MTR Corporation Limited

Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works

Monthly EM&A Report

(June 2024)

Verified by:	Adi Lee
Position: <u>Indeper</u>	ndent Environmental Checker
Date:	12 July 2024

MTR Corporation Limited

Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works

Monthly EM&A Report

(June 2024)

Certified by:	Edan Li Jam
Position:	Environmental Team Leader
Date:	12 July 2024

Table of Contents

		Page
1	INTRO	DUCTION1
	1.1 1.2 1.3	Background
2	ENVIR	ONMENTAL MONITORING AND AUDIT2
	2.1	EM&A Results
3	IMPLE!	MENTATION STATUS ON THE ENVIRONMENTAL PROTECTION REQUIREMENTS
List of	Tables	
Table 1.1 Table 2.1 Table 2.2 Table 2.3		Summary of Awarded Works Contracts Summary of Major Construction Activities in the Reporting Period Summary of 1-Hour TSP Monitoring Results in the Reporting Period Log for Environmental Complaints, Notification of Summons and Successful Prosecutions for the Reporting Month
Table 3	3.1	Summary of EP Submissions Status
List of	Append	lices
Append	dix A	Monthly EM&A Report for June 2024 - Oyster Bay Station and Associated Works Contract 1701
Append	dix B	Monthly EM&A Report for June 2024 – Trial Piles And Site Formation for Siu Ho Wan Depot Property Development – Phase 1 Contract 1731
Append	dix C	Monthly EM&A Report for June 2024 – Cable Bridges and Associated Civil Works for Cable Diversion Works Contract 1732
Append	dix D	Monthly EM&A Report for June 2024 – Vehicular Access Bridge, Demolition of Paint Shop and Construction of EV Stabling Tracks Works Contract 1733

1 INTRODUCTION

1.1 Background

- 1.1.1 MTR Corporation Limited (MTRCL) had commenced a study to formulate a technically feasible development scheme for the Proposed Comprehensive Residential and Commercial Development atop Siu Ho Wan Depot (hereinafter referred to the "Oyster Bay (OYB) Property Development") to optimize housing supply. To facilitate the construction of the OYB Property Development, railway related works would be required. The existing Siu Ho Wan Depot (SHD) will undergo replanning works to make room for the phased construction of the OYB Property Development, while maintenance and supporting services to the existing Tung Chung Line (TCL), Airport Express Line (AEL) and Disneyland Resort Line (DRL) should be maintained without causing disruption to the normal operation. A new Oyster Bay (OYB) Station (formerly named as Siu Ho Wan Station (SHO)) has also been proposed along the TCL tracks to meet transport needs of the OYB Property Development and enable building of a sustainable community.
- 1.1.2 The Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-214/2017) for the SHO and SHD Replanning Works (hereafter referred to as the "Project") was approved on 29 November 2017 under the Environmental Impact Assessment Ordinance (EIAO). Following the approval of the EIA Report, an Environmental Permit (EP) was granted on 22 March 2021 (EP No: EP-588/2021) for the construction and operation of the Project.

1.2 Project Programme

1.2.1 Four civil construction works contracts of the Project have been awarded since December 2021. The construction of the Project commenced in December 2021. Works contracts 1731, 1732 and 1733 are expected to complete in 2024, while works contract 1701 is expected to complete in 2030. **Table 1.1** summarises the information of the awarded Works Contracts.

Table 1.1 Summary of Awarded Works Contracts

Table I.I	Outilitially Of Awa	ilaca Holing O	oriti aoto	
Works Contract	Description	Construction Start Date	Contractor	Environmental Team
1701	Oyster Bay Station and Associated Works	April 2024	China State Construction Engineering (HK) Ltd.	Aurecon Hong Kong Ltd.
1731	Trial Piles and Site Formation for Siu Ho Wan Depot Property Development – Phase 1	January 2023	Gammon Construction Ltd.	WSP (Asia) Ltd.
1732	Cable bridges and associated civil works for cable diversion	December 2021	Paul Y – CRCCI JV	Acuity Sustainability Consulting Ltd.
1733	Vehicular Access Bridge, Demolition of Paint Shop and Construction of EV Stabling Tracks	April 2022	Build King Civil Engineering Ltd.	SGS Hong Kong Ltd.

1.3 Purpose of the Report

1.3.1 The Environmental Monitoring and Audit (EM&A) programme for the Project commenced in December 2021. This is the thirty-first EM&A Report for the Project which summarises the EM&A works undertaken by the respective Contractor's ETs during the period from 1 to 30 June 2024.

1

2 ENVIRONMENTAL MONITORING AND AUDIT

2.1 EM&A Results

- 2.1.1 The EM&A Report for Works Contract 1701, 1731, 1732 and 1733 prepared by the Contractor's ET are provided in **Appendices A** to **D**. The EM&A Report provides details of the project information, EM&A requirements, impact monitoring and audit results for the Contract.
- 2.1.2 A summary of the major construction activities undertaken by the Contractor of Works Contract during the reporting period is presented in **Table 2.1**.

Table 2.1 Summary of Major Construction Activities in the Reporting Period

Works Contract	Site	Construction Activities
1701	Overall	I&M installation along mainline and test track Trial pit and predrilling works in W11, W12 Project Manager Office: Underground utilities (UU) diversion and drainage works Underfloor Wheel Lathe (UFWL): sheet pile installation
1731	Overall	Site Clearance & Hoarding Pre-drilling Works Bored Piling Works
1732	Overall	 Instrumentation monitoring (cable bridges, EVA road for concerning pavements between trackside) Draw pits, cable ducts and cable trough works at depot EVA construction and watermain installation Additional footings and civil works at test track and east level crossing Cable containments at the footing for cable diversion Cable bridge E&M works, and outstanding steel works (under Els)
1733	Overall	 Concrete road construction Movement joints construction Steel member installation U-channel drainage construction Site Formation Work Site Clearance

2.1.3 During the reporting period, impact monitoring for air quality was conducted in accordance with the EM&A Manual. No exceedances of the Action / Limit Level of 1-hour TSP due to the Project construction were recorded. Results of air quality is summarised in **Table 2.2**. Details of the monitoring requirements, locations, equipment and methodology are presented in **Appendices A** to **D** of this Report.

Table 2.2 Summary of 1-Hour TSP Monitoring Results in the Reporting Period

Monitoring Station ID	Location	TSP Concentration (µg/m³)	Action Level (µg/m³)	Limit Level (µg/m³)	Exceedance due to the Project Construction (Yes/No)
Works Contrac	et 1701, 1731, 1732	2 & 1733			
DM1	Siu Ho Wan Government Maintenance Depot	3.0 – 36.0	294.7	500	No

2.1.4 No environmental complaints, notification of summons and successful prosecutions were recorded in the reporting period. Log for environmental complaints, notification of summons and successful prosecutions is provided in **Table 2.3**.

Table 2.3 Log for Environmental Complaints, Notification of Summons and Successful Prosecutions for the Reporting Month

Works Contract	Environmental Complaints	Notification of Summons	Successful Prosecutions
1701	0	0	0
1731	0	0	0
1732	0	0	0
1733	0	0	0

2.1.5 Regular site inspections were conducted by the Contractor's ET on a weekly basis and IEC audits on a monthly basis to check the implementation of environmental pollution control and mitigation measures for the Project. No non-conformance was identified in the reporting period.

3 IMPLEMENTATION STATUS ON THE ENVIRONMENTAL PROTECTION REQUIREMENTS

3.1.1 The Contractor has implemented all mitigation measures and requirements as stated in the EIA Report, EM&A Manual and EP (EP No: EP-588/2021). The status of required submissions under the EP as of the reporting period are summarised in **Table 3.1**.

Table 3.1 Summary of EP Submissions Status

EP Condition (EP-588/2021)	Submission	Submission date
(LF-300/2021)	Commencement Date of Construction	11 Jun 2021 (1 st submission)
Condition 1.12	Commencement Bate of Constitution	12 Jul 2021 (1 nd submission)
		12 Aug 2021 (3 rd submission)
	Construction Works Phasing Schedule	1 Nov 2021 (1 st Submission)
	Proposal	20 Dec 2021 (2 nd Submission)
		29 Dec 2021 (Deposited)
Condition 2.7		9 October 2023 (1st
		Submission with updated
		Phase 1 works) 30 Nov 2023 (Deposited)
	Environmental Permit Submission Schedule	12 Aug 2021
Condition 2.8	Livilorimental i emitt Submission Schedule	10 Sep 2021 (Deposited)
	Management Organization	1 Nov 2021 (1 st Submission)
		20 Dec 2021 (2 nd Submission)
		21 Mar 2022 (3 rd Submission)
Condition 2.9		9 Aug 2022 (4 th Submission)
		16 Nov 2022 (5 th Submission)
		18 Sep 2023 (6 th submission)
	Construction Noise Mitigation Plan	22 Jan 2024 (7 th Submission) 1 Nov 2021 (1 st Submission)
	Construction Noise Willigation Flair	20 Dec 2021 (2 nd Submission)
		28 Dec 2021 (Deposited)
		30 Dec 2022 (1st Submission
		which covered Phase 1 main
		works)
		29 Mar 2023 (2 nd Submission
		which covered Phase 1 main
		works)
Canditian 0.40		18 May 2023 (3 rd Submission which covered Phase 1 main
Condition 2.10		works)
		28 Jul 2023 (4 th Submission for
		Phase 1 works)
		30 Oct 2023 (5 th Submission
		for Phase 1 works)
		6 Dec 2023 (6 th Submission for
		Phase 1 works)
		8 Dec 2023 (Deposited) 21 June 2024 (7 th Submission
		for Phase 1 works)
	Noise Mitigation Plan	31 Mar 2023 (1st submission)
		31 Jul 2023 (2 nd submission)
Condition 2.11		20 Oct 2023 (3rd submission)
		7 March 2024 (4 th submission)
		18 March 2024 (Approved)
	Waste Management Plan	1 Nov 2021 (1st Submission)
		20 Dec 2021 (2 nd Submission)
		28 Dec 2021 (Deposited) 30 Jun 2023 (1st Submission
Condition 2.13		for Phase 1 work)
00110110112110		1 Aug 2023 (2 nd Submission
		for Phase 1 works)
		31 Aug 2023 (Deposited for
		Phase 1 works)
Condition 2.15	Landscape and Visual Plan(s)	27 Apr 2023 (1 st Submission)

EP Condition (EP-588/2021)	Submission	Submission date
		27 Jul 2023 (2 nd Submission)
		20 Oct 2023 (3 rd Submission)
		8 Dec 2023 (Approved)
Condition 3.3	Baseline Monitoring Report	1 Nov 2021
Condition 3.3	-	16 Nov 2021 (Deposited)
	Monthly EM&A Report No.30 (May 2024)	Submitted within 10 working
Condition 3.4		days after the end of the
		reporting month
	Dedicated Internet Website	12 Jan 2022
Condition 4.2		25 Jul 2023 (update address)
		14 Mar 2024 (update address)

Appendix A

Monthly EM&A Report for June 2024 Oyster Bay Station and Associated Works Contract 1701



MTR Corporation Limited

Contract 1701

Siu Ho Wan Depot Property Development Oyster Bay Station and Associated Works

Monthly EM&A Report (June 2024) (Version 2.0)

	Name	Post	Signature	Date
Prepared by:	Jack Chow	Contractor's Environmental Team Member	Jack	10 July 2024
Checked and Certified by:	F. C. Tsang	Contractor's Environmental Team Leader	Toang Faulbearg	10 July 2024

Contents

E	XECUTIVE SUMMARY	1
1	XECUTIVE SUMMARYINTRODUCTION	3
2	PROJECT INFORMATION	4
	Background	4
3	ENVIRONMENTAL STATUS	7
4	MONITORING RESULTS	9
	Air Quality Monitoring	Ç
	Monitoring Equipment and Methodology	Ç
	Result Summary	10
	Air Quality Monitoring	10
5	SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS	
	ENVIRONMENTAL SITE INSPECTION AND AUDIT	
7	FUTURE KEY ISSUES	14
8	CONCLUSION AND RECOMMENDATIONS	15
	Conclusion	15
	Recommendations	15

Appendices

Appendix A	Construction Programme
Appendix B	Calibration Certificates (Air Quality Monitoring Equipment)
Appendix C	Monitoring Data (Air Quality Monitoring)
Appendix D	Waste Flow Table
Appendix E	Complaint Handling Procedure
Appendix F	Event-Action Plan (Air Quality Monitoring)
Appendix G	Statistics on Complaint, Notification of Summons and Successful Prosecution
Appendix H	Environmental Mitigation Implementation Schedule (EMIS)
Appendix I	Monitoring Schedule of the Reporting Month
Appendix J	Monitoring Schedule of the Coming Month
Figures	
Figure 1	Alignment and Works Area for Contract No. 1701
Figure 2	Location Plan of Air Quality Monitoring Station
Figure 3	Project Organization Chart
Tables	
Table 1.1	Summary of the construction activities reported by Main Contractor during the Reporting Month
Table 1.2	Summary of the Status of Valid Environmental License Notification, Permit and Documentations
Table 2.1	Summary of Status of Required Submission for EP-588/2021 for the Project
Table 2.2	Summary of the location of the monitoring station
Table 3.1	Construction Dust Monitoring Equipment
Table 3.2	Construction Dust Monitoring Location
Table 3.3	Summary of 1-hour TSP Monitoring Results
Table 3.4	Quantities of waste generated from the Project
Table 5.1	Site Observations

EXECUTIVE SUMMARY

- A.1 Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works Contract 1701 Siu Ho Wan Depot Property Development for Oyster Bay Station and Associated Works (hereafter called "Contract 1701") covers the Oyster Bay Station (OYB) (formerly named as Siu Ho Wan Station (SHO)) and Siu Ho Wan Depot Replanning Works.
- A.2 To facilitate the construction of the Siu Ho Wan Depot (SHD) Property Development, railway related works would be required. The existing SHD will undergo replanning works to make room for the phased construction of the SHD Property Development, while maintenance and supporting services to the existing Tung Chung Line (TCL), Airport Express Line (AEL) and Disneyland Resort Line (DRL) should be maintained without causing disruption to the normal operation. A new OYB Station has also been proposed along the TCL tracks to meet transport needs of the SHD Property Development and enable building of a sustainable community.
- A.3 The Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-214/2017) for the SHO and SHD Replanning Works (hereafter referred to as the "Project") was approved on 29 November 2017 under the Environmental Impact Assessment Ordinance (EIAO). Following the approval of the EIA Report, an Environmental Permit (EP) was granted on 22 March 2021 (EP No: EP-588/2021) for the construction and operation of the Project.
- A.4 This is the 3rd monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the reporting period from 1 to 30 June 2024.
- A.5 A summary of the construction works reported by the *Contractor* for the Project during the reporting month is listed below.

Construction Activities to be undertaken

- I&M installation along mainline and test track;
- Trial pit and predrilling works in W11, W12;
- Project Manager Office: Underground utilities (UU) diversion and drainage works; and
- Underfloor Wheel Lathe (UFWL): sheet pile installation.
- A.6 A summary of regular construction dust monitoring activities in this reporting period is listed below:

Construction dust (1-hour TSP) monitoring DM1 18 times

- A.7 Weekly environmental site inspections were conducted during the reporting period. Four site inspections were carried out on 03, 11, 17 and 24 June 2024. One joint site inspection with the IEC was also undertaken on 11 June 2024. All items are rectified within the reporting period. The environmental performance of the Project was considered satisfactory.
- A.8 Details of waste management are presented in **Section 3**.

Breaches of Action Level and Limit Level for Air Quality

A.9 No Action Level or Limit Level exceedance of 1-hour TSP was recorded during the reporting period.

Complaint, Notification of Summons and Successful Prosecution

A.10 No Complaint, Notification of Summons or Successful Prosecution was recorded in the reporting month.

Reporting Changes

- A.11 No changes of EM&A programme were made in this reporting period.
- A.12 A summary of the construction activities provided by the Main Contractor in the next three reporting months are listed below:

Construction Activities to be undertaken

- Continue site clearance, underground utility detection and diversion, instrumentation & monitoring, trial pit, predrilling works at site;
- Installation of fencing and hoarding, sheet pile and bored pile; and
- Excavation and lateral support (ELS) and reinforced concrete (RC) works for Underfloor Wheel Lathe (UFWL).
- A.13 Potential environmental impacts arising from the above construction activities are mainly associated with construction dust, construction noise, water quality and waste management.

1 INTRODUCTION

1.1 China State Construction Engineering (Hong Kong) Limited was commissioned by the MTR Corporation (MTRC) as the Contractor for Service Contract 1701. Aurecon Hong Kong Limited (Aurecon) was appointed by China State Construction Engineering (Hong Kong) Limited as the *Contractor's* Environmental Team to undertake the Environmental Monitoring and Audit (EM&A) programme during the construction phase of the project.

Propose of the Report

1.2 This is the 3rd monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the reporting period from 1 to 30 June 2024.

Report Structure

- 1.3 The monthly EM&A Report is organized as follows:
 - Section 1: Introduction
 - Section 2: Project Information
 - Section 3: Environmental Status
 - Section 4: Monitoring Results
 - Section 5: Summary of Complaints, Notification or Summons and Prosecutions
 - Section 6: Environmental Site Inspection and Audit
 - Section 7: Future Key Issues
 - Section 8: Conclusions and Recommendations

2 PROJECT INFORMATION

Background

- 2.1 The Siu Ho Wan Depot (SHD) Property Development is envisaged as a multi-phases scheme to reconfigure the existing Depot and construct a roof deck above the Depot for topside development including foundation and structure, with associated building services and E&M systems and enabling works for depot migration and topside development.
- 2.2 A new above ground station with side platforms alongside the live running track of Tung Chung Line (TCL) is required. The Oyster Bay Station (OYB), formerly Siu Ho Wan Station (SHO), is to serve the future Siu Ho Wan topside development and the wider population within the nearby reclamation area development.
- 2.3 Track modification works to the Airport Express Link (AEL) and TCL in the form of a 2 to 4 bifurcation is required to accommodate the new station.
- 2.4 The existing Siu Ho Wan Depot (SHD) operations must be maintained to provide continuous uninterrupted maintenance to the running lines (including Tung Chung Line, Airport Express Line and Disneyland Resort Line), stabling and operational services during the phased migration schemes.
- 2.5 The "Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works" Environmental Impact Assessment Report (EIAO Register No. AEIAR-214/2017) was approved with conditions by the Environmental Protection Department (EPD) on 29 November 2017. The latest Environmental Permit (No. EP-588/2021) was issued by the EPD on 22 March 2021.
- 2.6 The Contract 1701 Siu Ho Wan Depot Property Development Oyster Bay Station and Associated Works was awarded to China State Construction Engineering (Hong Kong) Limited. China State Construction Engineering (Hong Kong) Limited has engaged Aurecon Hong Kong Limited as the Environmental Team (ET) to provide EM&A services for this contract.

General Description of the Project

- 2.7 The Project covers the following construction activities:
 - i. Civil and structural works for the Oyster Bay Station (OYB) excluding the property enabling works supporting the northern platform and concourse area;
 - ii. Link bridges and structures spanning between the OYB northern and southern concourse:
 - iii. Building services for the whole OYB, comprising fire services, mechanical ventilation, electrical and plumbing services, above ground drainage services and associated control system;
 - iv. Architectural Builders' Works and Finishes (ABWF) for the whole OYB, including supply and installation of common station components, sign and advertising panels; Information Corner; metal doors and ironmongeries, etc.;
 - v. Civil and structural works, including placement of bottom ballast and associated formation, Overhead Line (OHL) masts/ portals and associated foundation and cross station beams, for the Tung Chung Line 4-tracking bifurcation works;

- vi. Civil and BS provisions, trackwork and associated formation, OHL masts and associated foundation for the temporary Underfloor Wheel Lathe (UFWL);
- vii. Civil and structural works, including trackwork and associated formation, OHL masts/portals and associated foundation for existing west depot track modification and test track diversion;
- viii. Sewage Pump Station, including civil and structural works, E&M plant and equipment, BS and ABWF works at the eastern side of SHD;
- ix. Foundation and superstructure works up to depot roof with covered chambers for Phase 3D area, and associated drainage works together with relevant services from Phase 1 along the Phase 3D area connecting to Sewage Pump Station;
- x. Eastern Access Ramp including necessary road furniture with provisions for connection to the future Road P1 together with the services zone for accommodating the sewage pipes and services from Phase 3D connecting to Sewage Pump Station;
- xi. Property Enabling Works including foundation for podium edge columns at Phase 1 area; and
- xii. Landscaping including green roofs, green walls, ground plantings and associated drainage and irrigation systems.

Construction Programme and Activities

2.8 A summary of the major construction activities undertaken in this reporting period (from 1 to 30 June 2024) is shown in **Table 2.1**. The construction programme is presented in **Appendix A**.

Table 2.1 Summary of the construction activities reported by Main Contractor during the Reporting Month

Construction Activities undertaken

- I&M installation along mainline and test track;
- Trial pit and predrilling works in W11, W12;
- Project Manager Office: Underground utilities (UU) diversion and drainage works;
 and
- Underfloor Wheel Lathe (UFWL): sheet pile installation.
- 2.9 The project organisational chart specifying management structure and contact details are shown in **Figure 3**. The key personal contact names and numbers for the Project are summarized in **Table 2.2**.

Table 2.2 Contact Information of Key Personnel

Party	Role Position		Name	Telephone	
	Project	Project			
MTRC	Environmental	Environmental	Mr. Edan Li	2688 1179	
	Team	Team Leader			
	Independent	Independent			
Meinhardt	Environmental	Environmental	Mr. Adi Lee	2859 5443	
	Checker (IEC)	Checker (IEC)			
CSHK	Contractor	Environmental	Ms. Iris Ho	56118325	
CSHK	Comitación	Officer	1015. 1115 110	30110323	

Party	Role	Position	Name	Telephone
Aurecon	Contractor's Environmental Team (ET)	Contractor's ET Leader	Dr. F. C. Tsang	3664 6888

2.10 A summary of the valid permits, licences, and/ or notifications on environmental protection for this Project is presented in **Table 2.3**.

Table 2.3 Summary of the Status of Valid Environmental License Notification, Permit and Documentations

Permit/ Licences/	Valid	Period	G	D 1		
Notification/ Reference No. From		То	Status	Remark		
Environmental Permit						
EP-588/2021			-			
Wastewater Discharge L	icense					
10001345 TBA		0		N/A		
Notification of Construct Regulation	Notification of Construction Works under the Air Pollution Control (Construction Dust					
Ref. No.: 500947	18/12/2023	N/A	Valid	N/A		
Chemical Waste Produc	er Registration	1				
5213-961-C4924-01	30/01/2024	N/A	Valid	N/A		
Billing Account for Disp	osal of Constr	uction Waste				
Account No.: 7049565	21/12/2023	N/A	Valid	N/A		
Construction Noise Permit						
GW-RS0247-24	01/04/2024	30/09/2024	Superseded by GW- RS0482-24	N/A		
GW-RS0482-24	20/06/2024	19/12/2024	Valid	N/A		

3 ENVIRONMENTAL STATUS

3.1 Environmental permit (EP) conditions under the EIAO, submission status under the EP and implementation status of mitigation measures had been reviewed and implemented on schedule. The status of required submissions under the EP (No. EP-588/2021) as of the reporting period for the Project are summarised in **Table 3.1.**

Table 3.1 Summary of Status of Required Submission for EP-588/2021 for the Project

EP Condition (EP-588/2021)	Submission	Submission date
Condition 1.12	Commencement Date of Construction	11 Jun 2021 (1 st submission) 12 Jul 2021 (2 nd submission) 12 Aug 2021 (3 rd submission)
Condition 2.7	Construction Works Phasing Schedule Proposal	1 Nov 2021 (1 st Submission) 20 Dec 2021 (2 nd Submission) 29 Dec 2021 (Deposited) 9 Oct 2023 (1 st Submission with updated Phase 1 works) 30 Nov 2023 (Deposited)
Condition 2.8	Environmental Permit Submission Schedule	12 Aug 2021 10 Sep 2021 (Deposited)
Condition 2.9	Management Organization	1 Nov 2021 (1st Submission) 20 Dec 2021 (2nd Submission) 21 Mar 2022 (3rd Submission) 9 Aug 2022 (4th Submission) 16 Nov 2022 (5th Submission) 18 Sep 2023 (6th submission) 22 Jan 2024 (7th Submission)
Condition 2.10	Construction Noise Mitigation Plan	1 Nov 2021 (1st Submission) 20 Dec 2021 (2nd Submission) 28 Dec 2021 (Deposited) 30 Dec 2022 (1st Submission which covered Phase 1 main works) 29 Mar 2023 (2nd Submission which covered Phase 1 main works) 18 May 2023 (3nd Submission which covered Phase 1 main works) 28 Jul 2023 (4th Submission for Phase 1 works) 30 Oct 2023 (5th Submission for Phase 1 works) 6 Dec 2023 (6th Submission for Phase 1 works) 8 Dec 2023 (Deposited) 21 Jun 2024 (7th Submission for Phase 1 works)
Condition 2.11	Noise Mitigation Plan	31 Mar 2023 (1 st submission) 31 Jul 2023 (2 nd submission) 20 Oct 2023 (3 rd submission) 7 Mar 2024 (4 th submission)

EP Condition (EP-588/2021)	Submission	Submission date
		18 Mar 2024 (Approved)
Condition 2.13	Waste Management Plan	1 Nov 2021 (1 st Submission) 20 Dec 2021 (2 nd Submission) 28 Dec 2021 (Deposited) 30 Jun 2023 (1 st Submission for Phase 1 work) 1 Aug 2023 (2 nd Submission for Phase 1 works) 31 Aug 2023 (Deposited for Phase 1 works)
Condition 2.15	Landscape and Visual Plan(s)	27 Apr 2023 (1 st Submission) 27 Jul 2023 (2 nd Submission) 20 Oct 2023 (3 rd Submission) 8 Dec 2023 (Approved)
Condition 3.3	Baseline Monitoring Report	1 Nov 2021 16 Nov 2021 (Deposited)
Condition 3.4	Monthly EM&A Report (May 2024)	Submitted within 10 working days after the end of the reporting month
Condition 4.2	Dedicated Internet Website	12 Jan 2022 25 Jul 2023 (update address) 14 Mar 2024 (update address)

3.2 The drawings showing the project layout and the location of the monitoring station are attached in **Figures 1a**, **1b**, **1c** and **Figures 2**, respectively. A summary of the monitoring location is shown in **Table 3.2**.

 Table 3.2
 Summary of the location of the monitoring station

Air Sensitive Receiver (ASR) ID No. in EIA Report	Monitoring Station ID	ASR Description
A2	DM1	Siu Ho Wan Government Maintenance Depot

4 MONITORING RESULTS

Air Quality Monitoring

- 4.1 The impact monitoring had been carried out in accordance with Section 2.6 of the approved EM&A Manual, with sampling frequency of at least 3 times in every 6 days undertaken, to determine the 1-hour total suspended particulates (TSP) levels at the monitoring locations in the reporting period.
- 4.2 General meteorological conditions (wind speed, wind direction and precipitation) and notes regarding any significant adjacent dust producing sources had also been recorded throughout the impact monitoring period.

Monitoring Equipment and Methodology

Monitoring Equipment

- 4.3 Portable direct reading dust meter was used to carry out the 1-hour TSP monitoring. Portable direct reading dust meters used in this monitoring were proven to the IEC to be capable of achieving comparable result as that of the HVS and, thus, were used for sampling.
- 4.4 The proposed use of portable dust meter has been submitted to the IEC and agreement has been obtained from the IEC in accordance with Section 2.2.7 of the approved EM&A Manual.
- 4.5 **Table 4.1** summarizes the equipment used for 1-hour TSP measurement in the air quality monitoring programme.

Table 4.1 Construction Dust Monitoring Equipment

Measuring Parameter	Monitoring Equipment	Brand and Model	Serial Number	Date of Calibration
Digital Dust Indicator	Portable direct reading dust meter (1-hour TSP)	Sibata Digital Dust Monitor (Model No. LD-5R)	3Y7115	29 January 2024
Digital Dust Indicator	Portable direct reading dust meter (1-hour TSP)	Sibata Digital Dust Monitor (Model No. LD-5R)	882106	19 March 2024

4.6 The portable direct reading dust meter was calibrated annually. Copies of calibration certificates of the portable direct reading dust meter are attached in **Appendix B**.

Monitoring Methodology

4.7 The 1-hour TSP measurement followed manufacturer's instruction manual. Before initiating a measurement, zeroing the portable direct reading dust meter was carried out to ensure maximum accuracy of concentration measurements.

4.8 The 1-hour TSP was sampled by drawing air into the portable direct reading dust meter where particular concentrations were measured instantaneously with an in-built silicon detector sensing light scattered by the particulates in the sampled air. Continuous TSP levels were indicated and logged by a built-in data logger compatible with Windows based programme to facilitate data collection, analysis and reporting.

Monitoring Location

4.9 The location of the designated dust monitoring station is described in **Table 4.2.**

Table 4.2 Construction Dust Monitoring Location

Monitoring Station ID	Dust Monitoring Station
DM1	Siu Ho Wan Government Maintenance Depot

Result Summary

- 4.10 Dust impact monitoring was carried out at the monitoring location on 3, 7, 13, 19, 25 and 28 June 2024 during the reporting period (**Appendix I**). According to the field observations, the major dust sources identified included vehicular emissions from North Lantau Highway and Cheung Tung Road. Gentle wind was recorded throughout the monitoring period, with gentle to strong wind recorded occasionally.
- 4.11 The results for 1-hour TSP are summarized in **Table 4.3**. The measurement data are presented in **Appendix C**.

Table 4.3 Summary of 1-hour TSP Monitoring Results

Monitoring Location	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)	No. of Exceedances
DM1	3 - 36	294.7	500	0

Waste Management

4.12 The waste generated from this Project includes inert C&D materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/ cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in **Table 4.4**. Details of cumulative waste management data are presented as a waste flow table in **Appendix D**.

 Table 4.4
 Quantities of waste generated from the Project

I					Quantity			
					Non-inert	C&D materia	ıls	
	Reporting period	materials	× .	Others, e.g., General Refuse		Recycled wa	istes	
		(in m ³)	kg)	disposed of at Landfill (in '000 kg)	(in '000 kg)	Plastics (in '000 kg)	Metals (in '000 kg)	Yard Waste (in '000 kg)
	1 – 30 June 2024	672.30	0	97.50	0.175	0	17.81	0

- 4.13 All dump trucks for C&D materials transportation and disposal were equipped with Global Positioning System (GPS) for real time tracking and monitoring their travel routings and parking locations to avoid illegal dumping or landfilling of C&D materials.
- 4.14 The GPS data including travel routings of dump trucks was reviewed by the ET and IEC, and no illegal dumping activities were suspected.

5 SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

- 5.1 The Environmental Complaint Handling Procedure is shown in **Appendix E**.
- 5.2 Should non-compliance of the air quality criteria occur, action in accordance with the Event and Action Plan in **Appendix F** shall be carried out.
- 5.3 No Action Level or Limit Level exceedance of 1-hour TSP was recorded during the reporting month.
- 5.4 No complaint or non-compliance was reported in the reporting month.
- 5.5 No notification of summons and prosecution was received in the reporting period.
- 5.6 Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Appendix G**.

6 ENVIRONMENTAL SITE INSPECTION AND AUDIT

6.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, four site inspections were carried out on 03, 11, 17 and 24 June 2024. One joint site inspection with the IEC was also undertaken on 11 June 2024. Observations were reported during the weekly site inspections. Key observations during the site inspections are summarized in **Table 6.1**.

Table 6.1 Site Observations

Parameters	Date	Observation/ Recommendation	Follow-up Status
Water Quality	11/06/2024	Observation: Location W3, sandbags should be provided at manholes to prevent rainwater runoff.	Location W3, sandbags was provided at manholes to prevent rainwater runoff on 11/06/2024.
Chemical and Waste Management	24/06/2024	Observation: Oil stain was observed near the refuelling point of a generator at W11b, the stained material should be removed as chemical waste and stored at chemical waste cabinet.	Location W11b, Oil stain near the refuelling point of the generator was removed as chemical waste and stored at chemical waste cabinet on 25/06/2024.
NA	03/06/2024	No major environmental issue was observed during the site inspection.	NA
NA	17/06/2024	No major environmental issue was observed during the site inspection.	NA

6.2 According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents are implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix H**.

7 FUTURE KEY ISSUES

7.1 The construction programme for the Project for the next reporting month is presented in **Appendix A**. Works to be undertaken in the next three reporting months are:

Construction Activities to be undertaken

- Continue site clearance, underground utility detection and diversion, instrumentation & monitoring, trial pit, predrilling works at site;
- Installation of fencing and hoarding, sheet pile and bored pile; and
- Excavation and lateral support (ELS) and reinforced concrete (RC) works for Underfloor Wheel Lathe (UFWL).

Key Issues for the Coming Month

- 7.2 Potential environmental impacts arising from the above construction activities are mainly associated with construction dust impact, noise impact, and waste management.
- 7.3 Since wet season is coming, the Contractor was reminded that all works shall comply with the statutory environmental requirements. Water quality mitigation measures in the EM&A Manual shall be properly implemented. The Contractor is reminded not to make any discharge off-site before a discharge licence is granted.

Monitoring Schedule for the Next Month

7.4 The tentative schedule of regular 1-hour TSP monitoring in the next reporting period is presented in **Appendix J**.

8 CONCLUSION AND RECOMMENDATIONS

Conclusion

- 8.1 This 3rd monthly EM&A Report presents the EM&A works undertaken during the period from 1 to 30 June 2024 in accordance with the EM&A Manual and the requirement under EP-588/2021.
- 8.2 Air quality (including 1-hour TSP) impact monitoring was carried out in the reporting period. No exceedance of the Action and Limit Levels was recorded for air quality impact monitoring during the reporting period.
- 8.3 Weekly environmental site inspections were conducted during the reporting period. A joint site inspection with the IEC was carried out on 11 June 2024. Observations were reported during the site inspections. All items are rectified within the reporting period. The environmental performance of the Project was considered satisfactory.
- 8.4 No complaint or non-compliance was reported in the reporting month.
- 8.5 No notification of summons or prosecution was received in the reporting month.

Recommendations

Air Quality

- Regular watering to reduce dust emissions from exposed site surface;
- Stockpile of dusty materials shall be covered entirely by green net;
- NRMM Labels should be displayed on the applicable equipment on site by the Contractor.

Construction Noise

- Only well-maintained plant should be operated on-site, and plant should be maintained regularly during the construction programme;
- Quality Powered Mechanical Equipment (QPME) should be adopted as far as possible;
- Deploy movable temporary noise barriers along the active works area;
- Use noise enclosure to cover stationary PME such as air compressor and generator;
- Obtain Construction Noise Permit (CNP) for works to be carried out during restricted hours and follow the conditions stipulated in the CNP issued by the Noise Control Authority.

Water Quality

- Channels, earth bunds or sandbags barriers should be provided on site to direct storm water/polluted water to silt removal facilities;
- Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers;
- Exposed slope surfaces should be covered by tarpaulin to reduce muddy surface runoff;
- The site practices outlined in ProPECC Note PN 2/23 should be followed as far as practicable to minimize surface runoff and chance of erosion;
- Water quality mitigation measures as recommended in the EM&A Manual should be fully implemented. The Contractor is reminded not to make any discharge before a discharge licence is granted.

Chemical and Waste Management

- Provision of waste disposal points and regular collection of waste;
- to ensure the waste arising from the works are handled, stored, collected, transferred and disposed of in an environmentally acceptable manner;
- Regular cleaning and maintenance programme for drainage system;
- Chemical containers shall be stored with drip tray underneath.

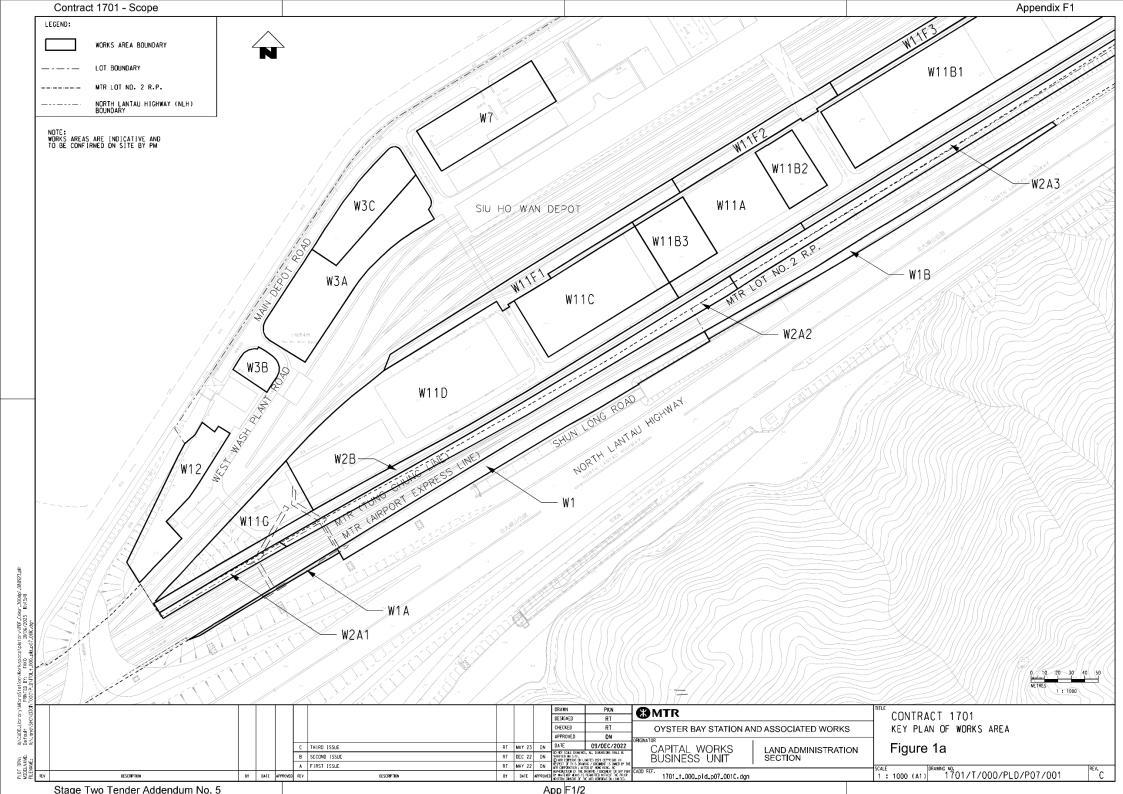
Landscape & Visual

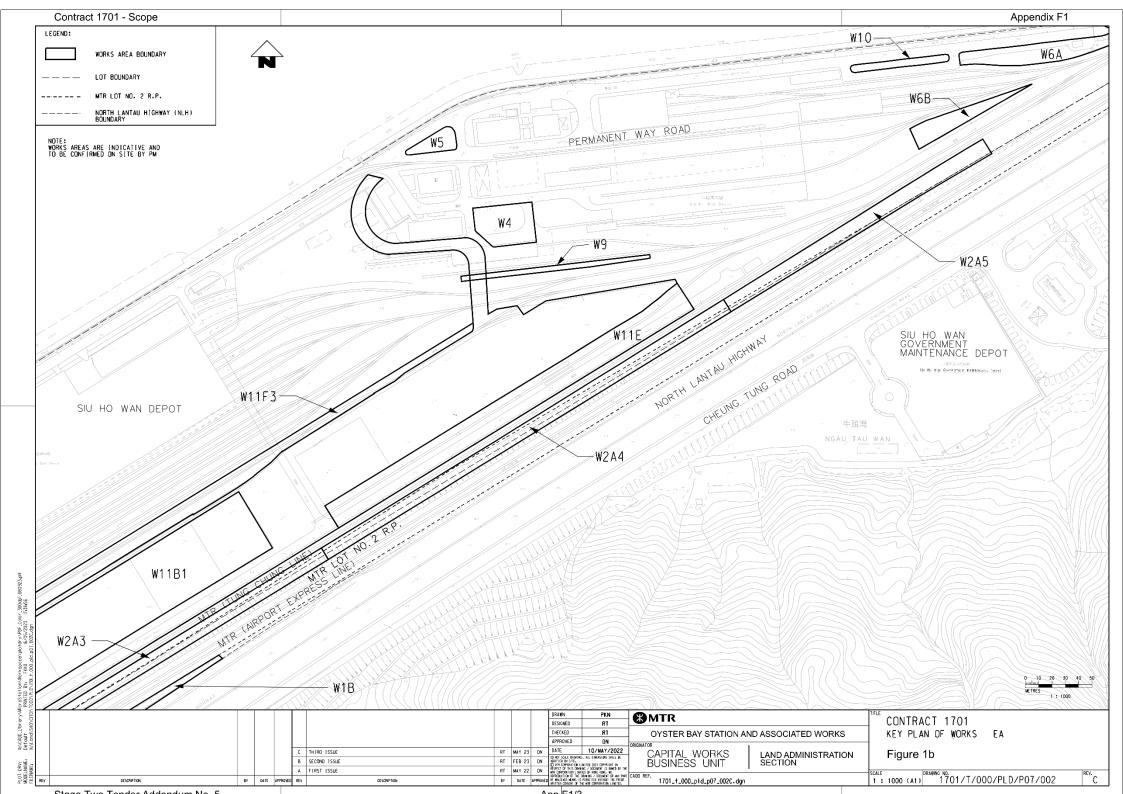
• Existing trees within site areas should be well protected and maintained.

Permits/Licenses

• Environmental Permit and effective environmental related licenses should be properly posted on site.

Figure 1	Alignment and Works Area for Contract No. 1701





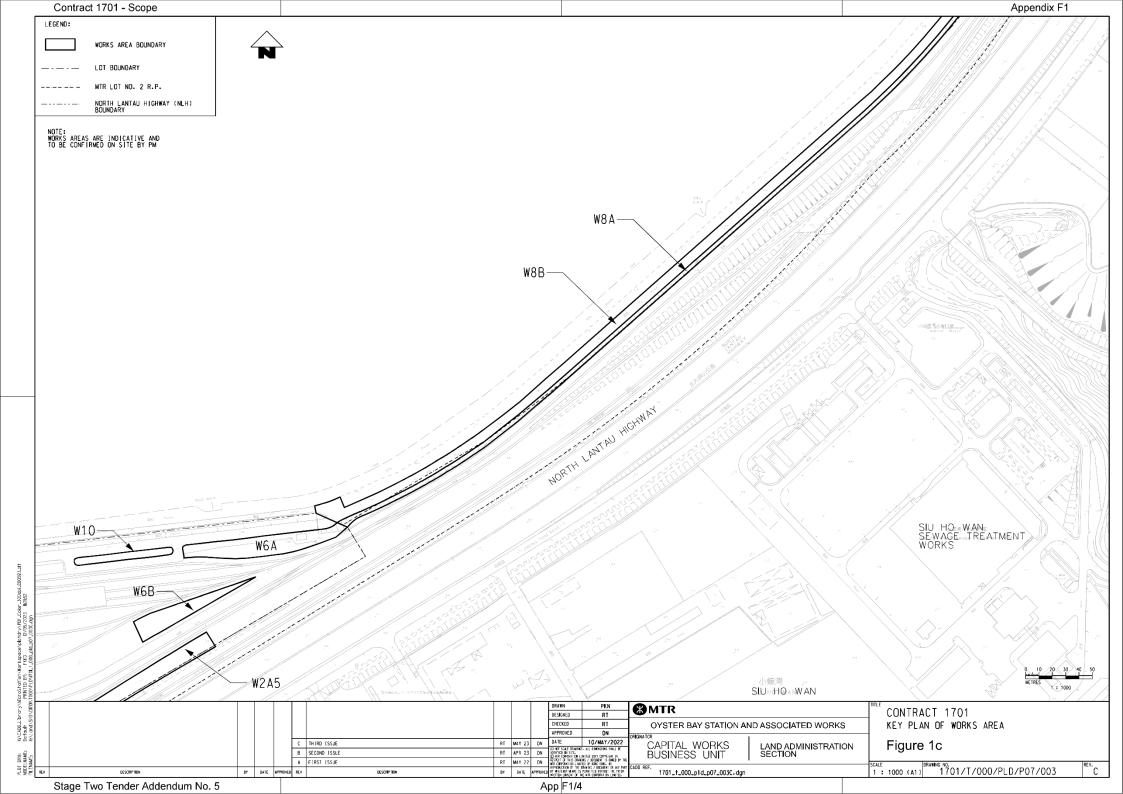


Figure 2	Location Plan of Air Quality Monitoring Station

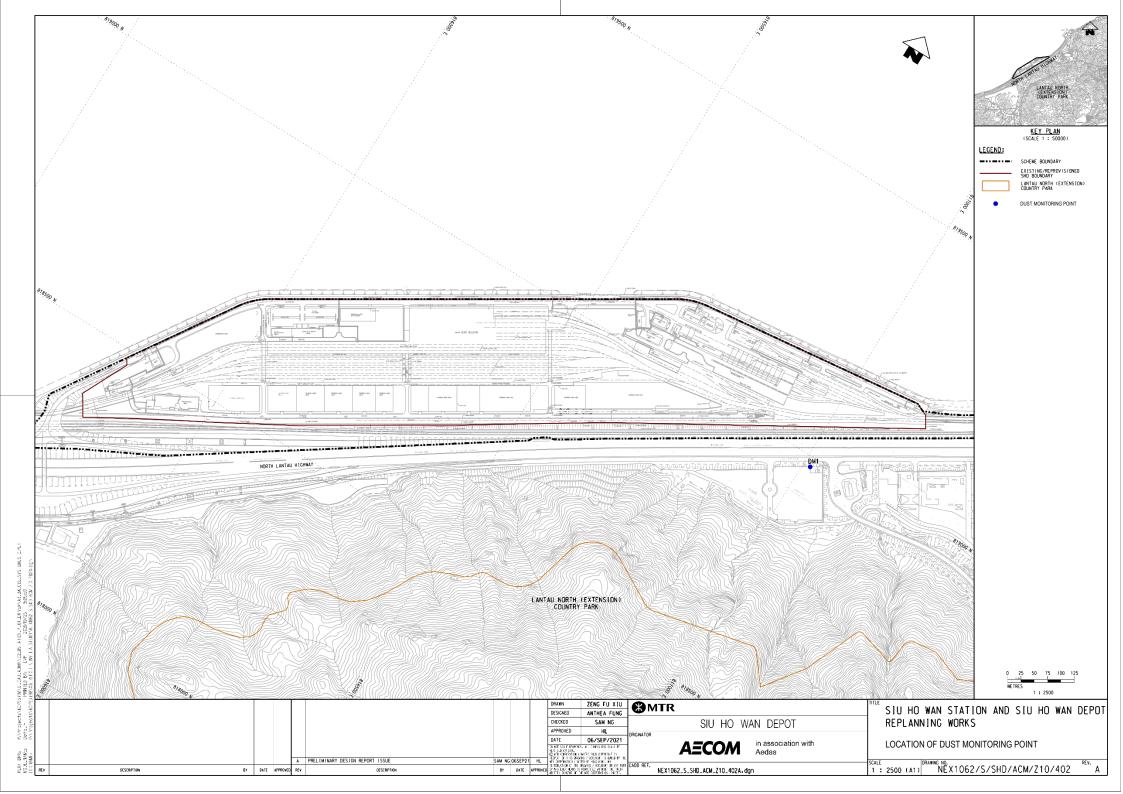
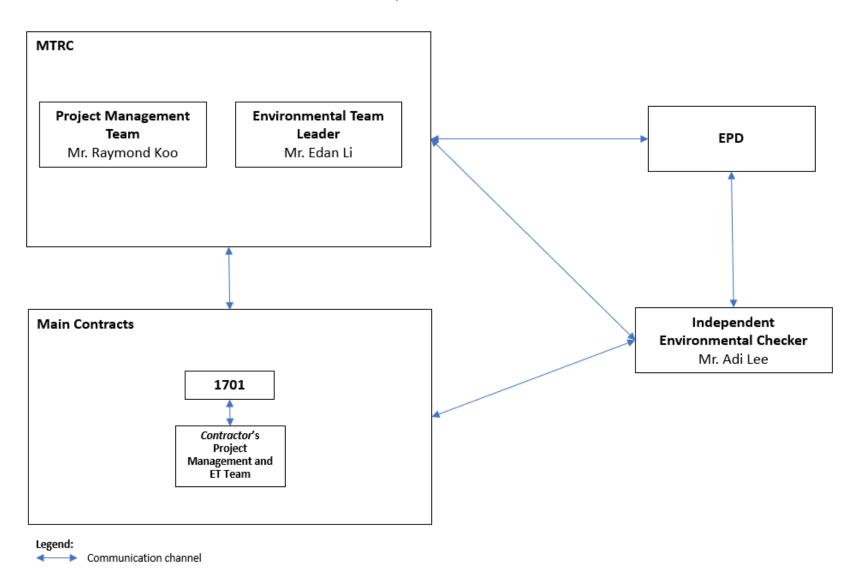


Figure 3 Project Organization Chart

Project O-Chart



MTR's Contact:

MTRC - Project Management Team					
Position	Name	Telephone			
Chief Construction Manager - OYB	Mr. Raymond Koo	2621 7051			

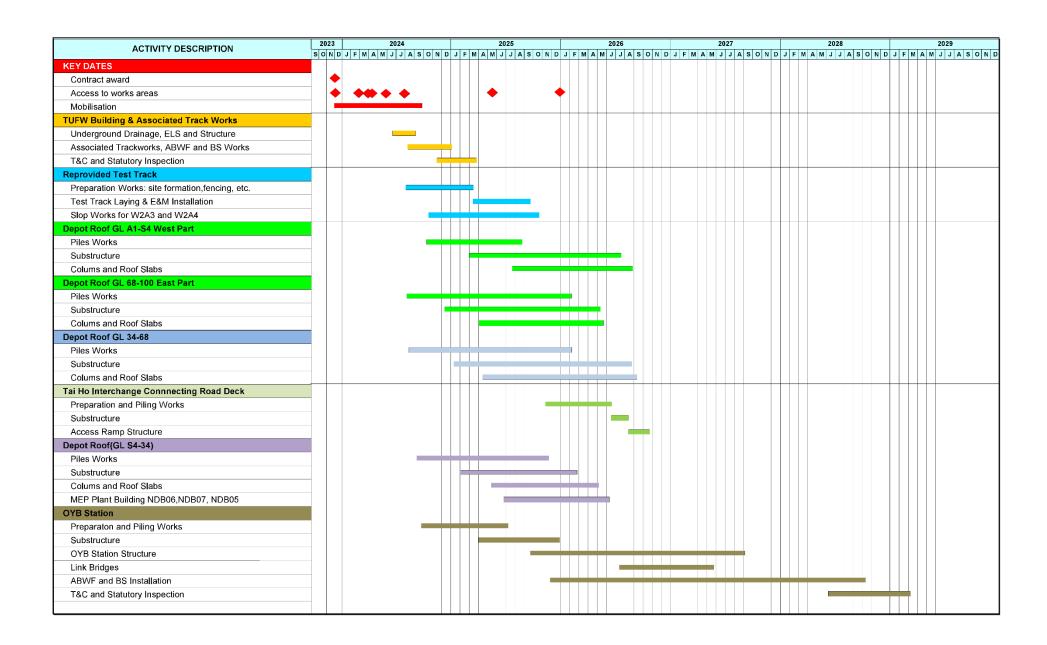
MTRC - Environmental Team					
Position	Name	Telephone			
Environmental Team Leader	Mr. Edan Li	2688 1179			
Environmental Team Member	Mr. Cyrus Lau	2688 1585			

Meinhardt Infrastructure and Environment					
<u>Limited- IEC</u>					
Position	Name	Telephone			
1 osition	Name	reiephone			

Contractor's Contact:

Main Works Contract	Description	Contractor	Position	Name	Telephone
		China State	Project Director	Mr. Eric Fong	6191 9337
1701	Oyster Bay Station and	Construction	Senior Environmental Manager	Mr. MH Isa	9884 0810
1701	Associated Works	Engineering	Environmental Officer	Ms. Iris Ho	5611 8325
		(HK) Ltd	Environmental Team Leader	Dr. F. C. Tsang	3664 6888

Appendix A Construction Programme





Appendix B Calibration Certificates (Air Quality Monitoring **Equipment**)



東業德勤測試顧問有限公司 **ETS-TESTCONSULT LTD.**

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

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



Form Q/MX/C/58 Issue 1(1/1) [08/21]

Calibration Certificate

Certificate No.

: CSA40398

Page

: 1 of

Information Provided by Customer

Customer

China State Construction Engineering (HK) Limited :

Address

N/A

Information of Unit-under-test (UUT)

Description

Туре

: Digital dust indicator

Manufacturer

: SIBATA

Equipment I.D. No.

: LD-5R

Serial No.

: 3Y7115

Laboratory Information

Lab. Ref. No.

: Q/CAL/24/0453/E

Procedure

: CQS/054/Z

Date of Calibration Date of Issue

: 29-Jan-2024 : 5-Feb-2024

Date of Receipt

: 16-Jan-2024

Calibration Condition Ambient Temperature : (20±3) °C

Relative Humidity

: (50±20) %

Sampling : As received

Reference equipment

Reference Balance, C-052-03

Calibration specification

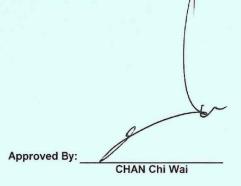
- By direct comparison of weight of dust particle trapped in a filter paper using high volume sampler for 3 hours at 25LPM for three times, with the reading of the UUT operated at the same location.

Calibration result (unit in : mg/m3)

Reference concentration	UUT reading (Total count for 3 hours)	CPM (Count per minute)	Expanded Uncertainty (%)	Coverage Factor
0.0156	2965	16		
0.0178	3419	19	5.0	2.0
0.0200	3708	21		

Remarks

- The calibration results apply to the particular unit-under-test only.
- The values given in this calibration certificate only to the values measureed at the time of test & any uncertainties quoted will not include allowance for the equipment long term drift, varifications with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement
- The interpolation equation: Concentration (mg/m³) = K x UUT reading (CPM) where K(Sensitivity) = 0.00095
- Correlation coefficient (r): 0.992
- All reported result were obtained from ETL approved sub-contractor.





Sibata LD-5R K-Factor Verification Test by Total Suspended Particulates HVS Test Report

Information of Calibrated Equipement

Verification Test Date:	19-Mar-24	to	24-Mar-24		Next Verification Test Date:	19-Mar-25
Unit-under-Test- Model No.:		Sibata LD-5R		_		
Unit-under-Test Serial No.:		882106		_		
Our Report Refrence No.:		RPT-24-HVS-00	67	_		
Calibration Location:				Emax		
· -						-

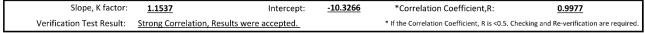
Standard Equipment Information

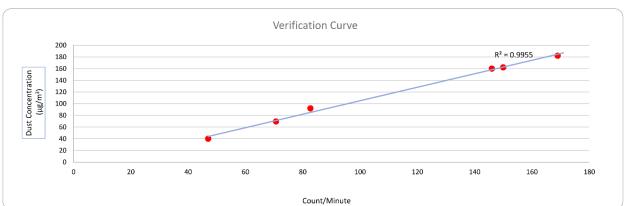
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5025A
Equipment serial no.:	1049	3465
Last Calibration Date:	19-Mar-24	15-Jan-24
Next Calibration Date:	2-Apr-24	15-Jan-25

Equipement Vertification Result

Verification	Duration			Results from	Calibrated Equipement	Results from Standard Equipment		
Test No.	Date	Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (μg/m³) y-axis	
1	19/03/2024	7953.66	7956.66	180.00	27000	150	162	
2	19/03/2024	7956.66	7959.66	180.00	26280	146	160	
3	19/03/2024	7959.66	7962.66	180.00	30420	169	182	
4	24/03/2024	7985.12	7988.12	180.00	8460	47	40	
5	24/03/2024	7988.12	7991.12	180.00	14886	83	92	
6	24/03/2024	7991.12	7994.12	180.00	12726	71	70	

Linear Regression of y on x





Operated By: Andy Li Date: _____ 29-03-2024

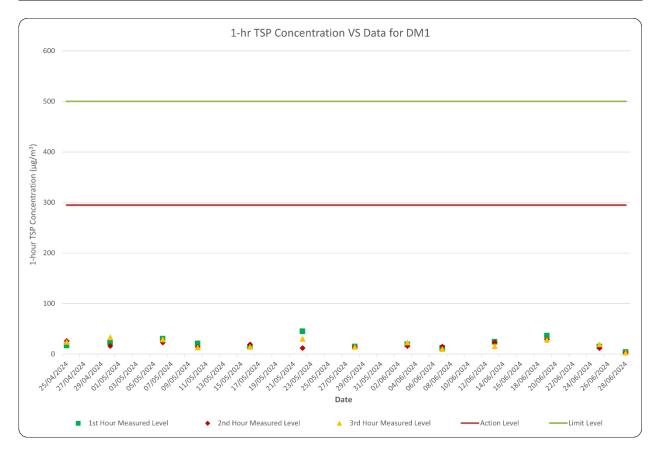
Checked By: Tandy Tse Date: 29-03-2024

Senior Consultant, Environmental

Appendix C Monitoring Data (Air Quality Monitoring)

The Summary of 1-hour TSP Concentration (µg/m³) at Location DM1

	ary or 1 hour 151 concentration (pg/ m) at 200ation 2711						
Date	Weather	Start Time	1st Hour	2 nd Hour	3 rd Hour		
Date	weather	(hh:mm)	$\mu g/m^3$	$\mu g/m^3$	μg/m³		
2024-06-03	Cloudy	13:30	19	16	23		
2024-06-07	Rainy	13:39	12	15	10		
2024-06-13	Fine	8:56	24	23	16		
2024-06-19	Sunny	8:55	36	29	28		
2024-06-25	Fine	8:45	15	12	19		
2024-06-28	Sunny	14:33	4	3	3		
Minimum: 3 μg/m³			Ma	ximum: 36 μg/	m³		



Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 03 June 2024

Tempearture/Humidity: (於香港時間04/06/2024 00 時 00 分更新) (Updated at 00:00H on 04/06/2024) 100 95 90 85 28 80 75 70 06 07 09 10 12 13 14 15 03/06/2024 香港時間 (時) Hong Kong Time (Hour) ©香港天文台 Hong Kong Observatory HKA Pressure: (於香港時間04/06/2024 00 時 00 分更新) (Updated at 00:00H on 04/06/2024) (百帕斯卡) (hPa) 1014 1014 1012 1012 1010 1010 1008 1008 1006 1006 1004 1004 1002 1002 05 06 07 09 10 11 12 13 03/06/2024 香港時間 (時) Hong Kong Time (Hour) 04/06/2024 ©香港天文台 Hong Kong Observatory Wind Direction: (於香港時間04/06/2024 00 時 00 分更新) (Updated at 00:00H on 04/06/2024) 北 N 西北 西 西南 SW S SE 東南 東北 Poo 01 02 09 10 11 12 13 14 03/06/2024 香港時間 (時) Hong Kong Time (Hour) ©香港天文台 Hong Kong Observatory Wind Speed: (於香港時間04/06/2024 00 時 00 分更新) (Updated at 00:00H on 04/06/2024) (公里/小時) (km/h) 50 50 40 40 30 30 20 20 10 10 04 05 01 03 06 07 08 09 10 11 12 13 14 15 16 17 18 19

香港時間 (時) Hong Kong Time (Hour)

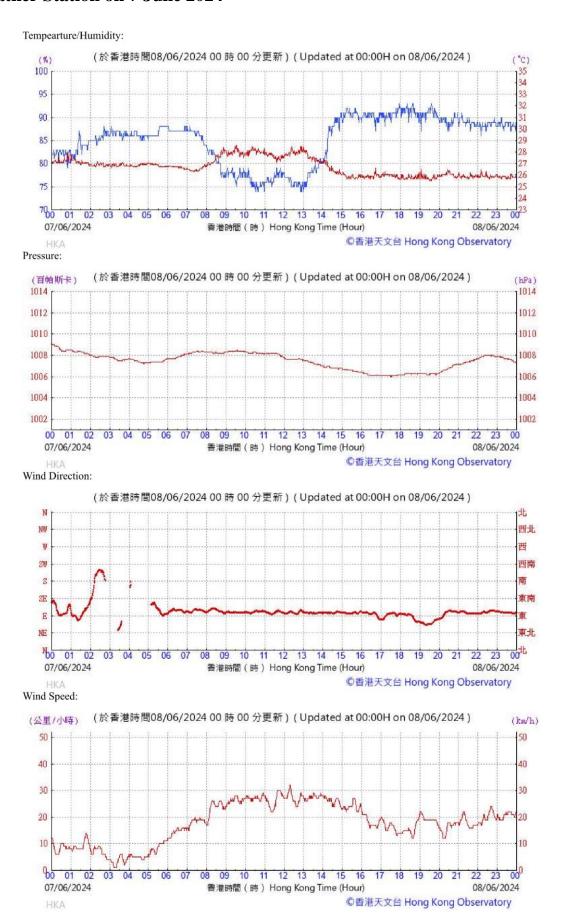
03/06/2024

HKA

04/06/2024

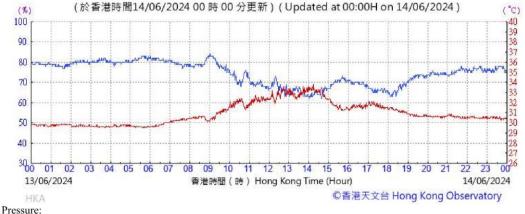
©香港天文台 Hong Kong Observatory

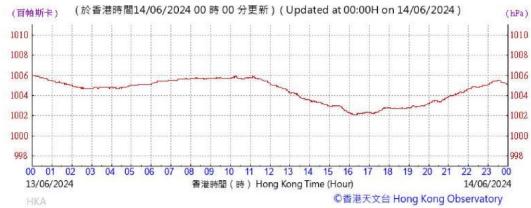
Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 7 June 2024



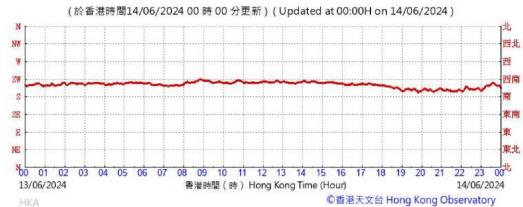
Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 13 June 2024



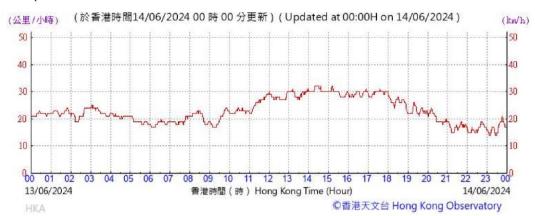




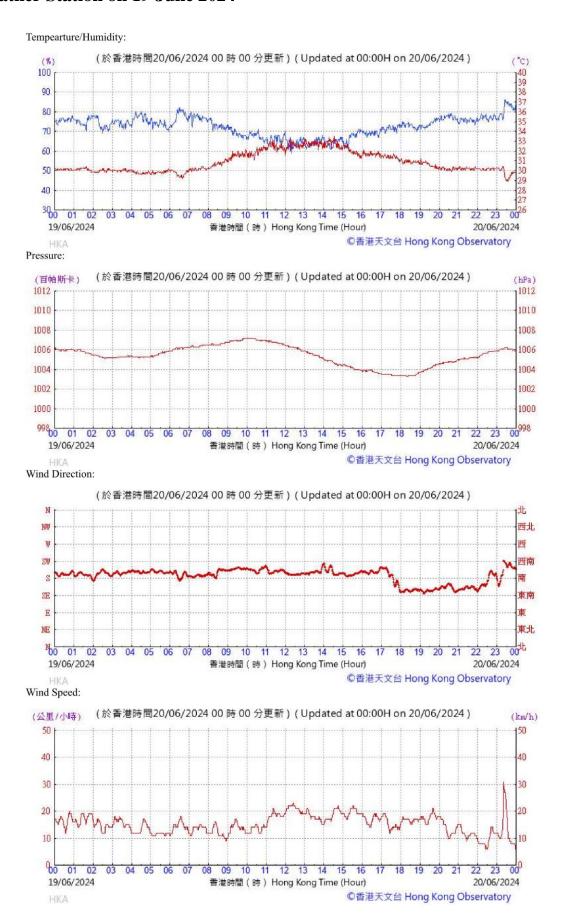
Wind Direction:



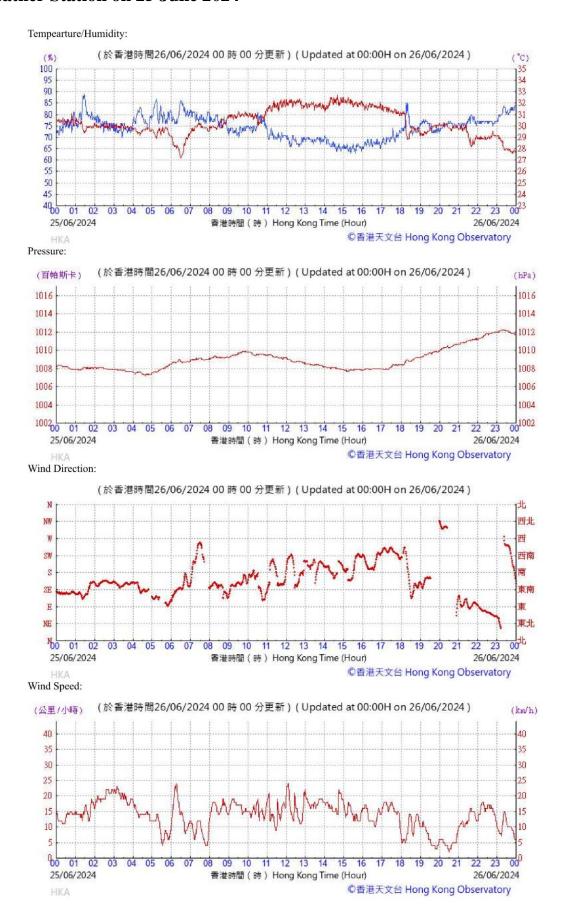
Wind Speed:



Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 19 June 2024



Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 25 June 2024



Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 28 June 2024



Appendix D Waste Flow Table

Monthly Summary Waste Flow Table for 2024 (year)

Project : Siu Ho Wan Dep	Depot Property Development - Oyster Bay Station and Associated Works									Contract No.: 1	
		Actual Quantit	ies of Inert C&	D Materials Ge	nerated Monthly		A	ctual Quantitie	s of C&D Wast	es Generated M	onthly
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete (a) (see Note 3)	Reused in the Contract (b)	Reused in other Projects (c)	Disposed as Public Fill (d)	Imported Fill	Metals (see Note 2)	Paper/ cardboard packaging (see Note 2)	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)
(see note: 6) Jan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(see note: 6) Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.153	0.000	0.000	2.680
(see note: 6) Mar	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.135	0.000	0.000	163.430
(see note: 6) 1-21 Apr	219.150	0.000	0.000	0.000	219.150	0.000	0.000	0.133	0.000	0.000	210.460
(see note 5:) 22-30 Apr	202.450	0.000	0.000	0.000	202.450	0.000	0.000	0.000	0.000	0.000	93.360
May	52.150	0.000	0.000	0.000	52.150	0.000	13.190	0.000	0.000	0.000	253.810
Jun	672.300	0.000	0.000	0.000	672.300	0.000	17.810	0.175	0.000	0.000	97.500
Sub-total	1146.050	0.000	0.000	0.000	1146.050	0.000	31.000	0.596	0.000	0.000	821.240
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Sub-total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	1146.050	0.000	0.000	0.000	1146.050	0.000	31.000	0.596	0.000	0.000	821.240

Notes:

⁽¹⁾ The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

⁽²⁾ Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging materials.

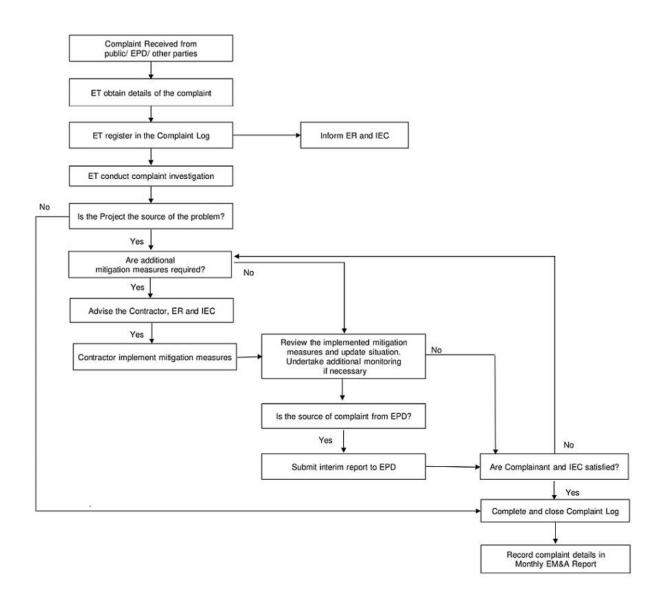
⁽³⁾ Broken concrete for recycling into aggregates.

⁽⁴⁾ Total Quantity Gernerated = a+b+c+d.

⁽⁵⁾ Commencement of EM&A activitities: 22 Apr 2024

⁽⁶⁾ Waste generated from Jan to Mar and 1-21 April 24 period are from site preparation and site clearance works.

Appendix E Complaint Handling Procedure



Appendix F Event-Action Plan (Air Quality Monitoring)

Event and Action Plan for Construction Dust Monitoring

EVENT	ACTION									
EVENI	ET	IEC	ER	CONTRACTOR						
ACTION LEVEL										
Exceedance for one sample	 Repeat measurement to confirm findings; If exceedance is confirmed, inform the Contractor, IEC and ER; Identify source(s), investigate the causes of exceedance and propose remedial measures; and Increase monitoring frequency. 	the ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on	exceedance in writing.	 Identify source(s), investigate the causes of exceedance and propose remedial measures; Implement remedial measures; and Amend working methods agreed with the ER as appropriate. 						
Exceedance for two or more consecutive samples	 Repeat measurements to confirm findings; If exceedance is confirmed, inform Contractor, IEC and ER; Identify source(s), investigate the causes of exceedance and propose remedial measures; Increase monitoring frequency to daily; Advise the Contractor and ER on the effectiveness of the proposed remedial measures; Discuss with IEC and Contractor on remedial actions required; If exceedance continues, arrange meeting with Contractor, IEC and ER to discuss the remedial measures to be taken; and If exceedance stops, cease additional monitoring. 	 the ET; 2. Check Contractor's working method; and 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Review and advise the ET and ER on the effectiveness of the proposed remedial measures; and 	exceedance in writing; 2. In consultation with the ET and IEC agree with the Contractor on the remedial measures to be implemented; and 3. Supervise implementation of remedial measures.	investigate the causes of exceedance;2. Submit proposals for remedial measures to the ER, ET and IEC within three						

EVENT	ACTION								
E A EIA I	ET	IEC	ER	CONTRACTOR					
LIMIT LEVEL									
Exceedance for one sample	 Repeat measurement to confirm findings; If exceedance is confirmed, inform the Contractor, IEC, EPD and ER; Identify source(s), investigate the causes of exceedance and propose remedial; Increase monitoring frequency to daily; and Discuss with the ER, IEC and Contractor on the remedial measures and assess effectiveness. 	by the ET; 2. Check Contractor's working method; 3. Discuss with the ET, ER and Contractor on possible remedial measures; 4. Review and advise the ET and ER on the effectiveness of the proposed remedial measures; and	of exceedance in writing; 2. Review and agree on the remedial measures proposed by the Contractor; and	investigate the causes of exceedance;					
Exceedance for two or more consecutive samples	 Repeat measurement to confirm findings; If exceedance is confirmed, inform IEC, ER, Contractor and EPD; Identify source(s), investigate the causes of exceedance and propose remedial measures; Increase monitoring frequency to daily; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with IEC and ER to discuss the remedial actions to be taken; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and If exceedance stops, cease additional monitoring. 	Contractor on the potential remedial actions; 3. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and	IEC, agree with the Contractor on the remedial measures to be implemented;3. Supervise the implementation of remedial measures; and4. If exceedance continues,	investigate the causes of exceedance; 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial measures to the ER, IEC and ET within three working days of notification for agreement; 4. Implement the agreed					

Appendix G Statistics on Complaint, Notification of Summons and **Successful Prosecution**

 Table G1
 Statistical Summary of Exceedance

Air Quality								
Location								
DM1	0	0	0					

Table G2 Statistical Summary of Environmental Complaint

Reporting	Environmental Complaint Statistics						
Period	Frequency	Cumulative	Complaint Nature				
1 June 2024 – 30 June 2024	0	0	N/A				

Table G3 Statistical Summary of Environmental Non-compliance

Reporting	Envii	Environmental Non-compliance Statistics						
Period	Frequency	Cumulative	Details					
1 June 2024 – 30 June 2024	0	0	N/A					

Table G4 Statistical Summary of Environmental Summons

Reporting	Eı	Environmental Summons Statistics						
Period	Frequency	Cumulative	Details					
1 June 2024 – 30 June 2024	0	0	N/A					

Table G5 Statistical Summary of Environmental Prosecution

Reporting	Env	vironmental Prosecution	Statistics
Period	Frequency	Cumulative	Details
1 June 2024 – 30 June 2024	0	0	N/A

Appendix H Environmental Mitigation Implementation Schedule (EMIS)

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
Air Quality	(Construction Phase)						
	Watering once per hour on active works areas, exposed areas and unpaved haul roads during working hours.	To minimize dust impacts	Contractor	All works area	Construction phase	Air Pollution Control Ordinance (APCO)	Implemented
	 Implementation of dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices should be carried out to further minimize construction dust impact. Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather. Use of frequent watering for particularly dusty construction areas and areas close to ASRs. Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering should be applied to aggregate fines. Open stockpiles should be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs. Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. Establishment and use of vehicle wheel and body washing facilities at the exit points of the site. Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading points, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods. 	To minimize dust impacts	Contractor	All works area	Construction phase	Air Pollution Control Ordinance (APCO)	Implemented Implemented Implemented Implemented Implemented Implemented Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	• Imposition of speed controls for vehicles on unpaved site roads. 8 kilometres per hour is the recommended limit.						Implemented Implemented
	Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs.						·
	• Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides.						Implemented
	Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high-level alarm which is interlocked with the material filling line and no overfilling is allowed.						Implemented
	• Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system.						Implemented
Noise Impa	act (Construction Phase)						
S4.5.16	 Implement the following good site practices as far as practicable: Only well-maintained plant should be operated on-site, and plant should be serviced regularly during the construction programme; Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction programme; 	To minimise impacts to surrounding habitats	Contractor	All works area	Construction phase	TM-EIAO	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	• Mobile plant, if any, should be sited as far from NSRs as possible;						
	 Machine and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; 						
	Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and						
	 Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities. 						
S4.5.17	Adopting quiet PME is recommended. The type of quiet PME adopted in this assessment is for reference only. The contractors may adopt alternative quiet PME as long as it can be demonstrated that they would not result in construction noise impacts worse than those predicted in this assessment.	To reduce impact to affected NSRs	Contractor	All works area	Construction phase	TM-EIAO	Implemented
S4.5.19	Use of noise barriers and noise enclosures to provide screening for construction plant where recommended.	To reduce impact to affected NSRs	Contractor	All works area	Construction phase	TM-EIAO	N/A
Water Qual	ity Impact (Construction Phase)						
S5.8.4	Surface and road run-off from construction sites should be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels or earth bunds or sandbag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels should be provided on site boundaries where necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	Water Pollution Control Ordinance (WPCO), Technical Memorandum on EIA Ordinance (EIAO-TM), ProPECC PN 2/23, Technical Memorandum on	Implemented after observation
S5.8.5	Silt removal facilities, channels and manholes should be	To minimise	Contractor	All works area	Construction phase	Standards for	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	maintained, and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to prevent local flooding. Any practical options for the diversion and re-alignment of drainage should comply with both engineering and environmental requirements to provide adequate hydraulic capacity of all drains.	impact from construction site run-off				Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal	
S5.8.6	Construction works should be programmed to minimize soil excavation works in rainy seasons (April to September). If soil excavation cannot be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary exposed slope surfaces should be covered, e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest/ edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	Waters (TM-DSS)	Implemented
S5.8.7	Earthworks final surfaces should be well compacted, and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase		Implemented
S5.8.8	Measures should be taken to minimize the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, trenches should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase		N/A
S5.8.9	If bentonite slurries are required for any construction works, they should be reconditioned and reused wherever practicable to minimise the disposal volume of used	To minimise impact from construction site	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 2/23	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	bentonite slurries. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be transported away after the related construction activities are completed. Requirements as stipulated in ProPECC Note PN 2/23 should be closely followed when handling and disposing bentonite slurries.	run-off					
S5.8.10	Open stockpiles of construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 2/23, TM- DSS	Implemented
S5.8.11	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 2/23, TM- DSS	Implemented
S5.8.12	Good site practices should be adopted to remove rubbish and litter from construction sites to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 2/23, TM- DSS	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
S5.8.12	 The following mitigation measures related to the transportation of the sediment should be implemented to minimize the potential water quality impact: Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water. The barge transporting the sediments to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation. Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the Director of Environmental Protection (DEP). 	To minimise impact from transportation of sediment	Contractor	Barging point and barges	Construction phase	WPCO, EIAO- TM, ProPECC PN 2/23	N/A
S5.8.13	There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence.	To minimize impact from effluent discharge	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 2/23, TM- DSS	N/A
S5.8.14	Water for Bored Piling Works Water used in ground boring and drilling for site investigation or rock/ soil anchoring should be re-circulated as far as practicable after sedimentation. When there is a	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 2/23, TM- DSS	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	need for final disposal, the wastewater should be						
	discharged into storm drains via silt removal facilities.				~		
S5.8.15	Wheel Washing Water Wash-water from wheel washing facility should have been treated by silt removal facilities before discharging into storm drains. Treated wash-water could be used as dust suppression measures as far as practicable. The section of access road between the wheel washing bay and the public road should be paved to reduce vehicle tracking of soil and to prevent silty water from entering public road and drains.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 2/23, TM- DSS	Implemented
S5.8.16	 Construction Works near Channelized Watercourse / Ditch For minimization of potential water quality impacts from the works to nearby inland channelized watercourse/ditch near SHWSTW, the practices outlined in ProPECC Note PN 2/23 "Construction Site Drainage" and ETWB TC (Works) No.5/2005 "Protection of natural streams / rivers from adverse impacts arising from construction works" should be adopted where applicable. Relevant mitigation measures are listed below: The use of less or smaller construction plants may be specified in works area close to the inland water bodies. Temporary storage of material (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from watercourse/ ditch when carrying out of the construction works. Stockpiling of construction materials and dusty materials should be covered and located away from any watercourse/ ditch. Construction debris and spoil should be covered up and/ or disposed of as soon as possible to avoid being washed into the nearby water receivers. 	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 2/23, TM- DSS, ETWB TC(Works) No. 5/2005	Implemented N/A Implemented
	 Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the watercourse/ ditch, where practicable. Construction effluent, site run-off and sewage should 						N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	be properly collected and/ or treated.						
S5.8.17 – S5.8.19	Accidental Spillage of Chemicals The Contractor should register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation, should be observed and complied.	To minimise impact from accidental spillage	Contractor	All works area	Construction phase	WPCO, EIAO- TM, Waste Disposal Ordinance (WDO), Waste Disposal (Chemical Waste) (General)	
	Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.					Regulation	Implemented after observation
	Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are						Implemented
	given as follows: • Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport.						Implemented
	Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents.						Implemented
	Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.						Implemented
S5.8.22 – S5.8.24	 Groundwater from Contaminated Areas, Contaminated Site Runoff and Wastewater from Land Decontamination Remediation of contaminated land should be properly conducted following the recommendations of Land 	impact from	Contractor	All works area confirmed with land contamination	Construction phase	WPCO, EIAO- TM, TM-DSS, Guidance Note for Contaminated	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	Contamination Assessment to be conducted in future. Any excavated contaminated material and exposed	areas, contaminated site				Land Assessment	
	contaminated surface should be properly housed and	run-off/					
	covered to avoid generation of contaminated runoff.	wastewater from					
	Open stockpiling of contaminated materials should not	land					
	be allowed. Any contaminated runoff or wastewater	decontamination					
	generated from the land decontamination processes should be properly collected and diverted to						
	wastewater treatment facilities (WTF) as necessary.						
	The WTF shall deploy suitable treatment processes						
	(e.g., oil interceptor/ activated carbon) to reduce the						
	pollution level to an acceptable standard and remove						
	any prohibited substances (such as total petroleum						
	hydrocarbon) to an undetectable range. All treated						
	effluent from the wastewater treatment system shall meet the requirements as stated in TM-DSS and						
	should be either discharged into the foul sewers or						
	tankered away for proper disposal.						
	No direct discharge of groundwater from						
	contaminated areas should be adopted. Prior to any						
	excavation works within the potentially contaminated						
	areas, the baseline groundwater quality in these areas						
	should be reviewed based on the past relevant site						
	investigation data and any additional groundwater quality measurements to be performed with reference						
	to Guidance Note for Contaminated Land Assessment						
	and Remediation and the review results should be						
	submitted to EPD for examination. If the review						
	results indicated that the groundwater to be generated						
	from the excavation works would be contaminated,						
	this contaminated groundwater should be either						
	properly treated or properly recharged into the ground						
	in compliance with the requirements of the TM-DSS.						
	If wastewater treatment is to be deployed for treating the contaminated groundwater, the wastewater						
	treatment unit shall deploy suitable treatment						

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	processes (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (such as total petroleum hydrocarbon) to an undetectable range. All treated effluent from the wastewater treatment plant shall meet the requirements as stated in the TM-DSS and should be either discharged into the foul sewers or tankered away for proper disposal. • If deployment of wastewater treatment is not feasible for handling the contaminated groundwater, groundwater recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in section 2.3 of TM-DSS. The baseline groundwater quality should be determined prior to the selection of the recharge wells, and submit a working plan to EPD for agreement. Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Groundwater monitoring wells should be installed near the recharge points to monitor the effectiveness of the recharge wells and to ensure that no likelihood of increase of groundwater level and transfer of pollutants beyond the site boundary. Prior to recharge, free products should be removed as necessary by installing the petrol interceptor. • The Contractor should apply for a discharge licence under the WPCO through the Regional Office of EPD for groundwater recharge operation or discharge of treated groundwater.						

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
Waste Mai	nagement Implication (Construction Phase)						
S7.5.3	 Recommendations for good site practices during the construction phase include: Nomination of approved personnel, such as a site manager, to be responsible for implementation of good site practices, arrangements for waste collection and effective disposal to an appropriate facility; Training of site personnel in site cleanliness, concepts 	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	Ordinance (WDO) and Public Cleansing and Prevention of Nuisances	Implemented
	of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures;					Regulation (Cap. 132BK)	
	 Provision of sufficient waste reception/ disposal points, and regular collection of waste; Adoption of appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; Provision of regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; 						
	 Adoption of a recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites); and 						
	• Preparation of Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP)						
S7.5.4	Recommendations to achieve waste reduction are as follow: • Segregate and store different types of construction related waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;	To minimize waste generation	Contractor	All works areas	Construction phase	WDO	Implemented
	Provide separate labelled bins to segregate recyclable waste such as aluminium cans from other general						

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	refuse generated by the work force, and to encourage collection by individual collectors;						
	• Recycle any unused chemicals or those with remaining functional capacity;						
	• Maximise the use of reusable steel formwork to reduce the amount of C&D materials;						
	 Adopt proper storage and site practices to minimise the potential for damage to, or contamination of construction materials; 						
	Plan the delivery and stock of construction materials carefully to minimise the amount of waste generated; and						
	• Minimize over ordering and wastage through careful planning during purchasing of construction materials.						
S7.5.6	To minimise the impact resulting from collection and transportation of C&D materials as far as practicable, C&D waste, such as wood, plastic, steel and other metals should be reused or recycled and, as a last resort, disposed of to landfill. A suitable area should be designated within the site for temporary stockpiling of C&D materials and to facilitate the sorting process.	To minimise the disposal of C&D waste	Contractor	All works areas	Construction phase	WDO	Implemented
S7.5.6	 Within the stockpile areas, the following measures should be taken to control potential environmental impacts or nuisance: Proper handling and storage of waste such as soil by means of covers and/ or water spraying system to minimise the potential environmental impact and to prevent materials from wind-blown or being washed away; Covering materials during heavy rainfall; Locating stockpiles to minimise potential visual impacts; Minimising land intake of stockpile areas as far as possible; 	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	Adopting GPS or equivalent system for tracking and monitoring of all dump trucks engaged for the Project in recording their travel routings and parking locations to prohibit illegal dumping and landfilling of C&D materials; and						
	 Keeping record and analysis of data collected by GPS or equivalent system related to travel routings and parking locations of dump trucks engaged on site. 						
S7.5.7 to S7.5.9	General refuse should be stored in enclosed bins or compaction units separated from C&D materials and chemical waste. A reputable waste collector should be employed by the contractor to remove general refuse from the site separately from C&D materials and chemical wastes. An enclosed and covered area is preferred to reduce the occurrence of 'wind blown' light materials. The recyclable component of general refuse, such as aluminium cans, paper and cleansed plastic containers shall be separated from other waste. Provision and collection of	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented
	recycling bins for different types of recyclable waste shall be set up by the Contractor. The Contractor shall also be responsible for arranging recycling companies to collect these materials.						
	The Contractor shall carry out an education programme for workers in avoiding, reducing, reusing and recycling of materials generation. Posters and leaflets advising on the use of the bins shall also be provided in the sites as reminders.						
\$7.5.10 to \$7.5.12	If chemical wastes were to be produced at the construction site, the Contractor would be required to register with the EPD as a Chemical Waste Producer, and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
S7.5.13 to S7.5.14	Appropriate containers with proper labels should be used for storage of chemical wastes. Chemical wastes should be collected and delivered to designated outlet by a licensed collector. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre (CWTC), or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. Any unused chemicals or those with remaining functional capacity should be collected for reuse as far as practicable. The sediment should be excavated, handled, transported and disposed of in a manner that would minimise adverse environmental impacts. For minimization of sediment disposal, beneficial reuse will be considered on site as far as practicable during the construction stage before the disposal of excavated sediment. Requirements of the Air Pollution Ordinance (Construction Dust) Regulation, where relevant, shall be adhered to during excavation, transportation and disposal of sediments.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	APCO WDO	N/A
S7.5.15	To minimise the exposure to contaminated materials, workers shall, when necessary, wear appropriate personal protective equipment (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities shall also be provided on site.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
\$7.5.20	Stockpiling of contaminated sediments shall be avoided as far as possible. If temporary stockpiling of contaminated sediments is unavoidable, the excavated sediment shall be covered by tarpaulin and the area shall be placed within earth bunds or sandbags to prevent leachate from entering the ground, nearby drains and/or surrounding water bodies. The stockpiles shall be completely paved or covered by linings to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas shall be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, shall be collected and discharged according to the Water Pollution Control Ordinance (WPCO).	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WPCO	N/A
\$7.5.21	To minimise the potential odour/ dust emissions during excavation and transportation of the sediment, the excavated sediments shall be wetted during excavation/material handling and shall be properly covered when placed on trucks or barges. Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO APCO	N/A
Land Cont	amination						
S8.9.3	To minimise environmental impacts arising from the handling of potentially contaminated materials, the following environmental precautionary measures are recommended to be utilised during the course of any required site remediation: • Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety; • Establish and maintain a Health and Safety Plan with the information below before commencement of the SI:	To control land remediation work	Contractor	Area identified with land contamination	Prior to the commencement of construction works at the contaminated areas		

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 (a) Instruction of works on work procedures, safe practices, emergency duties, and applicable regulations; (b) Regularly scheduled meetings of the workers in which the possible hazards, problems of the job, and related safe practices are emphasized and discussed; (c) Good housekeeping practices; and (d) Availability of and instruction in the location, use and maintenance of personal protective equipment. Excavation shall be carried out during dry season as far as possible to minimise contaminated runoff from contaminated soils; Supply of suitable clean backfill material (or treated soil) after excavation; Stockpiling site(s) shall be lined with impermeable sheeting and bunded. Stockpiles shall be fully covered by impermeable sheeting to reduce dust emission. If this is not practicable due to frequent usage, regular watering shall be applied. However, watering shall be avoided on stockpiles of contaminated soil to minimise contaminated runoff; Vehicles containing any excavated materials shall be suitably covered to limit potential dust emissions or contaminated wastewater run-off, and truck bodies and tailgates shall be sealed to prevent any discharge during transport or during wet conditions; Speed control for the trucks carrying contaminated materials shall be enforced; Vehicle wheel and body washing facilities at the site exit points shall be established and used; and Pollution control measures for air emissions (e.g. from biopile blower and handling of cement), noise emissions (e.g. from blower or earthmoving 					Land Management" "Public Cleansing and Prevention of Nuisances Regulation (Cap. 132BK)" APCO, WDO and WPCO	

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	equipment), and water discharges (e.g. runoff control from treatment facility) shall be implemented and complied with relevant regulations and guidelines.						
Landscape	and Visual Impact (Construction Phase)						
S9.8.1	Trees unavoidably affected by the works should be transplanted as far as possible in accordance with DEVB TC(W) 7/2015 – Tree Preservation or LAO PN 7/2007 - Tree Preservation and Tree Removal Application for Building Development in Private Projects where applicable.	To transplant affected trees	Contractor	All works areas	Construction phase	DEVB TC(W) No. 7/2015 or LAO PN 7/2007 where applicable	N/A
S9.8.1	Control of night-time lighting glare.	To minimize the landscape and visual	Contractor	All works areas	Construction phase	TM-EIAO	N/A
S9.8.1	Erection of decorative screen hoarding which should be compatible with the surrounding setting.	impact on surrounding setting	Contractor	All works areas	Construction phase	TM-EIAO	N/A
S9.8.1	Management of facilities on work sites by controlling the height and disposition/ arrangement of all facilities on the works site to minimize visual impact to adjacent VSRs.	To minimize visual impact to adjacent VSRs.	Contractor	All works areas	Construction phase	-	N/A
S9.8.1	All hard and soft landscape areas disturbed temporarily during construction should be reinstated on like-to-like basis, to the satisfaction of the relevant Government Departments.	To minimize the landscape impact on surrounding setting	Contractor	All works areas	Construction phase	_	N/A

Appendix I	Monitoring Schedule of the Reporting Month

JUNE 2024

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

Appendix J Monitoring Schedule of the Coming Month

Siu Ho Wan Depot Property Development MTR Contract No.: 1701-Oyster Bay Station And Associated Works Tentative Dust Monitoring Schedule in July 2024

JULY 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4 1-hour TSP Monitoring	5	6
7	8	9	10 1-hour TSP Monitoring	11	12	13
14	15	16 1-hour TSP Monitoring	17	18	19	20
21	22 1-hour TSP Monitoring	23	24	25	26 1-hour TSP Monitoring	27
28	29	30	31			

The schedule is subjected to change due to unforeseeable circumstances (e.g. adverse weather, etc.)

Document prepared by

Aurecon Hong Kong Limited

Unit 1608, 16/F, Tower B, Manulife Financial Centre, 223 – 231 Wai Yip Street, Kwun Tong, Kowloon Hong Kong S. A. R.

T +852 3664 6888

F +852 3664 6999

E hongkong@aurecongroup.com

W aurecongroup.com



Appendix B

Monthly EM&A Report for June 2024
Trial Piles And Site Formation for
Siu Ho Wan Depot Property Development
– Phase 1 Contract 1731

GAMMON CONSTRUCTION LIMITED

CONTRACT NO. 1731 TRIAL PILES AND SITE FORMATION FOR SIU HO WAN DEPOT PROPERTY DEVELOPMENT – PHASE 1

MONTHLY EM&A REPORT (JUNE 2024)

JULY 05, 2024 CONFIDENTIAL





Contract No. 1731
Trial Piles and Site
Formation for Siu Ho Wan
Depot Property Development
– Phase 1
Monthly EM&A Report
(June 2024)

FIRST ISSUE CONFIDENTIAL

PROJECT NO.: 2535700A DATE: JULY 05, 2024

WSP 7/F ONE KOWLOON 1 WANG YUEN STREET KOWLOON BAY, HONG KONG

PHONE: +852 2579-8899 FAX: +852 2856-9902

WSP.COM

QUALITY MANAGEMENT

ISSUE/REVISION	FIRST ISSUE	REVISION 1	REVISION 2	REVISION 3
Remarks				
Date	5 July 2024			
Prepared by	Gloria Chow			
Signature	175			
Checked by	Dr Alex Cheung			
Signature	pptd			
Authorised by	Dr Paul Kau			
Signature	do.			
Project number	2535700A	040		×
File reference				

SIGNATURES

PREPARED BY

Gloria Chow Site Auditor

REVIEWED BY

Dr. Alex Cheung

Environmental Team Leader

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

1	INTRODUCTION	2
2	ENVIRONMENTAL MONITORING AND AUDIT	3
3	SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS	7
4	EM&A SITE INSPECTION	8
5	FUTURE KEY ISSUES	9
6	CONCLUSION AND RECOMMENDATIONS	.10

Executive Summary

This Environmental Monitoring and Audit (EM&A) report presented the EM&A works carried out during the reporting period from 1 to 30 June 2024.

A summary of the construction works reported by the Main Contractor for the Project during the reporting month is listed below.

- Site Clearance & Hoarding
- Pre-drilling Works
- Bored Piling Works

A summary of regular construction dust monitoring activities in this reporting period is listed below:

Construction dust (1-hour TSP) monitoring	
DM1	18 times

Site inspections were conducted on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. Four (4) site inspections were conducted on 3, 11, 17 and 24 June 2024 for this reporting period. One joint inspection with Independent Environmental Checker (IEC) was also conducted on 11 June 2024. The environmental performance of the Project was considered satisfactory.

Details of waste management can be referred to **Section 2.4**.

No Action or Limit Levels exceedance of 1-hour TSP was recorded during this reporting period.

No complaints, notification of summons and prosecutions received during June 2024. Statistics on complaints, notifications of summons and successful prosecutions are presented in **Section 3**.

No changes of EM&A programme were made in this reporting period.

A summary of works to be conducted in the coming reporting months is listed below.

Site Clearance & Hoarding

1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 The "Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works" (EP-588/2021) project includes:
 - Siu Ho Wan Depot (SHD) replanning works, within the existing SHD boundary including construction of concrete slab over the SHD to provide support for future SHD Topside Development;
 - Construction of the new Oyster Bay (OYB) Station (formerly named as Siu Ho Wan Station (SHO)) and modification of the associated trackworks of the existing Airport Express Line/Tung Chung Line; and
 - Construction of other supporting facilities including the western access, the local accesses and sewerage network outside existing SHD boundary.
- 1.1.2 The "Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works" Impact Assessment Report (Register No. AEIAR-214/2017) was approved by the Environmental Protection Department (EPD) with conditions on 29 November 2017. The latest Environmental Permit (No. EP-588/2021) was issued by the EPD on 22 March 2021.
- 1.1.3 WSP (Asia) Ltd. (WSP) is commissioned by Gammon Construction Limited to provide Environmental Team (ET) services during the construction phase of Contract No. 1731 Trial Piles and Site Formation for Siu Ho Wan Depot Property Development – Phase 1 (hereafter as "the Project").

1.2 PROJECT PROGRAMME

- 1.2.1 A summary of the construction works reported by the Main Contractor for the Project during the reporting month is listed below.
 - (1) Site Clearance & Hoarding
 - (2) Pre-drilling Works
 - (3) Bored Piling Works
- 1.2.2 The construction programme is provided in **Appendix A**.

1.3 PURPOSE OF THE REPORT

1.3.1 This is the 18th monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the reporting period from 1 to 30 June 2024.

2 ENVIRONMENTAL MONITORING AND AUDIT

2.1 SUMMARY OF ENVIRONMENTAL LICENSE, NOTIFICATION, PERMIT AND DOCUMENTATIONS

2.1.1 A summary of valid permits, licenses, and notifications on environmental protection for this Project are listed in **Table 2.1**.

Table 2.1 Summary of the Status of Valid Environmental License, Notification, Permit and Documentation

Permit / Licenses / Notification /	Valid Period		Status	Remark
Reference No.			Remark	
Environmental Permit				
EP-588/2021	22 Mar 2021	N/A	Valid	
Billing Account under	Waste Dispos	al (Charges fo	r Disposal	of Construction Waste)
Regulation				
7045243	6 Oct 2022	N/A	Valid	
Construction Noise P	ermit			
GW-RS0076-24	4 Apr 2024	3 Oct 2024	Valid	
Notification Pursuant	to Section 3(1) of the Air Pol	lution Cont	rol (Construction Dust)
Regulation				
483822	N/A	N/A	Notified	Notification submitted
403022	IN/A	IN/A	Notinea	on 2 Sep 2022
Register of Chemical	Waste Produc	er		
5213-961-G2980-01	7 Oct 2022	N/A	Valid	
Water Pollution Disch	arge License			
WT000463109-2023	22 Feb 2023	29 Feb 2028	Valid	

2.2 ENVIRONMENTAL STATUS

2.2.1 Environment Permit (EP) conditions under the Environmental Impact Assessment Ordinance (EIAO), submission status of the EP and implementation status of mitigation measures had been reviewed and implemented on schedule. The status of required submissions under the EP (No. EP-588/2021) as of the reporting period for the Project are summarised in **Table 2.2**.

Table 2.2 Summary of Status of Required Submission for EP-588/2021 for the Project

EP Condition (EP-588/2021)	Submission	Submission Date
Condition 1.12	Commencement Date of Construction	11 Jun 2021 (1 st submission) 12 Jul 2021 (2 nd submission)
		12 Aug 2021 (3 rd submission)

		1 Nov 2021 (1st Submission)						
		20 Dec 2021 (2 nd Submission)						
Condition 2.7	Construction Works Phasing Schedule	29 Dec 2021 (Deposited)						
	Proposal	9 Oct 2023 (1 st Submission						
		with updated Phase 1 works)						
		30 Nov 2023 (Deposited)						
Condition 2.8	Environmental Permit Submission	12 Aug 2021						
	Schedule	10 Sep 2021 (Deposited)						
		1 Nov 2021 (1 st Submission)						
		20 Dec 2021 (2 nd Submission)						
		21 Mar 2022 (3 rd Submission)						
Condition 2.9	Management Organization	9 Aug 2022 (4 th Submission)						
		16 Nov 2022 (5 th Submission)						
		18 Sep 2023 (6 th Submission)						
		22 Jan 2024 (7 th Submission)						
		1 Nov 2021 (1 st Submission)						
		20 Dec 2021 (2 nd Submission)						
		28 Dec 2021 (Deposited)						
		30 Dec 2022 (1st Submission						
		which covered Phase 1 main						
		works)						
		29 Mar 2023 (2 nd Submission						
		which covered Phase 1 main						
		works)						
Condition 2.10	Construction Noise Mitigation Plan	18 May 2023 (3 rd Submission)						
		28 Jul 2023 (4 th submission for						
		Phase 1 works)						
		30 Oct 2023 (5 th Submission						
		for Phase 1 Works)						
		6 Dec 2023 (6 th Submission for						
		Phase 1 works)						
		8 Dec 2023 (Deposited)						
		21 June 2024 (7 th Submission						
		for Phase 1 works)						
		31 Mar 2023 (1 st Submission)						
Condition 2.11	Noise Mitigation Plan	31 Jul 2023 (2 nd submission)						
Condition 2.11	Noise Willigation Flam	20 Oct 2023 (3 rd Submission)						
		18 Mar 2024 (Deposited)						
		1 Nov 2021 (1 st Submission)						
		20 Dec 2021 (2 nd Submission)						
		28 Dec 2021 (Deposited)						
		30 Jun 2023 (1st submission						
Condition 2.13	Waste Management Plan	for Phase 1 work)						
		1 Aug 2023 (2 nd submission for						
		Phase 1 works)						
		31 Aug 2023 (Deposited for						
		Phase 1 works)						
Condition 2.15	Landscape & Visual Plan	27 Apr 2023 (1st Submission)						

		27 Jul 2023 (2 nd Submission)				
		20 Oct 2023 (3 rd Submission)				
		8 Dec 2023 (Approved)				
Condition 3.3	Baseline Monitoring Report	1 Nov 2021				
Condition 3.3	Baseline Monitoring Report	16 Nov 2021 (Deposited)				
	Monthly FM9 A Donort	Submitted within 10 working				
Condition 3.4	Monthly EM&A Report (January 2023 – May 2024)	days after the end of the				
Condition 3.4	(January 2023 – Way 2024)	reporting month				
	Monthly EM&A Report (June 2024)	This report submission				
		12 Jan 2022				
Condition 4.2	Dedicated Internet Website	25 Jul 2023 (update address)				
		14 Mar 2024 (update address)				

2.3 AIR QUALITY

- 2.3.1 Impact monitoring had been carried out in accordance with Section 2.6 of the approved EM&A Manual, with sampling frequency of at least 3 times in every 6 days undertaken, to determine the 1-hour total suspended particulates (TSP) levels at the monitoring location during this reporting period.
- 2.3.2 General meteorological conditions (wind speed, direction and precipitation) and notes regarding any significant adjacent dust producing sources had also been recorded throughout the impact monitoring period.
- 2.3.3 Portable direct reading dust meter was used to carry out the 1-hour TSP monitoring. Portable direction reading dust meters used for the monitoring were proven to the Independent Environmental Checker (IEC) to be capable of achieving comparable result as that of the High-Volume Sampler (HVS) and thus were used for sampling.
- 2.3.4 The portable direct reading dust meters used for the 1-hour TSP measurement during this reporting period are summarised in **Table 2.3**.

Table 2.3 Construction Dust Monitoring Equipment

Measuring	Monitoring	Brand and Model	Serial Number	Date of
Parameter	Equipment			Calibration
1-hour	Portable direct	Sibata Digital Dust	3Y7115	29 Jan 2024
TSP	reading dust meter	Monitor (Model No.	882106	19 Mar 2024
	(1-hour TSP)	LD-5R)		

- 2.3.5 The portable direct reading dust meter was calibrated by direct comparison of weight of dust particle trapped in filter paper using HVS for 3 hours at 25LPM for three times, with the reading of the UUT operated at the same location. Calibration certificate is provided in **Appendix D**.
- 2.3.6 The 1-hour TSP measurement followed manufacturer's instruction manual. Zeroing the portable direct reading meter was proceed prior to each measurement to ensure maximum accuracy of concentration measurements.
- 2.3.7 The 1-hour TSP was sampled by drawing air into the portable direct reading dust meter where particular concentrations were measured instantaneously with an in-built silicon detector

sensing light scattered by the particulates in the sampled air. Continuous TSP levels were indicated and logged by a built-in data logger compatible with Windows based program to facilitate data collection, analysis and reporting.

2.3.8 Location of the designated dust monitoring station is described in **Table 2.4** and shown on **Appendix E**.

Table 2.4 Construction Dust Monitoring Location

Monitoring Station ID	Dust Monitoring Station
DM1	Siu Ho Wan Government Maintenance Depot

2.3.9 Dust impact monitoring was carried out on 3, 7, 13, 19, 25 and 28 June 2024 during this reporting period. Schedule of the dust impact monitoring for this reporting period is provided in **Appendix F**. It is observed that major dust sources are from North Lantau Highway and Cheung Tung Road. Results for the 1-hour TSP are summarised in **Table 2.5**. Measurement data are shown in **Appendix G**.

Table 2.5 Summary of 1-hour TSP Monitoring Results

Monitoring Location	Range (µg/m³)	Action Level (μg/m³)	Limit Level (µg/m³)	No. of Exceedances
DM1	3.0 – 36.0	294.7	500.0	0

2.3.10 Schedule of the dust impact monitoring for next reporting period is provided in **Appendix H**.

2.4 WASTE MANAGEMENT

- 2.4.1 Waste generated from this Project includes inert construction and demolition (C&D) materials and non-inert C&D materials. Non-inert C&D would include, but not limited to general refuse, bamboo, timber, vegetation, paper and plastic that cannot be transported to public fill.
- 2.4.2 Quantities of different types of waste generated in this reporting month are summarised in **Table 2.6**. Details of cumulative waste management data are shown in **Appendix I**.

Table 2.6 Quantities of Waste Generated during this Reporting Period

				Quantity (to	onnes)									
	Inert C&D	Materials		Non-inert C&D Materials										
Reporting		Disposed		Others, i.e. Recycled Materials (tonnes)										
period	Disposed	to Sorting	Chemical	General										
period	as Public	Facilities	Waste	Refuse	Paper /	Plastics	Metals	Yard						
	Fill			disposed at	Cardboard	Flasiics	ivietais	Waste						
				Landfill										
June 2024	111.77	0	0	1.3	0	0	0	0						

- 2.4.3 All dump trucks for C&D materials transportation and disposal were equipped with Global Positioning System (GPS) for real time tracking and monitoring their travel routings and parking locations in order to avoid illegal dumping or landfilling of C&D materials.
- 2.4.4 The GPS data including travel routings of dump trucks was reviewed by the ET and IEC, and no illegal dumping activities were suspected.

3 SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

- 3.1.1 The Environmental Complaint Handling Procedure is presented in **Appendix J**.
- 3.1.2 Should non-compliance of the air quality criteria occur, action in accordance with the Event and Action Plan in **Appendix K** shall be carried out.
- 3.1.3 No Action and Limit Levels exceedance of 1-hour TSP was recorded during this reporting period.
- 3.1.4 No complaints, notification of summons and prosecutions received during June 2024.
- 3.1.5 Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Appendix L**.

4 EM&A SITE INSPECTION

4.1.1 Site inspections were conducted on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. Four (4) site inspections were conducted on 3, 11, 17 and 24 June 2024 for this reporting period. One joint inspection with IEC was also conducted on 11 June 2024. Key observations during the site inspections are summarized in **Table 4.1**.

Table 4.1 Site Observations

Date	Observation/ Recommendation	Follow-up Status
3 June 2024	Nil	Nil
11 June 2024	Nil	Nil
17 June 2024	Nil	Nil
24 June 2024	Nil	Nil

4.1.2 The mitigation measures detailed in the EIA Study Report, Environmental Permit, contract documents and the EM&A Manual are implemented as much as practical during this reporting period. The Implementation Status of the Environmental Mitigation Measures (EMIS) is presented in **Appendix M**.

5 FUTURE KEY ISSUES

- 5.1.1 Works to be conducted in the coming reporting month are:
 - (1) Site Clearance and Hoarding

6 CONCLUSION AND RECOMMENDATIONS

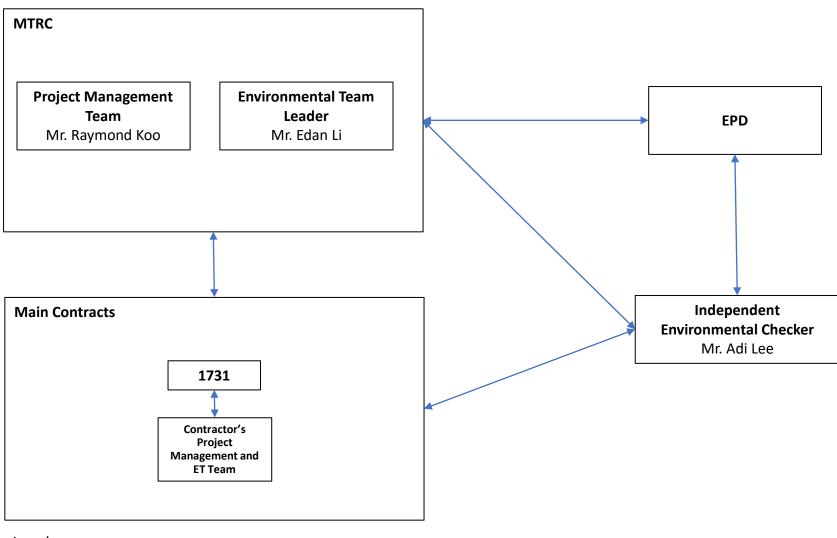
- 6.1.1 This monthly EM&A Report presented the EM&A works carried out during the reporting period from 1 to 30 June 2024.
- 6.1.2 Air quality impact monitoring was carried out during the report period. No exceedance of the Action and Limit Levels was recorded for air quality impact monitoring during this reporting period.
- 6.1.3 Four (4) weekly site inspections have been conducted during this reporting period. A joint site inspection with the IEC was conducted on 11 June 2024. Observations were reported in the weekly inspection checklists. The environmental performance of the Project was considered satisfactory.
- 6.1.4 No complaints, notification of summons and prosecutions received during this reporting period.
- 6.1.5 The proposed mitigation measures were properly implemented and were considered effective and efficient in pollution control.

Appendix A Construction Programme

Appendix 2.1 Construction Programme

Construction Activities				20)21						202	22					2	2023						2024		
		J F	M A	M J	JA	SC) N [D J	F M	A M	J	JA	SC	N D	J F	M A	M J	J	A S	0 N	D J	J F M	A M	JJ	A S C) N D
Contract 1731 - Trail Pile for SHD Phase 1	1																									
Site Clearance & Hoarding	1.1																									
Bored Piling Works	1.3																									
Pile Load Test	1.4																									

Appendix B Project Organisation Chart



Legend:

Communication channel

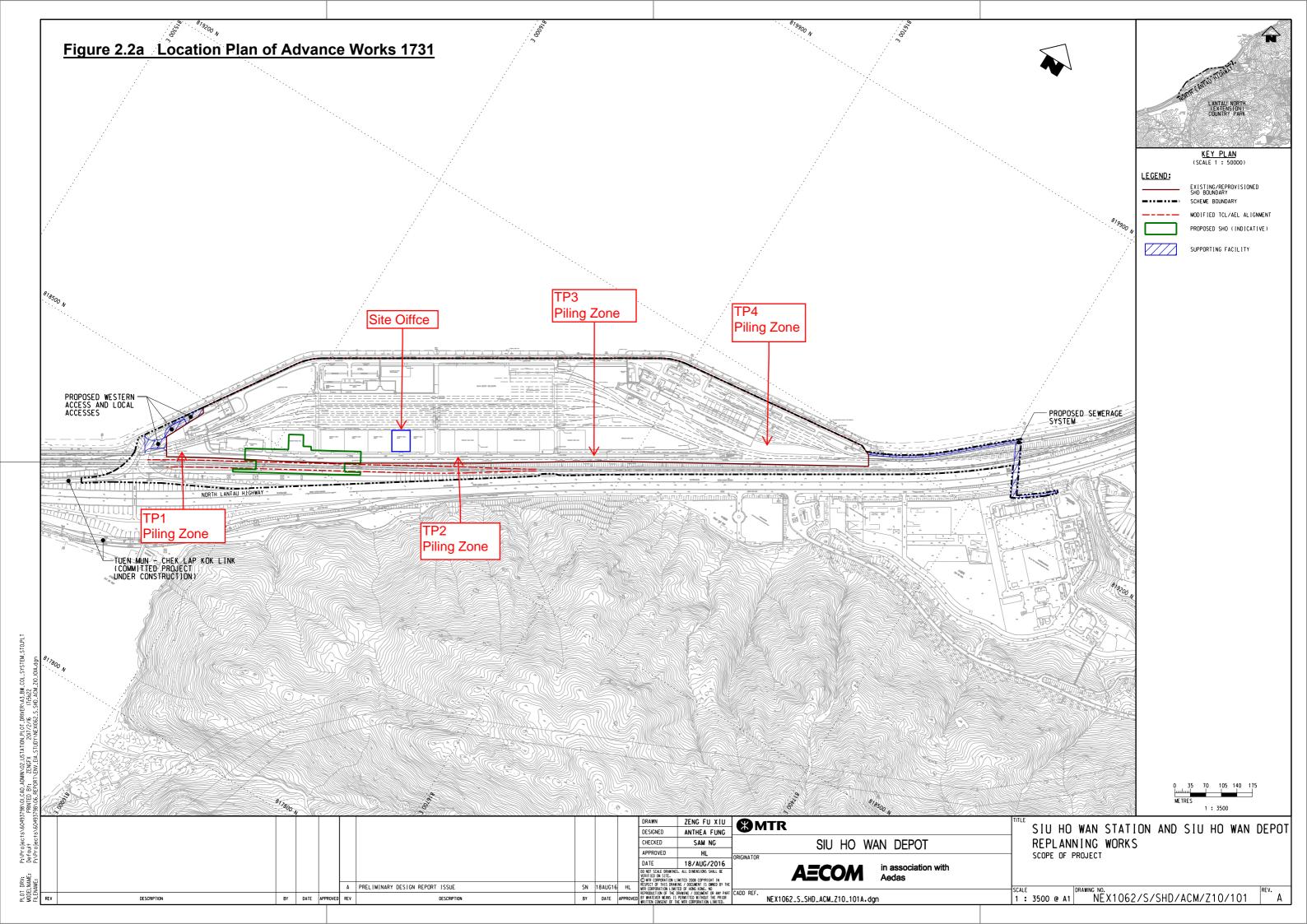
MTRC - Project Management Team								
Position	Name	Telephone						
Chief Construction Manager - OYB	Mr. Raymond Koo	2621 7051						

MTRC - Environmental Team		
Position	Name	Telephone
Environmental Team Leader	Mr. Edan Li	2621 7194
Environmental Team Member	Mr. Cyrus Lau	2621 7219

Meinhardt Infrastructure and Environment Limited - IEC									
Position Name Telephone									
Independent Environmental Checker	Mr. Adi Lee	2859 5443							
IEC Team Member	Ms. Echo Hung	2859 5837							

Main Works Contract	Description	Contractor	Position	Name	Telephone
	Trail piles and site	Common	Senior Project Manager	Carl Chan	9275 9207
1731	formation for Siu Ho Wan	Gammon Construction Ltd	Environmental Officer	Chris Tse	9127 7571
	Depot Property	Construction Ltd	Environmental Team Leader	Alex Cheung	9832 5750

Appendix C Location Plan



Appendix D Calibration Certification of Portable Direct Reading Dust Meters



東業德勤測試顧問有限公司 **ETS-TESTCONSULT LTD.**

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

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



Form Q/MX/C/58 Issue 1(1/1) [08/21]

Calibration Certificate

Certificate No.

: CSA40398

Page

: 1 of

Information Provided by Customer

Customer

China State Construction Engineering (HK) Limited

Address

· N/A

Information of Unit-under-test (UUT)

Description

: Digital dust indicator

Manufacturer

: SIBATA

Equipment I.D. No. Serial No.

: 3Y7115

: LD-5R Туре

Laboratory Information

Procedure

: CQS/054/Z

Date of Calibration

Lab. Ref. No.

Sampling

: Q/CAL/24/0453/E : 29-Jan-2024

Date of Issue

: 5-Feb-2024

Date of Receipt

: 16-Jan-2024

Calibration Condition

Ambient Temperature : (20±3) °C

: As received

Relative Humidity

: (50±20) %

Reference equipment

- Reference Balance, C-052-03

Calibration specification

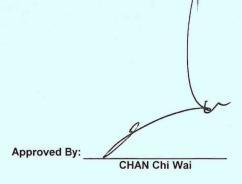
- By direct comparison of weight of dust particle trapped in a filter paper using high volume sampler for 3 hours at 25LPM for three times, with the reading of the UUT operated at the same location.

Calibration result (unit in : mg/m3)

Reference concentration	UUT reading (Total count for 3 hours)	CPM (Count per minute)	Expanded Uncertainty (%)	Coverage Factor
0.0156	2965	16		
0.0178	3419	19	5.0	2.0
0.0200	3708	21		

Remarks

- The calibration results apply to the particular unit-under-test only.
- The values given in this calibration certificate only to the values measureed at the time of test & any uncertainties quoted will not include allowance for the equipment long term drift, varifications with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement
- The interpolation equation: Concentration (mg/m³) = K x UUT reading (CPM) where K(Sensitivity) = 0.00095
- Correlation coefficient (r): 0.992
- All reported result were obtained from ETL approved sub-contractor.





Sibata LD-5R K-Factor Verification Test by Total Suspended Particulates HVS Test Report

Information of Calibrated Equipement

Verification Test Date:	19-Mar-24	to	24-Mar-24	Next Verification Test Date:	19-Mar-25
Unit-under-Test- Model No.:	: Sibata LD-5R			_	
Unit-under-Test Serial No.:	882106			_	
Our Report Refrence No.:	1	RPT-24-HVS-006	57	-	
Calibration Location:		Emax			
-					_

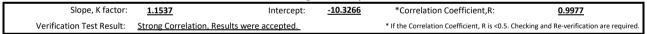
Standard Equipment Information

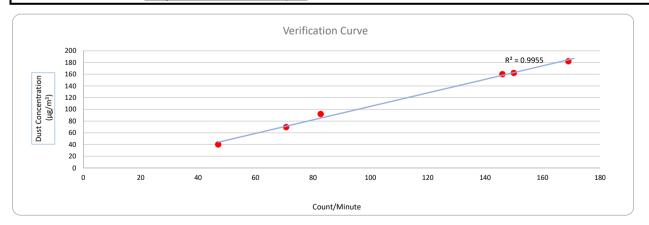
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5025A
Equipment serial no.:	1049	3465
Last Calibration Date:	19-Mar-24	15-Jan-24
Next Calibration Date:	2-Apr-24	15-Jan-25

Equipement Vertification Result

Verification	Date	Duration		Results from Calibrated Equipement		Results from Standard Equipment	
Test No.		Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (μg/m³) y-axis
1	19/03/2024	7953.66	7956.66	180.00	27000	150	162
2	19/03/2024	7956.66	7959.66	180.00	26280	146	160
3	19/03/2024	7959.66	7962.66	180.00	30420	169	182
4	24/03/2024	7985.12	7988.12	180.00	8460	47	40
5	24/03/2024	7988.12	7991.12	180.00	14886	83	92
6	24/03/2024	7991.12	7994.12	180.00	12726	71	70

Linear Regression of y on x





Operated By:

Andy Li

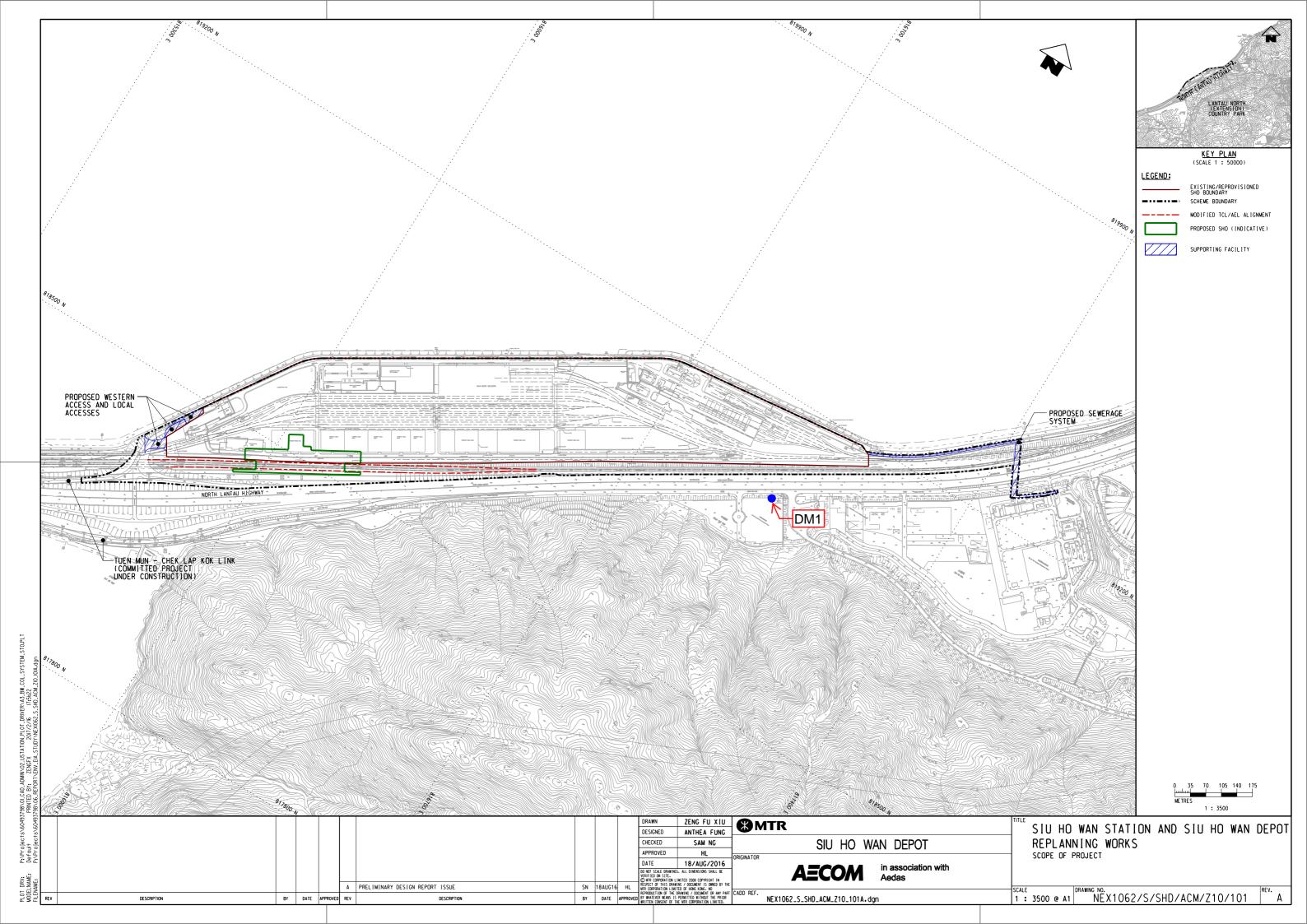
Project Technician, Environmental

Date: 29-03-2024

Checked By: Tandy Tse Date: 29-03-2024

Senior Consultant, Environmental

Appendix E Location Plan of Air Quality Monitoring Station



Appendix F Monitoring Schedule of This Reporting Period

JUNE 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 1-hour TSP Monitoring	4	5	6	1-hour TSP Monitoring	8
9	10	11	12	13 1-hour TSP Monitoring	14	15
16	17	18	19 1-hour TSP Monitoring	20	21	22
23	24	25 1-hour TSP Monitoring	26	27	28 1-hour TSP Monitoring	29
30						

Appendix G Air Quality Monitoring Data

Impact Air Quality Monitoring Results

1-hour TSP Monitoring Results at Station - DM1 Siu Ho Wan Government Maintenance Deport

	Start	1st Hour	2nd Hour	3rd Hour	Action Level	Limit Level	Exceedance
	Time	Conc.	Conc.	Conc.	Conc.	Conc.	(Y/N)
Date	(hh:mm)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(1/14)
3-Jun-24	13:30	19.0	16.0	23.0			N
7-Jun-24	13:39	12.0	15.0	10.0		500.0	N
13-Jun-24	8:56	24.0	23.0	16.0	294.7		N
19-Jun-24	8:55	36.0	29.0	28.0	294.7	300.0	N
25-Jun-24	8:45	15.0	12.0	19.0			N
28-Jun-24	14:33	4.0	3.0	3.0			N

 Average
 17.1

 Min
 3.0

 Max
 36.0

Appendix H Monitoring Schedule of Next Reporting Period

Tentative Dust Monitoring Schedule in July 2024

JULY 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4 1-hour TSP Monitoring	5	6
7	8	9	10 1-hour TSP Monitoring	11	12	13
14	15	16 1-hour TSP Monitoring	17	18	19	20
21	22 1-hour TSP Monitoring	23	24	25	26 1-hour TSP Monitoring	27
28	29	30	31			

The schedule is subjected to change due to unforeseeable circumstances (e.g. adverse weather, etc.)

Appendix I Waste Flow Table

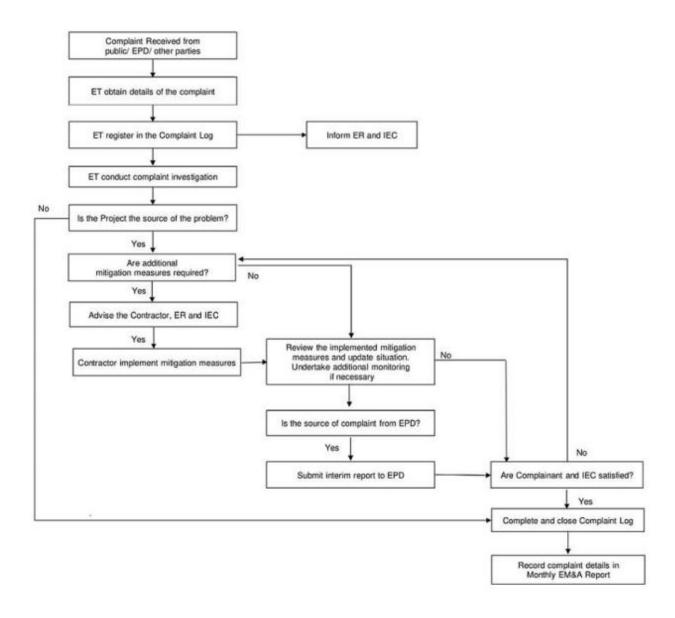
Monthly Summary Waste Flow Table

Project: Contract No. 1731 Trial Piles and Site Formation for Siu Ho Wan Depot Property Development - Phase 1

		Actual Quantities of Inert C&D Materials Generated					Actual Quantities of Non-inert C&D Materials Generated						
Month	(a) Total Quantity Generated	(b) Hard Rock and Large Broken Concrete	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill	(f) Disposed in Sorting Facilities	(g) Imported Fill	(h) Metals	(i) Paper / cardboard packaging	(j) Plastics	(k) Chemical Waste	(l) Recyclable Yard Waste	(m) Others, i.e. General Refuse disposed of at Landfill
	(tonnes)	(m^3)	(m^3)	(m^3)	(tonnes)	(tonnes)	(m^3)	(tonnes)	(tonnes)	(tonnes)	(tonnes)	(tonnes)	(tonnes)
Jan-23	1.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.78
Feb-23	3.17	0.00	0.00	0.00	3.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar-23	38.11	0.00	0.00	0.00	37.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
Apr-23	210.97	0.00	0.00	0.00	210.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
May-23	42.00	0.00	0.00	0.00	40.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66
Jun-23	264.55	0.00	0.00	0.00	192.85	67.46	0.00	0.00	0.00	0.00	0.00	0.00	4.24
Jul-23	247.19	0.00	0.00	0.00	238.99	7.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20
Aug-23	426.08	0.00	0.00	0.00	417.46	7.41	0.00	0.00	0.00	0.00	0.00	0.00	1.21
Sep-23	270.42	0.00	0.00	0.00	269.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34
Oct-23	172.46	0.00	0.00	0.00	171.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
Nov-23	910.88	0.00	0.00	0.00	907.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.78
Dec-23	258.10	0.00	0.00	0.00	239.00	0.00	0.00	17.31	0.00	0.00	0.00	0.00	1.79
Year 2023 Total	2845.71	0.00	0.00	0.00	2727.13	81.87	0.00	17.31	0.00	0.00	0.00	0.00	19.40
Jan-24	44.40	0.00	0.00	0.00	27.34	7.69	0.00	0.00	0.00	0.00	0.00	0.00	9.37
Feb-24	371.61	0.00	0.00	0.00	360.34	5.48	0.00	0.00	0.00	0.00	0.00	0.00	5.79
Mar-24	768.26	0.00	0.00	0.00	763.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.79
Apr-24	8.84	0.00	0.00	0.00	7.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73
May-24	96.08	0.00	0.00	0.00	82.10	11.79	0.00	0.00	0.00	0.00	0.00	0.00	2.19
June-24	113.07	0.00	0.00	0.00	111.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30
Year 2024 Total	1289.19	0.00	0.00	0.00	1352.13	24.96	0.00	0.00	0.00	0.00	0.00	0.00	25.17

Appendix J Complaint Handling Procedure

Complaint Handling Procedure



Appendix K Event and Action Plan for Air Quality Monitoring

	Action										
Event		Environmental Team	Ir	ndependent Environmental Checker	E	ingineer's Representative		CONTRACTOR			
ACTION LEVEL											
Exceedance for one sample	1. 2.	confirm findings;	 2. 3. 	Check monitoring data submitted by the ET; Check Contractor's working method; Discuss with ET, ER and	1.	Confirm receipt of notification of exceedance in writing.	1.	Identify source(s), investigate the causes of exceedance and propose remedial measures; Implement remedial			
	 4. 	Identify source(s), investigate the causes of exceedance and propose remedial measures; and Increase monitoring frequency.	4.	Contractor on possible remedial measures; and Review and advise the ET and ER on the effectiveness of the proposed remedial measures.			3.	measures; and Amend working methods agreed with the ER as appropriate.			
Exceedance for two or more consecutive samples	1. 2. 3. 4. 5. 6. 7.	confirm findings; If exceedance is confirmed, informed Contractor, IEC and ER; Identify source(s), investigate the causes of exceedance and propose remedial measures; Increase monitoring frequency to daily; Advise the Contractor and ER on the effectiveness of the proposed remedial measures; Discuss with IEC and Contractor on remedial actions required;	1. 2. 3. 4.	Check monitoring data submitted by the ET; Check Contractor's working method; Discuss with ET, ER and Contractor on possible remedial measures; Review and advise the ET and ER on the effectiveness of the proposed remedial measures; and Supervise implementation of remedial measures.	1. 2. 3.	Confirm receipt of notification of exceedance in writing; In consultation with the ET and IEC agree with the Contractor on the remedial measures to be implemented; and Supervise implementation of remedial measures.	1. 2. 3. 4.	Identify source(s) and investigate the causes of exceedance; Submit proposals for remedial measures to the ER, ET and IEC within three working days of notification for agreement; Implement the agreed proposals; and Amend proposal as appropriate.			

			tion	
Event	Environmental Team	Independent Environmental Checker	Engineer's Representative	CONTRACTOR
LIMIT LEVEL				
Exceedance for one sample	 Repeat measurement to confirm findings; If exceedance is confirmed, inform the Contractor, IEC, EPD and ER; Identify source(s), investigate the causes of exceedance and propose remedial; Increase monitoring frequency to daily; and Discuss with the ER, IEC and Contractor on the remedial measures and assess effectiveness. 	 Check monitoring data submitted by the ET; Check Contractor's working method; Discuss with the ET, ER and Contractor on possible remedial measures; Review and advise the ET and ER on the effectiveness of the proposed remedial measures; and Supervise implementation of remedial measures. 	 Confirm receipt of notification of exceedance in writing; Review and agree on the remedial measures proposed by the Contractor; and Ensure remedial measures properly implemented. 	 Identify source(s) and investigate the causes of exceedance; Take immediate action to avoid further exceedance; Submit proposals for remedial measures to ER, ET and IEC within three working days of notification for agreement; Implement the agreed proposals; and Amend proposal if appropriate.
Exceedance for two or more consecutive samples	 Repeat measurement to confirm findings; If exceedance is confirmed, inform IEC, ER, Contractor and EPD; Identify source(s), investigate the causes of exceedance and propose remedial measures; Increase monitoring frequency to daily; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with IEC and ER to discuss the remedial actions to be taken; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and If exceedance stops, cease additional monitoring. 	 Check monitoring data submitted by the ET; 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; and Supervise the implementation of remedial measures. 	 Confirm receipt of notification of exceedance in writing; In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; Supervise the implementation of remedial measures; and If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. 	 Identity source(s) and investigate the causes of exceedance; Take immediate action to avoid further exceedance; Submit proposals for remedial measures to the ER, IEC and ET within three working days of notification for agreement; Implement the agreed proposals; Revise and resubmit proposals if problem still not under control; and Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Appendix L Statistics on Complaint, Notification of Summons and Successful Prosecution

Statistics on Complaints, Notification of Summons and Successful Prosecution

Table L1 Statistical Summary of Environmental Complaint

Poporting Poriod	Environmental Complaint Statistics						
Reporting Period	Frequency	Cumulative	Complaint Nature				
1 June 2024							
to	0	0	N/A				
30 June 2024							

Table L2 Statistical Summary of Environmental Non-compliance

Reporting Period	Environmental Non-compliance Statistics						
Reporting Period	Frequency	Cumulative	Details				
1 June 2024	-						
to	0	0	N/A				
30 June 2024							

Table L3 Statistical Summary of Environmental Summons

Paparting Pariod	Environmental Summons Statistics						
Reporting Period	Frequency	Cumulative	Details				
1 June 2024							
to	0	0	N/A				
30 June 2024							

Table L4 Statistical Summary of Environmental Prosecution

Paparting Pariod	Environmental Prosecution Statistics						
Reporting Period	Frequency	Cumulative	Details				
1 June 2024							
to	0	0	N/A				
30 June 2024							

Appendix M Environmental Mitigation Implementation Schedule

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
Air Qual	ity (Construction Phase)						
S3.8.1	Watering once per hour on active works areas, exposed areas and unpaved haul roads during working hours.	To minimize dust impacts	Contractor	All works area	Construction phase	Air Pollution Control Ordinance (APCO)	Implemented
S3.8.9	 Implementation of dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices should be carried out to further minimize construction dust impact: Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather. Use of frequent water for particularly dusty construction areas and areas close to ASRs. Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering should be applied to aggregate fines. Open stockpiles should be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs. Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. Establishment and use of vehicle wheel and body washing facilities at the exit points of the site. Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading 	To minimize dust impacts	Contractor	All works area	Construction phase	Air Pollution Control Ordinance (APCO)	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	points, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods. Imposition of speed controls for vehicles on unpaved site roads. 8 kilometres per hour is the recommended limit. Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs. Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides. Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed. Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system.	Address					
Noise Im	pact (Construction Phase)						
S4.5.16	Implement the following good site	To minimise	Contractor	All works	Construction	TM-EIAO	Implemented
	practices as far as practicable:Only well-maintained plant should be operated on-site and plant should be	impacts to surrounding habitats		area	phase		

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 serviced regularly during the construction program. Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction program. Mobile plant, is any, should be sited as far from NSRs as possible. Machine and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum. Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs. Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities. 						
S4.5.17	Adopting quiet PME is recommended. The type of quiet PME adopted in this assessment is for reference only. The contractors may adopt alternative quiet PME as long as it can be demonstrated that they would not result in construction noise impacts worse than those predicted in this assessment	To reduce impact to affected NSRs	Contractor	All works area	Construction phase	TM-EIAO	Implemented
S4.5.19	Use of noise barriers and noise enclosures to provide screening for construction plant where recommended.	To reduce impact to affected NSRs	Contractor	All works area	Construction phase	TM-EIAO	N/A
	uality Impact (Construction Phase)	Ta astatus ta a	On mature of the	All	Construction	1 14/2422	January 1 1 1
S5.8.4	Surface and road run-off from construction sites should be discharged into storm drains via adequately	To minimise impact from	Contractor	All works area	Construction phase	Water Pollution Control	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels or earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels should be provided on site boundaries where necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	construction site run-off				Ordinance (WPCO), Technical Memorandum on EIA Ordinance (EIAO-TM), ProPECC PN 1/94, Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS)	
S5.8.5	Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to prevent local flooding. Any practical options for the diversion and realignment of drainage should comply with both engineering and environmental requirements in order to provide adequate hydraulic capacity of all drains.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented
S5.8.6	Construction works should be programmed to minimize soil excavation works in rainy seasons (April to September). If soil excavation cannot be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion,	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
05.0.7	temporary exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm.					MADOO	
S5.8.7	Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented
S5.8.8	Measures should be taken to minimize the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented
S5.8.9	If bentonite slurries are required for any construction works, they should be reconditioned and reused wherever practicable to minimise the disposal volume of used bentonite slurries. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	transported away after the related construction activities are completed. Requirements as stipulated in ProPECC Note PN 1/94 should be closely followed when handling and disposing bentonite slurries.						
S5.8.10	Open stockpiles of construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented
S5.8.11	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented
\$5.8.12	Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented
S5.8.12	The following mitigation measures related to the transportation of the sediment should be implemented to minimize the potential water quality impact: • Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water.	To minimise impact from transportation of sediment	Contractor	Barging point and barges	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 The barge transporting the sediments to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation. Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the Director of Environmental Protection (DEP). 						
S5.8.13	There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TMDSS. The beneficial uses of the treated effluent for other onsite activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence.	To minimize impact from effluent discharge	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
S5.8.14	Water for Bored Piling Works Water used in ground boring and drilling for site investigation or rock / soil anchoring should be re-circulated as far as practicable after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented
S5.8.15	Wheel Washing Water Wash-water from wheel washing facility should have been treated by silt removal facilities before discharging into storm drains. Treated wash-water could be used as dust suppression measures as far as practicable. The section of access road between the wheel washing bay and the public road should be paved to reduce vehicle tracking of soil and to prevent silty water from entering public road and drains.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented
S5.8.16	Construction Works near Channelized Watercourse / Ditch For minimization of potential water quality impacts from the works to nearby inland channelized watercourse/ditch near SHWSTW, the practices outlined in ProPECC Note PN 1/94 "Construction Site Drainage" and ETWB TC (Works) No.5/2005 "Protection of natural streams / rivers from adverse impacts arising from construction works" should be adopted where applicable. Relevant mitigation measures are listed below: The use of less or smaller construction plants may be specified in works area close to the inland water bodies.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAOTM, ProPECC PN 1/94, TMDSS	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 Temporary storage of material (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from watercourse/ditch when carrying out of the construction works. Stockpiling of construction materials and dusty materials should be covered and located away from any watercourse/ditch. Construction debris and spoil should be covered up and / or disposed of as soon as possible to avoid being washed into the nearby water receivers. Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the watercourse/ditch, where practicable. Construction effluent, site run-off and sewage should be properly collected and / or treated 						
S5.8.17 -	Accidental Spillage of Chemicals The Contractor should register as a	To minimise impact from	Contractor	All works area	Construction phase	WPCO, EIAOTM,	Implemented
S5.8.19	chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste)(General) Regulation, should be observed and complied. • Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be	accidental spillage				Waste Disposal Ordinance (WDO), Waste Disposal (Chemical Waste) (General) Regulation	

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges. • Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows: • Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport. • Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents. • Storage area should be selected at a safe location on site and adequate space should be	7.000					
\$5.8.20 - \$5.8.21	allocated to the storage area. Sewerage Effluent from Construction Workforce No discharge of sewage to the storm water system and marine water will be allowed. Adequate and sufficient portable chemical toilets should be provided in the works areas to	To minimise impact from workforces sewage effluent	Contractor	All works area	Construction phase	WPCO, EIAO- TM, TM-DSS	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 handle sewage from construction workforce. A licensed waste collector should be employed to clean and maintain the chemical toilets on a regular basis. Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment. 						
S5.8.22 - S5.8.24	Groundwater from Contaminated Areas, Contaminated Site Runoff and Wastewater from Land Decontamination • Remediation of contaminated land should be properly conducted following the recommendations of Land Contamination Assessment to be conducted in future. Any excavated contaminated material and exposed contaminated surface should be properly housed and covered to avoid generation of contaminated runoff. Open stockpiling of contaminated materials should not be allowed. Any contaminated runoff or wastewater generated from the land decontamination processes should be properly collected and diverted to wastewater treatment facilities (WTF) as necessary. The WTF shall deploy suitable treatment processes (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (such as total petroleum hydrocarbon) to an undetectable range. All treated	To minimise impact from groundwater from contaminated areas, contaminated site run-off/wastewater from land decontamination	Contractor	All works area confirmed with land contamination	Construction Phase	WPCO, EIAOTM, TM- DSS, Guidance Note for Contaminated Land Assessment	N/A

EIA	Recommended Mitigation Measures	Objectives of the	Implementation	Location of	Implementation	Requirements	Implementation
Ref.		Recommended	Agent	the Measures	Stage		Status
		Measures and					
		Main Concern to					
		Address					
	effluent from the wastewater						
	treatment system shall meet the						
	requirements as stated in TM-DSS						
	and should be either discharged into						
	the foul sewers or tankered away for						
	proper disposal.						
	No direct discharge of groundwater						
	from contaminated areas should be						
	adopted. Prior to any excavation						
	works within the potentially						
	contaminated areas, the baseline						
	groundwater quality in these areas						
	should be reviewed based on the						
	past relevant site investigation data and any additional groundwater						
	quality measurements to be						
	performed with reference to						
	Guidance Note for Contaminated						
	Land Assessment and Remediation						
	and the review results should be						
	submitted to EPD for examination. If						
	the review results indicated that the						
	groundwater to be generated from						
	the excavation works would be						
	contaminated, this contaminated						
	groundwater should be either						
	properly treated or properly						
	recharged into the ground in						
	compliance with the requirements of						
	the TM-DSS. If wastewater treatment						
	is to be deployed for treating the						
	contaminated groundwater, the						
	wastewater treatment unit shall						
	deploy suitable treatment processes						
	(e.g. oil interceptor / activated						
	carbon) to reduce the pollution level						
	to an acceptable standard and						
	remove any prohibited substances						

EIA Ref.	Recommended Mitigation Measures	Objectives of the	Implementation	Location of	Implementation	Requirements	Implementation
Rei.		Recommended Measures and	Agent	the Measures	Stage		Status
		Main Concern to					
		Address					
	(such as total petroleum						
	hydrocarbon) to an undetectable						
	range. All treated effluent from the						
	wastewater treatment plant shall						
	meet the requirements as stated in						
	the TM-DSS and should be either						
	discharged into the foul sewers or						
	tankered away for proper disposal.						
	If deployment of wastewater						
	treatment is not feasible for handling the contaminated groundwater,						
	groundwater recharging wells should						
	be installed as appropriate for						
	recharging the contaminated						
	groundwater back into the ground.						
	The recharging wells should be						
	selected at places where the						
	groundwater quality will not be						
	affected by the recharge operation						
	as indicated in section 2.3 of TM-						
	DSS. The baseline groundwater						
	quality should be determined prior to						
	the selection of the recharge wells,						
	and submit a working plan to EPD for						
	agreement. Pollution levels of						
	groundwater to be recharged shall						
	not be higher than pollutant levels of						
	ambient groundwater at the recharge						
	well. Groundwater monitoring wells should be installed near the recharge						
	points to monitor the effectiveness of						
	the recharge wells and to ensure that						
	no likelihood of increase of						
	groundwater level and transfer of						
	pollutants beyond the site boundary.						
	Prior to recharge, free products						
	should be removed as necessary by						
	installing the petrol interceptor.						

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	The Contractor should apply for a discharge licence under the WPCO through the Regional Office of EPD for groundwater recharge operation or discharge of treated groundwater						
Waste M	lanagement Implication (Construction Phase)		L			
\$7.5.3	Recommendations for good site practices during the construction phase include: Nomination of approved personnel, such as a site manager, to be responsible for implementation of good site practices, arrangements for waste collection and effective disposal to an appropriate facility. Training of site personnel in site cleanliness, concepts of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures. Provision of sufficient waste reception/ disposal points, and regular collection of waste. Adoption of appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers. Provision of regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors. Adoption of a recording system for the amount of wastes generated, recycled and disposed (including the disposal sites).	To avoid and minimize impacts arising from waste management	Contractor	All works area	Construction phase	Waste Disposal Ordinance (WDO) and Public Cleansing and Prevention of Nuisances Regulation (Cap. 132BK)	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	Preparation of Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP).						
S7.5.4	 Recommendations to achieve waste reduction are as follow: Segregate and store different types of construction related waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal. Provide separate labelled bins to segregate recyclable waste such as aluminium cans from other general refuse generated by the work force, and to encourage collection by individual collectors. Recycle any unused chemicals or those with remaining functional capacity. Maximise the use of reusable steel formwork to reduce the amount of C&D materials. Adopt proper storage and site practices to minimise the potential for damage to, or contamination of construction materials. Plan the delivery and stock of construction materials carefully to minimise the amount of waste generated. Minimize over ordering and wastage through careful planning during purchasing of construction materials. 	To minimize waste generation	Contractor	All works area	Construction phase	WDO	Implemented
S7.5.6	To minimise the impact resulting from collection and transportation of C&D materials as far as practicable, C&D	To minimise the disposal of C&D waste	Contractor	All works area	Construction phase	WDO	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	waste, such as wood, plastic, steel and other metals should be reused or recycled and, as a last resort, disposed to landfill. A suitable area should be designated within the site for temporary stockpiling of C&D materials and to facilitate the sorting process.						
S7.5.6	Within the stockpile areas, the following measures should be taken to control potential environmental impacts or nuisance: • Proper handling and storage of waste such as soil by means of covers and/or water spraying system to minimise the potential environmental impact and to prevent materials from wind-blown or being washed away. • Covering materials during heavy rainfall. • Locating stockpiles to minimise potential visual impacts. • Minimising land intake of stockpile areas as far as possible. • Adopting GPS or equivalent system for tracking and monitoring of all dump trucks engaged for the Project in recording their travel routings and parking locations to prohibit illegal dumping and landfilling of C&D materials. • Keeping record and analysis of data collected by GPS or equivalent system related to travel routings and parking locations of dump trucks engaged on site	To avoid and minimize impacts arising from waste management	Contractor	All works area	Construction phase	WDO	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
S7.5.7 - S7.5.9	General refuse should be stored in enclosed bins or compaction units separate from C&D materials and chemical waste. A reputable waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D materials and chemical wastes. An enclosed and covered area is preferred to reduce the occurrence of 'wind blown' light materials. The recyclable component of general refuse, such as aluminium cans, paper and cleansed plastic containers shall be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste shall be set up by the Contractor. The Contractor shall also be responsible for arranging recycling companies to collect these materials. The Contractor shall carry out an education programme for workers in avoiding, reducing, reusing and recycling of materials generation. Posters and leaflets advising on the use of the bins shall also be provided in the sites as reminders.	To avoid and minimize impacts arising from waste management	Contractor	All works area	Construction phase	WDO	Implemented
\$7.5.10 - \$7.5.12	If chemical wastes were to be produced at the construction site, the Contractor would be required to register with the EPD as a Chemical Waste Producer, and to follow the guidelines stated in the Code of Practice on the Packaging,	To avoid and minimize impacts arising from waste management	Contractor	All works area	Construction phase	WDO	Implemented

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
\$7.5.13 - \$7.5.14	Labelling and Storage of Chemical Wastes. Appropriate containers with proper labels should be used for storage of chemical wastes. Chemical wastes should be collected and delivered to designated outlet by a licensed collector. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the CWTC, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. Any unused chemicals or those with remaining functional capacity should be collected for reuse as far as practicable. The sediment should be excavated, handled, transported and disposed of in a manner that would minimise adverse environmental impacts. For minimization of sediment disposal, beneficial reuse will be considered on site as far as practicable during the construction stage before the disposal of excavated sediment. Requirements of the Air Pollution Ordinance (Construction Dust) Regulation, where relevant, shall be adhered to during excavation, transportation and disposal of sediments. In order to minimise the exposure to	To avoid and minimize impacts arising from waste management	Contractor	All works area	Construction phase	APCO EDO	N/A
	contaminated materials, workers shall, when necessary, wear appropriate	minimize impacts arising from	2333.01	area	phase		

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	personal protective equipments (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities shall also be provided on site.	waste management					
S7.5.16	For off-site disposal, the basic requirements and procedures specified under PNAP No. 252 (ADV-21) shall be followed. Marine Fill Committee (MFC) of CEDD is managing the disposal facilities in Hong Kong for the excavated sediment, while EPD is the authority of issuing marine dumping permit under the Dumping at Sea Ordinance (DASO).	To avoid and minimize impacts arising from waste management	Contractor	All works area	Construction phase	WDO, DASO, ADV-21	N/A
S7.5.17	For the purpose of site allocation and application of marine dumping permit and if considered necessary by EPD (Marine Dumping Section), separate SSTP shall be submitted to EPD for agreement under DASO. Additional SI works, based on the SSTP, shall then be carried out in order to confirm the disposal arrangements of the excavated sediment. A Sediment Quality Report (SQR), reporting the chemical and biological screening results and the estimated quantities of sediment under different disposal options, shall then be submitted to EPD for agreement under DASO.	To avoid and minimize impacts arising from waste management	Contractor	All works area	Construction phase	WDO, DASO, ADV-21	N/A
S7.5.18	To ensure disposal space is allocated for the Project, the Project Proponent should be responsible for obtaining agreement from MFC on the allocation of the disposal site. The contractor(s), on the other hand, should be responsible for the application of the marine dumping permit under DASO from EPD for the sediment disposal.	To avoid and minimize impacts arising from waste management	Project Proponent and Contractor	All works area	Construction phase	WDO, DASO, ADV-21	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
S7.5.19	The excavated sediments is expected to be loaded onto the barge at public barging point of which the exact location will be determined by the contractor(s) and agreed by EPD/CEDD and transported to the designated disposal sites allocated by MFC. The excavated sediment would be disposed of according to its determined disposal options and PNAP No. 252 (ADV-21).	To avoid and minimize impacts arising from waste management	Project Proponent and Contractor	All works area	Construction phase	WDO, DASO, ADV-21	N/A
S7.5.20	Stockpiling of contaminated sediments shall be avoided as far as possible. If temporary stockpiling of contaminated sediments is unavoidable, the excavated sediment shall be covered by tarpaulin and the area shall be placed within earth bunds or sand bags to prevent leachate from entering the ground, nearby drains and/or surrounding water bodies. The stockpiles shall be completely paved or covered by linings in order to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas shall be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, shall be collected and discharged according to the Water Pollution Control Ordinance (WPCO).	To avoid and minimize impacts arising from waste management	Contractor	All works area	Construction phase	WPCO	N/A
S7.5.21	In order to minimise the potential odour / dust emissions during excavation and transportation of the sediment, the excavated sediments shall be wetted during excavation / material handling and shall be properly covered when placed on trucks or barges. Loading of the excavated sediment to the barge shall be controlled to avoid splashing and	To avoid and minimize impacts arising from waste management	Contractor	All works area	Construction phase	WDO, APCO	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	overflowing of the sediment slurry to the surrounding water.						
S7.5.22	The barge transporting the sediments to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation. In addition, monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP.	To avoid and minimize impacts arising from waste management	Contractor	All works area	Construction phase	WSO	N/A
	ntamination		T	T		T	
\$8.9.3	To minimise environmental impacts arising from the handling of potentially contaminated materials, the following environmental precautionary measures are recommended to be utilised during the course of any required site remediation: • Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety. • Establish and maintain a Health and Safety Plan with the information below before commencement of the SI: (a) Instruction of works on work procedures, safe practices, emergency duties, and applicable regulations; (b) Regularly scheduled meetings of the workers in which the possible hazards, problems of the job,	To control land remediation work	Contractor	Area identified with land contamination	Prior to the commencement of construction works at the contaminated areas	"Guidance Note for Contaminated Land Assessment And Remediation", "Guidance Manual for Use of Risk- based Remediation Goals for Contaminated Land Management", "Public Cleansing and Prevention of Nuisances	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	and related safe practices are emphasized and discussed; (c) Good housekeeping practices; and (d) Availability of and instruction in the location, use and maintenance of personal protective equipment. • Excavation shall be carried out during dry season as far as possible to minimise contaminated runoff from contaminated soils. • Supply of suitable clean backfill material (or treated soil) after excavation. • Stockpiling site(s) shall be lined with impermeable sheeting and bunded. Stockpiles shall be fully covered by impermeable sheeting to reduce dust emission. If this is not practicable due to frequent usage, regular watering shall be applied. However, watering shall be avoided on stockpiles of contaminated soil to minimise contaminated runoff. • Vehicles containing any excavated materials shall be suitably covered to limit potential dust emissions or contaminated wastewater run-off, and truck bodies and tailgates shall be sealed to prevent any discharge during transport or during wet conditions. • Speed control for the trucks carrying contaminated materials shall be enforced.	Address				Regulation (Cap. 132BK)", APCO, WDO and WPCO	

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 Vehicle wheel and body washing facilities at the site's exist points shall be established and used. Pollution control measures for air emissions (e.g. from biopile blower and handling of cement), noise emissions (e.g. from blower or earthmoving equipment), and water discharges (e.g. runoff control from treatment facility) shall be implemented and complied with relevant regulations and guidelines. 						
	pe and Visual Impact (Construction Phase)						
S9.8.1	Trees unavoidably affected by the works should be transplanted as far as possible in accordance with DEVB TC(W) 7/2015 – Tree Preservation or LAO PN 7/2007 - Tree Preservation and Tree Removal Application for Building Development in Private Projects where applicable.	To transplant affected trees	Contractor	All works area	Construction phase	DEVB TC(W) No. 7/2015 or LAO PN 7/2007 where applicable	N/A
S9.8.1	Control of night-time lighting glare.	To minimize the Landscape and visual impact on surrounding setting	Contractor	All works area	Construction phase	TM-EIAO	N/A
S9.8.1	Erection of decorative screen hoarding which should be compatible with the surrounding setting	To minimize the Landscape and visual impact on surrounding setting	Contractor	All works area	Construction phase	TM-EIAO	N/A
S9.8.1	Management of facilities on work sites by controlling the height and disposition/arrangement of all facilities on the works site to minimize visual impact to adjacent VSRs.	To minimize visual impact to adjacent VSRs.	Contractor	All works area	Construction phase	-	Implemented
S9.8.1	All hard and soft landscape areas disturbed temporarily during construction should be reinstated on like-to-like basis,	To minimize the landscape impact	Contractor	All works area	Construction phase	-	N/A

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	to the satisfaction of the relevant Government Departments.	on surrounding setting					
Hazard to	o Life						
S10.7.2	Precautionary measures for chlorine released from SHWWTW such as provision of emergency plan for efficient evacuation including good practice (i.e. adequate training and drills for construction workers) during construction phase shall be implemented to further reduce the risk level.	To further reduce the risk level	Contractor	All works area	Construction phase	TM-EIAO	N/A

Appendix C

Monthly EM&A Report for June 2024 Cable Bridges and Associated Civil Works for Cable Diversion Works Contract 1732





MTR Corporation Limited

Siu Ho Wan Depot Property Development -

Cable Bridges and Associated Civil Works for Cable Diversion **Monthly EM&A Report**

(Period from 1 to 30 June 2024)

	Name	Signature
Prepared by	Andre C. Chui	Rus
Checked & Reviewed by	F. C. Tsang	ToayFankeary





TABLE OF CONTENTS

EXECUTIVE SUMMARY

1.	BASIC PROJECT INFORMATION	2
	ENVIRONMENTAL STATUS	
	MONITORING RESULTS	
	SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS	
	EM&A SITE INSPECTION	
	FUTURE KEY ISSUES	
7	CONCLUSION AND RECOMMENDATIONS	14





LIST OF APPENDICES

- A. Construction Programme
- B. Project Organization Chart
- C. Alignment and Works Area for Contract No. 1732
- D. Location Plan of Air Quality Monitoring Station
- E. Calibration Certificate (Air Quality Monitoring)
- F. Monitoring Data (Air Quality Monitoring)
- G. Waste Flow Table
- H. Complaint Handling Procedure
- I. Event-Action Plan (Air Quality Monitoring)
- J. Statistics on Complaint, Notification of Summons and Successful Prosecution
- K. Environmental Mitigation Implementation Schedule (EMIS)
- L. Monitoring Schedule of the Reporting Month
- M. Monitoring Schedule of the Coming Month





EXECUTIVE SUMMARY

- A.1 This is the 31st monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the reporting period from 1 June to 30 June 2024.
- A.2 A summary of the construction works reported by the Contractor for the Project during the reporting month is listed below.

Construction activities undertaken

- Instrumentation monitoring (cable bridges, EVA road for concerning pavements between trackside)
- Draw pits, cable ducts and cable trough works at depot
- EVA construction and watermain installation
- Additional footings and civil works at test track and east level crossing
- Cable containments at the footing for cable diversion
- Cable bridge E&M works, and outstanding steel works (under EIs)
- A.3 A summary of regular construction dust monitoring activities in this reporting period is listed below:

Construction dust (1-hour TSP) monitoring DM1

18 times

- A.4 Weekly environmental site inspections were conducted during the reporting period. A joint site inspection with the IEC was carried out on 11 June 2024. Observations were reported during the site inspections. All items are rectified within the reporting period. The environmental performance of the Project was considered satisfactory.
- A.5 Details of waste management are presented in **Section 3**.
- A.6 No Action or Limit Levels exceedance of 1-hour TSP was recorded during the reporting period.
- A.7 No complaint or non-compliance was reported in the reporting period.
- A.8 No notification of summon or prosecution was received in this reporting period.
- A.9 No changes of EM&A programme were made in this reporting period.
- A.10 A summary of the construction activities provided by the Main Contractor in the next three reporting months are listed below:

Construction Activities to be undertaken

- General survey works
- Instrumentation monitoring
- Cable ducts and cable trough works at depot
- EVA construction and watermain installation
- Additional civil works and trackworks for EV03 & 04
- Cable bridge E&M works and outstanding works under EIs





1. BASIC PROJECT INFORMATION

- 1.1.1. The Project involves the construction of the foundations and superstructure for two cable bridges and each of two spans across and above the Tung Chung Line, Airport Express Line and the Siu Ho Wan Depot test track. The Works enable the diversion of the existing utilities to provide space for the future foundation works of the Siu Ho Wan Property Development and Oyster Bay Station (OYB, formerly named as Siu Ho Wan Station (SHO)).
- 1.1.2. The (AEIAR-214/2017) "Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works" Environmental Impact Assessment Report was approved with conditions by the Environmental Protection Department (EPD) on 29 November 2017. The latest Environmental Permit (No. EP-588/2021) was issued by the EPD on 22 March 2021.
- 1.1.3. The Project (Contract 1732) was awarded to Paul Y. CRCCI Joint Venture (JV). JV has engaged Acuity Sustainability Consulting Limited as the Environmental Team (ET) for this contract.
- 1.1.4. The Project covers the following construction activities:
 - (a) Site formation, tree removal, site safety fencing and supply and installation of Engineer's Site Accommodation;
 - (b) Diversion of existing above ground watermains to create working areas within the site for the Works;
 - (c) Constructing foundations comprising pre-bored H-piles, and carrying out pile load tests on selected H-piles;
 - (d) Constructing pile caps and spread footing foundations in shallow excavation;
 - (e) Prefabrication of steel truss vertical support frames, and erection on the foundations;
 - (f) Prefabrication of steel truss cable bridges and erection on to the vertical support frames;
 - (g) Prefabrication and erection of a steel link bridge spanning between the cable bridge and the façade of the existing building AB11;
 - (h) Installation of cable trays, cable supports and sunshield in and along the cable bridges, vertical support frames and at external walls of the existing building AB11;
 - (i) Installation of cable bridge miscellaneous details such as roof, drainage, facades, lightings, lightning protection, access control;
 - (j) Installation of ground level cable troughs;
 - (k) Modification of the façade of existing AB11 building for cable feeding out from the building;
 - (l) All temporary railway protection works such as hoardings and retaining structures in course of the Execution of the works; and
 - (m) Supply and installation of equipotential bonding for the cable bridge and associated fixed metal parts attached to the cable bridge.





1.1.5. A summary of the major construction activities undertaken in this reporting period (from 1 June to 30 June 2024) is shown in **Table 1.1**. The construction programme is presented in **Appendix A**.

Table 1.1 Summary of the construction activities reported by Main Contractor during the Reporting Month

Construction Activities undertaken

- Instrumentation monitoring (cable bridges, EVA road for concerning pavements between trackside)
- Draw pits, cable ducts and cable trough works at depot
- EVA construction and watermain installation
- Additional footings and civil works at test track and east level crossing
- Cable containments at the footing for cable diversion
- Cable bridge E&M works, and outstanding steel works (under EIs)
- 1.1.6. The project organisational chart specifying management structure and contact details are shown in **Appendix B**.
- 1.1.7. A summary of the valid permits, licences, and/ or notifications on environmental protection for this Project is presented in **Table 1.2**.





Table 1.2 Summary of the Status of Valid Environmental License Notification, Permit and Documentations

Permit/ Licences/	Valid Period		g					
Notification/ Reference No.	From	То	Status	Remark				
Environmental Permit	Environmental Permit							
EP-588/2021	22 Mar 2021	N/A	Valid	-				
Wastewater Discharge Lie	cense							
WT00040639-2022	23 Mar 2022	31 Mar 2027	Valid	-				
Notification of Constructi Regulation	on Works unde	r the Air Pollutio	on Control (Construction Dust)				
Ref. 472845	N/A	N/A	Notified	Notification submitted on 19 Oct 2021				
Chemical Waste Producer	Registration							
WPN5213-961-P3457-01	19 Nov 2021	N/A	Valid	-				
Billing Account for Dispos	sal of Construct	tion Waste						
7042328	25 Nov 2021	N/A	Valid	-				
Construction Noise Permi	it							
GW-RS0215-24	1 Apr 2024	30 Sep 2024	Valid	Site office, main works at AB11 area and cross-track area, cable bracket works along TCL/AEL, and additional EI works.				





2. ENVIRONMENTAL STATUS

2.1.1. Environmental permit (EP) conditions under the EIAO, submission status under the EP and implementation status of mitigation measures had been reviewed and implemented on schedule. The status of required submissions under the EP (No. EP-588/2021) as of the reporting period for the Project are summarised in **Table 2.1**.

Table 2.1 Summary of Status of Required Submission for EP-588/2021 for the Project

EP Condition (EP-588/2021)	Submission	Submission date		
		11 June 2021 (1 st submission)		
1.12	Commencement Date of Construction	12 July 2021 (2 nd submission)		
	Construction	12 August 2021 (3 rd submission)		
		1 November 2021 (1 st submission)		
		20 December 2021 (2 nd submission)		
2.7	Construction Works Phasing	29 December 2021 (Deposited)		
2.1	Schedule	9 October 2023 (1 st submission with		
		updated Phase 1 work)		
		30 November 2023 (Deposited)		
2.8	Environmental Permit Submission	12 August 2021		
2.0	Schedule	10 September 2021 (Deposited)		
		1 November 2021 (1 st submission)		
		20 December 2021 (2nd submission)		
		21 April 2022 (3rd submission)		
2.9	Management Organization	9 August 2022 (4th submission)		
		16 November 2022 (5th submission)		
		18 September 2023 (6th submission)		
		22 January 2024 (7th submission)		





EP Condition (EP-588/2021)	Submission	Submission date		
		1 November 2021 (1st submission)		
		20 December 2021 (2nd submission)		
		28 December 2021 (Deposited)		
		30 December 2022 (1st submission for Phase 1 work) 29 March 2023 (2nd submission for Phase		
2.10	Construction Noise Mitigation	1 work) 18 May 2023 (3rd submission for Phase 1 work)		
2.10	Plan	28 July 2023 (4th submission for Phase 1 work)		
		30 October 2023 (5th submission for Phase 1 work)		
		6 December 2023 (6th submission for Phase 1 work)		
		8 December 2023 (Deposited)		
		21 June 2024 (7 th submission for Phase 1 work)		
		31 March 2023 (1 st submission)		
	Noise Mitigation Plan	31 July 2023 (2 nd submission)		
2.11		20 October 2023 (3 rd submission)		
		7 March 2024 (4 th submission)		
		18 March 2024 (Approved)		
		1 November 2021 (1 st submission)		
		20 December 2021 (2 nd submission)		
2.13	Waste Management Plan	28 December 2021 (Deposited) 30 June 2023 (1 st submission for Phase 1 work)		
		1 August 2023 (2 nd submission for Phase 1 work)		
		31 August 2023 (Deposited for Phase 1 work)		
		27 April 2023 (1st submission)		
2.15	Landscape and Visual Plan(s)	27 July 2023 (2 nd submission)		
2.13	Lanuscape and visual Plan(s)	20 October 2023 (3 rd submission)		
		8 December 2023 (Approved)		
3.3	Baseline Monitoring Report	1 November 2021		
5.5	Baseinie Mointoring Keport	16 November 2021 (Deposited)		
3.4	Monthly EM&A Report (Dec 2021 – May 2024)	Submitted within 10 working days after the end of the reporting month		





EP Condition (EP-588/2021)	Submission	Submission date
3.4	Monthly EM&A Report (June 2024)	This report submission
4.2	Dedicated Internet Website	12 January 2022 25 July 2023 (updated address) 14 March 2024 (updated address)

2.1.2. The drawings showing the project layout and the location of the monitoring station are attached in **Appendix C** and **Appendix D**, respectively. A summary of the monitoring location is shown in **Table 2.2**.

Table 2.2 Summary of the location of the monitoring station

Air Sensitive Receiver (ASR) ID No. in EIA Report	Monitoring Station ID	ASR Description
A2	DM1	Siu Ho Wan Government Maintenance Depot





3. MONITORING RESULTS

3.1. Monitoring Parameters

Air Quality

- 3.1.1. The impact monitoring had been carried out in accordance with Section 2.6 of the approved EM&A Manual, with sampling frequency of at least 3 times in every 6 days undertaken, to determine the 1-hour total suspended particulates (TSP) levels at the monitoring locations in the reporting period.
- 3.1.2. General meteorological conditions (wind speed, direction and precipitation) and notes regarding any significant adjacent dust producing sources had also been recorded throughout the impact monitoring period.

3.2. Monitoring Equipment and Methodology

Monitoring Equipment

- 3.2.1. Portable direct reading dust meter was used to carry out the 1-hour TSP monitoring. Portable direct reading dust meters used in this monitoring were proven to the IEC to be capable of achieving comparable result as that of the HVS and, thus, were used for sampling.
- 3.2.2. The equipment used for 1-hour TSP measurement during the reporting month are summarised in **Table 3.1**.

Table 3.1 Construction Dust Monitoring Equipment

Measuring Parameter	Monitoring Equipment	Brand and Model	Serial Number	Date of Calibration			
1-hour TSP	Portable direct reading dust meter (1-hour TSP)	Sibata Digital Dust Monitor (Model No. LD-5R)	3Y7115	29 Jan 2024			
1-hour TSP	Portable direct reading dust meter (1-hour TSP)	Sibata Digital Dust Monitor (Model No. LD-5R)	882106	19 Mar 2024 to 24 Mar 2024			

3.2.3. The portable direct reading dust meter was calibrated at 1-year interval against a High-Volume Sampler, TE-5170x. Copies of calibration certificates of the portable direct reading dust meter are presented in **Appendix E**.

Monitoring Methodology

3.2.4. The 1-hour TSP measurement followed manufacturer's instruction manual. Before initiating a measurement, zeroing the portable direct reading dust meter was carried out to ensure maximum accuracy of concentration measurements.





3.2.5. The 1-hour TSP was sampled by drawing air into the portable direct reading dust meter where particular concentrations were measured instantaneously with an in-built silicon detector sensing light scattered by the particulates in the sampled air. Continuous TSP levels were indicated and logged by a built-in data logger compatible with Windows based program to facilitate data collection, analysis and reporting.

3.3. Monitoring Location

3.3.1. Location of the designated dust monitoring station is described in **Table 3.2**.

Table 3.2 Construction Dust Monitoring Location

Monitoring Station ID	Dust Monitoring Station
DM1	Siu Ho Wan Government Maintenance Depot

3.4. Result Summary

- 3.4.1. Dust impact monitoring was carried out at DM1 on 3, 7, 13, 19, 25 and 28 June 2024 during the reporting month (**Appendix L**). According to the field observations, the major dust sources identified included vehicular emissions from North Lantau Highway and Cheung Tung Road. Gentle wind was recorded throughout the monitoring period, with gentle to strong wind recorded occasionally.
- 3.4.2. The results for 1-hour TSP are summarized in **Table 3.3**. The measurement data are presented in **Appendix F.**

Table 3.3 Summary of 1-hour TSP Monitoring Results

Monitoring Location	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)	No. of Exceedances
DM1	3.0 – 36.0	294.7	500	0

Waste management

3.4.3. The waste generated from this Project includes inert C&D materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/ cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in **Table 3.4**. Details of cumulative waste management data are presented as a waste flow table in **Appendix G**.





Table 3.4 Quantities of waste generated from the Project

			_	Quantity	-							
			Non-inert C&D materials									
Reporting period	Inert C&D materials (in m ³)	Chemical Waste (in '000 kg)	Others, e.g., General Refuse		Recycled	wastes						
	(in m ²)		disposed at Landfill (in '000 kg)	Paper/ cardboard (in '000 kg)	Plastics (in '000 kg)	Metals (in '000 kg)	Yard Waste (in '000 kg)					
June 2024	270.680	0.000	6.880	0.000	0.000	0.000	0.000					

- 3.4.4. All dump trucks for C&D materials transportation and disposal were equipped with Global Positioning System (GPS) for real time tracking and monitoring their travel routings and parking locations in order to avoid illegal dumping or landfilling of C&D materials.
- 3.4.5. The GPS data including travel routings of dump trucks was reviewed by the ET and IEC, and no illegal dumping activities were suspected.





4. SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

- 4.1.1. The Environmental Complaint Handling Procedure is shown in **Appendix H**.
- 4.1.2. Should non-compliance of the air quality criteria occur, action in accordance with the Event and Action Plan in **Appendix I** shall be carried out.
- 4.1.3. No Action or Limit Levels exceedance of 1-hour TSP was recorded during the reporting month.
- 4.1.4. No complaint or non-compliance was reported in the reporting month.
- 4.1.5. No notification of summons and prosecution was received in the reporting period.
- 4.1.6. Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Appendix J**.





5. EM&A SITE INSPECTION

5.1.1. Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, four (4) site inspections were carried out on 3, 11, 17 and 24 June 2024. One joint site inspection with the IEC was also undertaken on 11 June 2024. Observations were reported during the weekly site inspections. Key observations during the site inspections are summarized in **Table 5.1**.

Table 5.1 Site Observations

Date	Observation/ Recommendation	Follow-up Status			
3 June 2024	At TP4, breaker should be placed on impervious surface to prevent chemical spillage.	 Breaker was place on an impervious surface to prevent chemical spillage. 			
11 June 2024	None	None			
17 June 2024	None	None			
24 June 2024	None	None			

5.1.2. According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents are implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix K**.





6. FUTURE KEY ISSUES

6.1.1. Work to be undertaken in the next three reporting months are:

Construction Activities to be undertaken

- General survey works
- Instrumentation monitoring
- Cable ducts and cable trough works at depot
- EVA construction and watermain installation
- Additional civil works and trackworks for EV03 & 04
- Cable bridge E&M works and outstanding works under EIs
- 6.1.2. Potential environmental impacts arising from the above construction activities are mainly associated with construction dust impact, noise impact, and waste management.
- 6.1.3. The tentative schedule of regular 1-hour TSP monitoring in the next reporting period is presented in **Appendix M**.
- 6.1.4. The construction programme for the Project for the next reporting month is presented in **Appendix A**.





7. CONCLUSION AND RECOMMENDATIONS

- 7.1.1. This 31st monthly EM&A Report presents the EM&A works undertaken during the period from 1 June to 30 June 2024 in accordance with the EM&A Manual and the requirement under EP-588/2021.
- 7.1.2. Air quality (including 1-hour TSP) impact monitoring was carried out in the reporting period. No exceedance of the Action and Limit Levels was recorded for air quality impact monitoring during the reporting period.
- 7.1.3. Weekly environmental site inspections were conducted during the reporting period. A joint site inspection with the IEC was carried out on 11 June 2024. Observations were reported during the site inspections. All items are rectified within the reporting period. The environmental performance of the Project was considered satisfactory.
- 7.1.4. No complaint or non-compliance was reported in the reporting month.
- 7.1.5. No notification of summons or prosecution was received in the reporting month.
- 7.1.6. The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.
- 7.1.7. No change of EM&A programme was made in this reporting period.
- 7.1.8. The proposed mitigation measures were properly implemented and were considered effective and efficient in pollution control.





Appendix A Construction Programme





Appendix A Construction Programme

																																				_
Construction Activities	1	D -				202									2022								202									2024				_
Construction Activities		Ď	J F	M	A M	J	J A	S	0	N D	J	F M	I A	M J	J J	A :	S O	N :	D J	F	M	A M	J	J	A S	О	N D	J	F I	M A	M	J	J A	S	O N	D
Contract 1732 - Cable Bridge and Associated Civil Works for Cable Diversion	1 2	2																																		
Site Clearance & Hoarding / UU / Cable Trenches	2	.1																																		П
H-piling	2	2																														II		Ш		
Excavation (Soil)	2	3																																		
Substructure (footing, pile caps, columns)	2	.4																																		
Backfilling	2	5																																		
Superstructure (Cable Bridges)	2	6									П								Т	П			П									iΠ				П



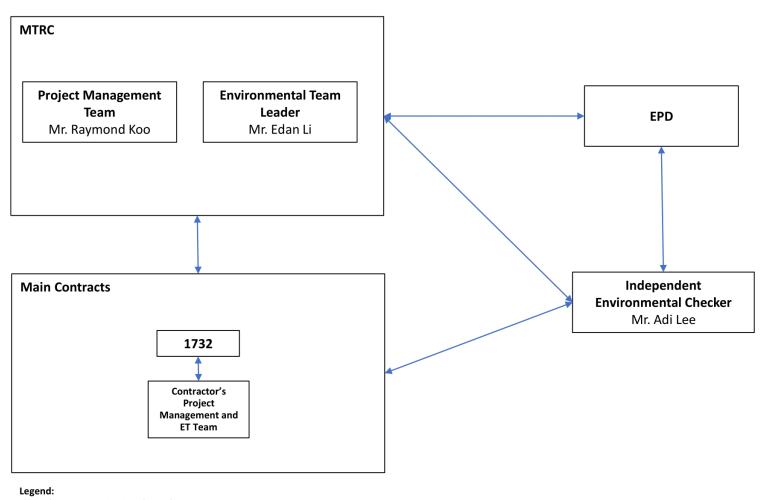


Appendix B Project Organization Chart





Project O-Chart



Communication channel





MTR's Contact:

MTRC - Project Management Team										
Position	Name	Telephone								
Chief Construction Manager - OYB	Mr. Raymond Koo	2621 7051								

MTRC - Environmental Team										
Position	Name	Telephone								
Environmental Team Leader	Mr. Edan Li	2621 7194								
Environmental Team Member	Mr. Cyrus Lau	2621 7219								

Meinhardt Infrastructure and Environment Limited- IEC											
Position	Name	Telephone									
Independent Environmental Checker	Mr. Adi Lee	2859 5443									
IEC Team Member	Ms. Echo Hung	2859 5837									

Contractor's Contact:

Main Works Contract	Description	Contractor	Position	Name	Telephone
	Cable buildess and associated sivil	Davil V. CDCCI	Project Manager	David Wong	9712 9984
1732	Cable bridges and associated civil works for cable diversion	Paul Y – CRCCI Joint Venture	Environmental Officer	Pan Fong	9436 9435
	works for cable diversion	John Venture	Environmental Team Leader	Tsang, Fan Cheong	2698 8060



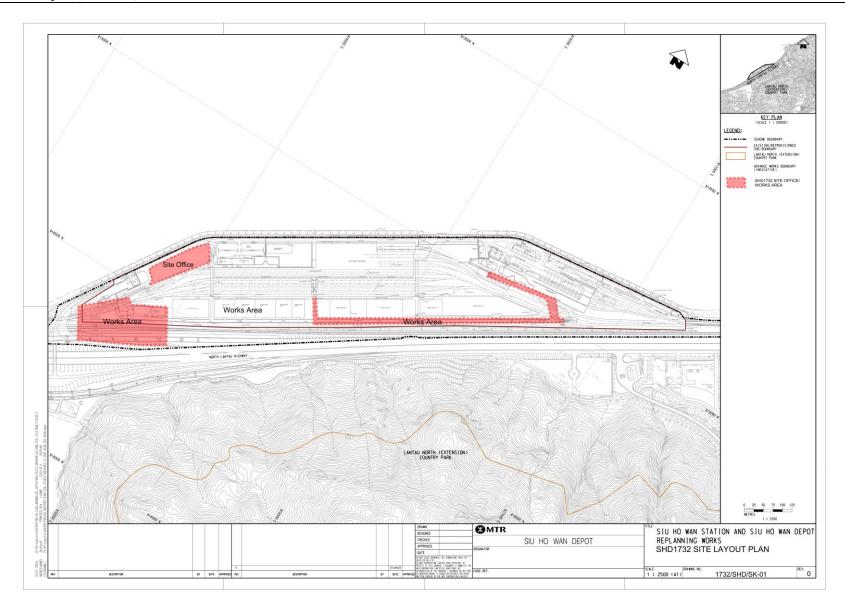


Appendix C

Alignment and Works Area for Contract No. 1732









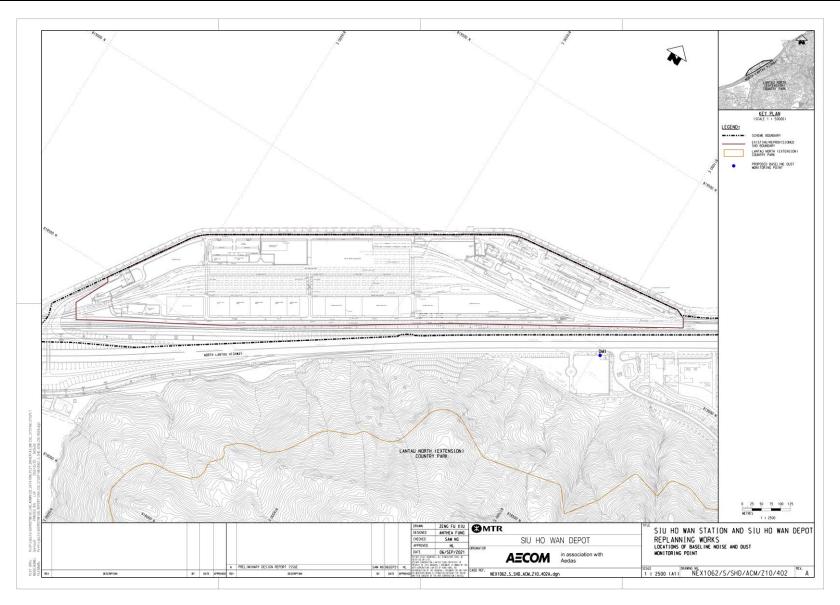


Appendix D

Location Plan of Air Quality Monitoring Station











Appendix E

Calibration Certificates

(Air Quality Monitoring Equipment)







東業德勤測試顧問有限公司 **ETS-TESTCONSULT LTD**.

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

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



Form Q/MX/C/58 Issue 1(1/1) [08/21]

Calibration Certificate

Certificate No. : CSA40398

Page : 1 of

 Information Provided by Customer

 Customer
 : China State Construction Engineering (HK) Limited

 Address
 : N/A

Information of Unit-under-test (UUT)

: Digital dust indicator Description

: SIBATA Manufacturer Equipment I.D. No.

: 3Y7115 : LD-5R Serial No. Type

Laboratory Information

: Q/CAL/24/0453/E Lab. Ref. No. Procedure · CQS/054/Z Date of Calibration : 29-Jan-2024 : 16-Jan-2024 Date of Receipt

: 5-Feb-2024 Date of Issue

Calibration Condition

: (20±3) °C Relative Humidity : (50±20) %

Sampling : As received

Reference equipment

Reference Balance, C-052-03

Calibration specification

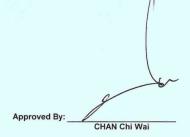
By direct comparison of weight of dust particle trapped in a filter paper using high volume sampler for 3 hours at 25LPM for three times, with the reading of the UUT operated at the same location.

Calibration result (unit in : mg/m3)

Reference concentration	UUT reading (Total count for 3 hours)	CPM (Count per minute)	Expanded Uncertainty (%)	Coverage Factor
0.0156	2965	16		
0.0178	3419	19	5.0	2.0
0.0200	3708	21		

Remarks

- The calibration results apply to the particular unit-under-test only.
- The values given in this calibration certificate only to the values measureed at the time of test & any uncertainties quoted will not include allowance for the equipment long term drift, varifications with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement
- The interpolation equation: Concentration (mg/m^3) = K x UUT reading (CPM) where K(Sensitivity) = 0.00095
- Correlation coefficient (r): 0.992
- All reported result were obtained from ETL approved sub-contractor.



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

24/03/2024

7991.12

7994.12







Sibata LD-5R K-Factor Verification Test by Total Suspended Particulates HVS Test Report

Information of Calibrated Equipement							
Verification Test Date:	19-Mar-24	to	24-Mar-24	Next Verification Test Da	ite: 19-Mar-25		
Unit-under-Test- Model No.:		Sibata LD-5R		-			
Unit-under-Test Serial No.:		882106		-			
Our Report Refrence No.:	1	RPT-24-HVS-0067		-			
Calibration Location:				- Emax			
-							

	Standard Equipment Informat	ion
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5025A
Equipment serial no.:	1049	3465
Last Calibration Date:	19-Mar-24	15-Jan-24
Next Calibration Date:	2-Apr-24	15-Jan-25

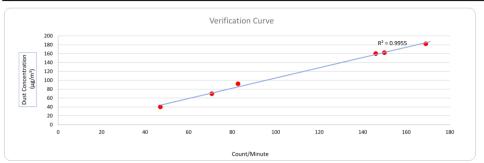
Equipement Vertification Result Duration Results from Calibrated Equipement Results from Standard Equipment Verificatio Counts/ Minute Dust Concentration (μg/m³) Test No. **Total Counts** Start-time End-time (in min) x-axis y-axis 19/03/2024 7953.66 7956.66 180.00 27000 150 26280 160 7956.66 7959.66 146 19/03/2024 180.00 19/03/2024 7959.66 7962.66 180.00 30420 169 182 24/03/2024 7985.12 7988.12 180.00 8460 47 40 14886 24/03/2024 7988.12 92 7991.12 180.00 83 12726

Linear Regression of y on x Slope, K factor: 1.1537 -10.3266 *Correlation Coefficient,R: * If the Correlation Coefficient, R is <0.5. Checking and Re-verification are require Strong Correlation, Results were accepted.

71

70

180.00



Operated By: Andy Li 29-03-2024 Project Technician, Environment Tandy Tse 29-03-2024 Checked By: Senior Consultant, Environmenta





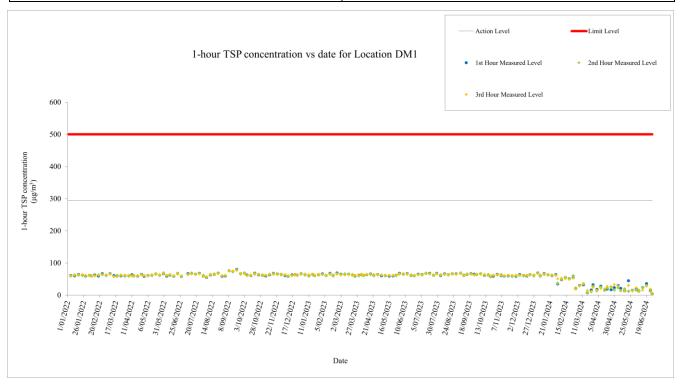
Appendix F
Monitoring Data (Air Quality Monitoring)





The Summary of 1-hour TSP Concentration (µg/m³) at Location DM1

Date	Weather	Start Time	1 st Hour	2 nd Hour	3 rd Hour
Date	weather	(hh:mm)	μg/m³	μg/m ³	μg/m ³
03/06/2024	Cloudy	13:30	19.0	16.0	23.0
07/06/2024	Rainy	13:39	12.0	15.0	10.0
13/06/2024	Fine	08:56	24.0	23.0	16.0
19/06/2024	Sunny	08:55	36.0	29.0	28.0
25/06/2024	Fine	08:45	15.0	12.0	19.0
28/06/2024	Sunny	14:33	4.0	3.0	3.0
Minimum: 3.0 μg/m ³			M	aximum: 36.0 µg/	m^3







Appendix G
Waste Flow Table





Monthly Summary Waste Flow Table

Name of Department: MTR Contract No. / Works Order No.: 1732

Monthly Summary Waste Flow Table for <u>June 2024</u>

	Actual Quantities of Inert Construction Materials Generated Monthly							
Month	(a) Total Quantity Generated			(d) Reused in other Projects	(e) Disposed of as Public Fill	(f) Imported Fill		
	(in m ³)	(in m ³)	(in m ³)	(in m ³)	(in m ³)	(in m ³)		
Jan-24	385.640	0.000	0.000	0.000	385.640	0.000		
Feb-24	41.895	0.000	0.000	0.000	41.895	0.000		
Mar-24	214.785	0.000	0.000	0.000	214.785	0.000		
Apr-24	476.380	0.000	0.000	0.000	476.380	0.000		
May-24	478.545	0.000	0.000	0.000	478.545	0.000		
Jun-24	270.680	0.000	0.000	0.000	270.680	0.000		
Sub-total	1867.925	0.000	0.000	0.000	1867.925	0.000		
Jul-24								
Aug-24								
Sep-24								
Oct-24								
Nov-24								
Dec-24								
Total	1867.925	0.000	0.000	0.000	1867.925	0.000		
2021	0.000	0.000	0.000	0.000	0.000	0.000		
2022	1226.473	72.128	0.000	0.000	1154.345	0.000		
2023	4832.103	535.988	0.000	0.000	4296.115	0.000		
Accumulated Total	7926.501	608.116	0.000	0.000	7318.385	0.000		





	Actual Quantities of Non-inert Construction Materials Generated Monthly							
Month	(g) Metals	(h) Paper/ cardboard packaging	(i) Plastics	(j) Chemical Waste	(k) Recyclable Yard Waste	(l) Others, e.g. General Refuse disposed of at Landfill		
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)		
	generated	generated	generated	generated	generated	generated		
Jan-24	0.000	0.000	0.000	0.000	0.000	22.260		
Feb-24	0.000	0.000	0.000	0.000	0.000	22.860		
Mar-24	0.000	0.000	0.000	0.000	0.000	26.690		
Apr-24	0.000	0.000	0.000	0.000	0.000	29.860		
May-24	0.000	0.000	0.000	0.000	0.000	13.160		
Jun-24	0.000	0.000	0.000	0.000	0.000	6.880		
Sub-total	0.000	0.000	0.000	0.000	0.000	121.710		
Jul-24								
Aug-24								
Sep-24								
Oct-24								
Nov-24								
Dec-24			-					
Total	0.000	0.000	0.000	0.000	0.000	121.710		
2021	0.000	0.000	0.000	0.000	0.000	0.000		
2022	0.200	0.277	0.300	0.010	93.660	393.380		
2023	0.000	0.0125	0.000	0.000	0.000	246.220		
Accumulated Total	0.200	0.2895	0.300	0.010	93.660	761.310		

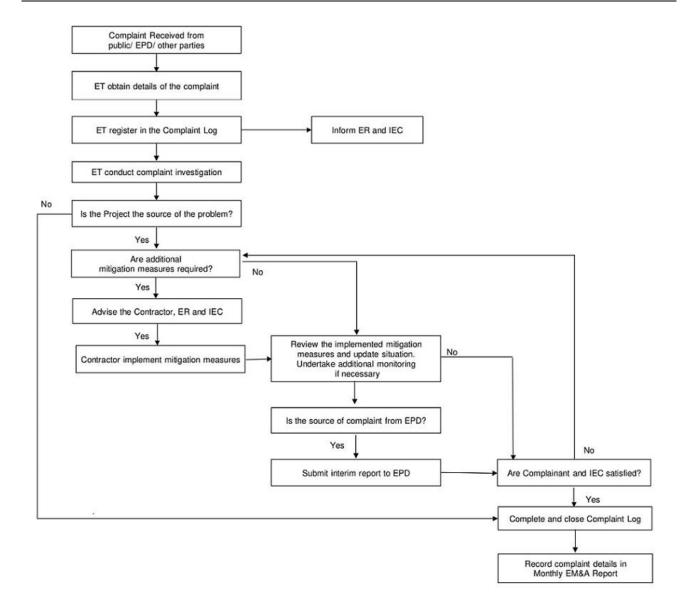




Appendix H
Complaint Handling Procedure











Appendix I
Event-Action Plan (Air Quality Monitoring)





FUENT		ACTION							
EVENT	ET	IEC	ER	CONTRACTOR					
ACTION LEVEL		•							
Exceedance for one sample	1. Repeat measurement to confirm findings; 2. If exceedance is confirmed, inform the Contractor, IEC and ER; 3. Identify source(s), investigate the causes of exceedance and propose remedial measures; and 4. Increase monitoring frequency.	1. Check monitoring data submitted by the ET; 2. Check Contractor's working method; and 3. Discuss with ET, ER and Contractor on possible remedial measures 4. Review and advise the ET and ER on the effectiveness of the proposed remedial measures.	Confirm receipt of notification of exceedance in writing.	Identify source(s), investigate the causes of exceedance and propose remedial measures; Implement remedial measures; and Amend working methods agreed with the ER as appropriate.					
Exceedance for two or more consecutive samples	1. Repeat measurements to confirm findings; 2. If exceedance is confirmed, inform Contractor, IEC and ER; 3. Identify source(s), investigate the causes of exceedance and propose remedial measures; 4. Increase monitoring frequency to daily; 5. Advise the Contractor and ER on the effectiveness of the proposed remedial measures; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with Contractor, IEC and ER to discuss the remedial measures to be taken; and 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by the ET; 2. Check Contractor's working method; and 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Review and advise the ET and ER on the effectiveness of the proposed remedial measures; and 5. Supervise Implementation of remedial measures.	Confirm receipt of notification of exceedance in writing; In consultation with the ET and IEC agree with the Contractor on the remedial measures to be implemented; and Supervise implementation of remedial measures	Identify source(s) and investigate the causes of exceedance; Submit proposals for remedial measures to the ER, ET and IEC within three working days of notification for agreement; Implement the agreed proposals; and Amend proposal as appropriate.					





EVENT		ACTION		
EVENT	ET	IEC	ER	CONTRACTOR
LIMIT LEVEL				
Exceedance for one sample	1. Repeat measurement to confirm findings; 2. If exceedance is confirmed, inform the Contractor, IEC, EPD and ER; 3. Identify source(s), investigate the causes of exceedance and propose remedial; 4. Increase monitoring frequency to daily; and 5. Discuss with the ER, IEC and Contractor on the remedial measures and assess effectiveness.	Check monitoring data submitted by the ET; Check Contractor's working method; Discuss with the ET, ER and Contractor on possible remedial measures; Review and advise the ET and ER on the effectiveness of the proposed remedial measures; and Supervise implementation of remedial measures.	Confirm receipt of notification of exceedance in writing; Review and agree on the remedial measures proposed by the Contractor, and Ensure remedial measures properly implemented.	Identify source(s) and investigate the causes of exceedance; Take immediate action to avoid further exceedance; Submit proposals for remedial measures to ER, ET and IEC within three working days of notification for agreement; Implement the agreed proposals; and
				Amend proposal if appropriate.
Exceedance for two or more consecutive samples	1. Repeat measurement to confirm findings; 2. If exceedance is confirmed, inform IEC, ER, Contractor and EPD; 3. Identify source(s), investigate the causes of exceedance and propose remedial measures; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and	1. Check monitoring data submitted by the ET; 2. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 3. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and 4. Supervise the implementation of remedial measures.	Confirm receipt of notification of exceedance in writing; In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; Supervise the implementation of remedial measures; and If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	1. Identify source(s) and investigate the causes of exceedance; 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial measures to the ER, IEC and ET within three working days of notification for agreement; 4. Implement the agreed proposals; 5. Revise and resubmit proposals if problem still not under control; and 6. Stop the relevant





EVENT	ACTION					
EVENT	ET	IEC	ER	CONTRACTOR		
	keep IEC, EPD and ER informed of the results; and 8. If exceedance stops, cease additional monitoring.			portion of works as determined by the ER until the exceedance is abated.		

Note: ET – Environmental Team; ER – Engineer's Representative; IEC – Independent Environmental Checker





Appendix J
Statistics on Complaint, Notification of Summons and Successful Prosecution





Table J1 Statistical Summary of Exceedance

Air Quality					
Location Action Level Limit Level Total					
DM1	0	0	0		

Table J2 Statistical Summary of Environmental Complaint

Donorting Poriod	Environmental Complaint Statistics				
Reporting Period	Frequency	Cumulative	Complaint Nature		
1 June 2024 - 30 June 2024	0	0	N/A		

Table J3 Statistical Summary of Environmental Non-compliance

Donouting Donied	Environmental Non-compliance Statistics				
Reporting Period	Frequency	Cumulative	Details		
1 June 2024 - 30 June 2024	0	0	N/A		

Table J4 Statistical Summary of Environmental Summons

Donarting Daried	Environmental Summons Statistics				
Reporting Period	Frequency	Cumulative	Details		
1 June 2024 - 30 June 2024	0	0	N/A		

Table J5 Statistical Summary of Environmental Prosecution

Deporting Devied	Environmental Prosecution Statistics				
Reporting Period	Frequency	Cumulative	Details		
1 June 2024 - 30 June 2024	0	0	N/A		





Appendix K
Environmental Mitigation Implementation
Schedule (EMIS)





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
Air Quality	y (Construction Phase)						
S3.8.1	Watering once per hour on active works areas, exposed areas and unpaved haul roads during working hours.	To minimize dust impacts	Contractor	All works area	Construction phase	Air Pollution Control Ordinance (APCO)	Implemented
S3.8.9	 Implementation of dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices should be carried out to further minimize construction dust impact. Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather. Use of frequent watering for particularly dusty construction areas and areas close to ASRs. Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering should be applied to aggregate fines. Open stockpiles should be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs. Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. Establishment and use of vehicle wheel and body washing facilities at the exit points of the site. 	To minimize dust impacts	Contractor	All works area	Construction phase	Air Pollution Control Ordinance (APCO)	Implemented





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	• Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading points, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods.						
	• Imposition of speed controls for vehicles on unpaved site roads. 8 kilometres per hour is the recommended limit.						
	• Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs.						
	• Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides.						
	• Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high-level alarm which is interlocked with the material filling line and no overfilling is allowed.						
	• Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system.						





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
Noise Impa	act (Construction Phase)						
S4.5.16	 Implement the following good site practices as far as practicable: Only well-maintained plant should be operated on-site, and plant should be serviced regularly during the construction program; Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction program; Mobile plant, is any, should be sited as far from NSRs as possible; Machine and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and 	To minimise impacts to surrounding habitats	Contractor	All works area	Construction phase	TM-EIAO	Implemented
	 Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities. 						
S4.5.17	Adopting quiet PME is recommended. The type of quiet PME adopted in this assessment is for reference only. The contractors may adopt alternative quiet PME as long as it can be demonstrated that they would not result in construction noise impacts worse than those predicted in this assessment.	To reduce impact to affected NSRs	Contractor	All works area	Construction phase	TM-EIAO	Implemented
S4.5.19	Use of noise barriers and noise enclosures to provide screening for construction plant where recommended.	To reduce impact to affected NSRs	Contractor	All works area	Construction phase	TM-EIAO	N/A





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
Water Qual	ity Impact (Construction Phase)						
S5.8.4	Surface and road run-off from construction sites should be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels or earth bunds or sandbag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels should be provided on site boundaries where necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	Control Ordinance (WPCO), Technical Memorandum on EIA Ordinance (EIAO-TM), ProPECC PN 1/94, Technical Memorandum on	Implemented
S5.8.5	Silt removal facilities, channels and manholes should be maintained, and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to prevent local flooding. Any practical options for the diversion and re-alignment of drainage should comply with both engineering and environmental requirements in order to provide adequate hydraulic capacity of all drains.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase		Implemented
S5.8.6	Construction works should be programmed to minimize soil excavation works in rainy seasons (April to September). If soil excavation cannot be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary exposed slope surfaces should be covered e.g., by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g., along the crest / edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	Waters (TM-DSS)	Implemented





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	Earthworks final surfaces should be well compacted, and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase		Implemented
	Measures should be taken to minimize the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase		Implemented
	If bentonite slurries are required for any construction works, they should be reconditioned and reused wherever practicable to minimise the disposal volume of used bentonite slurries. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be transported away after the related construction activities are completed. Requirements as stipulated in ProPECC Note PN 1/94 should be closely followed when handling and disposing bentonite slurries.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94	N/A
S5.8.10	Open stockpiles of construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	Implemented
	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	Implemented





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
S5.8.12	Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	Implemented
S5.8.12	 The following mitigation measures related to the transportation of the sediment should be implemented to minimize the potential water quality impact: Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water. The barge transporting the sediments to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation. Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the Director of Environmental Protection (DEP). 	To minimise impact from transportation of sediment	Contractor	and barges	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94	N/A
S5.8.13	There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on- site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required	To minimize impact from effluent discharge	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	Approved





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence.						
	Water for Bored Piling Works Water used in ground boring and drilling for site investigation or rock / soil anchoring should be re-circulated as far as practicable after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	Implemented
	Wheel Washing Water Wash-water from wheel washing facility should have been treated by silt removal facilities before discharging into storm drains. Treated wash-water could be used as dust suppression measures as far as practicable. The section of access road between the wheel washing bay and the public road should be paved to reduce vehicle tracking of soil and to prevent silty water from entering public road and drains.	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	Implemented
	Construction Works near Channelized Watercourse / Ditch For minimization of potential water quality impacts from the works to nearby inland channelized watercourse/ditch near SHWSTW, the practices outlined in ProPECC Note PN 1/94 "Construction Site Drainage" and ETWB TC (Works) No.5/2005 "Protection of natural streams / rivers from adverse impacts arising from construction works" should be adopted where applicable. Relevant mitigation measures are listed below: • The use of less or smaller construction plants may be specified in works area close to the inland water bodies. • Temporary storage of material (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from watercourse/ditch when carrying out of the construction works. Stockpiling of construction	To minimise impact from construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS, ETWB TC(Works) No. 5/2005	Implemented





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 materials and dusty materials should be covered and located away from any watercourse/ditch. Construction debris and spoil should be covered up and / or disposed of as soon as possible to avoid being washed into the nearby water receivers. Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the watercourse/ditch, where practicable. Construction effluent, site run-off and sewage should be properly collected and / or treated. 						
S5.8.17 – S5.8.19	 Accidental Spillage of Chemicals The Contractor should register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation, should be observed and complied. Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges. Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows: Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during 	To minimise impact from accidental spillage	Contractor	All works area	Construction phase	WPCO, EIAO- TM, Waste Disposal Ordinance (WDO), Waste Disposal (Chemical Waste) (General) Regulation	Implemented





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 storage, handling and transport. Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents. Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area. 						
S5.8.22 – S5.8.24	Groundwater from Contaminated Areas, Contaminated Site Runoff and Wastewater from Land Decontamination Remediation of contaminated land should be properly conducted following the recommendations of Land Contamination Assessment to be conducted in future. Any excavated contaminated material and exposed contaminated surface should be properly housed and covered to avoid generation of contaminated runoff. Open stockpiling of contaminated materials should not be allowed. Any contaminated runoff or wastewater generated from the land decontamination processes should be properly collected and diverted to wastewater treatment facilities (WTF) as necessary. The WTF shall deploy suitable treatment processes (e.g., oil interceptor/ activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (such as total petroleum hydrocarbon) to an undetectable range. All treated effluent from the wastewater treatment system shall meet the requirements as stated in TM-DSS and should be either discharged into the foul sewers or tankered away for proper disposal. No direct discharge of groundwater from contaminated areas should be adopted. Prior to any excavation works within the potentially contaminated areas, the baseline groundwater quality in these areas should be reviewed based on the past relevant site investigation data and	To minimise impact from groundwater from contaminated areas, contaminated site run-off/ wastewater from land decontamination	Contractor	All works area confirmed with land contamination	Construction phase	WPCO, EIAO- TM, TM-DSS, Guidance Note for Contaminated Land Assessment	N/A





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	any additional groundwater quality measurements to be performed with reference to Guidance Note for Contaminated Land Assessment and Remediation and the review results should be submitted to EPD for examination. If the review results indicated that the groundwater to be generated from the excavation works would be contaminated, this contaminated groundwater should be either properly treated or properly recharged into the ground in compliance with the requirements of the TM-DSS. If wastewater treatment is to be deployed for treating the contaminated groundwater, the wastewater treatment unit shall deploy suitable treatment processes (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (such as total petroleum hydrocarbon) to an undetectable range. All treated effluent from the wastewater treatment plant shall meet the requirements as stated in the TM-DSS and should be either discharged into the foul sewers or tankered away for proper disposal. If deployment of wastewater treatment is not feasible for handling the contaminated groundwater, groundwater recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in section 2.3 of TM-DSS. The baseline groundwater quality should be determined prior to the selection of the recharge wells, and submit a working plan to EPD for agreement.						
	Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient						





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	groundwater at the recharge well. Groundwater monitoring wells should be installed near the recharge points to monitor the effectiveness of the recharge wells and to ensure that no likelihood of increase of groundwater level and transfer of pollutants beyond the site boundary. Prior to recharge, free products should be removed as necessary by installing the petrol interceptor. • The Contractor should apply for a discharge licence under the WPCO through the Regional Office of EPD for groundwater recharge operation or discharge of treated groundwater.						
Waste Mar	nagement Implication (Construction Phase)						
S7.5.3	Recommendations for good site practices during the construction phase include: Nomination of approved personnel, such as a site manager, to be responsible for implementation of good site practices, arrangements for waste collection and effective disposal to an appropriate facility; Training of site personnel in site cleanliness, concepts	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	Waste Disposal Ordinance (WDO) and Public Cleansing and Prevention of Nuisances Regulation (Cap.	Implemented
	of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures;					132BK)	
	 Provision of sufficient waste reception/ disposal points, and regular collection of waste; 						
	 Adoption of appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; Provision of regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; 						
	• Adoption of a recording system for the amount of wastes generated, recycled and disposed (including the						





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	disposal sites); and						
	Preparation of Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP)						
S7.5.4	Recommendations to achieve waste reduction are as follow: Segregate and store different types of construction related waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;	To minimize waste generation	Contractor	All works areas	Construction phase	WDO	Implemented after observation
	Provide separate labelled bins to segregate recyclable waste such as aluminium cans from other general refuse generated by the work force, and to encourage collection by individual collectors;						
	Recycle any unused chemicals or those with remaining functional capacity;						
	Maximise the use of reusable steel formwork to reduce the amount of C&D materials;						
	Adopt proper storage and site practices to minimise the potential for damage to, or contamination of construction materials;						
	Plan the delivery and stock of construction materials carefully to minimise the amount of waste generated; and						
	Minimize over ordering and wastage through careful planning during purchasing of construction materials.						
S7.5.6	To minimise the impact resulting from collection and transportation of C&D materials as far as practicable, C&D waste, such as wood, plastic, steel and other metals should be reused or recycled and, as a last resort, disposed to landfill. A suitable area should be designated within the site for temporary stockpiling of C&D materials and to facilitate the sorting process.	To minimise the disposal of C&D waste	Contractor	All works areas	Construction phase	WDO	Implemented





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
S7.5.6	 Within the stockpile areas, the following measures should be taken to control potential environmental impacts or nuisance: Proper handling and storage of waste such as soil by means of covers and/or water spraying system to minimise the potential environmental impact and to prevent materials from wind-blown or being washed away; Covering materials during heavy rainfall; Locating stockpiles to minimise potential visual impacts; Minimising land intake of stockpile areas as far as possible; Adopting GPS or equivalent system for tracking and monitoring of all dump trucks engaged for the Project in recording their travel routings and parking locations to prohibit illegal dumping and landfilling of C&D materials; and Keeping record and analysis of data collected by GPS or equivalent system related to travel routings and parking locations of dump trucks engaged on site. 	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented
S7.5.7 to S7.5.9	General refuse should be stored in enclosed bins or compaction units separate from C&D materials and chemical waste. A reputable waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D materials and chemical wastes. An enclosed and covered area is preferred to reduce the occurrence of 'wind blown' light materials. The recyclable component of general refuse, such as aluminium cans, paper and cleansed plastic containers shall be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste shall	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	be set up by the Contractor. The Contractor shall also be responsible for arranging recycling companies to collect these materials.						
	The Contractor shall carry out an education programme for workers in avoiding, reducing, reusing and recycling of materials generation. Posters and leaflets advising on the use of the bins shall also be provided in the sites as reminders.						
S7.5.10 to S7.5.12	If chemical wastes were to be produced at the construction site, the Contractor would be required to register with the EPD as a Chemical Waste Producer, and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented
	Appropriate containers with proper labels should be used for storage of chemical wastes. Chemical wastes should be collected and delivered to designated outlet by a licensed collector. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the CWTC, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.						
	Any unused chemicals or those with remaining functional capacity should be collected for reuse as far as practicable.						
S7.5.13 to S7.5.14	The sediment should be excavated, handled, transported and disposed of in a manner that would minimise adverse environmental impacts. For minimization of sediment disposal, beneficial reuse will be considered on site as far as practicable during the construction stage before the disposal of excavated sediment.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	APCO WDO	N/A





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	Requirements of the Air Pollution Ordinance (Construction Dust) Regulation, where relevant, shall be adhered to during excavation, transportation and disposal of sediments.						
	In order to minimise the exposure to contaminated materials, workers shall, when necessary, wear appropriate personal protective equipment (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities shall also be provided on site.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	N/A
	Stockpiling of contaminated sediments shall be avoided as far as possible. If temporary stockpiling of contaminated sediments is unavoidable, the excavated sediment shall be covered by tarpaulin and the area shall be placed within earth bunds or sandbags to prevent leachate from entering the ground, nearby drains and/or surrounding water bodies. The stockpiles shall be completely paved or covered by linings in order to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas shall be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, shall be collected and discharged according to the Water Pollution Control Ordinance (WPCO).	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WPCO	N/A
	In order to minimise the potential odour / dust emissions during excavation and transportation of the sediment, the excavated sediments shall be wetted during excavation / material handling and shall be properly covered when placed on trucks or barges. Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO APCO	N/A





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
Land Cont	amination						
S8.9.3	To minimise environmental impacts arising from the handling of potentially contaminated materials, the following environmental precautionary measures are recommended to be utilised during the course of any required site remediation: • Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety; • Establish and maintain a Health and Safety Plan with the information below before commencement of the SI: (a) Instruction of works on work procedures, safe practices, emergency duties, and applicable regulations; (b) Regularly scheduled meetings of the workers in which the possible hazards, problems of the job, and related safe practices are emphasized and discussed; (c) Good housekeeping practices; and (d) Availability of and instruction in the location, use and maintenance of personal protective equipment. • Excavation shall be carried out during dry season as far as possible to minimise contaminated runoff from contaminated soils; • Supply of suitable clean backfill material (or treated soil) after excavation; • Stockpiling site(s) shall be lined with impermeable sheeting and bunded. Stockpiles shall be fully covered by impermeable sheeting to reduce dust emission. If this is not practicable due to frequent usage, regular watering shall be applied. However, watering shall be avoided on stockpiles of contaminated soil to minimise	To control land remediation work	Contractor	Area identified with land contamination	Prior to the commencement of construction works at the contaminated areas	Land Assessment	





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 contaminated runoff; Vehicles containing any excavated materials shall be suitably covered to limit potential dust emissions or contaminated wastewater run-off, and truck bodies and tailgates shall be sealed to prevent any discharge during transport or during wet conditions; Speed control for the trucks carrying contaminated materials shall be enforced; Vehicle wheel and body washing facilities at the site exist points shall be established and used; and Pollution control measures for air emissions (e.g. from biopile blower and handling of cement), noise emissions (e.g. from blower or earthmoving equipment), and water discharges (e.g. runoff control from treatment facility) shall be implemented and complied with relevant regulations and guidelines. 						
Landscape	and Visual Impact (Construction Phase)						
S9.8.1	Trees unavoidably affected by the works should be transplanted as far as possible in accordance with DEVB TC(W) 7/2015 – Tree Preservation or LAO PN 7/2007 - Tree Preservation and Tree Removal Application for Building Development in Private Projects where applicable.	To transplant affected trees	Contractor	All works areas	Construction phase	DEVB TC(W) No. 7/2015 or LAO PN 7/2007 where applicable	N/A
S9.8.1	Control of night-time lighting glare.	To minimize the Landscape and visual	Contractor	All works areas	Construction phase	TM-EIAO	N/A
S9.8.1	Erection of decorative screen hoarding which should be compatible with the surrounding setting.	impact on surrounding setting	Contractor	All works areas	Construction phase	TM-EIAO	N/A
S9.8.1	Management of facilities on work sites by controlling the height and disposition/arrangement of all facilities on the works site to minimize visual impact to adjacent VSRs.	To minimize visual impact to adjacent VSRs.	Contractor	All works areas	Construction phase	-	Implemented

Siu Ho Wan Depot Property Development Cable Bridges and Associated Civil Works for Cable Diversion Monthly EM&A Report (June 2024)





EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
S9.8.1	All hard and soft landscape areas disturbed temporarily	To minimize	Contractor	All works areas	Construction phase	-	To be
	during construction should be reinstated on like-to-like	the landscape					implemented
	basis, to the satisfaction of the relevant Government	impact on					
	Departments.	surrounding					
		setting					





Appendix L

Monitoring Schedule of the Reporting Month





Siu Ho Wan Depot Property Development MTR Contract No.: 1732 Oyster Bay Station and Associated Works Dust Monitoring Schedule in June 2024

JUNE 2024

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





Appendix M
Monitoring Schedule of the Coming Month





Siu Ho Wan Depot Property Development MTR Contract No.: 1732 Oyster Bay Station and Associated Works

Tentative Dust Monitoring Schedule in July 2024

JULY 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4 1-hour TSP Monitoring	5	6
7	8	9	10 1-hour TSP Monitoring	11	12	13
14	15	16 1-hour TSP Monitoring	17	18	19	20
21	22 1-hour TSP Monitoring	23	24	25	26 1-hour TSP Monitoring	27
28	29	30	31			

The schedule is subjected to change due to unforeseeable circumstances (e.g. adverse weather, etc.)

Appendix D

Monthly EM&A Report for June 2024
Vehicular Access Bridge, Demolition of Paint Shop
and Construction of EV Stabling Tracks
Works Contract 1733



MTR Corporation Limited Siu Ho Wan Depot Property Development Vehicular Access Bridge, Demolition of Paint Shop and Construction of EV Stabling Tracks Monthly EM&A Report (Period from 1 to 30 June 2024)

Issue and Revision Record

Revision	Description	Prepared by	Checked by	Approved by	Date
01	Submission	Various	Roy Hung A	Grace Fung	July 2024

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EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733

Monthly EM&A Report

3 Page HKES240700006125 Ref# Rev. 01 Date Jul-24

TABLE OF CONTENT

EXEC	UTIVE SUMMARY4		
1.	PROJECT INFORMATION6		
2.	ENVIRONMENTAL STATUS8		
3.	AIR QUALITY MONITORING11		
4.	WASTE MANAGEMENT 13		
5.	SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS 14		
6.	EM&A SITE INSPECTION15		
7.	FUTURE KEY ISSUES16		
8.	CONCLUSION AND RECOMMENDATION17		
APPENDIX A – CONSTRUCTION PROGRAMME			
APPE	NDIX B – PROJECT ORGANIZATION CHART		
APPE	NDIX C – ALIGNMENT AND WORKS AREA FOR CONTRACT NO. 1733		
APPE	NDIX D - LOCATION PLAN OF MONITORING STATION		
APPENDIX E - CALIBRATION CERTIFICATES			
APPENDIX F - MONITORING DATA			
APPENDIX G – WASTE FLOW TABLE			
APPE	NDIX H - COMPLAINT HANDLING PROCEDURE		
APPE	APPENDIX I - EVENT-ACTION PLAN		
APPE	NDIX J - STATISTICS ON COMPLAINT, NOTIFICATION OF SUMMONS AND SUCCESSFUL		

PROSECUTION

APPENDIX K - ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

APPENDIX L - MONITORING SCHEDULE OF THE REPORTING MONTH

APPENDIX M - MONITORING SCHEDULE OF THE COMING MONTH



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot
Replanning Works – Contract 1733

Monthly EM&A Report

Page	4
Ref#	HKES240700006125
Rev.	01
Date	Jul-24

EXECUTIVE SUMMARY

SGS Hong Kong Limited. ("SGS") has been commissioned by the Build King Civil Engineering Limited, to undertake the Environmental Team (ET) services to carry out environmental monitoring and audit (EM&A) for Vehicular Access Bridge, Demolition of Paint Shop and Construction of EV Stabling Tracks (hereafter referred to as the "Project").

This is the 27th monthly EM&A report for the project submitted under Condition 3.4 of the Environmental Permit (No. EP-588/2021). This report summarises the findings on EM&A during the period from 1 to 30 June 2024.

Exceedance of Action and Limit Levels

The summary of measured 1-hour TSP level is presented in **Section 3**.

No exceedance of Action or Limit Levels for 1-hour TSP levels were recorded in the Reporting Period.

Waste Management

Details of waste management are presented in **Section 4**.

Record of Complaints

There was no record of complaints received in the Reporting Period.

Record of Notification of Summons and Successful Prosecutions

There were no record of notification of summons and successful prosecution in the Reporting Period.

Reporting Changes

There are no reporting changes.

Site inspection

Weekly environmental site inspections were conducted during the reporting period. A joint site inspection with the IEC was carried out on 11 June 2024. Non-compliance was not observed. Observation and recommendation were reported during the site inspection. Items are rectified accordingly in the reporting period. The environmental performance of the Project was therefore considered satisfactory.

Future Key Issues

- · Construction of asphalt pavement on vehicular access bridge
- Bridge staircases installation
- LV diversion and drainage diversion
- E & M Work, including road lighting poles installation



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	5
Replanning Works - Contract 1733		HKES240700006125
Monthly EM&A Report		01
		Jul-24

- Site formation work
- Site clearance
- Dismantling of scaffold



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733

Monthly EM&A Report

Page	6
Ref#	HKES240700006125
Rev.	01
Date	Jul-24

1. PROJECT INFORMATION

The Project involves the construction of vehicular access bridge, demolition of paint shop and construction of engineering vehicle (EV) stabling tracks.

The (AEIAR-214/2017) "Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works" Environmental Impact Assessment Report was approved with conditions by the Environmental Protection Department (EPD) on 29 Nov 2017. The latest Environmental Permit (No. EP-588/2021) was issued by the EPD on 22 March 2021.

SGS Hong Kong Limited (SGS) has been commissioned by Build King Civil Engineering Limited to undertake the Environmental Team (ET) services to carry out environmental monitoring and audit for this project.

The Project covers the following construction activities:

- Site clearance & hoarding /UU/ Cable Trenches
- Paint shop demolition
- Excavation
- Substructure
- Backfilling
- Superstructure
- EV Tracks Formation and Track installation

The construction programme is presented in **Appendix A**

A summary of the major construction activities undertaken in this reporting period (from 1 to 30 June 2024) is shown in below:

- Concrete road construction
- Movement joints construction
- Steel member installation
- U-channel drainage construction
- Site Formation Work
- Site Clearance

The project organizational chart specifying management structure and contact details are shown in



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot		7
Replanning Works – Contract 1733		HKES240700006125
Monthly EM&A Report		01
	Date	Jul-24

Appendix B.

A summary of the valid permits, licenses, and /or notifications on environmental protection for this Project is presented in **Table 1.1**.

Table 1.1 Summary of Status of Required Submission for EP-588/2021 for the Project

Type of Permit/ License	Permit No. / Account No.	Valid From	Expiry Date	Status
Environmental Permit	EP-588/2021	22 Mar 2021	N/A	Valid
Wastewater Discharge License	WT00041829- 2022	31 Aug 2022	31 Aug 2027	Valid
Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation	Ref.: 477410	N/A	N/A	Notification submitted on 3 Mar 2022
Chemical Waste Producer Registration	WPN5213-961- B2653-01	15 Feb 2022	N/A	Valid
Billing Account for Disposal of Construction Waste	7043460	18 Mar 2022	N/A	Valid
Construction Noise Permit	GW-RS0236-24	25 Mar 2024	24 Sep 2024	Valid



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	8
Replanning Works - Contract 1733		HKES240700006125
Monthly EM&A Report		01
		Jul-24

2. ENVIRONMENTAL STATUS

Environmental permit (EP) conditions under the EIAO, submission status under the EP and implementation status of mitigation measures had been reviewed and implemented on schedule. The status of required submissions under the EP (No. EP-588/2021) as of the reporting period for the Project are summarised in **Table 2.1**.

Table 2.1 Summary of Status of Required Submission for EP-588/2021 for the Project

EP Condition	Submission	Submission Date
1.12	Commencement Date of Construction	11 Jun 2021 (1st submission)
		12 Jul 2021 (2nd submission)
		12 Aug 2021 (3rd submission)
2.7	Construction Works Phasing Schedule	1 Nov 2021 (1st submission)
		20 Dec 2021 (2nd submission)
		29 Dec 2021 (Deposited)
		9 Oct 2023 (1st submission with updated Phase 1 works)
2.8	Environmental Permit Submission Schedule	12 Aug 2021
		10 Sep 2021 (Deposited)
2.9	Management Organization	1 Nov 2021 (1st Submission)
		20 Dec 2021 (2nd Submission)
		21 Mar 2022 (3rd Submission)
		9 Aug 2022 (4th Submission)
		16 Nov 2022 (5th Submission)
		18 Sep 2023 (6th submission)
		22 Jan 2024 (7th Submission)
2.10	Construction Noise Mitigation Plan	1 Nov 2021 (1st submission for advanced work)



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733

Monthly EM&A Report

 Page
 9

 Ref#
 HKES240700006125

 Rev.
 01

 Date
 Jul-24

		20 Dec 2021 (2nd submission for advanced work)
		28 Dec 2021 (3rd submission for advanced work)
		30 Dec 2022 (1st submission for Phase 1 work)
		29 Mar 2023 (2nd submission for Phase 1 work)
		18 May 2023 (3rd submission for Phase 1 work)
		28 Jul 2023 (4th submission for Phase 1 works)
		30 Oct 2023 (5th submission for Phase 1 works)
		6 Dec 2023 (6th submission for Phase 1 works)
		8 Dec 2023 (Deposited)
		21 June 2024 (7 th submission for Phase 1 work)
2.11	Noise Mitigation Plan	31 Mar 2023 (1st submission)
		31 Jul 2023 (2nd submission)
		20 Oct 2023 (3rd submission)
		7 March 2024 (4th Submission)
		18 March 2024 (Approved)
2.13	Waste Management Plan	1 Nov 2021 (1st submission)
		20 Dec 2021 (2nd submission)
		28 Dec 2021 (Deposited)
		30 Jun 2023 (1st submission for Phase 1 work)



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Page 10 Monthly EM&A Report Ref# HKES240700006125 Date Jul-24

		1 Aug 2023 (2nd submission for Phase 1 works) 31 Aug 2023 (Deposited for Phase 1 works) 31 Aug 2023 (Deposited for Phase 1 work)
2.15	Landscape and Visual Plan	27 Apr 2023 (1st submission) 27 Jul 2023 (2nd submission) 20 Oct 2023 (3rd submission) 8 Dec 2023 (Approved)
3.3	Baseline Monitoring Report	1 Nov 2021 16 Nov 2021 (Deposited)
3.4	Monthly EM&A Report (Apr 2022 – May 2024)	Submitted within 10 working days after the end of the reporting month
	Monthly Monitoring Report (June 2024)	This report submission
4.2	Dedicated Internet Website	12 Jan 2022 25 Jul 2023 (Update address) 14 Mar 2024 (Update address)

The drawings showing the project layout and the location of the monitoring station are attached in **Appendix C** and **Appendix D**, respectively. A summary of the monitoring location is shown in **Table 2.2**.

Table 2.2 Summary of the location of the monitoring station

Air Sensitive Receiver (ASR) ID No. in EIA	Monitoring Station	Description
A2	DM1	Siu Ho Wan Government Maintenance Depot



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	11
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24

3. AIR QUALITY MONITORING

MONITORING REQUIREMENTS, FREQUENCY AND DURATION

The impact monitoring had been carried out in accordance with Section 2.6 of the approved EM&A Manual, with sampling frequency of at least 3 times in every 6 days undertaken, to determine the 1-hour total suspended particulates (TSP) levels at the monitoring locations in the reporting period.

General meteorological conditions (wind speed, direction and precipitation) and notes regarding any significant adjacent dust producing sources had also been recorded throughout the impact monitoring period.

Monitoring Equipment

Portable direct reading dust meters were used to carry out the 1-hour TSP monitoring. Portable direct reading dust meters used in this monitoring were proven to the IEC to be capable of achieving comparable result as that of the HVS and, thus, were used for sampling. The equipment used for 1-hour TSP measurement during the reporting month are summarised in **Table 3.1**.

Table 3.1 Construction Dust Monitoring Equipment

Measuring	Monitoring		Brand	Model No.	Calibration
Parameter	Equipme	nt			Date
1-hour TSP	Portable	direct	Sibata	LD-5R	29 Jan 2024
	reading dust	meter		(S/N: 3Y7115)	
	(1-hour TSP)				
1-hour TSP	Portable	direct	Sibata	LD-5R	19 Mar 2024
	reading dust	meter		(S/N: 882106)	
	(1-hour TSP)				

The portable direct reading dust meter was calibrated at 1-year interval against a High Volume Sampler, TE-5170. Copies of calibration certificates of the portable direct reading dust meter are presented in **Appendix E**.

Field Monitoring Methodology

The 1-hour TSP measurement followed manufacturer's instruction manual. Before initiating a measurement, zeroing the Portable direct reading dust meter was carried out to ensure maximum accuracy of concentration measurements.

The 1-hour TSP was sampled by drawing air into the portable direct reading dust meter where particular concentrations were measured instantaneously with an in-built silicon detector sensing light scattered by



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	12
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
monthly Linax Report		.lul-24

the particulates in the sampled air. Continuous TSP levels were indicated and logged by a built-in data logger compatible with Windows based program to facilitate data collection, analysis and reporting.

Monitoring Location

Location of the designated dust monitoring station is described in Table 3.2.

Table 3.2 Location of the designated dust monitoring station

Monitoring Station ID	Dust Monitoring Station		
DM1	Siu Ho Wan Government Maintenance Depot		

Result Summary

Dust impact monitoring was carried out at DM1 on 3, 7, 13, 19, 25 & 28 June 2024 during the reporting month (**Appendix L**). According to our field observations, the major dust sources identified included vehicular emissions from North Lantau Highway and Cheung Tung Road. Gentle wind was recorded throughout the monitoring period, with gentle to strong wind recorded occasionally.

The results for 1 - hour TSP are summarized in **Table 3.3**. The measurement data is presented in **Appendix F.**

Table 3.3 Summary of 1-hour TSP Monitoring Results

Monitoring Location	Range (µg/m3)	Action Level	Limit Level	No. of
		(µg/m3)	(µg/m3)	Exceedances
DM1	3 – 36	294.7	500	0



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot		13
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
monthly Emant Report	Doto	Jul 24

4. WASTE MANAGEMENT

The waste generated from this Project includes inert C&D materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/ cardboard packaging waste. Metals materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarized in Table 4.1. Details of cumulative waste management data are presented as a waste flow table in **Appendix G**.

Table 4.1 Quantities of waste generated from the Project

Month	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of C&D Materials Generated Monthly					
	Total	Hard	Reused	Reused	Disposal	Imported	Metals	Paper /	Plastics	Chemical	Other,
	Quantity	Rock	in the	in other	as	Fill		Cardboard	(See	Waste	e.g.
	Generated	and	Contract	Projects	Public			Packaging	note 3)		general
		Large			Fill						refuse
		Broken									
		Concrete									
	[in Tonne]	[in	[in	[in	[in	[in	[in	[in kg]	[in kg]	[in kg]	[in
		Tonne]	Tonne]	Tonne]	Tonne]	Tonne]	Tonne]				Tonne]
June	160.40	0.00	0.00	0.00	160.40	0.00	0.00	0.00	0.00	0.00	13.55

^{*}Data extracted from construction waste transaction record from EPD website.

All dump trucks for C&D materials transportation and disposal are equipped with Global Positioning System (GPS) for real time tracking and monitoring their travel routings and parking locations in order to avoid illegal dumping or landfilling of C&D materials.

The GPS data including travel routings of dump trucks was reviewed by the ET and IEC, and no illegal dumping activities were suspected.



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	14
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24

5. SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

The Environmental Complaint Handling Procedure is shown in Appendix H.

Should non-compliance of the criteria occur, action in accordance with the Event and Action Plan in **Appendix I** shall be carried out.

No exceedance of the Action and Limit Levels of 1-hour TSP was recorded during the reporting month.

No complaint or non-compliance was reported in the reporting month.

No notification of summons and prosecution was received in the reporting period.

Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Appendix J**.



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot		15
Replanning Works – Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24

6. EM&A SITE INSPECTION

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, four (4) site inspections were carried out on 3, 11, 17 & 24 June 2024. One joint site inspection with the IEC also undertaken on 11 June 2024 with engineer, IEC, contractor and contractor's ET. No observations and reminders were reported during the weekly site inspection. Key observations during the site inspections are summarized in **Table 6.1**.

Table 6.1 Site Observations

Date	Observation or Reminder	Follow-up Status			
3 June 2024	No particular findings during inspection.	N/A			
11 June 2024	Observation 1. The generator at EI 33 was observed as lack of NRMM Label. (Target date: 12/06/2024)	NRMM Label had been attached to the generator. (Close date: 11/06/2024)			
17 June 2024	No particular findings during inspection.	N/A			
24 June 2024	Observation 1: Contractor was reminded to cover breakers at AB 8 & W1 Entrance to avoid oil leakage to soil. (Target date: 28/06/2024)	The breakers are put on the wooden boards to prevent possible leakage. (Close date: 27/06/2024)			

According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents are implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix K**.



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot		16
Replanning Works – Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24

7. FUTURE KEY ISSUES

Work to be undertaken in the next reporting month are:

- · Construction of asphalt pavement on vehicular access bridge
- Bridge staircases installation
- LV diversion and drainage diversion
- E & M Work, including road lighting poles installation
- Site formation work
- Site clearance
- Dismantling of scaffold

The tentative schedule of regular 1-hour TSP monitoring in the next reporting period is presented in Appendix M.



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot
Replanning Works – Contract 1733

Monthly EM&A Report

Page	17
Ref#	HKES240700006125
Rev.	01
Date	Jul-24

8. CONCLUSION AND RECOMMENDATION

This 27th monthly EM&A Report presents the EM&A works undertaken during the period from 1 June to 30 June 2024 in accordance with the EM&A Manual and the requirement under EP-588/2021.

Air quality (including 1-hour TSP) impact monitoring was carried out in the reporting period. No exceedance of the Action and Limit Levels was recorded for air quality impact monitoring during the reporting period.

Weekly environmental site inspections were conducted during the reporting period. A joint site inspection with the IEC was carried out on 11 June 2024. Non-compliance was not observed. Observation and recommendation were reported during the site inspection. Items are rectified accordingly in the reporting period. The environmental performance of the Project was therefore considered satisfactory.

No complaint or non-compliance was reported in the reporting month.

No notification of summons or prosecution was received in the reporting month.

The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

The proposed mitigation measures were properly implemented and were considered effective and efficient in pollution control.



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	A-1
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24

APPENDIX A – CONSTRUCTION PROGRAMME



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works – Contract 1733 Page Ref# A-2 Monthly EM&A Report Rev. 01 Date Jul-24

9-1-1																								
Construction Activities					2022	2							2	2023					2024					
Construction Activities	J	F N	I A	М	J,	J A	S	O N	I D	J	F M	Α	M J	J	Α	S	N	D .	J F	M	A M	J	J A S	
Contract 1733 - Vehicular Access Bridge, Demolition of Paint Shop and Construction of EV Stabling Tracks																								
Site Clerance & Hoarding / UU / Cable Trenches																								
Paint Shop Demolition																								
Excavation																								
Substructure																								
Backfilling																								
Superstructure																								
EV Tracks - Formation and Track Installation							П					П					П							



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot
Replanning Works – Contract 1733

Monthly EM&A Report

 Page
 B-1

 Ref#
 HKES240700006125

 Rev.
 01

 Date
 Jul-24

APPENDIX B - PROJECT ORGANIZATION CHART



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733

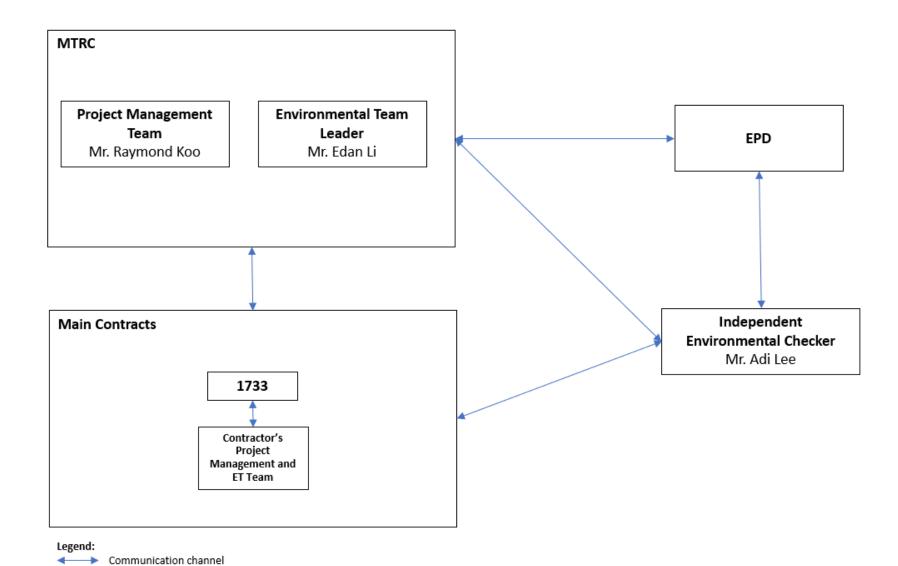
Monthly EM&A Report

 Page
 B-2

 Ref#
 HKES2407000 06125

 Rev.
 01

 Date
 Jul-24





EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Page B-3 Ref# HKES2407000 06125 Rev. 01 Date Jul-24

MTR's Contact:

MTRC - Project Management Team		
Position	Name	Telephone
Chief Construction Manager - OYB	Mr. Raymond Koo	2621 7051

MTRC - Environmental Team		
Position	Name	Telephone
Environmental Team Leader	Mr. Edan Li	2621 7194
Environmental Team Member	Mr. Cyrus Lau	2621 7219

Meinhardt Infrastructure and Environment Limited - IEC								
Position	Name	Telephone						
Independent Environmental Checker	Mr. Adi Lee	2859 5443						
IEC Team Member	Ms. Echo Hung	2859 5837						

Contractor's Contact

Main Works Contract	Description	Contractor	Position	Name	Telephone
	Vehicular access bridge, demolition of paint shop and	Build King Civil	Project Manager	Andy Yu	9648 4896
1733	construction of engineering	Engineering Ltd	Environmental Manager Environmental Team	Louisa Fung	9271 5370 2204 8305
	vehicle stabling tracks		Leader	Roy Hung	2204 0303

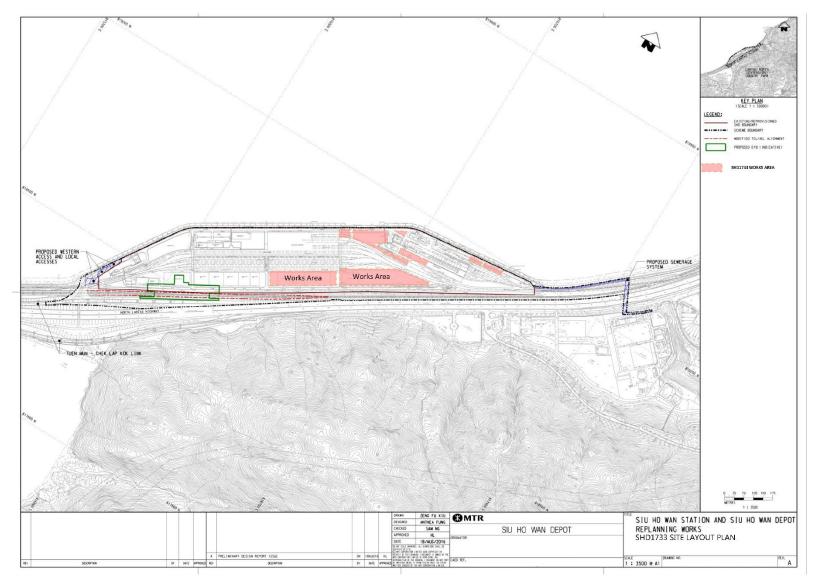


EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	C-1
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
monthly Emark Roport		lul-24

APPENDIX C – ALIGNMENT AND WORKS AREA FOR CONTRACT NO. 1733



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Page Ref# C-2 Monthly EM&A Report Rev. 01 Date Jul-24





EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	D-1
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
monthly Emarchoport	Date	lul-24

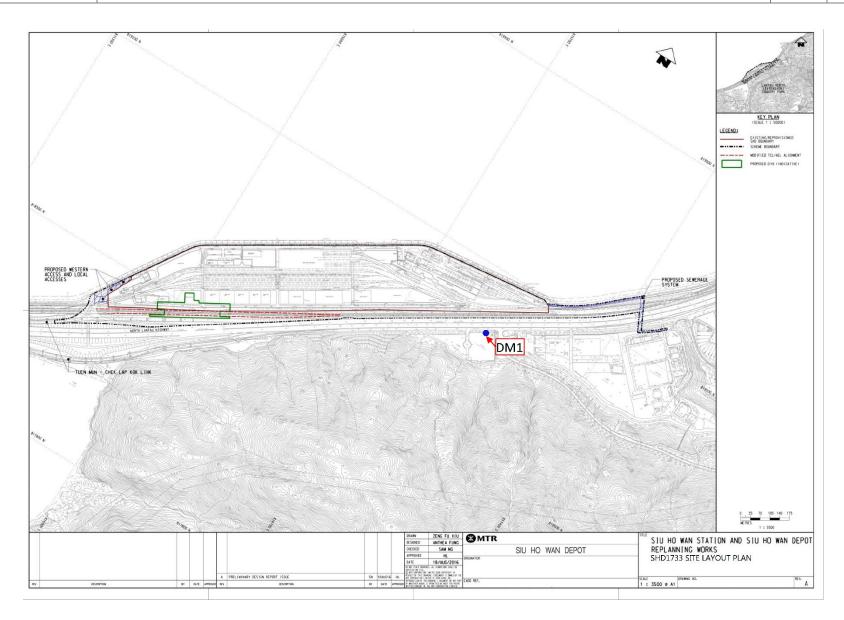
APPENDIX D - LOCATION PLAN OF AIR QUALITY MONITORING STATION



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733

Monthly EM&A Report







EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	E-1
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
monthly Emart Report	Date	lul-24

APPENDIX E - CALIBRATION CERTIFICATES (AIR QUALITY MONITORING EQUIPMENT)



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	E-2
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly FM&A Report	Rev.	01

	東業德勤測試顧問有限公司
+	ETS-TESTCONSULT LTD.

有限公司 Weristrong Industrial Centre,
Yeristrong Industrial Centre,
134-36 Au Put Wan Street,
Fo Tan, Hong Kong

Date

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



Jul-24

Form Q/MX/C/58 Issue 1(1/1) [08/21]

Calibration Certificate

Certificate No. : CSA40398

Page

; 1 of

Information Provided by Customer

Address

: China State Construction Engineering (HK) Limited : N/A

Information of Unit-under-test (UUT)

Description : Digital dust indicator
Manufacturer : SIBATA

Type

Equipment I.D. No. Serial No.

Procedure

: 3Y7115

Laboratory Information

Lab. Ref. No. ; Q/CAL/24/0453/E

Date of Calibration : 29-Jan-2024

Date of Issue 5-Feb-2024

Date of Receipt

: CQS/054/Z : 16-Jan-2024

Calibration Condition

Ambient Temperature : (20±3) °C

Sampling : As received Relative Humidity

: (50±20) %

Reference equipment

Reference Balance, C-052-03

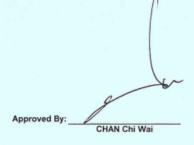
Calibration specification

By direct comparison of weight of dust particle trapped in a filter paper using high volume sampler for 3 hours at 25LPM for three times, with the reading of the UUT operated at the same location.

Calibration result (unit in : mg/m3)

Reference concentration	UUT reading (Total count for 3 hours)	CPM (Count per minute)	Expanded Uncertainty (%)	Coverage Factor
0.0156	2965	16		
0.0178	3419	19	5.0	2.0
0.0200	3708	21		

- The calibration results apply to the particular unit-under-test only.
- The values given in this calibration certificate only to the values measureed at the time of test & any uncertainties quoted will not include allowance for the equipment long term drift, varifications with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement
- The interpolation equation: Concentration (mg/m³) = K x UUT reading (CPM) where K(Sensitivity) = 0.00095
- Correlation coefficient (r): 0.992
- All reported result were obtained from ETL approved sub-contractor.

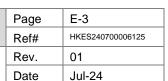


The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards This report shall not be reproduced unless with prior written approval from this laboratory.



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733

Monthly EM&A Report





Sibata LD-SR K-Factor Verification Test by Total Suspended Particulates HVS Test Report

Information of Calibrated Equipement								
Verification Test Date:	19-Mar-24	to	24-Mar-24	Next Verification Test Date:	19-Mar-25			
Unit-under-Test- Model No.:		Sibata LD-5R		•				
Unit-under-Test Serial No.:		882106		•				
Our Report Refrence No.:	R	PT-24-HVS-0067	,					
Calibration Location:			E	rmax				
Calibration Location:				mex	-			

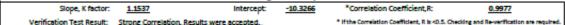
Standard Equipment Information

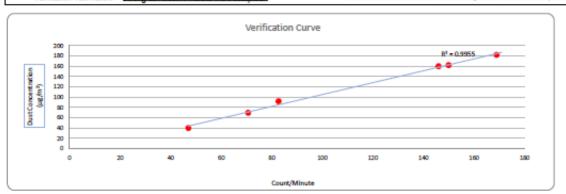
		Standard Equipment informs	
Γ	Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
-	Standard Equipment Model No.:	TE-5170X	TE-5025A
	Equipment serial no.:	1049	3465
	Last Calibration Date:	19-Mar-24	15-Jan-24
	Next Calibration Date:	2-Apr-24	15-Jan-25

Equipement Vertification Result

Verification Test No.		Duration			Results from	Calibrated Equipement	Results from Standard Equipment			
	Date	Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (μg/m³) γ-axis			
1	19/03/2024	7953.66	7956.66	180.00	27000	150	162			
2	19/03/2024	7956.66	7959.66	180.00	26280	146	160			
3	19/03/2024	7959.66	7962.66	180.00	30420	169	182			
4	24/03/2024	7985.12	7988.12	180.00	8460	47	40			
5	24/03/2024	7988.12	7991.12	180.00	14886	83	92			
6	24/03/2024	7991.12	7994.12	180.00	12726	71	70			

Linear Regression of y on x





Operated By:

Andy Li
Project Technician, Environmental

Checked By:

Tandy Tse

Date: 29-03-2024

Date: 29-03-2024



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	G-1
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24

APPENDIX F – MONITORING DATA (AIR QUALITY MONITORING)



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	G-2
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
monthly Emant Report	Date	lul-24

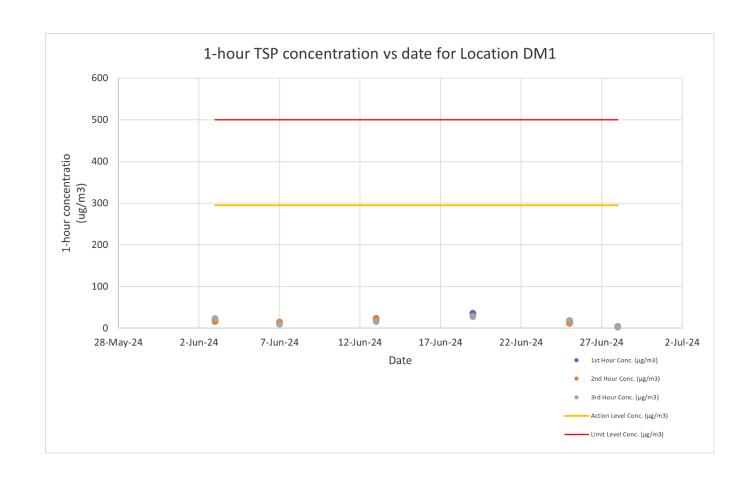
The Summary of 1-hour TSP Concentration ($\mu g/m^3$) at Location DM1

	Start	1st Hour	2nd Hour	3rd Hour	Action Level	Limit Level	Exceedance
	Time	Conc.	Conc.	Conc.	Conc.	Conc.	()//N1)
Date	(hh:mm)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(Y/N)
3-June-24	13:30	19	16	23	294.7	500	N
7-June-24	13:39	12	15	10	294.7	500	N
13-June-24	8:56	24	23	16	294.7	500	N
19-June-24	8:55	36	29	28	294.7	500	N
25-June-24	8:45	15	12	19	294.7	500	N
28-June-24	14:33	4.0	3.0	3.0	294.7	500	N

 Average
 17.1

 Min
 3.0

 Max
 36





EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	G-3
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24

APPENDIX G – WASTE FLOW TABLE



Note:

ED E00/2024	Ciu Ha Wan	Ctation and	Cir. Ha Wan	Danet Banlanning	Morks Contract 1722
EP-300/2U21 -	Siu no wan	Station and	Siu no wan	Depot Replanning	Works – Contract 1733

Monthly EM&A Report

 Page
 G-2

 Ref#
 HKES240700006125

 Rev.
 01

 Date
 Jul-24

Monthly Summary Waste Flow Table for 2024 Year

	Actual 0	Quantities of	Inert C&D I	Materials G	Actual Quantities of Non-inert C&D Materials Generated Monthly						
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposal as Public Fill	Imported Fill	Metals	Paper / Cardboard Packaging	Plastics	Chemical Waste	Other, e.g. general refuse
	[in Tonne]	[in Tonne]	[in Tonne]	[in Tonne]	[in Tonne]	[in Tonne]	[in Tonne]	[in kg]	[in kg]	[in kg]	[in Tonne]
Jan	40.67	0.00	0.00	0.00	40.67	0.00	0.00	0.00	0.00	0.00	7.19
Feb	156.48	0.00	0.00	0.00	156.48	0.00	0.00	0.00	0.00	0.00	5.63
Mar	184.26	0.00	0.00	0.00	184.26	0.00	0.00	0.00	0.00	0.00	3.55
Apr	685.56	0.00	0.00	0.00	685.56	0.00	0.00	0.00	0.00	0.00	4.46
May	573.99	0.00	0.00	0.00	573.99	0.00	0.00	0.00	0.00	0.00	6.41
June	160.40	0.00	0.00	0.00	160.40	0.00	0.00	0.00	0.00	0.00	13.55
SUB- TOTAL	1801.36	0.00	0.00	0.00	1801.36	0.00	0.00	0.00	0.00	0.00	40.79
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
TOTAL	1801.36	0.00	0.00	0.00	1801.36	0.00	0.00	0.00	0.00	0.00	40.79

¹ full loaded dumping truck is assumed equivalent to 6.5 m3 by volume from Archsd D/OL03/09.002

Plastics refer to plastic bottles / containers, plastic sheets / foam from packaging material

*Data extracted from construction waste transaction record from EPD website.

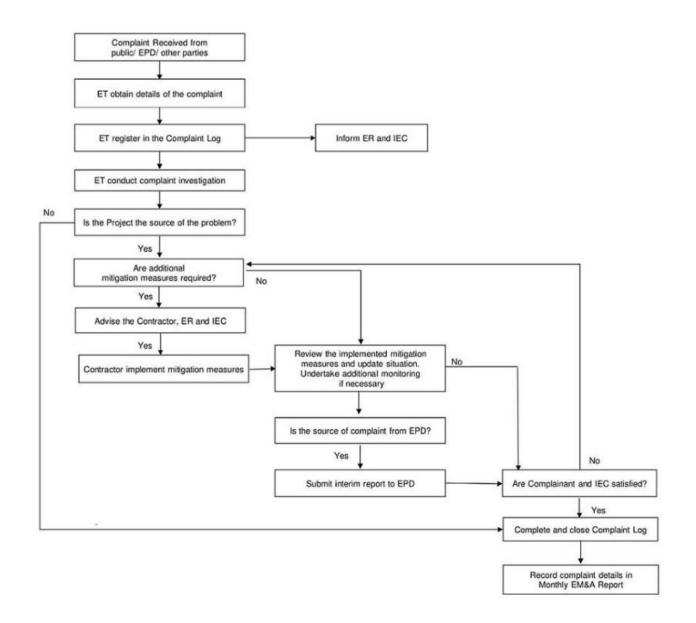


EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	H-1
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24

APPENDIX H - COMPLAINT HANDLING PROCEDURE



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	H-2
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24





EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot		I-1
Replanning Works - Contract 1733		HKES240700006125
Monthly EM&A Report		01
	Date	Jul-24

APPENDIX I - EVENT-ACTION PLAN (AIR QUALITY MONITORING)"



Page	I-2
Ref#	HKES240700006125
Rev.	01
Date	.lul-24

EVENT	ACTION			
EVENT	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
Exceedance for one sample	Repeat measurement to confirm findings; If exceedance is confirmed, inform the Contractor, IEC and ER; Identify source(s), investigate the causes of exceedance and propose remedial measures; and Increase monitoring frequency.	Check monitoring data submitted by the ET; Check Contractor's working method; and Discuss with ET, ER and Contractor on possible remedial measures Review and advise the ET and ER on the effectiveness of the proposed remedial measures.	Confirm receipt of notification of exceedance in writing.	Identify source(s), investigate the causes of exceedance and propose remedial measures; Implement remedial measures; and Amend working methods agreed with the ER as appropriate.
Exceedance for two or more consecutive samples	 Repeat measurements to confirm findings; If exceedance is confirmed, inform Contractor, IEC and ER; Identify source(s), investigate the causes of exceedance and propose remedial measures; Increase monitoring frequency to daily; Advise the Contractor and ER on the effectiveness of the proposed remedial measures; Discuss with IEC and Contractor on remedial actions required; If exceedance continues, arrange meeting with Contractor, IEC and ER to 	 Check monitoring data submitted by the ET; Check Contractor's working method; and Discuss with ET, ER and Contractor on possible remedial measures; Review and advise the ET and ER on the effectiveness of the proposed remedial measures; and Supervise Implementation of remedial measures. 	Confirm receipt of notification of exceedance in writing; In consultation with the ET and IEC agree with the Contractor on the remedial measures to be implemented; and Supervise implementation of remedial measures	1. Identify source(s) and investigate the causes of exceedance; 2. Submit proposals for remedial measures to the ER, ET and IEC within three working days of notification for agreement; 3. Implement the agreed proposals; and 4. Amend proposal as appropriate.



EP-588/2021 - Siu Ho Wan Station and

and Siu Ho Wan Donot Ponlanning Works - Contract 1722		1-3
and Siu Ho Wan Depot Replanning Works – Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
Monthly EMAA Report		Jul-24

EVENT		A	CTION	
EVENT	ET discuss the remedial measures to be taken; and 8. If exceedance stops, cease additional monitoring.	IEC	ER	CONTRACTOR
LIMIT LEVEL				
Exceedance for one sample	 Repeat measurement to confirm findings; If exceedance is confirmed, inform the Contractor, IEC, EPD and ER; Identify source(s), investigate the causes of exceedance and propose remedial; Increase monitoring frequency to daily; and Discuss with the ER, IEC and Contractor on the remedial measures and assess effectiveness. 	 Check monitoring data submitted by the ET; Check Contractor's working method; Discuss with the ET, ER and Contractor on possible remedial measures; Review and advise the ET and ER on the effectiveness of the proposed remedial measures; and Supervise implementation of remedial measures. 	Confirm receipt of notification of exceedance in writing; Review and agree on the remedial measures proposed by the Contractor; and Ensure remedial measures properly implemented.	 Identify source(s) and investigate the causes of exceedance; Take immediate action to avoid further exceedance; Submit proposals for remedial measures to ER, ET and IEC within three working days of notification for agreement; Implement the agreed proposals; and Amend proposal if appropriate.
Exceedance for two or more consecutive samples	Repeat measurement to confirm findings; If exceedance is confirmed, inform IEC, ER, Contractor and EPD; Identify source(s), investigate the causes of exceedance and propose remedial measures;	Check monitoring data submitted by the ET; Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their	Confirm receipt of notification of exceedance in writing; In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; Supervise the implementation of remedial measures; and	Identify source(s) and investigate the causes of exceedance; Take immediate action to avoid further exceedance; Submit proposals for remedial measures to the ER, IEC and ET within three working days of notification for agreement;



Monthly EM&A Report

Page	I-4
Ref#	HKES240700006125
Rev.	01
Date	.lul-24

EVENT	ACTION			
EVENT	ET	IEC	ER	CONTRACTOR
	 Increase monitoring frequency to daily; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with IEC and ER to discuss the remedial actions to be taken; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and If exceedance stops, cease additional monitoring. 	effectiveness and advise the ER accordingly; and 4. Supervise the implementation of remedial measures.	4. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	 4. Implement the agreed proposals; 5. Revise and resubmit proposals if problem still not under control; and 6. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Note: ET – Environmental Team; ER – Engineer's Representative; IEC – Independent Environmental Checker



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot		J-1
Replanning Works - Contract 1733		HKES240700006125
Monthly EM&A Report	Rev.	01
monthly Emant Report	Date	lul-24

APPENDIX J - STATISTICS ON COMPLAINT, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTION



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	J-2
Replanning Works - Contract 1733		HKES240700006125
Monthly EM&A Report		01
	Date	Jul-24

Statistic Summary of EJunexceedance

Air Quality				
Location	Action Level	Limit Level	Total	
DM1	0	0	0	

Statistical Summary of Environmental Complaint

	Envir	onmental Complaint Sta	tistics
Reporting Period	Frequency	Cumulative	Complaint Nature
1 June 2024 – 30 June 2024	0	0	0

Statistical Summary of Environmental Non-compliance

	Environr	mental Non-compliance S	Statistics
Reporting Period	Frequency	Cumulative	Complaint Nature
1 June 2024 – 30 June 2024	0	0	0

Statistical Summary of Environmental Summons

	Environmental Summons Statistics					
Reporting Period	Frequency	Cumulative	Complaint Nature			
1 June 2024 – 30 June 2024	0	0	0			



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	J-3
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
montany amount report		Jul-24

Statistical Summary of Environmental Prosecution

	Environmental Prosecution Statistics					
Reporting Period	Frequency	Cumulative	Complaint Nature			
1 June 2024 – 30 June 2024	0	0	0			



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	K-1
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
monany amazertopore		.lul-24

APPENDIX K - ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Page Ref# K-2 Monthly EM&A Report Rev. 01 Date Jul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
Air Quality	y (Construction Phase)						
S3.8.1	Watering once per hour on active works areas, exposed areas and unpaved haul roads during working hours.	To minimize dust impacts	Contractor	All works area	Construction phase	Air Pollution Control Ordinance (APCO)	Implemented
S3.8.9	 Implementation of dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices should be carried out to further minimize construction dust impact. Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather. Use of frequent watering for particularly dusty construction areas and areas close to ASRs. Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering should be applied to aggregate fines. Open stockpiles should be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs. Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. Establishment and use of vehicle wheel and body washing facilities at the exit points of the site. Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading points, 	dust impacts	Contractor	All works area	Construction phase	Air Pollution Control Ordinance (APCO)	Implementation enhanced after the observation.



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Page Ref# K-3 Ref# Monthly EM&A Report Rev. 01 Date Jul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ periods.						
	 Imposition of speed controls for vehicles on unpaved site roads. 8 kilometres per hour is the recommended limit. 						
	 Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs. 						
	 Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides. 						
	 Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed. 						
	 Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system. 						
Noise Impa	nct (Construction Phase)			1			
S4.5.16	Implement the following good site practices as far as practicable: Only well-maintained plant should be operated on-site, and plant should be serviced regularly during the	To minimise impacts to surrounding habitats	Contractor	All works area	Construction phase	TM-EIAO	Implemented



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Ref# | HKES240700006125 | Rev. | 01

Jul-24

Date

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	construction program;						
	Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction program;						
	Mobile plant, is any, should be sited as far from NSRs as possible;						
	 Machine and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; 						
	 Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and 						
	Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities						
S4.5.17	Adopting quiet PME is recommended. The type of quiet PME adopted in this assessment is for reference only. The contractors may adopt alternative quiet PME as long as it can be demonstrated that they would not result in construction noise impacts worse than those predicted in this assessment.	To reduce impact to affected NSRs	Contractor	All works area	Construction phase	TM-EIAO	Implemented
S4.5.19		To reduce impact to affected NSRs	Contractor	All works area	Construction phase	TM-EIAO	N/A
Water Qual	ity Impact (Construction Phase)						
S5.8.4	Surface and road run-off from construction sites should be discharged into storm drains via adequately designed	To minimise impact from	Contractor	All works area	Construction phase	Water Pollution Control	1



Monthly EM&A Report

Rev.	01
Date	Jul-24

K-5

HKES240700006125

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels or earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels should be provided on site boundaries where necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.					Ordinance (WPCO), Technical Memorandum on EIA Ordinance (EIAO-TM), ProPECC PN 1/94, Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS)	implemented
S5.8.5	Silt removal facilities, channels and manholes should be maintained, and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to prevent local flooding. Any practical options for the diversion and re- alignment of drainage should comply with both engineering and environmental requirements in order to provide adequate hydraulic capacity of all drains.	impact from construction site	Contractor	All works area		WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	implemented
S5.8.6	Construction works should be programmed to minimize soil excavation works in rainy seasons (April to September). If soil excavation cannot be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access	impact from construction site	Contractor	All works area		WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	implemented



Page	K-6
Ref#	HKES240700006125
Rev.	01
Date	Jul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm.						
\$5.8.7	Earthworks final surfaces should be well compacted, and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.	impact from construction site	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	implemented
	Measures should be taken to minimize the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	impact from construction site	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	implemented
	If bentonite slurries are required for any construction works, they should be reconditioned and reused wherever practicable to minimise the disposal volume of used bentonite slurries. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be transported away after the related construction activities are completed. Requirements as stipulated in ProPECC Note PN 1/94 should be closely followed when handling and disposing bentonite slurries.	impact from construction site	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94	implemented
S5.8.10	Open stockpiles of construction materials (e.g. aggregates,	To minimise	Contractor	All works area	Construction	WPCO,	



HKES240700006125 Ref# Rev. 01 Monthly EM&A Report Jul-24

Page

Date

K-7

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms.	impact from construction site run-off			phase	EIAO- TM, ProPECC PN 1/94, TM- DSS	implemented
S5.8.11	Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	impact from construction site	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	Implemented
S5.8.12	Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.	impact from construction site	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	Implemented
\$5.8.12	The following mitigation measures related to the transportation of the sediment should be implemented to minimize the potential water quality impact: Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding water. • The barge transporting the sediments to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation. • Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as	impact from transportation of sediment	Contractor	Barging point and barges	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94	N/A



Page K-8 HKES240700006125 Ref# Rev. 01 Monthly EM&A Report Jul-24 Date

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	specified by the Director of Environmental Protection (DEP).						
\$5.8.13	There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on- site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence.	impact from	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	implemented
S5.8.14	Water for Bored Piling Works Water used in ground boring and drilling for site investigation or rock / soil anchoring should be re-circulated as far as practicable after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.	construction site	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	N/A
S5.8.15	Wheel Washing Water Wash-water from wheel washing facility should have been treated by silt removal facilities before discharging into storm drains. Treated wash-water could be used as dust suppression measures as far as practicable. The section of access road between the wheel washing bay and the public road should be paved to reduce vehicle tracking of soil and to prevent silty water from entering public road and drains.	construction site run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	implemented



Page K-9 EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 HKES240700006125 Ref# Rev. 01 Monthly EM&A Report Jul-24

Date

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
S5.8.16	Construction Works near Channelized Watercourse / Ditch For minimization of potential water quality impacts from the works to nearby inland channelized watercourse/ditch near SHWSTW, the practices outlined in ProPECC Note PN 1/94 "Construction Site Drainage" and ETWB TC (Works) No.5/2005 "Protection of natural streams / rivers from adverse impacts arising from construction works" should be adopted where applicable. Relevant mitigation measures are listed below: • The use of less or smaller construction plants may be specified in works area close to the inland water bodies. • Temporary storage of material (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from watercourse/ditch when carrying out of the construction works. Stockpiling of construction materials and dusty materials should be covered and located away from any watercourse/ditch. • Construction debris and spoil should be covered up and / or disposed of as soon as possible to avoid being washed into the nearby water receivers. • Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the watercourse/ditch, where practicable. Construction effluent, site run-off and sewage should be properly collected and / or treated.	run-off	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS, ETWB TC(Works) No. 5/2005	Implemented
S5.8.17 – S5.8.19	Accidental Spillage of Chemicals The Contractor should register as a chemical waste producer if chemical wastes would be produced from		Contractor	All works area	Construction phase	WPCO, EIAO- TM, Waste Disposal	



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Ref# HKES240700006125 Rev. 01

Jul-24

Date

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation, should be observed and complied. • Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges. • Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows: • Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport. • Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents. • Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.					Ordinance (WDO), Waste Disposal (Chemical Waste) (General) Regulation	Implementation enhanced after the observation.
S5.8.22 – S5.8.24	Groundwater from Contaminated Areas, Contaminated Site Runoff and Wastewater from Land Decontamination Remediation of contaminated land should be properly	To minimise impact from groundwater from	Contractor	All works area confirmed with land	Construction phase	WPCO, EIAO- TM, TM-DSS, Guidance	N/A



Page	K-11
Ref#	HKES240700006125
Rev.	01
Date	Jul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	conducted following the recommendations of Land Contamination Assessment to be conducted in future. Any excavated contaminated material and exposed contaminated surface should be properly housed and covered to avoid generation of contaminated runoff. Open stockpiling of contaminated materials should not be allowed. Any contaminated runoff or wastewater generated from the land decontamination processes should be properly collected and diverted to wastewater treatment facilities (WTF) as necessary. The WTF shall deploy suitable treatment processes (e.g. oil interceptor/ activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (such as total petroleum hydrocarbon) to an undetectable range. All treated effluent from the wastewater treatment system shall meet the requirements as stated in TM-DSS and should be either discharged into the foul sewers or tankered away for proper disposal. No direct discharge of groundwater from contaminated areas should be adopted. Prior to any excavation works within the potentially contaminated areas, the baseline groundwater quality in these areas should be reviewed based on the past relevant site investigation data and any additional groundwater quality measurements to be performed with reference to Guidance Note for Contaminated Land Assessment and Remediation and the review results should be submitted to EPD for examination. If the review results indicated that the groundwater to be generated from the excavation works would be contaminated, this contaminated groundwater should be either properly treated or properly recharged into the ground in compliance with	areas, contaminated site run-off/ wastewater from land decontamination		contamination		Note for Contaminate d Land Assessment	



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Page Ref# K-12 Monthly EM&A Report Rev. 01 Date Jul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	the requirements of the TM-DSS. If wastewater treatment is to be deployed for treating the contaminated groundwater, the wastewater treatment unit shall deploy suitable treatment processes (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (such as total petroleum hydrocarbon) to an undetectable range. All treated effluent from the wastewater treatment plant shall meet the requirements as stated in the TM-DSS and should be either discharged into the foul sewers or tankered away for proper disposal. If deployment of wastewater treatment is not feasible for handling the contaminated groundwater, groundwater recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in section 2.3 of TM-DSS. The baseline groundwater quality should be determined prior to the selection of the recharge wells, and submit a working plan to EPD for agreement. Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Groundwater monitoring wells should be installed near the recharge wells and to ensure that no likelihood of increase of groundwater level and transfer of pollutants beyond the site boundary. Prior to recharge, free products should be removed as necessary by installing the petrol interceptor.						



Page	K-13
Ref#	HKES240700006125
Rev.	01
Date	Jul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 The Contractor should apply for a discharge licence under the WPCO through the Regional Office of EPD for groundwater recharge operation or discharge of treated groundwater. 						
Waste Mai	nagement Implication (Construction Phase)			•			-
S7.5.3	Recommendations for good site practices during the construction phase include: Nomination of approved personnel, such as a site manager, to be responsible for implementation of good site practices, arrangements for waste collection and effective disposal to an appropriate facility;	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	Waste Disposal Ordinance (WDO) and Public	Implemented
	 Training of site personnel in site cleanliness, concepts of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures; 					Cleansing and Prevention of Nuisances	
	 Provision of sufficient waste reception/ disposal points, and regular collection of waste; Adoption of appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; Provision of regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; 					Regulation (Cap. 132BK)	
	 Adoption of a recording system for the amount of wastes generated, recycled and disposed (including the disposal sites); and 						
	Preparation of Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP)						
S7.5.4	Recommendations to achieve waste reduction are as follow: • Segregate and store different types of construction		Contractor	All works areas	Construction phase	WDO	Implemented



Page	K-14
Ref#	HKES240700006125
Rev.	01
Date	lul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	related waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;						
	 Provide separate labelled bins to segregate recyclable waste such as aluminium cans from other general refuse generated by the work force, and to encourage collection by individual collectors; 						
	Recycle any unused chemicals or those with remaining functional capacity;						
	Maximise the use of reusable steel formwork to reduce the amount of C&D materials;						
	 Adopt proper storage and site practices to minimise the potential for damage to, or contamination of construction materials; 						
	 Plan the delivery and stock of construction materials carefully to minimise the amount of waste generated; and 						
	Minimize over ordering and wastage through careful planning during purchasing of construction materials.						
S7.5.6	To minimise the impact resulting from collection and transportation of C&D materials as far as practicable, C&D material, such as wood, plastic, steel and other metals should be reused or recycled and, as a last resort, disposed to landfill. A suitable area should be designated within the site for temporary stockpiling of C&D materials and to facilitate the sorting process.	To minimise the disposal of C&D waste	Contractor		Construction phase	WDO	Implemented
S7.5.6	Within the stockpile areas, the following measures should be taken to control potential environmental impacts or nuisance:		Contractor	1	Construction phase	WDO	Implemented



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Ref# K-15 Rev. 01

Jul-24

Date

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 Proper handling and storage of waste such as soil by means of covers and/or water spraying system to minimise the potential environmental impact and to prevent materials from wind-blown or being washed away; 						
	 Covering materials during heavy rainfall; 						
	 Locating stockpiles to minimise potential visual impacts; 						
	 Minimising land intake of stockpile areas as far as possible; 						
	 Adopting GPS or equivalent system for tracking and monitoring of all dump trucks engaged for the Project in recording their travel routings and parking locations to prohibit illegal dumping and landfilling of C&D materials; and 						
	 Keeping record and analysis of data collected by GPS or equivalent system related to travel routings and parking locations of dump trucks engaged on site. 						
\$7.5.7 to \$7.5.9	General refuse should be stored in enclosed bins or compaction units separate from C&D materials and chemical waste. A reputable waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D materials and chemical wastes. An enclosed and covered area is preferred to reduce the occurrence of 'wind blown' light materials. The recyclable component of general refuse, such as aluminium cans, paper and cleansed plastic containers shall be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste shall be	arising from waste management	Contractor		Construction phase	WDO	Implemented



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Page K-16 Ref# HKES24

Ref#	HKES240700006125
Rev.	01
Date	Jul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	set up by the Contractor. The Contractor shall also be responsible for arranging recycling companies to collect these materials.						
	The Contractor shall carry out an education programme for workers in avoiding, reducing, reusing and recycling of materials generation. Posters and leaflets advising on the use of the bins shall also be provided in the sites as reminders.						
S7.5.10 to S7.5.12	If chemical wastes were to be produced at the construction site, the Contractor would be required to register with the EPD as a Chemical Waste Producer, and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented
	Appropriate containers with proper labels should be used for storage of chemical wastes. Chemical wastes should be collected and delivered to designated outlet by a licensed collector. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the CWTC, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.						
	Any unused chemicals or those with remaining functional capacity should be collected for reuse as far as practicable.						
\$7.5.13 to \$7.5.14	The sediment should be excavated, handled, transported and disposed of in a manner that would minimise adverse environmental impacts. For minimization of sediment disposal, beneficial reuse will be considered on site as far as practicable during the construction stage before the disposal	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	APCO WDO	N/A



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Page R-17 K-17 Monthly EM&A Report Rev. 01 Date Jul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	of excavated sediment.						
	Requirements of the Air Pollution Ordinance (Construction Dust) Regulation, where relevant, shall be adhered to during excavation, transportation and disposal of sediments.						
S7.5.15	In order to minimise the exposure to contaminated materials, workers shall, when necessary, wear appropriate personal protective equipment (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities shall also be provided on site.	minimize impacts arising from waste	Contractor	All works areas	Construction phase	WDO	N/A
S7.5.20	Stockpiling of contaminated sediments shall be avoided as far as possible. If temporary stockpiling of contaminated sediments is unavoidable, the excavated sediment shall be covered by tarpaulin and the area shall be placed within earth bunds or sand bags to prevent leachate from entering the ground, nearby drains and/or surrounding water bodies. The stockpiles shall be completely paved or covered by linings in order to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas shall be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, shall be collected and discharged according to the Water Pollution Control Ordinance (WPCO).	minimize impacts arising from waste	Contractor	All works areas	Construction phase	WPCO	N/A
S7.5.21	In order to minimise the potential odour / dust emissions during excavation and transportation of the sediment, the excavated sediments shall be wetted during excavation / material handling and shall be properly covered when placed on trucks or barges. Loading of the excavated sediment to the barge shall be controlled to avoid splashing and overflowing of the sediment slurry to the surrounding	minimize impacts arising from waste	Contractor	All works areas	Construction phase	WDO APCO	N/A



Page	K-18
Ref#	HKES240700006125
Rev.	01
Date	.lul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	water.						
Land Cont	tamination				1	1	1
S8.9.3	To minimise environmental impacts arising from the handling of potentially contaminated materials, the following environmental precautionary measures are recommended to be utilised during the course of any required site remediation: • Excavation profiles must be properly designed and executed with attention to the relevant requirements for environment, health and safety; • Establish and maintain a Health and Safety Plan with the information below before commencement of the SI: (a) Instruction of works on work procedures, safe practices, emergency duties, and applicable regulations; (b) Regularly scheduled meetings of the workers in which the possible hazards, problems of the job, and related safe practices are emphasized and discussed; (c) Good housekeeping practices; and (d) Availability of and instruction in the location, use and maintenance of personal protective equipment. • Excavation shall be carried out during dry season as far as possible to minimise contaminated runoff from contaminated soils; • Supply of suitable clean backfill material (or treated soil) after excavation; • Stockpiling site(s) shall be lined with impermeable sheeting and bunded. Stockpiles shall be fully covered by impermeable sheeting to reduce dust emission. If this is not practicable due to frequent usage, regular		Contractor	Area identified with land contamination	Prior to the commencement of construction works at the contaminated areas	"Guidance Note for Contaminated Land Assessment and Remediation" "Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management "Public Cleansing and Prevention of Nuisances Regulation (Cap. 132BK)" APCO, WDO and WPCO	N/A



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Ref# K-19 Rev. 01

Jul-24

Date

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	watering shall be applied. However, watering shall be avoided on stockpiles of contaminated soil to minimise contaminated runoff; • Vehicles containing any excavated materials shall be suitably covered to limit potential dust emissions or contaminated wastewater run-off, and truck bodies and tailgates shall be sealed to prevent any discharge during transport or during wet conditions; • Speed control for the trucks carrying contaminated materials shall be enforced; • Vehicle wheel and body washing facilities at the site's exist points shall be established and used; and • Pollution control measures for air emissions (e.g. from biopile blower and handling of cement), noise emissions (e.g. from blower or earthmoving equipment), and water discharges (e.g. runoff control from treatment facility) shall be implemented and complied with relevant regulations and guidelines.						
Landscape	and Visual Impact (Construction Phase)						
S9.8.1	Trees unavoidably affected by the works should be transplanted as far as possible in accordance with DEVB TC(W) 7/2015 – Tree Preservation or LAO PN 7/2007 - Tree Preservation and Tree Removal Application for Building Development in Private Projects where applicable.	To transplant affected trees	Contractor	All works areas	Construction phase	DEVB TC(W) No. 7/2015 or LAO PN 7/2007 where applicable	Implemented
S9.8.1	Control of night-time lighting glare.	To minimize the Landscape and visual impact on surrounding setting	Contractor	All works areas	Construction phase	TM-EIAO	Implemented
S9.8.1	Erection of decorative screen hoarding which should be compatible with the surrounding setting.	To minimize the Landscape and visual impact on	Contractor	All works areas	Construction phase	TM-EIAO	Implemented



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works - Contract 1733 Page Ref# K-20 Monthly EM&A Report Rev. 01 Date Jul-24

EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
\$9.8.1		surrounding setting To minimize visual impact to	Contractor	All works areas	Construction phase	-	Implemented
S9.8.1		adjacent VSRs. To minimize the landscape impact	Contractor	All works areas	Construction phase	-	To be implemented
	Departments.	setting					



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	L-1
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24

APPENDIX L - MONITORING SCHEDULE OF THE REPORTING MONTH



ED 500/2024 Six He Way Station and Six He Way Danet Danlanning Wayke Contract 1722		L-2
EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works – Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
	Date	Jul-24

Dust Monitoring Schedule in June 2024

JUNE 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 1-hour TSP Monitoring	4	5	6	1-hour TSP Monitoring	8
9	10	11	12	13 1-hour TSP Monitoring	14	15
16	17	18	19 1-hour TSP Monitoring	20	21	22
23	24	25 1-hour TSP Monitoring	26	27	28 1-hour TSP Monitoring	29
30						



EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot	Page	M-1
Replanning Works - Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
monany =max respons	Date	Jul-24

APPENDIX M - MONITORING SCHEDULE OF THE COMING MONTH



ED 500/2024 Six He Way Station and Six He Way Dayet Daylonning Works Contract 1722		M-2
EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works – Contract 1733	Ref#	HKES240700006125
Monthly EM&A Report	Rev.	01
monthly Linex Report		Jul-24

Tentative Dust Monitoring Schedule in July 2024

JULY 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4 1-hour TSP Monitoring	5	6
7	8	9	10 1-hour TSP Monitoring	11	12	13
14	15	16 1-hour TSP Monitoring	17	18	19	20
21	22 1-hour TSP Monitoring	23	24	25	26 1-hour TSP Monitoring	27
28	29	30	31			

The schedule is subjected to change due to unforeseeable circumstances (e.g. adverse weather, etc.)