implementation Schedule**

	The content and gather imprementation contents			Implementa	Implementation Status				
	Environmental Protection Measures	Location	Implemented	Partially implemented	Not implemented	Not Applicable			
Ai	r Quality								
•	Dust control / mitigation measures shall be provided to prevent dust nuisance.	All areas		V					
•	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.	Northern Site Boundary	<b>√</b>						
•	Water sprays shall be provided and used to dampen materials.	All areas	√						
•	Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	All areas	√						
•	All vehicles shall be restrict to a maximum speed of 10 km per hour.	All areas	√						
•	Any vehicle with open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards. Material having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	Site Egress	<b>√</b>						
•	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	$\sqrt{}$						
•	Wheel washing facilities including high pressure water jet shall be provided at the entrance of work site.	Site Egress	$\sqrt{}$						
•	Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	Site Egress							
•	The temporary slope surfaces, 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	√						
•	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	$\sqrt{}$						
•	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	√						
•	All plant and equipment should be well maintained e.g. without black smoke emission.								
No	pise Impact		$\checkmark$						
•	Approved method of working, equipment and sound-reducing measures (e.g. use of silenced type of equipment, etc.) shall be adapted.	All areas							
•	Only well maintained plant should be operated on-site and plant should be serviced regularly during the construction works.	All areas	<b>√</b>						
•	Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	All areas	√						
•	Air compressors and hand held breakers should have noise labels.	All areas	<b>√</b>						
•	Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	All areas	√						
•	Noisy equipment and mobile plant shall always be site away from NSRs.	All areas	$\sqrt{}$						



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		Location		Implementa	ation Status	
	Environmental Protection Measures		Implemented	Partially implemented	Not implemented	Not Applicable
Wat	ter Quality					
•	Drainage system should be adequate and well maintained to prevent flooding and overflow, especially after rain storms.	All areas	√			
•	The permanent drainage channels should have sediment basin, traps and baffles and maintain properly.	All areas	√			
	Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels.  Earth bunds and sand bay barriers shall be used to assist the diversion of polluted stormwater to the intercepting channels.	All areas	V			
•	Manholes should be covered and sealed.	All areas	$\sqrt{}$			
•	Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding.	All areas		√		
	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			
•	A buffer distance of at least 20m shall be maintained between the boundary of the C&DMSF and the seafront.	C&DMFS	$\sqrt{}$			
•	The stormwater intercepting system shall be effective to collect of runoff and remove suspended solids before discharge.	All areas	$\checkmark$			
	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.	Temporary Slopes	V			
	Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	Temporary Slopes	V			
	Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times.	All areas	~			
	A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains.	Wheel Washing facility	√			
	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			
	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.	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	$\sqrt{}$			
	Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water.	Barge Handling Area (BHA)	$\sqrt{}$			
	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			
	All vessels used for transportation of fill material shall have tight fitting seals to their bottom openings to prevent leakage of material during transport.	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	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.	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	√			
	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	√			



	Location		Implementa	tion Status	
Environmental Protection Measures		Implemented	Partially implemented	Not implemented	Not Applicable
Landscape and Visual					
Construction of lighting to avoid spillage and glare	All areas	$\checkmark$			
Hydroseeding	Completed slopes	√			
Hoarding erection	Site boundary	√			
Damage to surrounding area avoided	All areas	√			
Other Environmental Factors					
C&D waste sorted from mixed C&D material shall be transfer to SENT landfill for disposal.	All areas	$\checkmark$			
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	$\checkmark$			
All generators, fuel and oil storage are within bunded areas.	All areas	$\checkmark$			
Oil leakage from machinery, vehicle and plant is prevented.	All areas		√		
Bund chemical storage area to 110% capacity.	All areas	√			
Prevent disposal of hazardous materials to air, soil and water body	All areas	√			
Provide rubbish skips at all work areas	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			



11

Statistical Analysis of the Trend of Suspended Solids in the Quarter



# Statistical Analysis of the Trend of Suspended Solids

## For Mid-Flood Tide

Station: M4

### t-test

Group Name	N	Missing	Mean	Std Dev	SE	
130% Baseline Mean	12	0	6.9690	1.0690	0.3086	
Quarterly Mean	38	0	2.1439	0.6099	0.0989	

### Result:

Difference between means = 4.8251 (95% CI : 4.3320 < Diff < 5.3182)

t-value of difference = 14.8894 (13 degrees of freedom)

Calculated t-value > Critical t-value

### **Conclusion:**

There is statistically significant difference between the groups.

The P-Value of 130% Baseline Mean is larger than quarterly mean = >0.99

The result of suspended solids in this reporting period is lower than that of 130% baseline.

## Station: C1

### t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	6.969	0.950	0.2742
Quarterly Mean	38	0	2.3377	0.5605	0.0909

### **Result:**

Difference between means = 4.6313 (95% CI : 4.1852 < Diff < 5.0774)

t-value of difference = 16.0295 (14 degrees of freedom)

Calculated t-value > Critical t-value

### **Conclusion:**

There is statistically significant difference between the groups.

The P-Value of 130% Baseline Mean is larger than quarterly mean = >0.99

The result of suspended solids in this reporting period is lower than that of 130% baseline.



# Statistical Analysis of the Trend of Suspended Solids

### For Mid-Ebb Tide

## Station: M4

### t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	6.897	1.449	0.4183
Quarterly Mean	38	0	2.0711	0.6918	0.1122

### Result:

Difference between means = 4.8259 (95% CI : 4.2120 < Diff < 5.4398)

t-value of difference = 11.1432 (13 degrees of freedom)

Calculated t-value > Critical t-value

### **Conclusion:**

There is statistically significant difference between the groups.

The P-Value of 130% Baseline Mean is larger than quarterly mean = >0.99

The result of suspended solids in this reporting period is lower than that of 130% baseline.

# Station: C1

## t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	6.933	1.045	0.3017
Quarterly Mean	38	0	2.2351	0.7051	0.1144

#### Result:

Difference between means = 4.6979 (95% CI : 4.1680 < Diff < 5.2278)

t-value of difference = 14.5617 (14 degrees of freedom)

Calculated t-value > Critical t-value

### **Conclusion:**

There is statistically significant difference between the groups.

The P-Value of 130% Baseline Mean is larger than quarterly mean = >0.99

The result of suspended solids in this reporting period is lower than that of 130% baseline.



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Statistical Analysis of the Trend of Suspended Solids in the Quarter (3RS)



# Statistical Analysis of the Trend of Suspended Solids

### For Mid-Flood Tide

Station: C1a

#### t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	4.1580	1.3670	0.3946
Quarterly Mean	38	0	2.3553	0.7887	0.1279

#### Result:

Difference between means = 1.8027 (95% CI : 1.1684 < Diff < 2.4370)

t-value of difference = 4.3456 (13 degrees of freedom)

Calculated t-value > Critical t-value

### **Conclusion:**

There is statistically significant difference between the groups.

The P-Value of 130% Baseline Mean is larger than quarterly mean = >0.99

The result of suspended solids in this reporting period is lower than that of 130% baseline.

Station: M4a

#### t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	3.9020	1.1420	0.3297
Quarterly Mean	38	0	2.3298	0.7014	0.1138

### Result:

Difference between means = 1.5722 (95% CI : 1.0239 < Diff < 2.1205)

t-value of difference = 4.5081 (14 degrees of freedom)

Calculated t-value > Critical t-value

### **Conclusion:**

There is statistically significant difference between the groups.

The P-Value of 130% Baseline Mean is larger than quarterly mean = >0.99

The result of suspended solids in this reporting period is lower than that of 130% baseline.

Station: M5

## t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	3.9360	1.4140	0.4082
Quarterly Mean	38	0	2.3535	0.8914	0.1446

# Result:

Difference between means = 1.5825 (95% CI : 0.8936 < Diff < 2.2714)

t-value of difference = 3.6543 (14 degrees of freedom)

Calculated t-value > Critical t-value

# **Conclusion:**

There is statistically significant difference between the groups.

The P-Value of 130% Baseline Mean is larger than quarterly mean = >0.99

The result of suspended solids in this reporting period is lower than that of 130% baseline.



# Statistical Analysis of the Trend of Suspended Solids

### For Mid-Ebb Tide

Station: C1a

#### t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	4.2860	1.3530	0.3906
Quarterly Mean	38	0	2.4303	0.7813	0.1267

#### Result:

Difference between means = 1.8557 (95% CI : 1.2276 < Diff < 2.4838)

t-value of difference = 4.5193 (13 degrees of freedom)

Calculated t-value > Critical t-value

#### Conclusion:

There is statistically significant difference between the groups.

The P-Value of 130% Baseline Mean is larger than quarterly mean = >0.99

The result of suspended solids in this reporting period is lower than that of 130% baseline.

### Station: M4a

#### t-test

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	4.0900	1.3250	0.3825
Quarterly Mean	38	0	2.2741	0.6972	0.1131

#### Result:

Difference between means = 1.8159 (95% CI : 1.2290 < Diff < 2.4028)

t-value of difference = 4.5526 (13 degrees of freedom)

#### Calculated t-value > Critical t-value

### **Conclusion:**

There is statistically significant difference between the groups.

The P-Value of 130% Baseline Mean is larger than quarterly mean = >0.99

The result of suspended solids in this reporting period is lower than that of 130% baseline.

# Station: M5

### t-test

Group Name	N	Missing	Mean	Std D0ev	SE
130% Baseline Mean	12	0	3.7900	1.4650	0.4229
Quarterly Mean	38	0	2.1719	0.6413	0.1040

#### Result:

Difference between means =1.6181 (95% CI : 1.0193 < Diff < 2.2169)

t-value of difference = 3.7153 (12 degrees of freedom)

Calculated t-value > Critical t-value

## **Conclusion:**

There is statistically significant difference between the groups.

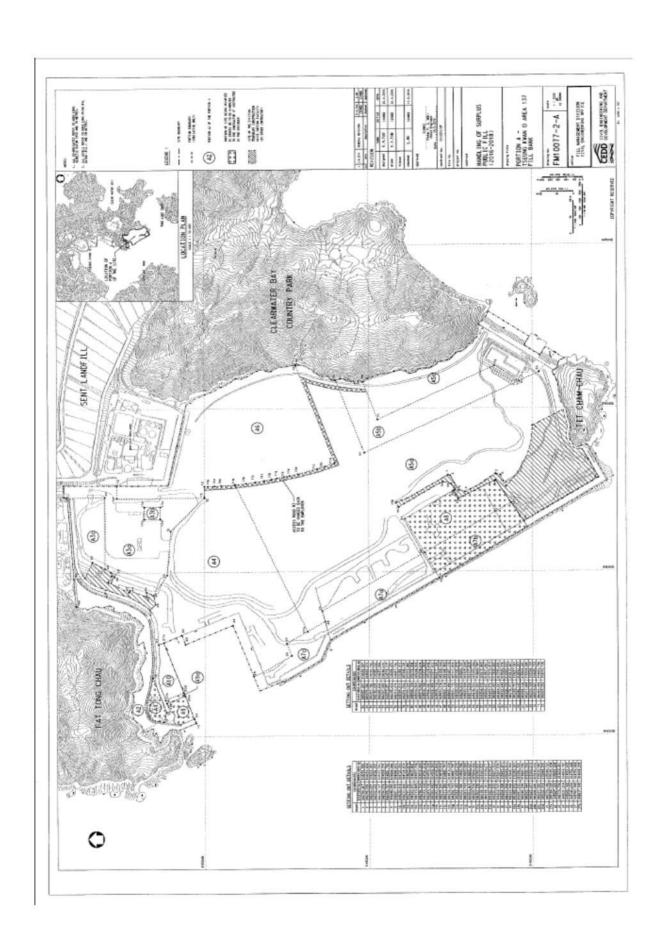
The P-Value of 130% Baseline Mean is larger than quarterly mean = >0.99

The result of suspended solids in this reporting period is lower than that of 130% baseline.



J

Site General Layout plan





K

**Weather Condition** 

Daily Extract of Meteorological Observations , January 2023 - Tseung Kwan O

	Mean		<u> </u>		Mean	Mean	Total	Prevailing	Mean
	Pressure	Air Temperature			Dew	Relative	Rainfall	Wind	Wind
Dov	(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	1023.3	19.3	16.9	14.5	10.2	65	0.1	10	23.4
2	1023.1	21.6	18.7	17.2	12	65	Trace	20	21.8
3	1023.7	19.2	17.3	16.1	11.4	69	Trace	10	24.1
4	1023.4	19.9	17.4	15.8	12.7	74	Trace	60	26.8
5	1023.4	21.4	18.5	16.8	14.3	77	-	60	21.7
6	1022.6	23.4	19.8	17	11.9	62	-	10	18.4
7	1020.5	21.3	19.1	17.9	10.9	59	-	60	23.8
8	1020	20	18.6	17	9.8	57	Trace	70	35
9	1019.5	21.4	19.7	18.2	14.3	72	0.1	50	22.8
10	1018.8	19	18.2	17.6	16.8	91	5.5	40	23.4
11	1017.6	19.1	18.1	17	15.9	87	3.2	60	31
12	1014.5	19.6	18.8	17.5	16.8	88	0.5	50	26.9
13	1011	23.9	21.7	18.9	20.5	93	4.5	20	14.5
14	1009.4	24.7	22.7	20	20.9	90	3.4	250	9.4
15	1014.4	21.6	18.4	13	14.7	80	Trace	10	25.9
16	1021.6	13.2	12.3	11.3	6.2	66	-	360	30.6
17	1023.6	15.2	13.2	11	8	71	-	10	24.2
18	1024.1	17.1	14.3	11.5	6.2	58	-	10	22.5
19	1022.3	18.7	16.1	13.3	8.9	63	-	40	14.4
20	1021.4	20.9	17.6	15.9	10.1	62	Trace	20	20.6
21	1019.5	18.8	16.9	16	13.1	79	Trace	80	36.9
22	1016.5	22.4	18.8	16.6	15.8	83	0.6	40	15.5
23	1016.2	21.1	18.8	16.9	16.4	86	-	50	11.3
24	1024.5	18.7	14.7	12	4.3	51	0.3	10	48.6
25	1023.1	14.4	12.5	10.6	3.5	54	-	60	31.8
26	1019.3	18.6	15.7	13	9.4	66	-	60	26.8
27	1022.5	17.3	15.4	12.4	3.2	46	-	10	40.8
28	1024.1	15.7	12.9	10.6	-5.2	28	-	10	32.6
29	1023.7	16	12.8	9.8	-2.6	35	-	360	18.6
30	1022.2	18.8	15	11.7	3.5	48	-	60	18.3
31	1017.9	20.1	16.9	13.8	9.1	61	-	60	27.3

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

Daily Extract of Meteorological Observations , February 2023 - Tseung Kwan O

Pressure		Mass				Massa	Massa	Total	Duoveilia	Mann
Chean   Chea		Mean	e Air Temperature			Mean	Mean	Total	Prevailing	Mean
Name		Pressure				Dew	Relative	Rainfall	Wind	Wind
Absolute   Daily   Max   (deg. C)   Daily   Min   (deg. C)		(hPa)				Point	Humidity	(mm)	Direction	Speed
Max (deg, C)	Day		Absolute	Mean	Absolute	(deg. C)	(%)		(degrees)	(km/h)
Max (deg, C)			Daily	(deg C)	Daily					
1				(acg.c)	_					
1         1015.6         23.7         19.9         17.8         15.8         77         -         30         17.8           2         1018.2         21.2         19.4         17.9         15.2         77         -         80         31.4           3         1018.6         19.9         17.9         16.7         13.6         76         -         70         31.3           4         1017.4         19.1         17.9         16.8         14.2         81         0.4         70         32.8           5         1016         19.3         17.9         16.8         15         83         Trace         70         27.5           6         1014.6         21.1         19.2         17.9         16.6         85         0.1         30         14           7         1015.4         24.8         21         18.8         17.9         83         Trace         80         11.3           8         1017.1         20.1         18.5         17.2         15.8         84         Trace         70         35           9         1016.3         23.5         19.5         16.9         87         0.1         20 <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>										
2         1018.2         21.2         19.4         17.9         15.2         77         -         80         31.4           3         1018.6         19.9         17.9         16.7         13.6         76         -         70         31.3           4         1017.4         19.1         17.4         16.6         14.2         81         0.4         70         32.8           5         1016         19.3         17.9         16.8         15         83         Trace         70         27.5           6         1014.6         21.1         19.2         17.9         16.6         85         0.1         30         14           7         1015.4         24.8         21         18.8         17.9         83         Trace         80         11.3           8         1017.1         20.1         18.5         17.2         15.8         84         Trace         70         35           9         1016.3         23.5         19.5         16.9         16.5         83         0.1         60         24.1           10         1014.9         24.2         21.2         19.5         18.9         87         0.1	1	1015 6		19.9		15.8	77	_	30	17.8
3         1018.6         19.9         17.9         16.7         13.6         76         -         70         31.3           4         1017.4         19.1         17.4         16.6         14.2         81         0.4         70         32.8           5         1016         19.3         17.9         16.8         15         83         Trace         70         27.5           6         1014.6         21.1         19.2         17.9         16.6         85         0.1         30         14           7         1015.4         24.8         21         18.8         17.9         83         Trace         80         11.3           8         1017.1         20.1         18.5         17.2         15.8         84         Trace         70         35           9         1016.3         23.5         19.5         16.9         16.5         83         0.1         60         24.1           10         1014.9         24.2         21.2         19.5         18.9         87         0.1         20         15           11         1014.6         20.2         18.7         17.8         17.6         93         0.9								-		
4         1017.4         19.1         17.4         16.6         14.2         81         0.4         70         32.8           5         1016         19.3         17.9         16.8         15         83         Trace         70         27.5           6         1014.6         21.1         19.2         17.9         16.6         85         0.1         30         14           7         1015.4         24.8         21         18.8         17.9         83         Trace         80         11.3           8         1017.1         20.1         18.5         17.2         15.8         84         Trace         70         35           9         1016.3         23.5         19.5         16.9         16.5         83         0.1         60         24.1           10         1014.9         24.2         21.2         19.5         18.9         87         0.1         20         15           11         1014.6         20.2         18.7         17.8         17.6         93         0.9         40         25.4           12         1013.9         21.1         19.9         18.7         19.1         95         Trace								-		
5         1016         19.3         17.9         16.8         15         83         Trace         70         27.5           6         1014.6         21.1         19.2         17.9         16.6         85         0.1         30         14           7         1015.4         24.8         21         18.8         17.9         83         Trace         80         11.3           8         1017.1         20.1         18.5         17.2         15.8         84         Trace         70         35           9         1016.3         23.5         19.5         16.9         16.5         83         0.1         60         24.1           10         1014.9         24.2         21.2         19.5         18.9         87         0.1         20         15           11         1014.6         20.2         18.7         17.8         17.6         93         0.9         40         25.4           12         1013.9         21.1         19.9         18.7         19.1         95         Trace         40         20.4           13         1013.7         26.1         22.3         19.5         20.2         88         Trace <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>0.4</td> <td></td> <td></td>							-	0.4		
6         1014.6         21.1         19.2         17.9         16.6         85         0.1         30         14           7         1015.4         24.8         21         18.8         17.9         83         Trace         80         11.3           8         1017.1         20.1         18.5         17.2         15.8         84         Trace         70         35           9         1016.3         23.5         19.5         16.9         16.5         83         0.1         60         24.1           10         1014.9         24.2         21.2         19.5         18.9         87         0.1         20         15           11         1014.6         20.2         18.7         17.8         17.6         93         0.9         40         25.4           12         1013.9         21.1         19.9         18.7         19.1         95         Trace         40         20.4           13         1013.7         26.1         22.3         19.5         20.2         88         Trace         40         10.4           14         1018.8         20.7         18.5         16.6         11.4         64         - </td <td></td>										
7         1015.4         24.8         21         18.8         17.9         83         Trace         80         11.3           8         1017.1         20.1         18.5         17.2         15.8         84         Trace         70         35           9         1016.3         23.5         19.5         16.9         16.5         83         0.1         60         24.1           10         1014.9         24.2         21.2         19.5         18.9         87         0.1         20         15           11         1014.6         20.2         18.7         17.8         17.6         93         0.9         40         25.4           12         1013.9         21.1         19.9         18.7         19.1         95         Trace         40         20.4           13         1013.7         26.1         22.3         19.5         20.2         88         Trace         40         10.4           14         1018.8         20.7         18.5         16.6         11.4         64         -         10         31.4           15         1023.5         20.3         16.3         13.1         8.4         60         - </td <td></td>										
8         1017.1         20.1         18.5         17.2         15.8         84         Trace         70         35           9         1016.3         23.5         19.5         16.9         16.5         83         0.1         60         24.1           10         1014.9         24.2         21.2         19.5         18.9         87         0.1         20         15           11         1014.6         20.2         18.7         17.8         17.6         93         0.9         40         25.4           12         1013.9         21.1         19.9         18.7         19.1         95         Trace         40         20.4           13         1013.7         26.1         22.3         19.5         20.2         88         Trace         40         10.4           14         1018.8         20.7         18.5         16.6         11.4         64         -         10         31.4           15         1023.5         20.3         16.3         13.1         8.4         60         -         10         28.2           16         1024.7         19.9         16.8         14.5         9.3         62         - <td></td>										
9 1016.3 23.5 19.5 16.9 16.5 83 0.1 60 24.1 10 1014.9 24.2 21.2 19.5 18.9 87 0.1 20 15 11 1014.6 20.2 18.7 17.8 17.6 93 0.9 40 25.4 12 1013.9 21.1 19.9 18.7 19.1 95 Trace 40 20.4 13 1013.7 26.1 22.3 19.5 20.2 88 Trace 40 10.4 14 1018.8 20.7 18.5 16.6 11.4 64 - 10 31.4 15 1023.5 20.3 16.3 13.1 8.4 60 - 10 28.2 16 1024.7 19.9 16.8 14.5 9.3 62 - 70 28.4 17 1021.2 24 18.7 15.6 13 70 - 70 26 18 1018.2 25.1 21 18 14.6 67 - 50 13.6 19 1017.6 26.6 22.8 19.8 16.4 67 Trace 360 17.5 20 1019.2 24.1 20.1 18.2 12.8 64 - 80 26.8 21 1022.6 20.5 17.8 16.1 10.3 62 - 80 46.4 22 1022.2 20.4 16.9 14.8 9.3 61 - 80 26.8 24 1018.9 23.4 19.8 17 13.3 67 - 50 20.1 25 1026.5 21 17.1 14.8 7.7 54 - 10 34.8 26 1029.2 21.2 16.8 14.4 8.3 58 - 80 28.2 27 1027.4 20.1 16.4 14.2 8.4 60 - 80 40.5 28 1024 22.3 17.8 14.9 12.3 71 - 70 26.8										
10         1014.9         24.2         21.2         19.5         18.9         87         0.1         20         15           11         1014.6         20.2         18.7         17.8         17.6         93         0.9         40         25.4           12         1013.9         21.1         19.9         18.7         19.1         95         Trace         40         20.4           13         1013.7         26.1         22.3         19.5         20.2         88         Trace         40         10.4           14         1018.8         20.7         18.5         16.6         11.4         64         -         10         31.4           15         1023.5         20.3         16.3         13.1         8.4         60         -         10         28.2           16         1024.7         19.9         16.8         14.5         9.3         62         -         70         28.4           17         1021.2         24         18.7         15.6         13         70         -         70         26           18         1018.2         25.1         21         18         14.6         67         - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>										
11         1014.6         20.2         18.7         17.8         17.6         93         0.9         40         25.4           12         1013.9         21.1         19.9         18.7         19.1         95         Trace         40         20.4           13         1013.7         26.1         22.3         19.5         20.2         88         Trace         40         10.4           14         1018.8         20.7         18.5         16.6         11.4         64         -         10         31.4           15         1023.5         20.3         16.3         13.1         8.4         60         -         10         28.2           16         1024.7         19.9         16.8         14.5         9.3         62         -         70         28.4           17         1021.2         24         18.7         15.6         13         70         -         70         26           18         1018.2         25.1         21         18         14.6         67         -         50         13.6           19         1017.6         26.6         22.8         19.8         16.4         67         Trace	10									
12         1013.9         21.1         19.9         18.7         19.1         95         Trace         40         20.4           13         1013.7         26.1         22.3         19.5         20.2         88         Trace         40         10.4           14         1018.8         20.7         18.5         16.6         11.4         64         -         10         31.4           15         1023.5         20.3         16.3         13.1         8.4         60         -         10         28.2           16         1024.7         19.9         16.8         14.5         9.3         62         -         70         28.4           17         1021.2         24         18.7         15.6         13         70         -         70         26           18         1018.2         25.1         21         18         14.6         67         -         50         13.6           19         1017.6         26.6         22.8         19.8         16.4         67         Trace         360         17.5           20         1019.2         24.1         20.1         18.2         12.8         64         -	11		20.2	18.7	17.8	17.6	93	0.9	40	25.4
13         1013.7         26.1         22.3         19.5         20.2         88         Trace         40         10.4           14         1018.8         20.7         18.5         16.6         11.4         64         -         10         31.4           15         1023.5         20.3         16.3         13.1         8.4         60         -         10         28.2           16         1024.7         19.9         16.8         14.5         9.3         62         -         70         28.4           17         1021.2         24         18.7         15.6         13         70         -         70         26           18         1018.2         25.1         21         18         14.6         67         -         50         13.6           19         1017.6         26.6         22.8         19.8         16.4         67         Trace         360         17.5           20         1019.2         24.1         20.1         18.2         12.8         64         -         80         26.8           21         1022.6         20.5         17.8         16.1         10.3         62         - <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>										
14       1018.8       20.7       18.5       16.6       11.4       64       -       10       31.4         15       1023.5       20.3       16.3       13.1       8.4       60       -       10       28.2         16       1024.7       19.9       16.8       14.5       9.3       62       -       70       28.4         17       1021.2       24       18.7       15.6       13       70       -       70       26         18       1018.2       25.1       21       18       14.6       67       -       50       13.6         19       1017.6       26.6       22.8       19.8       16.4       67       Trace       360       17.5         20       1019.2       24.1       20.1       18.2       12.8       64       -       80       26.8         21       1022.6       20.5       17.8       16.1       10.3       62       -       80       46.4         22       1022.2       20.4       16.9       14.8       9.3       61       -       80       39.7         23       1018.6       22.9       18.2       15.4       12.6									40	
16       1024.7       19.9       16.8       14.5       9.3       62       -       70       28.4         17       1021.2       24       18.7       15.6       13       70       -       70       26         18       1018.2       25.1       21       18       14.6       67       -       50       13.6         19       1017.6       26.6       22.8       19.8       16.4       67       Trace       360       17.5         20       1019.2       24.1       20.1       18.2       12.8       64       -       80       26.8         21       1022.6       20.5       17.8       16.1       10.3       62       -       80       46.4         22       1022.2       20.4       16.9       14.8       9.3       61       -       80       39.7         23       1018.6       22.9       18.2       15.4       12.6       70       -       70       23.7         24       1018.9       23.4       19.8       17       13.3       67       -       50       20.1         25       1026.5       21       17.1       14.8       7.7 <td< td=""><td>14</td><td></td><td></td><td>18.5</td><td>16.6</td><td>11.4</td><td>64</td><td>-</td><td>10</td><td>31.4</td></td<>	14			18.5	16.6	11.4	64	-	10	31.4
16         1024.7         19.9         16.8         14.5         9.3         62         -         70         28.4           17         1021.2         24         18.7         15.6         13         70         -         70         26           18         1018.2         25.1         21         18         14.6         67         -         50         13.6           19         1017.6         26.6         22.8         19.8         16.4         67         Trace         360         17.5           20         1019.2         24.1         20.1         18.2         12.8         64         -         80         26.8           21         1022.6         20.5         17.8         16.1         10.3         62         -         80         46.4           22         1022.2         20.4         16.9         14.8         9.3         61         -         80         39.7           23         1018.6         22.9         18.2         15.4         12.6         70         -         70         23.7           24         1018.9         23.4         19.8         17         13.3         67         -         50 <td>15</td> <td>1023.5</td> <td>20.3</td> <td>16.3</td> <td>13.1</td> <td>8.4</td> <td>60</td> <td>-</td> <td>10</td> <td>28.2</td>	15	1023.5	20.3	16.3	13.1	8.4	60	-	10	28.2
18     1018.2     25.1     21     18     14.6     67     -     50     13.6       19     1017.6     26.6     22.8     19.8     16.4     67     Trace     360     17.5       20     1019.2     24.1     20.1     18.2     12.8     64     -     80     26.8       21     1022.6     20.5     17.8     16.1     10.3     62     -     80     46.4       22     1022.2     20.4     16.9     14.8     9.3     61     -     80     39.7       23     1018.6     22.9     18.2     15.4     12.6     70     -     70     23.7       24     1018.9     23.4     19.8     17     13.3     67     -     50     20.1       25     1026.5     21     17.1     14.8     7.7     54     -     10     34.8       26     1029.2     21.2     16.8     14.4     8.3     58     -     80     28.2       27     1027.4     20.1     16.4     14.2     8.4     60     -     80     40.5       28     1024     22.3     17.8     14.9     12.3     71     -     70     26.	16			16.8	14.5	9.3	62	-	70	28.4
19     1017.6     26.6     22.8     19.8     16.4     67     Trace     360     17.5       20     1019.2     24.1     20.1     18.2     12.8     64     -     80     26.8       21     1022.6     20.5     17.8     16.1     10.3     62     -     80     46.4       22     1022.2     20.4     16.9     14.8     9.3     61     -     80     39.7       23     1018.6     22.9     18.2     15.4     12.6     70     -     70     23.7       24     1018.9     23.4     19.8     17     13.3     67     -     50     20.1       25     1026.5     21     17.1     14.8     7.7     54     -     10     34.8       26     1029.2     21.2     16.8     14.4     8.3     58     -     80     28.2       27     1027.4     20.1     16.4     14.2     8.4     60     -     80     40.5       28     1024     22.3     17.8     14.9     12.3     71     -     70     26.8	17	1021.2	24	18.7	15.6	13	70	-	70	26
20     1019.2     24.1     20.1     18.2     12.8     64     -     80     26.8       21     1022.6     20.5     17.8     16.1     10.3     62     -     80     46.4       22     1022.2     20.4     16.9     14.8     9.3     61     -     80     39.7       23     1018.6     22.9     18.2     15.4     12.6     70     -     70     23.7       24     1018.9     23.4     19.8     17     13.3     67     -     50     20.1       25     1026.5     21     17.1     14.8     7.7     54     -     10     34.8       26     1029.2     21.2     16.8     14.4     8.3     58     -     80     28.2       27     1027.4     20.1     16.4     14.2     8.4     60     -     80     40.5       28     1024     22.3     17.8     14.9     12.3     71     -     70     26.8	18	1018.2	25.1	21	18	14.6	67	-	50	13.6
21     1022.6     20.5     17.8     16.1     10.3     62     -     80     46.4       22     1022.2     20.4     16.9     14.8     9.3     61     -     80     39.7       23     1018.6     22.9     18.2     15.4     12.6     70     -     70     23.7       24     1018.9     23.4     19.8     17     13.3     67     -     50     20.1       25     1026.5     21     17.1     14.8     7.7     54     -     10     34.8       26     1029.2     21.2     16.8     14.4     8.3     58     -     80     28.2       27     1027.4     20.1     16.4     14.2     8.4     60     -     80     40.5       28     1024     22.3     17.8     14.9     12.3     71     -     70     26.8	19	1017.6	26.6	22.8	19.8	16.4	67	Trace	360	17.5
22     1022.2     20.4     16.9     14.8     9.3     61     -     80     39.7       23     1018.6     22.9     18.2     15.4     12.6     70     -     70     23.7       24     1018.9     23.4     19.8     17     13.3     67     -     50     20.1       25     1026.5     21     17.1     14.8     7.7     54     -     10     34.8       26     1029.2     21.2     16.8     14.4     8.3     58     -     80     28.2       27     1027.4     20.1     16.4     14.2     8.4     60     -     80     40.5       28     1024     22.3     17.8     14.9     12.3     71     -     70     26.8	20	1019.2	24.1		18.2	12.8	64	-	80	26.8
23     1018.6     22.9     18.2     15.4     12.6     70     -     70     23.7       24     1018.9     23.4     19.8     17     13.3     67     -     50     20.1       25     1026.5     21     17.1     14.8     7.7     54     -     10     34.8       26     1029.2     21.2     16.8     14.4     8.3     58     -     80     28.2       27     1027.4     20.1     16.4     14.2     8.4     60     -     80     40.5       28     1024     22.3     17.8     14.9     12.3     71     -     70     26.8	21	1022.6	20.5	17.8	16.1	10.3	62	-	80	46.4
24     1018.9     23.4     19.8     17     13.3     67     -     50     20.1       25     1026.5     21     17.1     14.8     7.7     54     -     10     34.8       26     1029.2     21.2     16.8     14.4     8.3     58     -     80     28.2       27     1027.4     20.1     16.4     14.2     8.4     60     -     80     40.5       28     1024     22.3     17.8     14.9     12.3     71     -     70     26.8         0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0	22	1022.2	20.4	16.9	14.8	9.3	61	-	80	39.7
25     1026.5     21     17.1     14.8     7.7     54     -     10     34.8       26     1029.2     21.2     16.8     14.4     8.3     58     -     80     28.2       27     1027.4     20.1     16.4     14.2     8.4     60     -     80     40.5       28     1024     22.3     17.8     14.9     12.3     71     -     70     26.8	23	1018.6	22.9	18.2	15.4	12.6	70	-	70	23.7
26     1029.2     21.2     16.8     14.4     8.3     58     -     80     28.2       27     1027.4     20.1     16.4     14.2     8.4     60     -     80     40.5       28     1024     22.3     17.8     14.9     12.3     71     -     70     26.8	24	1018.9	23.4	19.8	17	13.3	67	-	50	20.1
27     1027.4     20.1     16.4     14.2     8.4     60     -     80     40.5       28     1024     22.3     17.8     14.9     12.3     71     -     70     26.8	25	1026.5	21	17.1	14.8	7.7	54	-	10	34.8
28 1024 22.3 17.8 14.9 12.3 71 - 70 26.8 	26	1029.2	21.2	16.8	14.4	8.3	58	-	80	28.2
	27	1027.4	20.1	16.4	14.2	8.4	60	-	80	40.5
	28	1024	22.3	17.8	14.9	12.3	71	-	70	26.8

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

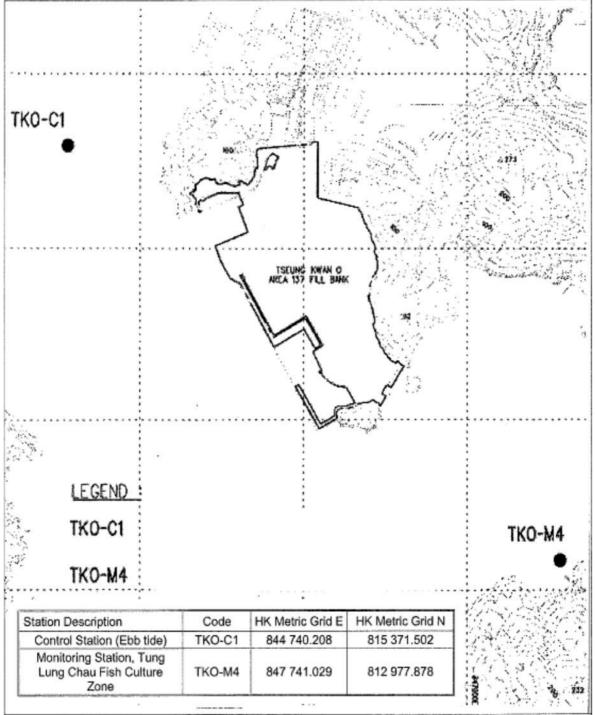
Daily Extract of Meteorological Observations , March 2023 - Tseung Kwan O

	Mean					70.67		TD *1*	78.47
					Mean	Mean	Total	Prevailing	Mean
	Pressure	Air Temperature			Dew	Relative	Rainfall	Wind	Wind
	(hPa)				Point	Humidity	(mm)	Direction	Speed
Day		Absolute	Mean	Absolute	(deg. C)	(%)		(degrees)	(km/h)
					(deg. c)	(70)		(degrees)	(1011/11)
		Daily	(deg.C)	Daily					
		Max		Min					
		(deg. C)		(deg. C)					
1	1021.5	24.4	19.7	16.4	14.1	71	-	40	11.5
2	1023.8	23.2	19.8	17.8	14	70	-	80	34.7
3	1024.9	22.4	18.6	16.5	9.5	56	-	80	30.8
4	1024.4	23.8	19.6	17.3	12.4	65	-	80	17.7
5	1023.6	23.5	19.7	17.3	10.1	57	-	80	26
6	1022.4	24.1	20	17.4	8.5	50	-	70	27.8
7	1020.9	24.1	20.1	17.7	10.8	56	-	70	21.8
8	1019.7	25.7	21.6	19.1	17.3	77	-	30	8.3
9	1017.7	27	22.5	19.5	17.6	75	-	230	5
10	1017.6	26.6	22.4	20.3	15.8	68	-	70	19.8
11	1018.3	26	22.1	19.9	15.6	67	-	70	20.2
12	1018.9	25.6	22.6	20.2	16.8	71	0.1	10	13.8
13	1020.4	22.4	20.1	19.1	13.1	64	Trace	80	24.5
14	1016.8	22.9	19.7	18.7	14.8	73	-	80	20.5
15	1017.4	24.5	21	18.7	16.8	77	-	80	13.2
16	1018.4	25.8	22	19.4	16.3	72	Trace	80	17.6
17	1016.8	26.1	21.7	20	18.6	83	0.5	70	20.5
18	1015.5	26.8	22.3	19.8	18.7	80	•	90	12.6
19	1015.2	21.9	20.6	20	18.2	86	0.6	80	32.5
20	1012	24.4	21.8	20.1	19.7	88	0.3	80	18.8
21	1009.2	25.4	23.7	22.1	21	85	Trace	170	14.8
22	1008	25.6	24.7	24.1	21.7	83	Trace	190	21.9
23	1008.6	26.3	25	24.1	21.6	81	-	200	17.5
24	1011.4	29	25.6	23.3	21.8	80	-	120	16.7
25	1013.1	26.4	23.4	20.9	21.4	89	53.5	80	28.5
26	1014	21.6	20.8	20	19.2	91	5.9	50	28.6
27	1016.2	20	18.6	17.5	16.1	86	6.3	80	42.3
28	1017.6	20.1	18.7	17.2	15.9	84	Trace	70	37.1
29	1015.4	21.8	19.9	18.4	17.5	86	0.9	80	30.6
30	1012.9	21.4	20.8	19.8	18.9	89	0.3	80	22.8
31	1013.3	21.1	20.3	19.6	19	92	1.9	90	28.1

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



# **Figures**



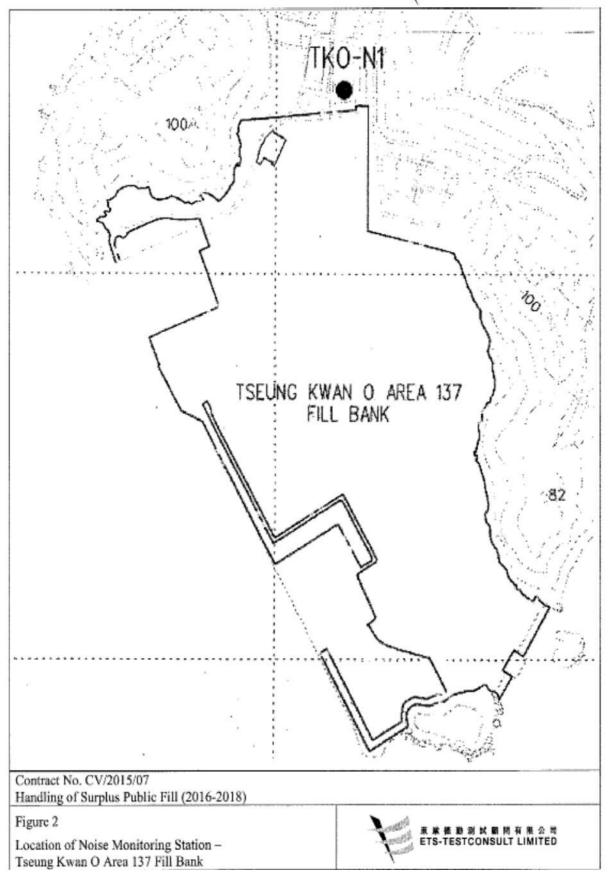
Contract No. CV/2015/07

Handling of Surplus Public Fill (2016-2018)

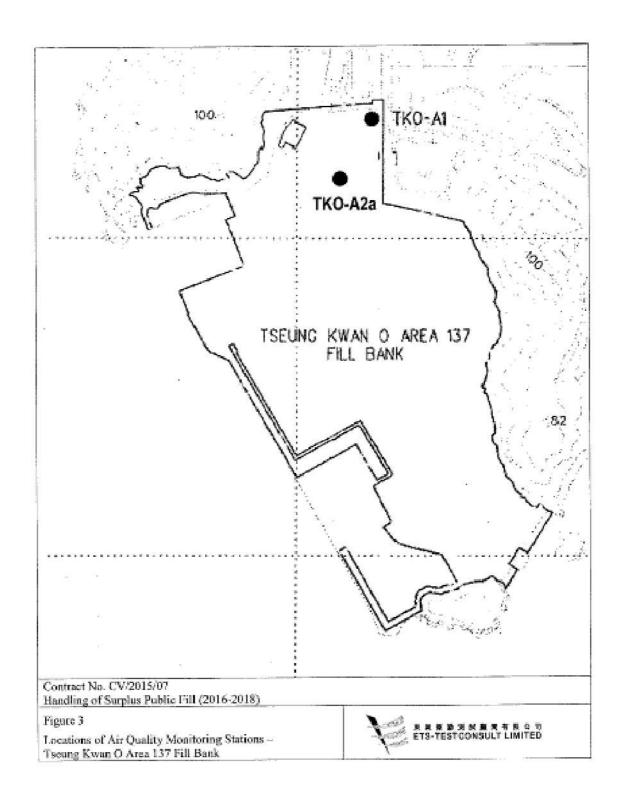
Figure 1

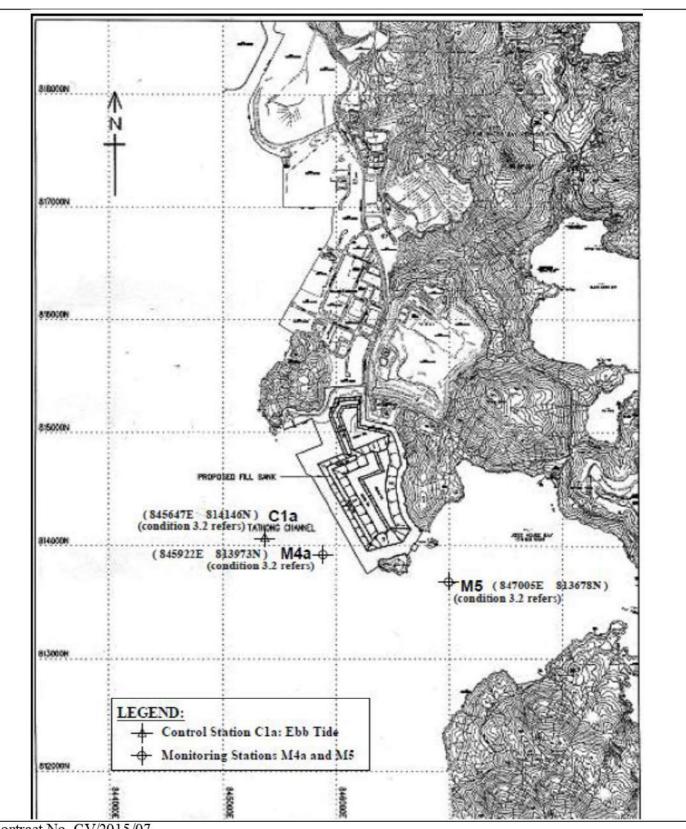
Locations of Water Quality Monitoring Stations -Tseung Kwan O Area 137 Fill Bank











Contract No. CV/2015/07

Handling of Surplus Public Fill(2016-2018)

# Figure 4 Locations of Additional Water Quality Monitoring Stations (3RS project)

Tseung Kwan O Area 137 Fill Bank

