MTR Corporation Limited

Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works

Monthly EM&A Report

(September 2024)

Verified by: <u>Adi Lee</u>

Position: Independent Environmental Checker

Date: _____ 14 October 2024 _____

MTR Corporation Limited

Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works

Monthly EM&A Report

(September 2024)

Certified by: <u>Edan Li</u>

Position: Environmental Team Leader

Date: _____ 14 October 2024 _____

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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.

1 able 1.1	Summary of Awarded Works Contracts			
Works Contract	Description	scription Construction 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.

Table 1.1 Summary of Awarded Works Contracts

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-fourth 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 September 2024.

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 Ma	or Construction Activities in the Reporting Period	
Works Contract	Site	Construction Activities	
1701	Overall	 Site clearance, Underground utilities (UU) detection and trial pit at site Instrumentation & Monitoring installation at W12 and test track Trial pit, predrilling and bored pile works in W11 Project Manager Office: Underground utilities (UU) diversion and concrete casting for foundation Underfloor Wheel Lathe (UFWL): Excavation and lateral support (ELS) works and plate load test 	
1731	Overall	Site Clearance & Hoarding	
1732	Overall	 Instrumentation monitoring (cable bridges, EVA road for concerning pavements between trackside) EVA construction and watermain installation Trackworks for EV03 & 04 Cable bridge E&M works, and outstanding steel works (under Els) 	
1733 Overall • Drainage • Catchpit • Tree Felli		 Down Pipe Installation Drainage Pipelining Work Catchpit Construction Tree Felling Staircase Painting Touch up 	

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-H	Hour TSP Monitor	ing Results i	n the Report	ing 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	Works Contract 1701, 1731, 1732 & 1733					
DM1	Siu Ho Wan Government Maintenance Depot	6.0 – 23.0	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**.

EP Condition	Submission	Submission date
(EP-588/2021)		
Condition 1 10	Commencement Date of Construction	11 Jun 2021 (1 st submission)
Condition 1.12		12 Jul 2021 (2 nd submission)
	Operation Warks Dhasing Ophesiuls	12 Aug 2021 (3 rd submission)
	Construction Works Phasing Schedule	1 Nov 2021 (1 st Submission)
	Proposal	20 Dec 2021 (2 nd Submission)
Condition 2.7		29 Dec 2021 (Deposited)
Condition 2.7		9 October 2023 (1 st
		Submission with updated Phase 1 works)
		30 Nov 2023 (Deposited)
	Environmental Permit Submission Schedule	12 Aug 2021
Condition 2.8		10 Sep 2021 (Deposited)
	Management Organization	1 Nov 2021 (1 st Submission)
	Management Organization	20 Dec 2021 (1 Submission)
		21 Mar 2022 (3 rd Submission)
Condition 2.9		9 Aug 2022 (4 th Submission)
Condition 2.0		16 Nov 2022 (5 th Submission)
		18 Sep 2023 (6 th submission)
		22 Jan 2024 (7 th Submission)
	Construction Noise Mitigation Plan	1 Nov 2021 (1 st Submission)
	5	20 Dec 2021 (2 nd Submission)
		28 Dec 2021 (Deposited)
		30 Dec 2022 (1 st Submission
		which covered Phase 1 main
		works)
		29 Mar 2023 (2 nd Submission
		which covered Phase 1 main
		works)
		18 May 2023 (3 rd Submission
Condition 2.10		which covered Phase 1 main
		works)
		28 Jul 2023 (4 th Submission for
		Phase 1 works)
		30 Oct 2023 (5th 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
	Noise Mitigation Plan	for Phase 1 works) 31 Mar 2023 (1 st submission)
	Noise Mitigation Plan	31 Mar 2023 (1 st submission) 31 Jul 2023 (2 nd submission)
Condition 2.11		20 Oct 2023 (3 rd submission)
		7 March 2024 (4 th submission)
		18 March 2024 (4 Submission)
	Waste Management Plan	1 Nov 2021 (1 st Submission)
		$20 \text{ Dec } 2021 (2^{nd} \text{ Submission})$
		28 Dec 2021 (2 Submission) 28 Dec 2021 (Deposited)
		30 Jun 2023 (1 st Submission
Condition 2.13		for Phase 1 work)
Sonation 2110		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)
Condition 2.15	Landscape and Visual Plan(s)	27 Apr 2023 (1 st Submission)

 Table 3.1
 Summary of EP Submissions Status

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 16 Nov 2021 (Deposited)
Condition 3.4	Monthly EM&A Report No.33 (August 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)

Appendix A

Monthly EM&A Report for September 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 (September 2024) (Version 2.0)

	Name	Post	Signature	Date
Prepared by:	Jack Chow	<i>Contractor's</i> Environmental Team Member	Jack	10 October 2024
Checked and Certified by:	F. C. Tsang	<i>Contractor's</i> Environmental Team Leader	toang Jankeng	10 October 2024

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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 6th monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the reporting period from 1 to 30 September 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

- Site clearance, Underground utilities (UU) detection and trial pit at site;
- Instrumentation & Monitoring installation at W12 and test track;
- Trial pit, predrilling and bored pile works in W11;
- Project Manager Office: Underground utilities (UU) diversion and concrete casting for foundation; and
- Underfloor Wheel Lathe (UFWL): Excavation and lateral support (ELS) works and plate load test.
- A.6 A summary of regular construction dust monitoring activities in this reporting period is listed below:

Construction dust (1-hour TSP) monitoring DM1

15 times

- A.7 Weekly environmental site inspections were conducted during the reporting period. Four site inspections were carried out on 03, 10, 17 and 24 September 2024. One joint site inspection with the IEC was also undertaken on 10 September 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 (UU) detection and diversion, instrumentation & monitoring, trial pit, predrilling works at site;
- Depot: Bored pile installation work, precautionary sheet pile works, pre-bored socket H piles installation;
- Test Track: Railway protective fencing installation, excavation and lateral support (ELS) for Overhead Line (OHL) Mast, underground utility (UU) construction;
- Oyster Bay Station: Predrilling, mini piles installation;
- Underfloor Wheel Lathe: Excavation, drainage and road works, RC works and BS works;
- Sewage Pump Station: Demolition of AB26, fencing and underground utility (UU) construction, SSK widening works; and
- Project Manager Office: Civil, ABWF and BS works.
- 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 6th monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the reporting period from 1 to 30 September 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 September 2024) is shown in **Table 2.1**. The construction programme is presented in **Appendix A**.

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

Construction Activities undertaken

- Site clearance, Underground utilities (UU) detection and trial pit at site
- Instrumentation & Monitoring installation at W12 and test track;
- Trial pit, predrilling and bored pile works in W11;
- Project Manager Office: Underground utilities (UU) diversion and concrete casting for foundation; and
- Underfloor Wheel Lathe (UFWL): Excavation and lateral support (ELS) works and plate load test.
- 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 2.2Contact 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)		

Party	Role	Position	Name	Telephone
CSHK	Contractor	Environmental Officer	Ms. Iris Ho	5611 8325
Aurecon	<i>Contractor's</i> 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 2.3Summary of the Status of Valid Environmental License Notification,
Permit and Documentations

Permit/	Valid	Valid Period			
Licences/ Notification/ Reference No.	From	То	Status	Remark	
Environmental P	ermit				
EP-588/2021		-			
Wastewater Disch	narge License				
Licence No.: WT10002895	09/07/2024	31/07/2029	Valid	N/A	
Notification of Co Regulation	Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation				
Ref. No.: 500947	18/12/2023	N/A	Valid	N/A	
Chemical Waste	Producer Registration				
5213-961- C4924-01	30/01/2024	N/A	Valid	N/A	
Billing Account fo	or Disposal of Construc	tion Waste			
Account No.: 7049565	21/12/2023	N/A	Valid	N/A	
Construction Noise Permit					
GW-RS0701-24	09/08/2024	06/02/2025	Superseded by GW- RS0879-24	N/A	
GW-RS0879-24	25/09/2024	28/02/2025	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**.

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	 Nov 2021 (1st Submission) 20 Dec 2021 (2nd Submission) 29 Dec 2021 (Deposited) 9 Oct 2023 (1st 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	 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	 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 (3rd 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 (1st submission) 31 Jul 2023 (2nd submission) 20 Oct 2023 (3rd submission) 7 Mar 2024 (4th submission) 	

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

EP Condition (EP-588/2021)	Submission	Submission Date
		18 Mar 2024 (Approved)
Condition 2.13	Waste Management Plan	 Nov 2021 (1st Submission) 20 Dec 2021 (2nd Submission) 28 Dec 2021 (Deposited) 30 Jun 2023 (1st Submission for Phase 1 work) 1 Aug 2023 (2nd Submission for Phase 1 works) 31 Aug 2023 (Deposited for Phase 1 works)
Condition 2.15	Landscape and Visual Plan(s)	 27 Apr 2023 (1st Submission) 27 Jul 2023 (2nd Submission) 20 Oct 2023 (3rd 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 (August 2024)	Submitted within 10 working days after the end of the reporting month
Condition 4.2	Dedicated Internet Website	12 Jan 202225 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
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Air Sensitive Receiver (ASR) ID No. in EIA Report	Monitoring Station ID	ASR Description
A2	DM1	Siu Ho Wan Government Maintenance Depot

MONITORING RESULTS 4

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.

8 1 1 1				
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

Table 4.1 **Construction Dust Monitoring Equipment**

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 4.2Construction 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 4, 10, 16, 20 and 26 September 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 S	ummary of 1-hour	TSP Monitoring Results
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Monitoring	Range	Action Level	Limit Level	No. of Exceedances
Location	(µg/m ³)	(µg/m ³)	(µg/m ³)	
DM1	6 - 23	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 4.4Quantities of waste generated from the Project

	Quantity						
	Inert C&D materials (in m ³)	Chemical Waste (in '000 kg)	Non-inert C&D materials				
Reporting period			General Refuse disposed	Recycled wastes			
				Paper/ cardboard (in '000 kg)	Plastics (in '000 kg)	Metals (in '000 kg)	Yard Waste (in '000 kg)
1 – 30 September 2024	3224.760	0	89.000	0.135	0.001	0.001	2.39

- 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, 10, 17 and 24 September 2024. One joint site inspection with the IEC was also undertaken on 10 September 2024. Observations were reported during the weekly site inspections. Key observations during the site inspections are summarized in **Table 6.1**.

Parameters	Date	Observation/ Recommendation	Follow-up Status	
Air Quality	17/09/2024	Observation: The main haul road at W11A should be sprayed water regularly.	Action Taken: The main haul road at W11A has been sprayed water on 17/09/2024.	
Water Quality	10/09/2024	Observation: The pH reading of the WetSep at W7a was observed to be lower than the WPCO license requirement. The Contractor was reminded to check and ensure the proper functioning of the WetSep.	Action Taken: Wastewater treatment facility at W3a was checked and the pH value display is in normal situation on 12/09/2024.	
	24/09/2024	Observation: Block the manhole with a dike or sandbags to prevent runoff/muddy water from entering the manhole. (W11C)	Action Taken: The sandbags have been placed at the u- channel to block the manhole at W11C on 24/09/2024.	
NA	03/09/2024	No major environmental issue was observed during the site inspection.	NA	

Table 6.1Site Observations

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 (UU) detection and diversion, instrumentation & monitoring, trial pit, predrilling works at site;
- Depot: Bored pile installation work, precautionary sheet pile works, pre-bored socket H piles installation;
- Test Track: Railway protective fencing installation, excavation and lateral support (ELS) for Overhead Line (OHL) Mast, underground utility (UU) construction;
- Oyster Bay Station: Predrilling, mini piles installation;
- Underfloor Wheel Lathe: Excavation, drainage and road works, RC works and BS works;
- Sewage Pump Station: Demolition of AB26, fencing and underground utility (UU) construction, SSK widening works; and
- Project Manager Office: Civil, ABWF and BS works.

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.

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 6th monthly EM&A Report presents the EM&A works undertaken during the period from 1 to 30 September 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 10 September 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

- Water spraying on haul road and dry site area was provided regularly;
- Where a vehicle leaving the works site is carrying a load of dusty materials, the load has covered entirely with clean impervious sheeting;
- Stockpile of dusty materials shall be covered entirely by green net;
- Before any vehicle leaving the works site, wheel watering has been performed; and
- 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;
- 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.

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.
- Chemical waste handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes.

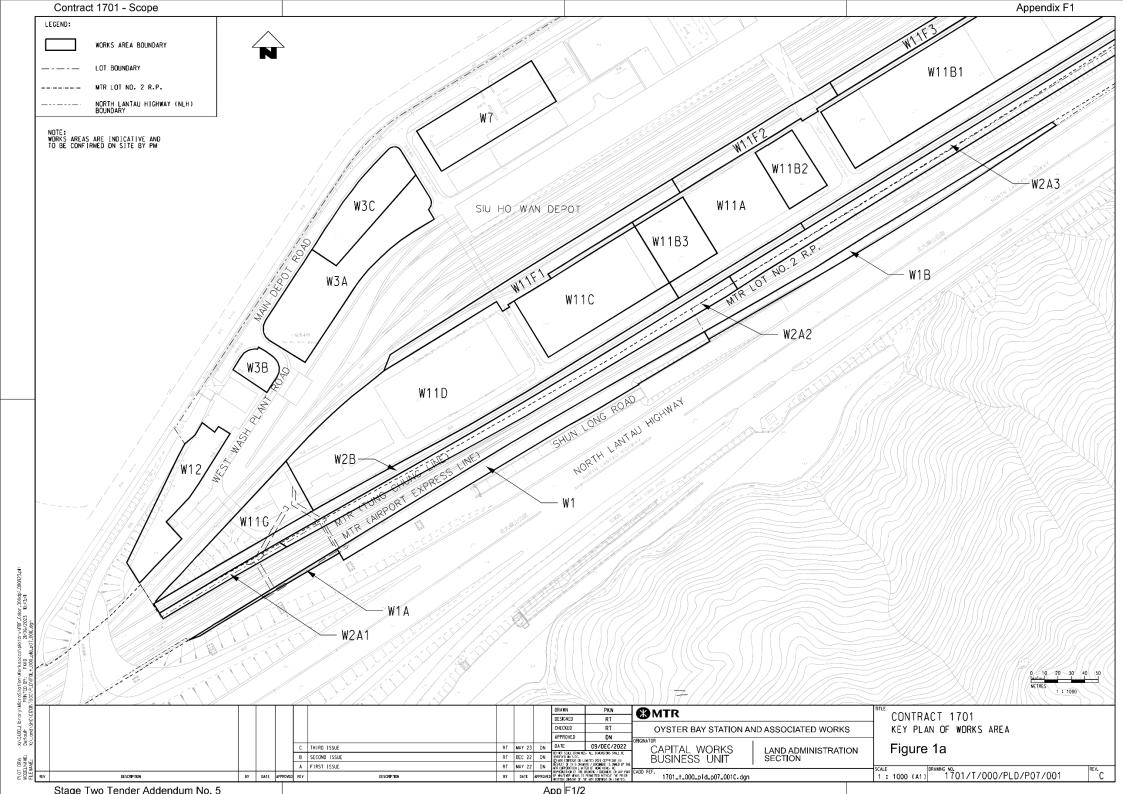
Landscape & Visual

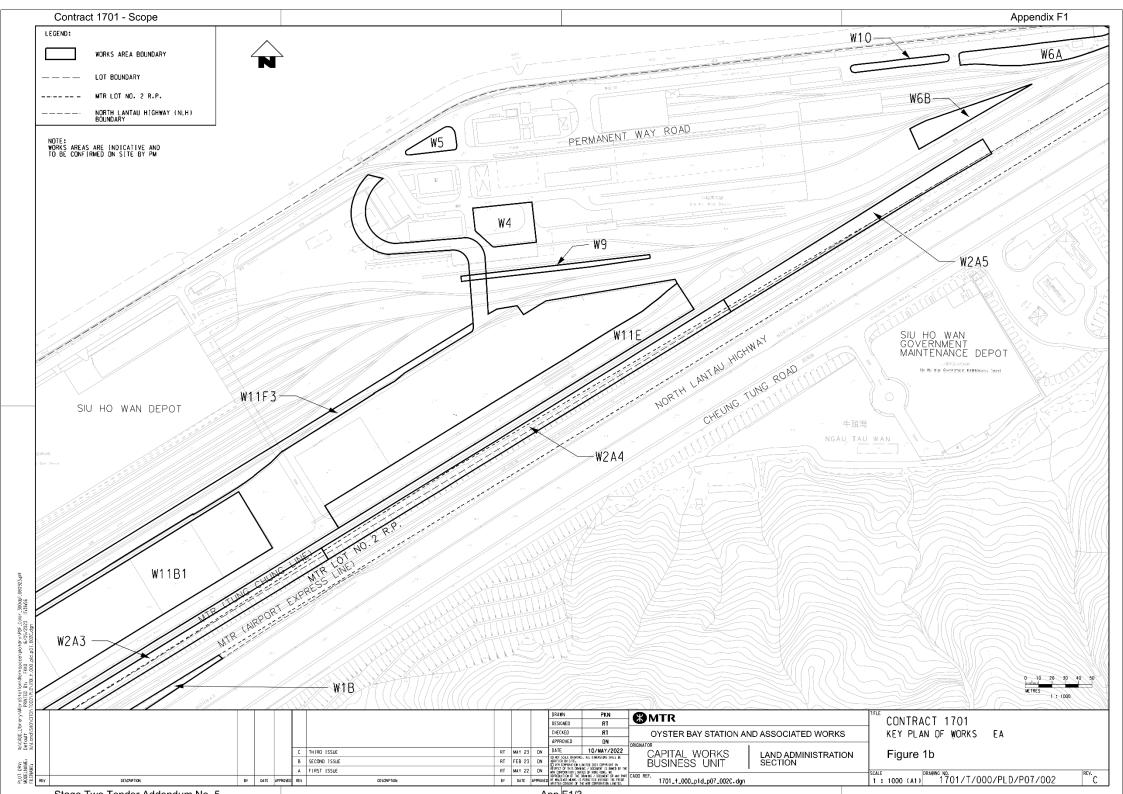
• Existing trees within site areas should be well protected and maintained.

Permits/ Licenses

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

Figure 1Alignment and Works Area for Contract No. 1701





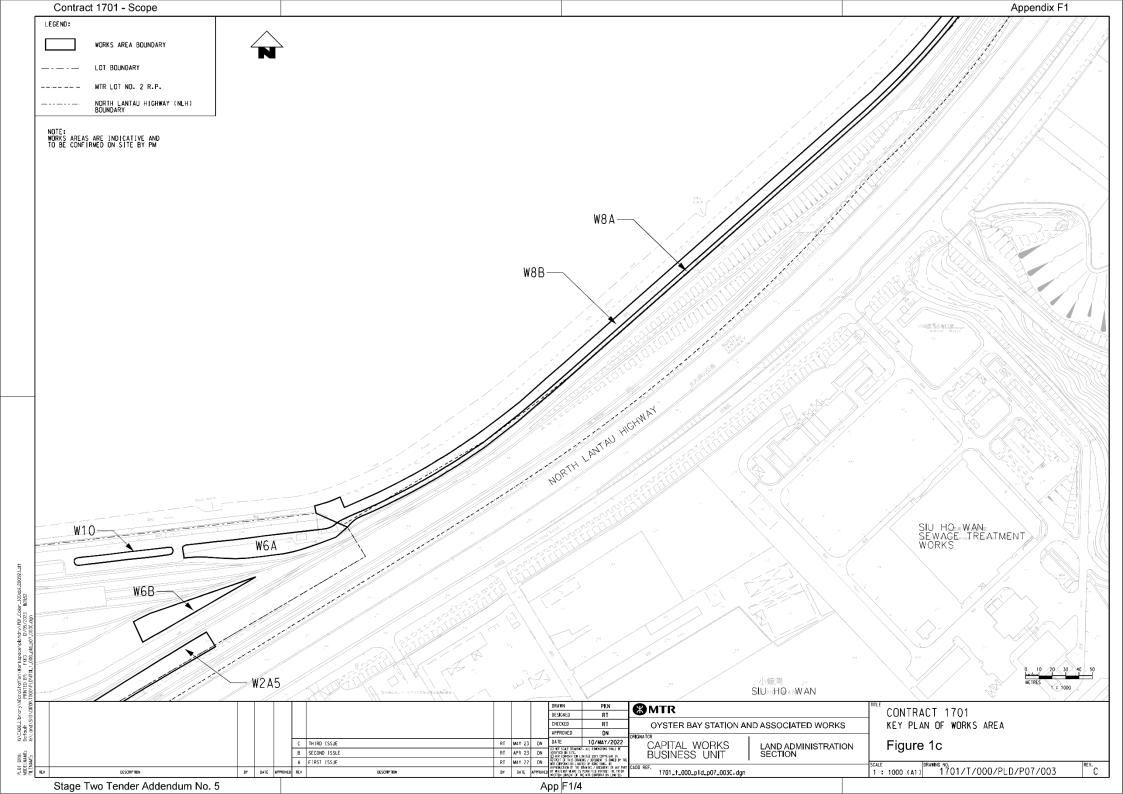


Figure 2Location Plan of Air Quality Monitoring Station

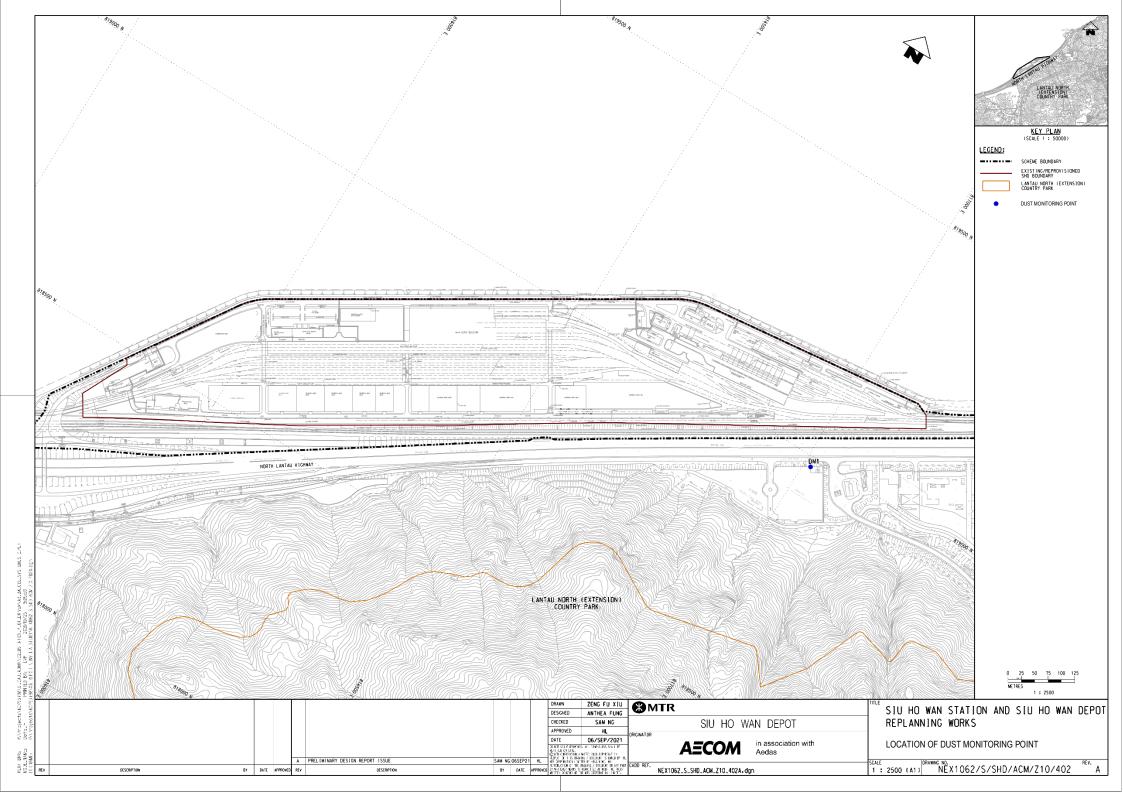
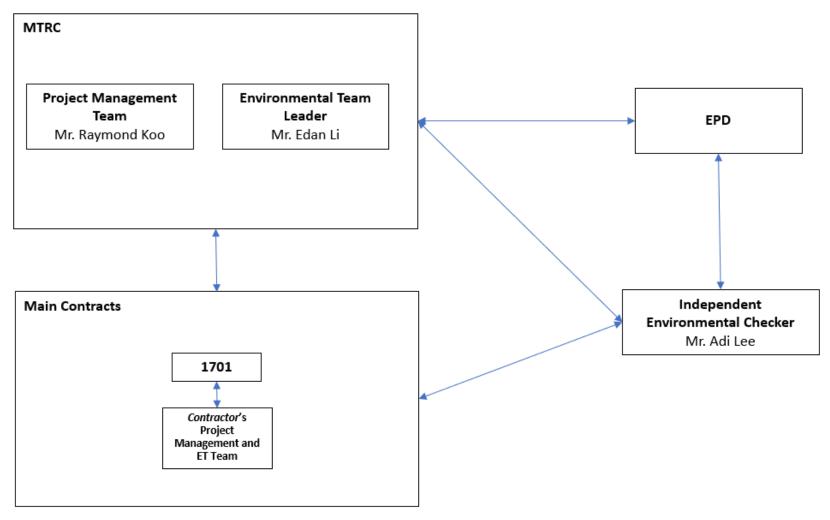


Figure 3

Project Organization Chart

Project O-Chart



Legend:

Communication channel

MTR's	Contact:
MITIND	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 Limited- IEC						
Position	Name	Telephone				
Independent Environmental Checker	Mr. Adi Lee	2859 5443				

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 Associated Works	Construction	Senior Environmental Manager	Mr. MH Isa	9884 0810
1/01		Engineering	Environmental Officer	Ms. Iris Ho	5611 8325
		(HK) Ltd	Environmental Team Leader	Dr. F. C. Tsang	3664 6888

Appendix A

Construction Programme

ACTIVITY DESCRIPTION	2023				125		2026			2027		2028			2029
	SON	DJFMAMJJAS	ONDJ	FMAMJ	JASOND	JFM	AMJJA	S O N D	JFMAM	JJASON	DJFM	AMJJAS	D N D J F	MAM	JJASOND
KEY DATES															
Contract award															
Access to works areas				•	•	•									
Mobilisation															
TUFW Building & Associated Track Works															
Underground Drainage, ELS and Structure															
Associated Trackworks, ABWF and BS Works															
T&C and Statutory Inspection				<u> </u>											
Reprovided Test Track															
Preparation Works: site formation, fencing, etc.		_		•											
Test Track Laying & E&M Installation															
Slop Works for W2A3 and W2A4															
Depot Roof GL A1-S4 West Part															
Piles Works															
Substructure							+++								
Colums and Roof Slabs															
Depot Roof GL 68-100 East Part															
Piles Works		-				-									
Substructure							•								
Colums and Roof Slabs															
Depot Roof GL 34-68															
Piles Works						÷÷•									
Substructure															
Colums and Roof Slabs															
Tai Ho Interchange Connnecting Road Deck															
Preparation and Piling Works					-										
Substructure															
Access Ramp Structure															
Depot Roof(GL S4-34)															
Piles Works															
Substructure															
Colums and Roof Slabs							•								
MEP Plant Building NDB06,NDB07, NDB05															
OYB Station															
Preparaton and Piling Works															
Substructure															
OYB Station Structure															
Link Bridges	-														
ABWF and BS Installation	-														
T&C and Statutory Inspection															
	-													TII	
L															



1701 Oyster Bay Station and Associated Works CONTRACT SUMMARY 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	1	
Information Pro	vided by Customer				
Customer	: China State Construction Engine	ering (HK) Limited			
Address	: N/A				
Information of L	Init-under-test (UUT)				
Description	: Digital dust indicator				
Manufacturer	: SIBATA	Equipment I.D. No.			
Туре	: LD-5R	Serial No.	: 3Y7115		
Laboratory Info	rmation		·		
Lab. Ref. No.	: Q/CAL/24/0453/E	Procedure	: CQS/054/Z		
Date of Calibration	: 29-Jan-2024	Date of Receipt	: 16-Jan-2024		
Date of Issue	: 5-Feb-2024				
Calibration Con	dition				
Ambient Temperature	e .: (20±3) °C	Relative Humidity	: (50±20) %		
Sampling	: As received				
Reference equip	oment				

- 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	1.000	

Remarks

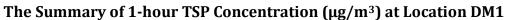
- The calibration results apply to the particular unit-under-test only.
- The values given in this calibration certificate only to the values measureed at the time of test & any uncertainties quoted will not include allowance for the equipment long term drift, varifications with environmental changes, 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.

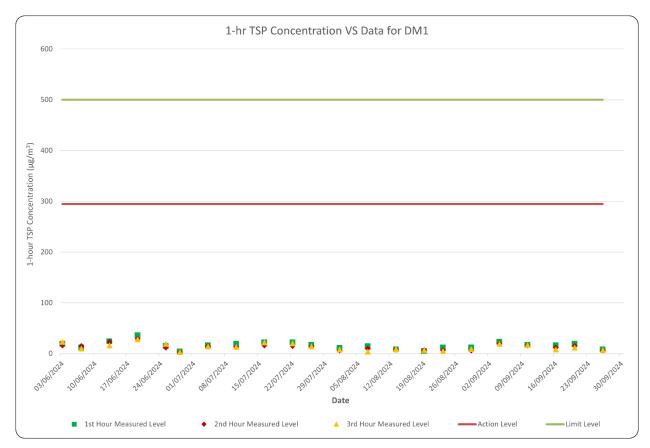
Approved By:

CHAN Chi Wai

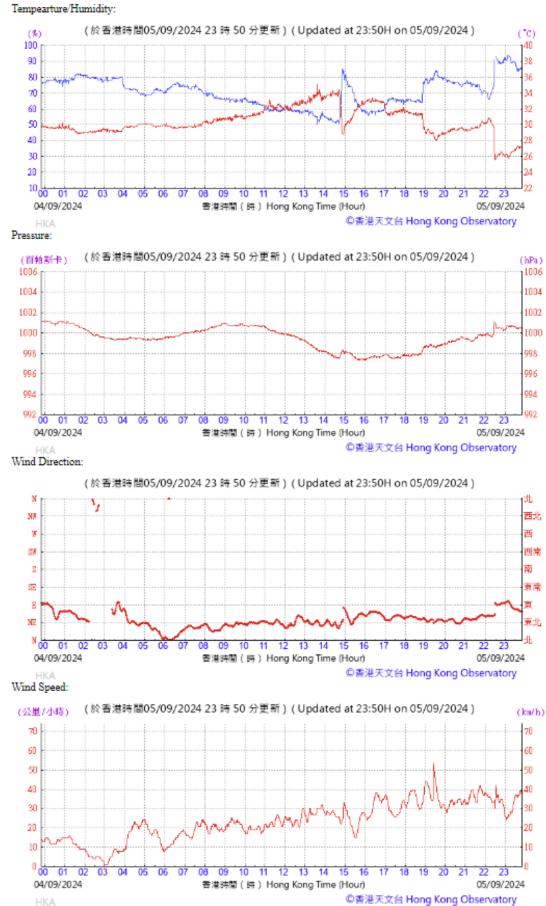
Appendix C Monitoring Data (Air Quality Monitoring)

Date	Weather	Start Time	1 st Hour	2 nd Hour	3 rd Hour
Date	weather	(hh:mm)	μg/m ³	μg/m ³	μg/m ³
04/09/2024	Sunny	8:37	23	20	19
10/09/2024	Fine	8:51	17	16	17
16/09/2024	Fine	8:50	16	12	8
20/09/2024	Fine	13:37	19	15	12
26/09/2024	Fine	8:46	8	6	7
Mini	mum: 6 μ g/m ³	Max	kimum: 23 μg	/m ³	

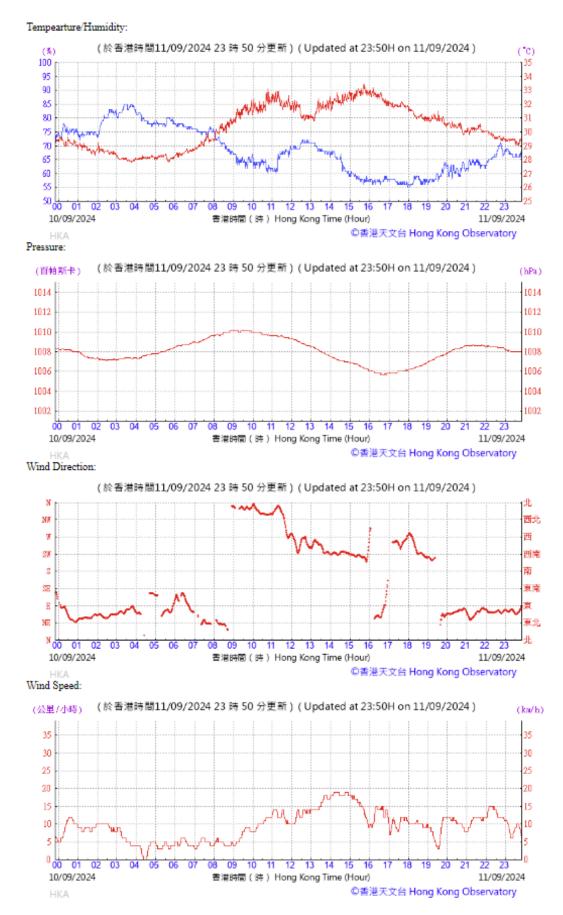




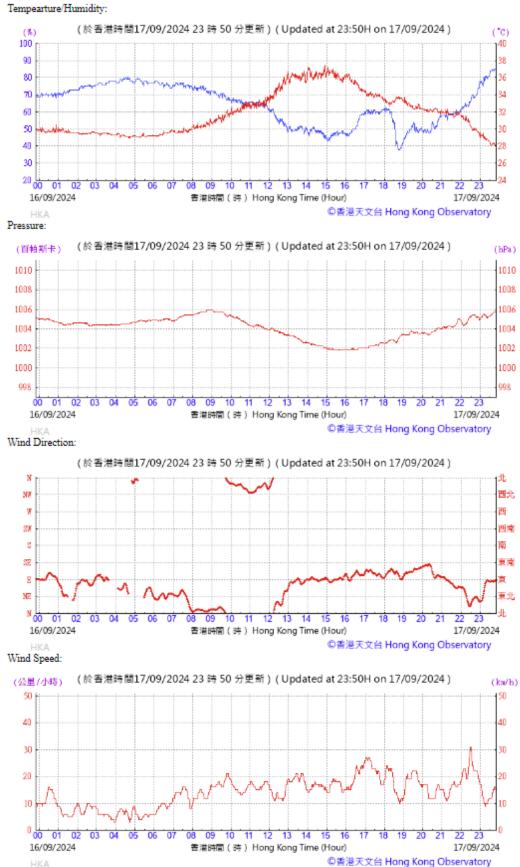
Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 04 September 2024



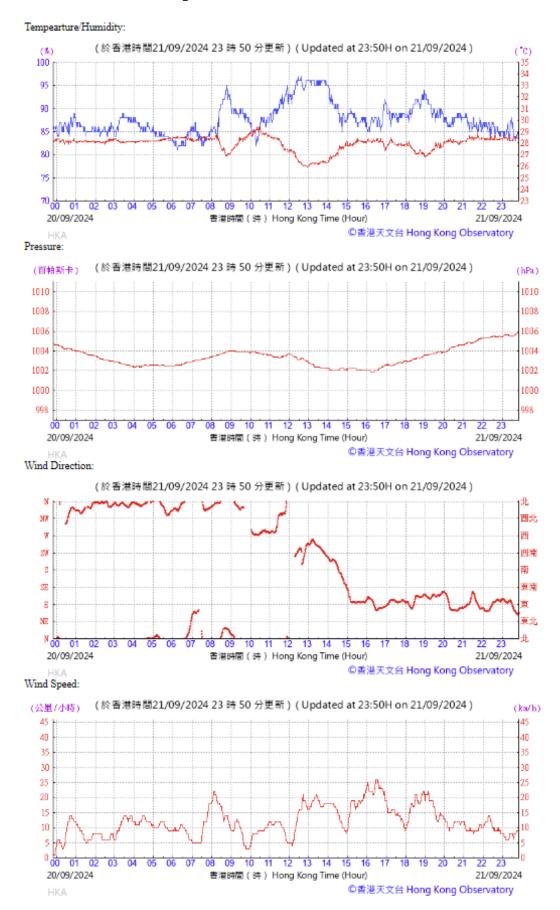
Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 10 September 2024



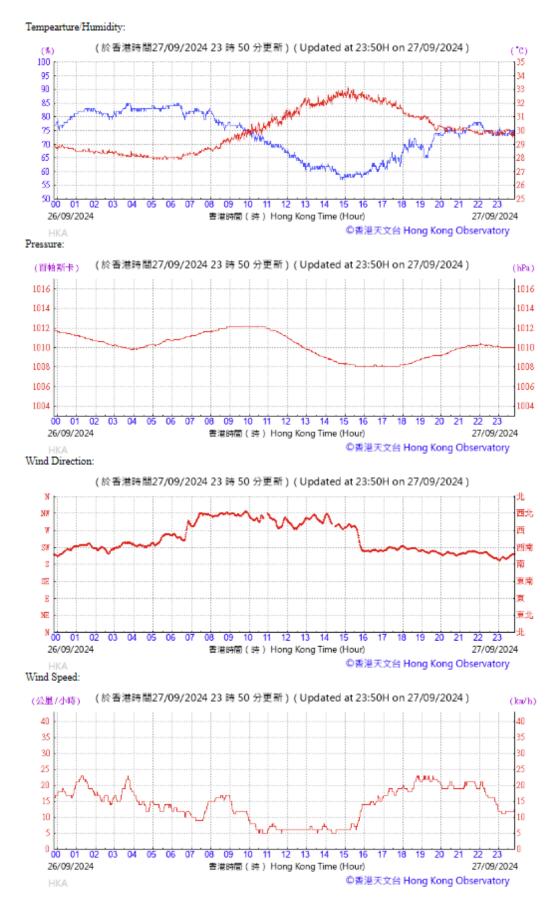
Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 16 September 2024



Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 20 September 2024



Extract of Meteorological Observations from Chek Lap Kok Automatic Weather Station on 26 September 2024



Appendix D Waste Flow Table

Monthly Summary Waste Flow Table for <u>2024</u> (year)

	Actual Quantities of Inert C&D Materials Generated Monthly						A	ctual Quantities	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	1899.050	0.000	0.000	0.000	1899.050	0.000	8.920	0.156	0.000	0.000	202.970
Aug	2980.600	0.000	0.000	0.000	2980.600	0.000	4.281	0.115	0.001	0.000	173.020
Sep	3224.760	0.000	0.000	0.000	3224.760	0.000	0.001	0.135	0.001	0.000	89.000
Oct											
Nov											
Dec											
Sub-total	8104.410	0.000	0.000	0.000	8104.410	0.000	13.202	0.406	0.001	0.000	464.990
Total	9250.460	0.000	0.000	0.000	9250.460	0.000	44.202	1.002	0.001	0.000	1286.230

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

Contract No.: 1701

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.

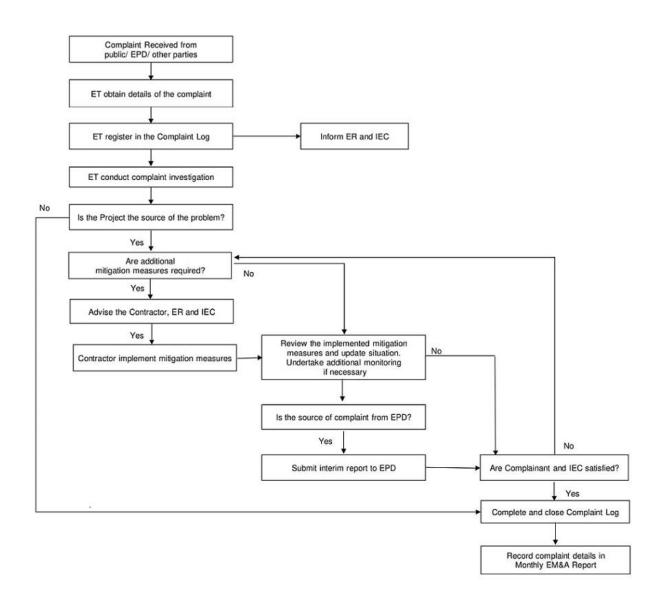
(3) Broken concrete for recycling into aggregates.

(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

		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. 	the ET;2. Check Contractor's working method;3. Discuss with ET, ER and Contractor on	 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 discuss the remedial measures to be taken; and If exceedance stops, cease additional monitoring. 	 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. 	 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 	investigate the causes of exceedance;

EVENT		ACTION									
	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; 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 	of exceedance in writing; 2. Review and agree on the remedial measures proposed by the Contractor; and 3. Ensure remedial measures properly implemented.	investigate the causes of exceedance;2. Take immediate action to avoid further 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. 	 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 	 of exceedance in writing; 2. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; 3. Supervise the implementation of remedial measures; and 4. 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; 							

Appendix G

Statistics on Complaint, Notification of Summons and Successful Prosecution

Table G1Statistical Summary of Exceedance

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

Table G2Statistical Summary of Environmental Complaint

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

Table G3 Statistical Summary of Environmental Non-compliance

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

Table G4Statistical Summary of Environmental Summons

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

Table G5 Statistical Summary of Environmental Prosecution

Reporting	En	vironmental Prosecution	Statistics
Period	Frequency	Cumulative	Details
1 September 2024 – 30 September 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)						
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 after observation
	 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 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 after observation 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
	• Where possible, routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs.						Implemented
	• 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					
\$5.8.10	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
\$5.8.12	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	Implemented after observation
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	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
	need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.						
	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 N/A
	 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)	Implemented
	• 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
	 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	 <u>Groundwater from Contaminated Areas, Contaminated Site</u> <u>Runoff and Wastewater from Land Decontamination</u> 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. Open stockpiling of contaminated materials should not	wastewater from 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 duality 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. 						

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 of waste reduction, reuse and recycling, proper waste management and chemical waste handling procedures; 	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. 132BK)	Implemented
	 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 minimise transportation of minimise transportation. 						
	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.	disposal of C&D	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; 	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented
	 Covering materials during heavy rainfall; Locating stockpiles to minimise potential visual impacts; Minimising land intake of stockpile areas as far as possible; 						

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 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.	arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented
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.	minimize impacts	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
	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						
S7.5.13 to S7.5.14	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.	minimize impacts arising from waste management	Contractor	All works areas	Construction phase	APCO WDO	N/A
	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.		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	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
	 (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 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 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

Siu Ho Wan Depot Property Development MTR Contract No.: 1701-Oyster Bay Station And Associated Works

Dust Monitoring Schedule in September 2024

SEPTEMBER 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 1-hour TSP Monitoring	21
22	23	24	25	26 1-hour TSP Monitoring	27	28
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 October 2024

OCTOBER 2024

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

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

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Appendix B

Monthly EM&A Report for September 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 (SEPTEMBER 2024)

OCTOBER 04, 2024

CONFIDENTIAL





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

Monthly EM&A Report (September 2024)

FIRST ISSUE CONFIDENTIAL

PROJECT NO.: 2535700A DATE: OCTOBER 04, 2024

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QUALITY MANAGEMENT

ISSUE/REVISION	FIRST ISSUE	REVISION 1	REVISION 2	REVISION 3
Remarks				
Date	4 October 2024			
Prepared by	Michelle Cheung			
Signature	Aboulle			
Checked by	Dr Alex Cheung			
Signature	Channy (cheu DN: c (cheu	ly signed by Cheung, Alex ng.waihung) #=Cheung, Alex ng.waihung), ou=Active, #Alex.WH.Cheung@wsp.com 2024.10.04 17:44:07 +08'00'		
Authorised by	Dr Paul Kau			
Signature		lly signed by Kau, Paul kau) h=Kau, Paul (gld_pkau), ¢tive, ≠paul.kau@wsp.com ≠024.10.0909:38.16 +08'00'		
Project number	2535700A	2027.10.05 05.30.10 100 00		
File reference				

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Dr. Alex Cheung Environmental Team Leader

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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 September 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

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

Construction dust (1-hour TSP) monitoring	
DM1	15 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, 10, 17 and 24 September 2024 for this reporting period. One (1) joint inspection with Independent Environmental Checker (IEC) was also conducted on 10 September 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 September 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
- 1.2.2 The construction programme is provided in **Appendix A**.

1.3 PURPOSE OF THE REPORT

1.3.1 This is the 21st monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the reporting period from 1 to 30 September 2024.

2 ENVIRONMENTAL MONITORING AND AUDIT

2.1 SUMMARY OF ENVIRONMENTAL LICENSES, NOTIFICATIONS, PERMITS 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 Licenses, Notifications, Permits
	and Documentations

Permits / Licenses / Notifications /	Valid	Period	Status	Remark		
Reference No.	From	То	Status	Nemark		
Environmental Permit						
EP-588/2021	22 Mar 2021	N/A	Valid			
Billing Account under Waste Disposal (Charges for Disposal of Construction Waste)						
Regulation						
7045243	6 Oct 2022	N/A	Valid			
Construction Noise Per	ermit					
GW-RS0564-24	5 Jul 2024	4 Jan 2025	Valid			
Notification Pursuant	to Section 3(1) of the Air Pol	Iution Cont	rol (Construction Dust)		
Regulation						
483822	N/A	N/A Notified Not	Notification submitted			
403022	IN/A	IN/A	Notified	on 2 Sep 2022		
Register of Chemical Waste Producer						
5213-961-G2980-01	7 Oct 2022	N/A	Valid			
Water Pollution Discharge 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 (1 st Submission)
		20 Dec 2021 (2 nd Submission)
Condition 2.7	Construction Works Phasing	29 Dec 2021 (Deposited)
Condition 2.7	Schedule 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 (1 st 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)
Opendities 0.4.4	Noise Milliontics Disc	31 Jul 2023 (2 nd submission)
Condition 2.11	Noise Mitigation Plan	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)
Condition 2.13		30 Jun 2023 (1 st submission for
	Waste Management Plan	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 (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
Condition 3.5	Daseline Monitoring Report	16 Nov 2021 (Deposited)
	Manthly EM8 A Danat	Submitted within 10 working
	Monthly EM&A Report (January 2023 – August 2024)	days after the end of the
Condition 3.4	(January 2023 – August 2024)	reporting month
	Monthly EM&A Report (September 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 three (3) times in every six (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 meter used for the 1-hour TSP measurement during this reporting period are summarised in **Table 2.3**.

10010 2.0				
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.		
	(1-hour TSP)	LD-5R)		

- Table 2.3 Construction Dust Monitoring Equipment
- 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 three (3) hours at 25LPM for three (3) 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	Monitorina	Location
	0011011001011	Daor	mormormig	Loodion

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

2.3.9 Dust impact monitoring was carried out on 4, 10, 16, 20 and 26 September 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/m ³)	Limit Level (µg/m³)	No. of Exceedances
DM1	6.0 – 23.0	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**.

				Quantity (t	onnes)			
	Inert C&D	Materials			Non-inert	C&D Mate	rials	
Reporting		Disposed		Others, i.e.	Rec	cycled Mate	rials (tonnes)
period	Disposed as Public Fill	to Sorting Facilities	Chemical Waste	General Refuse disposed at Landfill	Paper / Cardboard	Plastics	Metals	Yard Waste
September 2024	9.88	21.34	0	1.23	0	0	0	0

Table 2.6 Quantities of Waste Generated during this Reporting Period

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 be occurred, 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 September 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, 10, 17 and 24 September 2024 for this reporting period. One (1) joint inspection with IEC was also conducted on 10 September 2024. Key observations during the site inspections are summarized in **Table 4.1**.

Table 4.1 Site Ob	servations	
Date	Observation/ Recommendation	Follow-up Status
3 September 2024	Nil	Nil
10 September 2024	Nil	Nil
17 September 2024	Nil	Nil
24 September 2024	Nil	Nil

4.1.2 The mitigation measures detailed in the Environmental Impact Assessment 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 & Hoarding

6 CONCLUSION AND RECOMMENDATIONS

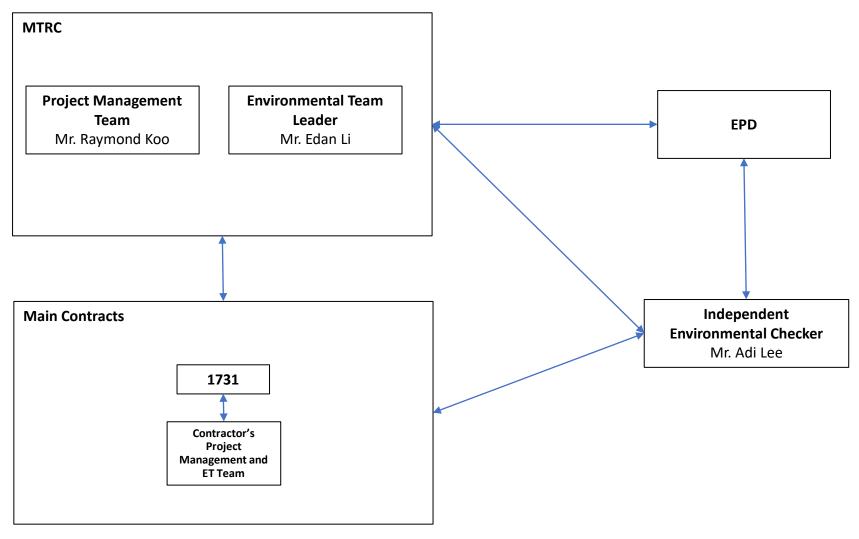
- 6.1.1 This monthly EM&A Report presented the EM&A works carried out during the reporting period from 1 to 30 September 2024.
- 6.1.2 Air quality impact monitoring was carried out during the report period. No exceedance of the Action and Limit Levels was recorded for air quality impact monitoring during 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 10 September 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	п				2021							2022	2	_					202	3						2024	, <u> </u>	
		JF	M	A M	J	JA	S 0	NE) J	FM	AN	1 J .	JA	S 0	Ν	DJ	FM	AM	J	JA	S O	NE	J	FM	А	MJJ	JAS	S O N C
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

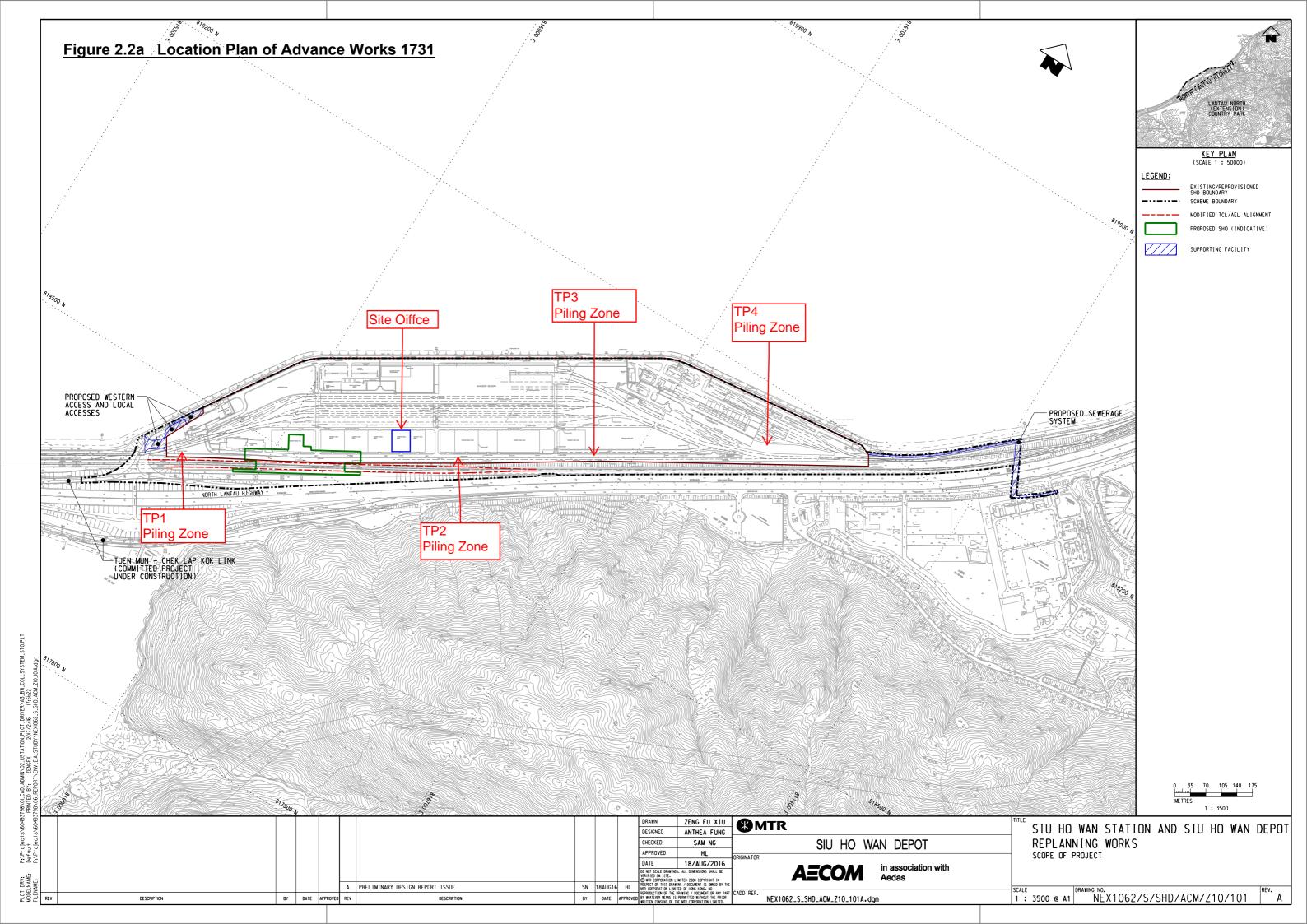
MTRC - Project Management Team		
Position	Name	Telephone
Chief Construction Manager - OYB	Mr. Raymond Koo	2621 7051

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

	Description	Contractor	Position
	· · ·		
EC Team Member	Ms. Echo Hung	2859 5837	
Independent Environmental Checker	Mr. Adi Lee	2859 5443	
Position	Name	Telephone	
Meinhardt Infrastructure and Environn	nent Limited - IEC		

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

Appendix C Location Plan



Appendix DCalibration 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

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

Calibration Certificate

		Certificate No.	: CSA40398			
		Page	: 1 of	1		
Information Provi	ided by Customer					
Customer	: China State Construction Engineer	ing (HK) Limited				
Address	: N/A					
Information of Un	nit-under-test (UUT)					
Description	: Digital dust indicator					
Manufacturer	: SIBATA	Equipment I.D. No.				
Туре	: LD-5R	Serial No.	: 3Y7115			
Laboratory Inform	nation		·		_	
Lab. Ref. No.	: Q/CAL/24/0453/E	Procedure	: CQS/054/Z			
Date of Calibration	: 29-Jan-2024	Date of Receipt	: 16-Jan-2024			
Date of Issue	: 5-Feb-2024					
Calibration Cond	ition					
Ambient Temperature	: (20±3) °C	Relative Humidity	: (50±20) %			
Sampling	: As received					
Reference equipr	ment					

- 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		2.0
0.0178	3419	19	5.0	
0.0200	3708	21	1.000	

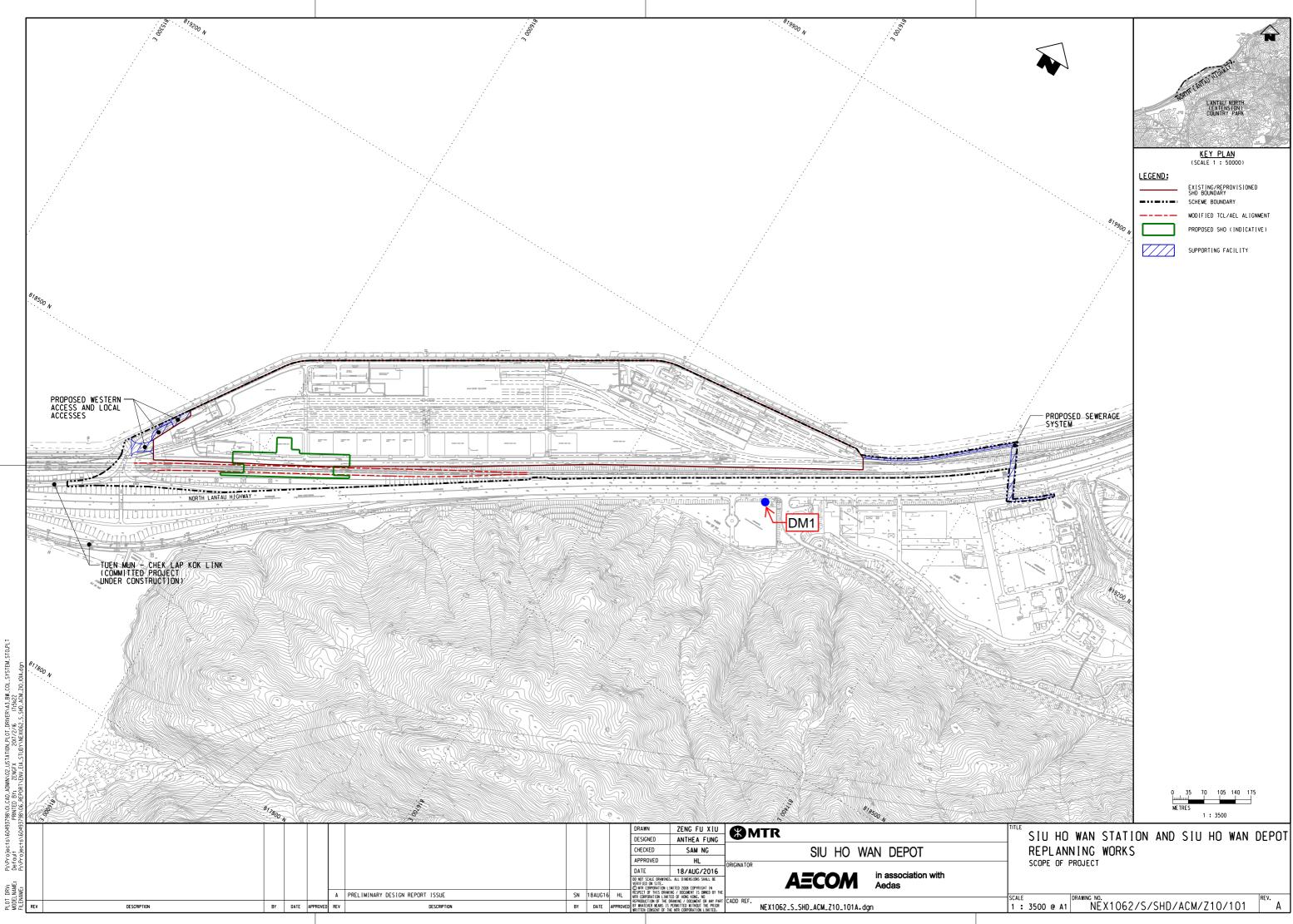
Remarks

- 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.

Approved By:

CHAN Chi Wai

The results shown in this certificate are traceable to the International System of Units (SI) or recognised measurement standards. This report shall not be reproduced unless with prior written approval from this laboratory. **Appendix E** Location Plan of Air Quality Monitoring Station



Appendix F Monitoring Schedule of This Reporting Period

SEPTEMBER 2024

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

Appendix G Air Quality Monitoring Data

Impact Air Quality Monitoring Results

	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)	(1/1)
04-Sep-24	08:37	23.0	20.0	19.0			N
10-Sep-24	08:51	17.0	16.0	17.0		500.0	N
16-Sep-24	08:50	16.0	12.0	8.0	294.7		N
20-Sep-24	13:37	19.0	15.0	12.0			N
26-Sep-24	08:46	8.0	6.0	7.0			N
			Average	14.3			
			Min	6.0			
			Max	23.0			

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

Appendix H Monitoring Schedule of Next Reporting Period

Siu Ho Wan Depot Property Development MTR Contract No.: 1701-Oyster Bay Station and Associated Works

Tentative Dust Monitoring Schedule in October 2024

OCTOBER 2024

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

Remark: The monitoring schedule is subject to change due to unforeseeable circumstances (e.g. adverse weather, etc.)

Appendix I Waste Flow Table

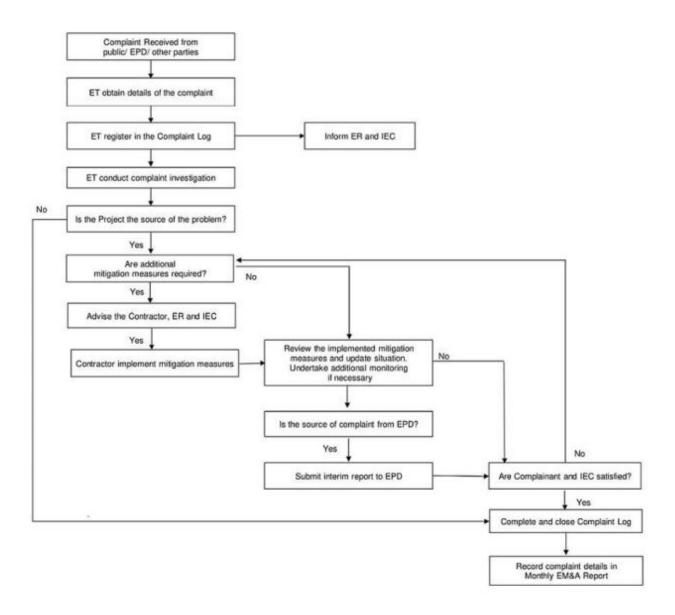
Monthly Summary Waste Flow Table

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 Ge	nerated			Actual	Quantities of Non-	inert C&D Material	s 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
Jun-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
Jul-24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug-24	71.76	0.00	0.00	0.00	43.56	25.06	0.00	0.00	0.00	0.00	0.00	0.00	3.14
Sep-24	32.45	0.00	0.00	0.00	9.88	21.34	0.00	0.00	0.00	0.00	0.00	0.00	1.23
Year 2024 Total	1474.02	0.00	0.00	0.00	1405.57	71.36	0.00	0.00	0.00	0.00	0.00	0.00	29.54

Appendix J Complaint Handling Procedure

Complaint Handling Procedure



Appendix K Event and Action Plan for Air Quality Monitoring

	Action										
Event	Environmental Team			ndependent Environmental Checker	E	Engineer's Representative		CONTRACTOR			
ACTION LEVEL											
one sample	 1. 2. 3. 4. 	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.	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; and Review and advise the ET and ER on the effectiveness of the proposed remedial measures.	1.	Confirm receipt of notification of exceedance in writing.	1. 2. 3.	agreed with the ER as appropriate.			
Exceedance for two or more consecutive samples	 3. 4. 5. 6. 7. 	Repeat measurements to 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; 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.	 1. 2. 3. 4. 5. 	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.	notification of exceedance in writing;	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

Departing Deried	Environmental Complaint Statistics					
Reporting Period	Frequency	Cumulative	Complaint Nature			
1 September 2024						
to	0	0	N/A			
30 September 2024						

Table L2 Statistical Summary of Environmental Non-compliance

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

Table L3 Statistical Summary of Environmental Summons

Poporting Poriod	Environmental Summons Statistics						
Reporting Period	Frequency	Cumulative	Details				
1 September 2024							
to	0	0	N/A				
30 September 2024							

Table L4 Statistical Summary of Environmental Prosecution

Poporting Poriod	Environmental Prosecution Statistics					
Reporting Period	Frequency	Cumulative	Details			
1 September 2024						
to	0	0	N/A			
30 September 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	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
Noise Im	 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					
	pact (Construction Phase)	Te minimire i	Construction	Allinant	Operations		
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 	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 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)				-	-	
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 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	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.						
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
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, 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
S5.8.13	 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). 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	<u>Water for Bored Piling Works</u> 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	<u>Wheel Washing Water</u> 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	 <u>Construction Works near Channelized</u> <u>Watercourse / Ditch</u> 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 - 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	To minimise impact from accidental spillage	Contractor	All works area	Construction phase	WPCO, EIAOTM, Waste Disposal Ordinance (WDO), Waste Disposal (Chemical Waste) (General) Regulation	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
	 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. 						
S5.8.20 - S5.8.21	 <u>Sewerage Effluent from Construction</u> <u>Workforce</u> 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	 <u>Groundwater from Contaminated Areas,</u> <u>Contaminated Site Runoff and</u> <u>Wastewater from Land Decontamination</u> 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 Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures and Main Concern to	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 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 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 	Address					
	remove any prohibited substances						

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
	 (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	Ianagement Implication (Construction Phase	e)					
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 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
S7.5.10 - S7.5.12		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
S7.5.13 	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		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 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.						
\$7.5.22	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
Land Co	ntamination	L			I.		
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, 	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 Address	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 avoided on stockpiles of 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. 					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. 						
	ape 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	on surrounding					
	Government Departments.	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 September 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 September 2024)

	Name	Signature
Prepared by	Andre C. Chui	Am
Checked & Reviewed by	F. C. Tsang	Toang Fauldeorg



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- K. Environmental Mitigation Implementation Schedule (EMIS)
- L. Monitoring Schedule of the Reporting Month
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EXECUTIVE SUMMARY

- This is the 34th monthly Environmental Monitoring and Audit (EM&A) report presenting A.1 the EM&A works carried out during the reporting period from 1 September to 30 September 2024.
- A summary of the construction works reported by the Contractor for the Project during the A.2 reporting month is listed below.

Construction activities undertaken

- Instrumentation monitoring (cable bridges, EVA road for concerning pavements between trackside)
- EVA construction and watermain installation
- Trackworks for EV03 & 04
- Cable bridge E&M works, and outstanding steel works (under EIs)
- A summary of regular construction dust monitoring activities in this reporting period is A.3 listed below:

Construction dust (1-hour TSP) monitoring

DM1

15 times

- A.4 Weekly environmental site inspections were conducted during the reporting period. A joint site inspection with the IEC was carried out on 9 September 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.
- No Action or Limit Levels exceedance of 1-hour TSP was recorded during the reporting A.6 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 summary of the construction activities provided by the Main Contractor in the next A.10 reporting month are listed below:

Construction Activities to be undertaken

- General survey works •
- Instrumentation monitoring •
- EVA watermain installation
- Wielding and ballast laying for EV tracks 03 & 04
- Cable bridge E&M works and finishing works •



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;
 - (1) 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 September to 30 September 2024) is shown in **Table 1.1**. The construction programme is presented in **Appendix A**.

Table 1.1Summary 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)
- EVA construction and watermain installation
- Trackworks for EV03 & 04
- 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 4 4	
Notification/ Reference No.	From	То	Status	Remark
Environmental Permit				
EP-588/2021	22 Mar 2021	N/A	Valid	-
Wastewater Discharge Li	cense			
WT00040639-2022	23 Mar 2022	31 Mar 2027	Valid	-
Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation				
Ref. 472845	N/A	N/A	Notified	Notification submitted on 19 Oct 2021
Chemical Waste Produce	r Registration			
WPN5213-961-P3457-01	19 Nov 2021	N/A	Valid	-
Billing Account for Dispo	sal of Construct	tion Waste		
7042328	25 Nov 2021	N/A	Valid	-
Construction Noise Permi	t			
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**.

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)
		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)

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



EP Condition (EP-588/2021)	Submission	Submission date
		1 November 2021 (1st submission)
		20 December 2021 (2nd submission)
2.10		28 December 2021 (Deposited)
		30 December 2022 (1st submission for Phase 1 work)
		29 March 2023 (2nd submission for Phase 1 work)
	Construction Noise Mitigation	18 May 2023 (3rd submission for Phase 1 work)
	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)
	Noise Mitigation Plan	31 March 2023 (1 st submission)
		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)
		28 December 2021 (Deposited)
2.13	Waste Management Plan	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 (1 st submission)
2.15	Landscape and Visual Plan(s)	27 July 2023 (2 nd submission)
2.13	Lanuscape and visual Fian(s)	20 October 2023 (3 rd submission)
		8 December 2023 (Approved)
3.3	Baseline Monitoring Papart	1 November 2021
5.5	Baseline Monitoring Report	16 November 2021 (Deposited)
3.4	Monthly EM&A Report (Dec 2021 – Aug 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 (September 2024)	This report submission
4.2	Dedicated Internet Website	12 January 202225 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**.

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

 Table 3.1
 Construction Dust Monitoring Equipment

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 Dus	t 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 4, 10, 16, 20 and 26 September 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.**

Monitoring	Range	Action Level	Limit Level	No. of Exceedances
Location	(µg/m ³)	(µg/m ³)	(µg/m ³)	
DM1	6.0 - 23.0	294.7	500	0

 Table 3.3
 Summary of 1-hour TSP Monitoring Results

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-in	ert C&D mate	erials	
Reporting period	Inert C&D materials (in m ³)	Chemical Waste (in '000 kg)	Others, e.g., General Refuse		Recycled	wastes	
	(III III)		disposed at Landfill (in '000 kg)	Paper/ cardboard (in '000 kg)	Plastics (in '000 kg)	Metals (in '000 kg)	Yard Waste (in '000 kg)
September 2024	0.000	0.000	1.320	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, five (5) site inspections were carried out on 2, 9, 16, 23 and 30 September 2024. One joint site inspection with the IEC was also undertaken on 9 September 2024. Observations were reported during the weekly site inspections. Key observations during the site inspections are summarized in Table 5.1.

Date	Observation/ Recommendation	Follow-up Status
2 September 2024	None	None
9 September 2024	None	None
16 September 2024	None	None
23 September 2024	None	None
30 September 2024	None	None

Table 5.1Site Observations

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 reporting month are:

Construction Activities to be undertaken

- General survey works
- Instrumentation monitoring
- EVA watermain installation
- Wielding and ballast laying for EV tracks 03 & 04
- Cable bridge E&M works and finishing works
- 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 34th monthly EM&A Report presents the EM&A works undertaken during the period from 1 September to 30 September 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 9 September 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

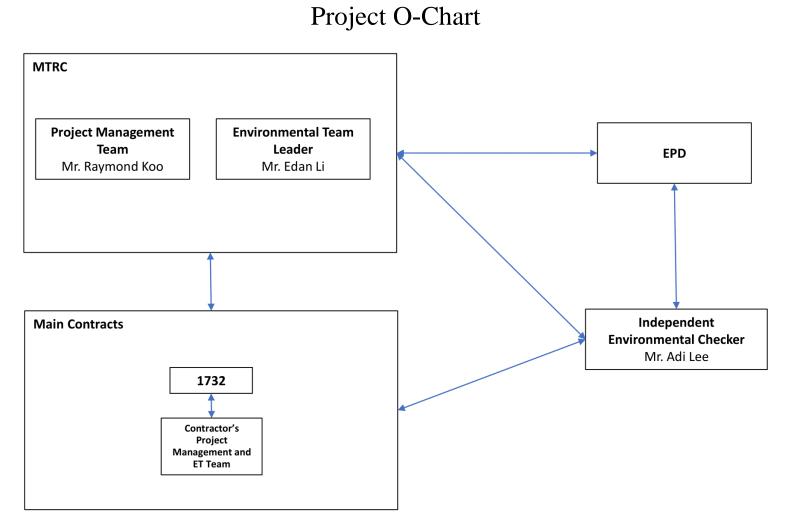
Construction Activities	ID				202									2022								2023								202				
Construction Activities	in m	JF	Μ	A N	1 J	JA	A S	0	N D	J	F M	[A	M J	J	A S	5 0	N E) J	F I	MA	M	JJ	Α	S C) N	DJ	JF	Μ	AN	IJ	J A	. S	O N	D
Contract 1732 - Cable Bridge and Associated Civil Works for Cable Diversion	2																																	
Site Clearance & Hoarding / UU / Cable Trenches	2.1																																	
H-piling	2.2																																	
Excavation (Soil)	2.3																																	
Substructure (footing, pile caps, columns)	2.4																																	
Backfilling	2.5																																	
Superstructure (Cable Bridges)	2.6																																	





Appendix B Project Organization Chart





Legend:

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	Mr. Sylar Tsui	2589 0143

Contractor's Contact:

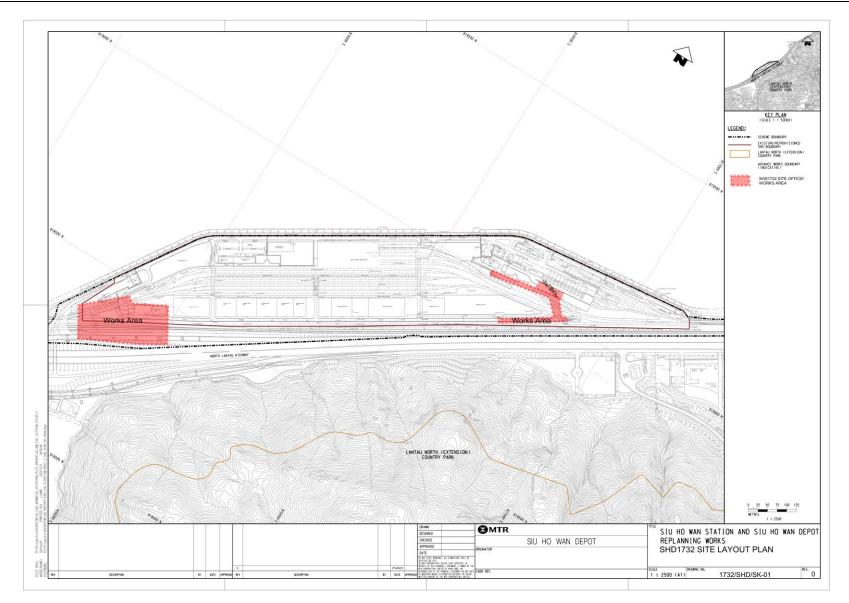
Main Works Contract	Description	Contractor	Position	Name	Telephone
	Cable buildees and associated simil	Paul V CDCCI	Project Manager	David Wong	9712 9984
1732	Cable bridges and associated civil works for cable diversion	Paul Y – CRCCI Joint Venture	Environmental Officer	Pan Fong	9436 9435
		Joint Venture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





Appendix C Alignment and Works Area for Contract No. 1732



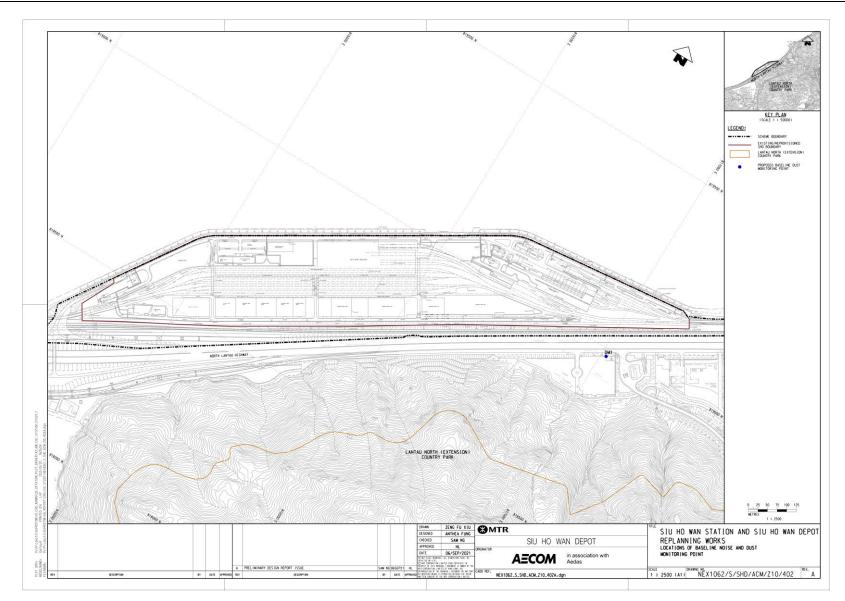




Appendix D

Location Plan of Air Quality Monitoring Station









Appendix E Calibration Certificates (Air Quality Monitoring Equipment)



aurecon

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					Form Q/MX	UC/58 Issue 1(1/1) [0	8/21]	
		Calibratio	on Certificat	e				
			Certificate	No.	CSA40398			
			Page		: 1 of	1		
nformation Prov	ided by Customer							
ustomer	: China State Constru	uction Engineering (HM	() Limited					
ddress	: N/A							
nformation of Ur	nit-under-test (UUT)							
Description	: Digital dust indicato							
Nanufacturer	: SIBATA	20 - A.	Equipment I.D	No.	-			
уре	: LD-5R		Serial No.		: 3Y7115			
abovete t f	and in a	in the second						
aboratory Information	: Q/CAL/24/0453/E		Procedure		: CQS/054/Z			
ab. Ref. No.	: 29-Jan-2024		Date of Receip		: 16-Jan-2024			
ate of Issue	5-Feb-2024							
Calibration Cond			Polativa Liumi	ditu	. (50+20) %			
mbient Temperature	: (20±3) °C : As received		Relative Humi	uity	: (50±20) %			
Reference equip								
 Reference Balance 	e, C-052-03							
Calibration speci	fication							
	on of weight of dust partic	le trapped in a filter pa	per 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	t (unit in : mg/m ³)							
Reference	UUT reading (Total	CPM (Count per Ex	panded Uncertainty	Coverage	1			
concentration	count for 3 hours)	minute)	(%)	Factor	1			
0.0156	2965	16						
	3419	19	5.0	2.0				
0.0178	5415	19						

- <u>Remarks</u> 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.

Approved By: CHAN Chi Wai

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



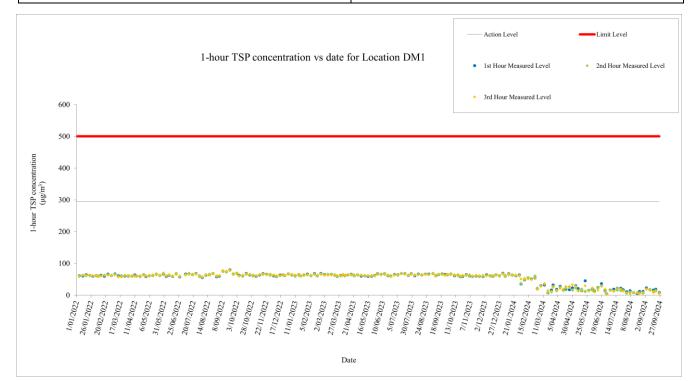


Appendix F Monitoring Data (Air Quality Monitoring)



The Summary of 1-hour TS	P Concentration (µg/m ³)	at Location DM1
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Date Weather	Weather	Start Time	1 st Hour	2 nd Hour	3 rd Hour
	weather	(hh:mm)	μg/m ³	μg/m ³	μg/m ³
04/09/2024	Sunny	08:37	23.0	20.0	19.0
10/09/2024	Fine	08:51	17.0	16.0	17.0
16/09/2024	Fine	08:50	16.0	12.0	8.0
20/09/2024	Fine	13:37	19.0	15.0	12.0
26/09/2024	Fine	08:46	8.0	6.0	7.0
Minimum: $6.0 \mu g/m^3$		Maximum: $23.0 \mu g/m^3$			







Appendix G Waste Flow Table



Monthly Summary Waste Flow TableName of Department:MTRMonthly Summary Waste Flow Table forSeptember 2024

		Actual Qua	antities of Inert Construction M	aterials Generated Mont	hly	
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) 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	43.785	0.000	0.000	0.000	43.785	0.000
Aug-24	7.635	0.000	0.000	0.000	7.635	0.000
Sep-24	0.000	0.000	0.000	0.000	0.000	0.000
Oct-24						
Nov-24						
Dec-24						
Total	1919.345	0.000	0.000	0.000	1919.345	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	7977.921	608.116	0.000	0.000	7369.805	0.000



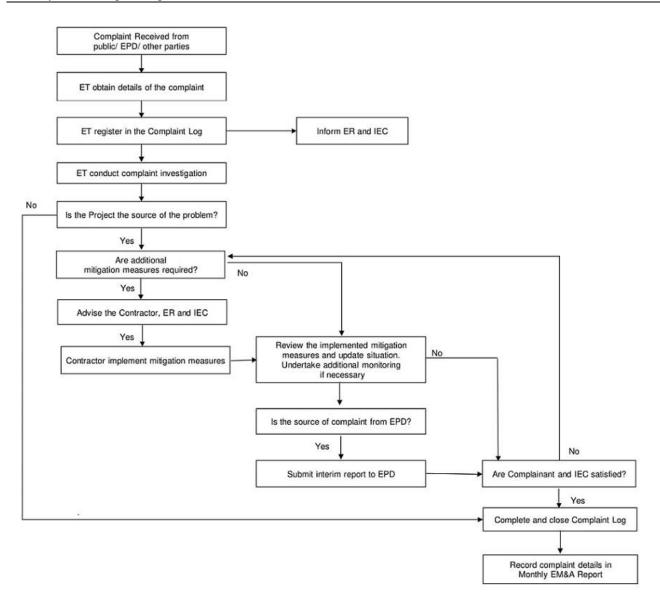
	Actual Quantities of <u>Non-inert</u> Construction Materials Generated Monthly							
Month	(g) Metals	(h) Paper/ cardboard packaging	(i) Plastics	(j) Chemical Waste	(k) Recyclable Yard Waste	(l) Others, e.g. General Refuse disposed of at Landfill		
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '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	0.000	0.000	0.000	0.000	0.000	10.160		
Aug-24	0.000	0.000	0.000	0.000	0.000	2.440		
Sep-24	0.000	0.000	0.000	0.000	0.000	1.320		
Oct-24								
Nov-24								
Dec-24								
Total	0.000	0.000	0.000	0.000	0.000	135.630		
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	773.910		





Appendix H Complaint Handling Procedure









Appendix I Event-Action Plan (Air Quality Monitoring)



CUCNT.	ACTION								
EVENT	ET	IEC	ER	CONTRACTOR					
ACTION LEVEL		•	•	1					
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 remedia measures; Implement remedia 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. 	 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 	 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							
EVENI	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. 	 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 				
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 	 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. 	 appropriate. 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; Implement the agreed proposals; Revise and resubmit proposals if problem still not under control; and Stop the relevant 				



EVENT	ACTION					
	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					
LocationAction LevelLimit LevelTotal					
DM1 0		0	0		

Table J2 Statistical Summary of Environmental Complaint

Deporting Deriod	Environmental Complaint Statistics				
Reporting Period	Frequency	Cumulative	Complaint Nature		
1 September 2024 - 30 September 2024	0	0	N/A		

Table J3 Statistical Summary of Environmental Non-compliance

Departing David	Environmental Non-compliance Statistics				
Reporting Period	Frequency Cumulative		Details		
1 September 2024 - 30 September 2024	0	0	N/A		

Table J4 Statistical Summary of Environmental Summons

Departing David	Environmental Summons Statistics				
Reporting Period	Frequency	Cumulative	Details		
1 September 2024 - 30 September 2024	0	0	N/A		

Table J5 Statistical Summary of Environmental Prosecution

Departing Devied	Environmental Prosecution Statistics				
Reporting Period	Frequency	Cumulative	Details		
1 September 2024 - 30 September 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 Imp	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 Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities. 	To minimise impacts to surrounding habitats	Contractor	All works area	Construction phase	TM-EIAO	Implemented
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	Water Pollution Control Ordinance (WPCO), Technical Memorandum on EIA Ordinance (EIAO-TM), ProPECC PN 1/94, Technical Memorandum on	Implemented
<u>85.8.5</u>	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
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, 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
\$5.8.9	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 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
\$5.8.11	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, 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	Barging point 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
S5.8.16	 <u>Construction Works near Channelized Watercourse / Ditch</u> 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. General 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. 						
<u>\$5.8.22</u> – <u>\$5.8.24</u>	 Groundwater from Contaminated Areas, Contaminated Site <u>Runoff and Wastewater from Land Decontamination</u> 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, 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 to be 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)						
\$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; 	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	Implemented
	• Training of site personnel in site cleanliness, concepts 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 (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
	• 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.						
\$7.5.6	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 	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented
	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 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.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	Implemented
	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						



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.						
\$7.5.15	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.	To avoid and minimize impacts arising from waste management	Contractor	All works areas	Construction phase	WDO	N/A
\$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 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
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 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						
<u>\$8.9.3</u>	 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	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
	 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



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 September 2024

SEPTEMBER 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 1-hour TSP Monitoring	21
22	23	24	25	26 1-hour TSP Monitoring	27	28
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 October 2024

OCTOBER 2024

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

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

Appendix D

Monthly EM&A Report for September 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 September 2024)

Prepared by

SGS Hong Kong Limited

MTR Corporation Limited

Issue and Revision Record

Revision	Description	Prepared by	Checked by	Approved by	Date
01	Submission	Various	Roy Hung AJ	Grace Fung	Oct 2024

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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 30th 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 September 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 9 September 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

• Tree Felling



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 September 2024) is shown in below:

- Down Pipe Installation
- Drainage Pipelining Work
- Catchpit Construction
- Tree Felling
- Staircase Painting Touch up

The project organizational chart specifying management structure and contact details are shown in **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-RS0775-24	29 Aug 2024	27 Feb 2025	Valid



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**.

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)



		۱ ۱
		20 Dec 2021 (2nd submission for advanced work)
		28 Dec 2021 (3rd submission for advanced work)
		TOT 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)



		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 – August 2024)	Submitted within 10 working days after the end of the reporting month
	Monthly Monitoring Report (September 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



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**.

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

Table 3.1 Construction Dust Monitoring Equipment

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 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 4, 10, 16, 20 & 26 September 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	6 – 23	294.7	500	0



4. WASTE MANAGEMENT

The waste generated from this Project includes inert C&D materials, and non-inert C&D materials. Noninert 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]
September	87.11	0.00	0.00	0.00	87.11	0.00	0.00	0.00	1.05	0.00	10.80

*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.



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**.



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, five (5) site inspections were carried out on 2, 9, 16, 23 & 30 September 2024. One joint site inspection with the IEC also undertaken on 9 September 2024 with engineer, IEC, contractor and contractor's ET. Key observations during the site inspections are summarized in **Table 6.1**.

Table 6.1 Site Observations

Date	Observation or Reminder	Follow-up Status
2 September 2024	No particular findings during inspection.	N/A
9 September 2024	Observation 1. The contractor was reminded to clear stagnant water under the generator at ST1. (Target date: 11/09/2024)	The stagnant water had been cleared under generator. (Close date: 10/09/2024)
16 September 2024	No particular findings during inspection.	N/A
23 September 2024	No particular findings during inspection.	N/A
30 September 2024	No particular findings during inspection.	N/A

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**.



7. FUTURE KEY ISSUES

Work to be undertaken in the next reporting month are:

• Tree Felling

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



8. CONCLUSION AND RECOMMENDATION

This 30th monthly EM&A Report presents the EM&A works undertaken during the period from 1 September to 30 September 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 9 September 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.



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APPENDIX A – CONSTRUCTION PROGRAMME

	ED 500/2024 - Six Lie Was Station and Six Lie Was Danat Danlanning Waska - Contract 1722	Page	A-2
	EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works – Contract 1733	Ref#	HKES241000006623
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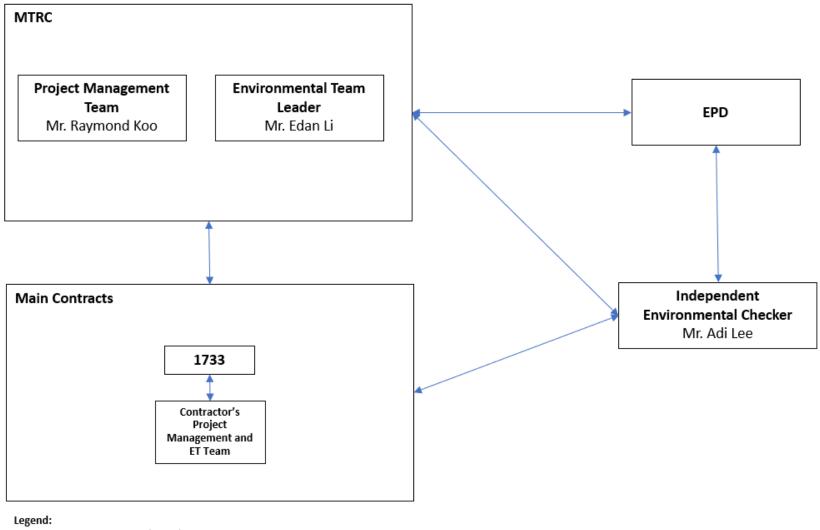
Construction Activities					202									2023								24			
Construction Activities		F	M	A M	J	J	A S	0	N D) J	F N	ΑN	Μ	JJ	Α	S	O N	D	JF	F M	Α	N J	JA	S	O N
ontract 1733 - Vehicular Access Bridge, Demolition of Paint Shop and Construction of EV Stabling Tracks																									
Site Clerance & Hoarding / UU / Cable Trenches																									
Paint Shop Demolition																									
Excavation																									
Substructure																									
Backfilling																									
Superstructure																									
EV Tracks - Formation and Track Installation																									



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APPENDIX B – PROJECT ORGANIZATION CHART

EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works – Contract 1733	Page	B-2	
	EP-566/2021 - Sid Ho Wall Station and Sid Ho Wall Depot Replanning Works – Contract 1755	Ref#	HKES2410000 06623
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Communication channel



ED 599/2021 Siu He Wan Station and Siu He Wan Danat Banlanning Works Contract 1722	Page	B-3
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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	Mr. Sylar Tsui	2589 0143							

Contractor's Contact

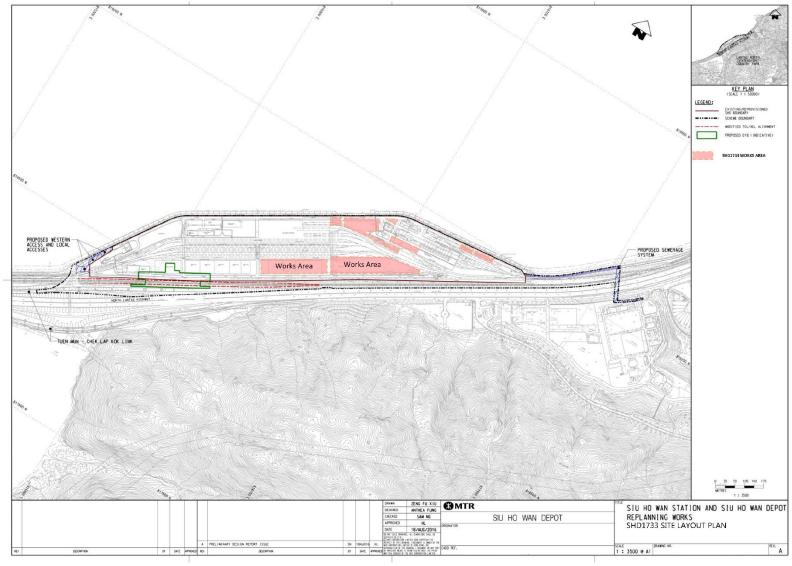
Main Works Contract	Description	Contractor	Position	Name	Telephone
	Vehicular access bridge,	Build King Civil	Project Manager	Andy Yu	9648 4896
1733	demolition of paint shop and	Engineering	Environmental Manager	Louisa Fung	9271 5370
	construction of engineering vehicle stabling tracks	Ltd	Environmental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



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

	ED 500/0004 Six Up Was Station and Six Up Was Danat Danlanning Waska Contract (722	Page	C-2
	EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works – Contract 1733		HKES241000006623
202	Monthly EM&A Report	Rev.	01
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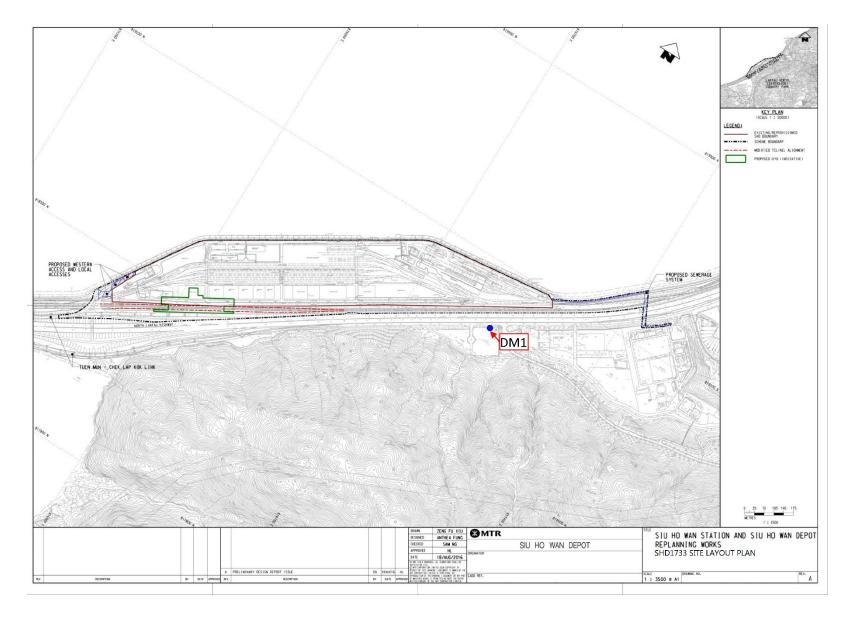




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APPENDIX D - LOCATION PLAN OF AIR QUALITY MONITORING STATION

	ED 500/2024 Six Lie Wan Station and Six Lie Wan Danat Danlanning Wanka Contract 4722		D-2
C <u>C</u> <u>C</u>	EP-588/2021 - Siu Ho Wan Station and Siu Ho Wan Depot Replanning Works – Contract 1733	Ref#	HKES241000006623
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APPENDIX E - CALIBRATION CERTIFICATES (AIR QUALITY MONITORING EQUIPMENT)



	ETS-TES	rconsui	LT LTD."	T: +852 2695 8318 F: +852 2695 3944 E: etil@ets-testconsult.com W: www.ets-testconsult.com	
	Calib	oration Certificate			
		Certificate No.	: CSA40398		
		Page	: 1 of 1		
	: China State Construction Engine : N/A	ring (HK) Limited			
Address Information of U Description Manufacturer		ring (HK) Limited Equipment I.D. No. Serial No.	: - : 3Y7115		
Address Information of (Description Manufacturer Type Laboratory Info	: N/A Jnit-under-test (UUT) : Digital dust indicator : SIBATA : LD-5R <u>rmation</u>	Equipment I.D. No. Serial No.	: 3Y7115		
Description Manufacturer Type <u>Laboratory Info</u> Lab. Ref. No.	: N/A <u>Jnit-under-test (UUT)</u> : Digital dust indicator : SIBATA : LD-SR <u>rmation</u> : Q/CAL/24/0453/E	Equipment I.D. No. Serial No. Procedure	: 3Y7115 : CQS/054/Z		
Address Information of (Description Manufacturer Type Laboratory Info	: N/A Jnit-under-test (UUT) : Digital dust indicator : SIBATA : LD-5R <u>rmation</u>	Equipment I.D. No. Serial No.	: 3Y7115		
Address Information of U Description Manufacturer Type Laboratory Info Lab. Ref. No. Date of Calibration Date of Issue	: N/A <u>Jnit-under-test (UUT)</u> : Digital dust indicator : SIBATA : LD-5R <u>indicator</u> : Q/CAL/24/0453/E : 29-Jan-2024 : 5-Feb-2024	Equipment I.D. No. Serial No. Procedure	: 3Y7115 : CQS/054/Z		
Address Information of U Description Manufacturer Type Laboratory Info Lab. Ref. No. Date of Calibration	: N/A <u>Jnit-under-test (UUT)</u> : Digital dust indicator : SIBATA : LD-5R <u>rmation</u> : Q/CAL/24/0453/E : 29-Jan-2024 : 5-Feb-2024 <u>stition</u>	Equipment I.D. No. Serial No. Procedure	: 3Y7115 : CQS/054/Z		
Address Information of U Description Manufacturer Type Laboratory Info Lab, Ref. No. Date of Calibration Date of Issue Calibration Con	: N/A <u>Jnit-under-test (UUT)</u> : Digital dust indicator : SIBATA : LD-5R <u>rmation</u> : Q/CAL/24/0453/E : 29-Jan-2024 : 5-Feb-2024 <u>stition</u>	Equipment I.D. No. Serial No. Procedure Date of Receipt	: 3Y7115 : CQS/054/Z : 16-Jan-2024		
Address Information of U Description Manufacturer Type Laboratory Info Lab. Ref. No. Date of Calibration Date of Issue <u>Calibration Con</u> Ambient Temperature	: N/A <u>Unit-under-test (UUT)</u> : Digital dust indicator : SiBATA : LD-SR <u>indicator</u> : Q/CAL/24/0453/E : 29-Jan-2024 : 5-Feb-2024 <u>indition</u> a : (20±3) *C : As received <u>indicator</u>	Equipment I.D. No. Serial No. Procedure Date of Receipt	: 3Y7115 : CQS/054/Z : 16-Jan-2024		

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 measured 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/m²) = 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.

Approved By: CHAN Chi Wai

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



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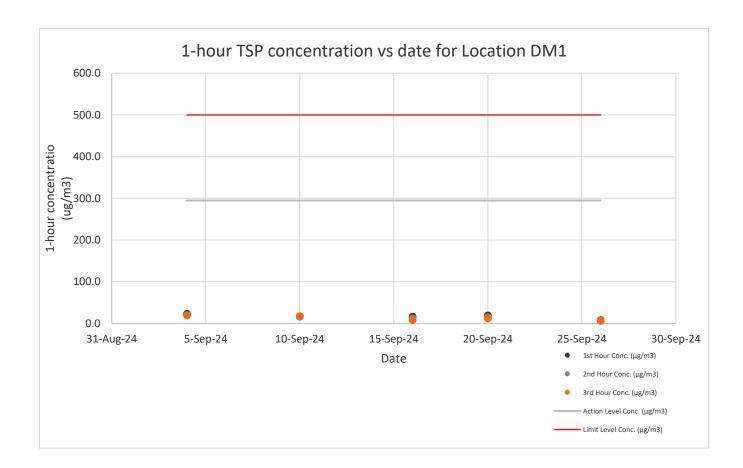
APPENDIX F – MONITORING DATA (AIR QUALITY MONITORING)



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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.	()/(NI)
Date	(hh:mm)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(Y/N)
4-Sep-24	8:37	23.0	20.0	19.0	294.7	500	N
10-Sep-24	8:51	17.0	16.0	17.0	294.7	500	N
16-Sep-24	8:50	16.0	12.0	8.0	294.7	500	N
20-Sep-24	13:37	19.0	15.0	12.0	294.7	500	N
26-Sep-24	8:46	8.0	6.0	7.0	294.7	500	N
			Average	14.3			
			Min	6.0]		
			Max	23.0			





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APPENDIX G – WASTE FLOW TABLE



Monthly Summary Waste Flow Table for 2024 Year

	Actual Quantities of Inert C&D Materials Generated Monthly							al Quantities Gene	of <u>Non-in</u> erated Mor		erials
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
Мау	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	80.15	0.00	0.00	0.00	80.15	0.00	0.00	0.00	0.00	0.00	45.40
Aug	117.11	0.00	0.00	0.00	117.11	0.00	0.00	0.00	0.00	0.00	24.70
Sep	87.11	0.00	0.00	0.00	87.11	0.00	0.00	0.00	1.05	0.00	10.80
Oct											
Nov											
Dec											
TOTAL	2085.73	0.00	0.00	0.00	2085.73	0.00	0.00	0.00	1.05	0.00	121.69

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

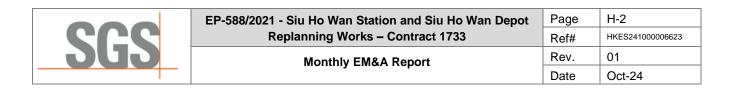
Note: Plastics refer to plastic bottles / containers, plastic sheets / foam from packaging material. On September 9th, total of 96 pcs plastic traffic barriers were recycled.

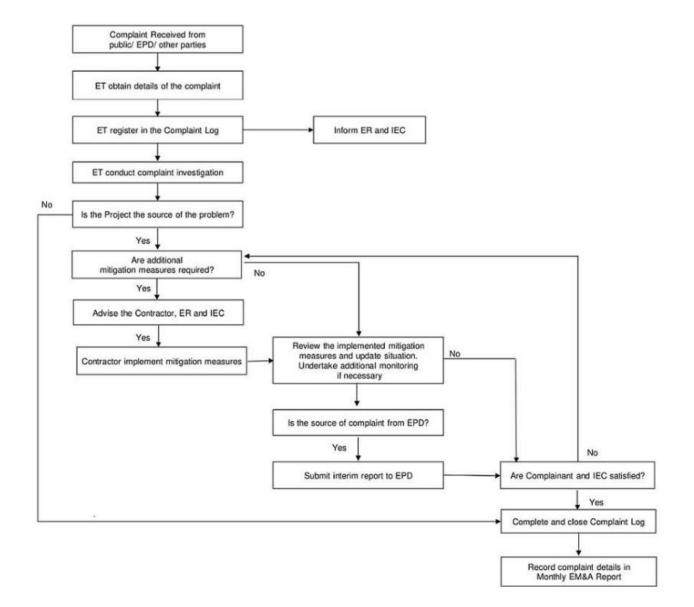
*Data extracted from construction waste transaction record from EPD website.



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APPENDIX H - COMPLAINT HANDLING PROCEDURE







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



Monthly EM&A Report	

	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 	 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 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

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.	 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. 	 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. 			

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



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



Statistic Summary of Exceedance

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

Statistical Summary of Environmental Complaint

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

Statistical Summary of Environmental Non-compliance

	Environmental Non-compliance Statistics							
Reporting Period	Frequency	Cumulative	Complaint Nature					
1 September 2024 – 30 September 2024	0	0	0					

Statistical Summary of Environmental Summons

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

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Statistical Summary of Environmental Prosecution

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



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. 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)	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
	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	act (Construction Phase)			1		I	I
\$4.5.16		To minimise impacts to surrounding habitats	Contractor		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
	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	1	To reduce impact to affected NSRs	Contractor	All works area	Construction phase	TM-EIAO	N/A
Water Qual	ity Impact (Construction Phase)	I	I	<u> </u>	1	1	
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	



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 after observation.
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	Construction phase	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	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
	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.						
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.	impact from construction site	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	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.	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,	



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
\$5.8.11	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
\$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.	impact from construction site	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 	impact from transportation of sediment	Contractor		Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94	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
	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.	impact from construction site	Contractor	All works area	Construction phase	WPCO, EIAO- TM, ProPECC PN 1/94, TM- DSS	N/A
\$5.8.15	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	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
S5.8.16	 <u>Construction Works near Channelized Watercourse / Ditch</u> 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 debris and spoil 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. 	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
S5.8.17 – S5.8.19	 <u>Accidental Spillage of Chemicals</u> 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	



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Date

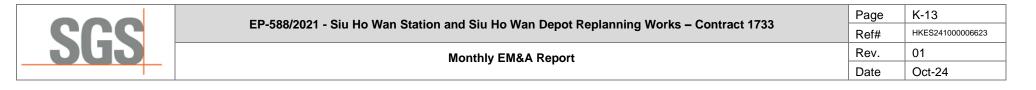
EIA Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Implementation Agent	Location of the Measures	Implementation Stage	Requirements	Implementation Status
	 the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations 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 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	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	To minimise impact from groundwater from	Contractor		Construction phase	WPCO, EIAO- TM, TM-DSS, Guidance	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
	 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 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 either properly in these areas for the excavation works would be contaminated, this contaminated groundwater should be either properly recharged into the ground in compliance with 	areas, contaminated site run-off/ wastewater from land decontamination		contamination		Note for Contaminate d 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
	 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 duality will not be affected by the recharge operation as indicated in section 2.3 of TM-DSS. The baseline groundwater to be recharge shall not be higher than pollutant levels of ambient groundwater at the recharge wells. Groundwater monitoring wells should be installed near the recharge wells and submit a working plan to EPD for agreement. Pollution levels of groundwater to be recharge shall not be higher than pollutant levels of ambient 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 & 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 Man	nagement Implication (Construction Phase)			I	1	I	
\$7.5.3	 Nomination of approved personnel, such as a site 	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. 132BK)	Implemented
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



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	All works areas	Construction phase	WDO	Implemented
\$7.5.6	Within the stockpile areas, the following measures should be taken to control potential environmental impacts or nuisance:		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
	 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; 	management					
	 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. 						
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	To avoid and minimize impacts arising from waste management	Contractor		Construction phase	WDO	Implemented
	be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste shall be						



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.						
\$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
	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	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
	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.						
\$7.5.15	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
\$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 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
\$7.5.21	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



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	water.						
Land Cont	amination			1	1	1	
\$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, 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



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



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	Management of facilities on work sites by controlling the height and disposition/arrangement of all facilities on the		Contractor	All works areas	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 the satisfaction of the relevant Government Departments.	landscape impact	Contractor	All works areas	Construction phase	-	To be implemented



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APPENDIX L - MONITORING SCHEDULE OF THE REPORTING MONTH



SEPTEMBER 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 1-hour TSP Monitoring	21
22	23	24	25	26 1-hour TSP Monitoring	27	28
29	30					



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APPENDIX M - MONITORING SCHEDULE OF THE COMING MONTH



Tentative Dust Monitoring Schedule in October 2024

OCTOBER 2024

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

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