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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.08

(FROM OCTOBER 2023 TO DECEMBER 2023)

Prepared by:

LAU, Wing Sum Assistant Environmental Officer

Checked by: LAU, Chi Leung Environmental Team Leader

Issue Date: 12 January 2023

Report No: ENA40005

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Our Ref: PL-202403031

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

18 March 2024

Dear Mr. Lau,

RE: Contract No. CV/2021/09 Handling of Surplus Public Fill (2022-2023) Quarterly EM&A Report (No. 8) for October to December 2023 for the Tseung Kwan O Area <u>137 Fill Bank</u>

Reference is made to your submission of the Quarterly EM&A Report for October to December 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 hesitate to contact the undersigned should you have any queries.

Yours faithfully,

Toam Jan Bearg

F. C. Tsang Independent Environmental Checker

cc. CEDD – Mr. T M YEUNG



TABLE OF CONTENTS

ENA40005 Quarterly EM&A Summary Report No.08

Page

EXECUTIVE SUMMARY 1.0 INTRODUCTION 1 2.0 **PROJECT INFORMATION** 2.1 Scope of the Project 1 2.2 Site Description 1 2.3 Project Activities 2 2.4 Project Organization and Management Structure 2 2 2.5 Contact Details of Key Personnel 3.0 SUMMARY OF EM&A REQUIREMENTS 2 3.1 EM&A Programme 2 3.2 Monitoring Stations and Parameters 2 3.3 Monitoring Methodology and Calibration Details 3.4 Environmental Quality Performance Limits (Action/Limit Levels) 3 3 3.5 Environmental Mitigation Measures 4.0 **MONITORING RESULTS** 3 4.1 Air Quality 4.2 Noise 4 4.3 Marine Water Quality 4 **INSPECTION RESULTS** 5.0 5.1 Inspection Results 5 5 – 6 5.2 Status of Environmental Licensing and Permitting 5.3 Advice on Solids and Liquid Waste Management Status 7 6.0 NON-COMPLIANCE OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMITS 6.1 Summary of Non-compliance 7 7 6.2 Review of the Reasons for and the implication of non-compliance 7 6.3 Summary of Action Taken 6.4 Summary of Environmental Complaint, Notification of Summons and Successful 7 7.0 COMMENTS, CONCLUSIONS AND RECOMMENDATION 8-9

APPENDIX

A	Organization Chart and Lines of Communication
В	Graphical Plots of Impact Air Quality Monitoring Data
С	Graphical Plots of Impact Noise Monitoring Data
D1	Graphical Plots of Impact Marine Water Quality Monitoring Data
D2	Graphical Plots of Impact Marine Water Quality Monitoring Data(3RS project)
E	Environmental Quality Performance (Action / Limit Levels)
F	Event-Action Plans
G	Work Programme
Н	Implementation Schedule of Environmental Mitigation Measures (EMIS)
11	Statistical Analysis of the Trend of Suspended Solids in the Quarter
12	Statistical Analysis of the Trend of Suspended Solids in the Quarter(3RS project)
J	Site General Layout Plan
K	Weather Condition

Figures

- Figure 1 Locations of Water Quality Monitoring Stations
- Figure 2 Noise Environmental Monitoring Station
- Figure 3 Locations of Air Quality Monitoring Stations Tseung Kwan O Area 137 Fill Bank
- Figure 4 Locations of Water Quality Monitoring Stations (3RS project)

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



Tables

- 2.1 Contact Details of Key Personnel
- 4.1 Summary of Number of Exceedances for 1-hr and 24-hr TSP Monitoring
- 4.2 Comparison of Baseline and Various Period of Average 1-hr and 24-hr TSP Impact Monitoring Results
- 4.3 Summary of Impact Monitoring Results of Noise Daytime Monitoring
- 4.4 Total Number of Marine Water Quality Exceedances in the Quarter
- 4.5 Total Number of Marine Water Quality Exceedances in the Quarter (3RS project)
- 4.6 Summary of Statistically Significant Results of SS
- 4.7 Summary of Statistically Significant Results of SS (3RS project)
- 5.1 Summary of Environmental Licensing and Permit Status
- 5.2 Estimated Offsite Waste Disposal in the Reporting Quarter
- 6.1 Summary of Environmental Complaints and Prosecutions



EXECUTIVE SUMMARY

This is Quarterly Environmental Monitoring and Audit (EM&A) Summary Report No.08 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 October 2023 to 31 December 2023.

Site Activities	
	 tractor, the site activities in this reporting quarter were as below: Operation of the Public Fill Reception Facilities at Tseung Kwan O Fill Bank (TKOFB); Operation of dewatering plant at TKOFB; Operation and Maintenance of crushing plants at TKOFB; Operation of the Integrated Public Fill Reception at TKOFB; Operation and Maintenance of the Wash House at TKOFB; Operation and Maintenance of the Wash House at TKOFB; Operation and Maintenance of the Wash House at TKOFB; Operation and Maintenance of the Wash House at TKOFB; Operation and Maintenance a Digital Works Supervision System of Moving Plant at TKOFB; Operation and Maintenance of Wheel Washing Bays and Facilities at TKOFB; Operation and maintenance of Wheel Washing Bays and Facilities at TKOFB; Maintenance of the Drainage Systems at TKOFB; Delivery of Public Fill to Taishan at TKOFB; Construction of Gabion Wall at TKOFB; Implementation of C Easy system at TKOFB (Phase 1) Carry out GCO Probe test and SRT Delivery of Excavated Materials (T2 Materials) from TKOFB to Sha Chau Dumping Site at TKOFB
November 2023	 Operation of the Public Fill Reception Facilities at Tseung Kwan O Fill Bank (TKOFB); Operation of dewatering plant at TKOFB; Operation and Maintenance of crushing plants at TKOFB; Operation and Maintenance of Artificial Intelligent System for Crushing Plant at TKOFB; Operation of the Integrated Public Fill Reception at TKOFB; Operation and Maintenance of the Wash House at TKOFB; Operation and Maintenance of the Wash House at TKOFB; Operation Tracking and Proximity Detection System of Moving Plant at TKOFB; Operation and Maintenance a Digital Works Supervision System (DWSS) for TKOFB; Operation and maintenance of Wheel Washing Bays and Facilities at TKOFB; Operation and maintenance of Wheel Washing Bays and Facilities at TKOFB; Maintenance of the Drainage Systems at TKOFB; Construction of Gabion Wall at TKOFB; Implementation of C Easy system at TKOFB (Phase 1) Carry out GCO Probe test and SRT Setup of plants for operation of recycling public fill as blanket layer material of reclamation projects – PMI No.70
December 2023	 Operation of the Public Fill Reception Facilities at Tseung Kwan O Fill Bank (TKOFB); Operation of dewatering plant at TKOFB; Operation and Maintenance of crushing plants at TKOFB; Operation and Maintenance of Artificial Intelligent System for Crushing Plant at TKOFB; Operation of the Integrated Public Fill Reception at TKOFB; Operation and Maintenance of the Wash House at TKOFB; Operation and Maintenance of the Wash House at TKOFB; Operation and Maintenance a Digital Works Supervision System of Moving Plant at TKOFB; Operation and Maintenance of Wheel Washing Bays and Facilities at TKOFB; Operation and maintenance of Wheel Washing Bays and Facilities at TKOFB; Maintenance of the Drainage Systems at TKOFB; Construction of Gabion Wall at TKOFB; Construction of C Easy system at TKOFB (Phase 1) Carry out GCO Probe test and SRT Setup of plants for operation of recycling public fill as blanket layer material of reclamation projects – PMI No.70



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

ENA40005 Quarterly EM&A Summary Report No.08

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.



1.0 INTRODUCTION

China Harbour Engineering Co Ltd (CHEC) appointed Environmental Team (ET) of ETS-Testconsult Limited (ETL) to undertake the Environmental Monitoring and Audit (EM&A) for the "Contract No: CV/2021/09 –Handling of Surplus Public Fill (2022-2023) – Tseung Kwan O (TKO) Area 137 Fill Bank" (The Project).

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

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

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

- All monitoring parameters;
- Monitoring schedules for the reporting 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 October 2023 to December 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.



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 0.4	Contract Dataila	af 1/a	
Table 2.1	Contact Details	U nev	

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.



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 Outlinnary of Number of Exceedances for 1 fit and 24 fit for Monitoring					
Monitoring	Level of	October 2023	November 2023	December 2023	
Parameter	Exceedance				
24-hr TSP	No of monitoring	5	5	6	
	events				
	Action Level	0	0	0	
	Limit Level	0	0	0	
1-hr TSP	No of monitoring	14	15	16	
	events				
	Action Level	0	0	0	
	Limit Level	0	0	0	

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

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 TSP (μg/m³)		24-hr TSP (µg/m³)	
renou	TKO-A1	TKO-A2a	TKO-A1	TKO-A2a
Baseline (29/08 – 13/09)	1	95	12	3
October 2023	248	251	139	142
November 2023	245	249	141	143
December 2023	247	250	146	148



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 1.6 Barmary of impact monitoring robate of Holeo Baytino monitoring					
Monitoring	Limit Level	October 2023	November 2023	December 2023	
Location	Leq, dB(A)				
TKO-N1	75	64.7	64.8	63.5	

Table 4.3	Summary	of Impact	Monitoring	results of	Noise Da	ytime Monitoring

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 quarter.

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.

Parameter	Exceedance	October 2023	November 2023	December 2023
Parameter		October 2023	November 2023	December 2023
	Level			
Number of monitori	ing days	12	13	12
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
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

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



ENA40005 Quarterly EM&A Summary Report No.08

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.

Parameter	Exceedance Level	October 2023	November 2023	December 2023
Number of monitor	ing days	12	13	12
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)
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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



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

Description	Permit No.	Valid	Month	Section
-		From	То	
Environmental Permit	EP- 134/2002/Q	31/10/23	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		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/24- 028	01/09/23	31/12/23	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

The status of licences and permits is summarized in Table 5.1. Table 5.1 Summary of environmental licensing and permit status



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

Table 0.2 Estimated Onsite Waste Disposal in the Reporting Quarter				
Waste Type	October 2023	November 2023	December 2023	
Public Fill ('000m³)	0	0	0	
C&D Waste (general refuse) ('000kg)	96.53	36.53	26.1	
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 quarter.

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

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 noncompliance 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.



Table 6.1	Summary of Environmental Complaints and Prosecutions			
	Period	Complaints logged	Summon served	Successful Prosecution
	October 2023	0	0	0
	November 2023	0	0	0
	December 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.



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

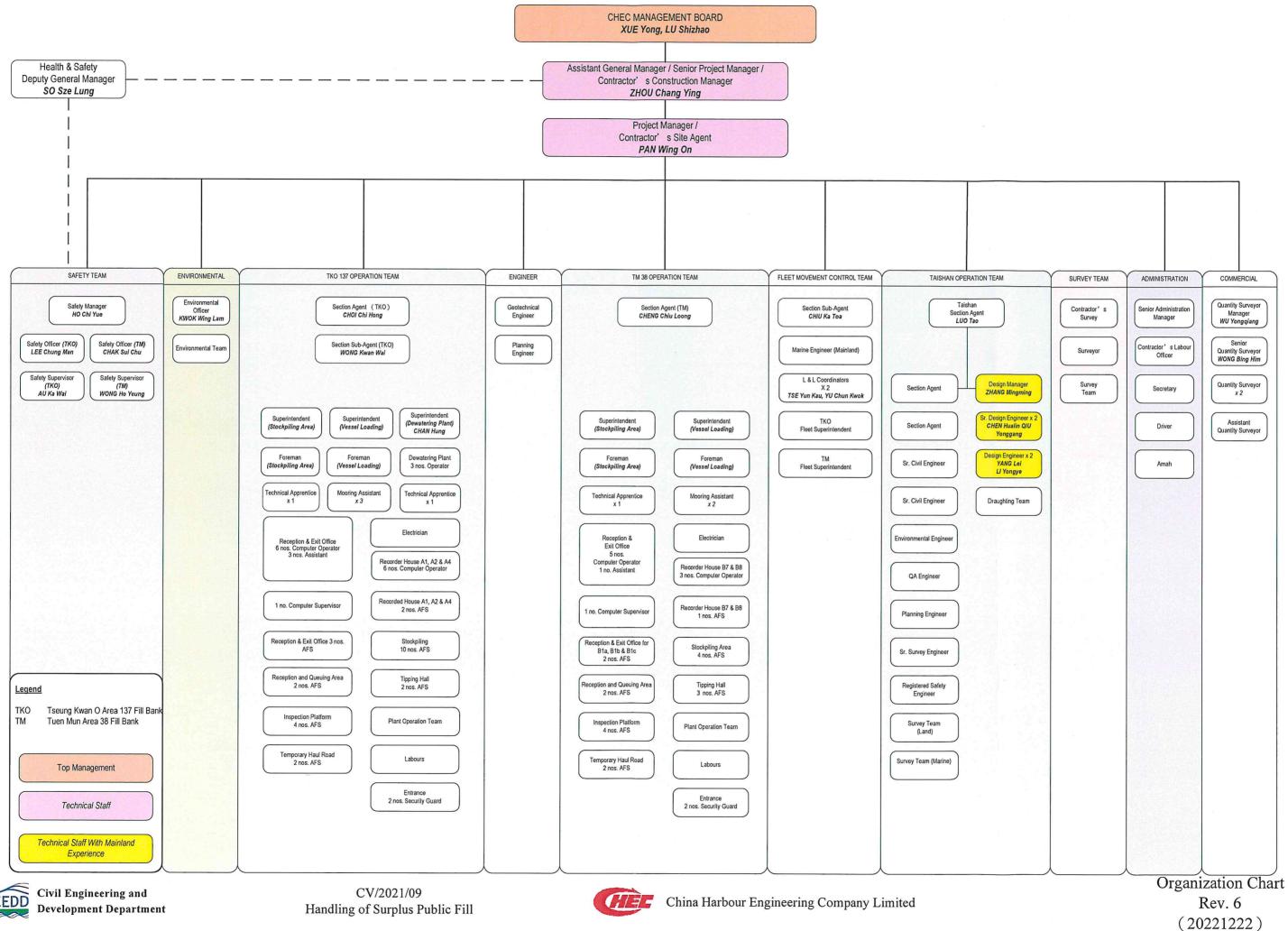
- Provide hydroseeding on the exposed slopes, on which the final profile has been formed;
- Erect all the site hoarding/chaining fences in accordance with agreed design at proper location;
- Maintain the hydroseeding slopes in accordance with the Landscape Plan.

- END OF REPORT -



Α

Organization Chart





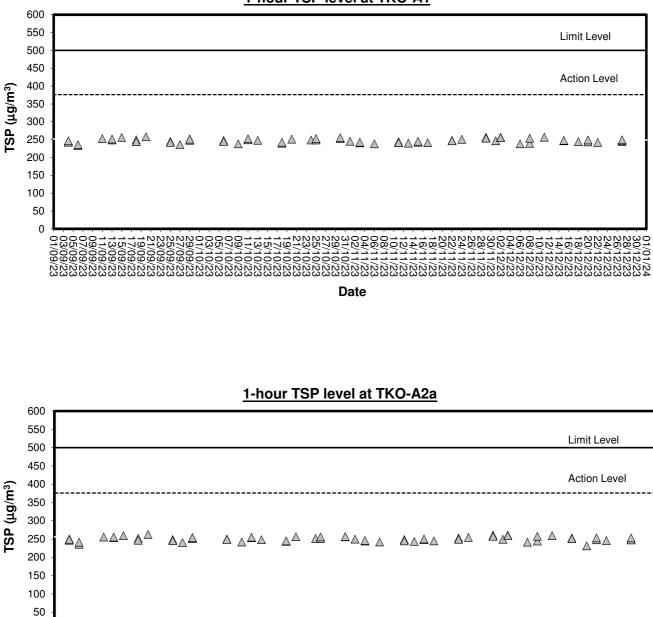




В

Graphical Plots of Air Quality Monitoring Data





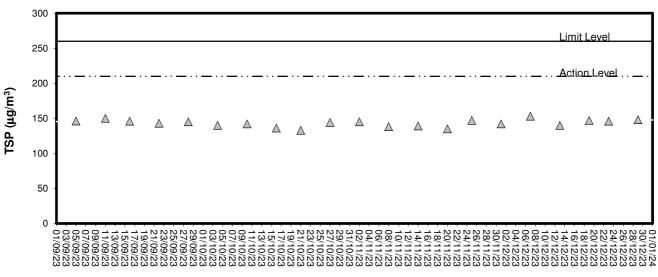
1-hour TSP level at TKO-A1

200 Date

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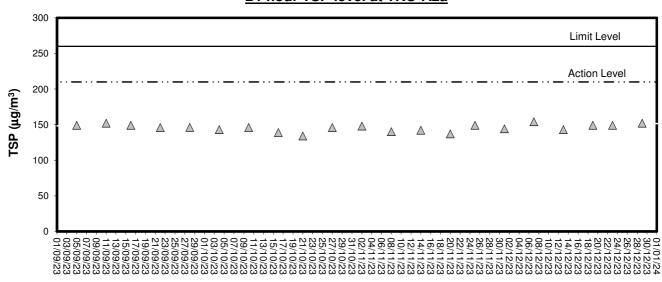
/09/





24-hour TSP level at TKO-A1

Date



Date

24-hour TSP level at TKO-A2a

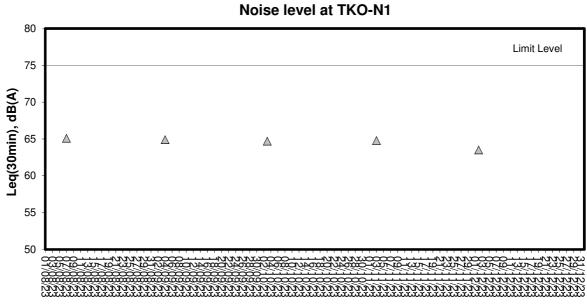


С

Graphical Plots of Noise Monitoring Data



Noise Monitoring (Day-time)



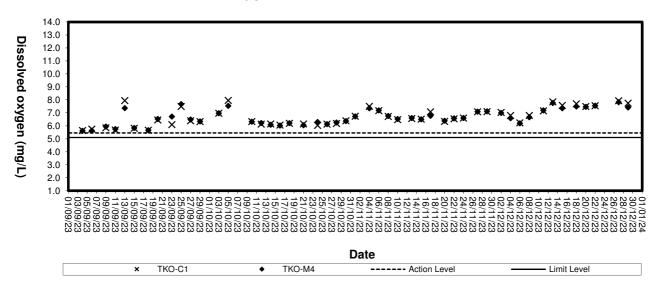
Date



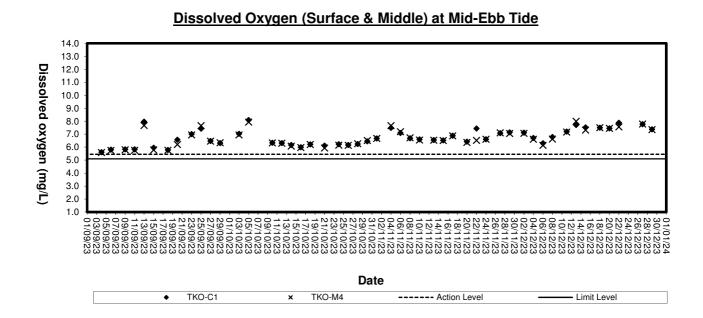
D1

Graphical Plots of Impact Marine Water Quality Monitoring Data

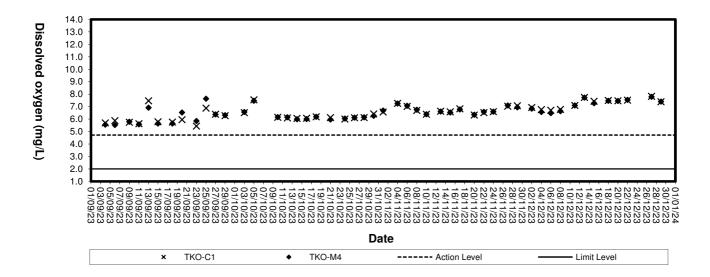




Dissolved Oxygen (Surface & Middle) at Mid-Flood Tide

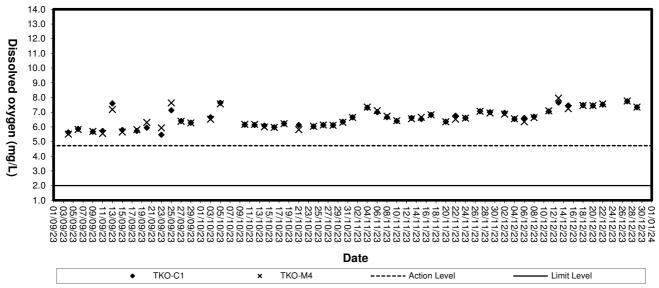




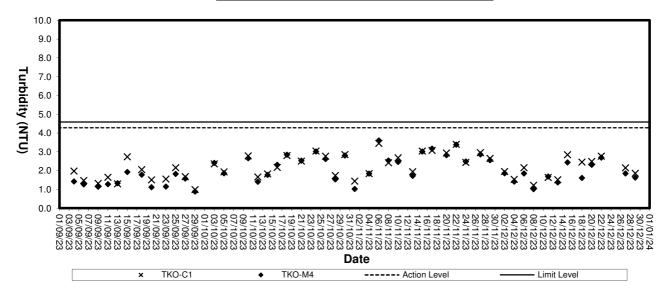


Dissolved Oxygen (Bottom) at Mid-Flood Tide



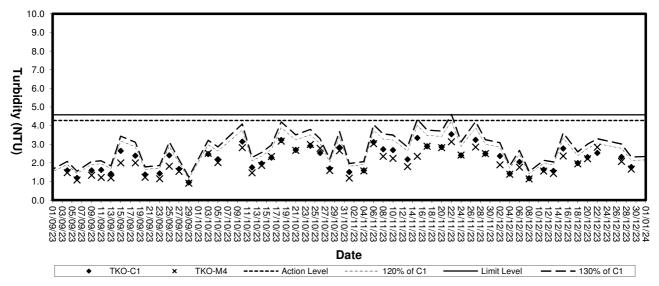




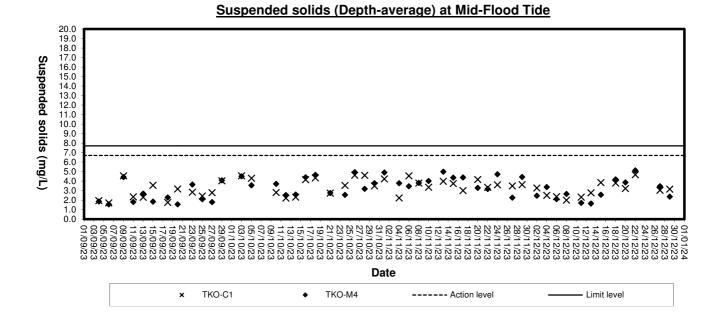


Turbidity (Depth-average) at Mid-Flood Tide

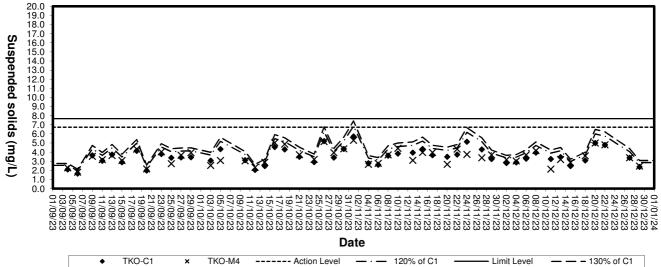
Turbidity(Depth-average) at Mid-Ebb Tide







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

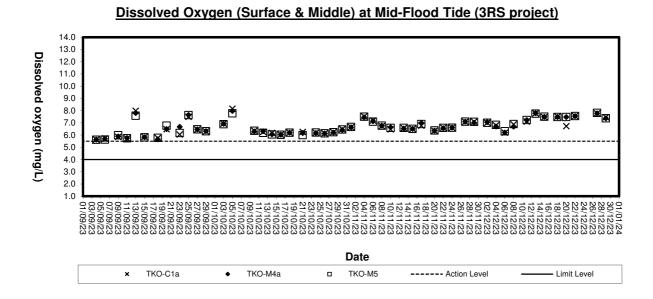


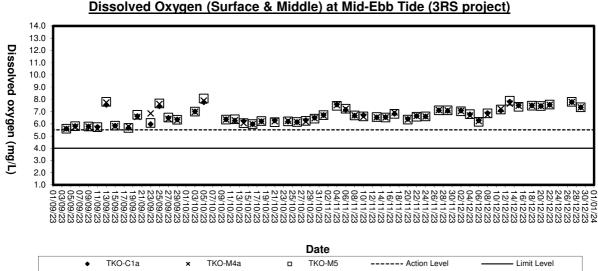


D2

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

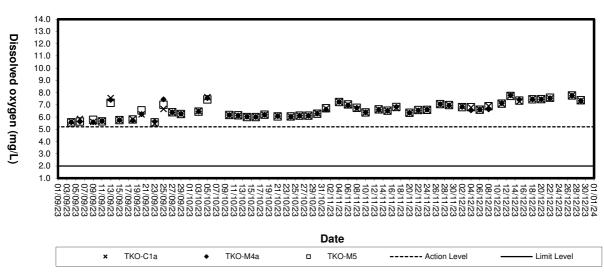




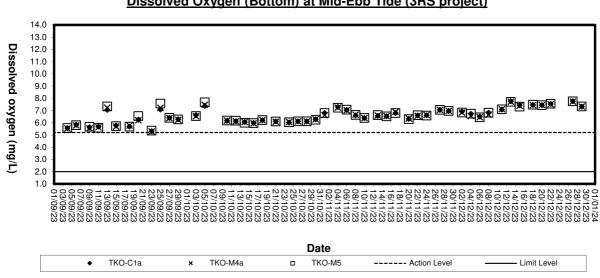


Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide (3RS project)



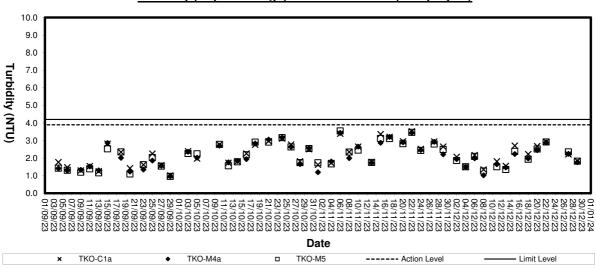


Dissolved Oxygen (Bottom) at Mid-Flood Tide (3RS project)

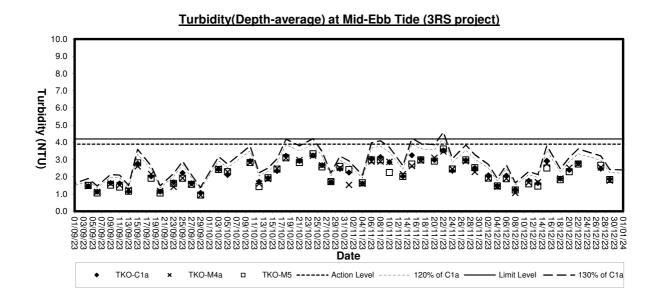


Dissolved Oxygen (Bottom) at Mid-Ebb Tide (3RS project)

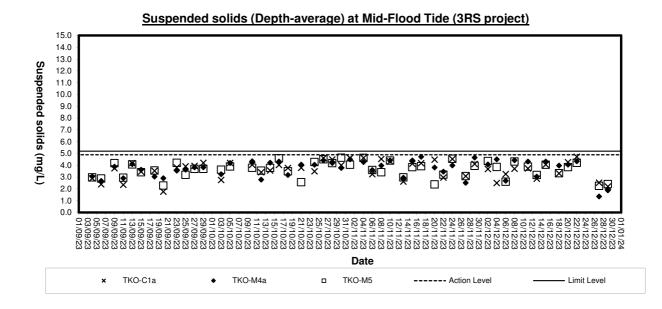


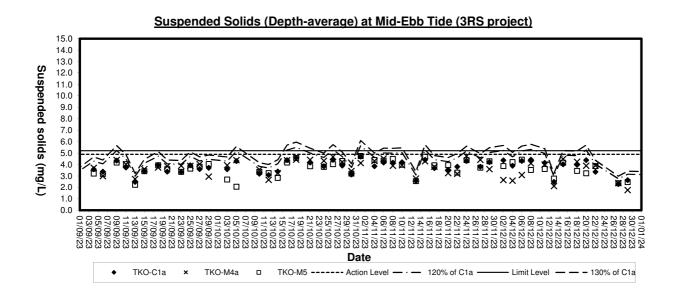


Turbidity (Depth-average) at Mid-Flood Tide (3RS project)











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/m ³	Limit Level, µg/m ³	
A1	376	500	
A2	1 210		

Action and Limit Levels for 24-Hour TSP

Location	Action Level, µg/m ³	Limit Level, µg/m ³	
A1	210		
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%-lle of baseline data) <u>Bottom</u> 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)	88 > 7.67 (99%-ile 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 (99%-ile of baseline data or Tby > 130% of upstream control stations Tby at the same tide of the same day)

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+	<u>Surface & Middle</u> + <4.00 mg/L (1%-ile of baseline data) + <u>Bottom</u> + <2.00 mg/L+
SS (mg/L) +	>4.9 mg/L or >120% of the upstream	>5.2 mg/L or >130% of the upstream
(Depth-	control station's SS at the same tide on	control station's SS at the same tide on
averaged)+	the same day.	the same day. ²
Turbidity	>3.9NTU or >120% of the upstream	>4.2 NTU or >130% of the upstream
(NTU) (Depth-	control station's turbidity at the same	control station's turbidity at the same tide
averaged)₽	tide on the same day.	on the same day?



F

Event-Action Plans

	Contractor			 Submit proposals for remediat actions to IC(E) within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate 	 Lake Inimediate action to avoid further exceedance Submit proposals for remedial actions to IC(E) within 3 working days of notification Implement the agreed proposals Amend proposal If appropriate.
LITY EXCEEDANCE	ER		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			 Check monitoring data submitted by the ET Check contractor's working method 	 Check monitoring data submitted by the ET Leader Check the Contractor's working method Check the Contractor on possible Discuss with ET and Contractor on possible remedial measures Advise the ER on the effectiveness of the proposed remedial measures Supervise implementation of remedial measures 	 Check monitoring data submitted by the ET Leader Check Contractor's working method Discuss with ET and Contractor on possible remedial measures Advise the ER on the effectiveness of the proposed remedial measures Supervise implementation of remedial measures
E		EI Leader	 Identify source, investigate the causes of exceedance and propose remedial measures Inform ER, IC(E) and Contractor Repeat measurement to confirm finding 4. Increase monitoring frequency to daily 	 Identify source, investigate the causes of exceedance and propose remedial measures Inform IC(E) and Contractor Repeat measurements to confirm finding Increase monitoring frequency to daily for remedial actions Discuss with IC(E) and Contractor on remedial actions If exceedance continues, arrange meeting with IC(E) and ER. If exceedance stops, cease additional monitoring 	 Identify source, investigate the causes of exceedance and propose remedial measures Inform ER, Contractor and EPD Repeat measurement to confirm finding 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

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

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Contractor		 Submit noise mitigation proposals to fC(E). Implement noise mitigation proposals. 	 Take immediate action to avoid further exceedance Submit proposals for remedial actions to IC(E) within 3 working days of notification. Implement the agreed proposals. Resubmit proposals if problem still not under control. Stop the relevant activity of works as determined by the ER until the exceedances is abated.
EVENT/ACTION PLAN FOR NOISE EXCEEDANCE ACTION		 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. 	 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. If exceedances continue, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedances is abated.
EVENT/ACTION PLAN FOR ACTION	IC(E)	 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. 	 Discuss amongst the ER, the ET Leader and the Contractor on the potential remedial actions. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. Supervise the implementation of remedial measures.
	ET Leader	 Notify the IC(E) and the Contractor. Carry out investigation. Report the results of investigation to the IC(E) and the Contractor. Discuss with the Contractor and formulate remedial measures. Increase monitoring frequency to check mitigation effectiveness 	 Notify the IC(E), the ER, the EPD and the Contractor. Identify source. Repeat measurement to confirm findings. Reneat measurement to confirm findings. Increase monitoring frequency. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. Inform the IC(E), the ER and the EPD the causes & actions taken for the exceedances. Assess effectiveness of Contractor's remedial actions and keep the IC(E), the EPD and the ER informed of the results If exceedance due to the construction works stops, cease additional monitoring
EVENT		Level	Eevel t

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<u>. </u>				ACIION	z			
		ET Leader		Contractor		ER		lec
Action level	<u> </u>	Identify source(s) of impact;	<u>-</u>	Notify the ER and IEC in writing	÷	Notify EPD and other relevant		Check monitoring data
heinn evreeded	: ~	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	ы.	Confirm ET assessment if
samnling dav	٣.	Notify Contractor in writing within	2	Rectify unacceptable practice;		Identification of the exceedance		exceedance is due / not due
for Buildings	;	24 hours of identification of the	റ	Check all plant and equipment;	2.	Discuss with IEC, ET and		to the works
		exceedance	4	Submit investigation report to IEC		Contractor on the proposed	က်	Discuss with ET, ER and
	4	Check monitoring data, all plant,		and ER within 3 working days of		mitigation measures;		Contractor on the mitigation
		equipment and Contractor's		the identification of an	ю.	Require contractor to propose		measures
		working methods:		exceedance		remedial measures for the	4	Review contractor's
	ي م	Carv out investigation	ហ៍	Consider changes of working		analysed problem if related to the		mitigation measures
	jœ	Renort the results of investigation		method if exceedance is due to		construction works		whenever necessary to
	5	to the Contractor within 3 working		the construction works	4.	Ensure remedial measures are		ensure their effectiveness
		dave of identification of	ç	Discuss with ET. IEC and ER and		properly implemented		and advise the ER
			;	pronose mitigation measures to	ŝ	Assess the effectiveness of the		accordingly
		excertance and advise		IEC and ED if exceedance is due	;	mitination measure	Ś	
		contractor if exceedance is due to			-		5	
*		contractor's construction works		to the construction works within 4				
	~	Discuss mitigation measures with		working days of identification of				measures
		Contractor if exceedance is due		an exceedance				
		to the construction works within 4		Implement the agreed mitigation				
		working days		measures within reasonable time				
	ώ	Repeat measurement on next day		scale				
		of exceedance if exceedance is						
		due to the construction works			_			

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Action level ET Leader Action ET Leader ET Leader Contractor Noity ETD and other relevant 1. Noity ETD and other relevant 1. Check monitoring data periodes in writing 24 hours of the summerial agencies in writing 24 hours of the same sampling days 2. Repeat In-situ measurement 2. Confin Tassessment Processourie 3. Noity Contractor in writing periodes in writing 24 hours of the same same sampling days 3. Confin Tassessment 3. Confin Tassessment Consecutive Within 24 hours of sampling days 3. Consecutive writing processedance 3. Consecutive writing processedance 3. Confin Tassessment Consecutive sampling days Consecutive contractor in writing processedance 3. Consecutive writing processedance 3. Consecutive writing processedance 3. Consecutive writing processedance Second more than on the proposed mritication of an writing a working days of the mitigation measures for the worksedance 3. Discuss with ET, ET and contractor's working methods; 3. Discuss with ET, ET and contractor's writing avoid days of the mitigation measures for the mitigation measures for the worksedance Early of the mitigation measures writin a working days of the mitigation measures for the worksedance writin a worksedance 4. Ensure mitigation works 5. Continue the worksecance mingation from the contractor's writends worksecance in	Event	<u> </u>		Ľ	EVENT AND ACTION PLAN FOR WATER QUALITY	E E	IR WATER QUALITY		
ET Leader Contractor ER Ieveil 1. Identify source(s) of impact; Notify ED and other relevant 1. ded by 2. Repart in writing 1. Notify ED and other relevant 1. ded by 2. Repart in writing 2. Notify Contractor in writing athon of exceedance writing writin A hours of the identification of the relevant 2. active 3. Notify Contractor in writing 2. Rectify unacceptable practice; 3. Writing writin A hours of the identification of the exceedance 3. active active measures 3. Check and plant and exceedance 3. Check and plant and exceedance 4. Check monitoring data, all 4. Check monitoring data, all 3. Check and plant and exceedance 4. Check monitoring data, all 3. Check and plant and exceedance 4. Contractor on the proposed 4. Check monitoring data, all 3. Check and plant and exceedance 4. Check monitor in the proposed 4. Indigation measures for the indigation measures for the indigation measures for the indigation of the contractor in writhin 3 working daty of the indigation measures for the individual of an exceedance 6. Discuss with ET, EC and ER 7. Discuss mith exceedance 6. Discuss writh EC, ET and exceedance 6. Discuss writh exceedance 6. Discuss writh exceedance 6. Discuss writh exceedance 6. Discuss writh exceedan					ACTIO	N			
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2. Repeat m-sutrement within 24 hours of the than one cutive 3. worting within 24 hours of the than one cutive 3. within 24 hours of the than one cutive 3. within 24 hours of the than one cutive 3. within 24 hours of the than one cutive identification of the than one cutive identification of the than one cutive identification of the than one identification of the the contractor on the proposed methods; 3. Check and part and than and than a than one identification of the than one identification of the the contractor on the proposed methods; 3. Check and part and than a than a than a than a thours of the identification of the the contractor on the proposed methods; 3. Check and part and than a the the construction works and advise contractor within 4 working days of the the construction works are implemented and propose miligation the analysed problem if related to the the construction works are properly inplemented and avoise contractor within 4 working days of the miligation measures of the miligation of an exceedance. 3. Check and the construction of an exceedance identification of an exceeda	Action level	·		<u>-</u>	Notify IEC and ER in writing		Notify EPD and other relevant	~`	Check monitoring data
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3. Notify Contractor in writing within 24 hours of writing atto. 3. Notify Contractor in writing atto writing attor measures of and propose miligation measures of and propose miligation measures and advise contractor within a working days of the miligation measures of and propose miligation measures of and property implemented and works attor and works are implemented at a working days of the miligation measures are implemented at a measures within a working day of exceedance 2. Rectify unacceptable practice; identification of the exposed measures investigation of an econstructor within a working days of the miligation measures of and property implemented at a working day of exceedance 3. Submit the results of the miligation measures; and and y and and average at a mask and advise contractor within a working day of exceedance 4. Ensure remedial measures of the miligation measures of and property implemented at a mask and advise construction of an exceedance 5. Assess the effectiveness of the miligation measures of and property implemented at a molyced and and an exceedance 5. Assess the effectiveness of the miligation measures of and property implemented at a molyced and an exceedance 6. The effectiveness of the mi	exceeded by		to confirm findings		identification of exceedance		writing within 24 hours of the	તં	Confirm ET assessment
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4. Check monitoring data, all plant, equipment and contractor's working methods; Contractor's working methods;4. Consider changes of working methods;Contractor on the proposed mitigation measures;5. Carry out investigation (a contractor's working days of investigation to the contractor investigation to the contractor investigation to the contractor investigation of exceedance and advise contractor if and advise contractor if exceedance is such in 3 working days of the investigation of exceedance and advise contractor if exceedance ithin 3 working days of identification of exceedance investigation4. Constactor on the proposed miligation measures of the investigation and propose mitigation and advise contractor if and advise contractor if and advise contractor if exceedance be within 2 working days of the miligation measures of the miligation measures are inplemented are implemented4. Constactor on the proposed measures of the the miligation measures the miligation measures7. Discuss mitigation an exceedance with IEC and Contractor within an exceedance are implemented5. Assess the effectiveness of the miligation measures the miligation measures5.8. Ensure miligation an exceedance are implemented day of exceedance.6. Discuss with in the working of identification of an exceedance the miligation measures7. Discuss mile the miligation measures the miligation measures the miligation measures6.9. Prepare to increase the monitoring frequency to daily; day of exceedance.9. Prepare to increa	sampling days		identification		equipment;	~i	Discuss with IEC, ET and	က်	Discuss with ET, ER and
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Contractor's working methods;5. Submit the results of the investigation to the Card ER within 3 working days of investigation to the Contractor 			plant, equipment and		methods;		mitigation measures;		mitigation measures.
Carry out investigation Report the results of investigation to the Contractor within 3 working days of investigation to the Contractor within 3 working days of identification of exceedance and advise contractor if exceedance is due to contractor's construction worksinvestigation to IEC and ER analysed problem if related to the construction works and advise contractor within 4 working days of the mitigation measures within 2 monitoring frequency to daily, Prepare to increase the monitoring frequency to daily,investigation to IEC and ER analysed problem if related to the construction worksCarry out investigation and advise contractor sceedanceG. Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER worksA. Ensure remedial measures the construction worksS. Assess the effectiveness of measures with IEC and Contractor within an exceedance Ensure mitigation measure the mitigation measure teasonable time scale5.			Contractor's working methods;	പ	Submit the results of the	က်	Require contractor to propose	4	Review contractor's
Report the results of investigation to the Contractor within 3 working days of investigation to the Contractor within 3 working days of and advise contractor if and advise contractor if exceedance and advise contractor if exceedance is due to contractor's construction workswithin 3 working days of identification of an exceedance and advise contractor if measures to IEC and ER within 16 contractor within and propose mitigation measures to IEC and ER within 16 contractor within and propose mitigation morkswithin 3 working days of the construction works are properly implemented and propose mitigation fector and ER with IEC and Contractor within the mitigation measures the mitigation measures the mitigation measures the mitigation measures the mitigation measures the mitigation measures the mitigation measure the mi		ы. С	-		investigation to IEC and ER		remedial measures for the		mitigation measures
investigation to the Contractoridentification of an within 3 working days of identification of exceedanceidentification of an exceedancethe construction workswithin 3 working days of 		ö			within 3 working days of the		analysed problem if related to		whenever necessary to
within 3 working days of identification of exceedance and advise contractor if exceedance is due to contractor's construction worksexceedance and propose mitigation and propose mitigation b. Discuss with ET, IEC and ER and propose mitigation measures to IEC and ER within 4 working days of the mitigation measures the mitigation measures of the mitigation measures the mitigation measure an exceedance Ensure mitigation measures the mitigation measures the mitigation measures the mitigation measures the mitigation measures the mitigation measures the mitigation measure the mitigation measure the mitigation measure the mitigation measure5.S. Discuss mitigation measures with IEC and Contractor within a nexceedance monitoring frequency to daily;1.1.1.1.S. Prepare to monitoring frequency to daily;2.1.1.1.1.S. Prepare to increase the monitoring frequency to daily;3.1.1.1.S. Prepare to increase the monitoring frequency to daily;1.1.1.1.1.S. Prepare to increase the monitoring frequency to daily;1.1.1.1.1.S. Prepare to increase the monitoring frequency to daily;2.1.1.1.S. Prepare to increase the monitoring frequency to daily;3.1.1.1.S. Prepare to increase the day of exceedance3. <td></td> <td></td> <td>investigation to the Contractor</td> <td></td> <td>identification of an</td> <td></td> <td>the construction works</td> <td></td> <td>ensure their</td>			investigation to the Contractor		identification of an		the construction works		ensure their
identification of exceedance and advise contractor if exceedance is due to contractor's construction works contractor's construction works with IEC and ER and propose mitigation exceedance is due to contractor's construction works with IEC and ER within 4 working days of identification of an exceedance Ensure mitigation measures within a exceedance Ensure mitigation measures within are properly implemented 5. Assess the effectiveness of the mitigation measures with IEC and Contractor within 4 working of identification of an exceedance Ensure mitigation measures within reasonable time scale Prepare to increase the monitoring frequency to daily; . Repeat measurement on next			within 3 working days of		exceedance	4	Ensure remedial measures		effectiveness and advise
and advise contractor if exceedance is due to contractor's construction worksand propose mitigation measures to IEC and ER within 4 working days of tidentification of an exceedance with IEC and Contractor within 4 working of identification of an exceedance an exceedance Ensure mitigation measures an exceedance Ensure mitigation measures tidentification of an exceedance Ensure mitigation measures tidentification of an exceedance Ensure mitigation measures of identification of an exceedance Ensure mitigation measures tidentification of an exceedance Ensure mitigation measures tidentification of an exceedance Ensure mitigation measures an exceedance Ensure mitigation measures an exceedance e monitoring frequency to daily; Discuss mitigation measures ensure monitoring frequency to daily; Discuss mitigation measures ensure mitigation measures<			identification of exceedance	Ö	Discuss with ET, IEC and ER		are properly implemented		the ER accordingly
exceedance is due to contractor's construction worksmeasures to IEC and ER within 4 working days of identification of an with IEC and Contractor within 4 working of identification of an exceedance Ensure mitigation measures the mitigation measurethe mitigation measure the mitigation measure7.measures within tidentification of an exceedance Ensure mitigation measures the mitigation measurethe mitigation measure tidentification of an exceedance mitigation measures within reasonable time scale monitoring frequency to daily, tepeat measurement on nextthe mitigation measure tidentification of an exceedance mitigation measures tidentification of an exceedancethe mitigation measure tidentification of an exceedance mitigation measures measurement on next			and advise contractor if		and propose mitigation	Ω.	Assess the effectiveness of	ഗ്	Assess the effectiveness
contractor's construction workswithin 4 working days of identification of an biscuss mitigation measures with IEC and Contractor within 4 working of identification of an exceedance Ensure mitigation measures e identification of an exceedance Ensure mitigation measures within reasonable time scale monitoring frequency to daily;within 4 working days of identification of an exceedance mitigation measures within reasonable time scale monitoring frequency to daily;. Repeat measurement on next day of exceedance.within 4 working days of identification of an exceedance mitigation measures within reasonable time scale			exceedance is due to		measures to IEC and ER		the mitigation measure		of the implemented
works Discuss mitigation measures with IEC and Contractor within 4 working of identification of an exceedance Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; . Repeat measurement on next day of exceedance.			contractor's construction		within 4 working days of				mitigation measures.
Discuss mitigation measures with IEC and Contractor within 7. 4 working of identification of an exceedance Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; . Repeat measurement on next day of exceedance.			works		identification of an				
with IEC and Contractor within 7. 4 working of identification of an exceedance Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; . Repeat measurement on next day of exceedance.		۲.	_		exceedance				
4 working of identification of an exceedance Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; . Repeat measurement on next day of exceedance.			with IEC and Contractor within	~	Implement the agreed				
an exceedance Ensure mitigation measures are implemented; Prepare to increase the monitoring frequency to daily; . Repeat measurement on next day of exceedance.			4 working of identification of		mitigation measures within				
			an exceedance		reasonable time scale				
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			are implemented;						
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EVENT AND ACTION PLAN FOR WATER QUALITY EXCEEDANCE
EVENT AND ACTION PLAN FOR WATER QUALITY EXCEEDANCE

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		IEC	. Check monitoring data			It exceedance is due /						mitigation measures	submitted by Contractor	and advise the ER		5. Assess the effectiveness	of the implemented	mitigation measures													
Ц С	}	-	~~	- C	¥ 						4				_				<u>.</u>												
ER QUALITY EXCEEDAN		ER	Notify EPD and other relevant	governmental agencies in	Writing Within 24 hours of	identification of exceedance	Discuss with IEC, ET and	Contractor on the proposed	mitigation measures;	Request Contractor to critically	review the working methods;	Ensure remedial measures	are properly implemented	Assess the effectiveness of	the implemented mitigation	measures.															
ATE	z						2			က် —		4		ഹ																	
EVENT AND ACTION PLAN FOR WATER QUALITY EXCEEDANCE	ACTION	Contractor	1. Notify IEC and ER in writing;	within 24 hours of the	identification of the	•	Rectify unacceptable practice;	Check all plant and	equipment;	Consider changes of working	_	Submit the results of the	investigation to IEC and ER	within 3 working days of the	identification of an	exceedance	Discuss with ET, IEC and ER	and propose mitigation	measures to IEC and ER	within 4 working days of the	identification of an		7. Implement the agreed	mitigation measures within	reasonable time scale						
LN NT		_								-	-																				
EVE		ET Leader	1. Repeat in-situ measurement	-	Identify source(s) of impact;	Notify Contractor in writing	within 24 hours of	identification of the	exceedance	Check monitoring data, all	plant, equipment and	Contractor's working methods;	5. Carry out investigation	-	investigation to the Contractor	within 3 working days of	identification of exceedance	and advise contractor if	exceedance is due to	contractor's construction	works	7. Discuss mitigation measures	with IEC, ER and Contractor	within 4 working of	identification of an	exceedance	8. Ensure mitigation measures	are implemented;	Increase the monitoring	frequency to daily until no	exceedance of Limit Level.
			F			ر ی				4																					
Event			Limit level	being	exceeded by	one sampling	dav .	`		. .					·		-														

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Event		EVEN	ITA	ND ACTION PLAN FOR W	ATI	EVENT AND ACTION PLAN FOR WATER QUALITY EXCEEDANCE	Щ	
				ACTION	ž			
		ET Leader		Contractor		ER		IEC
imit I aval	-	Dongaf in-citu maasurament	-	Notify FR and IFC in writing	ļ	Notify EPD and other relevant		Check monitoring data
Lunu Level boing	-	to confirm finding:	-	within 24 hours of the	:	dovernmental agencies in		submitted by ET
uaniy evreeded hv	0	Identify source(s) of imnact:		identification of the		writing within 24 hours of	сі	Confirm ET assessment
exceeded by more than one	i e	Notify Contractor in writing		exceedance and		identification of exceedance		if exceedance is due /
concect tive	<u>;</u>	within 24 hours of	2.	Rectify unacceptable practice:	ы М	Discuss with IEC, ET and		not due to the works
sampling days		identification of the	က် 	Check all plant and		Contractor on the proposed		Discuss with ER, ET and
		exceedance		equipment;		mitigation measures;		Contractor on the
	V	Check monitoring data all	4	Consider changes of working	ભં	Request Contractor to critically		mitigation measures.
	÷	nant equipment and		methods:		review the working methods;	4.	Review proposals on
		Contractor's working methods	œ	Submit the results of the	0	Ensure remedial measures		mitigation measures
	Ľ		;	investigation to IEC and ER		are properly implemented		submitted by Contractor
	i c			within 3 working days of the	4	Assess the effectiveness of		and advise the ER
	5			identification of an		the implemented mitigation		accordingly.
		within 3 working days of		exceedance		measures;	പ്	Assess the effectiveness
		identification of exceedance	ີ່ດ	Discuss with ET. IEC and ER	ശ്	Consider and instruct, if		of the implemented
		and advise contractor if		and propose mitigation		necessary, the Contractor to		mitigation measures.
		exceedance is due to		measures to IEC and ER		slow down or to stop all or part		
		contractor's construction		within 4 working days;		of the marine work until no		
		works	<u>.</u>	Implement the agreed		exceedance of Limit Level.		
	~	Discuss mitigation measures		mitigation measures within				
		with IEC, ER and Contractor;		reasonable time scale				
•	ω̈́		7.	As directed by the Engineer,				
	•	are implemented;		to slow down or to stop all or				
	റ്			part of the marine work or				
		frequency to daily until no		construction actives.				
		exceedance of Limit Level for						
		two consecutive days.						

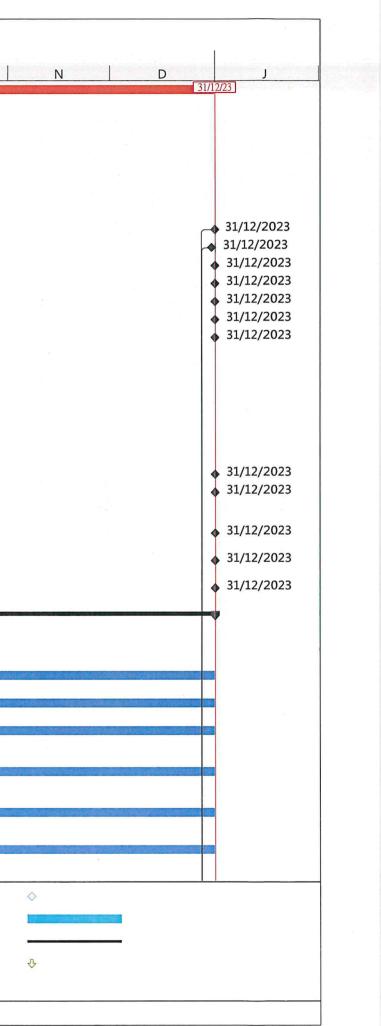
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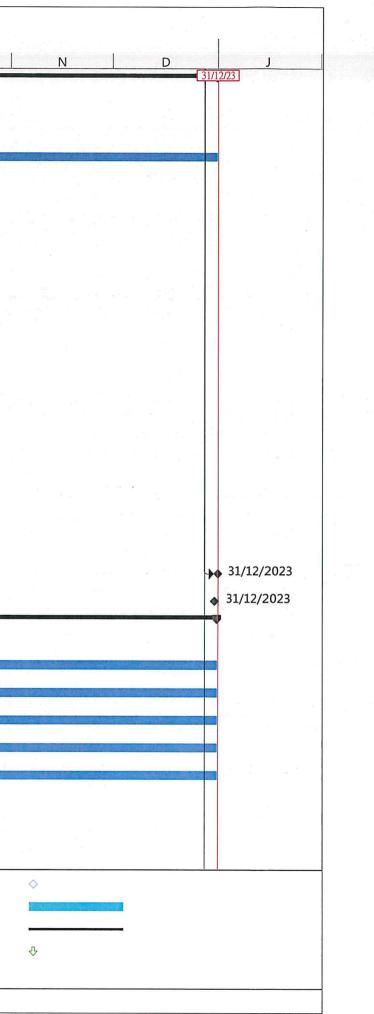
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Work Programme

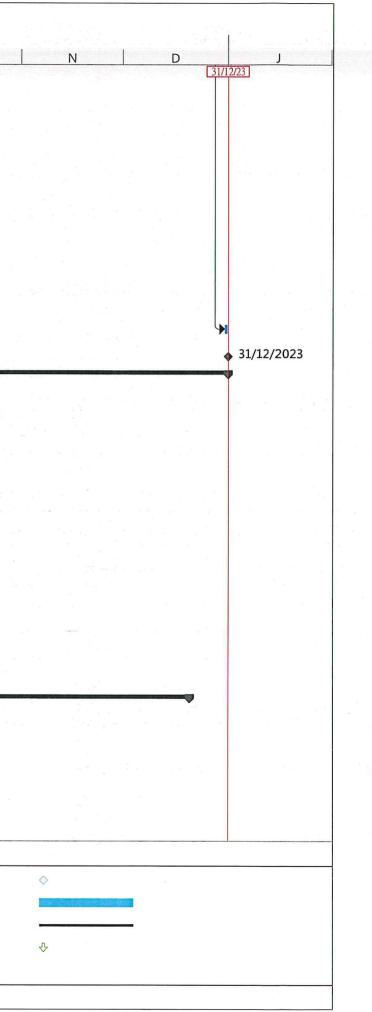
ID		Task Name		Baseline Start	Baseline Finish	Duration	Predec	risk allowa	Actual Start a	Actual Finish	% Complet			ł	Half 2, 1	2023
4 9 7	0		1	No. 19							1.1.1.1.1	А		S	Í	0
1		Contract duration of Contract CV/20		Sat 1/1/22	Sun 31/12/23				NA	NA	0%	And Spinstering and Spin	1/9/2	3		
2		Contract date,Date of the Letter of (assumed)	Acceptance	Mon 20/12/21	Mon 20/12/21	0 days			NA	NA	0%					
3		Starting Date of the Works		Sat 1/1/22	Sat 1/1/22	0 days			NA	NA	0%		-			
4	<u>n</u> Q	Starting Date of Section 1 of the Works	3	Sat 1/1/22	Sat 1/1/22	0 days			NA	NA	0%					
5	HE	Starting Date of Section 2 of the Works	3	Sat 1/1/22	Sat 1/1/22	0 days			NA	NA	0%					
6	HE	Starting Date of Section 3 of the Works	3	Sat 1/1/22	Sat 1/1/22	0 days	_		NA	NA	0%					2.1
7		Date for Completion of the Works		Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%					
8	H.	Completion Date of Section 1 of the W	orks	Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%					
9		Completion Date of Section 2 of the W	orks	Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%					
10	HE	Completion Date of Section 3 of the W	orks	Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%					
11		Planned completion dates		Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%					
12	TT I	Planned competion date of Section 1		Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%					
13	III	Planned competion date of Section 2		Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%					
14	n	Planned competion date of Section 3		Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%			2		
15		Access Date of the Site		Sat 1/1/22	Sat 1/1/22	0 days			NA	NA	0%					
16	-	Portion A2, A3a, A3b, A3c, A4, A5a, A (within 60 days after starting date)			Sat 1/1/22	0 days			Sat 1/1/22	Sat 1/1/22	100%					
17	_	Portion B1, B3, B6a, B6b and B7 (with date)			Sat 1/1/22	0 days			Sat 1/1/22	Sat 1/1/22	100%					
18	•	Portion A1. A7a, A7b, A7c1, A9, A9a a advance notice after starting date)		Sat 1/1/22	Sat 1/1/22	0 days			Sat 1/1/22	Sat 1/1/22	100%					
19	-	Portion B6c (7 day's advance notice af	ter starting date)	Sat 1/1/22	Sat 1/1/22	0 days	1916 823		Sat 1/1/22	Sat 1/1/22						
		Hand back of the Site	7-0 010 and 011 (an		Sun 31/12/23				NA	NA	0%					
21		Portion A2, A3a, A3b, A3c, A4, A5a, A at an earlier date notified by the Projec days' advance notice)		Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%					
22		Portion A1, A7b, A7c1, A9 and A9a (or notified by the Project Manager with 30) days' advance notice)	Sun 31/12/23	Sun 31/12/23	0 days		_	NA	NA	0%					
23		Portion B1, B3, B6a, B6b and B7 (or at notified by the Project Manager with 30) days' advance notice)		Sun 31/12/23				NA	NA	0%					
24		Portion B6c (or at an earlier date as no Manager with 30 days' advance notice)			Sun 31/12/23				NA	NA	0%					
25		Section 1 of the Works - Tseung Kw Bank		Sat 1/1/22	Sun 31/12/23				Sat 1/1/22	NA	80%					
26	~	Taking over the existing facilities at Area 137 Fill Bank within Portion A	of the Site	Sat 1/1/22 Sat 1/1/22	Sat 1/1/22	1 day	4SS	0	Sat 1/1/22 Sat 1/1/22	Sat 1/1/22	100% 86%			_		
		Operation of the the Tseung Kwan of within Portion A of the Site			Sun 31/12/23			0								
	<u>.</u> 2	Operation and maintenance of the s within Portion A of the Site		Sat 1/1/22	Sun 31/12/23				Sat 1/1/22	NA	86%					
29	<u>,</u> Q	Operation and maintenance of the e the Tseung Kwan O Area 137 Fill B the Site		Sat 1/1/22	Sun 31/12/23	730 days	2688	0	Sat 1/1/22	NA	86%					
30	-	Provision, operation and maintenan Plant at the Tseung Kwan O Area 1 Portion A of the Site	ce of the Crushing 37 Fill Bank within	Sat 1/1/22	Sun 31/12/23	730 days	26SS	0	Sat 1/1/22	NA	86%					
31	<u>1</u>	Operation and maintenance of the o Tseung Kwan O Area 137 Fill Bank	dewatering plant at the within portion A of the	Sat 1/1/22	Sun 31/12/23	730 days	26SS	0	Sat 1/1/22	NA	86%					
32	. C	Site. Collection and delivery of Public Fill Chai Wan and Mui Wo Barging Poir 137 Fill Bank within Portion A of the	nts to the TKO Area	Sat 1/1/22	Sun 31/12/23	730 days	26SS	0	Sat 1/1/22	NA	86%					
			Task			Externa	l Tasks	1			Duration-or	nly			Exte	rnal Tasks
			Split			Externa	l Milest	one	\diamond		Manual Sur	nmary Rollup	•		Exte	rnal Mileston
	3 month 2/09/202	n rolling Programme Oct 23 to Dec23 23]	Milestone	٠		Inactive					Manual Sur		٠			iress
			Summary			Inactive	e Summ	ary			Start-only				Dea	dline
			Project Summary	\bigtriangledown	\bigtriangledown	Manua		,	\diamond		Finish-only					
			,													



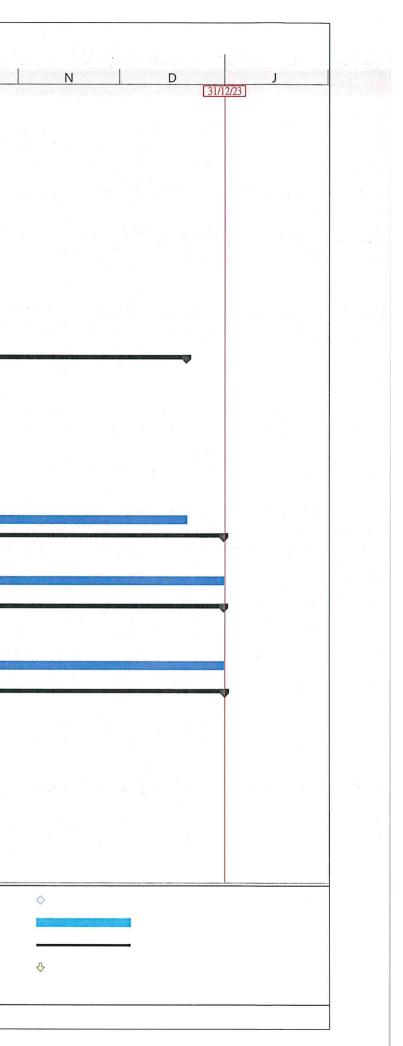
ID		Task Name		Baseline Start	Baseline Finish	Duration	Predeo	risk allowa	Actual Start	Actual Finish	% Complet [,]			F	lalf 2, 202	3
271	0			The second		1	No.		-	a states		А		S		0
33		Construction of Gabion wall		NA	NA	681 days	3		Sat 19/2/22		27%	and the spin of	1/9	0/23		
34	~	Preparing and submitting a meth approval		Sat 19/2/22	Fri 4/3/22	12 days		2	Sat 19/2/22		100%					
35	Var	Preparing and submitting the ma		Sat 5/3/22	Fri 18/3/22	12 days		2	Sat 19/2/22	Wed 2/3/22	100%					
36	~	Obtaining approval from the Pro	ject Manager	Sat 19/3/22	Fri 1/4/22	1 day	35,34	2	Tue 26/4/22	Tue 26/4/22	100%					
37	2	Construction of Gabion wall		Sat 2/4/22	Sun 31/12/23	546 days		7	Mon 4/7/22	NA	24%	and States to pass	Sec.3	Here was a second		
38	\checkmark	Re-surfacing of the access road		Mon 21/3/22	Fri 22/4/22	33 days			Mon 21/3/22	Fri 22/4/22	100%					
39	~	Submission of method statemer access road	t of re-surfacing the	Mon 21/3/22	Fri 25/3/22	5 days		0	Mon 21/3/22	Fri 25/3/22	100%					
40	~	Obtaining approval from the Pro	ject Manager	Thu 7/4/22	Thu 7/4/22	1 day	39	2	Thu 7/4/22	Thu 7/4/22	100%					
41	~	Milling off the existing pavement pavement on the access road	, overlaying new	Fri 15/4/22	Fri 22/4/22	8 days	40	1	Fri 15/4/22	Fri 22/4/22	100%					
42	~	PMI no.3 Trial Production of blan recycled from public fill	ket layer material	Tue 28/6/22	Wed 24/8/22	156 days			Tue 28/6/22	Wed 30/11/2	2 100%					
43	1	Submission of method statemer	t	Tue 28/6/22	Fri 29/7/22	32 days		1	Tue 28/6/22	Fri 29/7/22	100%			5 J V		
44	1	Obtaining approval from the Pro	ject Manager	Sat 30/7/22	Sat 20/8/22	1 day		2	Wed 17/8/22	Wed 17/8/22	100%					
45	1	Manufacturing and delivery of so		Fri 22/7/22	Thu 11/8/22	21 days		2		Thu 11/8/22						
46	V	Trial Production of blanket layer			Wed 24/8/22	R. D. D. D. D. C.		1	Mon 17/10/22	Wed 30/11/2						
47		PMI no.24 Implementation of C ea	asy system at TKOFB	Mon 22/8/22	Tue 27/12/22	94 days			Tue 30/8/22	NA	99%			n de la composición de		
48	.1	Submission of method statemer	t for approval	Mon 22/8/22	Sun 28/8/22	1 day			Tue 30/8/22	Tup 30/8/22	100%					
49	×	Obtaining approval from the Pro			Sun 18/9/22	1 day	48	2		Wed 31/8/22						
50	~	Ordering and delivery of C easy site			Wed 2/11/22		49	3		Thu 8/9/22	100%					
51	1	Installation of the C Easy system	า	Thu 3/11/22	Wed 16/11/22	19 days	50	2	Fri 9/9/22	Tue 27/9/22	100%					
52	1	Trail run of the system		1 10 1000 0000 0000 10 1000 1000 1 100	Wed 30/11/22		51	2		Wed 30/11/2						
53		Parallel run with the old system			Mon 26/12/22		52		Tue 22/11/22		95%					
54		Operation with C easy system in	dividually	Tue 27/12/22		1 day	53		Thu 1/12/22		95%				a	
55		Handing over the facilities at the Ts Fill Bank within Portion A of the Site	eung Kwan O Area 137		1		8SS	0	NA	NA	0%				ч 6 9	
56	III	Planned Completion Date (Section 1)		Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%			-		
57	H H	Section 2 of the Works - Tuen Mun A	Area 38 Fill Bank	Sat 1/1/22	Sun 31/12/23					NA	86%		No No Law		-	
58	V	Taking over the existing facilities at Fill Bank within Portion B of the Site		Sat 1/1/22	Sat 1/1/22	1 day	5SS	0		Sat 1/1/22	100%					
59	.	Operation of the Tuen Mun Area 38 B of the Site	Fill Bank within Portion	Sat 1/1/22	Sun 31/12/23	730 days	5SS	0	Sat 1/1/22	NA	86%				a francisca a statura	
	.	Operation and maintenance of the s within Portion B of the Site	-	Sat 1/1/22	Sun 31/12/23					NA	86%					
	<u>.</u>	Operation and maintenance of the e the Tuen Mun Area 38 Fill Bank with	hin Portion B of the Site		Sun 31/12/23					NA	86%					
62		Operation and Maintenance of the C Tuen Mun Area 38 Fill Bank within	Portion B of the Site	Gat 1/1/22	Sun 31/12/23	150 uays	000	0	Sat 1/1/22	NA	86%					Construction of
63		Operation and maintemnance of gla compartment at the Tuen Mun Area Portion B of the Site		Sat 1/1/22	Sun 31/12/23	730 days	5SS	0	Sat 1/1/22	NA	86%					
64	~	Portion B of the Site PMI no.05 Construction of vehicle facilities	e washing house	Wed 6/4/22	Fri 2/9/22	180 days			Wed 6/4/22	Sun 2/10/22	100%					
65	~	Submission of method statemen house facilities	t of vehicle washing	Wed 6/4/22	Wed 6/4/22	1 day		1	Wed 6/4/22	Wed 6/4/22	100%					
	1	Bacard of out of provide days considering the second second	Task			Externa	l Tasks				Duration-on	ly			External	Tasks
			Split			Externa	Milest	one	\diamond	1	Manual Sum	many Rollur	o 🔶		Fyternal	Milestone
		h rolling Programme Oct 23 to Dec23							-							
ate: [2	2/09/20	23]	Milestone	•		Inactive			L		Manual Sum	mary	•		Progress	5
			Summary		V	Inactive	Summ	ary	111111111		Start-only			and the second states and	Deadline	e
			Project Summary	\bigtriangledown	\bigtriangledown	Manual	Task		Ó	1	Finish-only					
			,,						<i>*</i>		in only			Ŷ		



ID	0	Task Name		Baseline Start	Baseline Finish	Duratior	Prede	cetime risk allow	Actual Start a	Actual Finish	% Complet				Half 2, 202	3
CC.	0	Obtaning approval from the Proj	oct Managor	Mon 25/4/22	Mon 25/4/22	1 day	65	2	Mon 25/4/22	Map 25/4/2	2 100%	Α	1/0/02	S		0
66	~	Fabrication and delivery of the v		Fri 10/6/22	Mon 8/8/22	70 days	00	2 5	Fri 10/6/22				1/9/23]		
67	× .	facilities materials on site					4									
68	\checkmark	Installation of the vehicle washin		Tue 9/8/22	Thu 1/9/22	17 days		2	Tue 13/9/22							
69	V ()	Trial run of vehicle washing hous	se facilities	Fri 2/9/22	Fri 2/9/22	1 day	68	0	Sun 2/10/22	Sun 2/10/22	2 100%					
70		PMI no.20 Implementation of C ea	asy system at TMFB	Mon 22/8/22	Tue 27/12/22	118 days			Wed 31/8/22	NA	97%					
71	~	Submission of method statemen	t for approval	Mon 22/8/22	Sun 28/8/22	1 day		1	Wed 31/8/22	Wed 31/8/2	2 100%					
72	~	Obtaining approval from the Pro	ject Manager	Mon 29/8/22	Sun 18/9/22	1 day	71	2	Thu 1/9/22	Thu 1/9/22	100%					
73	~	Ordering and delivery of C easy site	system hardware to	Mon 19/9/22	Wed 2/11/22	5 days	72	3	Sat 17/9/22	Wed 21/9/2	2 100%					
74	~	Installation of the C Easy system	ı	Thu 3/11/22	Wed 16/11/22	18 days	73	2	Thu 22/9/22	Sun 9/10/22	2 100%					
75	1	Trail run of the system		Thu 17/11/22	Wed 30/11/22	0 days	74	2	Tue 1/11/22	Thu 1/12/22	100%					
76	E.	Parallel run with the old system		Thu 1/12/22	Mon 26/12/22	26 days	75	2	Thu 1/12/22	NA	95%					
77		Operation with C easy system in	dividually	Tue 27/12/22	Sat 30/9/23	1 day	76	0	Thu 1/12/22	1 200	95%					
78		Handing over the facilities at the Tu Bank within Portion B of the Site to			Sun 31/12/23	1 day	9SS	0	NA	NA	0%					
79	HB	Planned Completion Date (Section 2)		Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%					
80		Section 3 of the Works - Designated the Mainland	Reclamation Sites in	Mon 20/12/21	Sun 31/12/23	755 days		1.1.1.2	Tue 7/12/21	NA	51%			and a subserver and a sub-		
81	~	Collection and delivery of 2 millio Fill by vessels from Tseung Kwar and the Tuen Mun Area 38 Fill Ba Reclamation Sites in the Mainlan	n O Area 137 Fill Bank nk to the Desiognated		Sun 31/12/23	442 days			Tue 7/12/21	Tue 21/2/23	8 100%					
82	1	1st and 2nd quarter of first yea	ar	Mon 20/12/21	Thu 31/3/22	190 days			Tue 7/12/21	Tue 14/6/22	100%		1 - 1 - 1			
90	1	3rd quarter of first year		Fri 20/5/22	Fri 30/9/22	168 days			Tue 28/12/	Mon 13/6/2	2 100%		·			
97	1	4th quarter of first year		Sat 20/8/22	Sat 31/12/22	71 days			Fri 22/7/22	Fri 30/9/22	100%		5			
104	1	1st quarter of second year		Sun 20/11/22		76 days			Thu 8/12/22				1. S. 2		s é la ses	
105	~	Submitting application docum application of dumping permi			Sun 18/12/22	the second second		0	Thu 8/12/22						- 	
106	~	Obtaining the dumping permi on 31/12/22)					105	2	Tue 7/2/23	Tue 7/2/23	100%					
107	~	Submiting Application docum for the application of the dum the sea		Sun 20/11/22	Sun 20/11/22	1 day		0	Thu 8/12/22	Thu 8/12/22	100%					
108	~	Obtaining the dumping perm Ecology and environment of t of China through the Employe	he People's Republic	Mon 21/11/22	Sat 31/12/22	1 day	107	14	Sat 4/2/23	Sat 4/2/23	100%					
109	~	Obtaining all necessary perm and concents		Sun 18/12/22	Sat 31/12/22	1 day		2	Tue 7/2/23	Tue 7/2/23	100%		-		N	
110	~	Collection and delivery of 250	0000 tonnes of Public F	Sun 1/1/23	Fri 31/3/23	14 days	103,109	9, 14	Wed 8/2/23	Tue 21/2/23	100%					
111		PMI no.60 for delivering the cumu exceeding 2 million tonnes under works		Sat 18/2/23	Sun 31/12/23	306 days			Sat 18/2/23	NA	83% 💻	in the second				
112	1	2nd quarter of second year		Sat 18/2/23	Fri 30/6/23	133 days			Sat 18/2/23	Fri 30/6/23	100%					
113	~	Submitting application docum application of dumping permit		Sat 18/3/23		1 day		0	Sat 18/3/23							
114	~	Obtaining the dumping permi on 31/3/23)	t from EPD (assumed		Fri 31/3/23	13 days	113	2	Sun 19/3/23		100%					
115	~	Submiting Application docum for the application of the dum the sea		Sat 18/2/23	Sat 18/2/23	1 day		0	Sat 18/2/23	Sat 18/2/23	100%		1		1.2 1.2 2	
			Task			Externa	l Tasks				Duration-only	/			External	Tasks
			Split			Externa	l Milest	tone	\diamond		Manual Sumr	nary Rollup	•		External	Milestone
	3 mont 2/09/20	th rolling Programme Oct 23 to Dec23 023]	Milestone	•		Inactive					Manual Sum		•		Progress	
			Summary			Inactive	Summ	nary	11111111	unnatio	Start-only		- Long the second second		Deadline	9
			Project Summary	\bigtriangledown	\bigtriangledown	Manua			\diamond		Finish-only		V			
										Page 3						



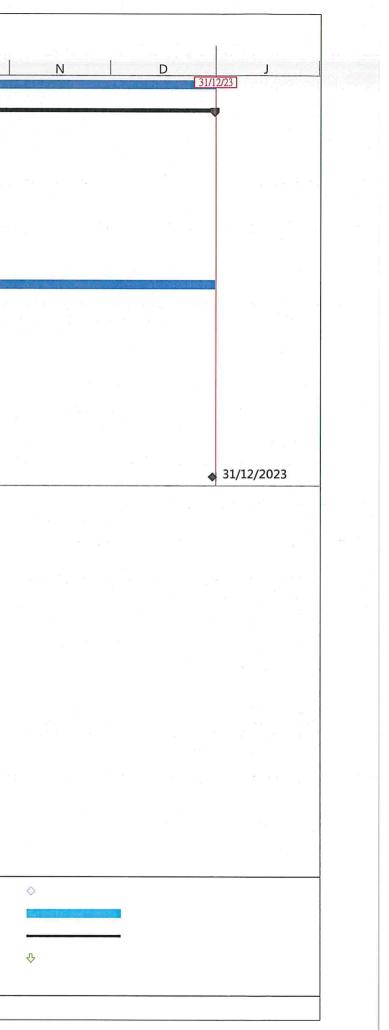
ID		Task Name		Baseline Start	Baseline Finish	Duration	Predec	etime risk allowa	Actual Start	Actual Finish	% Complet				Unit 2	2022
	0						and a	anowa		Section 1		А		S	Half 2,	2023 O
116	~	Obtaining the dumping perm Ecology and environment of of China through the Employ	the People's Republic	Sun 19/2/23	Fri 31/3/23	41 days	115	14	Sun 19/2/23	Fri 31/3/23	100%		1/9	0/23		
117	V	Obtaining all necessary perm and concents		Sat 18/3/23	Fri 31/3/23	14 days		2	Sat 18/3/23	Fri 31/3/23	100%					a o
118	1	Collection and delivery of Pul	olic Fill	Sat 1/4/23	Fri 30/6/23	91 days	110,114	, 14	Sat 1/4/23	Fri 30/6/23	100%					
119	V	3rd quarter of second year		Sat 20/5/23	Sat 30/9/23	103 days			Sat 20/5/23	Wed 30/8/23	100%					
120	V	Submitting application docun application of dumping permi		Sat 17/6/23	Sat 17/6/23	1 day		0	Thu 8/6/23	Thu 8/6/23	100%					
121	V	Obtaining the dumping permi on 30/6/23)		Sun 18/6/23	Fri 30/6/23	13 days	120	14	Fri 9/6/23	Wed 21/6/23	100%					
122	~	Submiting Application docum for the application of the dum the sea		Sat 20/5/23	Sat 20/5/23	1 day		0	Sat 20/5/23	Sat 20/5/23	100%					
123	~	Obtaining the dumping perm Ecology and environment of of China through the Employ	the People's Republic	Sun 21/5/23	Fri 30/6/23	41 days	122	14	Sun 21/5/23	Fri 30/6/23	100%					
124	V .	Obtaining all necessary perm and concents		Sat 17/6/23	Fri 30/6/23	14 days		2	Sat 17/6/23	Fri 30/6/23	100%					
125	~	Collection and delivery of Pul	olic Fill	Sat 1/7/23	Sat 30/9/23	61 days	118,124	, 14	Sat 1/7/23	Wed 30/8/23	100%					
126		4th quarter of second year		Sun 20/8/23	Sun 31/12/23	153 days			Fri 21/7/23	NA	21%					
127	~	Submitting application docum		Sun 17/9/23	Sun 17/9/23	1 day		0	Tue 1/8/23	Tue 1/8/23	100%					
128	1	application of dumping permi Obtaining the dumping permi		Mon 18/9/23	Sat 30/9/23	1 day	127	2	Thu 31/8/23	Thu 31/8/23	100%		4			
129	¥	Submiting Application docum for the application of the dum the sea	ents to the Employer	Sun 20/8/23		1 day		0		Fri 21/7/23	100%		•			
130	~	Obtaining the dumping perm Ecology and environment of of China through the Employ	he People's Republic	Mon 21/8/23	Thu 31/8/23	0 days	129	14	Wed 30/8/23	Wed 30/8/23	100%		•	30/8/2023		
131	V	Obtaining all necessary perm and concents		Mon 21/8/23	Thu 31/8/23	0 days		0	Thu 10/8/23	Wed 30/8/23	100%		•	30/8/2023	-	
132	-	Collection and delivery of Pul	olic Fill	Fri 1/9/23	Sun 31/12/23	80 days	125,131	, 14	Mon 2/10/23	NA	18%			1	1	
133		Removal, excavation and deposit and/or deposited Public Fill withi Reclamation Sites in the Mainlan	n the Designated	Sat 1/1/22	Sun 31/12/23	730 days	655		Sat 1/1/22	NA	86%					
134		Removal, excavation and depos and/or deposited public fill	ition of stockpiled	Sat 1/1/22	Sun 31/12/23	730 days		14	Sat 1/1/22	NA	86%					
135		Operation and maintenance of th channel and turning basins in as existing berthing facilituy at Zone Reclamation Sites in the Mainlan	sociation with the E of the Desiganted	Sat 1/1/22	Sun 31/12/23	730 days	6SS		Sat 1/1/22	NA	86%					
136	-	Operation and maintenance of th channel and turning basins	ne existing navigation	Sat 1/1/22	Sun 31/12/23	730 days		14	Sat 1/1/22	NA	86%				learn, Territor	
137		Design, construction, operation a the new navigation channel and t association with the new berthing the Designated Reclamation Sites (subject to Project's Manager's in	urning basins in g facility at Zone B of s in the Mainland	Sat 12/12/09	Sat 12/12/09	564 days			NA	NA	0%					
138		Obtaining the dumping permits Ecology and environment of the China through the Employer for on 31/12/21)	People's Republic of	Fri 31/12/21	Mon 31/1/22	1 day		0	NA	NA	0%					- 2
139	HH	Preparation of design submissio	n	Sat 1/1/22	Sun 30/1/22	30 days	138	7	NA	NA	0%					5
140		Obtaining all necessary design a	pprovals and concents	Mon 31/1/22	Tue 1/3/22	30 days	139	7	NA	NA	0%					219-18 1
141	HB	Construction of the new navigati basins	on channel and turning	Wed 2/3/22	Fri 29/7/22	150 days	140	14	NA	NA	0%					
142	HE	Obtaining the construction comp	letion certificate	Sat 30/7/22	Sun 28/8/22	30 days	141	7	NA	NA	0%				10 C	
			Task			Externa	l Tasks				Duration-on	ly			Exte	rnal Tasks
			Split			Externa	l Milesto	one	\diamond		Manual Sum	mary Rollup	•		Exte	rnal Milestone
	3 month 2/09/202	rolling Programme Oct 23 to Dec23	Milestone	٠		Inactive					Manual Sum		•		Prog	
			Summary			Inactive					Start-only	,				dline
			Project Summary	∇	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Manual		~')	۵. ا		Finish-only					
					•	·······································			-							



and the

ID	A	Task Name	Baseline Start	Baseline Finish	Duration	Predec	time risk allowa	Actual Start	Actual Finish	% Complet	-		2, 2023
143		Operation and maintenance of navigation channel and	Mon 20/8/22	Sun 31/12/23	321 dave	142	14	NA	NA	0%	A	S	0
145		turning basins	1011 23/0/22	0011 0 17 12/20	JZ T Udys	142	14	INA.		0 %	1/	9/23	
144		Design, construction, operation and maintenance of new berthing facilities at Zone B of the Designated Reclamation Sites in the Mainland (subject to Project's Manager's instruction)	Fri 31/12/21	Sun 31/12/23	564 days			NA	NA	0%			
145		Obtaining the dumping permits from Ministry of Ecology and environment of the People's Republic of China through the Employer for Zone A & B (assumed on 31/12/21)	Fri 31/12/21	Fri 31/12/21	1 day	-		NA	NA	0%			
146	H	Preparation of design submission	Sat 1/1/22	Sun 30/1/22	30 days	145	7	NA	NA	0%			
147	III	Obtaining all necessary design approvals and concents	Mon 31/1/22	Tue 1/3/22	30 days	146	7	NA	NA	0%			
148	HB	Construction of the berthing facilities	Wed 2/3/22	Sun 28/8/22	180 days	147	14	NA	NA	0%		- T. S.	
149		Obtaining the construction completion certificate	Mon 29/8/22	Tue 27/9/22	30 days	148	7	NA	NA	0%		1	
150		Operation and maintenance of new berthing facilities	Wed 28/9/22	Sun 31/12/23	293 days	149	14	NA	NA	0%			
151	H	Design and construction of seawalls (approximate 200m) in association with new berthing facility at Zone B of the Designated Reclamation Sites in the Mainland	Fri 10/6/22	Sat 4/2/23	181 days			NA	NA	0%			
152		Obtaining the permits from Ministry of Ecology and environment of the People's Republic of China through the Employer for Zone A & B	Sat 1/1/22	Sat 1/1/22	1 day		0	NA	NA	0%			
153	HI	Preparation of design submission (PMI no18)	Sun 2/1/22	Mon 31/1/22	30 days	152	7	NA	NA	0%			- 12 - 1 - 1
154		Obtaining all necessary design approvals and concents	Tue 1/2/22	Wed 2/3/22	30 days	153	7	NA	NA	0%			· · · · ·
155	Ħ	Construction of seawalls (subject to Project's Manager's instruction)	Thu 3/3/22	Tue 31/5/22	90 days	154	14	NA	NA	0%			
156		Obtaining the construction completion certificate (subject to Project's Manager's instruction)	Wed 1/6/22	Thu 30/6/22	30 days	155	7	NA	NA	0%			
157		Planned Completion Date (Section 3)	Sun 31/12/23	Sun 31/12/23	0 days			NA	NA	0%			

	Task		External Tasks		Duration-only		External Tasks
	Split		External Milestone	\diamond	Manual Summary Rollup	•	External Milestone
Project: 3 month rolling Programme Oct 23 to Dec23 Date: [22/09/2023]	Milestone	•	Inactive Milestone		Manual Summary	•	Progress
	Summary	₩	Inactive Summary		Start-only		Deadline
	Project Summary	\bigtriangledown \bigtriangledown	Manual Task	¢	Finish-only	÷	
				Page 5			





Η

Implementation Schedule of Environmental Mitigation Measures (EMIS)



Environmental Mitigation Implementation Schedule

				Implementa	ation Status	
	Environmental Protection Measures	Location	Implemented	Partially implemented	Not implemented	Not Applicable
Ai	Quality					
•	Dust control / mitigation measures shall be provided to prevent dust nuisance.	All areas		\checkmark		
•	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	\checkmark			
•	Water sprays shall be provided and used to dampen materials.	All areas	\checkmark			
•	Regular cleaning and watering the site shall be provided to minimize the fugitive dust emissions.	All areas	\checkmark			
•	All vehicles shall be restrict to a maximum speed of 10 km per hour.	All areas	\checkmark			
٠	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	\checkmark			
•	The designated site main haul rout shall be paved or regular watering.	All haul roads	\checkmark			
•	Frequent watering of work site shall be at least three times per day.	All areas	\checkmark			
•	Wheel washing facilities including high pressure water jet shall be provided at the entrance of work site.	Site Egress	\checkmark			
•	Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the fill bank.	Site Egress	\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.	All areas	\checkmark			
•	Final slope surfaces, especially those facing to the north of the site shall be treated by compaction, followed by hydroseeding, vegetation planting or sealing with shotconcrete, latex, vinyl, bitumen, or other suitable surface stabilizer approved by CEDD.	All areas	\checkmark			
•	When fill material is transfer by belt conveyor systems, the conveyors shall be enclosed on top and 2 sides.	C&DMSF	\checkmark			
•	The belt scraper shall be equipped with bottom plates or other similar means to prevent falling of material from the return belt.	C&DMFS	\checkmark			
•	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	\checkmark			
•	All plant and equipment should be well maintained e.g. without black smoke emission.		\checkmark			
No	ise 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	\checkmark			
•	Powered mechanical equipment (PME) should be covered or shielded by appropriate acoustic materials.	All areas	\checkmark			
•	Air compressors and hand held breakers should have noise labels.	All areas	\checkmark			
•	Machines and plants that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.	All areas	\checkmark			
•	Noisy equipment and mobile plant shall always be site away from NSRs.	All areas	\checkmark			



	Location	\ \	Implementa	ation Status	
Environmental Protection Measures		Implemented	Partially implemented	Not implemented	Not Applicable
Water 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	\checkmark			
 Temporary intercepting drains should be used at the stockpiling area to divert polluted stormwater to the intercepting channels. Earth bunds and sand bay barriers shall be used to assist the diversion of polluted stormwater to the intercepting channels. 	All areas	\checkmark			
 Manholes should be covered and sealed. 	All areas	\checkmark			
 Unnecessary water retained in receptacles and standing water should be avoided to prevent mosquito breeding. 	All areas		\checkmark		
• 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	\checkmark			
 A buffer distance of at least 20m shall be maintained between the boundary of the C&DMSF and the seafront. 	C&DMFS	\checkmark			
 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	\checkmark			
 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	\checkmark			
 Existing and newly constructed Catchpits, sand and silt removal facilities and intercepting channels shall be maintained, and the deposited silt and grit shall be removed weekly and on a need basis especially at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. 	All areas	\checkmark			
 A wheel washing bay shall be provided at the site exit and wash-water shall have sand and silt settled out or removed before being discharged into storm drains. 	Wheel Washing facility	\checkmark			
• The section of construction road between wheel washing bay and the public road shall be paved with concrete, bituminous materials or hardcores to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.	Wheel Washing facility	\checkmark			
 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	\checkmark			
 Oil intercept in addition of sand / silt removal facilities shall be provided at the car parking areas and work shop. 	All areas	\checkmark			
 Tipping halls enclosed with top and 3-side to prevent spillage of material into marine water. 	Barge Handling Area (BHA)	\checkmark			
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)	\checkmark			
 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)	\checkmark			
 Adequate environmental control measures shall be provided to prevent / avoid dropping of fill material into the sea during the transfer. 	Along the seafront	\checkmark			
 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)	\checkmark			
• 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	\checkmark			
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	\checkmark			



		Location		Implementa	tion Status	
	Environmental Protection Measures		Implemented	Partially implemented	Not implemented	Not Applicable
La	ndscape and Visual					
•	Construction of lighting to avoid spillage and glare	All areas	\checkmark			
•	Hydroseeding	Completed slopes	\checkmark			
•	Hoarding erection	Site boundary	\checkmark			
٠	Damage to surrounding area avoided	All areas	\checkmark			
O	her 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	\checkmark			
•	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		\checkmark		
٠	Bund chemical storage area to 110% capacity.	All areas	\checkmark			
٠	Prevent disposal of hazardous materials to air, soil and water body	All areas	\checkmark			
٠	Provide rubbish skips at all work areas	All areas	\checkmark			
•	Good site practices should be adopted to clean the rubbish and litter on a regular basis so as to prevent the rubbish and litter from dropping into the nearby environment.	All areas	\checkmark			
•	To encourage collection of aluminium cans by individual collectors, separate labelled bins should be provided to segregate this waste from other general refuse generated by the workforce.	All areas	\checkmark			



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

<u>t-test</u>

Group Name	Ν	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	6.9690	1.0690	0.3086
Quarterly Mean	37	0	3.5252	0.9825	0.1615

Result:

Difference between means = 3.4438 (95% CI : 2.7732 < Diff < 4.1143)

t-value of difference = 9.8872 (17 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 = >0.99The result of suspended solids in this reporting period is lower than that of 130% baseline.

Station: C1

<u>t-test</u>

Group Name	Ν	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	6.969	0.950	0.2742
Quarterly Mean	37	0	3.4577	0.7885	0.1296

Result:

Difference between means = 3.5113 (95% CI : 2.9572 < Diff < 4.0655)

t-value of difference = 11.5757 (16 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 = >0.99The 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

<u>t-test</u>

Group Name	Ν	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	6.897	1.449	0.4183
Quarterly Mean	37	0	3.6117	0.8547	0.1405

Result:

Difference between means = 3.2853 (95% CI : 2.6002 < Diff < 3.9704)

t-value of difference = 7.4453 (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 = >0.99The result of suspended solids in this reporting period is lower than that of 130% baseline.

Station: C1

<u>t-test</u>

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	6.933	1.045	0.3017
Quarterly Mean	37	0	3.6378	0.8751	0.1439

Result:

Difference between means = 3.2952 (95% CI : 2.6819 < Diff < 3.9085)

t-value of difference = 9.8595 (16 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 = >0.99The result of suspended solids in this reporting period is lower than that of 130% baseline.



12

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	Ν	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	4.1580	1.3670	0.3946
Quarterly Mean	37	0	3.7473	0.6991	0.1149

Result:

Difference between means = 0.4107 (95% CI : -0.1914 < Diff < 1.0128) t-value of difference = 0.9992 (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

<u>t-test</u>

Group Name	Ν	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	3.9020	1.1420	0.3297
Quarterly Mean	37	0	3.8185	0.7878	0.1295

Result:

Difference between means = 0.0835 (95% CI : -0.5069 < Diff < 0.6740) t-value of difference = 0.2358 (15 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 = >0.99The result of suspended solids in this reporting period is lower than that of 130% baseline.

Station: M5

<u>t-test</u>

Group Name	N	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	3.9360	1.4140	0.4082
Quarterly Mean	37	0	3.7131	0.6714	0.1104

Result:

Difference between means = 0.2229 (95% CI : -0.3797 < Diff < 0.8256) t-value of difference = 0.5272 (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.



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	37	0	3.8342	0.6222	0.1023

Result:

Difference between means = 0.4518 (95% CI : -0.1173 < Diff < 1.0208) t-value of difference = 1.1189 (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

<u>t-test</u>

Group Name	Ν	Missing	Mean	Std Dev	SE
130% Baseline Mean	12	0	4.0900	1.3250	0.3825
Quarterly Mean	37	0	3.7252	0.7735	0.1272

Result:

Difference between means = 0.3648 (95% CI : -0.2583 < Diff < 0.9878) t-value of difference = 0.9050 (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	Ν	Missing	Mean	Std D0ev	SE
130% Baseline Mean	12	0	3.7900	1.4650	0.4229
Quarterly Mean	37	0	3.7032	0.7106	0.1168

Result:

Difference between means =0.0868 (95% CI : -0.5433 < Diff < 0.7170) t-value of difference = 0.1979 (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

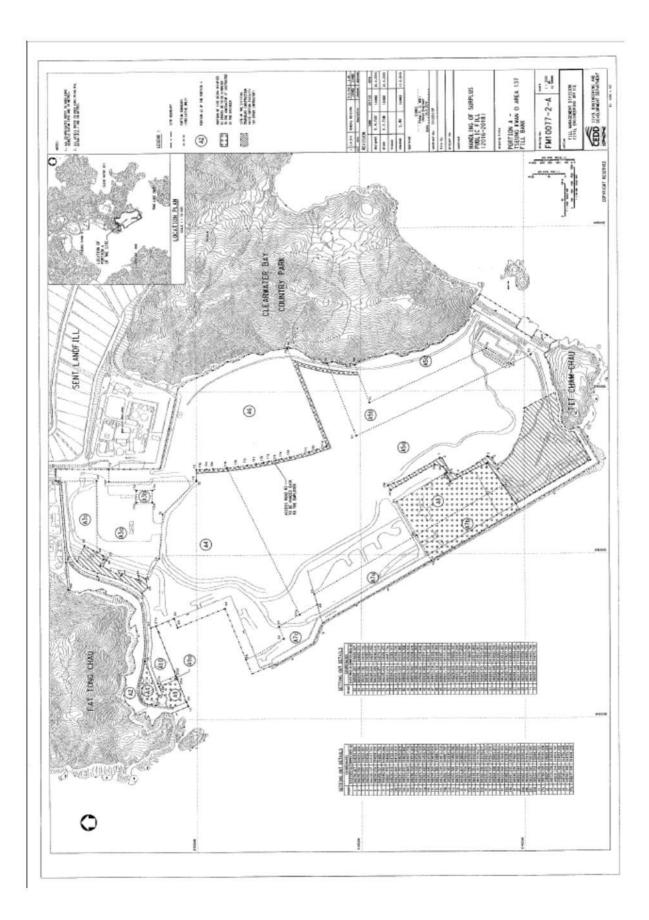
The result of suspended solids in this reporting period is lower than that of 130% baseline.



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Site General Layout plan







Κ

Weather Condition

Daily Extract of Meteorological Observ					ations,	October	2023 - 1	Seung Kw	
	Mean				Mean	Mean	Total	Prevailing	Mean
	Pressure	Ai	r Temperatı	ıre	Dew	Relative	Rainfall	Wind	Wind
	(hPa)				Point	Humidity	(mm)	Direction	Speed
Day	(III u)			.1 1 .			()		
		Absolute	Mean	Absolute	(deg. C)	(%)		(degrees)	(km/h)
		Daily	(deg.C)	Daily					
		Max		Min					
		(deg. C)		(deg. C)					
1	1009.8	34	30	28	25.4	77	-	90	10.5
2	1011.3	32.3	29.5	27.9	24.7	76	0.4	80	26.1
3	1010.6	31.4	29.3	27.7	25.1	78	Trace	90	11.5
4	1009	34.6	30.8	28.3	25.1	73	-	270	12.8
5	1007.3	34.1	30.5	28.5	21.4	58	-	350	27.2
6	1008.3	32.2	28.3	26.7	20.3	62	Trace	360	30.2
7	1008.1	27.2	25.1	23.5	20.2	74	1.9	350	48.8
8	1008.1	25.1	24.2	22.7	21.9	87	92.2	360	71.3
9	1013.2	25	24.5	23.4	23.4	94	369.7	60	48.3
10	1015.6	26.9	25.3	23.8	22.1	83	2.3	60	39.7
11	1016.9	29.2	25.6	23.7	20.7	75	-	10	25.3
12	1017.6	29.2	25.7	23.5	20.3	72	-	10	21
13	1015.5	30.2	26.7	24.8	20	67	-	10	18.7
14	1013.2	30	26.6	24.7	19.6	66	-	360	13.3
15	1013.3	29.9	26.9	25.1	21.4	72	0.1	70	21.6
16	1014.9	28.9	26.5	25.4	20.6	70	-	70	39.6
17	1015.4	28.2	25.8	24.5	17.7	61	Trace	60	47.7
18	1015.2	25.4	24.6	23.4	21.8	85	38.3	70	50.3
19	1014.7	26	25.3	24.6	23.7	91	27.9	80	32.8
20	1015.2	27.6	25.9	24.6	22.6	82	0.2	60	25.9
21	1018.4	25.4	23.3	22	18.8	76	Trace	10	32.1
22	1018.8	27.8	24.5	22.4	18.8	71	Trace	20	22.9
23	1017.4	29.4	26	23.8	21.5	77	Trace	70	25.5
24	1016.3	30.1	26.8	24.8	22.2	76	-	60	22.2
25	1015.5	29.7	26.6	25.3	22.8	80	-	60	18.7
26	1014.6	29.2	26.2	24.8	22.1	78	-	70	17.3
27	1014	29.6	26.6	24.9	23	81	-	70	14.5
28	1014.8	27.7	25.8	24.2	23.1	85	9.5	80	24.4
29	1016.1	27.1	25.3	24.1	21.3	79	3.5	80	30
30	1017.1	29.3	26.1	24.6	21.7	77	Trace	80	19.3
31	1018.4	28.6	25.8	24.1	19.9	70	-	80	29.5

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

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

Daily		JI WIELEC	loiogical	Observa	10115,1	ovenibe	2023 -	i seung K	
	Mean				Mean	Mean	Total	Prevailing	Mean
	Pressure	Ai	ir Temperatu	ıre	Dew	Relative	Rainfall	Wind	Wind
	(hPa)				Point	Humidity	(mm)	Direction	Speed
Day	(111 4)	.1 1 .	24				()		
5		Absolute	Mean	Absolute	(deg. C)	(%)		(degrees)	(km/h)
		Daily	(deg.C)	Daily					
		Max		Min					
		(deg. C)		(deg. C)					
1	1017.7	29.1	25.8	23.6	19.7	70	-	70	27.8
2	1015.5	28.4	25.8	24.4	21	75	-	70	19.5
3	1013.6	29.1	26	24.3	21.7	78	-	80	13.8
4	1013.9	29.4	26.3	24.7	21.8	76	-	70	15.2
5	1014.4	30.1	26.7	25	22.1	77	-	50	12.3
6	1015.1	30.7	27.6	25.3	20.3	65	-	10	15.5
7	1016.5	26.8	25.9	25.3	19.9	70	-	70	36
8	1015.8	26	25.2	24.7	20.8	77	-	80	35.1
9	1015.4	27.3	25.7	24.8	22.2	81	Trace	70	29.6
10	1016	29.3	26.9	25.6	23.5	82	-	70	19.2
11	1017.7	26.5	25.3	24.8	22.6	85	2.5	80	39.2
12	1020.2	26.6	24	22	19.5	77	0.6	10	30.5
13	1022.7	25.2	22	20.3	15.6	67	-	360	28.5
14	1022.6	23.9	20.8	18.9	15.2	70	-	10	19.9
15	1021.7	25.2	22.8	20.7	17.2	71	-	70	32.4
16	1023.6	24	21.5	17.3	14.4	65	-	360	35
17	1023.9	21.9	18.8	15.6	3.5	37	-	360	41.2
18	1022.9	23	19.5	16.6	6.2	42	-	360	24.2
19	1020.9	23.3	20.5	18.5	12.3	59	-	70	14.3
20	1019.4	24.6	21.3	19	14.2	65	-	60	18
21	1017.5	24.6	22	20.3	16.1	70	-	80	24
22	1016.3	25.7	22.6	20.5	17.4	73	-	80	14.4
23	1016.4	26.3	23	20.5	17.9	74	-	10	6.4
24	1019.6	25	22.9	21.5	16.3	67	-	70	42.8
25	1021	24.3	21.9	20	15.1	66	-	70	41
26	1020.1	25.3	22.1	19.8	15.8	68	-	60	21
27	1018.1	26.7	23	20.2	16.4	68	-	10	6
28	1018.7	25.4	22.8	20.2	14.9	61	Trace	70	27.7
29	1018.7	24	22.7	21.2	17.6	73	0.2	70	30.7
30	1019.9	26	23.8	21.9	18.6	73	-	70	25.4

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

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

Dally Extract of Meteorological Observa						2023			
	Mean				Mean	Mean	Total	Prevailing	Mean
	Pressure	Ai	r Temperatu	ıre	Dew	Relative	Rainfall	Wind	Wind
	(hPa)				Point	Humidity	(mm)	Direction	Speed
Day		Absolute	Mean	Absolute	(deg. C)	(%)		(degrees)	(km/h)
		Daily	(deg.C)	Daily					
		Max	(acg.c)	Min					
		(deg. C)		(deg. C)					
1	1021.5	23.2	21.5	19.6	15.5	69	-	10	30
2	1021.7	21.5	20	18.2	14.4	70	-	70	22.2
3	1020.4	23.3	21.4	20.1	16.4	73	Trace	70	23.4
4	1017.2	24.4	21.9	20.5	17.3	76	Trace	80	10.9
5	1015.6	24.1	21.7	19.7	16.7	73	-	360	5.8
6	1017.6	22.5	21.5	19.9	14.7	67	Trace	360	18.5
7	1017.8	25.1	21	18.4	9.1	47	-	360	19.8
8	1016.7	24	21.4	19.2	15.1	68	-	70	17.6
9	1014.6	24.9	22.9	21.6	19.3	80	-	60	14.9
10	1013.8	26.3	23.9	22.5	20.1	80	Trace	50	14.2
11	1014.6	27.3	24.2	22.3	21.5	85	0.3	40	5.1
12	1016.2	28.7	24.7	22.3	20.9	80	0.3	80	12.4
13	1019.4	23.2	22.3	21.6	19.1	82	Trace	70	31.8
14	1018.7	24.6	23.1	21.7	19.6	81	Trace	60	21.5
15	1016.3	26.9	24.4	23.2	20.9	81	-	50	12
16	1020.5	23.9	18.9	13.5	13.4	71	0.1	360	32.7
17	1024.9	15.2	13.4	11.4	7.9	69	-	10	30.8
18	1022.1	19	17.3	14.8	13.7	80	Trace	40	29
19	1021.2	19	16.8	14.7	12.4	75	-	350	22.2
20	1023.3	15.6	13.6	10.8	7.1	65	-	350	34.9
21	1027.1	12.3	10.9	9.8	4.6	65	-	350	39.8
22	1030.1	12.3	10.5	8.6	0.9	51	-	360	33
23	1029.9	13.3	11	8.1	2.9	58	0.2	360	30.3
24	1028.6	16.5	13.3	10.1	3.6	52	-	360	26.9
25	1026.7	18.2	14.9	12.1	4.8	51	-	360	24.8
26	1025.2	19.6	16.6	14.5	9.4	63	-	60	23.4
27	1024	21.8	18.7	16.6	11.1	62	Trace	40	16.4
28	1022.3	23.6	20.1	18.2	15	73	Trace	50	21.8
29	1021.1	21	19.4	18.3	15.7	79	-	60	29.5
30	1018.3	23	20.7	18.3	15	70	Trace	40	8.2
31	1018	25.7	21.8	19	16.7	73	-	40	8.4

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

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



Figures

