



17 August 2023

Our Ref: *JC/KW* JC/KW/N72261/23/tt

The EIA Ordinance Register Office,
27th floor, Southorn Centre,
130 Hennessy Road,
Wan Chai, Hong Kong

Attn: Ms. Trista Lau

Dear Sirs,

Contract No. EP/SP/77/15
North-East New Territories Landfill Extension (NENTX)
NENTX – Submission of Monthly EM&A Report (No. 8) – July 2023

In accordance with Condition 3.3 of the EP-292/2007 and FEP-01/292/2007 for the North East New Territories (NENT) Landfill Extension Project (the Project), we are now submitting 2 hard copies and one electronic copy (in CD-ROM format) of the Monthly EM&A Report (No. 8) – July 2023 for the construction stage dated 11 August 2023 together with ET's certification letter and IEC's verification for your perusal.

If you have any questions, please contact our Kristy Wong at 2902 5260.

Yours faithfully
For and on behalf of
VEOLIA HONG KONG HOLDING LIMITED

Colin Mitchell
Capex Delivery Director - Hong Kong

Encl.

cc. EPD – Jamie Ng / Amanda Yeung (by email only)
Arup – Anson Cheung (1 copy & email)
MIEL – Steve Kok / Claudine Lee (2 copies & email)
Aurecon – Fredrick Leong (1 copy & email)
VHK – JC / KW / VC

**Agreement No. CE
20/2004(EP) North
East New
Territories (NENT)
Landfill Extension**

Monthly Environmental
Monitoring and Audit Report
(No. 8) – July 2023

2023-08-11

Our Ref.: CL/91823/0628-VES
Date: 14 August 2023

By Email

Veolia Environmental Services Hong Kong Limited
40/F, One Taikoo Place
979 King's Road
Quarry Bay
Hong Kong

Attn.: Mr. Colin Mitchell

**Meinhardt Infrastructure and
Environment Ltd**
邁進基建環保工程顧問有限公司

10/F Genesis
33-35 Wong Chuk Hang Road
Hong Kong
香港黃竹坑道33-35號
創協坊10樓

Tel 電話: +852 2858 0738
Fax 傳真: +852 2540 1580

mail@meinhardt.com.hk
www.meinhardt-china.com
www.meinhardtgroup.com

Dear Sir

Re: Contract No. EP/SP/77/15
North-East New Territories Landfill Extension (NENTX)
Monthly Environmental Monitoring and Audit Report (No.8) – July 2023

I refer to Condition 3.3 under Environmental Permit No. EP-292/2007 and Further Environmental Permit No. FEP-01/292/2007, regarding the submission of a monthly Environmental Monitoring and Audit report. I hereby verify the captioned "Monthly Environmental Monitoring and Audit Report (No.8) – July 2023" dated 14 August 2023.

Should you have any queries, please do not hesitate to contact the undersigned at 2859 5409.

Yours faithfully
MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD



Claudine Lee
Independent Environmental Checker

Aurecon Hong Kong Limited
Unit 1608, 16/F, Tower B,
Manulife Financial Centre,
223 – 231 Wai Yip Street, Kwun Tong
Hong Kong

T +852 3664 6888
F +852 3664 6999
E hongkong@aurecongroup.com
W aurecongroup.com

The Aurecon logo consists of a small green square above the word "aurecon" in a bold, lowercase, sans-serif font.

Ref: P521530-0000-REP-NN-0066

14 August 2023

By Email

Meinhardt Infrastructure & Environment Ltd.
10/F Genesis
33-35 Wong Chuk Hand Road
Hong Kong

Attn: Ms. Claudine Lee,

Dear Claudine,

Re: Contract No. EP/SP/77/15
Northeast New Territories Landfill Extension
Submission of Monthly Environmental Monitoring and Audit Report (No.8) – July 2023

In accordance with the requirement specified in Condition 3.3 of Environmental Permit No. EP-292/2007 and Further Environmental Permit No. FEP-01/292/2007, we are pleased to submit the certified "Monthly Environmental Monitoring and Audit Report (No.8) – July 2023" dated 11 August 2023 for your verification.

Should you require any further information or clarification, please do not hesitate to contact the undersigned or our Mr. Keith Chau on 3664 6788.

Yours faithfully,
For and on behalf of
Aurecon Hong Kong Limited

A handwritten signature in blue ink, appearing to read "Fredrick Leong".

Fredrick Leong
Environmental Team Leader

Encl.

1. Monthly Environmental Monitoring and Audit Report (No.8) – July 2023

cc.

1. IEC - Ms. Claudine Lee (By email: claudinelee@meinhardt.com.hk)
2. IEC Representative – Ms. Echo Hung (By email: echohung@meinhardt.com.hk)

Document Control Record

Document prepared by:

Aurecon Hong Kong Limited

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

T +852 3664 6888

F +852 3664 6999



E hongkong@aurecongroup.com

W aurecongroup.com

A person using Aurecon documents or data accepts the risk of:

- a) Using the documents or data in electronic form without requesting and checking them for accuracy against the original hard copy version.
- b) Using the documents or data for any purpose not agreed to in writing by Aurecon.

Document control							aurecon
Report title		Monthly Environmental Monitoring and Audit Report (No. 8) – July 2023					
Document ID			Project number				
File path							
Client Veolia Environmental Services Hong Kong Limited							
Client contact			Client reference				
Rev	Date	Revision details/status	Author	Reviewer	Verifier (if required)	Approver	
0	7 August 2023	Submit to IEC	J Man	K.Chau		FL	
1	11 August 2023	Submit to IEC	J Man	K.Chau		FL	
Current revision		1					

Approval			
Reviewer's signature		Approver's signature	
Name	Keith Chau	Name	Fredrick Leong
Title	Associate, Environmental	Title	Environmental Team Leader

Contents

Executive Summary	1
1. Introduction	3
2. Project Information	5
3. Air Quality Monitoring	10
4. Noise Monitoring	19
5. Water Quality Monitoring	24
6. Waste Management	33
7. Landfill Gas Monitoring	34
8. Landscape and Visual	39
9. Cultural Heritage	40
10. Ecological Monitoring	41
11. Site Inspection and Audit	43
12. Environmental Non-conformance	46
13. Implementation Status on Environmental Mitigation Measures	47
14. Future Key Issues	48
15. Conclusion	49

Figure

Figure 1	Location of the Project Site
Figure 2	Impact Air Quality, Noise & Surface Water Monitoring Locations
Figure 3	Landfill Gas Monitoring Locations

Appendix

Appendix A	Construction Programme
Appendix B	Project Organization Chart & Management Structure
Appendix C	Monitoring Schedule for Reporting Month & Next Month
Appendix D	Calibration Certificates
Appendix E	Monitoring Results
Appendix F	Graphical Presentations
Appendix G	Notification of Environmental Quality Limits Exceedance
Appendix H	Wind Data
Appendix I	Waste Flow Table
Appendix J	Joint Environmental Site Inspection Records
Appendix K	Environmental Mitigation Implementation Schedule (EMIS)
Appendix L	Construction Site Activities
Appendix M	Mitigation Measures of Cultural Landscape Features
Appendix N	Ecological monitoring record
Appendix O	Detail Status of FEP & EP Submission
Appendix P	Cumulative complaint / enquiry log, Summaries of complaints and enquiries & Environmental complaint reports
Appendix Q	Implementation Status on Environmental Mitigation Measures

Executive Summary

Aurecon Hong Kong Limited (Aurecon) was appointed to undertake the role of Environmental Team (ET) and carry out Environmental Monitoring and Audit for the North East New Territories (NENT) Landfill Extension.

The construction phase and EM&A programme of the Project commenced on 1 December 2022.

This 8th Monthly EM&A Report presents the EM&A works conducted from 1 to 31 July 2023 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during Report Period

The major construction works undertaken during the reporting period include:

- Material loading and unloading, site traffic at Portion A, SBA to alternative disposal ground
- Permanent site office foundation works with pouring of concrete at Portion D
- Site clearance at Portion A, B2/E2, E3-1 & E4
- Installation of permanent fencing at Portion A, B1 & E4
- Site formation at Portion A & E3-1
- Tree felling at Portion B2/E1, E3-1 & E4

Environmental Monitoring and Audit Progress

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

Items	Times	Date
- Air Quality Monitoring during normal weekdays at each monitoring station	5 times	6, 12, 18, 24 & 29 July 2023
- Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	6, 12, 21 & 24 July 2023
- Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	12 July 2023
- Landfill Gas Monitoring during normal weekdays for Construction Works	24 times	3 to 8, 10 to 15, 18 to 22, 24 to 29, 31 July 2023
- Post-transplantation monitoring and audit during normal weekdays for transplanted plants and receptor sites	1 time	18 July 2023
- Post-translocation Monitoring during normal weekdays at recipient site	1 time	12 July 2023
- Joint Environmental Site Inspection	5 times	3, 10, 18, 24 & 31 July 2023
- General Site Inspection by EPD-RNG	1 time	31 July 2023

Environmental Exceedance

Air Quality, Noise, Surface Water Quality & Landfill Gas Monitoring

No exceedance of the Action and Limit Levels were recorded at designated monitoring stations during the reporting period.

Environmental Non-conformance/Compliant/Summons and Prosecution

No non-compliance event was recorded during the reporting period.

No complaint was recorded during the reporting period.

No summons/prosecutions were received in this reporting period.

Reporting Change

There was no reporting change in the reporting period.

Future Key Issues

Works to be undertaken in the next month include:

-
- Material loading and unloading, site traffic at Portion A, SBA to alternative disposal ground

 - Permanent site office foundation works with pouring of concrete at Portion D

 - Site clearance at Portion A & E3-1

 - Installation of permanent fencing at Portion A, B1 & E4

 - Site formation at Portion A & E3-1

 - Tree felling at Portion E3-1 & E4

Potential environmental impacts arising from the above construction activities are mainly associated with air quality, construction noise, water quality, waste management, landfill gas monitoring, landscape and visual, cultural heritage and ecology.

1. Introduction

1.1. Background

- 1.1.1. The North East New Territories Landfill Extension (the NENTX Project) is located adjacent to the existing North East New Territories (NENT) Landfill at Ta Kwu Ling. The extension site is located in a valley covering mainly the existing NENT Landfill Stockpile and Borrow Area that was formed to the east of the existing landfill as part of the original site development of the landfill, and layout plan shown in **Figure 1**.
- 1.1.2. The NENTX is a designated project. The Environmental Impact Assessment (EIA) Report (AEIAR-111/2007) and an Environmental Monitoring and Audit Manual were approved on 20 September 2007. The project is governed by an Environmental Permit (EP) (EP-292/2007) which was granted on 26 November 2007. A further of EP (FEP) was applied and the FEP (FEP-01/292/2007) was subsequently granted on 28 April 2022.
- 1.1.3. In accordance with the requirements specified in Section 2.6 to 2.10 and Section 12.3 of the approved Environmental Monitoring and Audit (EM&A) Manual and Environmental Permit (EP and FEP) condition 3.3, Monthly EM&A report should be submitted to the Director of Environmental Protection (DEP), within 2 weeks after the end of the reporting month. The submissions shall be certified by the Environmental Team (ET) Leader and verified by the Independent Environmental Checker (IEC).
- 1.1.4. The construction phase and EM&A programme of the Project commenced on 1 December 2022.

1.2. Nature, Scale and Scope of the captioned Designated Project

- 1.2.1 The Nature, Scale and Scope of the captioned Designated Project is presented in **Table 1-1**.

Table 1-1 Nature, Scale and Scope of the captioned Designated Project

Item(s)	Content
Nature of Designated Project	Construction and operation of a landfill for waste as defined in the “Waste Disposal Ordinance” (Cap. 354)
Scale and Scope of Designated Project	<p>The Project mainly consists of the followings: -</p> <p>Construction and operation of a landfill extension of about 70 hectares with a target void space of at least 19 million cubic metres on the eastern side of the existing NENT Landfill, including the followings: -</p> <ol style="list-style-type: none"> i. Site formation and preparation; ii. Installation of liner system; iii. Installation of leachate collection, treatment and disposal facilities; iv. Installation of gas collection, utilization and management facilities; v. Utilities provisions and drainage diversion; vi. Landfilling operation; vii. Restoration and aftercare in subsequent stages; and viii. Measures to mitigate environmental impacts as well as environmental monitoring and auditing to be implemented.

1.3. Purpose of this Report

- 1.3.1. This is the 8th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 01 to 31 July 2023.

1.4. Structure of the Report

- 1.4.1. The structure of the report is as follows:

Section 1 – Introduction

- details the background, purpose and structure of the report.

Section 2 – Project Information

- summarises background and scope of the Project, site description, project organization and contact details, construction programme, the construction works undertaken and the status of Environmental Permit(s)/License(s) during the reporting period.

Section 3 – Air Quality Monitoring

- Construction Dust

Section 4 – Noise Monitoring

Section 5 – Water Quality Monitoring

- Groundwater Monitoring
- Surface Water Monitoring

Section 6 – Waste Management

Section 7 – Landfill Gas Monitoring

Section 8 – Landscape and Visual

Section 9 – Cultural Heritage

Section 10 – Ecological Monitoring

Section 11 – Site Inspection and Audit

Section 12 – Environmental Non-Conformance

Section 13 – Implementation Status on Environmental Mitigation Measures

Section 14 – Future Key Issues

2. Project Information

2.1. Construction Activities

2.1.1. A summary of the major construction activities undertaken in this reporting period is shown in **Appendix L**. Construction programme is illustrated in **Appendix A**.

2.2. Project Organization & Management Structure

2.2.1. The Project Organization Chart & Management Structure are shown in **Appendix B**. The key personnel contact information is summarized in **Table 2-1**.

Table 2-1 Contact Information of Key Personnel

Party	Name	Contact Number
Contractor (Veolia Environmental Service Hong Kong Ltd.)	Ms. Kristy Wong	2902 5260
Independent Environmental Checker (IEC) (Meinhardt Infrastructure and Environment Ltd.)	Ms. Claudine Lee	2859 5409
Environmental Team Leader (ETL) (Aurecon Hong Kong Limited)	Mr. Fredrick Leong	3664 6888

2.3. Status of Submission required under the FEP & EP during reporting period

2.3.1. The status of statutory environmental compliance with the EP conditions under the EIAO, submission status under the FEP & EP during reporting period are presented in **Table 2-2**. The detail status of statutory environmental compliance with the EP conditions under the EIAO, submission status under the FEP & EP for NENTX project are shown in **Appendix O**.

Table 2-2 Status of Submissions required under the FEP & EP during reporting period

FEP Condition	EP Condition	Submission / Measures	Status
2.1	2.3	Management Organization of Main Construction Companies	Submitted
2.2	2.4	Setting up of Community Liaison Group (CLG)	Community Liaison Group was set up.
2.3	2.5	Submission of EM&A Manual	Submitted
2.5	2.7	Submission of Vegetation Survey (Transplantation Proposal)	Submitted
2.6	2.8	Submission of translocation proposal	Submitted
2.7	2.9	Submission of Transplantation Report and Post-Transplantation Monitoring	Submitted 12 th post-transplantation monitoring (18 Jul 2023)
2.8	2.10	Submission of Translocation Report and Post-Translocation Monitoring	Translocation was carried out and the report submitted. 12 th post-translocation monitoring (12 Jul 2023)
2.9	2.11	Submission of Detailed Landfill Gas Hazard Assessment Report	Submitted
2.10	2.12	Submission of Waste Management Plan	Submitted
3.2	3.2	Submission of Baseline Monitoring Report	Submitted

2.4. Status of Environmental Approval Document

2.4.1. A summary of the relevant valid permits, licences, and/or notifications on environmental protection for this Project since the granting of the FEP & EP is presented in **Table 2-4**.

Table 2-4 Summary of the relevant valid permits, licences, and/or notifications on environmental protection

Permit / Licenses / Notification	Reference	Expiry Date	Remark
Environmental Permit (EP)	EP-292/2007	Throughout the Contract	Permit granted on 26 November 2007
Further Environmental Permit (FEP)	FEP-210/2022	Throughout the Contract	Permit granted on 28 April 2022
Notification of Construction Works as required under Air Pollution Control (Construction Dust) Regulation	479809	Throughout the Construction Phase	Notified on 13 May 2022
Registration of Waste Producer under Waste Disposal Ordinance	7043692	Throughout the Contract	Registered on 13 April 2022
Registration as Chemical Waste Producer	5213-642-P1034-18	Throughout the Contract	Registered on 11 July 2022
Construction Noise Permit	GW-RN0619-23	22 September 2023	Permit granted on 16 June 2023
Effluent Discharge License under Water Pollution Control Ordinance	WT00042301-2022	31 October 2027	Permit granted on 18 October 2022 Variation of Licence (Permit granted on 7 February 2023)

2.5. Environmental Monitoring and Audit Progress

2.5.1. A summary of the monitoring activities in this reporting period is presented in **Table 2-5**.

Table 2-5 Summary of the Monitoring Activities in this reporting period

Items	Times	Date
- Air Quality Monitoring during normal weekdays at each monitoring station	5 times	6, 12, 18, 24 & 29 July 2023
- Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	6, 12, 21 & 24 July 2023
- Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	12 July 2023
- Landfill Gas Monitoring during normal weekdays for Construction Works	24 times	3 to 8, 10 to 15, 18 to 22, 24 to 29, 31 July 2023
- Post-transplantation monitoring and audit during normal weekdays for transplanted plants and receptor sites	1 time	18 July 2023
- Post-translocation Monitoring during normal weekdays at recipient site	1 time	12 July 2023
- Joint Environmental Site Inspection	5 times	3, 10, 18, 24 & 31 July 2023
- General Site Inspection by EPD-RNG	1 time	31 July 2023

Air Quality

5 sets of 1-hr & 24-hr TSP construction dust measurement were carried out at each monitoring stations during normal weekdays of the reporting period. No Action / Limit Level exceedance for 1-hr & 24-hr TSP impact monitoring was recorded during the period.

Noise

4 sets of 30-minute construction noise measurement were carried out at each monitoring stations during normal weekdays of the reporting period. No exceedance of Action and Limit Levels of construction noise was recorded during the reporting period.

Groundwater

Site clearance of future landfilling area is in progress. The installation of groundwater monitoring boreholes will be installed after the site formation work of the landfilling area. The target commencement period of groundwater monitoring will be in 2026. No groundwater monitoring is required before the completion of site formation work of the landfilling area.

Surface Water Quality

1 set of surface water quality measurement were carried out at each monitoring stations during normal weekdays of the reporting period. No exceedance of Action Levels and Limit Level of surface water quality were recorded during the reporting period.

Landfill Gas

24 sets of landfill gas measurement were carried out at the designated monitoring locations during normal weekdays of the reporting period. No exceedance of Action and Limit Levels of landfill gas was recorded during the reporting period.

Landscape and Visual

All the specified and affected LCAs, LRs and VSRs have been monitored during the reporting period. No exceedance of Action and Limit Levels of landscape and visual was recorded during the reporting period.

Cultural Heritage

Implementation of the mitigation measures during construction phase of the Project has been monitored through the regular site inspection/audit.

Ecology

1 set of post-translocation monitoring at recipient site and 1 set of post-transplantation monitoring and audit for transplanted plants and receptor sites during normal weekdays of the reporting period were carried out. Implementation of the mitigation measures during construction phase of the Project has been monitored through the regular site inspection/audit.

Environmental Site Inspection

5 weekly environmental site inspections were carried out during the reporting period. A joint environmental site inspection was carried out by the representatives of the Employer's Representative (ER), the Contractor, IEC and the ET on 18 July 2023. The Contractor has generally implemented the mitigation measures as recommended. 1 general site inspection on 31 July 2023 was conducted by Environmental Protection Department-Regional Office (North) (EPD-RNG).

3. Air Quality Monitoring

3.1 Construction Dust

3.1.1 Monitoring Requirement

3.1.1.1 In accordance with the EM&A Manual, 1-hr & 24-hr Total Suspended Particulates (TSP) levels should be measured at the designated air quality monitoring stations in every 6 days to ensure that any deteriorating air quality could be readily detected, and timely action shall be undertaken to rectify such situation. For 1-hr TSP monitoring, the sampling frequency of at least three times in every six-days should be undertaken when the highest dust impact occurs. The specific time to start and stop the 24-hr TSP monitoring shall be clearly defined for each location.

3.1.2 Monitoring Parameters, Frequency and Location

3.1.2.1 According to the EM&A Manual, three monitoring stations namely AM(D)1, AM(D)2 and AM(D)3 are selected for the impact monitoring.

3.1.2.2 A baseline monitoring plan has been submitted to IEC and EPD on 31 May 2022 including the proposal with justification of change of monitoring locations. Due to limited access to the original monitoring locations at AM(D)1, AM(D)2 and AM(D)3, the adjusted stations at AM1, AM2 and AM3 were agreed with IEC prior to the baseline and impact monitoring. The locations of adjusted dust monitoring locations are shown in **Figure 2**.

3.1.2.3 The detailed monitoring schedule is shown in **Appendix C**. The locations of dust monitoring stations are shown in **Table 3-1**. The monitoring parameters, frequency and duration are shown in **Table 3-2**.

Table 3-1 Locations of Dust Monitoring Stations

Monitoring Station	Representative for	Monitoring Parameters
AM1	Tung Lo Hang	1-hr and 24-hr TSP
AM2	Heung Yuen Wai	1-hr and 24-hr TSP
AM3	Wo Keng Shan Tsuen	1-hr and 24-hr TSP

Remarks:

The contractor passed correspondence including original monitoring locations specified on the Approved EM&A Manual to the village representatives on 26 April 2022. After a meeting with Ta Kwu Ling District Rural Committee (RC) Chairman, representative from the RC and a few villagers on 1 May 2022, all the Village Heads of Wo Keng Shan Tsuen, Heung Yuen Wai and Lin Ma Hang verbally refused to accept our proposal for installation of dust and / or noise monitoring equipment within or next to their villages, for the baseline & impact monitoring.

AM(D)1 Tung Lo Hang, AM(D)2 Heung Yuen Wai, AM(D)3 Wo Keng Shan Tsuen are the air monitoring stations for the construction phase EM&A programme as identified in the approved EM&A Manual for the Project. The access to Tung Lo Hang, Heung Yuen

Wai and Wo Keng Shan Tsuen were denied. A search for alternative air monitoring locations (AM1, AM2 & AM3) was carried out during the site visit.

The Baseline Monitoring Plan has been submitted to IEC and EPD including the proposal of change of monitoring locations on 31 May 2022. This arrangement was conducted between baseline and impact monitoring and has been agreed by the Independent Environmental Checker (IEC) and no comment received from EPD.

Due to the adjustment of the location of AM(D)1, AM(D)2 & AM(D)3 to AM1, AM2 & AM3, the measured air quality levels at AM1, AM2 & AM3 would represent the air quality levels at AM(D)1, AM(D)2 & AM(D)3.

Table 3-2 Dust Impact Monitoring Parameters, Frequency and Duration

Monitoring Station	Parameter	Frequency and Duration
AM1, AM2, AM3	1-hr TSP	At least 3 times per 6 days
	24-hr TSP	1 time per 6 days

3.1.3 Monitoring Equipment

3.1.3.1 High volume samplers (HVSs) were used for carrying out 24-hr TSP monitoring. For 1-hr TSP monitoring, direct reading dust meters were used to measure 1-hr TSP levels.

3.1.3.2 **Table 3-3** summarises the equipment that were used in the dust monitoring programme. The calibration certificates are shown in **Appendix D**.

Table 3-3 Dust Monitoring Equipment

Equipment	Model	Expiry Date	Monitoring Station
High Volume Sampler (HVS)	TE-5170X (S/N: 1105)	19 Jun 2024	AM1
	TE-5170X (S/N: 1106)		AM2
	TE-5170X (S/N: 1856)		AM3
Direct Reading Dust Meter	Sibata LD-5R (S/N: 0Z4545)	2 Dec 2023	AM1 to AM3
	Sibata LD-5R (S/N: 882106)		
	Sibata LD-5R (S/N: 882110)		
	Sibata LD-5R (S/N: 942532)		
Calibration Kit (for HVS)	TE-5025A (S/N: 4166)	19 Jun 2024	AM1 to AM3

Remarks:

The Expiry Date of Calibration Kit (for HVS) reflected that the calibration certificate fulfils the bi-monthly calibration interval requirement for the HVS.

3.1.4 Monitoring Methodology

1-hr TSP Monitoring

3.1.4.1 The 1-hr TSP impact monitoring was conducted using a portable direct reading dust meter.

Measuring Procedures

3.1.4.2 The measuring procedures of the 1-hr dust meter has been undertaken in accordance with the Manufacturer's Instruction Manual as follows:

Procedure of starting monitoring

- Place the 1-hr dust meter at least 1.3m above ground;
- Turn on the "On/Off" button at the side of instrument. Program will be changed to "BG" mode and leave it for 1 minute.
- Pull out the Suction adaptor and turn the button at the side. Cover with hand at the suction adaptor measure the background for 10 seconds.
- Press "UP" and "DOWN" for choosing "SPAM Mode" for SPAM Measurement.
- Press "Up" and "Down" to select "Measurement Mode" with 60 minutes interval and unit in ug/m3.
- Press "Start/Stop" to start monitoring.

Procedure of setting measurement timer

- Press "Up" or "Down" to find "Setting LOG".
- Select "Record Cycle" and change the record time subject to different project requirement. For example, setting the record cycle as 60 minutes for normal operation.
- Press "ESCAPE" back to the main page.
- Press "Up" or "Down" to access "Measurement Timer" and select "Measurement time" to change the time to 3 hours.
- Information such as sampling date, time, count value and site condition will be recorded during the monitoring period.

Calibration & Maintenance

3.1.4.3 The direct reading dust meters will be verified against calibrated high volume samples (HVSs) annually. A 2-day, three 3-hour measurement results per day from direct reading dust meter will be taken to compare with the sampling results from the HVS. The correlation between the direct reading dust meter and the HVS will then be concluded. By accounting for the correlation factor, the direct reading dust meter will be considered to achieve comparable results as that of the HVS.

3.1.4.4 All digital dust indicator will be calibrated with on-site HVS annually. Calibration certificate will be provided after calibration. The Calibration process shall eyewitness with the representative of ET & IEC.

Quality Audit

3.1.4.5 Checklist of regular checking for digital dust meter will be conducted bi-weekly by environmental technician to ensure the all-digital dust meter are in good condition and submitted to supervisors. All checklists will be kept by supervisors.

3.1.4.6 Logbook is provided to environmental technician record the transferal of equipment to other colleagues, reporting to supervisors is required.

24-hr TSP Monitoring

3.1.4.7 The 24-hr TSP monitoring has been conducted using a High-Volume Sampler (HVS).

Measuring Procedures

3.1.4.8 The HVS has been set-up at the monitoring location with a fixed power supply for operation. The measuring procedures of the 24-hr TSP measurements has been undertaken in accordance with the specifications listed in the EM&A Manual. Each HVS includes a motor, a filter holder, a flow controller and a sampling inlet in accordance with the performance specification of the USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50), Appendix B. The measuring procedures of the 24-hr dust meter was undertaken in accordance with the Manufacturer's Instruction Manual as follows:

- The power supply will be checked to ensure the HVS works properly;
- The filter holder and the area surrounding the filter will be cleaned;
- The filter holder will be removed by loosening the four bolts and a new filter on a supporting screen will be aligned carefully;
- The filter will be properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter;
- The swing bolts will be fastened to hold the filter holder down to the frame. The pressure applied should be sufficient to avoid air leakage at the edges;
- The shelter lid will be closed and secured with the aluminium strip;
- The HVS will be warmed-up to establish run-temperature conditions;
- A new flowrate record sheet will be set into the flow recorder;
- The programmable timer will be set for a sampling period of 24 hour, and the starting time, weather condition and the filter number will be recorded;
- The initial elapsed time will be recorded;
- At the end of sampling, the sampled filter will be removed carefully and folded in half-length so that only surfaces with collected particulate matter will be in contact;
- The sample will be placed in a clean plastic envelope and sealed;
- All monitoring information will be recorded on a standard data sheet; and
- The filters will be taken back to HOKLAS accredited laboratory for analysis.

3.1.4.9 In addition, site conditions and dust sources were recorded in a standard form for direct input into a database.

Calibration & Maintenance

3.1.4.10 The high volume motors and their accessories should be properly maintained, including routine motor brushes replacement and electrical wiring checking, to ensure that the equipment and a continuous power supply were in good working condition.

3.1.4.11 Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognized primary standard and be calibrated annually.

The detail procedure of calibration of HVS is listed below:

1. Make sure the electrical circuit is connected properly. The motor should be directly connected to the power source.
2. Open the top cover and unlock the screws at the four corners.
3. Install the orifice and adapter plate to high volume air sample. Tighten the nut securely. Turn the knob of orifice clock-wise to close the four holes on the bottom open.
4. Hold the water manometer on the cover of mass flow controller vertically. Connect one side of a water manometer to the pressure tap on the side of the orifice with a rubber vacuum tube. Leave opposite side of the manometer open to the atmosphere.
5. Turn on the sampler
6. Five flow rates are achieved by changing the different plates to change the resistance. Record the manometer reading and the reading from continuous flow recorder. At least 5 sets of data should be recorded.

3.1.4.12 The Calibration process shall eyewitness with the representative of ET & IEC.

3.1.5 Monitoring Results

3.1.5.1 The impact dust monitoring results are summarized in **Table 3-4** and **Table 3-5**. The monitoring data together with graphical presentations are presented in **Appendix E** and **Appendix F**.

Table 3-4 Summary of Impact 1-hr TSP Monitoring Results

Dust Monitoring Station	Average 1-hr TSP Concentration, $\mu\text{g}/\text{m}^3$ (Range)	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM1	35 (21 – 46)	>285	>500
AM2	34 (21 – 48)	>279	>500
AM3	32 (21 – 44)	>285	>500

Table 3-5 Summary of Impact 24-hr TSP Monitoring Results

Dust Monitoring Station	Average 24-hr TSP Concentration, $\mu\text{g}/\text{m}^3$ (Range)	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM1	36 (17 – 60)	>164	>260
AM2	34 (25 – 48)	>152	>260
AM3	30 (22 – 40)	>163	>260

3.1.5.2 The Summary of Impact 1-hr & 24-hr TSP Exceedance are shown in **Table 3-6**. The Notification of Environmental Quality Limits Exceedances are presented in **Appendix G**.

Table 3-6 Summary of Impact 1-hr & 24-hr TSP Exceedance during the reporting period

Dust Monitoring Station	Parameter	1-hr TSP	24-hr TSP	Exceedance Count
	Level Exceedance			
AM1	Action	0	0	0
	Limit	0	0	0
AM2	Action	0	0	0
	Limit	0	0	0
AM3	Action	0	0	0
	Limit	0	0	0

Remarks: * equal to non-project related

3.1.5.3 No Action / Limit Level exceedance for 1-hr & 24-hr TSP impact monitoring at AM1, AM2 & AM3 was recorded during the period.

3.1.6 Wind Data Monitoring

3.1.6.1 During the monitoring period, wind data from existing weather station in the vicinity of the designated monitoring location, i.e Ta Kwu Ling station operated by Hong Kong Observatory was adopted. It is considered that the wind data obtained from Ta Kwu Ling station are representative of the Project area and could be used for the construction dust monitoring programme for the Project. The results for wind data monitoring are presented in **Appendix H**.

3.1.7 Recommended Mitigation Measures

3.1.7.1 The recommended dust mitigation measures from EIA report are listed as followed:

- The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation.
- Dust emission from construction vehicle movement is confined within the worksites area.

- Watering facilities will be provided at every designated vehicular exit point.
- Good site practice is recommended during construction phase.

3.1.8 Event and Action Plan

- 3.1.8.1 Should non-compliance of the criteria occur, action in accordance with the action plan in **Table 3-7** shall be carried out.

Table 3-7 Event and Action Plan for dust impact

Event	ET	IEC	Contractor
Exceedance of Action Level			
Exceedance for one sample	<ul style="list-style-type: none"> • Identify source • Prepare Notification of Exceedance • Inform IEC and Contractor • Repeat measurement to confirm findings • Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below action level 	<ul style="list-style-type: none"> • Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss with ET and Contractor on proposed remedial measures 	<ul style="list-style-type: none"> • Rectify any unacceptable practice • Amend working methods if appropriate
Exceedance for two or more consecutive samples	<ul style="list-style-type: none"> • Identify source • Prepare Notification of Exceedance • Inform Contractor and IEC • Repeat measurements to confirm findings • Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below action level • Discuss with IEC for remedial action required • Ensure remedial measures are properly implemented • Continue monitoring at daily intervals if exceedance is due to the Project • If no exceedance for 3 consecutive days, cease additional monitoring 	<ul style="list-style-type: none"> • Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss with ET and Contractor on proposed remedial measures • Review with analysed results submitted by ET • Review the proposed remedial measures by Contractor • Supervise the implementation of remedial measures 	<ul style="list-style-type: none"> • Submit proposals for remedial actions to IEC within 3 working days of notification • Implement the agreed proposals • Amend proposal if appropriate

Event	ET	IEC	Contractor
Exceedance of Limit Level			
Exceedance for one sample	<ul style="list-style-type: none"> • Identify source • Prepare Notification of Exceedance • Inform IEC and Contractor • Repeat measurement to confirm findings • Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below limit level • Assess effectiveness of Contractor's remedial actions and keep EPD and IEC informed of the results 	<ul style="list-style-type: none"> • Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss with ET and Contractor potential remedial actions • Supervise the implementation of remedial measures 	<ul style="list-style-type: none"> • Take immediate action to avoid further exceedance • Submit proposals for remedial actions to IEC within 3 working days of notification • Implement the agreed proposals • Amend proposal if appropriate
Exceedance for two or more consecutive samples	<ul style="list-style-type: none"> • Identify source • Prepare Notification of Exceedance • Inform IEC and EPD the causes and actions taken for the exceedances • Discuss with IEC for remedial action required • Ensure remedial measures are properly implemented • Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and informed of the results • Increase monitoring frequency to confirm findings • If exceedance stops, cease additional monitoring 	<ul style="list-style-type: none"> • Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss amongst ET and Contractor on the potential remedial actions. • Review Contractor's remedial actions whenever necessary to assure their effectiveness • Supervise the implementation of remedial measures 	<ul style="list-style-type: none"> • Take immediate action to avoid further exceedance • Submit proposals for remedial actions to IEC of notification • Implement the agreed proposals • Resubmit proposals if problem still not under control • Stop the relevant activity of works until the exceedance is abated

4 Noise Monitoring

4.1 Monitoring Requirement

4.1.1 In accordance with the EM&A manual, noise impact monitoring shall be carried out at 2 monitoring stations NM1 and NM2 once a week during normal construction working hour (0700-1900 Monday to Saturday). The minimum logging interval shall be 30 minutes with average of 6 consecutive Leq 5 mins. L10 and L90 shall also be measured at 5 mins intervals.

4.2 Monitoring Locations, Parameters and Frequency

4.2.1 According to the EM&A Manual, two monitoring stations namely NM1 and NM2 are selected for the impact monitoring.

4.2.2 A baseline monitoring plan has been submitted to IEC and EPD on 31 May 2022 including the proposal with justification of change of monitoring locations. Due to limited access to the original monitoring locations at NM1 and NM2, the adjusted stations at NM1a and NM2a were agreed with IEC prior to the baseline and impact monitoring. The noise monitoring locations are summarized in **Table 4-1** and shown in **Figure 2**.

4.2.3 The detailed monitoring schedule is shown in **Appendix C**. The frequency and duration are shown in **Table 4-2**.

Table 4-1 Noise Monitoring Locations

Monitoring Station	Representative for	Type of Measurement
NM1a	Wo Keng Shan Tsuen	Free field
NM2a	Lin Ma Hang	Free field

Remarks:

The contractor passed correspondence including original monitoring locations specified on the Approved EM&A Manual to the village representatives on 26 April 2022. After a meeting with Ta Kwu Ling District Rural Committee (RC) Chairman, representative from the RC and a few villagers on 1 May 2022, all the Village Heads of Wo Keng Shan Tsuen, Heung Yuen Wai and Lin Ma Hang verbally refused to accept our proposal for installation of dust and / or noise monitoring equipment within or next to their villages, for the baseline & impact monitoring.

NM1 Wo Keng Shan Tsuen & NM2 Lin Ma Hang are the noise monitoring stations for the construction phase EM&A programme as identified in the approved EM&A Manual for the Project. The access to Tung Lo Hang, Heung Yuen Wai and Wo Keng Shan Tsuen were denied. A search for alternative noise monitoring locations (NM1a & NM2a) was carried out during the site visit.

The Baseline Monitoring Plan has been submitted to IEC and EPD including the proposal of change of monitoring locations on 31 May 2022. This arrangement was conducted between baseline and impact monitoring and has been agreed by the Independent Environmental Checker (IEC) and no comments received from EPD. Noise measurement at NM1a & NM2a will be considered as free-field and a correction of +3dB(A) would be made to the noise monitoring results.

Due to the adjustment of the location of NM1 & NM2 to NM1a & NM2a, the measured noise levels at NM1 & NM2 would represent the noise levels at NM1 & NM2.

Table 4-2 Noise Monitoring Parameters, Frequency and Duration

Monitoring Station	Parameter	Frequency and Duration
NM1a and NM2a	L _{Aeq} (30mins) average of 6 consecutive L _{eq} (5min); L10 (5min) & L90 (5min)	once a week during normal construction working hour (0700- 1900 Monday to Saturday)

4.3 Monitoring Equipment

4.3.1 Integrating Sound Level Meters (SLMs) was used for noise impact monitoring. The SLM complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications shall be used for carrying out noise monitoring. The accuracy of the SLM was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements shall be accepted as valid only if the calibration level from prior to and after the noise measurement agrees to within 1.0dB.

4.3.2 A portable wind speed meter was used for measuring wind speeds in m/s.

4.3.3 **Table 4-3** summarises the equipment that have been used in the impact noise monitoring programme. The calibration certificates are shown in **Appendix D**.

Table 4-3 Noise Monitoring Equipment

Equipment	Model	Expiry Date
Sound Level Meter	NTi XL2 (S/N: A2A-13661-E0)	21 Aug 2023
Acoustic Calibrator	Rion NC-75 (S/N: 35124527)	1 Nov 2023
Anemometer	RS PRO RS-90 (S/N: 210722208)	12 Feb 2025

4.4 Monitoring Methodology

4.4.1 The details of noise measurement procedures are described as follows:

- Free-field measurements were made at the monitoring locations.
- For free field, the Sound Level Meter was set at a height of 1.2 m above the ground. The battery condition was checked to ensure the proper functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
- Frequency weighting: A
- Time weighting: Fast
- Measurement time: 5 minutes (Leq (30-min) would be determined for daytime noise by calculating the logarithmic average of six Leq (5min) data.)
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid

and repeat of noise measurement would be required after recalibration or repair of the equipment.

- Noise measurement should be paused during periods of high intrusive noise if possible and observation shall be recorded when intrusive noise is not avoided.
- At the end of the monitoring period, the Leq, L10 and L90 shall be recorded. In addition, site conditions and noise sources should be recorded on a standard record sheet.
- All noise monitoring will be conducted with the wind speed not exceeding 5m/s and no gusts exceeding 10m/s.

Calibration & Maintenance

4.4.2 The sound level meter, sound calibrator, and anemometer should be properly maintained to ensure that the equipment and a continuous power supply were in good working condition. The sound level meter and sound calibrator will be calibrated annually. The anemometer will be calibrated two years interval in accordance with the HOKLAS Supplementary Criteria No.2. Calibration certificate will be provided after calibration.

4.4.3 The microphone head of the sound level meter and calibrator should be cleaned with a soft cloth at quarterly intervals.

4.5 Monitoring Results

4.5.1 The impact noise monitoring results are summarized in **Table 4-4**. The monitoring data together with graphical presentations are presented in **Appendix E** and **Appendix F**.

Table 4-4 Summary of Noise Monitoring Results during normal working hours (07:00-19:00, Monday to Saturday)

Noise Monitoring Station	Average Leq, 30min, dB(A) (Range)	Action Level	Limit Level
NM1a	62.1 (61.0 – 63.7)	When one documented complaint is received	>75dB(A)
NM2a	56.3 (54.2 – 58.2)		

Remark:

- (1) * A correction of +3 dB(A) was made to the free field measurements
- (2) If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

4.5.2 No exceedance of Action and Limit Levels of construction noise was recorded during the reporting period. Therefore, there was no record of Notification of Environmental Quality Limits Exceedance in the **Appendix G**.

4.5.3 No particular observations are identified near the monitoring stations during the monitoring period.

4.6 Recommended Mitigation Measures

4.6.1 The recommended noise mitigation measures from EIA report are listed as followed:

1. Use of good site practices to limit noise emissions by considering the following:
 - Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;
 - Machines and plant (such as trucks, cranes) 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, where possible, be orientated so that the noise is directed away from nearby NSRs;
 - Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works;
 - Mobile plant should be sited as far away from NSRs as possible and practicable;
 - Material stockpiles, mobile container site officer and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.
2. Select “Quiet plants” which comply with the BS 5228 Part 1 or TM standards.

4.7 Event and Action Plan

4.7.1 Should non-compliance of the criteria occurs, action in accordance with the action plan in **Table 4-5** shall be carried out.

Table 4-5 Event and action plan for construction noise monitoring

Event	ET	IEC	Contractor
Exceedance of Action Level	<ul style="list-style-type: none"> Identify source, investigate the causes of exceedance Prepare Notification of Exceedance Inform IEC and Contractor Report the results of investigation to IEC, and Contractor Discuss with Contractor and IEC for formulate remedial measures Ensure remedial measures are properly implemented Have additional monitoring if exceedance is due to the Project. If exceedance stops, cease additional monitoring 	<ul style="list-style-type: none"> Verify the Notification of Exceedance Review the analysed results submitted by ET Discuss with ET, and Contractor on the potential remedial actions Review the proposed remedial measures Supervise the implementation of remedial measures 	<ul style="list-style-type: none"> Submit noise mitigation proposals to IEC Implement the agreed noise mitigation proposals
Exceedance of Limit Level	<ul style="list-style-type: none"> Identify source, investigate the causes of exceedance Prepare Notification of Exceedance Inform IEC and Contractor Repeat measurements to confirm findings Discuss with Contractor and IEC for remedial measures Ensure remedial measures are properly implemented Assess effectiveness of Contractor's remedial actions and keep IEC and EPD informed of the results Have additional monitoring if exceedance is due to the Project. If exceedance stops, cease additional monitoring 	<ul style="list-style-type: none"> Verify the Notification of Exceedance Review the analysed results submitted by ET Discuss with ET, and Contractor on the potential remedial actions Review the proposed remedial measures Supervise the implementation of remedial measures 	<ul style="list-style-type: none"> Take immediate action to avoid further exceedance Submit proposals for remedial actions to IEC of notification Implement the agreed proposals Resubmit proposals if problem still not under control Stop the relevant portion of works as determined by project proponent until the exceedance is abated.

5 Water Quality Monitoring

5.1 Groundwater Monitoring

5.1.1 Monitoring Requirement

5.1.1.1 In accordance with the EM&A manual, groundwater quality monitoring shall be carried out at least once per month at the 35 designated groundwater monitoring locations (i.e ED1 to ED35). Based on the existing construction programme, site clearance and site formation works for future landfilling area are in progress. The groundwater monitoring locations ED1 to ED35 will be installed after the site formation work of the landfilling area. No groundwater monitoring is required before the completion of site formation work of the landfilling area.

5.2 Surface Water Monitoring

5.2.1 Monitoring Requirement

5.2.1.1 In accordance with the EM&A manual, impact surface water quality monitoring was carried out at the two designated surface water discharge points (i.e WM1 and WM2) for once per month from commencement of construction works of the Project.

5.2.2 Monitoring Locations, Parameters and Frequency

5.2.2.1 Impact surface water monitoring was carried out on 12 July 2023 at WM1 and WM2. The monitoring locations are indicated in **Table 5-1** and **Figure 2**.

5.2.2.2 The monitoring parameters, frequency and duration of surface water quality monitoring are summarized in **Table 5-2**. Detailed monitoring schedule is presented in **Appendix C**.

Table 5-1 Surface water quality monitoring locations

Monitoring Station	Location	Coordinates (HK Grid)	
		Easting	Northing
WM1	Upstream of Lin Ma Hang River	836665	845020
WM2	Ping Yuen River	835592	844186

Table 5-2 Surface water quality monitoring Parameters, Frequency and Duration

Parameter	Frequency
pH, Electrical conductivity, DO, Turbidity, SS, Alkalinity, COD, BOD ₅ , TOC, Ammonia-nitrogen, TKN, Nitrate, Sulphate, Sulphite, Phosphate, Chloride, Sodium, Mg, Ca, K, Fe, Ni, Zn, Mn, Cu, Pb, Cd, Coliform Count, Oil and Grease	Once per month

5.2.3 Monitoring Equipment

5.2.3.1 The measurements of pH, electrical conductivity (EC), DO, turbidity, water temperature and air temperature were undertaken in situ. In situ monitoring instruments in compliance with the specifications listed under Section 5.5 of the EM&A Manual were used to undertake the surface water quality monitoring for the Project. **Table 5-3** summarises the equipment used in the impact surface water quality monitoring works. Copies of the calibration certificates are attached in **Appendix D**.

Table 5-3 Surface Water Quality Monitoring Equipment

Equipment	Model	Expiry Date
Water Quality Meter	HORIBA U-53 (S/N: PORBNFNT)	16 Aug 2023
Water Flow Meter	FP111 (S/N: 22K100859)	6 Nov 2023

5.2.4 Summary of Surface Water Quality Monitoring Procedure

Operational/ Analytical Procedures

5.2.4.1 In general, water samples were collected from within 500 mm of the water surface. Water was collected by a small clean open-mouthed bucket with the lip pointing upstream. Usually, water was then transferred to the sample bottles until they were filled to the top with no remaining air space before the lid was securely screwed on. For samples that were preserved with acid or alkalis prior to transport to the laboratory, the samples bottles were filled to the level specified by the analytical laboratory.

5.2.4.2 Analyses shall be carried out in accordance with methods described in ASTM or APHA - AWWA-WEF Standard.

Laboratory Analytical Methods

5.2.4.3 The testing of parameters presented in **Table 5-4** for all stations was conducted by ALS Technichem (HK) Pty Ltd. (HOKLAS Registration No. 066). Comprehensive quality assurance and control procedures were in place in order to ensure quality and consistency in results. The detection limits are provided in **Table 5-4**.

Table 5-4 Surface Water Monitoring Detection Limits and Limit of Reporting

Parameters	Detection Limit (in EM&A Manual)	Limit of Reporting	Method Reference
pH	0.1	0.1	APHA 4500 H+ B
Electrical conductivity	1 µS/cm	1 µS/cm	APHA 2510 B
Alkalinity	1 mg/L	1 mg/L	APHA 2320 B
COD	10 mg/L	5 mg/L	APHA 5220 C
BOD ₅	3 mg/L	2 mg/L	APHA 5210 B
TOC	1 mg/L	1 mg/L	APHA 5310 B
SS	0.1 mg/L	0.1 mg/L	APHA 2540 D
Ammonia-nitrogen	0.2 mg/L	0.01 mg/L	APHA 4500 NH3 G
TKN	0.4 mg/L	0.1 mg/L	APHA 4500Norg: D
Nitrate	0.5 mg/L	0.01 mg/L	APHA 4500 NO3 I
Sulphate	5 mg/L	1 mg/L	USEPA 375.4
Sulphite	2 mg/L	2 mg/L	APHA 4500 SO3 B
Phosphate	0.01 mg/L	0.01 mg/L	APHA 4500-P B & F
Chloride	0.5 mg/L	0.5 mg/L	USEPA 325.1
Sodium	50 µg/L	50 µg/L	USEPA 6010C
Mg	50 µg/L	50 µg/L	USEPA 6010C
Ca	50 µg/L	50 µg/L	USEPA 6010C
K	50 µg/L	50 µg/L	USEPA 6010C
Fe	50 µg/L	10 µg/L	USEPA 6010C
Ni	1 µg/L	1 µg/L	USEPA 6020A
Zn	10 µg/L	10 µg/L	USEPA 6020A
Mn	1 µg/L	1 µg/L	USEPA 6020A
Cu	1 µg/L	1 µg/L	USEPA 6020A
Pb	1 µg/L	1 µg/L	USEPA 6020A
Cd	0.2 µg/L	0.2 µg/L	USEPA 6020A
Coliform Count	1 cfu/ 100mL	1 cfu/ 100mL	DoE section 7.8, 7.9.4.1 & 3
Oil and Grease	5 mg/L	5 mg/L	APHA 5520 B

QA/ QC Requirements

5.2.4.4 All in situ monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or other international accreditation scheme before use, and subsequently re-calibrated at the intervals according to manufacturer's requirement throughout all stages of the surface water quality monitoring programme. Calibration of temperature, DO, salinity, pH and turbidity is conducted in three-month interval. Calibration of water flow is conducted annually. Responses of sensors and electrodes were checked with certified standard solutions before each use. Calibration for a DO meter was carried out before measurement according to the instruction manual of the equipment model. For the on-site calibration of field equipment, the requirements of the BS 1427:2018, "Guide to on-site test methods for the analysis of waters" was observed.

Decontamination Procedures

5.2.4.5 Water sampling equipment used during the course of the monitoring programme was decontaminated by manual washing and rinsed with clean distilled water after each sampling location.

Sampling Management and Supervision

5.2.4.6 All sampling bottles were labelled with the sample ID (including the indication of sampling station), laboratory number and sampling date. Water samples were dispatched to the testing laboratory for analysis as soon as possible after the sampling. All samples were stored in a cool box and kept at less than 4°C but without frozen. All water samples were handled under chain of custody protocols and relinquished to the laboratory representatives at locations specified by the laboratory. The laboratory determination works started within 24 hours after collection of water samples.

Quality Control Measures for Sample Testing

5.2.4.7 The samples testing was performed by ALS Technichem (HK) Pty Ltd. The following quality control programme was performed by the laboratory:

- One method blank; and
- One sample duplicate.

5.2.5 Monitoring Results

5.2.5.1 Impact surface water quality monitoring was conducted at WM1 and WM2 on 12 July 2023. No adverse weather was observed during reporting period. The detailed monitoring schedule is shown in **Appendix C**.

5.2.5.2 The summary of monitoring results is presented in **Table 5-5**. Detailed monitoring results at each monitoring station and graphical presentations of surface water quality (DO, SS and Turbidity) at the monitoring stations are given in **Appendix E** and **Appendix F**.

5.2.5.3 No particular observations are identified near the monitoring stations during the monitoring period.

Table 5-5 Summary of Impact Surface Water Monitoring Results

Monitoring Parameter(s)	Monitoring Station					
	WM1			WM2		
	Monitoring Results	Action Level	Limit Level	Monitoring Results	Action Level	Limit Level
pH	7.2	>7.7	>7.8	7.1	>7.6	>7.7
DO in mg/L	7.5	<7.4	<4	7.3	<5	<4
Turbidity in NTU	6.1	>9.2	>9.5	50.2	>108.3	>108.9
Electrical Conductivity in $\mu\text{S}/\text{cm}$	99	---	---	137	---	---
SS in mg/L	2.0	>9.7	>11.4	16.8	>94.5	>94.7
Alkalinity in mg/L	18	---	---	38	---	---
COD in mg/L	12			9		
BOD ₅ in mg/L	<2			<2		
TOC in mg/L	3			2		
Ammonia-nitrogen in mg/L	0.03			0.07		
TKN in mg/L	0.4			0.3		
Nitrate in mg/L	0.53			0.26		
Sulphate in mg/L	7			13		
Sulphite in mg/L	<2			<2		
Phosphorus in mg/L	0.01			<0.01		
Chloride in mg/L	7			7		
Sodium in $\mu\text{g}/\text{L}$	8350			6120		
Magnesium in $\mu\text{g}/\text{L}$	660			1330		
Calcium in $\mu\text{g}/\text{L}$	19400			15600		
Potassium in $\mu\text{g}/\text{L}$	690			2130		
Iron in $\mu\text{g}/\text{L}$	780			2370		
Nickel in $\mu\text{g}/\text{L}$	<1			2.0		
Zinc in $\mu\text{g}/\text{L}$	72			26		
Manganese in $\mu\text{g}/\text{L}$	72			757		
Copper in $\mu\text{g}/\text{L}$	2			2		
Lead in $\mu\text{g}/\text{L}$	<1			3		
Cadmium in $\mu\text{g}/\text{L}$	<0.2			<0.2		
Coliform Count in cfu/100mL	56			850		
Oil and Grease in mg/L	<5	<5				

5.2.5.4 No exceedance of Action Levels and Limit Level of surface water monitoring were recorded during the reporting period.

5.2.5.5 The Summary of Impact Surface Water Quality Exceedance are shown in **Table 5-6**.

Table 5-6 Summary of Impact Surface Water Quality Exceedance during the reporting period

Water Quality Monitoring Station	Parameter	pH	DO	Turbidity	SS	Exceedance Count
	Level Exceedance					
WM1	Action	0	0	0	0	0
	Limit	0	0	0	0	0
WM2	Action	0	0	0	0	0
	Limit	0	0	0	0	0

Remarks:

(1) # The investigation results will be presented in the report after the investigation.

(2) * equal to non-project related

5.2.6 Recommended Mitigation Measure

5.2.6.1 The recommended surface water mitigation measures from EIA report are listed as followed:

- Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities.
- The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows.
- The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silts and sediment traps should be 5 minutes under maximum flow conditions.
- All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads.
- Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts.
- Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.

5.2.7 Implementation of the temporary surface water drainage system

5.2.7.1 The site inspection and audits were carried out by ER, IC, ET & Contractor on weekly basis (IEC on monthly basis) to monitor the construction progress, maintenance performance and effectiveness of temporary surface water drainage system in the Project Site to fulfil the FEP Condition 2.13, EP Condition 2.15 and the section 5.2.1.1 of the EM&A Manual. The layout of the temporary surface water drainage system is presented in **Appendix Q**. The joint environmental site inspection records are shown in **Appendix J**.

5.2.7.2 All construction site runoff would be treated by silt removal facilities to fulfil the requirement of WPCO licenses from the project. Construction site runoff from the project after treatment was discharged to Ping Yuen River. The surface water monitoring results at WM2 (after the discharge point of silt removal facilities) can reflect the water quality at Ping Yuen River during the reporting period.

5.2.8 Event and Action Plan

5.2.8.1 Should non-compliance of the criteria occurs, action in accordance with the action plan in **Table 5-6** shall be carried out.

Table 5-6 Event and Action Plan for Water Quality

Event	ET	IEC	Contractor
Action level being exceeded by one sampling day	<ul style="list-style-type: none"> • Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor • Check monitoring data, all plant, equipment and Contractor's working methods • Repeat measurement on next day of exceedance 	<ul style="list-style-type: none"> • Verify Notification of Exceedance • Check monitoring data and Contractor's working methods 	<ul style="list-style-type: none"> • Rectify unacceptable practice • Amend working methods if appropriate
Action level being exceeded by two or more consecutive sampling days	<ul style="list-style-type: none"> • Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor • Check monitoring data, all plant, equipment and Contractor's working methods • Discuss with Contractor and IEC for remedial measures • Ensure mitigation measures are implemented • Increase the monitoring frequency to daily until no exceedance of Action level • Repeat measurement on next day of exceedance 	<ul style="list-style-type: none"> • Verify Notification of Exceedance • Check monitoring data and Contractor's working method • Discuss with ET and Contractor on possible remedial actions • Review the proposed mitigation measures • Supervise the implementation of mitigation measures 	<ul style="list-style-type: none"> • Submit proposal of additional mitigation measures to IEC of notification • Implement the agreed mitigation measures • Amend proposal if appropriate

Event	ET	IEC	Contractor
Limit Level being exceeded by one sampling day	<ul style="list-style-type: none"> • Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor; • Check monitoring data, all plant, equipment and Contractor's working methods • Discuss mitigation measures with IEC and Contractor • Ensure mitigation measure are implemented 	<ul style="list-style-type: none"> • Verify Notification of Exceedance • Check monitoring data submitted By ET and Contractor's working method • Discuss with ET and Contractor on possible remedial actions • Review the proposed mitigation measures • Supervise the implementation of mitigation measures 	<ul style="list-style-type: none"> • Critically review the working method • Rectify unacceptable practice • Take immediate corrective actions to avoid further exceedance • Submit proposal of mitigation measures to IEC • Implement the agreed mitigation measures •
Limit level being exceeded by two or more consecutive sampling days	<ul style="list-style-type: none"> • Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC, contractor and EPD • Check monitoring data, all plant, equipment and Contractor's working methods • Discuss mitigation measures with IEC and Contractor • Ensure mitigation measure are implemented 	<ul style="list-style-type: none"> • Verify Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working method • Discuss with ET and Contractor on possible remedial actions • Review the proposed mitigation measures • Supervise the implementation of mitigation measures 	<ul style="list-style-type: none"> • Critically review the working method • Rectify unacceptable practice • Take immediate corrective actions to avoid further exceedance • Submit proposal of mitigation measures to IEC • Implement the agreed mitigation measures • Resubmit proposals if problem still not under control • Slow down or to stop relevant activity until exceedance is abated

6 Waste Management

- 6.1.1** Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. Non-inert C&D materials were made up of general refuse, steels and paper/cardboard packaging materials. Steel materials generated from the Project were 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 **Appendix I**.
- 6.1.2** A total of 50,307 tonnes of C&D materials was reused at alternative disposal ground (NENT Landfill) during the reporting period. No Yard waste (collected to Y-Park) was generated during the reporting period. A total of 25.54 tonnes of general refuse and A total of 262.95 tonnes of non-recyclable yard waste was generated during the reporting period. The general refuse generated from the Project were disposed of at the NENT Landfill.
- 6.1.3** The recommended waste management mitigation measures from EIA report are listed as followed:
- Implement a trip-ticket system to ensure that the movement of C&D materials are properly documented and verified in accordance with DEVB TC(W) No. 6/2010.
 - Concrete and masonry should be used as general fill and steel reinforcement bars can be used by scrap steel mills.
 - Proper areas should be designated for waste segregation and storage wherever site conditions permit.
 - Maximise the use of reusable steel formwork to reduce the amount of C&D material.
 - Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement.
 - On-site sorting and segregation facility of all type of wastes is considered as one of the best practice in waste management and hence, should be implemented in all projects generating construction waste.
 - The sorted public fill and C&D waste should be properly reused.
 - Excavated slope, stockpiled material and bund walls should be covered by tarpaulin until used in order to prevent wind-blown dust during dry weather, and to reduce muddy runoff during wet weather.

7 Landfill Gas Monitoring

7.1 Monitoring Requirement during Construction

Monitoring for Construction Works

7.1.1 Intrinsically safe portable gas detectors should be used during or when working in any confined spaces, which have the potential for presence of LFG and risk of explosion or asphyxiation. The monitoring equipment should alarm, both audibly and visually, when the concentrations of the following gases were exceeded:

- CH₄: >10% Lower Explosion Limit (LEL);
- CO₂: >0.5%; and
- O₂: <18% by volume.

7.2 Monitoring Locations

7.2.1 During the construction works within the NENT Landfill Extension site with excavation of 1m deep or more, LFG concentrations should be monitored before entry and periodically during the progress of works. If drilling is required, the procedures for safety management and working procedures as stipulated in EPD's Landfill Gas Hazard Assessment – Guidance Note should be strictly adopted.

7.2.2 The monitoring frequency and areas to be monitored should be set down prior to commencement of groundworks by the Safety Officer. All measurements in excavations should be made with the monitoring tube located not more than 10mm from the exposed ground surface. Monitoring of excavations should be undertaken as follows:

7.2.3 For excavation works deeper than 1m, measurements should be made:

- at ground surface prior to excavation;
- immediately before any worker enters the excavation;
- at the beginning of each working day for the entire period the excavation remains open; and
- periodically through the working day whilst workers are in the excavation.

7.2.4 For excavation between 300mm and 1m deep, measurements should be made:

- directly after the excavation has been completed; and
- periodically whilst the excavation remains open.

7.2.5 For excavations less than 300mm deep, monitoring may be omitted, at the discretion of the Safety Officer.

7.2.6 The locations of LFG monitoring locations during reporting period are shown in **Table 7-1**. The Site formation layout plan is shown in **Figure 2** and the Layout of LFG monitoring locations is presented in **Figure 3**.

Table 7-1 Locations of LFG Monitoring during reporting period

Monitoring Location	Type of works
Portion A +55 mpD to 70 mpD Platform	Excavation Works

7.3 Monitoring Equipment

7.3.1.1 Gas Detector was used for carrying out LFG monitoring for Construction Works. **Table 7-2** summarises the equipment that were used in the LFG monitoring programme. The calibration certificates are shown in **Appendix D**. The detection limits are provided in **Table 7-3**.

Table 7-2 LFG Monitoring Equipment

Monitoring Parameters	Equipment	Model	Expiry Date
CH ₄ & O ₂	Gas Detector	PS200 (S/N: 373075)	16 Nov 2023
CO ₂	Gas Analyser	GEM5000 (S/N: G508566)	16 Aug 2023

Table 7-3 Landfill Gas Monitoring Detection Limits

Parameters	Detection Limit
CH ₄	1% LEL
O ₂	0.1%
CO ₂	0.1%

7.4 Event and Action Plan (EAP)

7.4.1 Should non-compliance of the criteria occur, action in accordance with the action plan in **Table 7-4** shall be carried out.

Table 7-4 Action Plan for the monitoring during construction phase

Parameter	Monitoring Result	Action
Oxygen (O ₂)	Action Level <19% O ₂	Ventilate trench/void to restore O ₂ to >19%
	Limit Level <18% O ₂	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore O ₂ to >19%
Methane (CH ₄)	Action Level >10% LEL*	Prohibit hot works Increase ventilation to restore CH ₄ to <10% LEL
	Limit Level >20% LEL*	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore CH ₄ to <10% LEL
Carbon dioxide (CO ₂)	Action Level** >0.5%** CO ₂	Ventilate to restore CO ₂ to <0.5%
	Limit Level >1.5% CO ₂	Stop works Evacuate personnel / prohibit entry Increase ventilation to restore CO ₂ to <0.5%

* LEL: Lower Explosive Limit - concentrations in air below which there is not enough fuel to continue an explosion.

** This Action Level of CO₂ at 0.5% is set for reference only, assuming no CO₂ emission from a particular location.

Depending on the baseline CO₂ levels, the Action Level at a particular location will be changed.

7.5 Monitoring Results

- 7.5.1** The LFG monitoring was carried out two rounds (at the beginning of works in the morning and after lunch) at the working days. The monitoring period of each round of LFG monitoring is around 5 minutes.
- 7.5.2** The LFG monitoring was conducted at Portion A +55 mpD to 70 mpD Platform in July 2023 (Conducted on working days). The LFG monitoring results are summarized in **Table 7-5**.

Table 7-5 Summary of LFG Monitoring Results

LFG Monitoring Station	Monitoring Date	Monitoring Parameter(s)			
		CH ₄ in %	LEL in %/v	CO ₂ in %	O ₂ in %
		Average Monitoring Results			
Portion A +55 mpD to 70 mpD Platform	3 Jul 2023	0	0	0	20.2
	4 Jul 2023	0	0	0	20.2
	5 Jul 2023	0	0	0	20.1
	6 Jul 2023	0	0	0	20.2
	7 Jul 2023	0	0	0	20.1
	8 Jul 2023	0	0	0	20.0
	10 Jul 2023	0	0	0	20.2
	11 Jul 2023	0	0	0	20.1
	12 Jul 2023	0	0	0	20.1
	13 Jul 2023	0	0	0	20.2
	14 Jul 2023	0	0	0	20.2
	15 Jul 2023	0	0	0	20.1
	18 Jul 2023	0	0	0	20.2
	19 Jul 2023	0	0	0	20.1
	20 Jul 2023	0	0	0	20.1
	21 Jul 2023	0	0	0	20.1
	22 Jul 2023	0	0	0	20.1
	24 Jul 2023	0	0	0	20.1
	25 Jul 2023	0	0	0	20.1
	26 Jul 2023	0	0	0	20.1
27 Jul 2023	0	0	0	20.1	
28 Jul 2023	0	0	0	20.2	
29 Jul 2023	0	0	0	20.2	
31 Jul 2023	0	0	0	20.2	
Action Level		>10% LEL	---	>0.5%** CO ₂	<19%

* LEL: Lower Explosive Limit - concentrations in air below which there is not enough fuel to continue an explosion.

** This Limit Level of CO₂ at 0.5% is set for reference only, assuming no CO₂ emission from a particular location.

7.5.3 No exceedance of Limit Levels of LFG was recorded during the reporting period. Therefore, there was no record of Notification of Environmental Quality Limits Exceedance in the **Appendix G**.

7.5.4 No effect that arose from the other special phenomena and work progress of the concerned site was noted during the current monitoring month.

7.6 Recommended Mitigation Measures

7.6.1 The recommended landfill gas mitigation measures from EIA report are listed as followed:

- Special LFG precautions should be taken due to close proximity of NENT landfill extension site to existing landfill to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity).

- Prominent safety warning signs should be erected on-site to alert all personnel and visitors of LFG hazards during excavation works.
- No smoking or burning should be permitted on-site.
- Prominent 'No smoking' and 'No Naked Flames' signs should be erected on-site.
- No worker should be allowed to work alone at any time in excavated trenches or confined areas on-site.
- Adequate fire fighting equipment should be provided on-site.
- Construction equipment should be equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors.
- Electrical motors and extension cords should be explosion-proof and intrinsically safe for use on-site.
- 'Permit to Work' system should be implemented.
- Welding, flame-cutting or other hot works should be conducted only under 'Permit to Work' system following clear safety requirements, gas monitoring procedures and presence of qualified persons to supervise the works.

8 Landscape and Visual

8.1 Monitoring Requirement

- 8.1.1 In order to monitor the landscape and visual impact after providing mitigation measures effectively, all the specified and affected LCAs, LRs and VSRs should be monitored. Implementation of the mitigation measures during construction phase of the Project has been monitored through the regular site inspection/audit.
- 8.1.2 All relevant environmental mitigation measures listed in the approved EIA Report and the EM&A Manual and their implementation status are summarised in **Appendix K**.

8.2 Result and Observation

- 8.2.1 Measures to mitigate the landscape and visual impacts during the construction phase has been checked to ensure compliance with the intended aims of the measures within the reporting period. The progress of the engineering works are regularly reviewed on site to identify the earliest practical opportunities for the landscape works to be undertaken.
- 8.2.2 In order to monitor the landscape and visual impact after providing mitigation measures effectively, all the specified and affected LCAs, LRs and VSRs should be monitored. Implementation of the mitigation measures during construction phase of the Project has been monitored through the regular site inspection/audit.

9 Cultural Heritage

- 9.1.1** The Mitigation measures for preservation of the cultural landscape feature located within the project area was conducted before commencement of construction of the project based on the requirement of Survey Report and Mapping Records for Boulder Paths BP1 & 2 & Conditions of G2, G4, G5 G6, G7, G8, G14, G15, G25, G26 and G27 within NENTX.
- 9.1.2** The survey and mapping works carried out on 23 August 2022 and the verification works carried out on 23 August 22 confirmed that both 2 boulder paths BP1 and BP2 are fall outside the site boundary and the Project area.
- 9.1.3** All the affected graves within the waste boundary have been removed in accordance with section 119(1) of the Public Health and Municipal Services Ordinance (Cap 132). Removal of the graves as shown on Figure 2 attached to the FEP was proven by the visit of graves on 8 July 2022. All the graves as shown on Figure 2 attached to the FEP were abandoned and removed and no mitigation or preservation measures is necessary.
- 9.1.4** The Survey Report and Mapping Records for Boulder Paths BP1 & 2 was certified by ET on 10 Oct 2022, was verified by IEC and submitted to EPD on 12 Oct 2022. The Conditions of G2, G4, G5 G6, G7, G8, G14, G15, G25, G26 and G27 within NENTX was certified by ET, was verified by IEC and submitted to EPD on 15 Oct 2022. No later than four weeks before commencement of construction of the project in accordance with Condition 2.4 of the FEP-01/292/2007.
- 9.1.5** Implementation of the mitigation measures such as permanent fencing to protect the boulder path and setting up warning notices during construction phase of the Project has been monitored through the regular site inspection/audit. The permanent fencing locations are shown in **Appendix M**. In case of any presence of undiscovered grave during construction phase, AMO will be informed as soon as possible.

10 Ecological Monitoring

- 10.1.1** The post-transplantation monitoring was conducted on 18 Jul 2023 based on the requirement of the approved Transplantation Proposal for Plant Species of Conservation Importance (Rev.1). The 12th Post-transplantation Monitoring and Audit Report (18th Jul 2023) presents the details of requirements, monitoring results and site inspection with photos. The site inspection photos are also summarized in **Appendix N**. During the reporting period, the numbers, measurements, and health conditions of the transplanted plant species are recorded.
- 10.1.2** In the reporting period, the post-translocation monitoring for the Endemic Freshwater Crab *Somanniathelphusa zanklon* was conducted on 12 Jul 2023 based on the requirement of the approved Revised Translocation Proposal for the Endemic Freshwater Crab *Somanniathelphusa zanklon*. The 12th Post-Translocation Monitoring Report (Jul 2023) presents the details of requirements, monitoring results and site inspection with photos. The site inspection photos are also summarized in **Appendix N**. During the reporting period, no *S. zanklon* individual is identified.
- 10.1.3** The details of requirements, monitoring results and site inspection with photos for the post-translocation monitoring and post-transplantation monitoring would be reported separately.
- 10.1.4** The milestone of the ecological monitoring is presented in **Table 10-1**. The softcopies of the submissions are provided in <https://www.nentx-ema.com/ep-submissions/>.

Table 10-1 Milestone of the Ecological Monitoring

Type of Monitoring	Monitoring Event No.	Monitoring Date
Post-transplantation Monitoring	1 st	24 Nov 2022
	2 nd	9 Dec 2022
	3 rd	21 Dec 2022
	4 th	13 Jan 2023
	5 th	26 Jan 2023
	6 th	8 Feb 2023
	7 th	24 Feb 2023
	8 th	20 Mar 2023
	9 th	21 Apr 2023
	10 th	12 May 2023
	11 th	16 Jun 2023
	12 th	18 Jul 2023
Post-translocation Monitoring	1 st (Aug 2022)	29 Aug 2022
	2 nd (Sep 2022)	28 Sep 2022
	3 rd (Oct 2022)	28 Oct 2022
	4 th (Nov 2022)	22 Nov 2022
	5 th (Dec 2022)	29 Dec 2022
	6 th (Jan 2023)	30 Jan 2023
	7 th (Feb 2023)	24 Feb 2023
	8 th (Mar 2023)	20 Mar 2023
	9 th (Apr 2023)	19 Apr 2023
	10 th (May 2023)	17 May 2023
	11 th (Jun 2023)	7 Jun 2023
	12 th (Jul 2023)	12 Jul 2023

11 Site Inspection and Audit

11.1.1 Site Inspection and audits were carried out by ET on weekly basis to monitor the implementation of proper environmental management practices and mitigation measures in the Project Site.

11.1.2 Weekly ET environmental site inspections were conducted in the reporting period on 03, 10, 18, 24 & 31 July 2023. A joint environmental site inspection was carried out by the representatives of the ER, the Contractor, IEC and the ET on 18 July 2023. The joint environmental site inspection records are shown in **Appendix J**. There was no noncompliance recorded during the site inspections.

11.1.3 Major findings and recommendations are summarized as follows:

03 July 2023

Observation(s):

- Dusty stockpiles in Portion A shall be covered with impervious sheets when they are not in used. The Contractor was reminded to cover the dusty stockpile with impervious sheets.
- Muddy water was observed at the vehicular entrance in Portion A. The Contractor was reminded to clear the muddy water and divert the muddy water to wastewater treatment facility.
- Chemical containers in SBA shall be stored properly to prevent any potential of chemical leakage and generation of chemical waste. The Contractor has been reminded to provide proper chemical storage area on site.

12 Jul 2023

Observation(s):

- Full loading of the rubbish skips for general waste at the Portion D and lack of waste separation were found. The contractor was recommended that accumulation of waste should be avoid, the waste should be disposed regularly & the general waste should be collected properly by using the waste separation facilities for paper, aluminium cans and plastic bottles etc.
- The loaded dump truck without covered by impervious sheeting was found. The contractor was advised that the loaded dump trucks should be covered by impervious sheeting when transportation of materials was conducting at the access road.
- The stagnant water, floating leaves, deposited silt and grit were found at the sedimentation basin near the wheel washing facilities at the Portion B1. The contractor was recommended that the stagnant water should be collected to silt removal facilities for treatment before reusing for wheel washing. The floating leaves, deposited silt and grit should be removed regularly.
- The high amount of deposited silt was found at the silt removal facilities at the Portion E3-1. The contractor was advised that the deposited silt should be removed and regularly and increase the checking frequency of it, and the silt removal facilities should be maintained at good condition to maintain the high effectiveness of it.

- The exposed slope surfaces were not covered by tarpaulin sheets or treated with shotcrete at the Portion E3-1. The contractor was recommended to implement the cover works of exposed slope surfaces by tarpaulin sheets or shotcrete at the Portion E3-1 to minimise the potential high concentration construction runoff to silt removal facilities.

18 July 2023

Observation(s):

- The earth bund along the edge of the slope in Portion A was collapsed. The earth bund along the edge of the slope in Portion A should be reconstructed to prevent surface runoff flowing outside the site boundary. The Contractor was reminded to review the height of the earth bund to ensure the surface runoff should not flow outside the site boundary.
- The stagnant water in the drip trays should be cleared off In Portion A. The Contractor was reminded to clear the drip tray after the rainfall.
- EP shall be displayed at the entrance of portion. The Contractor was reminded to display the EP at the entrance of each portion.
- Holes are found on the silt fencing. The Contractor was recommended to review and replace the damage silt fencing in SBA to fulfil EP condition 2.13b.
- Surface Protection in Portion A should be maintained properly after the rainfall. The Contractor was reminded to conduct maintenance work on the slope surface in Portion A.

24 July 2023

Observation(s):

- Dusty materials was entering in the exist channel in Portion A. Earth bund or sand barriers shall be provided along the existing channels in Portion A.
- Earth bund shall be constructed at the edge of the slope to prevent surface runoff flowing outside the site in Portion A. The contractor was recommended to construction earth bund along the edge of the slope in Portion A.
- The work area in Portion A was dry and dusty. The contractor was advised to schedule watering in the work area and review the coverage of the water sprinkler.

Reminder(s):

- The accumulated silt in sedimentation basin Portion E3 shall be removed regularly. The Contractor was reminded to clear up the accumulated silt regularly to ensure the proper function of the sedimentation basin.

31 July 2023

Observation(s):

- Earth bunds and ditches should be established at the boundary of the +52 mpd Platform of the Portion A. The contractor was advised that the earth bunds and ditches should be constructed at the boundary of the +52 mpd Platform of the Portion A. The sandbags barriers or other control of surface runoff measures

should be provided at the boundary in short term to avoid the surface runoff flow to the earth bunds at the boundary of the +38 mpd platform directly.

- The slope surface at the Portion E4 shall be covered by impervious sheet. The contractor was recommended that the exposed slope at the Portion E4 should be covered by impervious sheet. The exposed slope at the Portion E4 should be treated with shotcrete for long term.
- The assess road at the Portion E4 was dry. The contractor was advised that the assess road at the Portion E4 should be sprayed with water when the assess road is dry to minimize the dust suppression. The water sprinkler should be considered to establish at the assess road of the Portion E4.
- The accumulated silt and grit were found near the sandbags barriers of the Portion E3-1 silt removal facilities. The contractor was advised that the silt and grit should be removed near the sandbags barriers of the Portion E3-1 silt removal facilities after heavy rain.
- The accumulated water at the drip tray under the silt removal facilities was found. The contractor was recommended to remove the accumulated water at the drip tray to minimize the potential chemical waste.

Reminder(s):

- The contractor was reminded that the particular attention should be paid to the control of silty surface runoff during upcoming storm event in accordance with Appendix A2 of ProPECC PN/94. The contractor was reminded that the particular attention should be paid to the control of silty surface runoff during upcoming storm event in accordance with Appendix A2 of ProPECC PN/94.

11.1.4 1 general site inspection on 31 July 2023 was conducted by Environmental Protection Department-Regional Office (North) (EPD-RNG).

12 Environmental Non-conformance

12.1 Summary of Monitoring Exceedance

12.1.1 No exceedance of the Action Levels and Limit Level were recorded at designated monitoring stations during the reporting period.

12.2 Summary of Environmental Non-compliance

12.2.1 No non-compliance event was recorded during the reporting period.

12.3 Summary of Environmental Complaint

12.3.1 No complaint was recorded during the reporting period.

12.3.2 The cumulative statistics on environmental complaints are presented in **Table 12-1**.

Table 12-1 Cumulative Statistics on Environmental Complaints

Reporting Period	Environmental Aspects					No. of Environmental Complaints
	Air Quality	Noise	Water Quality	Waste	Ecology	
Jul 2023	0	0	0	0	0	0
Accumulate of project	1*	0	1#	0	0	2(1* & 1#)

Remarks:

(1) * equal to non-project related after the investigation

(2) # equal to the investigation results will be presented in the report after the investigation.

12.3.3 Cumulative complaint / enquiry log, Summaries of complaints and enquiries & Environmental complaint reports are presented in **Appendix P**.

12.4 Summary of Environmental Summons and Successful Prosecution

12.4.1 No summons and successful prosecution were received during the reporting period

13 Implementation Status on Environmental Mitigation Measures

13.1 General

13.1.1 The Contractor has generally implemented environmental mitigation measures and requirements as stated in the EIA Report, the EP and EM&A Manual and the contract documents. The implementation status during the reporting period is summarized in **Appendix K**.

13.2 Temporary Surface Water Drainage System (TSWDS)

13.2.1 The effectiveness of the TSWDS is keeping reviewing and improve by the contractor. The layout of the TSWDS is presented in **Appendix Q**.

13.3 Hydroseeding

13.3.1 The implementation of hydroseeding at the site boundary is keeping conducting by the contractor. The layout of implementation of hydroseeding is presented in **Appendix Q**.

14 Future Key Issues

15.2 Key Issues for the Coming Month

15.2.1 Works to be undertaken for the coming monitoring periods are summarized below. Detailed construction activities and locations are summarized in **Appendix L**.

-
- Material loading and unloading, site traffic at Portion A, SBA to alternative disposal ground

 - Permanent site office foundation works with pouring of concrete at Portion D

 - Site clearance at Portion A & E3-1

 - Installation of permanent fencing at Portion A, B1 & E4

 - Site formation at Portion A & E3-1

 - Tree felling at Portion E3-1 & E4

15.2.2 Potential environmental impacts arising from the above construction activities are mainly associated with air quality, construction noise, water quality, waste management, landfill gas monitoring, landscape and visual, cultural heritage and ecology

15.3 Monitoring Schedule for the Next Month

15.3.1 The tentative schedule of environmental monitoring for the next reporting period is presented in **Appendix C**.

15.4 Construction Programme for the Next Month

15.4.1 The most updated construction programme for the Project is presented in **Appendix A**.

16 Conclusion

- 16.1.1 1-hr & 24-hr TSP impact monitoring was carried out in the reporting month. No Action / Limit Level exceedance for 1-hr & 24-hr TSP impact monitoring was recorded during the period.
- 16.1.2 Construction noise monitoring was carried out in the reporting month. No Action / Limit Level exceedance at NM1a & NM2a was recorded during the period.
- 16.1.3 Site clearance of future landfilling area is in progress. The installation of groundwater monitoring boreholes will be installed after the site formation work of the landfilling area. The target commencement period of groundwater monitoring will be in 2026. No groundwater monitoring is required before the completion of site formation work of the landfilling area.
- 16.1.4 Surface water monitoring was carried out in the reporting month. No Action / Limit Level exceedance of surface water monitoring was recorded during the reporting period.
- 16.1.5 Landfill Gas Monitoring was carried out in the reporting month. No exceedance of Limit Levels of LFG was recorded during the reporting period.
- 16.1.6 In terms of cultural heritage, implementation of the mitigation measures such as permanent fencing to protect the boulder path and setting up warning notices during construction phase of the Project has been monitored through the regular site inspection/audit in the reporting period. All the mitigation measures are in order.
- 16.1.7 Post-transplantation monitoring was carried out in the reporting month. Post-translocation Monitoring was carried out in the reporting period. No *S. zanklon individual* was found. The numbers, measurements and health conditions of the transplanted species are recorded.
- 16.1.8 Five environmental site inspections were carried out in the reporting month. Recommendations on mitigation measures for Permit/ Licenses were given to the Contractor for remediating the deficiencies identified during the site inspections.
- 16.1.9 No complaint was recorded during the reporting period.
- 16.1.10 No non-compliance event was recorded during the reporting period.
- 16.1.11 No notification of summons and prosecution was received during the reporting period.
- 16.1.12 The ET will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Figure 1 Location of the Project Site

Figure 2 Impact Air Quality, Noise & Surface Water Quality Monitoring Locations

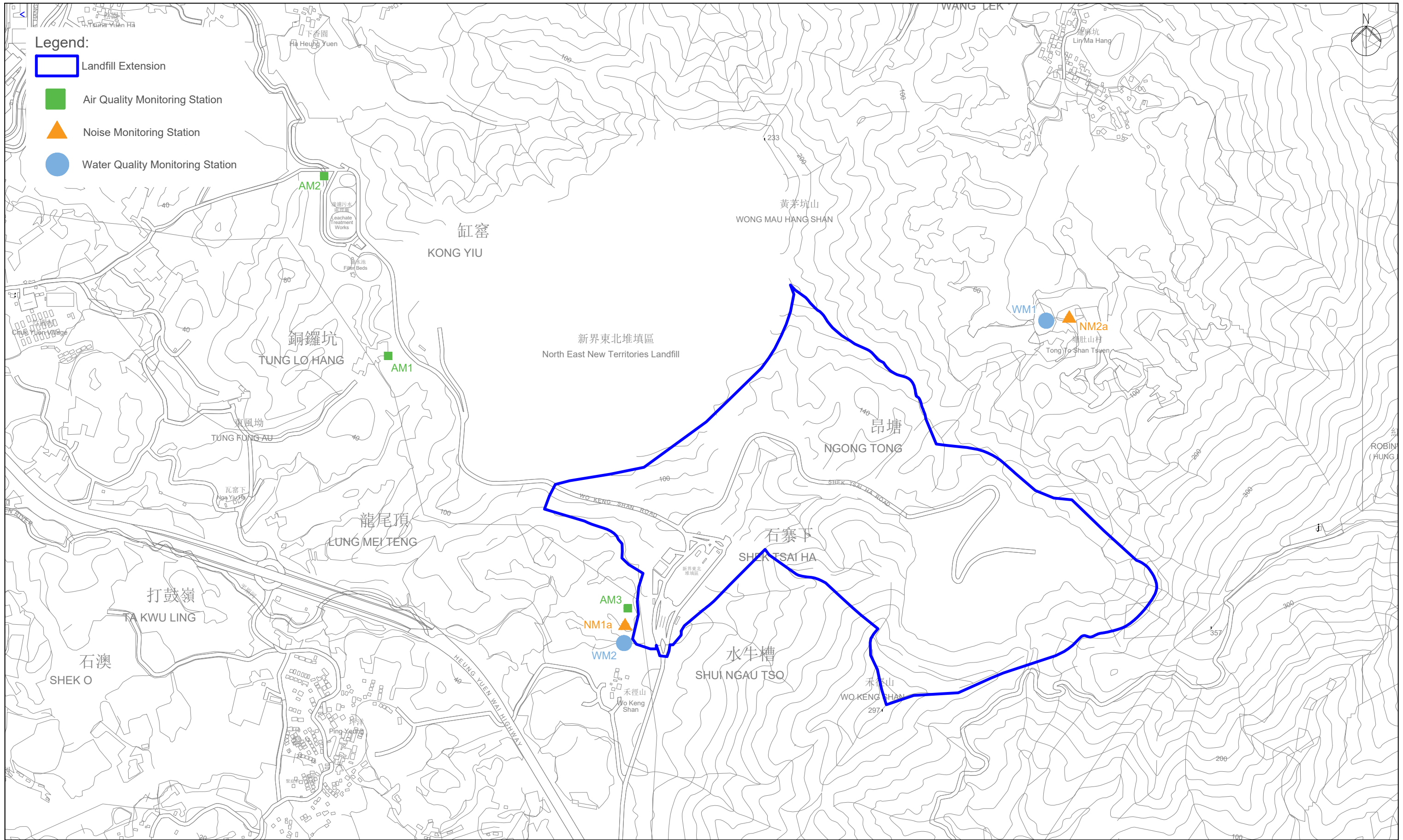


Figure 3 Landfill Gas Monitoring Locations

Gas Monitoring Point ●

Monitoring Frequency: 2 times per day

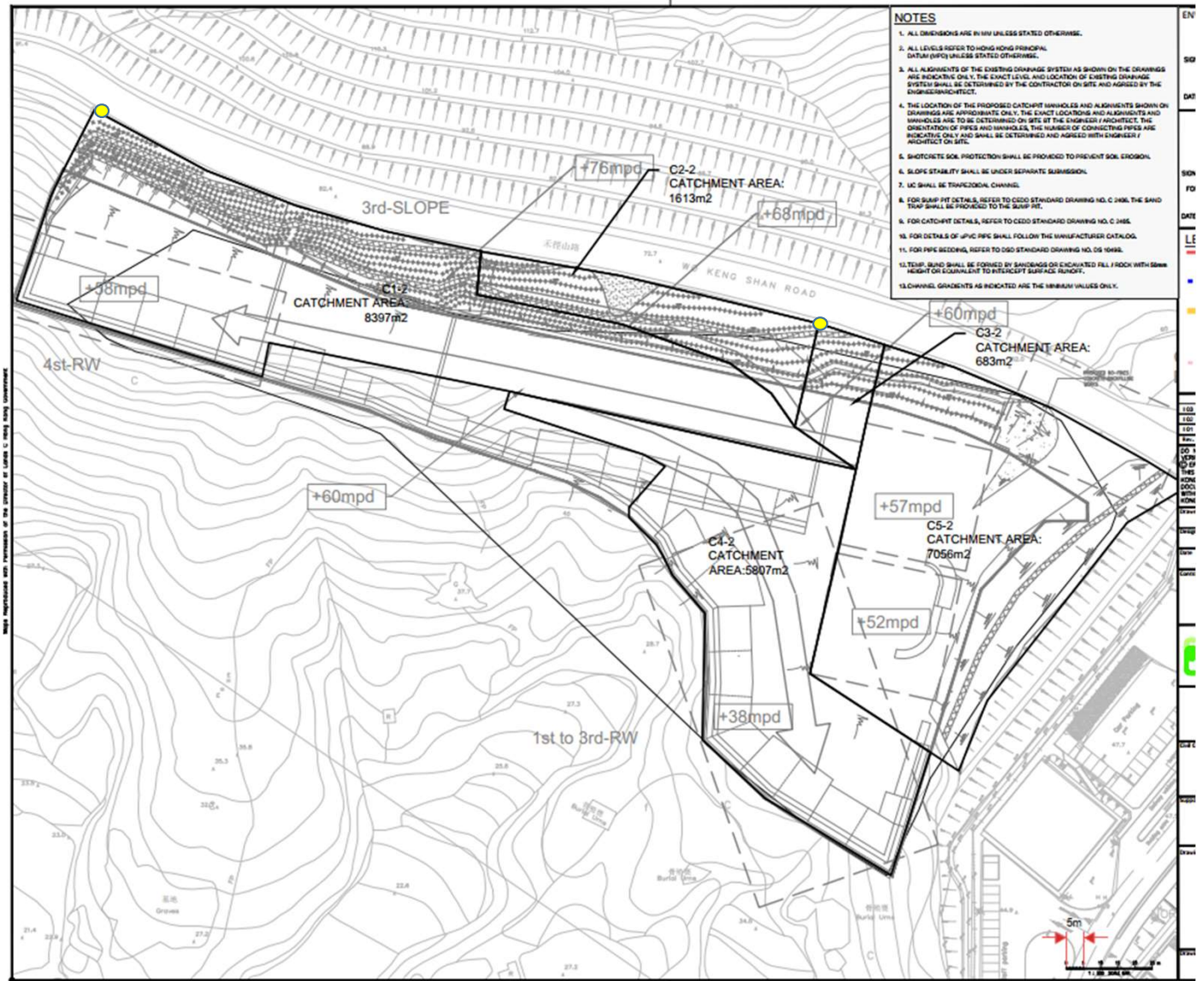
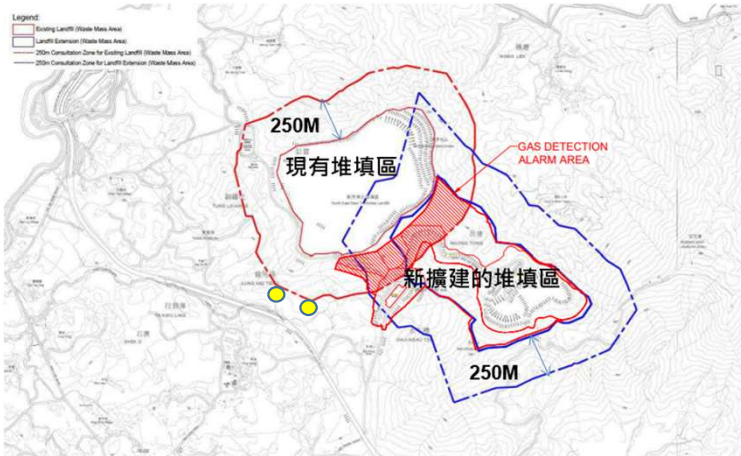
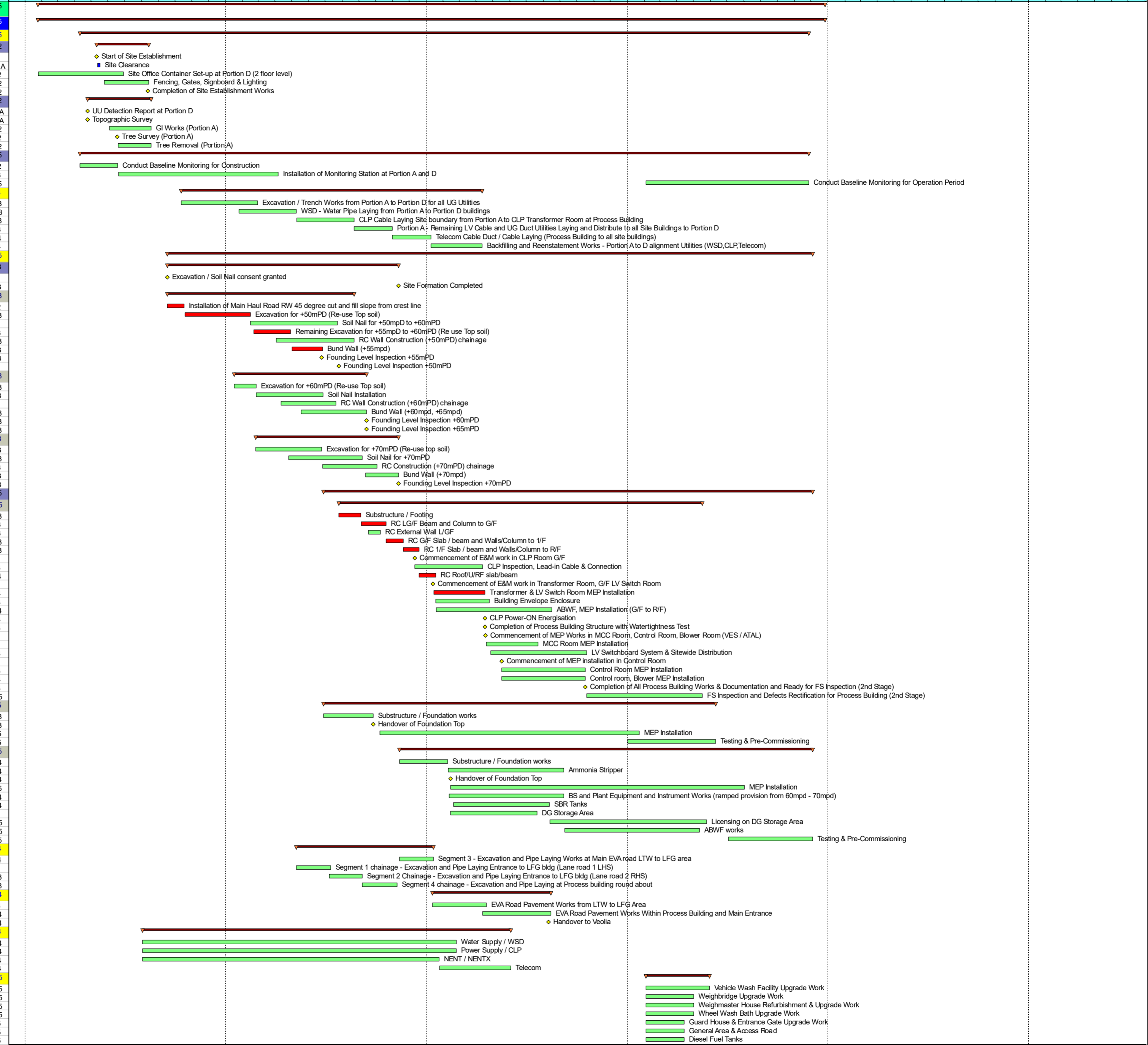


Figure 3 Landfill Gas Monitoring Locations

Appendix A Construction Programme

Activity ID	Activity Name	OD	Start	Finish	2022												2023												2024												2025												2026												2027											
					Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov

NENTX		1432	25-Jan-22 A	27-Dec-25
CONSTRUCTION - INITIAL WORKS PHASE 1		1432	25-Jan-22 A	27-Dec-25
PORTION A - Advance Works & Site Establishment		1403	11-Apr-22 A	27-Nov-25
SITE ESTABLISHMENT AND MOBILISATION		202	12-May-22 A	14-Aug-22
05-0001	Start of Site Establishment	0	12-May-22 A	
05-0002	Site Clearance	12	13-May-22 A	18-May-22 A
05-0003	Site Office Container Set-up at Portion D (2 floor level)	60	13-May-22 A	29-Jun-22
05-0004	Fencing, Gates, Signboard & Lighting	80	25-May-22 A	14-Aug-22
05-0005	Completion of Site Establishment Works	0		12-Aug-22
SITE SURVEY & INVESTIGATION WORKS		75	25-Apr-22 A	18-Aug-22
05-0007	UU Detection Report at Portion D	0		25-Apr-22 A
05-0008	Topographic Survey	0		25-Apr-22 A
05-0009	GI Works (Portion A)	75	04-Jun-22	18-Aug-22
05-0010	Tree Survey (Portion A)	0		17-Jun-22
05-0011	Tree Removal (Portion A)	59	19-Jun-22	18-Aug-22
ENVIRONMENTAL MONITORING		1138	11-Apr-22	27-Nov-25
05-0018	Conduct Baseline Monitoring for Construction	60	11-Apr-22	18-Jun-22
05-0019	Installation of Monitoring Station at Portion A and D	250	20-Jun-22	06-Apr-23
05-0020	Conduct Baseline Monitoring for Operation Period	255	04-Feb-25	27-Nov-25
SITEWIDE Underground UTILITIES (Portion A to Portion D)		470	12-Oct-22	11-Apr-24
05-0012	Excavation / Trench Works from Portion A to Portion D for all UG Utilities	120	12-Oct-22	28-Feb-23
05-0013	WSD - Water Pipe Laying from Portion A to Portion D buildings	90	25-Jan-23	09-Mar-23
05-0014	CLP Cable Laying Site boundary from Portion A to CLP Transformer Room at Process Building	90	10-May-23	22-Aug-23
05-0015	Portion A - Remaining LV Cable and UG Duct Utilities Laying and Distribute to all Site Buildings	60	22-Aug-23	31-Oct-23
05-0016	Telecom Cable Duct / Cable Laying (Process Building to all site buildings)	60	31-Oct-23	09-Jan-24
05-0017	Backfilling and Reenstatement Works - Portion A to D alignment Utilities (WSD,CLP,Telecom)	80	09-Jan-24	11-Apr-24
PORTION A - Infrastructure Treatment Area		1174	17-Sep-22	04-Dec-25
SITE FORMATION		397	17-Sep-22	11-Nov-23
05-0021	Excavation / Soil Nail consent granted	0	17-Sep-22	
05-0022	Site Formation Completed	0		11-Nov-23
Soil Ground Platform at +50mPD/+55mPD		320	17-Sep-22	22-Aug-23
05-0023	Installation of Main Haul Road RW 45 degree cut and fill slope from crest line	28	17-Sep-22	17-Oct-22
05-0024	Excavation for +50mPD (Re-use Top soil)	111	19-Oct-22	15-Feb-23
05-0025	Soil Nail for +50mPD to +60mPD	150	15-Feb-23	23-Jul-23
05-0026	Remaining Excavation for +55mPD to +60mPD (Re use Top soil)	64	21-Feb-23	29-Apr-23
05-0027	RC Wall Construction (+50mPD) chainage	134	03-Apr-23	22-Aug-23
05-0028	Bund Wall (+55mpd)	54	02-May-23	26-Jun-23
05-0029	Founding Level Inspection +55mPD	0		24-Jun-23
05-0030	Founding Level Inspection +50mPD	0		26-Jul-23
Soil Ground Platform at +60mPD (LTW Plant)		229	17-Jan-23	14-Sep-23
05-0031	Excavation for +60mPD (Re-use Top soil)	36	17-Jan-23	25-Feb-23
05-0032	Soil Nail Installation	115	25-Feb-23	27-Jun-23
05-0033	RC Wall Construction (+60mPD) chainage	96	12-Apr-23	20-Jul-23
05-0034	Bund Wall (+60mpd, +65mpd)	117	18-May-23	14-Sep-23
05-0035	Founding Level Inspection +60mPD	0		14-Sep-23
05-0036	Founding Level Inspection +65mPD	0		14-Sep-23
Soil Ground Platform at +70mPD (LTW Plant)		248	25-Feb-23	11-Nov-23
05-0037	Excavation for +70mPD (Re-use top soil)	113	25-Feb-23	24-Jun-23
05-0038	Soil Nail for +70mPD	130	26-Apr-23	06-Sep-23
05-0039	RC Construction (+70mPD) chainage	96	26-Jun-23	03-Oct-23
05-0040	Bund Wall (+70mpd)	56	13-Sep-23	11-Nov-23
05-0041	Founding Level Inspection +70mPD	0		11-Nov-23
PROCESS TREATMENT AREA		891	28-Jun-23	04-Dec-25
Process Building (+50mpd)		661	26-Jul-23	17-May-25
05-0042	Substructure / Footing	40	26-Jul-23	04-Sep-23
05-0043	RC LG/F Beam and Column to G/F	42	05-Sep-23	20-Oct-23
05-0044	RC External Wall U/GF	18	18-Sep-23	09-Oct-23
05-0045	RC G/F Slab / beam and Walls/Column to 1/F	30	20-Oct-23	20-Nov-23
05-0046	RC 1/F Slab / beam and Walls/Column to R/F	29	20-Nov-23	19-Dec-23
05-0047	Commencement of E&M work in CLP Room G/F	0	11-Dec-23	
05-0048	CLP Inspection, Lead-in Cable & Connection	107	11-Dec-23	12-Apr-24
05-0050	RC Roof/U/R/F slab/beam	27	19-Dec-23	18-Jan-24
05-0051	Commencement of E&M work in Transformer Room, G/F LV Switch Room	0	13-Jan-24	
05-0052	Transformer & LV Switch Room MEP Installation	80	15-Jan-24	17-Apr-24
05-0053	Building Envelope Enclosure	90	18-Jan-24	25-Apr-24
05-0054	ABWF, MEP Installation (G/F to R/F)	180	19-Jan-24	16-Aug-24
05-0055	CLP Power-ON Energisation	0		17-Apr-24
05-0056	Completion of Process Building Structure with Watertightness Test	0		17-Apr-24
05-0057	Commencement of MEP Works in MCC Room, Control Room, Blower Room (VES / ATAL)	0	18-Apr-24	
05-0058	MCC Room MEP Installation	80	19-Apr-24	22-Jul-24
05-0059	LV Switchboard System & Sitewide Distribution	150	27-Apr-24	19-Oct-24
05-0060	Commencement of MEP installation in Control Room	0	17-May-24	
05-0061	Control Room MEP Installation	130	17-May-24	16-Oct-24
05-0062	Control room, Blower MEP Installation	130	17-May-24	16-Oct-24
05-0063	Completion of All Process Building Works & Documentation and Ready for FS Inspection (2nd Stage)	0		16-Oct-24
05-0064	FS Inspection and Defects Rectification for Process Building (2nd Stage)	180	19-Oct-24	17-May-25
LFG Plant (+55mpd)		678	28-Jun-23	10-Jun-25
05-0065	Substructure / Foundation works	90	28-Jun-23	26-Sep-23
05-0066	Handover of Foundation Top	0		26-Sep-23
05-0067	MEP Installation	450	08-Oct-23	22-Jan-25
05-0068	Testing & Pre-Commissioning	150	02-Jan-25	10-Jun-25
LTW Plant (+60mpd, +70mpd)		753	13-Nov-23	04-Dec-25
05-0069	Substructure / Foundation works	86	13-Nov-23	09-Feb-24
05-0070	Ammonia Stripper	180	10-Feb-24	07-Sep-24
05-0071	Handover of Foundation Top	0		14-Feb-24
05-0072	MEP Installation	510	14-Feb-24	01-Aug-25
05-0073	BS and Plant Equipment and Instrument Works (ramped provision from 60mpd - 70mpd)	180	12-Feb-24	07-Sep-24
05-0074	SBR Tanks	150	19-Feb-24	12-Aug-24
05-0075	DG Storage Area	150	14-Feb-24	20-Jul-24
05-0076	Licensing on DG Storage Area	270	13-Aug-24	25-May-25
05-0077	ABWF works	210	09-Sep-24	12-May-25
05-0078	Testing & Pre-Commissioning	150	04-Jul-25	04-Dec-25
PORTION A - Underground Drainage and Process Pipeworks		240	09-May-23	14-Jan-24
05-0079	Segment 3 - Excavation and Pipe Laying Works at Main EVA road LTW to LFG area	60	13-Nov-23	14-Jan-24
05-0080	Segment 1 chainage - Excavation and Pipe Laying Entrance to LFG bldg (Lane road 1 LHS)	60	09-May-23	11-Jul-23
05-0081	Segment 2 Chainage - Excavation and Pipe Laying Entrance to LFG bldg (Lane road 2 RHS)	60	08-Jul-23	06-Sep-23
05-0082	Segment 4 chainage - Excavation and Pipe Laying at Process building round about	60	06-Sep-23	09-Nov-23
PORTION A - EVA Road Paving Works		203	12-Jan-24	14-Aug-24
05-0067.01	EVA Road Pavement Works from LTW to LFG Area	90	12-Jan-24	19-Apr-24
05-0067.02	EVA Road Pavement Works Within Process Building and Main Entrance	120	12-Apr-24	14-Aug-24
05-0067.03	Handover to Veolia	0		10-Aug-24
SITEWIDE Interfacing and Coordination		633	03-Aug-22	02-Jun-24
05-0083	Water Supply / WSD	540	03-Aug-22	24-Feb-24
05-0084	Power Supply / CLP	540	03-Aug-22	24-Feb-24
05-0085	NENT / NENTX	513	03-Aug-22	24-Jan-24
05-0086	Telecom	120	25-Jan-24	02-Jun-24
PORTION C - Waste Reception Area		100	04-Feb-25	30-May-25
05-0087	Vehicle Wash Facility Upgrade Work	100	04-Feb-25	30-May-25
05-0089	Weighbridge Upgrade Work	75	04-Feb-25	01-May-25
05-0091	Weighmaster House Refurbishment & Upgrade Work	75	04-Feb-25	01-May-25
05-0092	Wheel Wash Bath Upgrade Work	75	04-Feb-25	01-May-25
05-0093	Guard House & Entrance Gate Upgrade Work	60	04-Feb-25	14-Apr-25
05-0094	General Area & Access Road	60	04-Feb-25	14-Apr-25
05-0095	Diesel Fuel Tanks	60	04-Feb-25	14-Apr-25



█	Remaining Level of Effort
█	Actual Work
█	Remaining Work
█	Critical Remaining Work
◆	Milestone
▬	Summary

NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION

BASELINE PROGRAMME - EXTRACTED (REV.3)

INITIAL WORKS (PHASE 1)

Page 1 of 4

	Date	Revision	Checked	Approved
	08-Jul-22	EXTRACTED - ISSUED 14JAN2023	DW	AY

Activity ID	Activity Name	OD	Start	Finish	2022												2023												2024												2025												2026												2027											
					Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
PORTION D - Accomodation Buildings					954	25-Jan-22 A	04-Sep-24																																																																					
Advanced Works					822	25-Jan-22 A	15-Jun-24																																																																					
05-00100	Topographic Survey	0		25-Apr-22 A																																																																								
05-00101	GI Works	70	04-Aug-22	15-Oct-22																																																																								
05-00102	Existing Utility Diversion, Interface & Advanced Works	0		10-Oct-22																																																																								
05-00104	Moving IN to completed Integrated Building Office - for IC/ER and construction project team	0		10-May-24																																																																								
05-0096	Possession of Portion D	0	25-Jan-22																																																																									
05-0097	Site Clearance & Temporary Access Roads	52	11-Mar-22	09-May-22																																																																								
05-0098	Duration at 2 Floor Level Temporary Site Office - IC/ER and construction project team	690	18-Jun-22	15-Jun-24																																																																								
05-0099	Environmental Monitoring	26	25-Apr-22	24-Feb-24																																																																								
FIRE SERVICE BUILDING					501	11-Oct-22	24-Feb-24																																																																					
Substructure					95	11-Oct-22	19-Jan-23																																																																					
05-00105	Site Formation - Excavation / UG Utilities	60	11-Oct-22	09-Dec-22																																																																								
05-00106	Installation of Earth Mat	7	10-Dec-22	16-Dec-22																																																																								
05-00107	RC Footing/Beam to G/F	28	17-Dec-22	19-Jan-23																																																																								
Superstructure					393	20-Jan-23	16-Feb-24																																																																					
05-00108	G/F RC slab/beam and column and wall to 1/F	22	20-Jan-23	14-Feb-23																																																																								
05-00109	1/F RC slab/beam and column and wall to 2/F	25	15-Feb-23	12-Mar-23																																																																								
05-00110	Removal and clearing of falsework at G/F	8	16-Mar-23	24-Mar-23																																																																								
05-00111	2/F RC slab/beam and column and wall to R/F	25	12-Mar-23	07-Apr-23																																																																								
05-00112	Scaffolding installation within perimeter	65	12-Mar-23	16-May-23																																																																								
05-00113	Watertightness Test at G/F FS Tank Room	35	24-Mar-23	28-Apr-23																																																																								
05-00114	R/F slab/beam	24	09-Apr-23	04-May-23																																																																								
05-00115	Removal and clearing of falsework at 1/F	8	21-Apr-23	29-Apr-23																																																																								
05-00116	Removal and clearing of falsework at 2/F	8	02-Jun-23	10-Jun-23																																																																								
05-00117	Installation of Visitor / Cafeteria Pod at R/F	90	10-Jun-23	08-Sep-23																																																																								
05-00118	Scaffolding removal within perimeter	8	08-Feb-24	16-Feb-24																																																																								
ABWF & E&M					298	01-May-23	24-Feb-24																																																																					
Ground Floor					283	01-May-23	08-Feb-24																																																																					
05-00119	Ground Floor Access Date	0	01-May-23																																																																									
05-00120	ABWF and Internal Finishes Works	70	23-Jul-23	04-Oct-23																																																																								
05-00121	BS Works / FS Pump Room and T&C	70	03-Oct-23	12-Dec-23																																																																								
05-00122	BS Electrical Meter Room - Final Connection and T&C	30	09-Jan-24	08-Feb-24																																																																								
05-00123	WSD Water Meter Room and Final Connection	30	10-Nov-23	10-Dec-23																																																																								
1st Floor					121	20-May-23	18-Sep-23																																																																					
05-00124	1st Floor Access Date	0	20-May-23																																																																									
05-00125	ABWF and Internal Finishes Works	60	21-May-23	23-Jul-23																																																																								
05-00126	BS Works	60	20-Jul-23	18-Sep-23																																																																								
2nd Floor					125	11-Jul-23	13-Nov-23																																																																					
05-00127	2nd Floor Access Date	0	11-Jul-23																																																																									
05-00128	ABWF and Internal Finishes Works	60	12-Jul-23	10-Sep-23																																																																								
05-00129	BS Works	60	10-Sep-23	13-Nov-23																																																																								
Roof Floor					122	20-Aug-23	20-Dec-23																																																																					
05-00130	Roof Floor Access Date	0	20-Aug-23																																																																									
05-00131	ABWF and External Trellis Finishes Works	60	21-Aug-23	24-Oct-23																																																																								
05-00132	BS and T&C Works	60	20-Oct-23	20-Dec-23																																																																								
Visitor Cafeteria POD					119	20-Oct-23	24-Feb-24																																																																					
05-00331	Builders and ABWF Finishes Works	60	20-Oct-23	20-Dec-23																																																																								
05-00332	BS and T&C Works	60	19-Dec-23	24-Feb-24																																																																								
INTEGRATED OFFICE BUILDING					489	10-Dec-22	12-Apr-24																																																																					
Substructure					101	10-Dec-22	29-Mar-23																																																																					
05-00133	Site Formation - Excavation / UG Utilities	57	10-Dec-22	13-Feb-23																																																																								
05-00134	Installation of Earth Mat	7	13-Feb-23	20-Feb-23																																																																								
05-00135	RC Footing/Beam to G/F	37	21-Feb-23	29-Mar-23																																																																								
Superstructure					379	30-Mar-23	12-Apr-24																																																																					
05-00136	G/F RC slab/beam and column and wall to 1/F	35	30-Mar-23	08-May-23																																																																								
05-00137	1/F RC slab/beam and column and wall to 2/F	40	09-May-23	19-Jun-23																																																																								
05-00138	Removal and clearing of falsework at G/F	8	07-Jun-23	15-Jun-23																																																																								
05-00139	2/F RC slab/beam and column/wall to R/F	38	19-Jun-23	29-Jul-23																																																																								
05-00140	Removal and clearing of falsework at 1/F	8	19-Jun-23	27-Jul-23																																																																								
05-00141	R/F RC slab/beam and column/wall to UR slab/beam	40	29-Jul-23	07-Sep-23																																																																								
05-00142	Scaffolding installation within perimeter	14	29-Jul-23	12-Aug-23																																																																								
05-00143	Removal and clearing of falsework at 2/F	8	28-Aug-23	05-Sep-23																																																																								
05-00144	Scaffolding removal and clearing within perimeter	24	19-Mar-24	12-Apr-24																																																																								
ABWF & E&M					281	16-Jun-23	23-Mar-24																																																																					
Ground Floor					232	16-Jun-23	03-Feb-24																																																																					
05-00145	Ground Floor Access Date	0	16-Jun-23																																																																									
05-00146	ABWF and Internal Finishes Works	60	23-Jul-23	21-Sep-23																																																																								
05-00147	BS Works and Electrical Meter Room Final Connection	120	03-Oct-23	03-Feb-24																																																																								
1st Floor					126	27-Jul-23	30-Nov-23																																																																					
05-00148	1st Floor Access Date	0	27-Jul-23																																																																									
05-00149	ABWF and Internal Finishes Works	60	28-Jul-23	26-Sep-23																																																																								
05-00150	BS Works	60	27-Sep-23	30-Nov-23																																																																								
2nd Floor					124	19-Sep-23	21-Jan-24																																																																					
05-00151	2nd Floor Access Date	0	19-Sep-23																																																																									
05-00152	ABWF and Internal Finishes Works	60	20-Sep-23	23-Nov-23																																																																								
05-00153	BS Works	60	19-Nov-23	21-Jan-24																																																																								
Roof Floor					125	19-Nov-23	23-Mar-24																																																																					
05-00154	Roof Floor Access Date	0	19-Nov-23																																																																									
05-00155	ABWF and External Trellis Finishes Works	60	20-Nov-23	22-Jan-24																																																																								
05-00156	BS / Lift and T&C Works	60	19-Jan-24	23-Mar-24																																																																								
OPERATION AND MAINTENANCE BUILDING					487	01-Mar-23	29-Jun-24																																																																					
Substructure					113	01-Mar-23	28-Jun-23																																																																					
05-00157	Site Formation - Excavation / UG Utilities	84	01-Mar-23	29-May-23																																																																								
05-00158	Installation of Earth Mat	7	30-May-23	06-Jun-23																																																																								
05-00159	RC Footing	21	07-Jun-23	28-Jun-23																																																																								
Superstructure					259	29-Jun-23	13-Mar-24																																																																					
05-00160	G/F to 1/F RC slab/beam and column works	25	29-Jun-23	24-Jul-23																																																																								
05-00161	1/F to 2/F RC slab/beam and column works	25	24-Jul-23	18-Aug-23																																																																								
05-00162	2/F to R/F RC slab/beam and column works	26	18-Aug-23	13-Sep-23																																																																								
05-00163	Scaffolding installation within perimeter	40	18-Aug-23	27-Sep-23																																																																								
05-00164	Removal and clearing of falsework at G/F	8	23-Aug-23	31-Aug-23																																																																								
05-00165	R/F RC works slab / beam works	30	13-Sep-23	16-Oct-23																																																																								
05-00166	Removal and clearing of falsework at 1/F	8	17-Sep-23	25-Sep-23																																																																								
05-00167	Removal and clearing of falsework at 2/F	8	13-Oct-23	21-Oct-23																																																																								
05-00168	Scaffolding removal and clearing within perimeter	22	20-Feb-24	13-Mar-24																																																																								
ABWF & E&M					277	26-Sep-23	29-Jun-24																																																																					
Ground Floor					148	26-Sep-23	21-Feb-24																																																																					
05-00169	Ground Floor Access Date	0	26-Sep-23																																																																									
05-00170	ABWF and Internal Finishes Works	70	27-Sep-23	10-Dec-23																																																																								
05-00171	BS Works / FS Pump Room and T&C	70	06-Dec-23	21-Feb-24																																																																								
05-00172	BS Electrical Meter Room - Final Connection and T&C	30	15-Jan-24	14-Feb-24																																																																								
05-00173	WSD Water Meter Room and Final Connection	30	15-Jan-24	14-Feb-24																																																																								
1st Floor					128	22-Oct-23	27-Feb-24																																																																					
05-00174	1st Floor Access Date	0	22-Oct-23																																																																									
05-00175	ABWF and Internal Finishes Works	60	24-Oct-23	22-Dec-23																																																																								
05-00176	BS Works	60	22-Dec-23	27-Feb-24																																																																								
2nd Floor					125	21-Dec-23	24-Apr-24																																																																					
05-00177	2nd Floor Access Date	0	21-Dec-23																																																																									
05-00178	ABWF and Internal Finishes Works	60	22-Dec-23	27-Feb-24																																																																								
05-00179	BS Works	60	20-Feb-24	24-Apr-24																																																																								
Roof Floor					191	21-Dec-23	29-Jun-24																																																																					
05-00180	Roof Floor Access Date	0	21-Dec-23																																																																									

- ▬ Remaining Level of Effort
- ▬ Actual Work
- ▬ Remaining Work
- ▬ Critical Remaining Work
- ◆ Milestone
- ▬ Summary

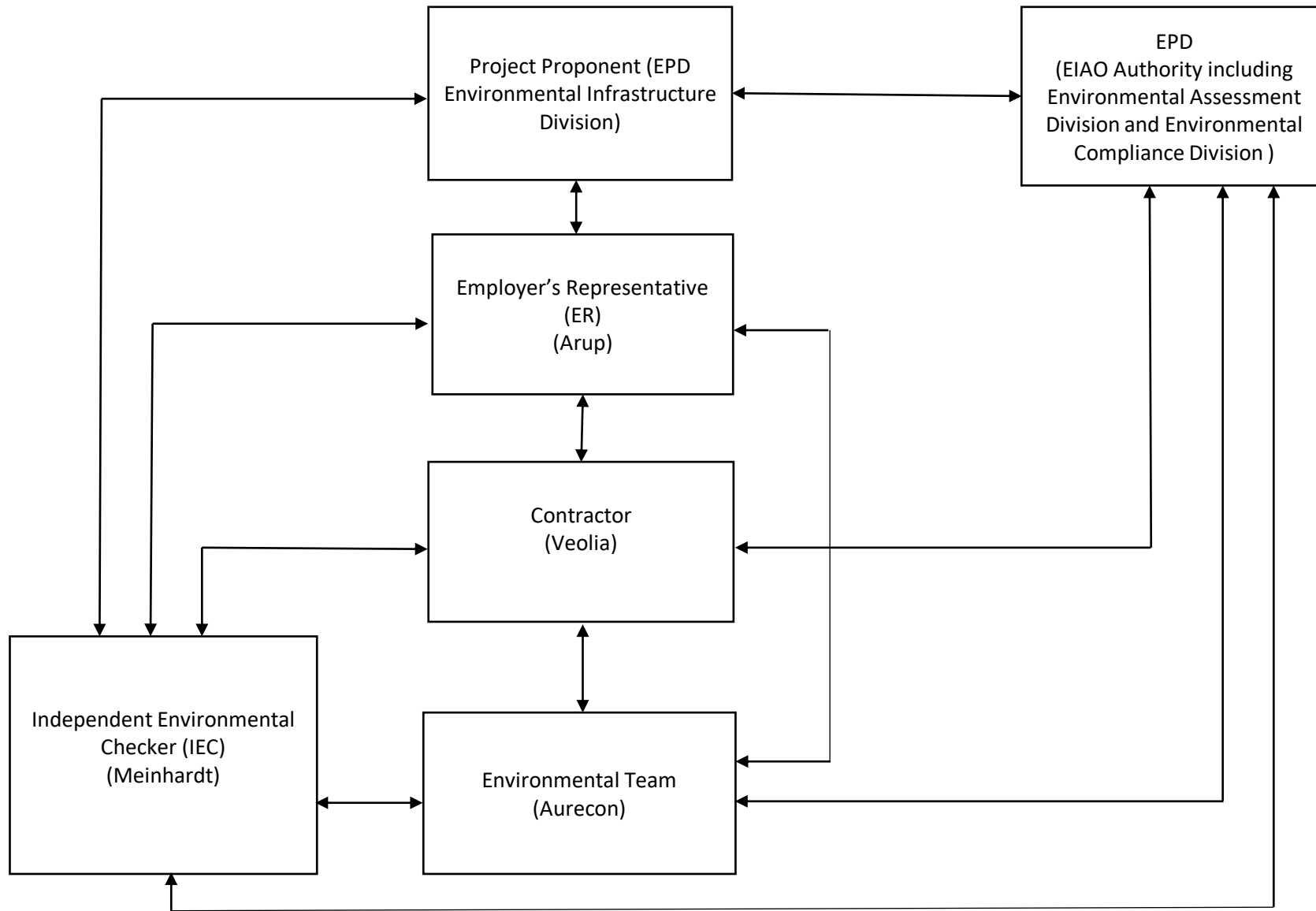
NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION
BASELINE PROGRAMME - EXTRACTED (REV.3)
INITIAL WORKS (PHASE 1)



Date	Revision	Checked	Approved
08-Jul-22	EXTRACTED - ISSUED 14JAN2023	DW	AY



Appendix B Project Organization Chart & Management Structure



Notes:

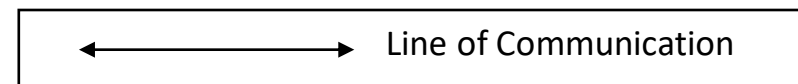
EPD - Environmental Protection Department

Arup – Ove Arup & Partners Limited

Veolia - Veolia Environmental Services Hong Kong Limited

Meinhardt - Meinhardt Infrastructure And Environment Limited

Aurecon - Aurecon Hong Kong Limited



Appendix C Monitoring Schedule for Reporting Month & Next Month

Impact Monitoring Schedule for NENT Landfill Extension (July 2023) (version 2.0)

7-2023						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
						1
2	3	4	5	6 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	7	8
9	10	11	12 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a Surface water quality monitoring at WM1 and WM2	13	14	15
16	17	18 Air quality monitoring at AM1, AM2 and AM3	19	20	21 Noise monitoring at NM1a and NM2a	22
23	24 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	25	26	27	28	29 Air quality monitoring at AM1, AM2 and AM3
30	31					

Remark:

1. The schedule is tentative only and would be subject to changes due to unforeseen circumstances.
2. Air quality monitoring includes 1-hour TSP and 24-hour TSP monitoring at AM1, AM2 and AM3 (Ref.: Table 3.1 of the approved EM&A Manual).
3. Noise monitoring includes 30-minute construction noise monitoring at NM1a and NM2a (Ref.: Table 4.1 of the approved EM&A Manual).
4. Surface water quality monitoring includes in-situ measurement and water sampling for laboratory analysis at WM1 and WM2 (Ref.: Table 5.5 and Section 5.5.6 of the approved EM&A Manual).

Impact Monitoring Schedule for NENT Landfill Extension (August 2023) (version 1.0)

8-2023						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
		5	2	3	4 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a Surface water quality monitoring at WM1 and WM2	5
6	7	8	9	10 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	11	12
13	14	15	16 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	17	18	19
20	21	22 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	23	24	25	26
27	28 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	29	30	31	1	2 Air quality monitoring at AM1, AM2 and AM3

Remark:

1. The schedule is tentative only and would be subject to changes due to unforeseen circumstances.
2. Air quality monitoring includes 1-hour TSP and 24-hour TSP monitoring at AM1, AM2 and AM3 (Ref.: Table 3.1 of the approved EM&A Manual).
3. Noise monitoring includes 30-minute construction noise monitoring at NM1a and NM2a (Ref.: Table 4.1 of the approved EM&A Manual).
4. Surface water quality monitoring includes in-situ measurement and water sampling for laboratory analysis at WM1 and WM2 (Ref.: Table 5.5 and Section 5.5.6 of the approved EM&A Manual).

Appendix D Calibration Certificates

Air Quality

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	Representative ForTung Lo Hang	Site ID:	AM1	Date:	06-Jul-2023
Serial No.:	1105	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P _a) (mm Hg):	754.9	Actual Temperature during Calibration (T _a) (deg K):	294.0
---	-------	--	-------

Calibration Orifice

Model:	TE-5025A	Slope (m _c):	2.10188
Serial No.:	4166	Intercept (b _c):	-0.35800
Calibration Due Date:	19-Jun-24	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	ΔH ₂ O (in)	Qa, X-Axis (m ³ /min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	12.60	1.865	52.0	52.18
13	10.20	1.695	46.0	46.16
10	8.00	1.521	42.0	42.14
7	5.00	1.238	34.0	34.12
5	3.00	0.997	26.0	26.09

Sampler Calibration Relationship (Qa on x-axis, IC on y-axis)

m = 29.3019 b = -2.7348 Corr. Coeff = 0.9985

Calculations

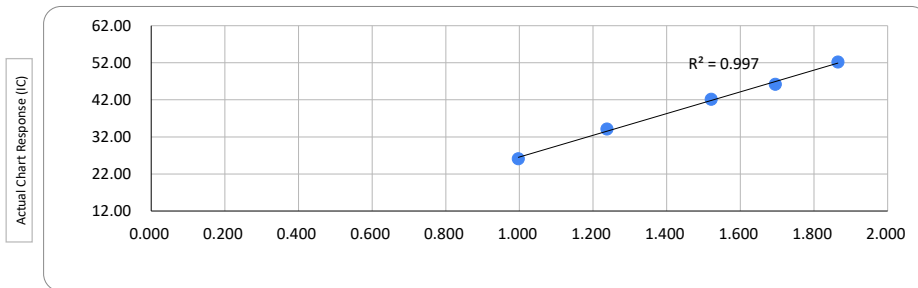
$$Q_a = 1/m_c \cdot [\text{Sqrt}(\Delta H_2O \cdot (P_a/P_{std}) \cdot (T_{std}/T_a)) - b_c]$$

$$IC = I \cdot (\text{Sqrt}(P_a/P_{std}) \cdot (T_{std}/T_a))$$

Q_a = actual flow rate
 IC = corrected chart response
 I = actual chart response
 m_c = calibrator slope
 b_c = calibrator intercept

m = sampler slope
 b = sampler intercept
 T_{std} = 298 deg K
 P_{std} = 760 mm Hg
 T_a = actual temperature during calibration (deg K)
 P_a = actual pressure during calibration (mm Hg)

Flow Rate Chart



Standard Flow Rate (m³/min)

Checked by: Tandy Tse Senior Consultant, Environmental

Date: 06-Jul-2023

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	Representative For Heung Yuen Wai	Site ID:	AM2	Date:	06-Jul-2023
Serial No.:	1106	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P _a) (mm Hg):	754.9	Actual Temperature during Calibration (T _a) (deg K):	294.0
---	-------	--	-------

Calibration Orifice

Model:	TE-5025A	Slope (m _c):	2.10188
Serial No.:	4166	Intercept (b _c):	-0.35800
Calibration Due Date:	19-Jun-24	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	ΔH ₂ O (in)	Qa, X-Axis (m ³ /min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	12.00	1.824	61.0	61.21
13	10.30	1.702	55.0	55.19
10	8.00	1.521	48.0	48.16
7	5.20	1.259	41.0	41.14
5	3.00	0.997	33.0	33.11

Sampler Calibration Relationship (Qa on x-axis, IC on y-axis)

m = 32.9874 b = -0.4203 Corr. Coeff = 0.9946

Calculations

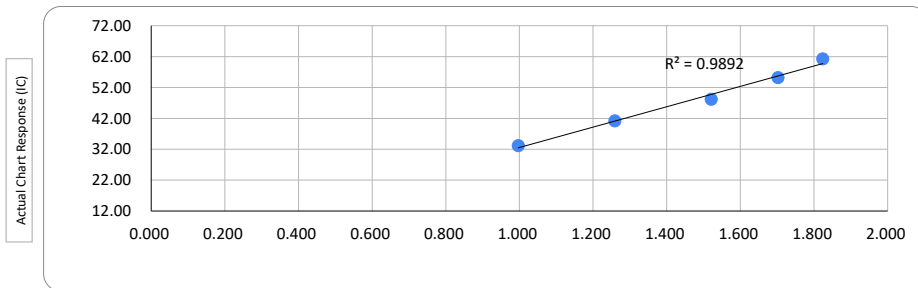
$$Q_a = 1/m_c \cdot [\text{Sqrt}(\Delta H_2O \cdot (P_a/P_{Std}) \cdot (T_{Std}/T_a)) - b_c]$$

$$IC = I \cdot (\text{Sqrt}(P_a/P_{Std}) \cdot (T_{Std}/T_a))$$

Q_a = actual flow rate
 IC = corrected chart response
 I = actual chart response
 m_c = calibrator slope
 b_c = calibrator intercept

m = sampler slope
 b = sampler intercept
 T_{Std} = 298 deg K
 P_{Std} = 760 mm Hg
 T_a = actual temperature during calibration (deg K)
 P_a = actual pressure during calibration (mm Hg)

Flow Rate Chart



Standard Flow Rate (m³/min)

Checked by: Tandy Tse Senior Consultant, Environmental

Date: 06-Jul-2023

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	Representative For Work Keng Shan Tsuen	Site ID:	AM3	Date:	06-Jul-2023
Serial No.:	1856	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P _a) (mm Hg):	754.9	Actual Temperature during Calibration (T _a) (deg K):	294.0
--	-------	--	-------

Calibration Orifice

Model:	TE-5025A	Slope (m _c):	2.10188
Serial No.:	4166	Intercept (b _c):	-0.35800
Calibration Due Date:	19-Jun-24	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	ΔH ₂ O (in)	Qa, X-Axis (m ³ /min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	12.70	1.872	54.0	54.18
13	10.40	1.710	50.0	50.17
10	8.10	1.529	44.0	44.15
7	5.20	1.259	36.0	36.12
5	3.10	1.011	29.0	29.10

Sampler Calibration Relationship (Qa on x-axis, IC on y-axis)

m = 29.5749 b = -0.9086 Corr. Coeff = 0.9995

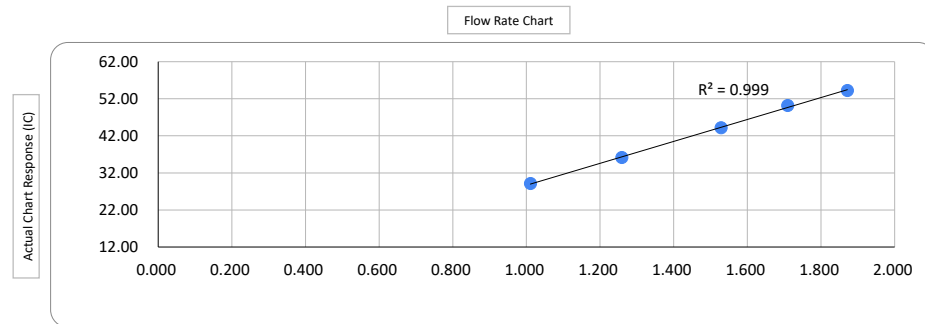
Calculations

$$Q_a = 1/m_c \cdot [\text{Sqrt}(\Delta H_2O \cdot (P_a/P_{std}) \cdot (T_{std}/T_a)) - b_c]$$

$$IC = I \cdot (\text{Sqrt}(P_a/P_{std}) \cdot (T_{std}/T_a))$$

Q_a = actual flow rate
 IC = corrected chart response
 I = actual chart response
 m_c = calibrator slope
 b_c = calibrator intercept

m = sampler slope
 b = sampler intercept
 T_{std} = 298 deg K
 P_{std} = 760 mm Hg
 T_a = actual temperature during calibration (deg K)
 P_a = actual pressure during calibration (mm Hg)



Standard Flow Rate (m³/min)

Checked by: Tandy Tse

 Senior Consultant, Environmental

Date: 06-Jul-2023

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

Verification Test Date: 3-Dec-22 to 4-Dec-22
 Next Verification Test Date: 2-Dec-23
 Unit-under-Test- Model No.: Sibata LD-5R
 Unit-under-Test Serial No.: 882106
 Our Report Reference No.: RPT-22-HVS-0027
 Calibration Location: AM2, Located near the Leachate Treatment Works within the NENT Landfill

Standard Equipment Information			
Verification Equipment Type	Tisch TSP HVS	Tisch HVS Calibrator	
Standard Equipment Model No.	TE-5170X	TE-5025A	
Equipment serial no.	MFC 1106	3465	
Last Calibration Date	1-Dec-22	28-Jun-22	
Next Calibration Date	31-Jan-23	27-Jun-23	

Verification Test No.	Date	Time			K-Factor K-Factor (K=C/R)	Counts/ Minute (R)	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C)
		Start-time	End-time	Elapsed Time (in min)					y axis
1	3/12/2022	194.73	198.08	201.00	0.00123	50	9983	R222043/1	61
2	3/12/2022	198.08	201.27	191.40	0.00092	37	7146	R222043/2	34
3	3/12/2022	201.27	204.35	184.80	0.00103	48	8870	R222043/3	49
4	4/12/2022	252.37	255.36	179.40	0.00108	62	11183	R222044/1	67
5	4/12/2022	255.38	258.38	180.00	0.00110	57	10260	R222044/2	62
6	4/12/2022	258.38	261.38	180.00	0.00108	65	11760	R222044/3	70
					0.00107				

K-Factor to be inputted in LD-5R (corrected 1 decimal point): 1.1

By Linear Regression of y on x:

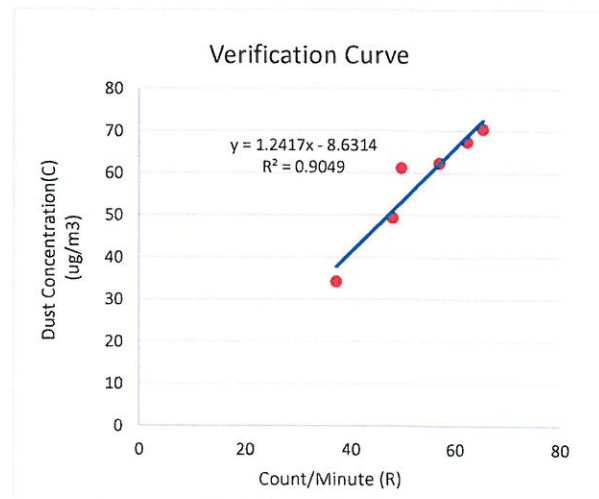
slope, mh= 1.2417

intercept, ch= -8.6314

*Correlation Coefficient, R= 0.9513

Verification Test Result: Strong Correlation, Results were accepted.

* If the Correlation Coefficient, R is <0.5. Checking and Re-verification are required.



Verified By: IA
 Technical Manager

Date: 05-12-2022

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

Verification Test Date: 3-Dec-22 to 4-Dec-22
 Next Verification Test Date: 2-Dec-23
 Unit-under-Test- Model No. Sibata LD-5R
 Unit-under-Test Serial No. 882110
 Our Report Reference No. RPT-22-HVS-0025
 Calibration Location: AM2, Located near the Leachate Treatment Works within the NENT Landfill

Standard Equipment Information			
Verification Equipment Type	Tisch TSP HVS	Tisch HVS Calibrator	
Standard Equipment Model No.	TE-5170X	TE-5025A	
Equipment serial no.	MFC 1106	3465	
Last Calibration Date	1-Dec-22	28-Jun-22	
Next Calibration Date	31-Jan-23	27-Jun-23	

Verification Test No.	Date	Time			K-Factor	Counts/Minute (R)	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C)	
		Start-time	End-time	Elapsed Time (in min)					K-Factor (K=C/R)	x-axis
1	3/12/2022	194.73	198.08	201.00	0.00101	61	12194	R222043/1	61	
2	3/12/2022	198.08	201.27	191.40	0.00089	38	7337	R222043/2	34	
3	3/12/2022	201.27	204.35	184.80	0.00108	46	8439	R222043/3	49	
4	4/12/2022	252.37	255.36	179.40	0.00110	61	11003	R222044/1	67	
5	4/12/2022	255.38	258.38	180.00	0.00112	56	10080	R222044/2	62	
6	4/12/2022	258.38	261.38	180.00	0.00104	68	12180	R222044/3	70	
					0.00104					

K-Factor to be inputted in LD-5R (corrected 1 decimal point): 1.0

By Linear Regression of y on x:

slope, mh= 1.1984

intercept, ch= -8.3267

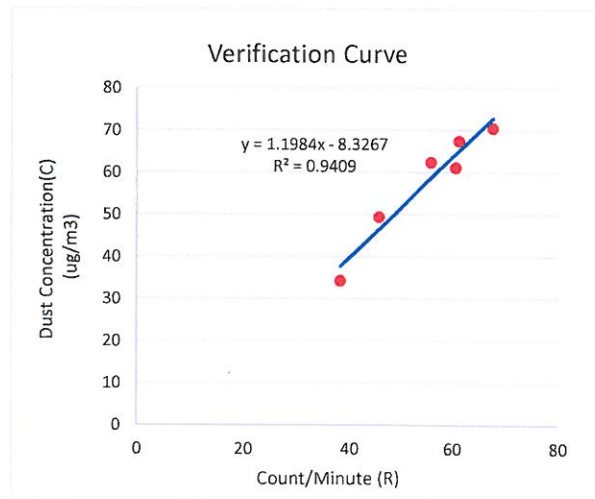
*Correlation Coefficient, R= 0.9700

Verification Test Result: Strong Correlation, Results were accepted.

* If the Correlation Coefficient, R is <0.5. Checking and Re-verification are required.

Verified By: 
 Technical Manager

Date: 05-12-2022





Website www.acuityhk.com
 Unit E, 12/F, Ford Glory Plaza
 Nos. 37-39 Wing Hong Street,
 Cheung Sha Wan, Kowloon
 Tel: (852) 2698 6833
 Fax: (852) 2698 9383

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

Verification Test Date: 3-Dec-22 to 4-Dec-22
 Next Verification Test Date: 2-Dec-23
 Unit-under-Test- Model No. Sibata LD-5R
 Unit-under-Test Serial No. 942532
 Our Report Reference No. RPT-22-HVS-0024
 Calibration Location: AM2, Located near the Leachate Treatment Works within the NENT Landfill

Standard Equipment Information			
Verification Equipment Type	Tisch TSP HVS	Tisch HVS Calibrator	
Standard Equipment Model No.	TE-5170X	TE-5025A	
Equipment serial no.	MFC 1106	3465	
Last Calibration Date	1-Dec-22	28-Jun-22	
Next Calibration Date	31-Jan-23	27-Jun-23	

Verification Test No.	Date	Time			K-Factor K-Factor (K=C/R)	Counts/ Minute (R) x-axis	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C) y axis
		Start-time	End-time	Elapsed Time (in min)					
1	3/12/2022	194.73	198.08	201.00	0.00111	55	11122	R222043/1	61
2	3/12/2022	198.08	201.27	191.40	0.00093	37	7082	R222043/2	34
3	3/12/2022	201.27	204.35	184.80	0.00110	45	8316	R222043/3	49
4	4/12/2022	252.37	255.36	179.40	0.00113	60	10704	R222044/1	67
5	4/12/2022	255.38	258.38	180.00	0.00120	52	9360	R222044/2	62
6	4/12/2022	258.38	261.38	180.00	0.00104	68	12180	R222044/3	70

0.00108

K-Factor to be inputted in LD-5R (corrected 1 decimal point): 1.1

By Linear Regression of y on x:

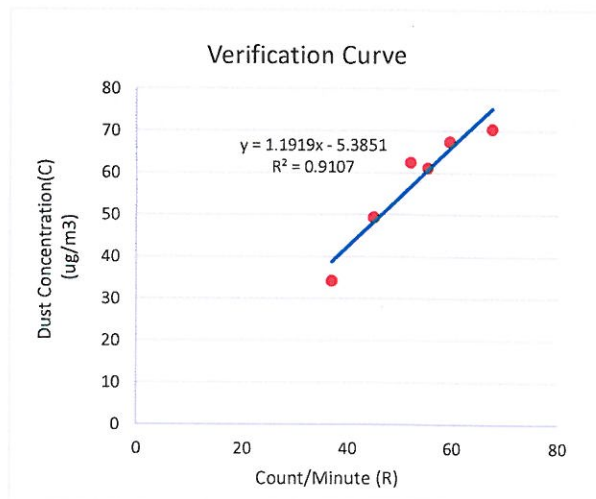
slope, mh= 1.1919

intercept, ch= -5.3851

*Correlation Coefficient, R= 0.9543

Verification Test Result: Strong Correlation, Results were accepted.

* If the Correlation Coefficient, R is <0.5. Checking and Re-verification are required.



Verified By: [Signature]
 Technical Manager

Date: 05-12-2022

**RECALIBRATION
DUE DATE:
June 19, 2024**

Certificate of Calibration

Calibration Certification Information			
Cal. Date: June 19, 2023	Rootsmeter S/N: 438320	Ta: 294	°K
Operator: Jim Tisch		Pa: 754.9	mm Hg
Calibration Model #: TE-5025A	Calibrator S/N: 4166		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4500	3.2	2.00
2	3	4	1	1.0260	6.4	4.00
3	5	6	1	0.9170	8.0	5.00
4	7	8	1	0.8770	8.8	5.50
5	9	10	1	0.7240	12.8	8.00

Data Tabulation					
Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis)
1.0025	0.6914	1.4190	0.9958	0.6867	0.8826
0.9983	0.9730	2.0068	0.9915	0.9664	1.2481
0.9961	1.0863	2.2436	0.9894	1.0790	1.3955
0.9951	1.1346	2.3532	0.9883	1.1270	1.4636
0.9897	1.3670	2.8380	0.9830	1.3578	1.7651
QSTD	m=	2.10188	QA	m=	1.31616
	b=	-0.03580		b=	-0.02227
	r=	0.99998		r=	0.99998

Calculations	
Vstd= $\Delta Vol \left(\frac{Pa - \Delta P}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)$	Va= $\Delta Vol \left(\frac{Pa - \Delta P}{Pa} \right)$
Qstd= $Vstd / \Delta Time$	Qa= $Va / \Delta Time$
For subsequent flow rate calculations:	
Qstd= $1/m \left(\left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right) - b \right)$	Qa= $1/m \left(\left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} \right) - b \right)$

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg
Key	
ΔH:	calibrator manometer reading (in H2O)
ΔP:	rootsmeter manometer reading (mm Hg)
Ta:	actual absolute temperature (°K)
Pa:	actual barometric pressure (mm Hg)
b:	intercept
m:	slope

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

Noise

Certificate of Calibration

for

Description: Sound Level Meter
Manufacturer: NTi Audio
Type No.: XL2 (Serial No.: A2A-13661-E0)
Microphone: ACO 7052 (Serial No.:68914)
Preamplifier: NTi Audio MA220 (M2211) (Serial No.:6282)

Submitted by:

Customer: Acuity Sustainability Consulting Limited
Address: Unit E, 12/F., Ford Glory Plaza,
Nos. 37-39 Wing Hong Street,
Cheung Sha Wan, Kowloon, Hong Kong

Upon receipt for calibration, the instrument was found to be:

- Within (31.5Hz – 8kHz)
 Outside

the allowable tolerance.

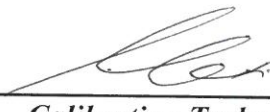
The test equipment used for calibration are traceable to National Standards via:

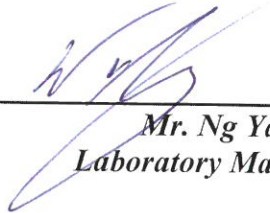
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 20 August 2022

Date of calibration: 22 August 2022

Date of NEXT calibration: 21 August 2023

Calibrated by: 
Calibration Technician

Certified by: 
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 22 August 2022

Certificate No.: APJ22-071-CC001



Page 1 of 4

1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. Calibration Conditions:

Air Temperature: 23.4 °C
 Air Pressure: 1005 hPa
 Relative Humidity: 68.5 %

3. Calibration Equipment:

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS

4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)				Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA SPL	Fast	94	1000	93.8	±0.4	

Linearity

Setting of Unit-under-test (UUT)				Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA SPL	Fast	94	1000	93.8	Ref	
			104		103.8	±0.3	
			114		114.0	±0.3	

Time Weighting

Setting of Unit-under-test (UUT)				Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA SPL	Fast	94	1000	93.8	Ref	
		Slow			93.8	±0.3	

Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dB	SPL	Fast	94	31.5	93.9	±2.0
					63	94.0	±1.5
					125	93.9	±1.5
					250	93.8	±1.4
					500	93.8	±1.4
					1000	93.8	Ref
					2000	93.4	±1.6
					4000	93.0	±1.6
					8000	92.2	+2.1; -3.1

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA	SPL	Fast	94	31.5	54.6	-39.4 ±2.0
					63	67.7	-26.2 ±1.5
					125	77.8	-16.1 ±1.5
					250	85.2	-8.6 ±1.4
					500	90.6	-3.2 ±1.4
					1000	93.8	Ref
					2000	94.6	+1.2 ±1.6
					4000	94.0	+1.0 ±1.6
					8000	91.2	-1.1 ±2.1; -3.1

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBC	SPL	Fast	94	31.5	90.9	-3.0 ±2.0
					63	93.1	-0.8 ±1.5
					125	93.7	-0.2 ±1.5
					250	93.8	-0.0 ±1.4
					500	93.8	-0.0 ±1.4
					1000	93.8	Ref
					2000	93.3	-0.2 ±1.6
					4000	92.2	-0.8 ±1.6
					8000	89.3	-3.0 ±2.1; -3.1

5. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.10
	63 Hz	± 0.10
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
	8000 Hz	± 0.10
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

Note:

The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)*L shall not be liable for any loss or damage resulting from the use of the equipment.



CALIBRATION CERTIFICATE

Product : SOUND CALIBRATOR
Type : NC-75
Serial number : 35124527
Manufacturer : RION CO., LTD.
Calibration quantities : Sound pressure level (with reference standard microphone)
Calibration method : Measured by specified secondary standard microphone
according to JCSS calibration procedure specified by RION.
Ambient conditions : Temperature 23.9 °C, Relative humidity 49 %,
Static pressure 100.6 kPa
Calibration date : 02/11/2022 (DD/MM/YYYY)
Calibration location : 3-20-41 Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan
RION CO., LTD. Calibration Room

We hereby certify that the results of this calibration were as follows.

Issue date : 09/11/2022 (DD/MM/YYYY)

Junichi Kawamura
Manager
Quality Assurance Section,
Quality Assurance Department,
Environmental Instrument Division,
RION CO., LTD.
3-20-41 Higashimotomachi, Kokubunji,
Tokyo 185-8533, Japan



This certificate is based on article 144 of the Measurement Law and indicates the result of calibration in accordance with measurement standards traceable to Primary Measurement Standards (National Standards) which realizes the physical units of measurement according to the International System of Units (SI).

The accreditation symbol is attestation of which the result of calibration is traceable to Primary Measurement Standards (National Standards).

The certificate shall not be reproduced except in full, without the written approval of the issuing laboratory.

The calibration laboratory who issued this calibration certificate conforms to ISO/IEC 17025:2017.

This calibration certificate was issued by the calibration laboratory accredited by IA Japan who is a signatory to the Mutual Recognition Arrangement (MRA) of International Laboratory Accreditation Cooperation (ILAC) and Asia Pacific Accreditation Cooperation (APAC). This (These) calibration result(s) may be accepted internationally through ILAC/APAC MRA.

CALIBRATION RESULT

1. Sound pressure level (with reference standard microphone)

Measured value	Expanded uncertainty *1
93.99 dB	0.09 dB

Specified secondary standard microphone:

Type : 4160
 Serial number : 2973341
 Reference Sound pressure : 2×10^{-5} Pa

*1 Defines an interval estimated to have a level of confidence of approximately 95 %.

Coverage factor $k=2$

Calibration result is the calibration value in ambient conditions during calibration.

BE OUT OF JCSS CALIBRATION

1. Frequency

Measured value	Measurement uncertainty ($k=2$)
1000.0 Hz	2.7×10^{-4} Hz

Working measurement standard universal counter:

Type : 53132A
 Serial number : MY40005574
 (JCSS Calibration Certificate No. 2208001889940)

2. Total distortion

Measured value
0.2 %

Working measurement standard distortion meter:

Type : VA-2230A
 Serial number : 11076061
 (A2LA Calibration Certificate No. 1502-03109)

- closing -



AI

Calibration Certificate

Certificate No. **300737**

Page 1 of 2 Pages

Customer : Acuity Sustainability Consulting Limited

Address : Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, H.K.

Order No. : Q30320

Date of receipt : 2-Feb-23

Item Tested

Description : Hot Wire Anemometer

Manufacturer : RS PRO

I.D. : ASCL-EQ-111

Model : RS-90

Serial No. : 210722208

Test Conditions

Date of Test : 13-Feb-23

Supply Voltage : --

Ambient Temperature : $(23 \pm 3)^\circ\text{C}$

Relative Humidity : $(50 \pm 25) \%$

Test Specifications

Calibration check.

Ref. Document/Procedure : T03, Z04.

Test Results

All results were within the manufacturer's specification.

The results are shown in the attached page(s).

Main Test equipment used:

<u>Equipment No.</u>	<u>Description</u>	<u>Cert. No.</u>	<u>Traceable to</u>
S155	Std. Anemometer	206240	NIM-PRC
S223C	Std. Thermometer	205617	NIM-PRC

The values given in this Calibration Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Hong Kong Calibration Ltd. shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to International System of Units (SI), or by reference to a natural constant. The test results apply to the above Unit-Under-Test only

Calibrated by : 
James Yau

Approved by : 
Steve Kwan

Date: 13-Feb-23



Calibration Certificate

Certificate No. 300737

Page 2 of 2 Pages

Results :

1. Velocity

Applied Value (m/s)	UUT Reading (m/s)	Mfr's Spec.
0.00	0.00	± (3 % of reading + 0.3 m/s)
2.50	2.43	
5.00	5.04	
10.00	10.07	
15.00	15.65	
19.00	19.87	

2. Temperature

Applied Value (°C)	UUT Reading (°C)	Mfr's Spec.
23.12	23.0	± 2 °C

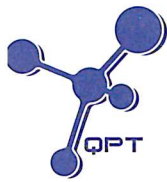
Remark : 1. UUT: Unit-Under-Test

2. Uncertainty : ± (0.9 % + 0.16 m/s) for Velocity, ± 0.1 °C for Temperature, for a confidence probability of not less than 95 %.

3. Atmospheric Pressure: 1 002 hPa

----- END -----

Water Quality



專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BC050055
Date of Issue : 17 May 2023
Page No. : 1 of 2

PART A - CUSTOMER INFORMATION

Acuity Sustainability Consulting Limited
Unit E, 12/F, Ford Glory Plaza 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment : HORIBA U-53
Manufacturer : HORIBA
Serial Number : PORBNFNT
Date of Received : 11 May 2023
Date of Calibration : 17 May 2023
Date of Next Calibration : 16 August 2023
Request No. : D-BC050055

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500 H ⁺
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520 B
Dissolved oxygen	APHA 21e 4500 O
Turbidity	APHA 21e 2130 B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.14	0.14	Satisfactory
7.42	7.45	0.03	Satisfactory
10.01	10.06	0.05	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
16	17.5	1.5	Satisfactory
24	25.7	1.7	Satisfactory
32	32.3	0.3	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)

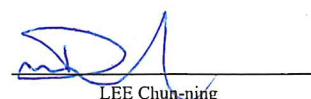
(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.66	-3.40	Satisfactory
20	19.52	-2.40	Satisfactory
30	30.20	0.67	Satisfactory

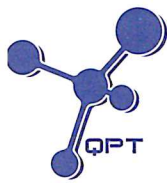
Tolerance of Salinity should be less than ± 10.0 (%)

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED
SIGNATORY:


LEE Chun-ning

Assistant Manager (Chemical Testing)



專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BC050055
Date of Issue : 17 May 2023
Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
8.22	7.88	-0.34	Satisfactory
4.31	3.90	-0.41	Satisfactory
1.81	1.37	-0.44	Satisfactory
0.07	0.00	-0.07	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.00	--	Satisfactory
10	10.8	8.00	Satisfactory
20	20.0	0.00	Satisfactory
100	106	6.00	Satisfactory
800	811	1.40	Satisfactory

Tolerance of Turbidity should be less than ± 10.0 (%)

Remark(s)

- The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards.
- The results relate only to the calibrated equipment as received
- The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
- The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted from relevant international standards.

--- END OF REPORT ---



Calibration Certificate

Certificate No. **210252**

Page 1 of 2 Pages

Customer : Acuity Sustainability Consulting Limited

Address : Unit E, 12/F, Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, H.K.

Order No. : Q24081

Date of receipt : 31-Oct-22

Item Tested

Description : Flow Probe

Manufacturer : Global Water

Model : FP111

I.D. : --

Serial No. : 22K100859

Test Conditions

Date of Test : 7-Nov-22

Ambient Temperature : 23°C

Supply Voltage : --

Relative Humidity : 78%

Test Specifications

Calibration check.

Ref. Document/Procedure : V12

Test Results

All results were within the manufacturer's specification.

The results are shown in the attached page(s).

Main Test equipment used:

<u>Equipment No.</u>	<u>Description</u>	<u>Cert. No.</u>	<u>Traceable to</u>
S179	Std. Tape	201868	NIM-PRC
S136A	Stop Watch	201878	SCL-HKSAR

The values given in this Calibration Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Hong Kong Calibration Ltd. shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to International System of Units (SI), or by reference to a natural constant.
The test results apply to the above Unit-Under-Test only

Calibrated by : 
Kin Wong

Approved by : 
Alan Chu

This Certificate is issued by:
Hong Kong Calibration Ltd.

Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street, Kwai Chung, NT, Hong Kong.
Tel: 2425 8801 Fax: 2425 8646

Date: 7-Nov-22



Calibration Certificate

Certificate No. 210252

Page 2 of 2 Pages

Results :

Applied Value (m/s)	UUT Reading (m/s)	Mfr's Spec.
0.96	1.0	± 0.1 m/s

Remarks : 1. UUT : Unit-Under-Test

2. Uncertainty : ± 1 %, for a confidence probability of not less than 95%.

----- END -----

Landfill Gas

CERTIFICATION OF CALIBRATION



Date Of Calibration: 17-Aug-2022

Certificate Number: G508566_2/31066

Issued by: QED Environmental Systems Ltd.

Customer: Onuee Electronics Ltd
C3-E TCL Science Park No.1001 Zhong Shan Yuan Rd.
Nanshan Shenzhen 518052 CHINA

Description: Gas Analyser

Model: GEM5000

Serial Number: G508566

UKAS Accredited results:

Methane (CH ₄)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.9	0.072
15.0	14.9	0.13
60.0	59.6	0.42

Carbon Dioxide (CO ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	5.0	0.074
15.0	14.9	0.13
40.0	40.0	0.29

Oxygen (O ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
21.2	21.3	0.25

All concentrations are molar.

CH₄, CO₂ readings recorded at : 33.0 °C ± 2.5 °C

O₂ readings recorded at : 22.7 °C ± 2.5 °C

Barometric Pressure : 1002 mbar ± 4 mbar

Method of Test : The analyser is calibrated in a temperature controlled chamber using a series of reference gases, in compliance with procedure LP004.

Instrument has passed calibration as the measurement result is within the specification limit. The specification limit takes into account the measurement uncertainty.

The results relate only to the item calibrated

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Calibration Instance:114 IGC Instance:N/A

Page 1 of 2 | LP015GIUKAS-2.5

www.qedenv.com +44 (0) 333 800 0088 sales@qedenv.co.uk

QED Environmental Systems Ltd. Cyan Park - Unit 3, Jimmy Hill Way, Coventry, CV2 4QP, UNITED KINGDOM

Registered in England and Wales 1898734

CERTIFICATION OF CALIBRATION



Date Of Calibration: 17-Aug-2022

Certificate Number: G508566_2/31066

Issued by: QED Environmental Systems Ltd.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Calibrations marked 'Non-UKAS Accredited results' on this certificate have been included for completeness.

Non-UKAS accredited results after adjustment:

Barometer (mbar)	
Reference	Instrument Reading
1002	1002

Additional Gas Cells		
Gas	Certified Gas (ppm)	Instrument Reading (ppm)
H ₂ S	52.6	53

Date of Issue : 18-Aug-2022

Approved by Signatory

Keeley Knight

Laboratory Inspection

End of Certificate

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Calibration Instance: 114 IGC Instance: N/A

Page 2 of 2 | LP015GIUKAS-2.5

www.qedenv.com +44 (0) 333 800 0088 sales@qedenv.co.uk

QED Environmental Systems Ltd. Cyan Park - Unit 3, Jimmy Hill Way, Coventry, CV2 4QP, UNITED KINGDOM

Registered in England and Wales 1898734

Calibration Certificate

Customer Name Paul Y Construction Co. Ltd
 Model PS200
 Serial 373075
 Tested On 16 November, 2022
 Cal Expires 16 November, 2023

Audible Alarm PASS
 Visual Alarm PASS
 Calibrated For METHANE
 100% LEL Equivalent 4.4% by VOL

Overall Results PASS



Calibration Result

Gas Applied	Range	Reading	Calibrated	Result
Zero Air	% LEL	0	0	PASS
Zero Air	% O2	20.9	20.9	PASS
Zero Air	PPM CO	0	0	PASS
Zero Air	PPM H2S	0	0	PASS

Gas Applied	Range	Reading	Calibrated	Result
50% LEL Methane	% LEL	61	50	PASS
18% VOL Oxygen	% O2	17.8	N/A	PASS
100 PPM Carbon Monoxide	PPM CO	71	100	PASS
25 PPM Hydrogen Sulphide	PPM H2S	22	25	PASS

Calibrated By Ivan Lo :



Appendix E Monitoring Results

Air Quality

1-hour TSP Concentration ($\mu\text{g}/\text{m}^3$) at Location AM1

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level	Action Level	Limit Level
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
6/07/2023	Sibata LD-5R	942532	0.00108	Fine	14:30	15:30	16:30	37	25	36	33	285	500	285	500
12/07/2023	Sibata LD-5R	942532	0.00108	Fine	10:00	11:00	12:00	36	40	32	36			285	500
18/07/2023	Sibata LD-5R	942532	0.00108	Fine	15:10	16:10	17:10	24	26	21	24			285	500
24/07/2023	Sibata LD-5R	942532	0.00108	Cloudy	14:40	15:40	16:40	46	45	45	45			285	500
29/07/2023	Sibata LD-5R	942532	0.00108	Fine	12:05	13:05	14:05	39	40	37	39			285	500
Average								35							
Max.								46							
Min.								21							

1-hour TSP Concentration ($\mu\text{g}/\text{m}^3$) at Location AM2

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level	Action Level	Limit Level
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
6/07/2023	Sibata LD-5R	882106	0.00107	Fine	13:30	14:30	15:30	26	36	26	29	279	500	279	500
12/07/2023	Sibata LD-5R	882106	0.00107	Fine	10:15	11:15	12:15	40	45	36	40			279	500
18/07/2023	Sibata LD-5R	882106	0.00107	Fine	15:30	16:30	17:30	21	26	23	23			279	500
24/07/2023	Sibata LD-5R	882106	0.00107	Cloudy	14:50	15:50	16:50	46	48	45	46			279	500
29/07/2023	Sibata LD-5R	882106	0.00107	Fine	12:16	13:16	14:16	30	34	31	32			279	500
Average								34							
Max.								48							
Min.								21							

1-hour TSP Concentration ($\mu\text{g}/\text{m}^3$) at Location AM3

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level	Action Level	Limit Level
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
6/07/2023	Sibata LD-5R	0Z4545	0.00114	Fine	12:36	13:36	14:36	29	37	28	31	285	500	285	500
12/07/2023	Sibata LD-5R	0Z4546	0.00114	Fine	10:40	11:40	12:40	31	36	36	34			285	500
18/07/2023	Sibata LD-5R	0Z4545	0.00114	Fine	14:00	15:00	16:00	21	32	21	23			285	500
24/07/2023	Sibata LD-5R	0Z4545	0.00114	Cloudy	14:30	15:30	16:30	30	31	28	46			285	500
29/07/2023	Sibata LD-5R	0Z4545	0.00114	Fine	12:30	13:30	14:30	41	44	40	42			285	500
Average								32							
Max.								44							
Min.								21							

The Summary of TSP 24-hour Concentration ($\mu\text{g}/\text{m}^3$) at Location AM1

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time	Averaged Flow Rate	Averaged Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
		($^{\circ}\text{C}$)		(hPa)	Initial					Final	(minutes)				
6/07/2023	Fine	30.4	1009.3	1353.53	1377.53	1440	30.4	1.44	2075	2.6757	2.7102	0.0345	17	164	260
12/07/2023	Fine	30.7	998.0	1377.53	1401.53	1440	30.7	1.44	2076	2.6500	2.7741	0.1241	60		
18/07/2023	Fine	31.0	1002.1	1401.53	1425.53	1440	31	1.43	2059	2.6493	2.6924	0.0431	21		
24/07/2023	Cloudy	29.8	1007.0	1425.74	1449.74	1440	39	1.41	2024	2.6574	2.7499	0.0925	46		
29/07/2023	Fine	29.5	1003.9	1450.61	1474.61	1440	41	1.47	2116	2.7471	2.8267	0.0796	38		
												Average	36		
												Min	17		
												Max	60		

The Summary of 24-hour TSP Concentration ($\mu\text{g}/\text{m}^3$) at Location AM2

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time	Averaged Flow Rate	Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
		($^{\circ}\text{C}$)		(hPa)	Initial					Final	(minutes)				
6/07/2023	Fine	30.4	1009.3	1111.40	1135.40	1440	40	1.21	1742	2.6638	2.7071	0.0433	25	152	260
12/07/2023	Fine	30.7	998.0	1135.40	1159.40	1440	40	1.20	1722	2.6447	2.7140	0.0693	40		
18/07/2023	Fine	31.0	1002.1	1159.40	1183.40	1440	40.5	1.21	1750	2.6377	2.6818	0.0441	25		
24/07/2023	Cloudy	29.8	1007.0	1183.93	1207.93	1440	38	1.15	1654	2.6514	2.7306	0.0792	48		
29/07/2023	Fine	29.5	1003.9	1208.55	1232.55	1440	36.5	1.10	1585	2.6471	2.6986	0.0515	32		
												Average	34		
												Min	25		
												Max	48		

The Summary of 24-hour TSP Concentration ($\mu\text{g}/\text{m}^3$) at Location AM3

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time	Averaged Flow Rate	Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
		($^{\circ}\text{C}$)		(hPa)	Initial					Final	(minutes)				
6/07/2023	Fine	30.4	1009.3	2118.79	2142.81	1441	41	1.40	2017	2.6682	2.7125	0.0443	22	163	260
12/07/2023	Fine	30.7	998.0	2142.81	2166.81	1440	42	1.42	2039	2.6442	2.7101	0.0659	32		
18/07/2023	Fine	31.0	1002.1	2166.81	2190.81	1440	39.5	1.34	1928	2.6464	2.7044	0.0580	30		
24/07/2023	Cloudy	29.8	1007.0	2190.82	2214.82	1440	39.5	1.35	1941	2.6663	2.7207	0.0544	28		
29/07/2023	Fine	29.5	1003.9	2216.00	2240.00	1440	42.5	1.44	2079	2.7477	2.8309	0.0832	40		
												Average	30		
												Min	22		
												Max	40		

Remarks:
 1. Orange Text equal to exceed Action Level
 2. Red Text equal to exceed Limit Level

Noise

Impact Phase Construction Noise Monitoring Data at Location NM1a

Date	Weather	Wind speed	Start Time	End Time	L_{eq} (dB(A))							L_{10} (dB(A))						L_{90} (dB(A))					
		m/s			1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th
6/07/2023	Fine	2.1	16:00	16:30	60.2	61.1	62.4	62.9	63.2	62.6	62.2	63.4	62.6	64.2	63.4	64.6	63.6	59.2	58.2	59.2	60.3	62.4	60.6
12/07/2023	Fine	2.1	9:30	10:00	62.1	63.2	64.3	63.4	63.9	62.9	63.4	64.1	65.2	66.4	65.3	64.9	63.9	60.1	60.4	59.1	61.2	61.9	60.3
21/07/2023	Fine	1.2	9:15	9:45	62.4	61.1	63.2	64.3	64.9	65.1	63.7	64.6	63.2	66.2	65.4	67.1	66.2	60.2	60.4	61.2	62.3	62.6	62.1
24/07/2023	Cloudy	2.1	8:00	8:30	59.2	60.2	61.2	60.9	61.4	62.4	61.0	62.2	63.3	62.5	62.9	63.6	64.5	52.4	58.3	59.1	58.4	57.5	59.2
											Average	62.1											
											Baseline Level	55.4											
											Action Level	When one valid documented complaint is received											
											Limit Level	75											

Impact Phase Construction Noise Monitoring Data at Location NM2a

Date	Weather	Wind speed	Start Time	End Time	L_{eq} (dB(A))							L_{10} (dB(A))						L_{90} (dB(A))					
		m/s			1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th
6/07/2023	Fine	2.5	14:00	14:30	57.2	58.4	57.7	58.1	59.1	57.6	58.1	59.2	60.2	59.4	59.6	60.3	59.1	55.2	54.4	55.2	56.2	55.2	54.2
12/07/2023	Fine	1.9	14:30	15:00	53.6	54.1	55.3	54.2	55.6	55.9	54.9	55.4	56.2	57.1	55.6	56.9	57.4	50.1	53.2	52.6	52.4	53.1	54.6
21/07/2023	Fine	1.2	15:00	15:30	57.2	58.2	59.2	57.2	58.1	59.1	58.2	59.4	60.2	60.2	59.2	60.1	62.1	55.2	56.2	57.3	55.2	56.2	57.9
24/07/2023	Cloudy	1.22	14:00	14:30	54.2	55.2	54.5	53.2	54.5	53.5	54.2	57.2	58.4	57.8	56.9	58.1	56.7	50.2	51.2	50.1	49.1	52.1	50.6
											Average	56.3											
											Baseline Level	54.5											
											Action Level	When one valid documented complaint is received											
											Limit Level	75											

Water Quality

Monitoring Location: WM1

Date	Time	Weather	Water Depth (m)	Water Flow (L/s)	Water Temperature (°C)	DO (mg/L)			pH			Turbidity (NTU)			SS (mg/L)		
						Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level
12-Jul-23	13:39	Sunny	0.05	0.2	28	7.5	<7.4	<4	7.2	>7.7	>7.8	6.1	>9.2	>9.5	2.0	>9.7	>11.4

Monitoring Location: WM2

Date	Time	Weather	Water Depth (m)	Water Flow (L/s)	Water Temperature (°C)	DO (mg/L)			pH			Turbidity (NTU)			SS (mg/L)		
						Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level
12-Jul-23	8:16	Sunny	0.15	0.1	26.8	7.3	<5	<4	7.1	>7.6	>7.7	50.2	>108.3	>108.9	16.8	>94.5	>94.7

Remarks

1. Sample will be grabbed on surface when the water depth is less than 1m.
2. "TBC" equal to "To be confirm"






CERTIFICATE OF ANALYSIS

Client	: ACUMEN LABORATORY AND TESTING LIMITED	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 9
Contact	: HUNTINGTON HUI	Contact	: Richard Fung	Work Order	: HK2327651
Address	: UNIT D, 12/F, FORD GLORY PLAZA, NOS.37-39 WING HONG STREET, CHEUNG SHA WAN, KOWLOON, HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: Huntington.Hui@aurecongroup.com	E-mail	: richard.fung@alsglobal.com		
Telephone	: ---	Telephone	: +852 2610 1044		
Facsimile	: ---	Facsimile	: +852 2610 2021		
Project	: NENXT			Date Samples Received	: 12-Jul-2023
Order number	: ---	Quote number	: HKE/2751/2022_V2	Issue Date	: 26-Jul-2023
C-O-C number	: ---			No. of samples received	: 2
Site	:			No. of samples analysed	: 2

This report may not be reproduced except with prior written approval from the testing laboratory.

This document has been signed by those names that appear on this report and are the authorised signatories.

<i>Signatories</i>	<i>Position</i>	<i>Authorised results for</i>
 Fung Lim Chee, Richard	Managing Director	Inorganics
 Fung Lim Chee, Richard	Managing Director	Metals_ENV
 Ng Sin Kou, May	Laboratory Manager	Microbiology_ENV



General Comments

This report supersedes any previous report(s) with the same work order number. All pages of this report have been checked and approved for release. When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Testing period is from 12-Jul-2023 to 25-Jul-2023.

Key: LOR = Limit of reporting; CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

Specific Comments for Work Order: HK2327651

Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in chilled condition.

Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.

Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.

Microbiological sample(s) was/ were collected in 125mL sterile plastic bottles containing sodium thiosulfate. Sample(s) arrived at the laboratory at 18:45.

NOT DETECTED denotes result(s) is (are) less than the Limit of Report (LOR).

ED037 - Titration end point for Total Alkalinity is pH 4.5 while end point for Total Alkalinity <20mg/L is pH 4.2.

Water sample(s) digested by in-house method E-3005 prior to the determination of total metals. The in-house method is developed based on USEPA method 3005.

EA002 - pH value is reported as at 25°C. Calibration range of pH value is 4.0 - 10.0. Results exceeding this range is for reference only.

EA025 - The accredited LOR of Total Suspended Solids is 0.5mg/L. Results below this LOR are for reference only.



Analytical Results

Sub-Matrix: WATER

				Sample ID	WM1	WM2	---	---	---
				Sampling date / time	12-Jul-2023	12-Jul-2023	---	---	---
Compound	CAS Number	LOR	Unit	HK2327651-001	HK2327651-002	-----	-----	-----	
EA/ED: Physical and Aggregate Properties									
EA002: pH Value	----	0.1	pH Unit	7.6	7.2	---	---	---	
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	84	132	---	---	---	
EA025: Suspended Solids (SS)	----	0.1	mg/L	2.0	16.8	---	---	---	
ED037: Total Alkalinity as CaCO3	----	1	mg/L	18	38	---	---	---	
ED/EK: Inorganic Nonmetallic Parameters									
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	7	13	---	---	---	
ED045K: Chloride	16887-00-6	0.5	mg/L	7	7	---	---	---	
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	0.03	0.07	---	---	---	
EK058A: Nitrate as N	14797-55-8	0.01	mg/L	0.53	0.26	---	---	---	
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.4	0.3	---	---	---	
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	0.01	<0.01	---	---	---	
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	---	---	---	
EP: Aggregate Organics									
EP005: Total Organic Carbon	----	1	mg/L	3	2	---	---	---	
EP020: Oil & Grease	----	5	mg/L	<5	<5	---	---	---	
EP026C: Chemical Oxygen Demand	----	5	mg/L	12	9	---	---	---	
EP030: Biochemical Oxygen Demand	----	2	mg/L	<2	<2	---	---	---	
EG: Metals and Major Cations - Total									
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	---	---	---	
EG020: Copper	7440-50-8	1	µg/L	2	2	---	---	---	
EG020: Lead	7439-92-1	1	µg/L	<1	3	---	---	---	
EG020: Manganese	7439-96-5	1	µg/L	72	757	---	---	---	
EG020: Nickel	7440-02-0	1	µg/L	<1	2	---	---	---	
EG020: Zinc	7440-66-6	10	µg/L	72	26	---	---	---	
EG032: Calcium	7440-70-2	50	µg/L	19400	15600	---	---	---	
EG032: Iron	7439-89-6	10	µg/L	780	2370	---	---	---	
EG032: Magnesium	7439-95-4	50	µg/L	660	1330	---	---	---	
EG032: Potassium	7440-09-7	50	µg/L	690	2130	---	---	---	
EG032: Sodium	7440-23-5	50	µg/L	8350	6120	---	---	---	



Sub-Matrix: WATER				Sample ID	WM1	WM2	---	---	---
				Sampling date / time	12-Jul-2023	12-Jul-2023	---	---	---
Compound	CAS Number	LOR	Unit	HK2327651-001	HK2327651-002	-----	-----	-----	
EM: Microbiological Testing									
EM002: E. coli	----	1	CFU/100mL	40	600	---	---	---	
EM003: Total Coliforms	----	1	CFU/100mL	56	850	---	---	---	



Laboratory Duplicate (DUP) Report

Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method/Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 5170445)								
HK2327588-004	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.3	5.2	3.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5171046)								
HK2325943-001	Anonymous	ED037: Total Alkalinity as CaCO3	----	1	mg/L	330	335	1.3
EA/ED: Physical and Aggregate Properties (QC Lot: 5172207)								
HK2327755-001	Anonymous	EA002: pH Value	----	0.1	pH Unit	7.6	7.6	0.0
HK2327651-002	WM2	EA002: pH Value	----	0.1	pH Unit	7.2	7.2	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5172208)								
HK2327651-002	WM2	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	132	133	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5170970)								
HK2327651-001	WM1	ED045K: Chloride	16887-00-6	1	mg/L	7	7	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5170971)								
HK2327651-001	WM1	ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	7	7	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5173620)								
HK2327651-001	WM1	EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	0.01	0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5184374)								
HK2327651-001	WM1	EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5184416)								
HK2327361-001	Anonymous	EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	71.6	72.6	1.4
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5190580)								
HK2328232-001	Anonymous	EK055K: Ammonia as N	7664-41-7	0.01	mg/L	23.5	23.1	1.7
EP: Aggregate Organics (QC Lot: 5186610)								
HK2328067-005	Anonymous	EP005: Total Organic Carbon	----	1	mg/L	<1	<1	0.0
EP: Aggregate Organics (QC Lot: 5188867)								
HK2327609-004	Anonymous	EP026C: Chemical Oxygen Demand	----	5	mg/L	22	22	0.0
EG: Metals and Major Cations - Total (QC Lot: 5170772)								
HK2327651-002	WM2	EG032: Iron	7439-89-6	10	µg/L	2370	2350	1.1
		EG032: Calcium	7440-70-2	50	µg/L	15600	15600	0.2
		EG032: Magnesium	7439-95-4	50	µg/L	1330	1320	1.0
		EG032: Potassium	7440-09-7	50	µg/L	2130	2160	1.4
		EG032: Sodium	7440-23-5	50	µg/L	6120	6060	1.1



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations - Total (QC Lot: 5170773)								
HK2327651-002	WM2	EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	3	3	0.0
		EG020: Manganese	7439-96-5	1	µg/L	757	724	4.5
		EG020: Nickel	7440-02-0	1	µg/L	2	1	0.0
		EG020: Zinc	7440-66-6	10	µg/L	26	22	16.8

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 5170445)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	10 mg/L	97.0	----	82.4	118	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 5171046)											
ED037: Total Alkalinity as CaCO3	----	1	mg/L	<1	50 mg/L	102	----	95.0	105	----	----
				<1	2000 mg/L	97.2	----	95.0	105	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 5172208)											
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	<1	146.9 µS/cm	97.8	----	93.5	106	----	----
				<1	1412 µS/cm	96.6	----	94.3	105	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5170970)											
ED045K: Chloride	16887-00-6	1	mg/L	<1	10 mg/L	96.4	----	88.2	108	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5170971)											
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	<1	5 mg/L	105	----	89.8	108	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5173620)											
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	97.0	----	92.4	106	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5184374)											
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	----	----	----	----	----	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5184416)											
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	0.5 mg/L	104	----	89.0	120	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
		LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)	
Method: Compound	CAS Number					LCS	DCS	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5190580)											
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	100	----	89.3	109	----	----
EP: Aggregate Organics (QC Lot: 5169711)											
EP030: Biochemical Oxygen Demand	----	----	mg/L	----	198 mg/L	102	----	77.6	118	----	----
EP: Aggregate Organics (QC Lot: 5181462)											
EP020: Oil & Grease	----	2	mg/L	<2	20 mg/L	97.2	----	84.2	110	----	----
EP: Aggregate Organics (QC Lot: 5188610)											
EP005: Total Organic Carbon	----	1	mg/L	<1	5 mg/L	99.2	----	78.1	123	----	----
				<1	100 mg/L	106	----	79.9	119	----	----
EP: Aggregate Organics (QC Lot: 5188867)											
EP026C: Chemical Oxygen Demand	----	----	mg/L	----	25 mg/L	100	----	92.0	108	----	----
				----	250 mg/L	99.9	----	92.3	106	----	----
EG: Metals and Major Cations - Total (QC Lot: 5170772)											
EG032: Calcium	7440-70-2	50	µg/L	<50	2000 µg/L	96.2	----	85.0	115	----	----
EG032: Iron	7439-89-6	10	µg/L	<10	2000 µg/L	104	----	85.0	115	----	----
EG032: Magnesium	7439-95-4	50	µg/L	<50	2000 µg/L	103	----	85.0	115	----	----
EG032: Potassium	7440-09-7	50	µg/L	<50	2000 µg/L	96.0	----	85.0	115	----	----
EG032: Sodium	7440-23-5	50	µg/L	<50	2000 µg/L	97.4	----	85.0	115	----	----
EG: Metals and Major Cations - Total (QC Lot: 5170773)											
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	5 µg/L	103	----	85.0	109	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	50 µg/L	99.5	----	90.0	111	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	50 µg/L	100	----	89.0	111	----	----
EG020: Manganese	7439-96-5	1	µg/L	<1	50 µg/L	102	----	85.0	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	50 µg/L	98.1	----	87.0	110	----	----
EG020: Zinc	7440-66-6	10	µg/L	<10	50 µg/L	104	----	86.0	114	----	----



Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

Matrix: WATER

					Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5170970)										
HK2327651-001	WM1	ED045K: Chloride	16887-00-6	5 mg/L	84.6	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5170971)										
HK2327651-001	WM1	ED041K: Sulphate as SO4 - Turbidimetric	----	5 mg/L	96.0	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5173620)										
HK2327651-001	WM1	EK071K: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	95.8	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5184416)										
HK2327361-001	Anonymous	EK061A: Total Kjeldahl Nitrogen as N	----	50 mg/L	118	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5190580)										
HK2328232-001	Anonymous	EK055K: Ammonia as N	7664-41-7	50 mg/L	93.8	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5186610)										
HK2328067-005	Anonymous	EP005: Total Organic Carbon	----	5 mg/L	92.4	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5188867)										
HK2327651-001	WM1	EP026C: Chemical Oxygen Demand	----	10 mg/L	102	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5170772)										
HK2327651-001	WM1	EG032: Calcium	7440-70-2	2000 µg/L	# Not Determined	----	75.0	125	----	----
		EG032: Iron	7439-89-6	2000 µg/L	97.6	----	75.0	125	----	----
		EG032: Magnesium	7439-95-4	2000 µg/L	97.4	----	75.0	125	----	----
		EG032: Potassium	7440-09-7	2000 µg/L	92.8	----	75.0	125	----	----
		EG032: Sodium	7440-23-5	2000 µg/L	# Not Determined	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5170773)										
HK2327651-001	WM1	EG020: Cadmium	7440-43-9	5 µg/L	103	----	75.0	125	----	----
		EG020: Copper	7440-50-8	50 µg/L	99.9	----	75.0	125	----	----
		EG020: Lead	7439-92-1	50 µg/L	98.7	----	75.0	125	----	----



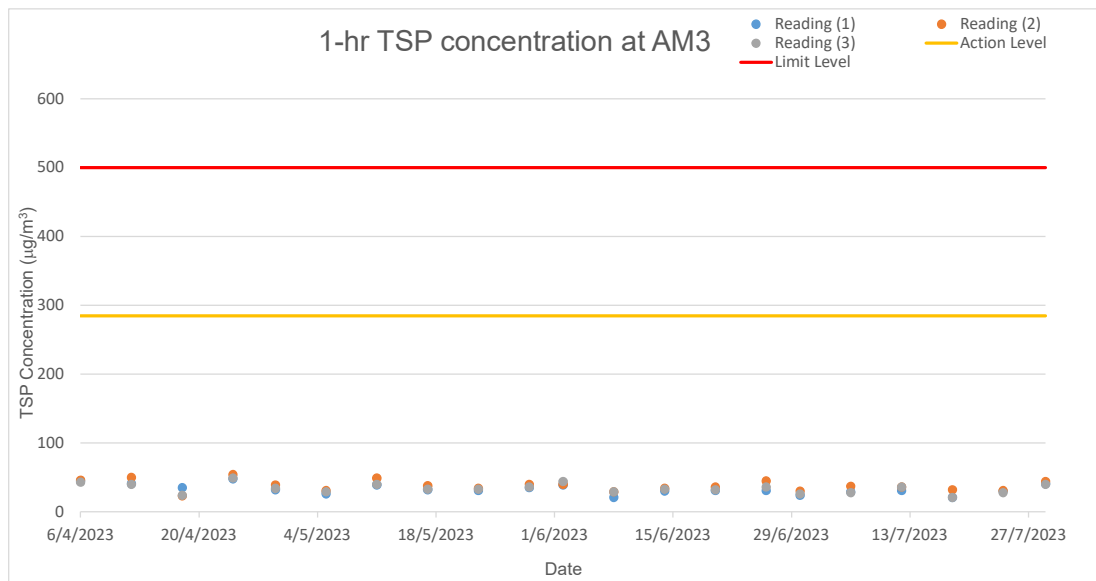
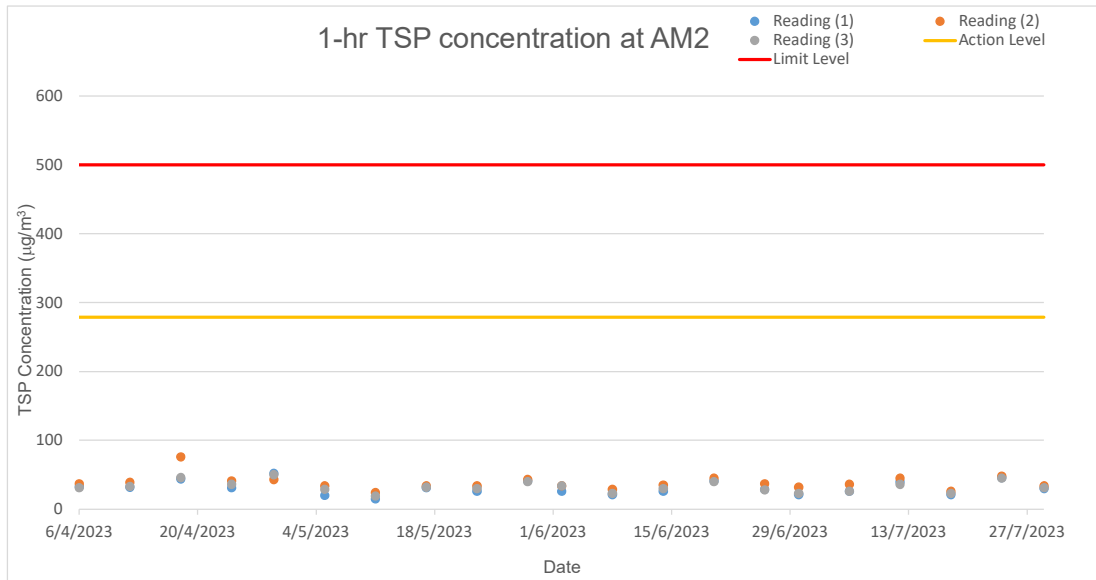
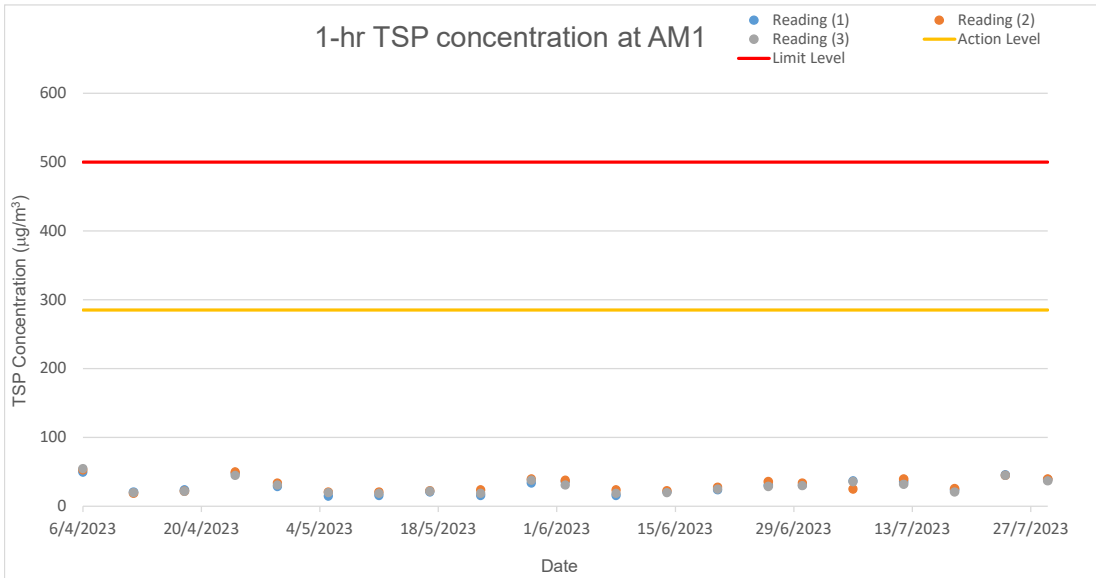
Matrix: WATER

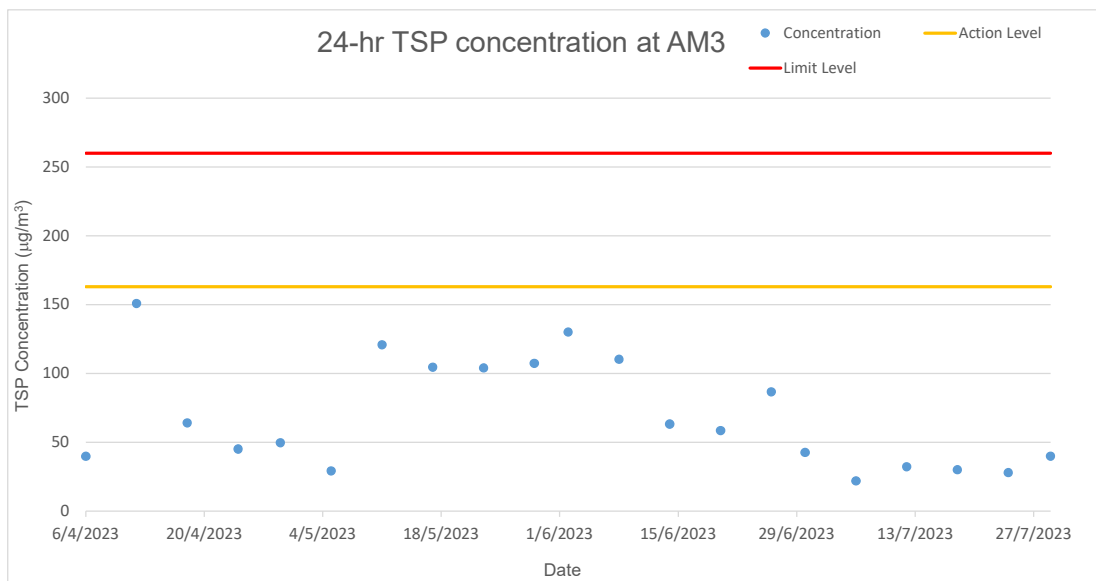
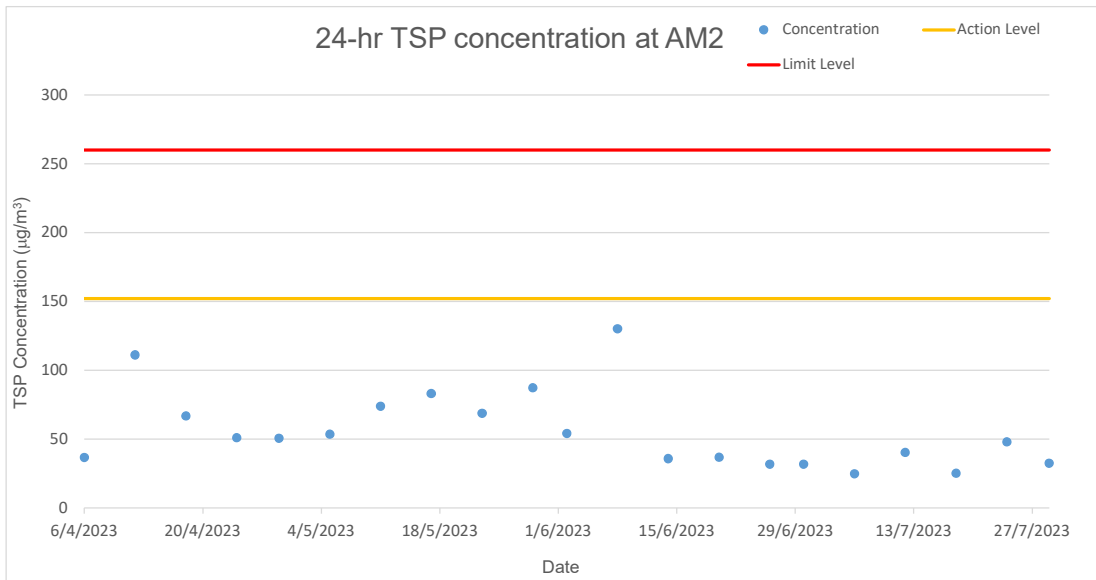
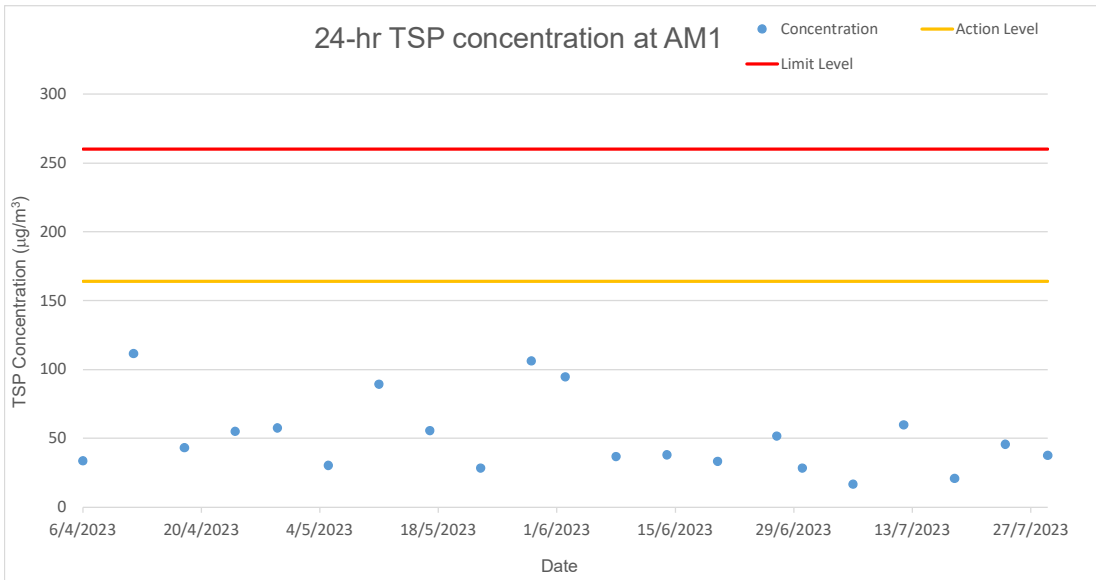
Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations - Total (QC Lot: 5170773) - Continued										
HK2327651-001	WM1	EG020: Manganese	7439-96-5	50 µg/L	93.3	----	75.0	125	----	----
		EG020: Nickel	7440-02-0	50 µg/L	97.4	----	75.0	125	----	----
		EG020: Zinc	7440-66-6	50 µg/L	85.2	----	75.0	125	----	----

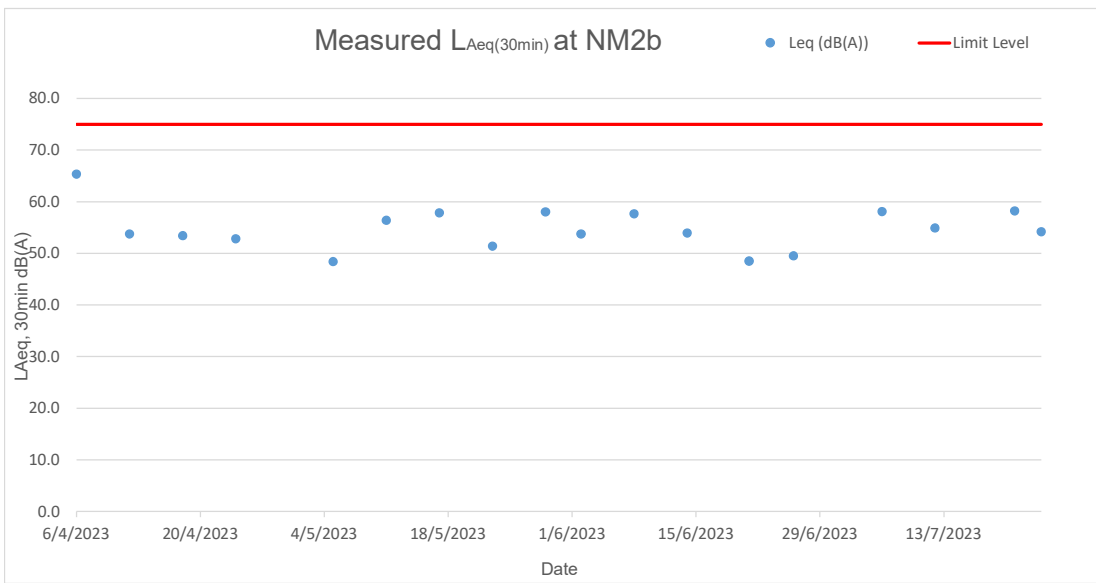
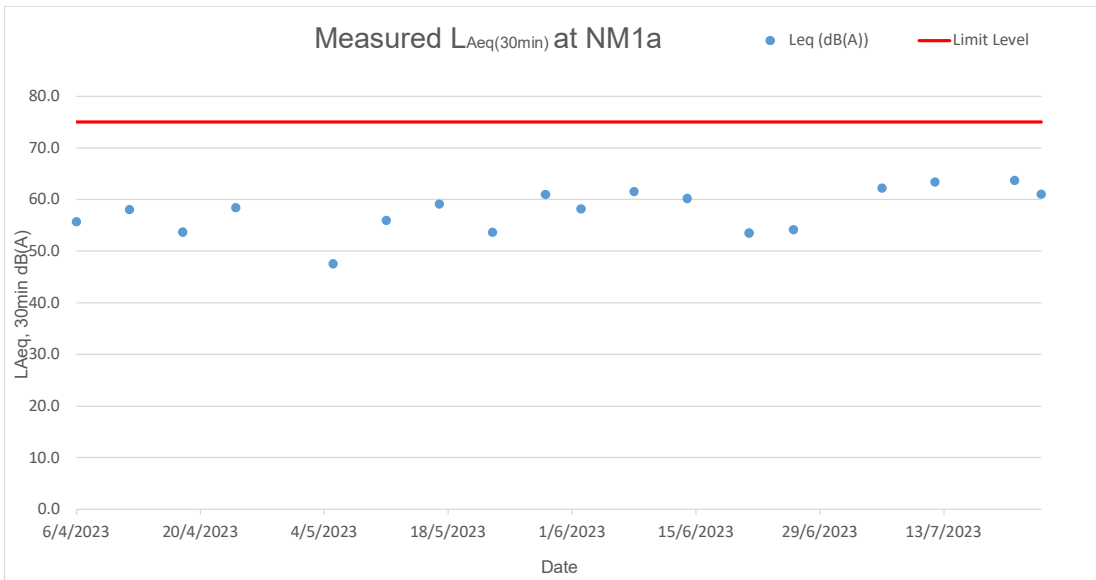
Appendix F Graphical Presentations

Air Quality



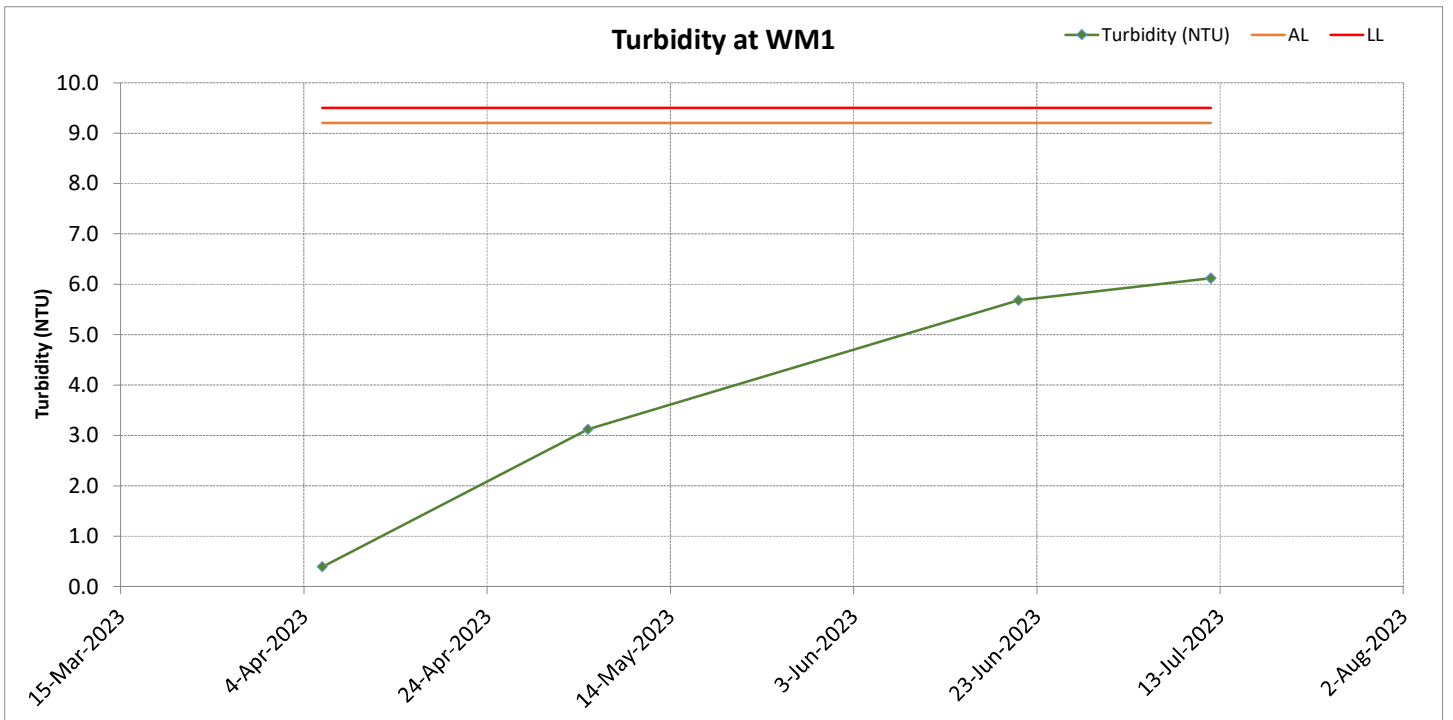
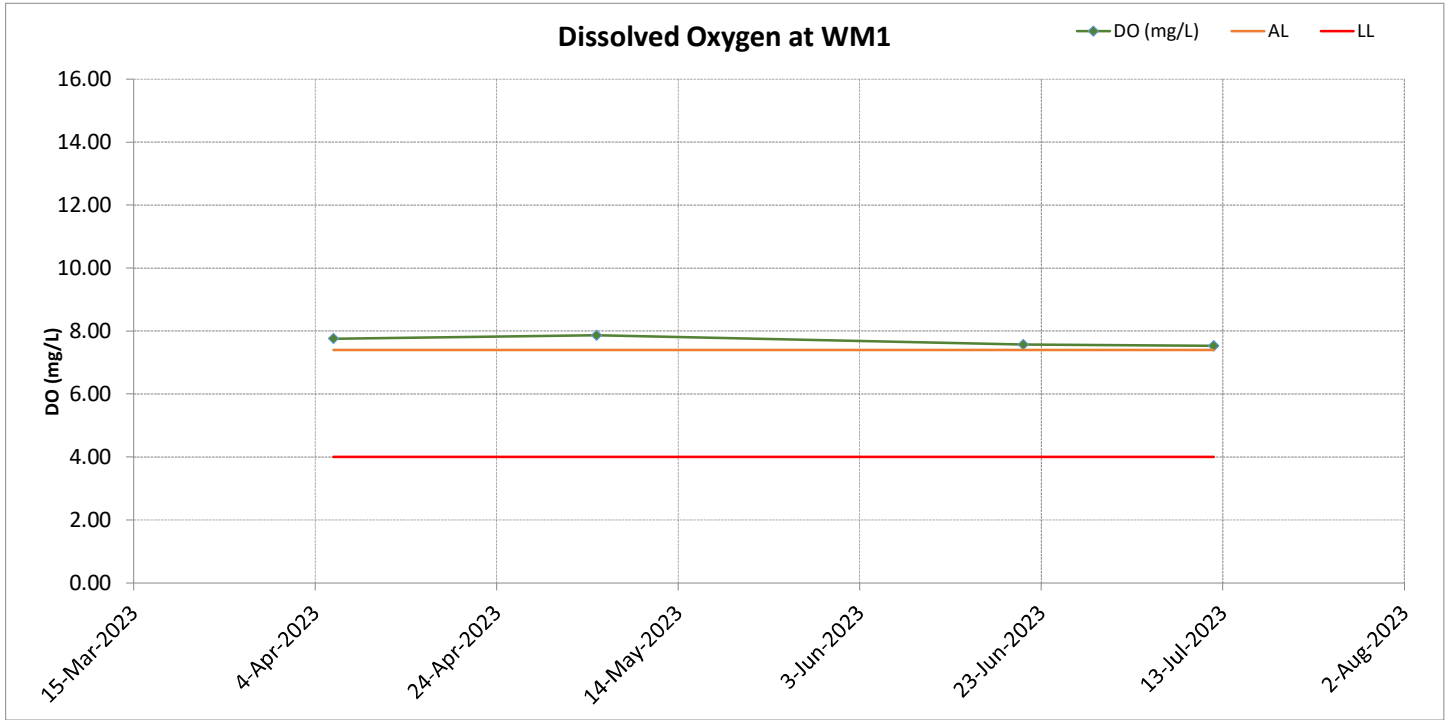


Noise

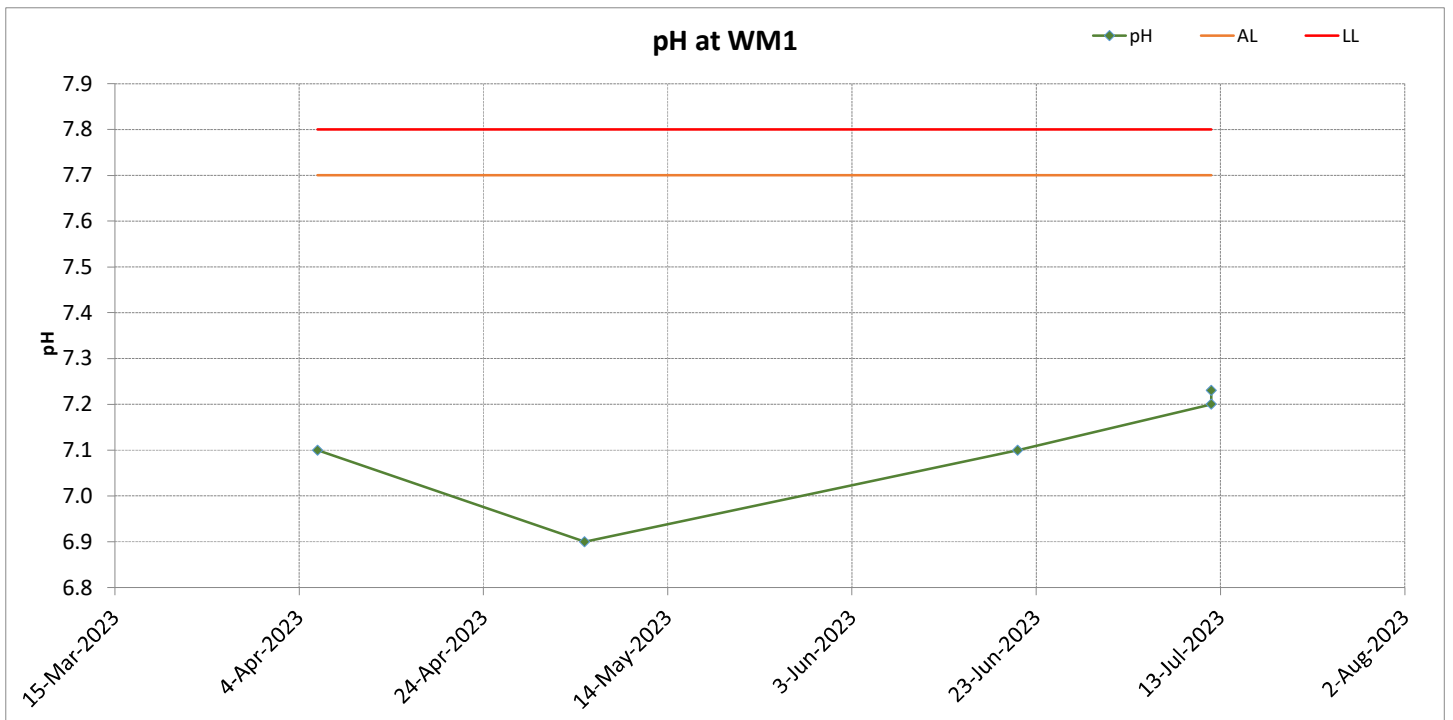
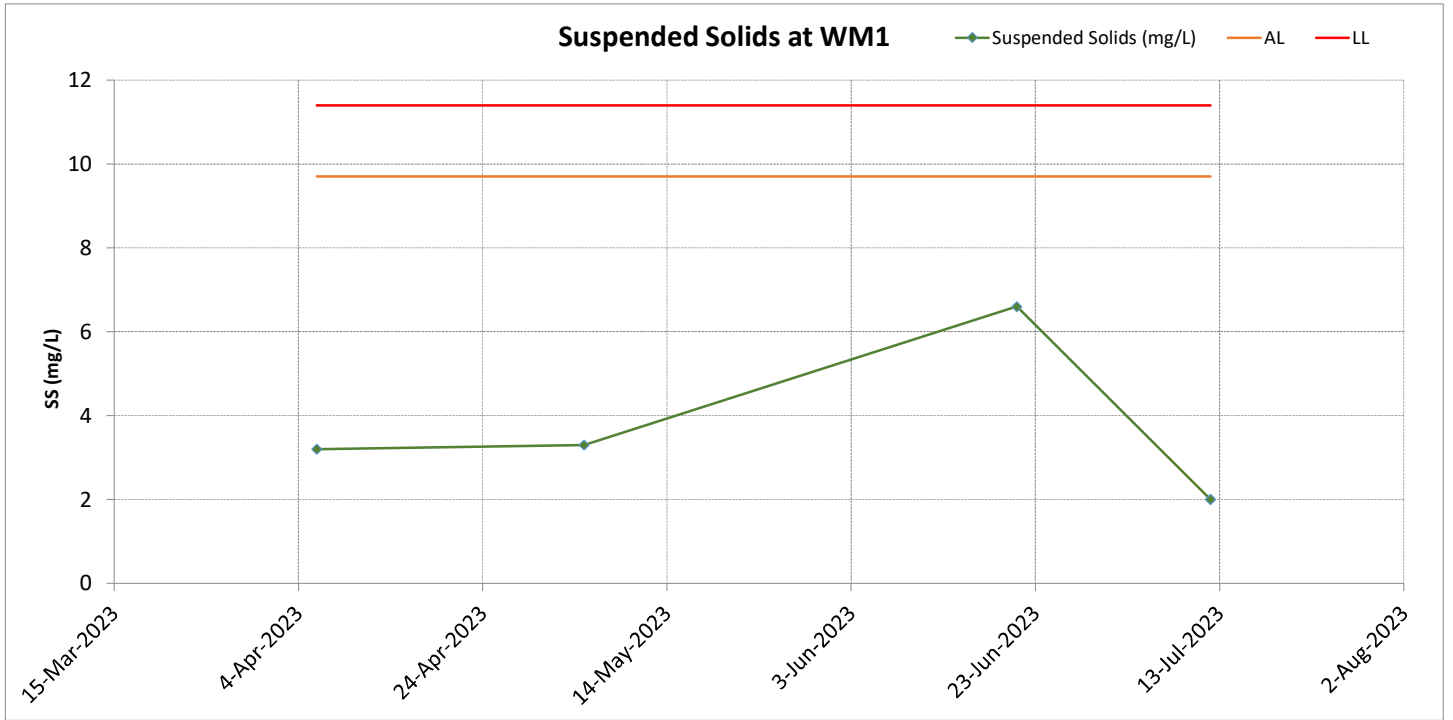


Water Quality

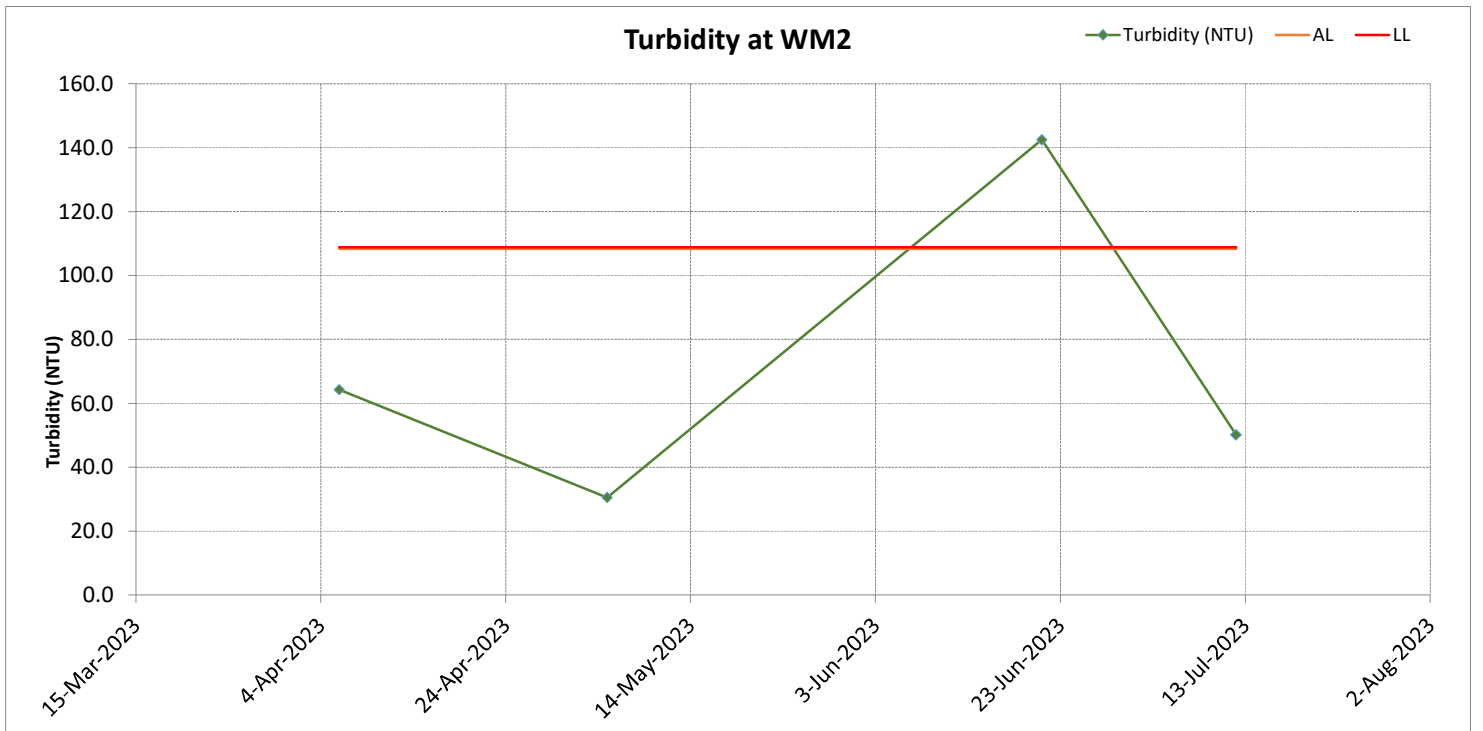
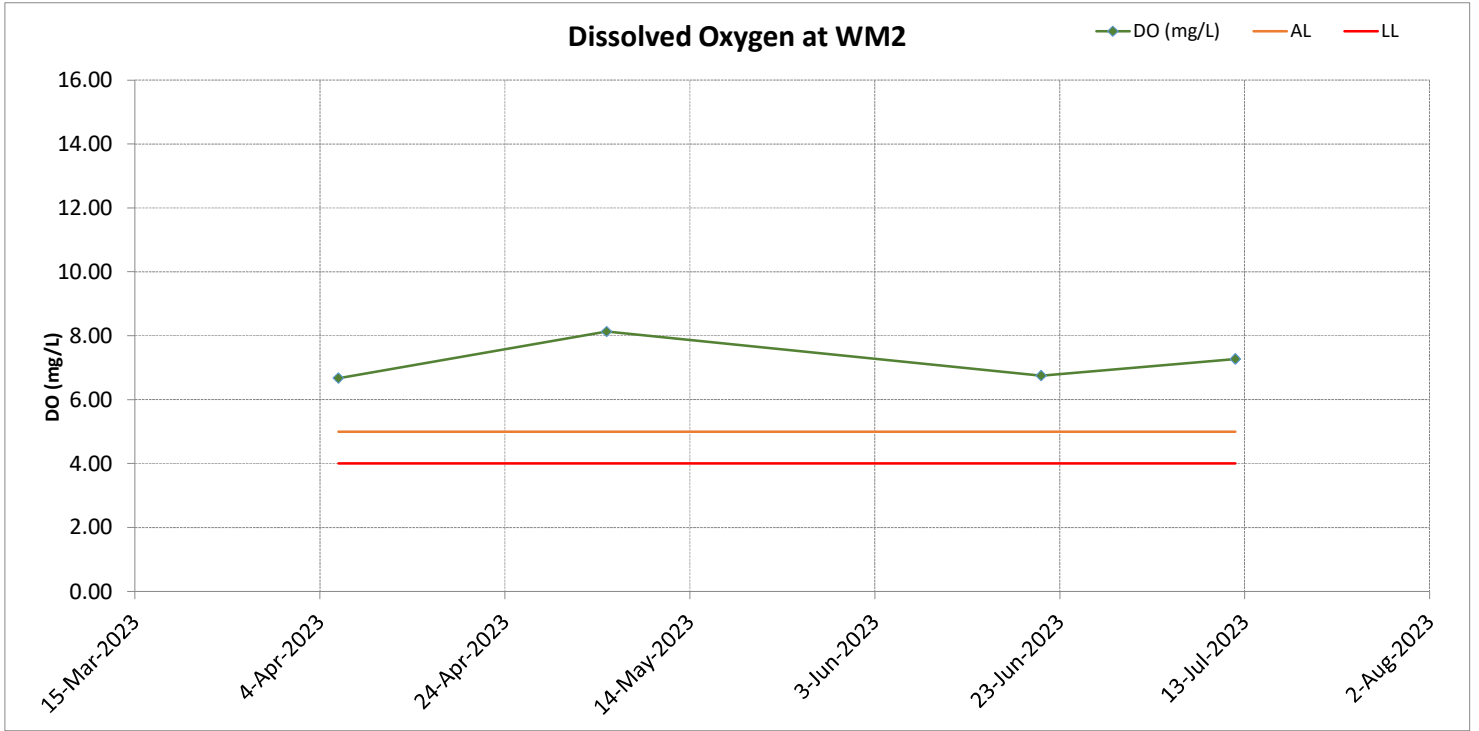
Surface Water Monitoring Results at WM1



Surface Water Monitoring Results at WM1

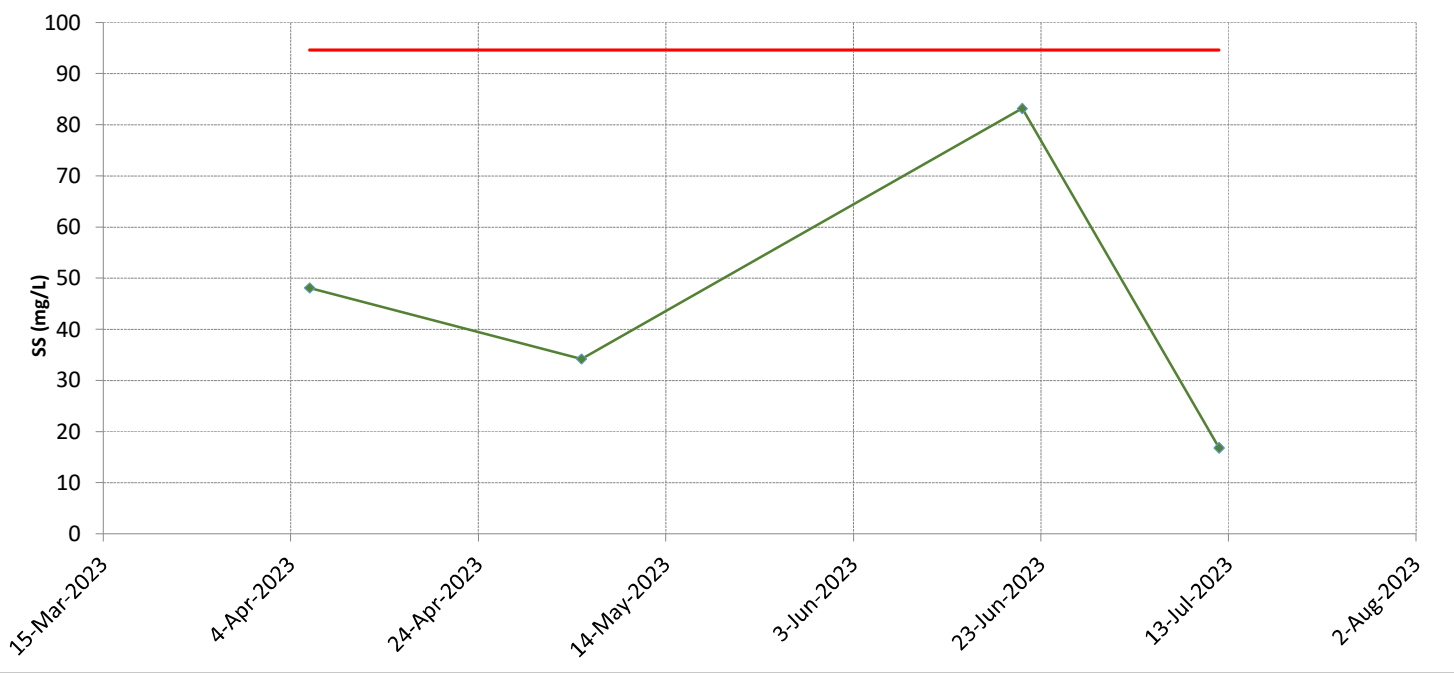


Surface Water Monitoring Results at WM2

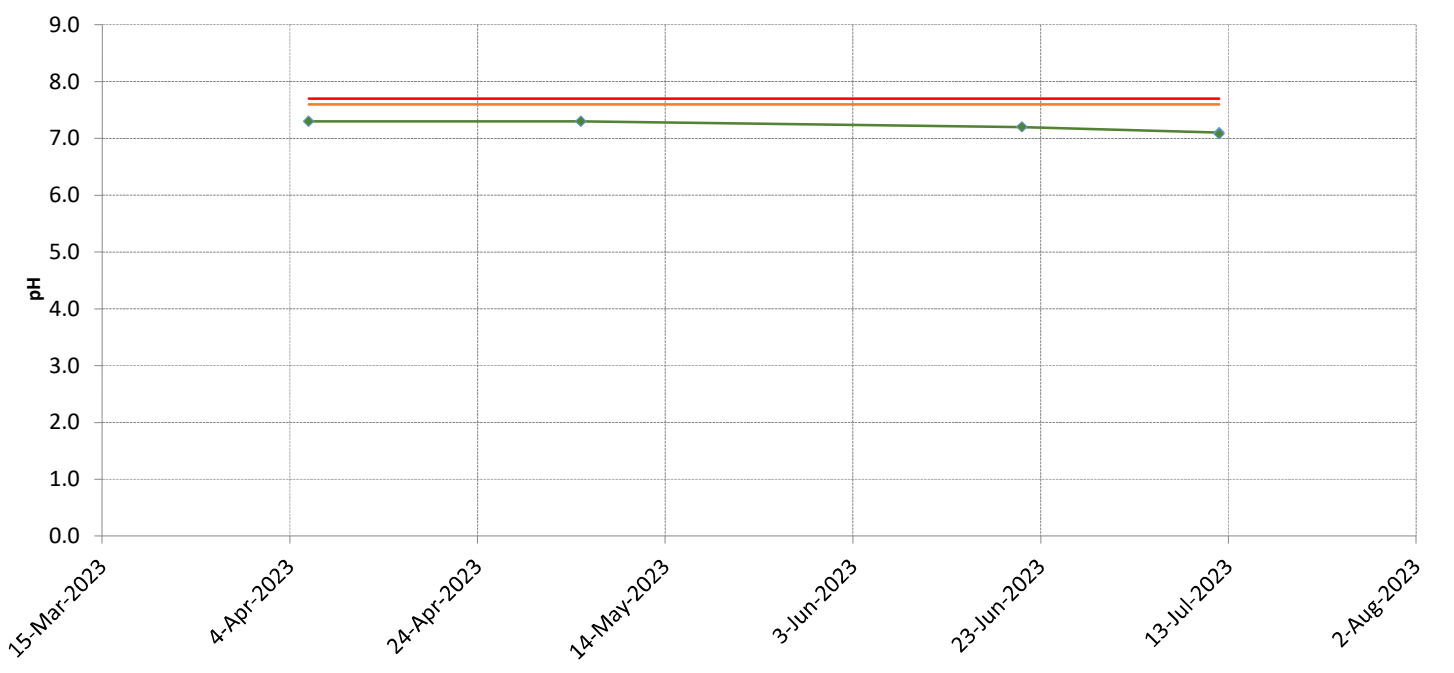


Surface Water Monitoring Results at WM2

Suspended Solids at WM2



pH at WM2



Appendix G Notification of Environmental Quality Limits Exceedance

Notification of Environmental Quality Limits Exceedance

Construction Dust

Dust Monitoring Station	Parameter	1-hr TSP	24-hr TSP	Exceedance Count			
				Reporting period		Accumulate project to date	
	Level Exceedance			Project related	Non-project replated	Project related	Non-project replated
AM1	Action	0	0	0	0	0	2
	Limit	0	0	0	0	0	3
AM2	Action	0	0	0	0	0	0
	Limit	0	0	0	0	0	0
AM3	Action	0	0	0	0	0	4
	Limit	0	0	0	0	0	3

Noise Monitoring

Monitoring Station	Monitoring Parameter(s)	No. of Exceedance	
		Action Level	Limit Level
NM1a	LAeq (30mins)	0	0
NM2a		0	0

Notification of Environmental Quality Limits Exceedance

Surface Water Monitoring

Monitoring Station	Level Exceedance	Monitoring Parameter(s)				Exceedance Count			
						Reporting period		Accumulate project to date	
		Dissolved Oxygen	pH	Turbidity	Suspended Solids	Project related	Non-project replated	Project related	Non-project replated
WM1	Action Level	0	0	0	0	0	0	0	0
	Limit Level	0	0	0	0	0	0	0	0
WM2	Action Level	0	0	0	0	0	0	0	0
	Limit Level	0	0	0	0	0	0	0	1#

Remarks: # equal to "Investigation In progress"

Landfill Gas (LFG) Monitoring

LFG Monitoring Station	Monitoring Parameter(s)	No. of Exceedance
		Limit Level
Portion A +50 mpD to +70 mpD Platform	CH ₄	0
	CO ₂	0
	O ₂	0

Appendix H Wind Data

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230701 0000	2.2	E
20230701 0010	1.7	E
20230701 0020	1.9	SE
20230701 0030	2.8	ESE
20230701 0040	2.2	ESE
20230701 0050	3.3	E
20230701 0100	3.1	E
20230701 0110	2.8	ENE
20230701 0120	3.1	E
20230701 0130	3.1	E
20230701 0140	1.7	E
20230701 0150	2.2	ESE
20230701 0200	1.9	ENE
20230701 0210	1.4	ESE
20230701 0220	2.2	ESE
20230701 0230	2.2	SE
20230701 0240	2.2	SE
20230701 0250	1.4	ESE
20230701 0300	1.4	ESE
20230701 0310	1.7	ENE
20230701 0320	2.2	ESE
20230701 0330	2.2	ESE
20230701 0340	1.7	ESE
20230701 0350	1.7	E
20230701 0400	1.7	E
20230701 0410	1.7	ESE
20230701 0420	1.7	E
20230701 0430	1.9	E
20230701 0440	2.2	ESE
20230701 0450	1.9	E
20230701 0500	1.9	E
20230701 0510	2.2	ESE
20230701 0520	2.5	ESE
20230701 0530	2.5	ESE
20230701 0540	3.1	ESE
20230701 0550	3.3	ESE
20230701 0600	2.5	E
20230701 0610	2.8	E
20230701 0620	2.8	ESE
20230701 0630	1.9	ESE
20230701 0640	2.5	ESE
20230701 0650	2.5	ESE
20230701 0700	2.5	ESE
20230701 0710	1.9	ESE
20230701 0720	2.5	ESE
20230701 0730	0.6	SE
20230701 0740	0.3	-
20230701 0750	0.8	SE
20230701 0800	0.6	WSW
20230701 0810	0.3	SSW
20230701 0820	1.7	SE
20230701 0830	0.6	SSE
20230701 0840	1.1	SE
20230701 0850	1.4	SE
20230701 0900	1.4	ESE
20230701 0910	1.4	ESE
20230701 0920	1.4	ESE
20230701 0930	1.1	E
20230701 0940	1.1	E
20230701 0950	1.4	ESE
20230701 1000	1.4	ESE
20230701 1010	1.4	SE
20230701 1020	0.8	ENE
20230701 1030	0.8	W
20230701 1040	1.1	WNW
20230701 1050	0.8	SE
20230701 1100	0.6	WNW
20230701 1110	1.4	-
20230701 1120	2.8	NNE
20230701 1130	3.1	NNE
20230701 1140	3.3	NNE
20230701 1150	2.8	NNE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230701 1200	2.8	N
20230701 1210	3.9	N
20230701 1220	3.3	NNE
20230701 1230	2.8	N
20230701 1240	2.8	N
20230701 1250	2.8	N
20230701 1300	3.3	NNE
20230701 1310	3.3	N
20230701 1320	3.6	N
20230701 1330	3.9	NNE
20230701 1340	3.6	NE
20230701 1350	2.8	NE
20230701 1400	2.8	NNE
20230701 1410	2.8	NE
20230701 1420	3.3	NE
20230701 1430	2.8	NNE
20230701 1440	3.3	NNE
20230701 1450	3.3	NNE
20230701 1500	2.5	NNE
20230701 1510	2.5	NNE
20230701 1520	2.5	NNE
20230701 1530	4.4	NNE
20230701 1540	5.3	NNE
20230701 1550	5	NNE
20230701 1600	3.9	NNE
20230701 1610	5	NNE
20230701 1620	5.3	NNE
20230701 1630	5.3	NNE
20230701 1640	5.8	NNE
20230701 1650	6.4	NNE
20230701 1700	6.4	NNE
20230701 1710	5.8	NNE
20230701 1720	6.1	NNE
20230701 1730	4.7	NNE
20230701 1740	4.7	NNE
20230701 1750	5	NNE
20230701 1800	5.3	NNE
20230701 1810	4.4	NNE
20230701 1820	4.7	NNE
20230701 1830	3.3	NNE
20230701 1840	3.3	NE
20230701 1850	3.6	NNE
20230701 1900	2.8	NE
20230701 1910	2.5	NE
20230701 1920	3.9	NNE
20230701 1930	4.7	NNE
20230701 1940	4.2	NNE
20230701 1950	3.1	NNE
20230701 2000	4.7	NNE
20230701 2010	3.9	NNE
20230701 2020	4.7	NNE
20230701 2030	3.9	NNE
20230701 2040	3.3	NNE
20230701 2050	3.6	N
20230701 2100	3.3	NNE
20230701 2110	3.3	N
20230701 2120	3.3	NNE
20230701 2130	3.1	N
20230701 2140	2.8	N
20230701 2150	2.8	N
20230701 2200	2.5	N
20230701 2210	2.5	N
20230701 2220	3.1	NNE
20230701 2230	2.8	NNE
20230701 2240	3.1	NNE
20230701 2250	4.2	NNE
20230701 2300	3.3	NNE
20230701 2310	2.8	NNE
20230701 2320	3.6	NNE
20230701 2330	3.3	NNE
20230701 2340	3.3	NNE
20230701 2350	3.1	NNE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230702 0000	3.3	N
20230702 0010	4.7	N
20230702 0020	3.9	NNE
20230702 0030	5	NNE
20230702 0040	4.7	NNE
20230702 0050	5	NNE
20230702 0100	5.6	NNE
20230702 0110	4.7	NNE
20230702 0120	4.4	NNE
20230702 0130	5.3	NNE
20230702 0140	4.7	NNE
20230702 0150	4.7	N
20230702 0200	4.7	NNE
20230702 0210	4.7	NNE
20230702 0220	4.7	NNE
20230702 0230	5	NNE
20230702 0240	4.2	NNE
20230702 0250	5	NNE
20230702 0300	4.4	NNE
20230702 0310	3.3	N
20230702 0320	3.6	N
20230702 0330	3.9	N
20230702 0340	3.3	N
20230702 0350	3.9	NNE
20230702 0400	4.7	NNE
20230702 0410	4.7	NNE
20230702 0420	3.9	NNE
20230702 0430	5	NNE
20230702 0440	4.4	NNE
20230702 0450	3.9	NNE
20230702 0500	4.2	NNE
20230702 0510	2.8	NNE
20230702 0520	4.2	NNE
20230702 0530	4.7	NNE
20230702 0540	3.9	NNE
20230702 0550	3.9	NNE
20230702 0600	3.9	NNE
20230702 0610	3.1	NNE
20230702 0620	3.6	NNE
20230702 0630	2.5	NNE
20230702 0640	2.2	NNE
20230702 0650	1.1	NNE
20230702 0700	0.8	N
20230702 0710	1.1	NNE
20230702 0720	1.1	NNE
20230702 0730	1.4	ENE
20230702 0740	1.1	E
20230702 0750	1.4	-
20230702 0800	2.5	NE
20230702 0810	3.3	NE
20230702 0820	3.6	NE
20230702 0830	3.9	NE
20230702 0840	4.4	NE
20230702 0850	3.9	NE
20230702 0900	3.6	ENE
20230702 0910	3.1	NE
20230702 0920	3.3	NE
20230702 0930	3.3	NE
20230702 0940	3.3	NNE
20230702 0950	3.9	NNE
20230702 1000	4.4	NNE
20230702 1010	4.2	NNE
20230702 1020	4.2	NNE
20230702 1030	3.3	NNE
20230702 1040	3.9	NNE
20230702 1050	4.2	NNE
20230702 1100	4.7	NNE
20230702 1110	5.3	NNE
20230702 1120	3.9	NNE
20230702 1130	4.4	NNE
20230702 1140	4.4	NNE
20230702 1150	5	NNE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230702 1200	3.9	NNE
20230702 1210	5.3	NNE
20230702 1220	5	NNE
20230702 1230	4.4	NNE
20230702 1240	3.3	NNE
20230702 1250	4.7	N
20230702 1300	5	N
20230702 1310	4.7	N
20230702 1320	4.2	NNE
20230702 1330	4.4	N
20230702 1340	4.2	N
20230702 1350	4.7	N
20230702 1400	3.6	N
20230702 1410	4.4	N
20230702 1420	3.9	N
20230702 1430	4.2	N
20230702 1440	4.2	NNE
20230702 1450	3.3	NNE
20230702 1500	3.6	NNE
20230702 1510	3.3	NNE
20230702 1520	2.8	NNE
20230702 1530	3.3	NNE
20230702 1540	2.8	NNE
20230702 1550	3.1	NNE
20230702 1600	2.5	NNE
20230702 1610	2.5	NNE
20230702 1620	2.5	NNE
20230702 1630	2.5	NNE
20230702 1640	1.9	N
20230702 1650	1.9	NNE
20230702 1700	1.7	NNE
20230702 1710	1.7	NNE
20230702 1720	1.7	NNE
20230702 1730	1.1	NNE
20230702 1740	0.3	-
20230702 1750	0.3	SSE
20230702 1800	0.3	WSW
20230702 1810	0.3	NNE
20230702 1820	1.4	N
20230702 1830	0.6	NNE
20230702 1840	0	N
20230702 1850	0	N
20230702 1900	0.3	SSW
20230702 1910	0.8	NNE
20230702 1920	1.1	NNE
20230702 1930	0.6	NE
20230702 1940	0.3	-
20230702 1950	1.4	NNE
20230702 2000	1.9	NE
20230702 2010	2.8	NE
20230702 2020	1.4	NNE
20230702 2030	0.8	N
20230702 2040	1.4	NE
20230702 2050	1.7	NW
20230702 2100	0.8	NNE
20230702 2110	1.7	ENE
20230702 2120	0.8	WNW
20230702 2130	0.8	W
20230702 2140	0.8	WSW
20230702 2150	0.3	SW
20230702 2200	0.8	SSW
20230702 2210	0.3	W
20230702 2220	0.3	SW
20230702 2230	0	N
20230702 2240	0.8	NNW
20230702 2250	0	N
20230702 2300	0.3	NW
20230702 2310	1.1	N
20230702 2320	0.8	N
20230702 2330	1.1	N
20230702 2340	0.3	-
20230702 2350	1.4	-

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230703 0000	1.7	N
20230703 0010	3.3	NNE
20230703 0020	3.6	NNE
20230703 0030	1.7	N
20230703 0040	1.7	N
20230703 0050	2.2	NNE
20230703 0100	2.8	NNE
20230703 0110	3.3	N
20230703 0120	3.9	NNE
20230703 0130	2.8	N
20230703 0140	3.1	N
20230703 0150	2.8	N
20230703 0200	3.1	N
20230703 0210	2.2	N
20230703 0220	3.3	NE
20230703 0230	0.8	ESE
20230703 0240	0.3	WSW
20230703 0250	2.2	N
20230703 0300	2.5	N
20230703 0310	2.2	NNW
20230703 0320	2.8	N
20230703 0330	3.3	NNE
20230703 0340	3.3	NNE
20230703 0350	3.1	NNE
20230703 0400	3.3	N
20230703 0410	3.9	NNE
20230703 0420	3.3	N
20230703 0430	4.2	NNE
20230703 0440	3.3	NNE
20230703 0450	4.2	N
20230703 0500	2.8	NNE
20230703 0510	2.8	NNE
20230703 0520	3.3	NNE
20230703 0530	1.4	N
20230703 0540	0.8	ESE
20230703 0550	0.3	ENE
20230703 0600	2.8	NNE
20230703 0610	3.1	N
20230703 0620	4.4	NNE
20230703 0630	2.8	NNE
20230703 0640	0.8	NE
20230703 0650	0.3	N
20230703 0700	0.3	NNW
20230703 0710	1.4	NW
20230703 0720	2.8	N
20230703 0730	3.3	N
20230703 0740	3.3	NNE
20230703 0750	4.2	NNE
20230703 0800	3.3	NNE
20230703 0810	1.7	NE
20230703 0820	1.7	NNE
20230703 0830	3.9	N
20230703 0840	3.3	NNE
20230703 0850	3.3	NNE
20230703 0900	3.3	NNE
20230703 0910	3.3	N
20230703 0920	3.1	N
20230703 0930	3.3	N
20230703 0940	3.3	N
20230703 0950	3.9	N
20230703 1000	3.9	N
20230703 1010	3.6	N
20230703 1020	3.3	N
20230703 1030	3.1	NNE
20230703 1040	3.9	NNE
20230703 1050	2.8	NNE
20230703 1100	2.5	N
20230703 1110	1.7	-
20230703 1120	1.9	NE
20230703 1130	2.2	NNE
20230703 1140	2.8	ENE
20230703 1150	2.2	NNE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230703 1200	2.5	NNE
20230703 1210	2.8	NNE
20230703 1220	1.7	-
20230703 1230	2.2	-
20230703 1240	2.5	E
20230703 1250	2.5	-
20230703 1300	2.2	-
20230703 1310	2.8	E
20230703 1320	2.2	E
20230703 1330	1.9	E
20230703 1340	1.7	NNE
20230703 1350	3.3	-
20230703 1400	1.7	-
20230703 1410	3.1	NE
20230703 1420	1.7	SE
20230703 1430	2.5	E
20230703 1440	2.5	ENE
20230703 1450	1.7	-
20230703 1500	1.9	NE
20230703 1510	2.5	ENE
20230703 1520	2.5	E
20230703 1530	2.8	E
20230703 1540	3.1	ESE
20230703 1550	2.8	ESE
20230703 1600	2.8	E
20230703 1610	3.3	ESE
20230703 1620	3.9	ESE
20230703 1630	3.6	E
20230703 1640	3.6	E
20230703 1650	3.3	E
20230703 1700	3.9	E
20230703 1710	3.6	E
20230703 1720	3.3	ESE
20230703 1730	3.1	E
20230703 1740	3.1	ESE
20230703 1750	2.8	ESE
20230703 1800	3.3	ESE
20230703 1810	3.3	ESE
20230703 1820	3.3	E
20230703 1830	3.1	ESE
20230703 1840	2.2	E
20230703 1850	2.2	ESE
20230703 1900	2.5	SE
20230703 1910	2.8	SE
20230703 1920	2.5	ESE
20230703 1930	1.9	ESE
20230703 1940	2.5	ESE
20230703 1950	1.7	ESE
20230703 2000	1.9	SE
20230703 2010	2.5	SE
20230703 2020	2.8	SE
20230703 2030	3.3	SE
20230703 2040	2.8	SE
20230703 2050	3.3	SE
20230703 2100	2.5	SE
20230703 2110	2.2	SE
20230703 2120	2.2	SE
20230703 2130	2.8	SE
20230703 2140	2.8	ESE
20230703 2150	3.1	ESE
20230703 2200	3.1	E
20230703 2210	3.1	ESE
20230703 2220	2.5	E
20230703 2230	2.8	E
20230703 2240	2.5	ESE
20230703 2250	2.2	E
20230703 2300	1.7	ESE
20230703 2310	1.7	ESE
20230703 2320	1.4	ESE
20230703 2330	1.4	E
20230703 2340	1.4	ENE
20230703 2350	2.5	E

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230704 0000	2.5	E
20230704 0010	2.8	E
20230704 0020	2.2	E
20230704 0030	2.5	E
20230704 0040	2.5	E
20230704 0050	2.2	E
20230704 0100	1.7	ESE
20230704 0110	1.7	ESE
20230704 0120	1.4	ESE
20230704 0130	1.1	SSE
20230704 0140	1.4	ESE
20230704 0150	1.4	ESE
20230704 0200	0.8	S
20230704 0210	1.7	SSE
20230704 0220	1.7	SE
20230704 0230	1.4	SSE
20230704 0240	0.3	WSW
20230704 0250	0.3	WSW
20230704 0300	0.3	-
20230704 0310	0.8	SSW
20230704 0320	0.8	S
20230704 0330	0.8	SSW
20230704 0340	0.3	SSW
20230704 0350	0.3	WSW
20230704 0400	0.8	S
20230704 0410	0.8	SSE
20230704 0420	1.1	SE
20230704 0430	1.1	ESE
20230704 0440	1.1	SE
20230704 0450	0.6	SSW
20230704 0500	0.3	SSW
20230704 0510	0.3	-
20230704 0520	0.8	WNW
20230704 0530	0.8	SE
20230704 0540	0.8	ESE
20230704 0550	0.8	ESE
20230704 0600	0.3	-
20230704 0610	0	N
20230704 0620	0.3	ENE
20230704 0630	0.6	ENE
20230704 0640	0.3	N
20230704 0650	0.3	W
20230704 0700	0	N
20230704 0710	0	N
20230704 0720	0.3	WNW
20230704 0730	0	N
20230704 0740	0	N
20230704 0750	0.3	-
20230704 0800	0.8	ESE
20230704 0810	1.4	E
20230704 0820	1.7	ENE
20230704 0830	2.2	ESE
20230704 0840	2.2	ESE
20230704 0850	2.2	E
20230704 0900	2.2	ESE
20230704 0910	2.5	ESE
20230704 0920	3.3	E
20230704 0930	3.3	ESE
20230704 0940	2.2	ESE
20230704 0950	2.5	ESE
20230704 1000	1.7	E
20230704 1010	2.2	ENE
20230704 1020	2.5	ESE
20230704 1030	2.2	E
20230704 1040	2.2	ENE
20230704 1050	2.8	E
20230704 1100	2.5	ESE
20230704 1110	3.3	E
20230704 1120	2.5	E
20230704 1130	2.5	SE
20230704 1140	2.8	E
20230704 1150	2.2	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230704 1200	2.8	SE
20230704 1210	1.7	ESE
20230704 1220	1.7	SSE
20230704 1230	2.2	SSE
20230704 1240	2.2	SE
20230704 1250	2.2	SSE
20230704 1300	1.4	ENE
20230704 1310	1.9	E
20230704 1320	2.2	ESE
20230704 1330	1.4	W
20230704 1340	2.5	NE
20230704 1350	2.5	E
20230704 1400	2.8	E
20230704 1410	2.8	E
20230704 1420	3.1	E
20230704 1430	2.8	E
20230704 1440	2.8	ESE
20230704 1450	2.8	E
20230704 1500	2.8	E
20230704 1510	2.8	ESE
20230704 1520	2.8	ESE
20230704 1530	3.3	E
20230704 1540	3.3	E
20230704 1550	3.3	ESE
20230704 1600	3.3	E
20230704 1610	3.9	E
20230704 1620	4.4	E
20230704 1630	3.9	E
20230704 1640	3.9	E
20230704 1650	3.9	E
20230704 1700	3.9	E
20230704 1710	3.3	E
20230704 1720	3.9	E
20230704 1730	2.8	ESE
20230704 1740	3.1	ESE
20230704 1750	2.8	ESE
20230704 1800	2.8	SE
20230704 1810	1.1	SE
20230704 1820	1.4	SSE
20230704 1830	2.2	SSE
20230704 1840	2.2	SE
20230704 1850	2.8	SE
20230704 1900	2.2	SE
20230704 1910	2.5	SE
20230704 1920	2.2	ESE
20230704 1930	2.8	ESE
20230704 1940	2.8	ESE
20230704 1950	3.1	ESE
20230704 2000	2.8	ESE
20230704 2010	3.3	ESE
20230704 2020	3.2	ESE
20230704 2030	2.2	ESE
20230704 2040	1.7	ESE
20230704 2050	2.5	SE
20230704 2100	2.5	SE
20230704 2110	2.8	SE
20230704 2120	1.9	ESE
20230704 2130	2.2	ESE
20230704 2140	1.4	ESE
20230704 2150	1.4	ESE
20230704 2200	1.7	ESE
20230704 2210	1.7	ESE
20230704 2220	1.4	ESE
20230704 2230	1.7	ESE
20230704 2240	2.2	ESE
20230704 2250	2.2	ESE
20230704 2300	2.5	SE
20230704 2310	2.2	SE
20230704 2320	2.5	SE
20230704 2330	1.1	-
20230704 2340	1.1	ESE
20230704 2350	1.1	ESE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230705 0000	2.2	ESE
20230705 0010	1.9	ESE
20230705 0020	1.7	ENE
20230705 0030	1.4	E
20230705 0040	1.1	ESE
20230705 0050	1.9	SE
20230705 0100	1.4	SE
20230705 0110	1.1	E
20230705 0120	0.8	ENE
20230705 0130	0.3	NNE
20230705 0140	0.6	-
20230705 0150	0.6	NE
20230705 0200	0.8	NE
20230705 0210	0.8	E
20230705 0220	1.4	E
20230705 0230	1.7	E
20230705 0240	2.2	E
20230705 0250	1.7	E
20230705 0300	1.7	ESE
20230705 0310	1.4	ESE
20230705 0320	1.4	ESE
20230705 0330	1.7	SE
20230705 0340	1.1	ESE
20230705 0350	0.3	-
20230705 0400	0.3	WSW
20230705 0410	0	N
20230705 0420	0	N
20230705 0430	0.3	SSE
20230705 0440	0.6	SE
20230705 0450	0.3	ESE
20230705 0500	0.6	S
20230705 0510	0.8	NNE
20230705 0520	0.3	-
20230705 0530	0.3	S
20230705 0540	0.3	NW
20230705 0550	0.3	E
20230705 0600	0.3	NE
20230705 0610	0	N
20230705 0620	0.3	S
20230705 0630	0	N
20230705 0640	0	N
20230705 0650	0	N
20230705 0700	0	N
20230705 0710	0	N
20230705 0720	0	N
20230705 0730	0	N
20230705 0740	0	N
20230705 0750	0	N
20230705 0800	0.3	NNE
20230705 0810	0.3	NNE
20230705 0820	0.3	NNW
20230705 0830	0.3	N
20230705 0840	0.6	-
20230705 0850	0.8	NNW
20230705 0900	0.8	NW
20230705 0910	1.1	WNW
20230705 0920	1.1	W
20230705 0930	0.8	WSW
20230705 0940	1.1	NW
20230705 0950	1.1	NNE
20230705 1000	0.8	NNE
20230705 1010	1.1	W
20230705 1020	1.7	WNW
20230705 1030	1.7	N
20230705 1040	0.8	NNE
20230705 1050	1.1	NW
20230705 1100	1.4	NW
20230705 1110	2.2	NW
20230705 1120	2.8	NW
20230705 1130	1.1	N
20230705 1140	1.7	NNW
20230705 1150	1.7	W

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230705 1200	1.7	NNW
20230705 1210	1.7	WNW
20230705 1220	2.5	NW
20230705 1230	1.7	W
20230705 1240	0.8	N
20230705 1250	1.4	NW
20230705 1300	1.7	NNE
20230705 1310	1.1	-
20230705 1320	1.4	NW
20230705 1330	0.8	SSW
20230705 1340	1.4	WNW
20230705 1350	1.4	NW
20230705 1400	1.4	SSW
20230705 1410	2.2	SE
20230705 1420	3.3	E
20230705 1430	2.2	SSE
20230705 1440	2.5	E
20230705 1450	2.8	SE
20230705 1500	2.8	ESE
20230705 1510	2.5	ESE
20230705 1520	2.5	ESE
20230705 1530	3.1	ESE
20230705 1540	2.2	ESE
20230705 1550	2.8	ESE
20230705 1600	2.2	ESE
20230705 1610	2.2	E
20230705 1620	1.7	E
20230705 1630	2.2	SW
20230705 1640	1.1	SW
20230705 1650	1.7	SW
20230705 1700	1.7	SE
20230705 1710	1.9	ESE
20230705 1720	1.1	-
20230705 1730	2.5	E
20230705 1740	2.5	E
20230705 1750	2.2	ESE
20230705 1800	2.2	ESE
20230705 1810	2.2	ESE
20230705 1820	2.5	ESE
20230705 1830	2.8	ESE
20230705 1840	2.8	ESE
20230705 1850	2.5	ESE
20230705 1900	1.7	ESE
20230705 1910	1.7	ESE
20230705 1920	2.8	ESE
20230705 1930	2.5	ESE
20230705 1940	1.7	E
20230705 1950	1.7	ESE
20230705 2000	2.2	ESE
20230705 2010	2.5	ESE
20230705 2020	2.2	ESE
20230705 2030	2.8	ESE
20230705 2040	2.5	ESE
20230705 2050	2.5	ESE
20230705 2100	2.8	ESE
20230705 2110	2.2	SE
20230705 2120	2.2	ESE
20230705 2130	2.5	ESE
20230705 2140	1.7	SE
20230705 2150	1.9	SE
20230705 2200	2.5	SE
20230705 2210	2.2	SE
20230705 2220	1.9	SE
20230705 2230	2.2	SE
20230705 2240	2.2	SE
20230705 2250	3.1	SE
20230705 2300	1.7	SE
20230705 2310	2.2	SSE
20230705 2320	1.7	SSE
20230705 2330	1.7	SE
20230705 2340	1.4	SE
20230705 2350	1.7	SSE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230706 0000	1.4	SE
20230706 0010	1.1	SE
20230706 0020	1.1	E
20230706 0030	1.1	ESE
20230706 0040	0.3	ENE
20230706 0050	0.8	E
20230706 0100	0.6	ESE
20230706 0110	0.3	E
20230706 0120	0.3	ENE
20230706 0130	0.8	-
20230706 0140	0.8	-
20230706 0150	0.8	N
20230706 0200	1.1	E
20230706 0210	0.8	E
20230706 0220	0.6	ESE
20230706 0230	0.6	SE
20230706 0240	1.1	SSE
20230706 0250	0.8	S
20230706 0300	0.3	SSW
20230706 0310	0.3	SSE
20230706 0320	1.1	SE
20230706 0330	0.8	SE
20230706 0340	1.4	ESE
20230706 0350	1.1	ESE
20230706 0400	0.3	-
20230706 0410	1.4	ESE
20230706 0420	0.3	S
20230706 0430	0.3	NE
20230706 0440	0.3	N
20230706 0450	0	N
20230706 0500	0	N
20230706 0510	0	N
20230706 0520	0.3	S
20230706 0530	0.3	SSE
20230706 0540	0	N
20230706 0550	0	N
20230706 0600	0.3	NNE
20230706 0610	0.6	N
20230706 0620	0.3	N
20230706 0630	0.3	SW
20230706 0640	0.8	SSW
20230706 0650	0.3	SW
20230706 0700	0	N
20230706 0710	0	N
20230706 0720	0.3	SSE
20230706 0730	0.3	S
20230706 0740	0.3	SSE
20230706 0750	0	N
20230706 0800	0	N
20230706 0810	0.3	NNE
20230706 0820	0.3	NE
20230706 0830	0.3	-
20230706 0840	0.3	-
20230706 0850	0.3	-
20230706 0900	0.3	S
20230706 0910	0.3	SE
20230706 0920	0.3	-
20230706 0930	0.6	NE
20230706 0940	0.8	NNE
20230706 0950	0.8	NE
20230706 1000	1.1	NW
20230706 1010	0.8	-
20230706 1020	1.1	W
20230706 1030	1.7	NW
20230706 1040	1.9	NW
20230706 1050	2.2	N
20230706 1100	2.2	NNW
20230706 1110	1.9	NNW
20230706 1120	1.7	NNW
20230706 1130	2.2	N
20230706 1140	1.7	N
20230706 1150	1.7	N

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230706 1200	1.4	NNE
20230706 1210	1.4	NW
20230706 1220	1.7	N
20230706 1230	1.4	-
20230706 1240	1.1	ESE
20230706 1250	3.6	E
20230706 1300	3.1	ESE
20230706 1310	3.6	E
20230706 1320	3.9	E
20230706 1330	4.2	E
20230706 1340	3.6	E
20230706 1350	3.9	E
20230706 1400	3.9	E
20230706 1410	3.3	E
20230706 1420	3.9	E
20230706 1430	3.9	ESE
20230706 1440	4.4	E
20230706 1450	3.9	E
20230706 1500	4.2	E
20230706 1510	4.2	E
20230706 1520	3.3	E
20230706 1530	4.2	E
20230706 1540	4.4	E
20230706 1550	4.4	E
20230706 1600	4.2	E
20230706 1610	3.3	E
20230706 1620	2.8	ESE
20230706 1630	3.9	ESE
20230706 1640	3.3	E
20230706 1650	4.4	ESE
20230706 1700	3.3	E
20230706 1710	3.3	E
20230706 1720	3.1	ESE
20230706 1730	3.1	ESE
20230706 1740	3.1	E
20230706 1750	3.1	E
20230706 1800	3.3	E
20230706 1810	3.1	ESE
20230706 1820	3.3	ESE
20230706 1830	2.8	ESE
20230706 1840	3.3	ESE
20230706 1850	2.8	ESE
20230706 1900	2.5	SE
20230706 1910	3.1	ESE
20230706 1920	3.3	ESE
20230706 1930	2.8	SE
20230706 1940	1.7	SE
20230706 1950	2.2	SE
20230706 2000	2.2	SE
20230706 2010	2.5	SE
20230706 2020	2.8	ESE
20230706 2030	2.2	ESE
20230706 2040	1.7	ESE
20230706 2050	1.7	ESE
20230706 2100	2.5	SE
20230706 2110	2.2	SE
20230706 2120	2.5	SE
20230706 2130	2.8	ESE
20230706 2140	2.2	ESE
20230706 2150	2.2	SE
20230706 2200	2.2	SE
20230706 2210	1.4	E
20230706 2220	1.7	ESE
20230706 2230	2.2	SE
20230706 2240	2.2	SE
20230706 2250	1.7	SE
20230706 2300	2.2	SE
20230706 2310	2.2	ESE
20230706 2320	1.4	ESE
20230706 2330	1.1	ESE
20230706 2340	1.1	E
20230706 2350	1.4	E

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsinfo/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230707 0000	1.4	E
20230707 0010	2.2	E
20230707 0020	1.1	E
20230707 0030	1.4	E
20230707 0040	1.7	ESE
20230707 0050	1.1	ESE
20230707 0100	1.7	ENE
20230707 0110	1.4	E
20230707 0120	1.1	ESE
20230707 0130	0.8	ESE
20230707 0140	1.7	ESE
20230707 0150	1.4	SE
20230707 0200	1.1	SE
20230707 0210	1.4	SE
20230707 0220	1.1	SE
20230707 0230	0.8	SSE
20230707 0240	0.3	SSE
20230707 0250	0.6	ESE
20230707 0300	0	N
20230707 0310	0	N
20230707 0320	0.3	S
20230707 0330	0.3	S
20230707 0340	0	N
20230707 0350	0.3	E
20230707 0400	0.8	SE
20230707 0410	0.8	SE
20230707 0420	0.3	SSE
20230707 0430	0.6	S
20230707 0440	0.3	S
20230707 0450	0.8	S
20230707 0500	1.1	S
20230707 0510	1.4	S
20230707 0520	0.8	SSE
20230707 0530	0	N
20230707 0540	0	N
20230707 0550	0	N
20230707 0600	0.3	SSE
20230707 0610	0.3	SSW
20230707 0620	0.3	SSW
20230707 0630	0.3	S
20230707 0640	0	N
20230707 0650	0	N
20230707 0700	0	N
20230707 0710	0	N
20230707 0720	0.3	-
20230707 0730	0	N
20230707 0740	0	N
20230707 0750	0	N
20230707 0800	0.3	-
20230707 0810	0.3	N
20230707 0820	0.3	ESE
20230707 0830	0.3	ENE
20230707 0840	0.8	SE
20230707 0850	1.4	ESE
20230707 0900	2.5	E
20230707 0910	2.5	ESE
20230707 0920	2.5	E
20230707 0930	2.2	ENE
20230707 0940	1.7	E
20230707 0950	1.7	ESE
20230707 1000	1.4	SE
20230707 1010	1.1	SE
20230707 1020	1.1	ENE
20230707 1030	0.8	-
20230707 1040	1.7	ENE
20230707 1050	1.4	ESE
20230707 1100	1.4	E
20230707 1110	1.7	SE
20230707 1120	1.4	E
20230707 1130	1.4	NE
20230707 1140	1.7	SSE
20230707 1150	1.4	S

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230707 1200	1.1	WSW
20230707 1210	1.1	NW
20230707 1220	1.7	NNW
20230707 1230	2.2	NNE
20230707 1240	2.2	N
20230707 1250	2.2	NE
20230707 1300	1.7	-
20230707 1310	3.1	ENE
20230707 1320	2.8	E
20230707 1330	3.3	ESE
20230707 1340	3.1	ESE
20230707 1350	3.3	E
20230707 1400	3.9	ESE
20230707 1410	3.9	E
20230707 1420	4.2	E
20230707 1430	4.4	E
20230707 1440	4.7	E
20230707 1450	4.2	E
20230707 1500	3.9	ESE
20230707 1510	4.2	E
20230707 1520	4.2	E
20230707 1530	3.3	ESE
20230707 1540	4.2	E
20230707 1550	3.3	E
20230707 1600	3.3	E
20230707 1610	3.3	E
20230707 1620	3.3	E
20230707 1630	3.9	E
20230707 1640	3.3	E
20230707 1650	3.1	E
20230707 1700	3.9	E
20230707 1710	3.1	E
20230707 1720	2.8	ESE
20230707 1730	3.3	E
20230707 1740	3.3	E
20230707 1750	3.3	E
20230707 1800	3.3	E
20230707 1810	2.2	ESE
20230707 1820	3.3	ESE
20230707 1830	3.3	ESE
20230707 1840	3.3	ESE
20230707 1850	2.8	ESE
20230707 1900	2.8	SE
20230707 1910	3.3	SE
20230707 1920	3.1	ESE
20230707 1930	3.3	ESE
20230707 1940	3.3	ESE
20230707 1950	3.3	ESE
20230707 2000	3.6	ESE
20230707 2010	3.9	ESE
20230707 2020	3.9	ESE
20230707 2030	3.9	ESE
20230707 2040	2.8	ESE
20230707 2050	3.3	ESE
20230707 2100	2.8	ESE
20230707 2110	2.8	ESE
20230707 2120	2.2	SE
20230707 2130	2.8	SE
20230707 2140	2.8	SE
20230707 2150	2.5	SE
20230707 2200	2.2	SE
20230707 2210	2.5	SE
20230707 2220	2.8	SE
20230707 2230	2.5	SE
20230707 2240	2.2	SE
20230707 2250	2.5	SE
20230707 2300	1.7	SE
20230707 2310	1.4	SE
20230707 2320	1.7	SE
20230707 2330	1.7	SE
20230707 2340	1.4	SE
20230707 2350	1.4	SSE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230708 0000	1.7	SSE
20230708 0010	1.7	SSE
20230708 0020	1.7	SSE
20230708 0030	1.9	SSE
20230708 0040	1.9	SE
20230708 0050	1.7	SE
20230708 0100	1.4	SE
20230708 0110	1.4	SE
20230708 0120	1.4	ESE
20230708 0130	1.1	ESE
20230708 0140	1.4	ESE
20230708 0150	1.1	ESE
20230708 0200	1.7	SE
20230708 0210	1.7	SE
20230708 0220	1.1	ESE
20230708 0230	0.8	ENE
20230708 0240	0	N
20230708 0250	0.3	ENE
20230708 0300	0.8	ENE
20230708 0310	0.8	ENE
20230708 0320	0.8	ENE
20230708 0330	0.8	ENE
20230708 0340	0	N
20230708 0350	0	N
20230708 0400	0.3	-
20230708 0410	0.3	SE
20230708 0420	0.3	E
20230708 0430	0.3	ENE
20230708 0440	0	N
20230708 0450	0.8	ESE
20230708 0500	1.1	ESE
20230708 0510	1.4	ESE
20230708 0520	1.7	SE
20230708 0530	0.3	N
20230708 0540	0.3	NE
20230708 0550	0.3	-
20230708 0600	0.3	SSW
20230708 0610	0.3	-
20230708 0620	0.3	S
20230708 0630	0	N
20230708 0640	0	N
20230708 0650	0	N
20230708 0700	0	N
20230708 0710	0	N
20230708 0720	0	N
20230708 0730	0	N
20230708 0740	0	N
20230708 0750	0	N
20230708 0800	0	N
20230708 0810	0	N
20230708 0820	0	N
20230708 0830	0.3	SW
20230708 0840	0.3	-
20230708 0850	0.3	NNW
20230708 0900	0.3	NNE
20230708 0910	0.6	E
20230708 0920	0.8	-
20230708 0930	0.3	NE
20230708 0940	1.1	NE
20230708 0950	0.8	N
20230708 1000	0.8	NNE
20230708 1010	0.6	NNW
20230708 1020	1.1	NNE
20230708 1030	1.4	NNW
20230708 1040	1.7	WNW
20230708 1050	1.1	-
20230708 1100	1.4	NW
20230708 1110	1.1	ESE
20230708 1120	3.1	ESE
20230708 1130	3.1	ESE
20230708 1140	3.3	ESE
20230708 1150	3.3	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230708 1200	3.3	ESE
20230708 1210	3.3	E
20230708 1220	2.8	ESE
20230708 1230	2.8	ESE
20230708 1240	2.5	ENE
20230708 1250	2.2	ENE
20230708 1300	1.1	E
20230708 1310	0.6	NW
20230708 1320	0.8	NE
20230708 1330	1.1	WSW
20230708 1340	2.2	WSW
20230708 1350	1.4	WSW
20230708 1400	1.7	SE
20230708 1410	1.1	-
20230708 1420	2.2	ENE
20230708 1430	2.5	E
20230708 1440	3.1	ESE
20230708 1450	2.8	E
20230708 1500	2.8	ESE
20230708 1510	2.8	ESE
20230708 1520	3.3	E
20230708 1530	3.6	E
20230708 1540	4.2	E
20230708 1550	3.9	E
20230708 1600	3.9	E
20230708 1610	3.9	ESE
20230708 1620	4.2	E
20230708 1630	4.2	ESE
20230708 1640	3.3	E
20230708 1650	3.1	E
20230708 1700	3.9	E
20230708 1710	4.2	ESE
20230708 1720	3.3	ESE
20230708 1730	3.3	ESE
20230708 1740	3.1	ESE
20230708 1750	3.1	ESE
20230708 1800	2.8	ESE
20230708 1810	3.3	SE
20230708 1820	2.2	SE
20230708 1830	2.2	SE
20230708 1840	1.7	ESE
20230708 1850	2.8	ESE
20230708 1900	3.1	ESE
20230708 1910	3.1	ESE
20230708 1920	3.3	ESE
20230708 1930	2.5	SE
20230708 1940	3.3	SE
20230708 1950	2.2	ESE
20230708 2000	1.9	ESE
20230708 2010	3.3	ESE
20230708 2020	3.1	ESE
20230708 2030	3.6	ESE
20230708 2040	3.9	ESE
20230708 2050	3.6	ESE
20230708 2100	3.3	ESE
20230708 2110	3.3	ESE
20230708 2120	3.6	SE
20230708 2130	3.3	SE
20230708 2140	3.3	SE
20230708 2150	3.1	SE
20230708 2200	3.1	SE
20230708 2210	3.3	SE
20230708 2220	2.8	SE
20230708 2230	2.5	SE
20230708 2240	2.5	SE
20230708 2250	3.3	SE
20230708 2300	3.3	SE
20230708 2310	3.3	SE
20230708 2320	3.3	SE
20230708 2330	3.3	ESE
20230708 2340	3.3	SE
20230708 2350	3.1	SE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230709 0000	3.1	SE
20230709 0010	3.3	SE
20230709 0020		
20230709 0030	3.9	SE
20230709 0030	3.9	SE
20230709 0040	3.9	SE
20230709 0050	3.9	SE
20230709 0100	4.2	SE
20230709 0110	3.6	SE
20230709 0120	3.1	SE
20230709 0130	2.5	SE
20230709 0140	2.5	SE
20230709 0150	1.7	SE
20230709 0200	2.2	SE
20230709 0210	1.7	ESE
20230709 0220	1.4	ENE
20230709 0230	1.7	E
20230709 0240	1.4	E
20230709 0250	1.7	E
20230709 0300	1.7	E
20230709 0310	1.7	E
20230709 0320	0.8	E
20230709 0330	1.4	ESE
20230709 0340	1.4	ESE
20230709 0350	1.1	ENE
20230709 0400	1.1	E
20230709 0410	1.7	E
20230709 0420	1.7	E
20230709 0430	1.7	E
20230709 0440	1.7	E
20230709 0450	1.4	E
20230709 0500	1.1	E
20230709 0510	1.4	E
20230709 0520	1.4	E
20230709 0530	1.4	E
20230709 0540	1.1	E
20230709 0550	1.1	E
20230709 0600	1.7	E
20230709 0610	1.7	E
20230709 0620	2.2	ESE
20230709 0630	1.4	ESE
20230709 0640	1.1	ESE
20230709 0650	0.8	ESE
20230709 0700	1.4	E
20230709 0710	0.8	E
20230709 0720	1.7	ESE
20230709 0730	2.2	ESE
20230709 0740	1.7	SE
20230709 0750	2.2	SE
20230709 0800	2.5	SE
20230709 0810	2.2	SE
20230709 0820	2.5	SE
20230709 0830	2.8	SE
20230709 0840	2.8	ESE
20230709 0850	2.5	E
20230709 0900	2.5	E
20230709 0910	2.5	E
20230709 0920	3.1	ENE
20230709 0930	3.1	ENE
20230709 0940	3.3	ENE
20230709 0950	3.6	E
20230709 1000	3.3	E
20230709 1010	3.1	E
20230709 1020	2.8	ENE
20230709 1030	3.1	E
20230709 1040	3.1	E
20230709 1050	3.3	E
20230709 1100	4.2	E
20230709 1110	3.9	ENE
20230709 1120	3.3	ENE
20230709 1130	3.1	E
20230709 1140	2.8	-

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230709 1200	2.8	E
20230709 1210	2.8	ENE
20230709 1220	2.8	ENE
20230709 1230	2.8	ENE
20230709 1240	3.1	ENE
20230709 1250	3.1	ENE
20230709 1300	2.5	E
20230709 1310	2.5	E
20230709 1320	2.5	ENE
20230709 1330	2.2	E
20230709 1340	1.1	N
20230709 1350	1.7	ENE
20230709 1400	2.8	E
20230709 1410	3.1	ESE
20230709 1420	3.1	E
20230709 1430	3.6	E
20230709 1440	3.3	E
20230709 1450	3.1	E
20230709 1500	3.1	E
20230709 1510	3.1	E
20230709 1520	3.1	E
20230709 1530	3.9	E
20230709 1540	3.3	E
20230709 1550	3.9	E
20230709 1600	3.6	E
20230709 1610	3.9	E
20230709 1620	4.2	E
20230709 1630	3.6	E
20230709 1640	3.9	E
20230709 1650	3.3	E
20230709 1700	3.3	E
20230709 1710	2.8	E
20230709 1720	2.8	ESE
20230709 1730	3.3	E
20230709 1740	3.3	E
20230709 1750	3.3	E
20230709 1800	2.8	E
20230709 1810	2.5	E
20230709 1820	2.5	E
20230709 1830	3.1	E
20230709 1840	2.8	E
20230709 1850	2.8	E
20230709 1900	2.8	ESE
20230709 1910	2.2	SE
20230709 1920	2.8	ESE
20230709 1930	1.9	ESE
20230709 1940	2.2	ESE
20230709 1950	1.7	SE
20230709 2000	2.2	ESE
20230709 2010	1.7	ESE
20230709 2020	1.7	ESE
20230709 2030	2.5	E
20230709 2040	2.8	E
20230709 2050	2.2	E
20230709 2100	2.2	E
20230709 2110	1.4	ESE
20230709 2120	1.1	SE
20230709 2130	0.8	S
20230709 2140	1.7	SSE
20230709 2150	0.8	SSE
20230709 2200	1.1	SSE
20230709 2210	1.1	SSE
20230709 2220	0.8	S
20230709 2230	0.3	SW
20230709 2240	0.8	SW
20230709 2250	0.6	SSW
20230709 2300	1.7	S
20230709 2310	1.7	SE
20230709 2320	1.7	ESE
20230709 2330	2.2	ESE
20230709 2340	2.2	ESE
20230709 2350	2.5	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230710 0000	2.8	SE
20230710 0010	2.5	ESE
20230710 0020	2.2	ESE
20230710 0030	1.4	ESE
20230710 0030	1.4	ESE
20230710 0040	1.1	ESE
20230710 0050	1.4	ESE
20230710 0100	1.4	ESE
20230710 0110	0.8	ESE
20230710 0120	1.1	SE
20230710 0130	1.1	ESE
20230710 0140	1.4	SE
20230710 0150	0.8	SSE
20230710 0200	0.3	SE
20230710 0210	0	N
20230710 0220	0	N
20230710 0230	0.3	-
20230710 0240	0.3	E
20230710 0250	0.3	WSW
20230710 0300	0.3	-
20230710 0300	0	N
20230710 0320	0.6	NE
20230710 0330	0.8	E
20230710 0340	0.3	ESE
20230710 0350	0	N
20230710 0400	0.3	ESE
20230710 0410	1.4	SE
20230710 0420	0.6	S
20230710 0430	0.3	WSW
20230710 0440	0	N
20230710 0450	0.8	SW
20230710 0500	0.6	W
20230710 0510	0.3	SW
20230710 0520	1.1	SSW
20230710 0530	0.3	-
20230710 0540	0.3	SSW
20230710 0550	0.8	SE
20230710 0600	0.6	SE
20230710 0610	0.8	E
20230710 0620	0.3	SSW
20230710 0630	0	N
20230710 0640	0	N
20230710 0650	0	N
20230710 0700	0.3	SW
20230710 0710	1.4	S
20230710 0720	1.4	S
20230710 0730	1.1	S
20230710 0740	0.8	SSW
20230710 0750	0.8	SSW
20230710 0800	1.4	NNE
20230710 0810	0.8	ENE
20230710 0820	2.5	E
20230710 0830	2.5	E
20230710 0840	2.2	E
20230710 0850	1.7	ESE
20230710 0900	2.2	ESE
20230710 0910	2.2	ESE
20230710 0920	2.8	E
20230710 0930	3.3	ESE
20230710 0940	2.5	ESE
20230710 0950	2.2	E
20230710 1000	2.2	ESE
20230710 1010	2.8	ESE
20230710 1020	2.5	E
20230710 1030	2.5	ESE
20230710 1040	2.5	E
20230710 1050	3.1	E
20230710 1100	3.1	E
20230710 1110	2.8	E
20230710 1120	3.1	E
20230710 1130	2.8	ESE
20230710 1140	2.5	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230710 1200	2.5	E
20230710 1210	2.5	E
20230710 1220	2.5	ESE
20230710 1230	2.5	ESE
20230710 1240	2.8	E
20230710 1250	2.5	E
20230710 1300	2.5	E
20230710 1310	2.8	E
20230710 1320	2.8	E
20230710 1330	2.5	E
20230710 1340	3.3	E
20230710 1350	3.1	ENE
20230710 1400	3.1	E
20230710 1410	3.3	E
20230710 1420	3.1	E
20230710 1430	3.3	E
20230710 1440	3.1	E
20230710 1450	3.3	ENE
20230710 1500	3.6	E
20230710 1510	3.6	E
20230710 1520	3.3	E
20230710 1530	3.9	E
20230710 1540	3.3	E
20230710 1550	3.3	E
20230710 1600	3.3	E
20230710 1610	3.6	E
20230710 1620	3.3	E
20230710 1630	3.3	E
20230710 1640	3.3	E
20230710 1650	3.3	E
20230710 1700	3.1	ESE
20230710 1710	3.1	ESE
20230710 1720	2.5	ESE
20230710 1730	3.3	ESE
20230710 1740	4.2	E
20230710 1750	3.6	ESE
20230710 1800	3.3	E
20230710 1810	3.3	ESE
20230710 1820	3.1	E
20230710 1830	2.2	E
20230710 1840	1.7	ESE
20230710 1850	1.9	ESE
20230710 1900	1.4	SE
20230710 1910	1.7	SE
20230710 1920	1.9	SE
20230710 1930	1.4	SSE
20230710 1940	0.3	-
20230710 1950	0.3	S
20230710 2000	0.3	SE
20230710 2010	0.3	ENE
20230710 2020	0.6	SE
20230710 2030	0.3	-
20230710 2040	0.3	SSE
20230710 2050	0.8	SSW
20230710 2100	0.8	SSW
20230710 2110	0.8	S
20230710 2120	1.1	S
20230710 2130	1.1	S
20230710 2140	0.8	S
20230710 2150	0.3	-
20230710 2200	0.3	ESE
20230710 2210	0.3	SE
20230710 2220	0.3	SE
20230710 2230	0.8	S
20230710 2240	1.1	SSE
20230710 2250	0.3	-
20230710 2300	0.6	SSW
20230710 2310	0.6	SSW
20230710 2320	0.3	SSW
20230710 2330	0.3	S
20230710 2340	0.8	SE
20230710 2350	1.1	SW

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230711 0000	0.3	W
20230711 0010	0.3	SW
20230711 0020	0.8	SE
20230711 0030	0.3	-
20230711 0030	0.3	W
20230711 0040	0.3	-
20230711 0050	0.3	SW
20230711 0100	0.3	SSW
20230711 0110	0.8	SSW
20230711 0120	0.3	SSW
20230711 0130	0.3	S
20230711 0140	0.6	SSW
20230711 0150	0.8	SSW
20230711 0200	0.3	SSW
20230711 0210	0.8	S
20230711 0220	0.8	SSE
20230711 0230	0.3	SSE
20230711 0240	0.3	S
20230711 0250	0	N
20230711 0300	0	N
20230711 0310	0.3	-
20230711 0320	0.3	E
20230711 0330	0.3	WNW
20230711 0340	0.3	-
20230711 0350	0	N
20230711 0400	0	N
20230711 0410	0	N
20230711 0420	0.3	SSW
20230711 0430	0	N
20230711 0440	0.3	SSE
20230711 0450	0.3	SSE
20230711 0500	0	N
20230711 0510	0	N
20230711 0520	0.8	SE
20230711 0530	0.6	SE
20230711 0540	0.3	SE
20230711 0550	0	N
20230711 0600	0.3	W
20230711 0610	0	N
20230711 0620	0	N
20230711 0630	0.3	S
20230711 0640	0	N
20230711 0650	0	N
20230711 0700	0	N
20230711 0710	0	N
20230711 0720	0.3	SSW
20230711 0730	0.3	S
20230711 0740	0.3	SSE
20230711 0750	0.3	SSW
20230711 0800	0	N
20230711 0810	0	N
20230711 0820	0.3	-
20230711 0830	0.3	SSW
20230711 0840	0.8	NW
20230711 0850	0.3	ENE
20230711 0900	0.6	NW
20230711 0910	0.3	NNE
20230711 0920	0.8	NNE
20230711 0930	1.1	NNE
20230711 0940	0.8	ENE
20230711 0950	0.8	NNW
20230711 1000	0.8	N
20230711 1010	1.1	NW
20230711 1020	1.1	NNE
20230711 1030	1.1	NW
20230711 1040	1.1	NNE
20230711 1050	0.8	NNE
20230711 1100	0.8	NE
20230711 1110	1.4	SE
20230711 1120	1.4	NE
20230711 1130	1.7	NE
20230711 1140	1.4	NNE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230711 1200	0.6	S
20230711 1210	0.8	S
20230711 1220	1.4	SE
20230711 1230	0.8	-
20230711 1240	1.1	SW
20230711 1250	1.9	SE
20230711 1300	1.9	SE
20230711 1310	1.7	ESE
20230711 1320	1.7	S
20230711 1330	2.2	ESE
20230711 1340	2.5	ESE
20230711 1350	3.3	ESE
20230711 1400	2.8	ESE
20230711 1410	1.9	E
20230711 1420	2.2	ESE
20230711 1430	2.2	ESE
20230711 1440	2.2	SE
20230711 1450	2.2	-
20230711 1500	1.7	-
20230711 1510	1.7	ESE
20230711 1520	1.4	SE
20230711 1530	1.1	ESE
20230711 1540	0.8	SSE
20230711 1550	1.4	SSE
20230711 1600	1.4	SSW
20230711 1610	1.7	SE
20230711 1620	2.5	E
20230711 1630	2.2	E
20230711 1640	1.7	ESE
20230711 1650	1.7	ESE
20230711 1700	1.7	ESE
20230711 1710	1.9	E
20230711 1720	2.2	E
20230711 1730	1.7	E
20230711 1740	2.5	ESE
20230711 1750	2.2	E
20230711 1800	2.2	ESE
20230711 1810	2.2	E
20230711 1820	2.2	ESE
20230711 1830	1.9	ESE
20230711 1840	2.5	ESE
20230711 1850	2.2	ESE
20230711 1900	2.5	ESE
20230711 1910	2.5	ESE
20230711 1920	2.5	ESE
20230711 1930	2.5	ESE
20230711 1940	2.5	ESE
20230711 1950	1.9	E
20230711 2000	2.2	E
20230711 2010	2.2	E
20230711 2020	2.5	E
20230711 2030	2.2	ESE
20230711 2040	1.7	ESE
20230711 2050	2.2	ESE
20230711 2100	1.4	ESE
20230711 2110	1.1	SE
20230711 2120	0.8	ESE
20230711 2130	1.4	SE
20230711 2140	1.1	SE
20230711 2150	0.8	E
20230711 2200	0.8	E
20230711 2210	1.4	E
20230711 2220	1.7	E
20230711 2230	1.1	E
20230711 2240	1.1	ESE
20230711 2250	0.3	E
20230711 2300	1.1	E
20230711 2310	1.4	E
20230711 2320	1.4	E
20230711 2330	0.8	E
20230711 2340	0	N
20230711 2350	0.3	-

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230712 0000	0.8	E
20230712 0010	0.3	-
20230712 0020	0.6	-
20230712 0030	0.3	NE
20230712 0030	0.3	WSW
20230712 0040	0.3	NW
20230712 0050	0.3	WNW
20230712 0100	0.3	WNW
20230712 0110	1.1	WNW
20230712 0120	0.3	W
20230712 0130	0.3	WSW
20230712 0140	0.3	W
20230712 0150	0.8	SW
20230712 0200	0.3	WSW
20230712 0210	0.3	NNW
20230712 0220	0.8	NW
20230712 0230	0.8	ESE
20230712 0240	0.3	SW
20230712 0250	0.3	-
20230712 0300	0.3	-
20230712 0310	0.3	SSW
20230712 0320	0.3	-
20230712 0330	0	N
20230712 0340	0	N
20230712 0350	0	N
20230712 0400	0	N
20230712 0410	0.3	-
20230712 0420	0	N
20230712 0430	0	N
20230712 0440	0	N
20230712 0450	0	N
20230712 0500	0	N
20230712 0510	0	N
20230712 0520	0	N
20230712 0530	0.3	S
20230712 0540	0.3	SE
20230712 0550	0	N
20230712 0600	0	N
20230712 0610	0	N
20230712 0620	0	N
20230712 0630	0	N
20230712 0640	0	N
20230712 0650	0	N
20230712 0700	0	N
20230712 0710	0	N
20230712 0720	0	N
20230712 0730	0	N
20230712 0740	0	N
20230712 0750	0.3	NE
20230712 0800	0.3	NNE
20230712 0810	0.6	-
20230712 0820	0.6	NE
20230712 0830	0.3	NNE
20230712 0840	0.3	WNW
20230712 0850	0.8	NE
20230712 0900	0.8	ENE
20230712 0910	1.7	E
20230712 0920	1.7	ESE
20230712 0930	1.4	SE
20230712 0940	0.8	ENE
20230712 0950	1.4	E
20230712 1000	1.9	NE
20230712 1010	2.5	E
20230712 1020	2.8	ENE
20230712 1030	2.5	ENE
20230712 1040	2.2	SE
20230712 1050	1.4	E
20230712 1100	2.8	ENE
20230712 1110	2.5	ENE
20230712 1120	2.8	E
20230712 1130	2.8	E
20230712 1140	1.9	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230712 1200	2.5	ENE
20230712 1210	2.5	E
20230712 1220	2.2	ESE
20230712 1230	3.3	E
20230712 1240	3.1	E
20230712 1250	3.3	E
20230712 1300	3.3	E
20230712 1310	2.8	E
20230712 1320	2.8	E
20230712 1330	2.8	E
20230712 1340	2.8	E
20230712 1350	2.8	E
20230712 1400	3.1	E
20230712 1410	2.8	E
20230712 1420	3.1	E
20230712 1430	2.5	ENE
20230712 1440	2.8	E
20230712 1450	2.5	E
20230712 1500	2.8	ESE
20230712 1510	2.5	E
20230712 1520	2.8	E
20230712 1530	1.7	SE
20230712 1540	1.7	ESE
20230712 1550	2.2	ESE
20230712 1600	2.2	SSE
20230712 1610	2.5	ESE
20230712 1620	2.8	ESE
20230712 1630	1.7	ESE
20230712 1640	2.5	SSE
20230712 1650	2.2	SSE
20230712 1700	2.5	SSE
20230712 1710	1.7	SSE
20230712 1720		
20230712 1730	3.3	E
20230712 1740	3.3	E
20230712 1750	3.1	E
20230712 1800	2.8	E
20230712 1810	2.5	E
20230712 1820	2.8	ESE
20230712 1830	3.1	ESE
20230712 1840	3.1	ESE
20230712 1850	2.5	ESE
20230712 1900	2.8	ESE
20230712 1910	2.2	ESE
20230712 1920	2.5	SE
20230712 1930	3.1	ESE
20230712 1940	3.3	ESE
20230712 1950	2.8	ESE
20230712 2000	2.5	ESE
20230712 2010	2.8	ESE
20230712 2020	2.5	ESE
20230712 2030	2.5	ESE
20230712 2040	1.1	E
20230712 2050	1.7	ESE
20230712 2100	2.2	ESE
20230712 2110	2.5	ESE
20230712 2120	2.2	ESE
20230712 2130	1.7	ESE
20230712 2140	1.9	ESE
20230712 2150	2.5	ESE
20230712 2200	2.2	E
20230712 2210	0.3	-
20230712 2220	1.4	-
20230712 2230	0.6	ENE
20230712 2240	0	N
20230712 2250	0.3	WNW
20230712 2300	1.1	WSW
20230712 2310	0.6	WSW
20230712 2320	0.8	S
20230712 2330	1.7	ESE
20230712 2340	0.8	SSE
20230712 2350	0.3	S

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230713 0000	0.3	SW
20230713 0010	1.1	SSW
20230713 0020	0.8	SSW
20230713 0030	0.3	WSW
20230713 0040	0.3	WSW
20230713 0050	0.6	SSW
20230713 0100		
20230713 0110	0	N
20230713 0120	0.3	E
20230713 0130	0.3	-
20230713 0140	0.3	ESE
20230713 0150	0.3	SE
20230713 0200	0.3	W
20230713 0210	0	N
20230713 0220	0	N
20230713 0230	0	N
20230713 0240	0	N
20230713 0250	0.3	S
20230713 0300	0.3	ESE
20230713 0310	0.3	WSW
20230713 0320	0.6	SSW
20230713 0330	0.8	N
20230713 0340	0.3	NNE
20230713 0350	0.3	SSE
20230713 0400	1.1	ESE
20230713 0410	1.7	ESE
20230713 0420		
20230713 0430	1.4	ESE
20230713 0440	1.7	ESE
20230713 0450	1.7	SSE
20230713 0500	1.7	ESE
20230713 0510	1.1	ESE
20230713 0520	1.1	SE
20230713 0530	0.8	ESE
20230713 0540	0.6	ENE
20230713 0550	0.3	ESE
20230713 0600	0.3	-
20230713 0610	0.3	SW
20230713 0620	0.8	S
20230713 0630	1.4	SSE
20230713 0640	1.4	SSW
20230713 0650	0.8	SSE
20230713 0700	0.6	S
20230713 0710	0.3	WSW
20230713 0720	0.3	WNW
20230713 0730	0.3	WNW
20230713 0740	0	N
20230713 0750	0.3	WSW
20230713 0800	0.3	SSW
20230713 0810	0	N
20230713 0820	0.6	SW
20230713 0830	0	N
20230713 0840	0.3	WNW
20230713 0850	0.3	WSW
20230713 0900	0	N
20230713 0910	0	N
20230713 0920	0	N
20230713 0930	0	N
20230713 0940	0	N
20230713 0950	0.3	SSW
20230713 1000	0.8	SW
20230713 1010	1.1	SW
20230713 1020	0.8	SW
20230713 1030	1.7	SW
20230713 1040	1.7	SSW
20230713 1050	1.7	SW
20230713 1100	1.7	SW
20230713 1110		
20230713 1120	1.4	WSW
20230713 1130	1.7	SW
20230713 1140	2.2	SW
20230713 1150	1.9	SW

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230713 1200	2.2	WSW
20230713 1210	2.5	SW
20230713 1220	2.8	SW
20230713 1230	2.2	SW
20230713 1240	2.2	WSW
20230713 1250	2.2	WSW
20230713 1300	1.1	WNW
20230713 1310	1.1	W
20230713 1320	0.8	WNW
20230713 1330	1.4	NW
20230713 1340	0.8	NW
20230713 1350	1.7	SW
20230713 1400	1.1	NNW
20230713 1410	1.9	W
20230713 1420	1.1	NW
20230713 1430	0.3	S
20230713 1440	0.8	W
20230713 1450	1.4	WNW
20230713 1500	1.4	W
20230713 1510	1.4	WNW
20230713 1520	2.2	W
20230713 1530	1.7	WNW
20230713 1540	1.4	WNW
20230713 1550	1.7	WNW
20230713 1600	1.4	WNW
20230713 1610	1.4	W
20230713 1620	0.8	NW
20230713 1630	1.1	NW
20230713 1640	0.8	NNW
20230713 1650	1.4	NW
20230713 1700	1.7	WNW
20230713 1710	1.7	WNW
20230713 1720	1.4	W
20230713 1730	1.7	SW
20230713 1740	1.1	SW
20230713 1750	0.3	SW
20230713 1800	0.6	WSW
20230713 1810	0.3	WSW
20230713 1820	0.3	WNW
20230713 1830	0.3	SW
20230713 1840	0.3	SSE
20230713 1850	0.6	ESE
20230713 1900	0.8	SE
20230713 1910	0.6	SE
20230713 1920	1.1	ESE
20230713 1930	0.8	S
20230713 1940	0.3	SSW
20230713 1950	0.8	SSW
20230713 2000	0.6	SW
20230713 2010	0.8	S
20230713 2020	0.6	ENE
20230713 2030	0.3	-
20230713 2040	0.3	-
20230713 2050	0	N
20230713 2100	0	N
20230713 2110	0.3	SSE
20230713 2120	0.8	SSE
20230713 2130	0	N
20230713 2140	0.3	S
20230713 2150	0	N
20230713 2200	0.8	SSW
20230713 2210	0.3	-
20230713 2220	0.3	-
20230713 2230	0	N
20230713 2240	1.1	NNW
20230713 2250	0.8	NW
20230713 2300	0.6	N
20230713 2310	1.7	NNE
20230713 2320	0.3	NW
20230713 2330	0.3	S
20230713 2340	0.3	S
20230713 2350	0.3	WSW

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230714 0000	0	N
20230714 0010	0.3	SSW
20230714 0020	0.3	SSE
20230714 0030	0.3	SE
20230714 0040	0	N
20230714 0050	0.3	SSW
20230714 0100	0.3	SW
20230714 0110	0	N
20230714 0120	0	N
20230714 0130	0	N
20230714 0140	0	N
20230714 0150	0	N
20230714 0200	0	N
20230714 0210	0	N
20230714 0220	0	N
20230714 0230	0	N
20230714 0240	0	N
20230714 0250	0	N
20230714 0300	0.6	NW
20230714 0310	0	N
20230714 0320	0	N
20230714 0330	0	N
20230714 0340	0	N
20230714 0350	0.3	NW
20230714 0400	1.1	NW
20230714 0410	0.3	NW
20230714 0420	0.3	S
20230714 0430	0	N
20230714 0440	0	N
20230714 0450	0.6	NNW
20230714 0500	1.4	NW
20230714 0510	1.1	NW
20230714 0520	1.4	NNW
20230714 0530	1.7	NW
20230714 0540	1.1	SSE
20230714 0550	0.3	SSW
20230714 0600	0.6	S
20230714 0610	1.1	S
20230714 0620	0.8	SSW
20230714 0630	0.3	-
20230714 0640	0.3	SE
20230714 0650	1.4	NNE
20230714 0700	0.8	NE
20230714 0710	0.8	SE
20230714 0720	0.8	SSE
20230714 0730	0.3	NE
20230714 0740	2.5	N
20230714 0750	2.8	N
20230714 0800	2.5	N
20230714 0810	3.3	N
20230714 0820	3.6	N
20230714 0830	4.2	N
20230714 0840	3.3	N
20230714 0850	3.6	N
20230714 0900	3.3	NNE
20230714 0910	2.5	NNE
20230714 0920	3.3	N
20230714 0930	2.8	N
20230714 0940	3.3	N
20230714 0950	3.1	N
20230714 1000	2.8	N
20230714 1010	3.9	NNE
20230714 1020	3.3	N
20230714 1030	2.8	NNW
20230714 1040	2.5	NW
20230714 1050	2.5	NW
20230714 1100	2.2	N
20230714 1110	1.7	NNW
20230714 1120	2.2	N
20230714 1130	2.5	N
20230714 1140	2.5	NNW

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230714 1200	2.5	N
20230714 1210	2.5	N
20230714 1220	2.2	N
20230714 1230	2.2	-
20230714 1240	1.9	N
20230714 1250	1.7	NNE
20230714 1300	1.9	NE
20230714 1310	2.5	N
20230714 1320	2.8	NE
20230714 1330	1.7	-
20230714 1340	2.2	WNW
20230714 1350	2.2	N
20230714 1400	2.5	NW
20230714 1410	2.5	NNE
20230714 1420	2.8	-
20230714 1430	2.8	N
20230714 1440	3.1	N
20230714 1450	3.1	NNW
20230714 1500	2.8	NNW
20230714 1510	2.8	NNW
20230714 1520	1.9	NNW
20230714 1530	3.1	N
20230714 1540	2.5	N
20230714 1550	2.2	N
20230714 1600	2.2	NNW
20230714 1610	3.3	NNE
20230714 1620	3.3	NNE
20230714 1630	2.5	NNE
20230714 1640	2.5	N
20230714 1650	2.8	N
20230714 1700	2.5	NNE
20230714 1710	2.2	NNE
20230714 1720	1.7	N
20230714 1730	2.2	N
20230714 1740	2.2	NNE
20230714 1750	1.1	NNE
20230714 1800	1.7	NNE
20230714 1810	1.7	NE
20230714 1820	1.7	NE
20230714 1830	1.7	NNE
20230714 1840	1.7	NE
20230714 1850	1.1	NE
20230714 1900	1.1	NE
20230714 1910	1.1	NE
20230714 1920	1.1	ENE
20230714 1930	0.3	SSW
20230714 1940	0.3	SSE
20230714 1950	0	N
20230714 2000	0	N
20230714 2010	0.3	SSW
20230714 2020	0.3	S
20230714 2030	0.8	S
20230714 2040	0.8	SSE
20230714 2050	1.1	SE
20230714 2100	1.4	SE
20230714 2110	0.3	-
20230714 2120	0	N
20230714 2130	0	N
20230714 2140	0.3	SSW
20230714 2150	0	N
20230714 2200	0.3	SW
20230714 2210	0	N
20230714 2220	0	N
20230714 2230	0	N
20230714 2240	0	N
20230714 2250	0	N
20230714 2300	0	N
20230714 2310	0	N
20230714 2320	0	N
20230714 2330	0	N
20230714 2340	0	N
20230714 2350	0	N

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230715 0000	1.4	SE
20230715 0010	2.2	E
20230715 0020	2.2	ESE
20230715 0030	3.3	ESE
20230715 0040	3.3	E
20230715 0050	3.3	ESE
20230715 0100	4.2	ESE
20230715 0110	5.3	ESE
20230715 0120	3.3	ESE
20230715 0130	3.3	E
20230715 0140	3.3	E
20230715 0150	3.9	E
20230715 0200	3.3	E
20230715 0210	2.5	E
20230715 0220	2.8	E
20230715 0230	2.2	E
20230715 0240	2.8	E
20230715 0250	3.3	E
20230715 0300	2.8	E
20230715 0310	2.8	ESE
20230715 0320	3.1	E
20230715 0330	2.5	ESE
20230715 0340	2.5	E
20230715 0350	2.2	ESE
20230715 0400	2.2	ESE
20230715 0410	0.6	SE
20230715 0420	0	N
20230715 0430	0.3	ESE
20230715 0440	0	N
20230715 0450	0	N
20230715 0500	0	N
20230715 0510	0.3	ENE
20230715 0520	0.8	NE
20230715 0530	1.1	NE
20230715 0540	0.8	E
20230715 0550	1.7	E
20230715 0600	1.4	E
20230715 0610	1.1	E
20230715 0620	1.1	E
20230715 0630	1.7	E
20230715 0640	1.1	E
20230715 0650	1.4	E
20230715 0700	1.4	ENE
20230715 0710	0.8	ENE
20230715 0720	1.4	ESE
20230715 0730	2.5	ESE
20230715 0740	2.8	E
20230715 0750	2.8	ESE
20230715 0800	2.8	E
20230715 0810	3.3	ESE
20230715 0820	3.1	E
20230715 0830	3.3	E
20230715 0840	4.2	ESE
20230715 0850	3.3	ESE
20230715 0900	3.9	ESE
20230715 0910	3.9	ESE
20230715 0920	3.9	SE
20230715 0930	4.2	SE
20230715 0940	3.1	ESE
20230715 0950	3.1	E
20230715 1000	3.3	E
20230715 1010	3.3	ESE
20230715 1020	3.3	E
20230715 1030	3.9	E
20230715 1040	3.9	ESE
20230715 1050	3.9	ENE
20230715 1100	3.3	E
20230715 1110	3.3	E
20230715 1120	4.4	ESE
20230715 1130	4.4	E
20230715 1140	3.3	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230715 1200	3.3	E
20230715 1210	3.3	ESE
20230715 1220	2.8	SE
20230715 1230	3.9	ESE
20230715 1240	4.2	ESE
20230715 1250	4.7	SE
20230715 1300	3.9	SE
20230715 1310	3.1	SE
20230715 1320	3.9	E
20230715 1330	3.3	ESE
20230715 1340	4.4	E
20230715 1350	4.2	E
20230715 1400	3.3	ESE
20230715 1410	3.9	ESE
20230715 1420	3.9	ENE
20230715 1430	3.6	ESE
20230715 1440	4.2	E
20230715 1450	3.9	E
20230715 1500	4.4	E
20230715 1510	3.9	ESE
20230715 1520	4.2	E
20230715 1530	3.3	ESE
20230715 1540	3.3	ESE
20230715 1550	3.1	SE
20230715 1600	3.9	E
20230715 1610	3.3	E
20230715 1620	3.3	E
20230715 1630	3.1	E
20230715 1640	3.3	E
20230715 1650	3.3	ESE
20230715 1700	3.9	SE
20230715 1710	3.9	SE
20230715 1720	2.5	ESE
20230715 1730	3.1	SE
20230715 1740	3.1	SE
20230715 1750	2.5	SE
20230715 1800	3.3	ESE
20230715 1810	3.3	SE
20230715 1820	3.3	SE
20230715 1830	3.3	SE
20230715 1840	3.3	SE
20230715 1850	3.1	SE
20230715 1900	3.3	SE
20230715 1910	3.3	SE
20230715 1920	3.3	SE
20230715 1930	3.3	ESE
20230715 1940	3.3	ESE
20230715 1950	3.3	ESE
20230715 2000	3.6	ESE
20230715 2010	3.9	ESE
20230715 2020	3.3	ESE
20230715 2030	4.2	ESE
20230715 2040	5	ESE
20230715 2050	4.4	ESE
20230715 2100	4.7	SE
20230715 2110	5	SE
20230715 2120	4.7	SE
20230715 2130	4.4	ESE
20230715 2140	4.7	ESE
20230715 2150	5	SE
20230715 2200	5	SE
20230715 2210	4.4	ESE
20230715 2220	4.2	SE
20230715 2230	4.7	ESE
20230715 2240	5.3	SE
20230715 2250	4.4	ESE
20230715 2300	4.2	ESE
20230715 2310	4.2	ESE
20230715 2320	3.6	ESE
20230715 2330	4.4	ESE
20230715 2340	4.2	ESE
20230715 2350	4.7	ESE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230716 0000	4.2	ESE
20230716 0010	3.3	ESE
20230716 0020	4.4	ESE
20230716 0030	4.7	ESE
20230716 0040	5	ESE
20230716 0050	5.3	ESE
20230716 0100	5	ESE
20230716 0110	4.7	ESE
20230716 0120	5.3	ESE
20230716 0130	4.7	ESE
20230716 0140	4.7	ESE
20230716 0150	5.6	ESE
20230716 0200	5	ESE
20230716 0210	3.9	ESE
20230716 0220	4.2	ESE
20230716 0230	4.2	ESE
20230716 0240	4.2	ESE
20230716 0250	4.2	ESE
20230716 0300	5.3	ESE
20230716 0310	4.7	ESE
20230716 0320	5	ESE
20230716 0330	4.7	ESE
20230716 0340	5.8	ESE
20230716 0350	5.8	ESE
20230716 0400	5.6	ESE
20230716 0410	5	ESE
20230716 0420	4.4	ESE
20230716 0430	5.3	ESE
20230716 0440	5	ESE
20230716 0450	5.3	ESE
20230716 0500	5	ESE
20230716 0510	5.3	ESE
20230716 0520	5.3	ESE
20230716 0530	5.8	ESE
20230716 0540	5.6	ESE
20230716 0550	5.3	ESE
20230716 0600	5.3	ESE
20230716 0610	5	ESE
20230716 0620	4.7	ESE
20230716 0630	4.7	ESE
20230716 0640	5	ESE
20230716 0650	5	ESE
20230716 0700	3.9	E
20230716 0710	4.2	ESE
20230716 0720	3.3	ESE
20230716 0730	3.6	E
20230716 0740	3.9	E
20230716 0750	4.2	ESE
20230716 0800	5	E
20230716 0810	5	ESE
20230716 0820	5.6	ESE
20230716 0830	5.3	ESE
20230716 0840	4.7	ESE
20230716 0850	3.3	ESE
20230716 0900	3.3	ESE
20230716 0910	4.2	ESE
20230716 0920	4.2	ESE
20230716 0930	4.7	ESE
20230716 0940	4.7	ESE
20230716 0950	5	ESE
20230716 1000	5.3	ESE
20230716 1010	5.3	ESE
20230716 1020	5.3	ESE
20230716 1030	4.4	ESE
20230716 1040	3.9	E
20230716 1050	3.9	ESE
20230716 1100	5.3	ESE
20230716 1110	5.6	ESE
20230716 1120	5	ESE
20230716 1130	5.3	ESE
20230716 1140	5.3	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230716 1200	5.8	ESE
20230716 1210	4.7	ESE
20230716 1220	5	ESE
20230716 1230	5	ESE
20230716 1240	4.4	ESE
20230716 1250	4.7	E
20230716 1300	5	ESE
20230716 1310	4.2	ESE
20230716 1320	4.4	ESE
20230716 1330	4.7	ESE
20230716 1340	5	SE
20230716 1350	4.7	E
20230716 1400	5.3	E
20230716 1410	4.2	ESE
20230716 1420	4.4	E
20230716 1430	3.3	E
20230716 1440	3.9	ESE
20230716 1450	3.9	ESE
20230716 1500	3.3	ESE
20230716 1510	3.6	ESE
20230716 1520	2.8	ESE
20230716 1530	3.3	SE
20230716 1540	3.3	ESE
20230716 1550	3.3	ESE
20230716 1600	3.3	ESE
20230716 1610	2.8	ESE
20230716 1620	3.3	SE
20230716 1630	3.1	ESE
20230716 1640	2.8	ESE
20230716 1650	2.5	ESE
20230716 1700	2.5	ESE
20230716 1710	2.5	ESE
20230716 1720	2.5	SE
20230716 1730	2.8	ESE
20230716 1740	2.5	ESE
20230716 1750	2.2	ESE
20230716 1800	1.7	ESE
20230716 1810	1.4	SE
20230716 1820	1.7	ESE
20230716 1830	1.7	ESE
20230716 1840	2.2	ESE
20230716 1850	1.9	ESE
20230716 1900	2.2	ESE
20230716 1910	1.9	ESE
20230716 1920	2.2	SE
20230716 1930	2.2	ESE
20230716 1940	2.8	ESE
20230716 1950	1.7	SE
20230716 2000	2.8	SE
20230716 2010	2.8	ESE
20230716 2020	1.7	SSE
20230716 2030	1.4	
20230716 2040	2.2	ESE
20230716 2050	2.2	SE
20230716 2100	1.9	E
20230716 2110	2.2	ESE
20230716 2120	2.2	ESE
20230716 2130	1.4	ESE
20230716 2140	1.7	ESE
20230716 2150	2.2	ESE
20230716 2200	2.8	ESE
20230716 2210	2.8	ESE
20230716 2220	2.5	ESE
20230716 2230	2.8	E
20230716 2240	2.5	ESE
20230716 2250	2.5	ESE
20230716 2300	2.2	E
20230716 2310	1.4	E
20230716 2320	1.7	ESE
20230716 2330	1.4	E
20230716 2340	1.9	E
20230716 2350	1.7	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230717 0000	1.1	SE
20230717 0010	1.7	ESE
20230717 0020	1.7	ESE
20230717 0030	2.2	E
20230717 0040	1.4	SE
20230717 0050	1.7	ESE
20230717 0100	2.2	E
20230717 0110	2.8	E
20230717 0120	1.7	ESE
20230717 0130	1.4	ESE
20230717 0140	2.2	ESE
20230717 0150	2.2	ESE
20230717 0200	2.5	ESE
20230717 0210	1.7	E
20230717 0220	1.7	ESE
20230717 0230	1.7	SE
20230717 0240	1.7	ESE
20230717 0250	1.9	ESE
20230717 0300	1.4	ESE
20230717 0310	1.7	SE
20230717 0320	1.7	ESE
20230717 0330	1.7	ESE
20230717 0340	2.2	ESE
20230717 0350	2.5	ESE
20230717 0400	1.7	SE
20230717 0410	1.7	ESE
20230717 0420	1.7	ESE
20230717 0430	2.2	SE
20230717 0440	1.7	ESE
20230717 0450	1.9	ESE
20230717 0500	1.7	ESE
20230717 0510	1.7	ESE
20230717 0520	1.7	ESE
20230717 0530	2.2	SE
20230717 0540	1.7	ESE
20230717 0550	1.4	ESE
20230717 0600	1.1	ESE
20230717 0610	1.7	ESE
20230717 0620	2.5	ESE
20230717 0630	1.9	E
20230717 0640	2.2	E
20230717 0650	2.2	E
20230717 0700	1.4	ESE
20230717 0710	1.7	E
20230717 0720	1.4	ESE
20230717 0730	2.2	ESE
20230717 0740	1.4	ESE
20230717 0750	1.1	E
20230717 0800	1.4	ESE
20230717 0810	1.1	E
20230717 0820	1.1	E
20230717 0830	1.4	E
20230717 0840	1.9	ENE
20230717 0850	2.5	ENE
20230717 0900	1.4	ESE
20230717 0910	1.7	E
20230717 0920	2.2	E
20230717 0930	1.7	E
20230717 0940	3.1	E
20230717 0950	2.5	E
20230717 1000	2.8	ENE
20230717 1010	3.3	ENE
20230717 1020	3.1	E
20230717 1030	3.3	E
20230717 1040	3.3	E
20230717 1050	3.6	E
20230717 1100	3.3	E
20230717 1110	3.3	ENE
20230717 1120	3.9	E
20230717 1130	3.3	E
20230717 1140	3.1	E
20230717 1150	2.8	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230717 1200	3.3	ENE
20230717 1210	3.1	ENE
20230717 1220	3.3	ENE
20230717 1230	3.6	ENE
20230717 1240	3.1	ENE
20230717 1250	2.5	E
20230717 1300	2.8	E
20230717 1310	3.3	E
20230717 1320	3.1	E
20230717 1330	3.3	E
20230717 1340	3.3	ENE
20230717 1350	2.5	E
20230717 1400	2.8	ENE
20230717 1410	2.5	ENE
20230717 1420	2.5	E
20230717 1430	1.9	ESE
20230717 1440	1.7	ESE
20230717 1450	2.8	ESE
20230717 1500	2.5	ESE
20230717 1510	2.2	ESE
20230717 1520	2.2	ESE
20230717 1530	2.2	ESE
20230717 1540	2.2	E
20230717 1550	1.7	ESE
20230717 1600	1.9	ESE
20230717 1610	1.7	SE
20230717 1620	2.5	E
20230717 1630	2.8	ESE
20230717 1640	2.5	ESE
20230717 1650	1.7	ESE
20230717 1700	1.7	ESE
20230717 1710	1.4	ESE
20230717 1720	2.2	E
20230717 1730	1.4	E
20230717 1740	2.2	E
20230717 1750	1.7	E
20230717 1800	1.7	E
20230717 1810	1.1	E
20230717 1820	0.6	E
20230717 1830	0.3	ENE
20230717 1840	0.8	E
20230717 1850	1.1	E
20230717 1900	1.1	E
20230717 1910	0.8	NE
20230717 1920	0.8	NE
20230717 1930	0.8	ENE
20230717 1940	0.3	ENE
20230717 1950	0.8	ENE
20230717 2000	0.8	E
20230717 2010	0.3	E
20230717 2020	0.6	ESE
20230717 2030	1.1	SE
20230717 2040	0.8	ESE
20230717 2050	0.8	ESE
20230717 2100	0.8	ESE
20230717 2110	0.3	ESE
20230717 2120	0.8	-
20230717 2130	0.3	NNE
20230717 2140	0.8	E
20230717 2150	0.8	ESE
20230717 2200	2.2	ESE
20230717 2210	1.4	SE
20230717 2220	1.1	E
20230717 2230	0	N
20230717 2240	1.1	SE
20230717 2250	1.1	SSE
20230717 2300	0.3	SE
20230717 2310	0.6	E
20230717 2320	1.1	E
20230717 2330	0.3	-
20230717 2340	0.3	-
20230717 2350	0.8	NE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230718 0000	0.8	E
20230718 0010	0.6	ESE
20230718 0020		
20230718 0030	1.4	SE
20230718 0040	1.4	SE
20230718 0050	0.8	E
20230718 0100	1.4	NE
20230718 0110	0.8	ENE
20230718 0120	0.8	NE
20230718 0130	1.1	ENE
20230718 0140	0.8	E
20230718 0150	0.8	ESE
20230718 0200	1.1	E
20230718 0210	0.8	NE
20230718 0220	1.4	E
20230718 0230	0.8	ESE
20230718 0240	1.1	E
20230718 0250	0.8	E
20230718 0300	1.1	E
20230718 0310	1.1	ESE
20230718 0320	1.4	ESE
20230718 0330	1.7	SE
20230718 0340	1.9	SE
20230718 0350	1.7	SSE
20230718 0400	1.4	SE
20230718 0410	1.1	ESE
20230718 0420	1.4	E
20230718 0430	1.7	ENE
20230718 0440	1.4	E
20230718 0450	1.1	ESE
20230718 0500	0.8	ESE
20230718 0510	0.8	ESE
20230718 0520	1.1	ESE
20230718 0530	1.1	ESE
20230718 0540	1.1	E
20230718 0550	1.4	E
20230718 0600	1.4	E
20230718 0610	1.1	SE
20230718 0620	1.1	E
20230718 0630	0.3	SE
20230718 0640	0.3	-
20230718 0650	0.3	E
20230718 0700	0.8	E
20230718 0710	1.4	ESE
20230718 0720	0.8	ENE
20230718 0730	1.1	E
20230718 0740	0.8	E
20230718 0750	1.1	E
20230718 0800	0.8	E
20230718 0810	0.3	ENE
20230718 0820	0.8	ENE
20230718 0830	0.8	ENE
20230718 0840	1.7	NE
20230718 0850	1.7	ENE
20230718 0900	1.4	ENE
20230718 0910	1.1	ESE
20230718 0920	0.8	-
20230718 0930	1.1	ESE
20230718 0940	1.1	NNE
20230718 0950	1.4	N
20230718 1000	1.7	NNE
20230718 1010	2.2	N
20230718 1020	1.4	N
20230718 1030	1.4	N
20230718 1040	1.7	N
20230718 1050	2.5	NNE
20230718 1100	2.2	N
20230718 1110	1.4	NE
20230718 1120	0.8	NE
20230718 1130	1.1	ESE
20230718 1140	1.7	E
20230718 1150	1.1	NE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230718 1200	1.1	N
20230718 1210	2.5	N
20230718 1220	1.7	NNW
20230718 1230	1.7	N
20230718 1240	2.2	N
20230718 1250	3.1	NNE
20230718 1300	2.8	NNE
20230718 1310	2.5	N
20230718 1320	2.2	N
20230718 1330	2.2	NNW
20230718 1340	1.7	NNW
20230718 1350	1.9	N
20230718 1400	2.5	N
20230718 1410	2.5	NNE
20230718 1420	2.5	N
20230718 1430	3.1	NNE
20230718 1440	2.2	N
20230718 1450	1.7	N
20230718 1500	2.2	N
20230718 1510	3.3	N
20230718 1520	2.8	N
20230718 1530	2.5	N
20230718 1540	3.1	NNE
20230718 1550	2.5	NNE
20230718 1600	2.5	N
20230718 1610	2.5	N
20230718 1620	2.2	N
20230718 1630	2.5	N
20230718 1640	2.5	N
20230718 1650	2.5	N
20230718 1700	2.2	N
20230718 1710	2.2	N
20230718 1720	3.1	N
20230718 1730	3.9	N
20230718 1740	3.3	N
20230718 1750	3.3	NNE
20230718 1800	3.6	NNE
20230718 1810	3.1	NNE
20230718 1820	2.8	NNE
20230718 1830	3.1	N
20230718 1840	3.1	N
20230718 1850	3.3	N
20230718 1900	3.1	N
20230718 1910	2.8	N
20230718 1920	3.3	N
20230718 1930	3.3	N
20230718 1940	2.2	N
20230718 1950	2.5	N
20230718 2000	3.1	N
20230718 2010	2.8	N
20230718 2020	2.8	N
20230718 2030	2.2	N
20230718 2040	1.4	NNW
20230718 2050	1.4	NNW
20230718 2100	1.4	N
20230718 2110	1.4	N
20230718 2120	0.8	NNW
20230718 2130	1.1	NW
20230718 2140	0.8	N
20230718 2150	1.4	N
20230718 2200	1.1	N
20230718 2210	1.1	N
20230718 2220	0.8	NNW
20230718 2230	1.7	N
20230718 2240	1.7	N
20230718 2250	1.4	N
20230718 2300	1.7	NNW
20230718 2310	2.2	N
20230718 2320	2.8	N
20230718 2330	1.7	NNW
20230718 2340	1.9	NNW
20230718 2350	1.7	NW

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsinfo/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230719 0000	1.7	NNW
20230719 0010	1.7	NNW
20230719 0020	1.9	NNW
20230719 0030	1.4	NNW
20230719 0040	1.4	N
20230719 0050	2.2	N
20230719 0100	2.2	N
20230719 0110	2.5	N
20230719 0120	3.3	NNE
20230719 0130	2.5	NNE
20230719 0140	2.5	NNE
20230719 0150	0.3	-
20230719 0200	0.3	NW
20230719 0210	0.8	NNW
20230719 0220	1.1	N
20230719 0230	1.4	N
20230719 0240	2.2	N
20230719 0250	2.5	N
20230719 0300	1.9	N
20230719 0310	2.5	N
20230719 0320	2.5	N
20230719 0330	2.2	N
20230719 0340	1.4	NNE
20230719 0350	0.6	NNE
20230719 0400	0.3	NNW
20230719 0410	1.1	N
20230719 0420	0.8	NNW
20230719 0430	1.4	NNW
20230719 0440	2.2	N
20230719 0450	1.7	N
20230719 0500	1.1	N
20230719 0510	0.6	N
20230719 0520	0.3	N
20230719 0530	0.8	N
20230719 0540	1.1	N
20230719 0550	0.8	N
20230719 0600	0.8	NNW
20230719 0610	0.3	N
20230719 0620	1.4	N
20230719 0630	1.7	N
20230719 0640	1.7	N
20230719 0650	1.4	N
20230719 0700	1.1	N
20230719 0710	0.8	N
20230719 0720	1.7	N
20230719 0730	1.7	N
20230719 0740	1.1	NNW
20230719 0750	1.1	NNW
20230719 0800	1.1	N
20230719 0810	1.7	N
20230719 0820	1.7	N
20230719 0830	1.1	NNW
20230719 0840	0.3	NW
20230719 0850	1.4	NNW
20230719 0900	1.7	N
20230719 0910	1.4	N
20230719 0920	1.1	N
20230719 0930	0.8	N
20230719 0940	1.1	NNW
20230719 0950	1.7	N
20230719 1000	1.7	N
20230719 1010	1.7	N
20230719 1020	2.2	N
20230719 1030	2.2	N
20230719 1040	2.5	N
20230719 1050	1.7	N
20230719 1100	2.2	N
20230719 1110	1.7	N
20230719 1120	1.7	N
20230719 1130	2.2	N
20230719 1140	2.2	N
20230719 1150	1.7	N

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230719 1200	2.5	N
20230719 1210	2.8	N
20230719 1220	2.5	N
20230719 1230	2.5	N
20230719 1240	2.2	N
20230719 1250	1.7	N
20230719 1300	1.7	N
20230719 1310	1.1	N
20230719 1320	1.7	N
20230719 1330	1.4	N
20230719 1340	1.7	N
20230719 1350	2.2	N
20230719 1400	1.7	N
20230719 1410	1.7	N
20230719 1420	2.2	N
20230719 1430	2.5	N
20230719 1440	2.2	N
20230719 1450	1.7	N
20230719 1500	1.4	N
20230719 1510	2.2	NNE
20230719 1520	2.8	N
20230719 1530	2.5	N
20230719 1540	1.9	N
20230719 1550	1.4	N
20230719 1600	1.7	N
20230719 1610	2.5	N
20230719 1620	1.7	N
20230719 1630	1.7	N
20230719 1640	1.1	N
20230719 1650	1.7	N
20230719 1700	1.7	N
20230719 1710	1.7	N
20230719 1720	1.4	NNW
20230719 1730	2.5	N
20230719 1740	2.5	NNE
20230719 1750	1.7	NNE
20230719 1800	1.1	N
20230719 1810	1.1	NNW
20230719 1820	1.7	N
20230719 1830	2.5	N
20230719 1840	1.9	N
20230719 1850	1.7	N
20230719 1900	1.1	N
20230719 1910	1.1	NNW
20230719 1920	1.4	NNW
20230719 1930	1.4	NNW
20230719 1940	1.1	NNW
20230719 1950	0.8	NNE
20230719 2000	0.6	N
20230719 2010	1.1	NE
20230719 2020	0.3	NNE
20230719 2030	0.3	ENE
20230719 2040	0.3	N
20230719 2050	1.1	N
20230719 2100	1.1	N
20230719 2110	0.3	N
20230719 2120	0.3	NNE
20230719 2130	0.8	NNW
20230719 2140	0.3	-
20230719 2150	0.8	ESE
20230719 2200	0.3	E
20230719 2210	0.3	NE
20230719 2220	0.3	NE
20230719 2230	0.3	N
20230719 2240	0.3	NW
20230719 2250	0	N
20230719 2300	0	N
20230719 2310	0.3	SW
20230719 2320	0.3	SW
20230719 2330	0.3	WSW
20230719 2340	0	N
20230719 2350	0	N

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230720 0000	0.3	NW
20230720 0010	0.3	NW
20230720 0020	0.3	NNE
20230720 0030	2.8	ESE
20230720 0040	1.7	E
20230720 0050	2.2	ESE
20230720 0100	2.2	E
20230720 0110	2.2	E
20230720 0120	2.5	E
20230720 0130	2.8	E
20230720 0140	1.9	ESE
20230720 0150	1.7	ESE
20230720 0200	1.7	ESE
20230720 0210	1.4	ESE
20230720 0220	1.1	E
20230720 0230	0.8	E
20230720 0240	0.8	ENE
20230720 0250	1.1	ENE
20230720 0300	1.1	E
20230720 0310	0.8	ESE
20230720 0320	0.3	ESE
20230720 0330	0	N
20230720 0340	0.3	ESE
20230720 0350	0.8	ESE
20230720 0400	1.1	ESE
20230720 0410	1.1	ESE
20230720 0420	0.8	ESE
20230720 0430	1.7	ESE
20230720 0440	1.1	SE
20230720 0450	1.4	ESE
20230720 0500	0.6	ESE
20230720 0510	0.6	E
20230720 0520	1.1	ESE
20230720 0530	1.1	SE
20230720 0540	0.3	-
20230720 0550	0.6	SE
20230720 0600	1.4	SE
20230720 0610	1.1	E
20230720 0620	1.4	E
20230720 0630	0.8	SE
20230720 0640	1.4	ESE
20230720 0650	1.7	E
20230720 0700	1.4	E
20230720 0710	1.7	ESE
20230720 0720	2.5	E
20230720 0730	2.5	E
20230720 0740	1.7	ESE
20230720 0750	1.4	ESE
20230720 0800	1.7	SE
20230720 0810	1.7	ESE
20230720 0820	1.7	ESE
20230720 0830	1.7	E
20230720 0840	2.2	E
20230720 0850	2.2	E
20230720 0900	2.2	ESE
20230720 0910	2.5	E
20230720 0920	2.5	E
20230720 0930	3.3	ENE
20230720 0940	3.3	E
20230720 0950	2.8	E
20230720 1000	2.5	E
20230720 1010	2.8	E
20230720 1020	2.2	ESE
20230720 1030	3.3	E
20230720 1040	2.8	-
20230720 1050	2.5	E
20230720 1100	2.8	E
20230720 1110	3.1	E
20230720 1120	3.3	E
20230720 1130	3.1	E
20230720 1140	3.1	ESE
20230720 1150	2.5	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230720 1200	1.4	ESE
20230720 1210	1.1	ESE
20230720 1220	1.7	ESE
20230720 1230	1.7	SE
20230720 1240	1.4	ESE
20230720 1250	1.4	E
20230720 1300	1.7	ESE
20230720 1310	1.9	ESE
20230720 1320	1.7	SE
20230720 1330	1.7	ESE
20230720 1340	2.2	SE
20230720 1350	2.2	ESE
20230720 1400	1.4	ESE
20230720 1410	1.4	ESE
20230720 1420	1.7	SE
20230720 1430	1.4	SE
20230720 1440	1.1	ESE
20230720 1450	0.3	-
20230720 1500	0	N
20230720 1510	0	N
20230720 1520	0	N
20230720 1530	0	N
20230720 1540	0.3	ESE
20230720 1550	0.6	E
20230720 1600	1.4	E
20230720 1610	0.8	-
20230720 1620	0.6	ESE
20230720 1630	1.4	E
20230720 1640	1.7	ESE
20230720 1650	2.2	ESE
20230720 1700	1.9	ESE
20230720 1710	2.2	ESE
20230720 1720	1.9	SE
20230720 1730	2.2	ESE
20230720 1740	1.7	SE
20230720 1750	1.7	ESE
20230720 1800	1.9	ESE
20230720 1810	1.9	ESE
20230720 1820	1.4	E
20230720 1830	1.7	ESE
20230720 1840	2.5	E
20230720 1850	2.2	ESE
20230720 1900	1.7	ESE
20230720 1910	1.9	SE
20230720 1920	1.9	ESE
20230720 1930	1.9	E
20230720 1940	1.4	E
20230720 1950	1.9	E
20230720 2000	2.2	E
20230720 2010	1.7	E
20230720 2020	2.2	ESE
20230720 2030	2.2	ESE
20230720 2040	2.2	E
20230720 2050	1.7	E
20230720 2100	2.2	ESE
20230720 2110	2.2	ESE
20230720 2120	2.2	ESE
20230720 2130	1.7	-
20230720 2140	2.5	E
20230720 2150	2.5	E
20230720 2200	2.2	ESE
20230720 2210	3.3	ESE
20230720 2220	2.5	E
20230720 2230	3.1	E
20230720 2240	2.8	E
20230720 2250	3.3	ESE
20230720 2300	2.8	ESE
20230720 2310	2.5	SE
20230720 2320	2.8	ESE
20230720 2330	2.5	SE
20230720 2340	2.2	SE
20230720 2350	1.7	SE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230721 0000	2.2	SE
20230721 0010	2.5	ESE
20230721 0020	2.5	E
20230721 0030	2.5	E
20230721 0040	2.8	E
20230721 0050	2.5	E
20230721 0100	3.1	E
20230721 0110	2.8	ESE
20230721 0120	2.8	ESE
20230721 0130	2.5	ESE
20230721 0140	1.9	ESE
20230721 0150	1.4	S
20230721 0200	1.7	ESE
20230721 0210	3.1	E
20230721 0220	3.1	E
20230721 0230	2.8	E
20230721 0240	3.1	E
20230721 0250	3.3	E
20230721 0300	3.1	E
20230721 0310	2.8	ESE
20230721 0320	2.8	E
20230721 0330	2.2	E
20230721 0340	2.8	E
20230721 0350	2.5	ESE
20230721 0400	2.2	ESE
20230721 0410	3.1	ESE
20230721 0420	2.2	ESE
20230721 0430	2.2	ESE
20230721 0440	2.5	ESE
20230721 0450	1.7	ESE
20230721 0500	1.7	ESE
20230721 0510	2.2	ESE
20230721 0520	2.5	ESE
20230721 0530	2.2	E
20230721 0540	2.2	ESE
20230721 0550	1.4	E
20230721 0600	1.7	ESE
20230721 0610	1.7	ESE
20230721 0620	1.7	E
20230721 0630	1.7	ESE
20230721 0640	1.4	ESE
20230721 0650	1.7	E
20230721 0700	1.1	ESE
20230721 0710	0.3	-
20230721 0720	1.1	ESE
20230721 0730	1.1	E
20230721 0740	1.4	E
20230721 0750	1.1	E
20230721 0800	0.8	E
20230721 0810	1.1	SE
20230721 0820	1.1	E
20230721 0830	1.1	SSE
20230721 0840	0	N
20230721 0850	0.6	E
20230721 0900	0.3	ESE
20230721 0910	0.3	SSE
20230721 0920	0.3	ESE
20230721 0930	0.8	SSE
20230721 0940	1.4	SSE
20230721 0950	0.8	ENE
20230721 1000	1.1	ESE
20230721 1010	0.6	ESE
20230721 1020	0.3	SSW
20230721 1030	0.8	S
20230721 1040	1.1	SE
20230721 1050	0.8	SSE
20230721 1100	0.3	ESE
20230721 1110	0.3	SW
20230721 1120	0.3	-
20230721 1130	0	N
20230721 1140	0.3	-
20230721 1150	0.3	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230721 1200	0	N
20230721 1210	0	N
20230721 1220	0	N
20230721 1230	0	N
20230721 1240	0.3	SSW
20230721 1250	0	N
20230721 1300	0.3	SE
20230721 1310	0	N
20230721 1320	0	N
20230721 1330	0.3	S
20230721 1340	0.3	SSE
20230721 1350	0.3	S
20230721 1400	0.3	-
20230721 1410	0.3	NE
20230721 1420	0	N
20230721 1430	0.3	S
20230721 1440	0.8	S
20230721 1450	0.8	SSE
20230721 1500	0.8	SE
20230721 1510	0.8	S
20230721 1520	0.3	S
20230721 1530	0	N
20230721 1540	0.3	SSW
20230721 1550	0.3	SSW
20230721 1600	0.6	SSE
20230721 1610	1.1	SE
20230721 1620	0.8	ESE
20230721 1630	0.3	-
20230721 1640	0.3	SSW
20230721 1650	0	N
20230721 1700	0.8	ESE
20230721 1710	0.8	SE
20230721 1720	1.1	SE
20230721 1730	1.7	SE
20230721 1740	1.7	E
20230721 1750	1.4	E
20230721 1800	1.7	E
20230721 1810	1.7	E
20230721 1820	1.1	E
20230721 1830	1.4	ENE
20230721 1840	1.1	ENE
20230721 1850	1.4	ENE
20230721 1900	1.1	E
20230721 1910	1.4	E
20230721 1920	0.8	E
20230721 1930	1.7	E
20230721 1940	1.7	ESE
20230721 1950	2.2	ESE
20230721 2000	2.8	ESE
20230721 2010	2.5	ESE
20230721 2020	2.2	ESE
20230721 2030	1.9	ESE
20230721 2040	1.7	ESE
20230721 2050	2.2	ESE
20230721 2100	2.5	ESE
20230721 2110	1.7	ESE
20230721 2120	1.7	ESE
20230721 2130	1.7	ESE
20230721 2140	2.2	E
20230721 2150	2.5	E
20230721 2200	2.2	E
20230721 2210	1.7	E
20230721 2220	1.7	SE
20230721 2230	0.8	-
20230721 2240	1.4	S
20230721 2250	1.9	ESE
20230721 2300	1.9	ESE
20230721 2310	1.7	ESE
20230721 2320	3.1	ENE
20230721 2330	2.2	ESE
20230721 2340	1.7	-
20230721 2350	2.5	SE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230722 0000	3.1	ESE
20230722 0010	3.1	E
20230722 0020	3.3	E
20230722 0030	2.8	E
20230722 0040	3.3	ENE
20230722 0050	3.3	E
20230722 0100	2.5	ESE
20230722 0110	2.2	ESE
20230722 0120	2.8	SE
20230722 0130	1.9	ESE
20230722 0140	1.7	ESE
20230722 0150	2.5	SE
20230722 0200	1.7	S
20230722 0210	2.5	SSW
20230722 0220	1.4	SW
20230722 0230	2.2	S
20230722 0240	2.2	SSW
20230722 0250	2.2	SSW
20230722 0300	3.3	S
20230722 0310	2.8	SSW
20230722 0320	1.4	SW
20230722 0330	2.5	SSW
20230722 0340	2.5	S
20230722 0350	2.2	SSW
20230722 0400	2.2	SSE
20230722 0410	2.8	S
20230722 0420	2.8	S
20230722 0430	2.5	S
20230722 0440	2.8	SSE
20230722 0450	3.1	S
20230722 0500	3.1	SSW
20230722 0510	2.8	SSW
20230722 0520	2.5	SSW
20230722 0530	2.5	SSW
20230722 0540	2.5	S
20230722 0550	2.2	SSE
20230722 0600	2.2	SE
20230722 0610	2.2	SSE
20230722 0620	1.7	SSE
20230722 0630	0.8	ESE
20230722 0640	1.4	SE
20230722 0650	1.4	SE
20230722 0700	1.7	SE
20230722 0710	1.7	SE
20230722 0720	1.4	SE
20230722 0730	1.7	ESE
20230722 0740	1.7	E
20230722 0750	1.9	E
20230722 0800	1.1	ESE
20230722 0810	1.7	E
20230722 0820	1.4	E
20230722 0830	1.4	ESE
20230722 0840	2.2	E
20230722 0850	1.9	ESE
20230722 0900	1.7	ESE
20230722 0910	1.7	ESE
20230722 0920	2.2	E
20230722 0930	1.9	E
20230722 0940	1.7	E
20230722 0950	1.7	E
20230722 1000	1.7	ESE
20230722 1010	2.2	ESE
20230722 1020	2.2	ESE
20230722 1030	1.9	ESE
20230722 1040	0.8	-
20230722 1050	0.3	SE
20230722 1100	0.6	SE
20230722 1110	1.1	ESE
20230722 1120	1.4	SE
20230722 1130	1.1	SE
20230722 1140	1.7	ESE
20230722 1150	1.7	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230722 1200	1.7	ESE
20230722 1210	1.7	ESE
20230722 1220	1.1	ESE
20230722 1230	1.9	ESE
20230722 1240	1.7	ESE
20230722 1250	1.4	SE
20230722 1300	0.6	SSW
20230722 1310	0	N
20230722 1320	0.8	ESE
20230722 1330	1.4	ESE
20230722 1340	0.8	SE
20230722 1350	0.3	SW
20230722 1400	0.3	SW
20230722 1410	0.3	-
20230722 1420	0	N
20230722 1430	0.3	SSW
20230722 1440	1.1	S
20230722 1450	1.1	S
20230722 1500	0.8	SSW
20230722 1510	0.8	SSW
20230722 1520	0.8	SW
20230722 1530	0.3	SE
20230722 1540	0	N
20230722 1550	0	N
20230722 1600	0	N
20230722 1610	0	N
20230722 1620	0	N
20230722 1630	0	N
20230722 1640	0	N
20230722 1650	0.3	SSE
20230722 1700	0.3	SSE
20230722 1710	0.8	SE
20230722 1720	0.8	SSE
20230722 1730	1.4	SE
20230722 1740	1.4	SE
20230722 1750	1.7	SE
20230722 1800	1.9	ESE
20230722 1810	1.4	SE
20230722 1820	1.1	SE
20230722 1830	0.8	SE
20230722 1840	1.1	SSE
20230722 1850	2.2	SSE
20230722 1900	1.7	S
20230722 1910	1.1	S
20230722 1920	1.1	S
20230722 1930	0.8	SE
20230722 1940	0.6	SE
20230722 1950	1.4	SSE
20230722 2000	1.1	S
20230722 2010	0.8	SSE
20230722 2020	1.1	S
20230722 2030	1.4	SSW
20230722 2040	1.4	SW
20230722 2050	1.4	SW
20230722 2100	1.7	SW
20230722 2110	1.7	SSW
20230722 2120	2.5	SW
20230722 2130	2.8	SSW
20230722 2140	3.1	SW
20230722 2150	4.4	SSW
20230722 2200	3.3	SSW
20230722 2210	3.3	SW
20230722 2220	3.3	SSW
20230722 2230	3.3	SSW
20230722 2240	3.9	SSW
20230722 2250	4.2	SW
20230722 2300	3.9	SW
20230722 2310	4.4	SW
20230722 2320	4.4	SW
20230722 2330	4.2	SW
20230722 2340	3.9	SW
20230722 2350	3.3	SW

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230723 0000	3.6	SW
20230723 0010	3.3	SW
20230723 0020	4.2	SSW
20230723 0030	4.7	S
20230723 0040	3.3	SSW
20230723 0050	5.6	SSW
20230723 0100	3.9	SSW
20230723 0110	3.6	SSW
20230723 0120	3.3	SSW
20230723 0130	4.4	SSW
20230723 0140	4.4	SSW
20230723 0150	3.9	SSW
20230723 0200	3.3	SSW
20230723 0210	3.9	S
20230723 0220	3.3	SSW
20230723 0230	3.9	S
20230723 0240	3.3	S
20230723 0250	3.6	S
20230723 0300	4.4	S
20230723 0310	3.3	S
20230723 0320	3.3	S
20230723 0330	3.3	SSW
20230723 0340	3.1	SSW
20230723 0350	3.9	SSW
20230723 0400	3.1	SSW
20230723 0410	3.6	SW
20230723 0420	4.4	SW
20230723 0430	3.3	SW
20230723 0440	3.3	SW
20230723 0450	2.8	SW
20230723 0500	3.3	SSW
20230723 0510	3.3	SSW
20230723 0520	2.8	SSW
20230723 0530	3.1	SSW
20230723 0540	3.1	SSW
20230723 0550	2.8	SSW
20230723 0600	3.1	S
20230723 0610	3.3	S
20230723 0620	2.5	SSW
20230723 0630	1.4	SW
20230723 0640	0.8	SW
20230723 0650	0.8	SW
20230723 0700	1.4	SSW
20230723 0710	1.1	SSW
20230723 0720	1.4	SW
20230723 0730	0.3	SW
20230723 0740	0.3	SSW
20230723 0750	0.3	SSW
20230723 0800	0	N
20230723 0810	0	N
20230723 0820	0	N
20230723 0830	0	N
20230723 0840	0	N
20230723 0850	0.3	-
20230723 0900	0	N
20230723 0910	0.3	SSE
20230723 0920	0.3	SE
20230723 0930	0	N
20230723 0940	0	N
20230723 0950	0	N
20230723 1000	0	N
20230723 1010	0	N
20230723 1020	0	N
20230723 1030	0	N
20230723 1040	0	N
20230723 1050	0.3	E
20230723 1100	0.6	E
20230723 1110	0.3	W
20230723 1120	0.3	WNW
20230723 1130	0.3	N
20230723 1140	0.3	ESE
20230723 1150	0.3	-

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230723 1200	0.3	-
20230723 1210	0	N
20230723 1220	0	N
20230723 1230	0	N
20230723 1240	0	N
20230723 1250	0	N
20230723 1300	0	N
20230723 1310	0	N
20230723 1320	0	N
20230723 1330	0.3	W
20230723 1340	0.3	-
20230723 1350	0.3	WNW
20230723 1400	0	N
20230723 1410	0.6	WSW
20230723 1420	0.3	SW
20230723 1430	0	N
20230723 1440	0.3	W
20230723 1450	0	N
20230723 1500	0	N
20230723 1510	0	N
20230723 1520	0	N
20230723 1530	0	N
20230723 1540	0	N
20230723 1550	0	N
20230723 1600	0.3	ENE
20230723 1610	0	N
20230723 1620	0	N
20230723 1630	0.3	SSE
20230723 1640	0.3	ESE
20230723 1650	0.6	ESE
20230723 1700	0.6	S
20230723 1710	1.1	SSE
20230723 1720	0.6	SSE
20230723 1730	1.9	SE
20230723 1740	0.8	SE
20230723 1750	0.8	SE
20230723 1800	0.8	SSE
20230723 1810	1.4	SE
20230723 1820	1.7	SE
20230723 1830	1.7	ESE
20230723 1840	1.4	SE
20230723 1850	1.4	SE
20230723 1900	1.1	SE
20230723 1910	0.8	ESE
20230723 1920	0.8	ESE
20230723 1930	0.3	SSW
20230723 1940	1.4	SW
20230723 1950	1.7	SSW
20230723 2000	1.7	SSW
20230723 2010	1.7	S
20230723 2020	2.5	SSW
20230723 2030	2.2	S
20230723 2040	2.8	S
20230723 2050	2.8	S
20230723 2100	2.5	SSE
20230723 2110	2.2	S
20230723 2120	1.7	S
20230723 2130	1.7	S
20230723 2140	2.5	S
20230723 2150	2.2	S
20230723 2200	1.7	SW
20230723 2210	2.2	SW
20230723 2220	2.8	SSW
20230723 2230	3.3	SSW
20230723 2240	3.3	S
20230723 2250	3.3	S
20230723 2300	2.8	S
20230723 2310	3.9	S
20230723 2320	2.8	S
20230723 2330	2.8	S
20230723 2340	3.1	SSW
20230723 2350	3.3	SSW

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230724 0000	3.9	SW
20230724 0010	4.2	SW
20230724 0020	4.4	SW
20230724 0030	3.3	SSW
20230724 0040	3.9	SSW
20230724 0050	3.9	SSW
20230724 0100	4.2	S
20230724 0110	4.4	SSW
20230724 0120	4.2	SSW
20230724 0130	4.2	SSW
20230724 0140	3.9	SSW
20230724 0150	3.1	SW
20230724 0200	4.2	SSW
20230724 0210	3.9	SW
20230724 0220	3.3	SW
20230724 0230	3.3	SSW
20230724 0240	4.2	S
20230724 0250	4.4	S
20230724 0300	3.3	SSW
20230724 0310	3.3	SSW
20230724 0320	2.8	SW
20230724 0330	2.8	SSW
20230724 0340	2.5	SW
20230724 0350	3.3	SSW
20230724 0400	3.1	SW
20230724 0410	3.1	SSW
20230724 0420	2.5	SSW
20230724 0430	2.5	SW
20230724 0440	2.8	SW
20230724 0450	2.5	SW
20230724 0500	2.5	SW
20230724 0510	2.5	SW
20230724 0520	1.7	SW
20230724 0530	2.2	SW
20230724 0540	2.2	SW
20230724 0550	1.9	SW
20230724 0600	1.4	SW
20230724 0610	1.7	SSW
20230724 0620	1.7	S
20230724 0630	1.7	SW
20230724 0640	1.4	SW
20230724 0650	1.1	SSW
20230724 0700	1.4	SW
20230724 0710	0.8	SW
20230724 0720	1.4	S
20230724 0730	1.1	SSW
20230724 0740	0.3	SE
20230724 0750	1.1	SE
20230724 0800	0.8	ESE
20230724 0810	0.3	E
20230724 0820	0.3	-
20230724 0830	0.3	-
20230724 0840	0.3	-
20230724 0850	0.3	N
20230724 0900	0.3	NNE
20230724 0910	0	N
20230724 0920	0.3	-
20230724 0930	0	N
20230724 0940	0.3	ENE
20230724 0950	0.8	E
20230724 1000	1.1	SSE
20230724 1010	0.8	E
20230724 1020	0.3	SW
20230724 1030	0.3	SE
20230724 1040	0.3	ESE
20230724 1050	0	N
20230724 1100	0.3	E
20230724 1110	0.3	S
20230724 1120	0.3	SSE
20230724 1130	0.3	ESE
20230724 1140	0.3	E
20230724 1150	0	N

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230724 1200	0.3	SSW
20230724 1210	0	N
20230724 1220	0	N
20230724 1230	0	N
20230724 1240	0	N
20230724 1250	0.3	S
20230724 1300	0	N
20230724 1310	0.3	SE
20230724 1320	0	N
20230724 1330	0	N
20230724 1340	0	N
20230724 1350	0	N
20230724 1400	0	N
20230724 1410	0	N
20230724 1420	0.3	E
20230724 1430	0.3	NE
20230724 1440	0.3	NW
20230724 1450	0	N
20230724 1500	0.6	E
20230724 1510	0.3	-
20230724 1520	0	N
20230724 1530	0.8	ENE
20230724 1540	0.3	ESE
20230724 1550	0.3	E
20230724 1600	0.3	ESE
20230724 1610	0	N
20230724 1620	0.3	ESE
20230724 1630	0.3	ENE
20230724 1640	0	N
20230724 1650	0.6	-
20230724 1700	0.6	ESE
20230724 1710	0.8	E
20230724 1720	0.3	-
20230724 1730	0.3	E
20230724 1740	0	N
20230724 1750	0	N
20230724 1800	0.8	E
20230724 1810	0.3	-
20230724 1820	1.1	SE
20230724 1830	0.8	ESE
20230724 1840	0.3	ESE
20230724 1850	1.1	ESE
20230724 1900	1.1	ESE
20230724 1910	1.4	SE
20230724 1920	1.7	ESE
20230724 1930	1.4	ESE
20230724 1940	1.1	E
20230724 1950	1.4	SE
20230724 2000	1.1	SSE
20230724 2010	1.4	ESE
20230724 2020	1.1	E
20230724 2030	1.7	SSE
20230724 2040	0.8	W
20230724 2050	1.4	W
20230724 2100	1.7	SW
20230724 2110	1.1	SSW
20230724 2120	2.2	SSW
20230724 2130	1.7	SSW
20230724 2140	2.5	SW
20230724 2150	2.8	SW
20230724 2200	2.5	SW
20230724 2210	2.2	SSW
20230724 2220	1.9	SSW
20230724 2230	3.3	SW
20230724 2240	3.3	SW
20230724 2250	3.3	SW
20230724 2300	3.3	SW
20230724 2310	3.3	SW
20230724 2320	3.1	WSW
20230724 2330	3.3	SW
20230724 2340	3.3	SW
20230724 2350	3.6	WSW

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230725 0000	3.3	SW
20230725 0010	3.3	SW
20230725 0020	3.3	SW
20230725 0030	3.3	SSW
20230725 0040	3.9	WSW
20230725 0050	3.9	SSW
20230725 0100	4.2	SSW
20230725 0110	4.2	SW
20230725 0120	3.6	SW
20230725 0130	3.6	SW
20230725 0140	3.3	SSW
20230725 0150	3.6	SW
20230725 0200	4.2	SW
20230725 0210	3.9	WSW
20230725 0220	2.8	WSW
20230725 0230	3.3	WSW
20230725 0240	3.1	WSW
20230725 0250	2.5	SW
20230725 0300	3.6	SW
20230725 0310	4.2	SW
20230725 0320	3.3	SSW
20230725 0330	3.9	SW
20230725 0340	3.9	SW
20230725 0350	3.3	WSW
20230725 0400	3.3	SW
20230725 0410	3.3	SW
20230725 0420	3.1	SSW
20230725 0430	3.1	SW
20230725 0440	3.1	SW
20230725 0450	3.1	SW
20230725 0500	3.3	SW
20230725 0510	3.1	WSW
20230725 0520	2.8	SW
20230725 0530	2.8	WSW
20230725 0540	2.2	WSW
20230725 0550	1.7	SW
20230725 0600	1.7	WSW
20230725 0610	1.4	WSW
20230725 0620	1.4	SSW
20230725 0630	1.1	S
20230725 0640	0.6	S
20230725 0650	0.8	S
20230725 0700	0.8	SE
20230725 0710	1.1	ESE
20230725 0720	1.4	SE
20230725 0730	0.3	ESE
20230725 0740	0.8	SE
20230725 0750	1.1	SE
20230725 0800	2.5	E
20230725 0810	1.7	E
20230725 0820	1.4	E
20230725 0830	1.4	ESE
20230725 0840	1.4	E
20230725 0850	1.1	ESE
20230725 0900	1.7	E
20230725 0910	1.1	SE
20230725 0920	1.1	SE
20230725 0930	1.4	ESE
20230725 0940	1.7	ESE
20230725 0950	1.7	ESE
20230725 1000	1.7	ESE
20230725 1010	1.1	SE
20230725 1020	1.7	ESE
20230725 1030	1.4	ESE
20230725 1040	1.4	ESE
20230725 1050	0.8	ESE
20230725 1100	1.1	ESE
20230725 1110	1.4	E
20230725 1120	1.7	ESE
20230725 1130	1.7	ESE
20230725 1140	1.7	ESE
20230725 1150	1.9	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230725 1200	1.9	ESE
20230725 1210	2.2	ESE
20230725 1220	1.9	ESE
20230725 1230	1.9	ESE
20230725 1240	1.4	ESE
20230725 1250	1.7	E
20230725 1300	1.7	ESE
20230725 1310	1.4	ESE
20230725 1320	1.7	E
20230725 1330	1.7	E
20230725 1340	1.7	ESE
20230725 1350	1.1	E
20230725 1400	1.7	E
20230725 1410	1.7	E
20230725 1420	1.7	E
20230725 1430	1.1	E
20230725 1440	1.1	E
20230725 1450	1.7	E
20230725 1500	0.8	ESE
20230725 1510	1.4	E
20230725 1520	0.3	E
20230725 1530	0.8	E
20230725 1540	0.8	ESE
20230725 1550	1.1	E
20230725 1600	1.1	SE
20230725 1610	0.8	ESE
20230725 1620	1.1	ESE
20230725 1630	1.7	E
20230725 1640	0.8	E
20230725 1650	1.1	E
20230725 1700	1.4	E
20230725 1710	1.1	E
20230725 1720	1.4	E
20230725 1730	1.9	E
20230725 1740	1.7	E
20230725 1750	1.4	ESE
20230725 1800	2.5	ESE
20230725 1810	1.9	ESE
20230725 1820	1.9	ESE
20230725 1830	2.5	ESE
20230725 1840	1.9	ESE
20230725 1850	1.7	ESE
20230725 1900	2.2	ESE
20230725 1910	1.9	E
20230725 1920	1.7	E
20230725 1930	1.7	E
20230725 1940	1.9	E
20230725 1950	2.2	ENE
20230725 2000	1.7	E
20230725 2010	1.7	E
20230725 2020	2.2	SE
20230725 2030	1.9	ESE
20230725 2040	2.2	ESE
20230725 2050	2.2	ESE
20230725 2100	2.8	SE
20230725 2110	3.1	SE
20230725 2120	3.3	SE
20230725 2130	2.8	SE
20230725 2140	2.8	SSE
20230725 2150	3.6	SSE
20230725 2200	3.3	SSE
20230725 2210	3.9	SSE
20230725 2220	3.3	SE
20230725 2230	3.3	SSE
20230725 2240	2.5	SE
20230725 2250	3.3	SE
20230725 2300	2.8	SSE
20230725 2310	4.2	SSE
20230725 2320	3.3	SSE
20230725 2330	3.9	S
20230725 2340	4.2	SE
20230725 2350	3.9	SSE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230726 0000	3.3	SSE
20230726 0010	3.3	ESE
20230726 0020	3.1	ESE
20230726 0030	3.3	SE
20230726 0040	3.3	ESE
20230726 0050	3.9	SE
20230726 0100	2.8	SE
20230726 0110	4.2	SSE
20230726 0120	4.2	SSE
20230726 0130	4.2	SSE
20230726 0140	3.6	SSE
20230726 0150	3.3	SSE
20230726 0200	4.2	SSE
20230726 0210	3.9	E
20230726 0220	2.8	SE
20230726 0230	3.3	SE
20230726 0240	2.8	ESE
20230726 0250	3.1	ESE
20230726 0300	2.8	SE
20230726 0310	3.1	SE
20230726 0320	3.3	ESE
20230726 0330	2.5	ESE
20230726 0340	2.2	SE
20230726 0350	2.5	SE
20230726 0400	2.5	ESE
20230726 0410	2.5	SE
20230726 0420	3.1	ESE
20230726 0430	2.5	SE
20230726 0440	2.5	SE
20230726 0450	2.8	SE
20230726 0500	1.7	ESE
20230726 0510	2.5	SE
20230726 0520	2.8	ESE
20230726 0530	1.9	SE
20230726 0540	2.5	SE
20230726 0550	2.5	ESE
20230726 0600	2.5	E
20230726 0610	2.8	E
20230726 0620	2.8	E
20230726 0630	3.1	ESE
20230726 0640	3.1	ESE
20230726 0650	2.8	ESE
20230726 0700	3.3	ESE
20230726 0710	3.3	ESE
20230726 0720	2.5	ESE
20230726 0730	2.5	ESE
20230726 0740	2.8	ESE
20230726 0750	3.1	ESE
20230726 0800	3.1	E
20230726 0810	2.5	E
20230726 0820	2.8	E
20230726 0830	2.8	E
20230726 0840	2.5	E
20230726 0850	1.7	E
20230726 0900	1.4	E
20230726 0910	2.2	E
20230726 0920	1.7	E
20230726 0930	2.8	E
20230726 0940	2.2	ESE
20230726 0950	2.2	ESE
20230726 1000	2.2	ESE
20230726 1010	2.2	ESE
20230726 1020	1.9	ESE
20230726 1030	2.5	ESE
20230726 1040	1.9	ESE
20230726 1050	1.7	ESE
20230726 1100	2.5	ESE
20230726 1110	2.5	ESE
20230726 1120	1.7	ESE
20230726 1130	2.2	ESE
20230726 1140	2.5	ESE
20230726 1150	2.2	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230726 1200	1.7	ESE
20230726 1210	2.2	ESE
20230726 1220	2.2	E
20230726 1230	1.7	E
20230726 1240	1.4	ENE
20230726 1250	1.4	ESE
20230726 1300	1.7	ESE
20230726 1310	1.4	E
20230726 1320	1.1	E
20230726 1330	1.1	E
20230726 1340	1.1	ESE
20230726 1350	1.1	ESE
20230726 1400	1.4	SE
20230726 1410	1.1	ESE
20230726 1420	1.1	SE
20230726 1430	1.4	SE
20230726 1440	1.1	ESE
20230726 1450	0.8	SE
20230726 1500	0.8	SSE
20230726 1510	1.1	ESE
20230726 1520	0.8	E
20230726 1530	0.6	E
20230726 1540	0.3	SE
20230726 1550	0.3	SSE
20230726 1600	0	N
20230726 1610	0	N
20230726 1620	0	N
20230726 1630	0.3	S
20230726 1640	1.1	S
20230726 1650	0.8	SSE
20230726 1700	0.3	SE
20230726 1710	0.8	S
20230726 1720	0.6	SSE
20230726 1730	1.1	SSE
20230726 1740	0.3	SE
20230726 1750	1.1	ENE
20230726 1800	0.3	ENE
20230726 1810	0.8	SSE
20230726 1820	0.3	NE
20230726 1830	0.3	ENE
20230726 1840	0.8	ESE
20230726 1850	1.4	ESE
20230726 1900	2.2	ESE
20230726 1910	1.7	SE
20230726 1920	1.7	ESE
20230726 1930	2.2	ESE
20230726 1940	2.2	ESE
20230726 1950	2.8	ESE
20230726 2000	2.5	ESE
20230726 2010	2.5	E
20230726 2020	2.2	E
20230726 2030	1.9	ESE
20230726 2040	2.2	ENE
20230726 2050	2.5	ENE
20230726 2100	2.2	ENE
20230726 2110	2.2	E
20230726 2120	2.8	E
20230726 2130	2.2	ENE
20230726 2140	2.8	ENE
20230726 2150	2.5	E
20230726 2200	1.9	ENE
20230726 2210	2.2	ENE
20230726 2220	2.2	ENE
20230726 2230	2.8	E
20230726 2240	3.1	E
20230726 2250	3.1	ESE
20230726 2300	1.7	SE
20230726 2310	2.2	SSE
20230726 2320	1.7	S
20230726 2330	0.8	-
20230726 2340	1.4	-
20230726 2350	2.2	SSE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230727 0000	3.1	ESE
20230727 0010	3.3	E
20230727 0020	2.8	E
20230727 0030	3.3	E
20230727 0040	2.5	E
20230727 0050	2.8	SE
20230727 0100	2.5	ESE
20230727 0110	2.2	ESE
20230727 0120	1.9	ESE
20230727 0130	2.5	E
20230727 0140	2.2	E
20230727 0150	1.7	SE
20230727 0200	2.2	SE
20230727 0210	1.7	ESE
20230727 0220	2.5	ESE
20230727 0230	1.7	SE
20230727 0240	2.2	SE
20230727 0250	1.7	ESE
20230727 0300	1.9	ESE
20230727 0310	1.7	ESE
20230727 0320	2.2	E
20230727 0330	2.8	E
20230727 0340	2.8	E
20230727 0350	3.1	ESE
20230727 0400	3.1	ESE
20230727 0410	2.8	ESE
20230727 0420	2.2	ESE
20230727 0430	2.5	ESE
20230727 0440	2.8	ESE
20230727 0450	2.5	SE
20230727 0500	3.1	ESE
20230727 0510	2.2	ESE
20230727 0520	2.5	ESE
20230727 0530	2.5	ESE
20230727 0540	2.8	ESE
20230727 0550	2.2	ESE
20230727 0600	2.5	ESE
20230727 0610	1.7	E
20230727 0620	2.5	ESE
20230727 0630	1.7	ESE
20230727 0640	2.8	ESE
20230727 0650	2.5	SE
20230727 0700	1.7	ESE
20230727 0710	1.9	SE
20230727 0720	1.9	SE
20230727 0730	1.4	ESE
20230727 0740	1.9	ESE
20230727 0750	1.4	ESE
20230727 0800	1.7	E
20230727 0810	1.7	ESE
20230727 0820	1.1	ESE
20230727 0830	0.8	SE
20230727 0840	0.6	ESE
20230727 0850	0.6	S
20230727 0900	0.8	-
20230727 0910	1.1	S
20230727 0920	1.4	SE
20230727 0930	1.4	SE
20230727 0940	0.8	SSE
20230727 0950	0.8	SSE
20230727 1000	1.1	SSE
20230727 1010	1.1	SSE
20230727 1020	0.8	SSE
20230727 1030	1.1	S
20230727 1040	0.8	SSE
20230727 1050	0	N
20230727 1100	0.3	NE
20230727 1110	0.8	SE
20230727 1120	0.8	ESE
20230727 1130	0.8	ESE
20230727 1140	1.7	ESE
20230727 1150	1.7	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230727 1200	1.1	E
20230727 1210	1.4	SE
20230727 1220	0.8	SE
20230727 1230	0.3	SSE
20230727 1240	0.3	SSE
20230727 1250	0.8	SE
20230727 1300	0.3	SE
20230727 1310	0.6	SSE
20230727 1320	0.6	SSE
20230727 1330	0.8	SSE
20230727 1340	0.3	SE
20230727 1350	0.3	SSE
20230727 1400	0.8	SSE
20230727 1410	0.6	SSE
20230727 1420	0.3	S
20230727 1430	1.1	SE
20230727 1440	0.3	E
20230727 1450	0.3	SW
20230727 1500	0.8	S
20230727 1510	1.1	S
20230727 1520	1.1	S
20230727 1530	1.1	S
20230727 1540	1.4	S
20230727 1550	1.4	S
20230727 1600	1.1	S
20230727 1610	1.4	S
20230727 1620	1.4	S
20230727 1630	0.8	S
20230727 1640	0.8	SSE
20230727 1650	0	N
20230727 1700	0	N
20230727 1710	0.8	ESE
20230727 1720	1.4	SE
20230727 1730	2.5	ESE
20230727 1740	1.7	ESE
20230727 1750	1.1	ESE
20230727 1800	0.8	E
20230727 1810	1.1	ESE
20230727 1820	3.3	ESE
20230727 1830	3.9	ESE
20230727 1840	3.6	ESE
20230727 1850	2.8	ESE
20230727 1900	3.3	ESE
20230727 1910	3.9	ESE
20230727 1920	4.4	ESE
20230727 1930	3.3	E
20230727 1940	3.6	ESE
20230727 1950	3.9	ESE
20230727 2000	3.6	E
20230727 2010	3.3	E
20230727 2020	3.6	ESE
20230727 2030	3.9	ESE
20230727 2040	4.2	ESE
20230727 2050	3.1	E
20230727 2100	3.1	E
20230727 2110	3.3	ESE
20230727 2120	2.8	ESE
20230727 2130	3.1	ESE
20230727 2140	3.3	ESE
20230727 2150	3.3	ESE
20230727 2200	3.9	ESE
20230727 2210	4.2	ESE
20230727 2220	2.8	ESE
20230727 2230	3.3	ESE
20230727 2240	2.8	ESE
20230727 2250	2.8	ESE
20230727 2300	2.5	ESE
20230727 2310	2.2	ESE
20230727 2320	2.5	ESE
20230727 2330	3.3	E
20230727 2340	2.5	ESE
20230727 2350	2.5	ESE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230728 0000	2.8	SE
20230728 0010	3.3	ESE
20230728 0020	3.3	SE
20230728 0030	3.3	SE
20230728 0040	3.3	SE
20230728 0050	3.6	SE
20230728 0100	3.9	SE
20230728 0110	3.3	SE
20230728 0120	3.3	ESE
20230728 0130	3.3	ESE
20230728 0140	3.9	ESE
20230728 0150	3.3	ESE
20230728 0200	3.6	SE
20230728 0210	3.3	ESE
20230728 0220	3.3	ESE
20230728 0230	3.6	ESE
20230728 0240	3.9	E
20230728 0250	3.1	ESE
20230728 0300	3.3	E
20230728 0310	3.3	ESE
20230728 0320	3.3	ESE
20230728 0330	3.3	SE
20230728 0340	3.3	SE
20230728 0350	3.1	SE
20230728 0400	1.9	SE
20230728 0410	2.5	ESE
20230728 0420	2.5	ESE
20230728 0430	3.1	ESE
20230728 0440	2.8	ESE
20230728 0450	2.8	SE
20230728 0500	2.8	SE
20230728 0510	2.2	SE
20230728 0520	2.5	SE
20230728 0530	3.3	SE
20230728 0540	2.5	SE
20230728 0550	1.7	ESE
20230728 0600	2.2	SE
20230728 0610	2.8	SE
20230728 0620	2.5	SE
20230728 0630	1.7	SE
20230728 0640	1.7	SE
20230728 0650	1.9	ESE
20230728 0700	1.1	ESE
20230728 0710	1.1	ESE
20230728 0720	2.2	SE
20230728 0730	3.1	SE
20230728 0740	2.8	SE
20230728 0750	2.2	SE
20230728 0800	2.8	ESE
20230728 0810	2.8	ESE
20230728 0820	2.2	ESE
20230728 0830	2.5	SE
20230728 0840	1.9	SE
20230728 0850	1.4	ESE
20230728 0900	1.9	SE
20230728 0910	2.2	SE
20230728 0920	2.2	SE
20230728 0930	2.5	SE
20230728 0940	1.7	SE
20230728 0950	2.5	SE
20230728 1000	2.8	ESE
20230728 1010	2.8	ESE
20230728 1020	2.8	E
20230728 1030	2.8	E
20230728 1040	2.8	E
20230728 1050	3.3	E
20230728 1100	2.2	E
20230728 1110	2.8	ESE
20230728 1120	1.7	ESE
20230728 1130	2.5	SE
20230728 1140	2.5	ESE
20230728 1150	1.7	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230728 1200	2.5	ESE
20230728 1210	2.2	ESE
20230728 1220	2.8	ESE
20230728 1230		
20230728 1240	3.1	E
20230728 1250	2.5	ESE
20230728 1300	2.5	ESE
20230728 1310	2.5	SE
20230728 1320	2.5	ESE
20230728 1330	3.1	ESE
20230728 1340	2.8	ESE
20230728 1350	3.1	ESE
20230728 1400	3.1	ESE
20230728 1410	3.3	ESE
20230728 1420	2.5	ESE
20230728 1430	3.1	ESE
20230728 1440	3.1	ESE
20230728 1450	2.8	ESE
20230728 1500	2.8	E
20230728 1510	2.8	E
20230728 1520	2.5	E
20230728 1530	3.3	E
20230728 1540	2.5	ENE
20230728 1550	1.7	E
20230728 1600	2.2	ENE
20230728 1610	2.2	E
20230728 1620	1.4	NNE
20230728 1630	1.1	N
20230728 1640	1.4	N
20230728 1650	1.7	N
20230728 1700	0.8	N
20230728 1710	2.2	NNE
20230728 1720	2.8	NNE
20230728 1730	3.6	NNE
20230728 1740	3.3	NNE
20230728 1750	3.6	NNE
20230728 1800	3.3	NNE
20230728 1810	3.1	NNE
20230728 1820	3.3	NNE
20230728 1830	3.3	NNE
20230728 1840	3.3	NNE
20230728 1850	2.5	NNE
20230728 1900	2.2	NNE
20230728 1910	1.7	N
20230728 1920	2.2	N
20230728 1930	2.8	NNE
20230728 1940	2.2	N
20230728 1950	2.2	N
20230728 2000	1.7	NNE
20230728 2010	2.2	NNE
20230728 2020	1.7	N
20230728 2030	1.9	N
20230728 2040	2.5	N
20230728 2050	2.8	NNE
20230728 2100	2.5	N
20230728 2110	2.8	N
20230728 2120	3.1	NNE
20230728 2130	2.2	NNE
20230728 2140	1.7	NNE
20230728 2150	1.9	N
20230728 2200	2.5	NNE
20230728 2210	2.5	NNE
20230728 2220	3.1	NNE
20230728 2230	2.8	NNE
20230728 2240	3.3	NNE
20230728 2250	3.3	NNE
20230728 2300	4.4	NNE
20230728 2310	3.3	NNE
20230728 2320	4.2	NNE
20230728 2330	3.9	NNE
20230728 2340	3.9	NNE
20230728 2350	4.7	NNE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230729 0000	5	NNE
20230729 0010	4.4	N
20230729 0020	4.7	N
20230729 0030	4.7	N
20230729 0040	4.7	NNE
20230729 0050	5.3	NNE
20230729 0100	4.2	N
20230729 0110	4.7	N
20230729 0120	4.2	NNE
20230729 0130	3.9	NNE
20230729 0140	5	NNE
20230729 0150	4.7	NNE
20230729 0200	5.8	NNE
20230729 0210	5	NNE
20230729 0220	4.2	NNE
20230729 0230	4.7	NNE
20230729 0240	3.3	NNE
20230729 0250	4.7	N
20230729 0300	3.6	N
20230729 0310	3.9	N
20230729 0320	3.3	N
20230729 0330	3.3	N
20230729 0340	3.9	N
20230729 0350	3.3	N
20230729 0400	3.3	N
20230729 0410	4.7	NNE
20230729 0420	3.9	NNE
20230729 0430	5	NNE
20230729 0440	3.9	N
20230729 0450	3.1	N
20230729 0500	3.9	NNE
20230729 0510	3.6	N
20230729 0520	3.9	NNE
20230729 0530	3.9	NNE
20230729 0540	3.9	NNE
20230729 0550	4.4	NNE
20230729 0600	3.3	NE
20230729 0610	3.9	NNE
20230729 0620	3.6	NNE
20230729 0630	4.2	NNE
20230729 0640	3.3	NNE
20230729 0650	3.9	NNE
20230729 0700	3.3	NNE
20230729 0710	3.3	NNE
20230729 0720	3.3	NNE
20230729 0730	3.3	NNE
20230729 0740	3.9	N
20230729 0750	3.3	NNE
20230729 0800	2.8	N
20230729 0810	2.2	N
20230729 0820	2.8	N
20230729 0830	3.3	N
20230729 0840	4.2	N
20230729 0850	4.2	N
20230729 0900	3.3	N
20230729 0910	3.1	N
20230729 0920	3.1	N
20230729 0930	2.8	N
20230729 0940	3.9	N
20230729 0950	3.9	N
20230729 1000	3.9	N
20230729 1010	3.3	N
20230729 1020	3.9	N
20230729 1030	4.2	N
20230729 1040	3.3	N
20230729 1050	4.7	N
20230729 1100	3.1	N
20230729 1110	4.2	N
20230729 1120	3.6	NNE
20230729 1130	3.3	NNE
20230729 1140	3.1	NNE
20230729 1150	3.3	NNE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230729 1200	3.1	NNE
20230729 1210	3.3	N
20230729 1220	3.3	N
20230729 1230	3.6	N
20230729 1240	3.9	N
20230729 1250	3.9	N
20230729 1300	4.2	N
20230729 1310	3.9	N
20230729 1320	3.1	N
20230729 1330	3.1	NNE
20230729 1340	3.3	N
20230729 1350	3.1	NNE
20230729 1400	3.9	N
20230729 1410	3.3	N
20230729 1420	3.9	N
20230729 1430	3.1	NNE
20230729 1440	3.1	NNE
20230729 1450	2.8	NNE
20230729 1500	3.3	N
20230729 1510	3.6	N
20230729 1520	3.9	N
20230729 1530	3.3	N
20230729 1540	3.3	N
20230729 1550	3.1	N
20230729 1600	3.3	N
20230729 1610	3.3	N
20230729 1620	3.3	N
20230729 1630	3.3	N
20230729 1640	3.3	NNE
20230729 1650	3.3	NNE
20230729 1700	3.3	NNE
20230729 1710	3.3	NNE
20230729 1720	4.2	NNE
20230729 1730	3.3	N
20230729 1740	3.6	N
20230729 1750	4.4	N
20230729 1800	5	NNE
20230729 1810	4.4	NNE
20230729 1820	4.2	N
20230729 1830	3.9	N
20230729 1840	4.4	N
20230729 1850	4.7	NNE
20230729 1900	5.8	NNE
20230729 1910	5.3	NNE
20230729 1920	4.4	NNE
20230729 1930	5.3	NNE
20230729 1940	4.7	NNE
20230729 1950	4.2	NNE
20230729 2000	4.2	NNE
20230729 2010	4.2	N
20230729 2020	4.2	N
20230729 2030	3.3	N
20230729 2040	3.9	N
20230729 2050	3.1	N
20230729 2100	3.9	N
20230729 2110	4.7	NNE
20230729 2120	4.2	NNE
20230729 2130	3.3	NNE
20230729 2140	3.9	N
20230729 2150	5	NNE
20230729 2200	3.6	N
20230729 2210	3.3	N
20230729 2220	3.1	N
20230729 2230	3.3	N
20230729 2240	4.2	N
20230729 2250	3.3	N
20230729 2300	3.6	NNE
20230729 2310	3.3	NNE
20230729 2320	2.8	N
20230729 2330	3.6	N
20230729 2340	3.1	N
20230729 2350	3.1	N

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230730 0000	3.6	N
20230730 0010	3.3	N
20230730 0020	3.9	N
20230730 0030	4.2	NNE
20230730 0040	3.6	N
20230730 0050	3.9	NNE
20230730 0100	4.2	N
20230730 0110	4.4	N
20230730 0120	3.9	N
20230730 0130	4.7	N
20230730 0140	5	NNE
20230730 0150	3.6	NNE
20230730 0200	4.4	NNE
20230730 0210	4.4	NNE
20230730 0220	4.4	NNE
20230730 0230	4.2	NNE
20230730 0240	4.4	NNE
20230730 0250	4.2	NNE
20230730 0300	4.2	NNE
20230730 0310	4.4	NNE
20230730 0320	4.7	NNE
20230730 0330	3.3	NNE
20230730 0340	3.3	NNE
20230730 0350	3.6	NNE
20230730 0400	4.2	NNE
20230730 0410	3.6	NNE
20230730 0420	2.8	NNE
20230730 0430	2.8	NNE
20230730 0440	3.1	N
20230730 0450	3.3	NNE
20230730 0500	3.3	NNE
20230730 0510	3.9	NNE
20230730 0520	4.2	NNE
20230730 0530	3.3	NNE
20230730 0540	4.2	NNE
20230730 0550	3.9	NNE
20230730 0600	3.9	NNE
20230730 0610	1.9	ENE
20230730 0620	0.8	-
20230730 0630	0.3	N
20230730 0640	2.5	NNE
20230730 0650	1.4	NE
20230730 0700	0.3	-
20230730 0710	0.6	-
20230730 0720	0.8	NNE
20230730 0730	1.4	NNE
20230730 0740	0.8	N
20230730 0750	0	N
20230730 0800	0.3	-
20230730 0810	0.8	SW
20230730 0820	0.6	WNW
20230730 0830	0.3	-
20230730 0840	0.3	W
20230730 0850	0.3	NNW
20230730 0900	1.4	N
20230730 0910	2.5	N
20230730 0920	2.2	N
20230730 0930	2.5	N
20230730 0940	3.1	N
20230730 0950	1.9	N
20230730 1000	1.4	N
20230730 1010	1.1	N
20230730 1020	0.8	ENE
20230730 1030	0.8	NE
20230730 1040	0.8	E
20230730 1050	0	N
20230730 1100	1.1	SSE
20230730 1110	0.8	SE
20230730 1120	0.3	SSE
20230730 1130	0	N
20230730 1140	0.8	SSE
20230730 1150	0.3	N

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230730 1200	0.3	-
20230730 1210	0	N
20230730 1220	0.3	SSW
20230730 1230	0.3	SW
20230730 1240	0.3	SW
20230730 1250	0.3	S
20230730 1300	0.3	SSE
20230730 1310	0.8	SSE
20230730 1320	0.3	-
20230730 1330	0.3	ESE
20230730 1340	0	N
20230730 1350	0	N
20230730 1400	0.3	-
20230730 1410	0.3	SSE
20230730 1420	0.6	S
20230730 1430	0.8	SSE
20230730 1440	0	N
20230730 1450	0.3	-
20230730 1500	0.3	SE
20230730 1510	0.3	-
20230730 1520	0.3	-
20230730 1530	0.3	S
20230730 1540	0	N
20230730 1550	0	N
20230730 1600	0	N
20230730 1610	0	N
20230730 1620	0	N
20230730 1630	0.3	S
20230730 1640	0.3	SSE
20230730 1650	0	N
20230730 1700	0.3	S
20230730 1710	0.3	SSE
20230730 1720	0.3	-
20230730 1730	0.3	NE
20230730 1740	0.3	-
20230730 1750	0	N
20230730 1800	0.3	S
20230730 1810	0.3	-
20230730 1820	0.3	S
20230730 1830	0.8	SSE
20230730 1840	0.3	SSE
20230730 1850	0.6	S
20230730 1900	0	N
20230730 1910	0	N
20230730 1920	0.3	S
20230730 1930	0.3	W
20230730 1940	0.3	S
20230730 1950	0.6	E
20230730 2000	0.3	-
20230730 2010	2.2	N
20230730 2020	1.7	NNW
20230730 2030	3.3	N
20230730 2040	3.1	N
20230730 2050	3.3	N
20230730 2100	2.8	N
20230730 2110	2.5	N
20230730 2120	2.5	N
20230730 2130	1.7	S
20230730 2140	3.1	ESE
20230730 2150	2.5	E
20230730 2200	2.8	E
20230730 2210	2.8	E
20230730 2220	2.5	ESE
20230730 2230	3.1	ESE
20230730 2240	3.1	ESE
20230730 2250	3.1	ESE
20230730 2300	3.1	ESE
20230730 2310	2.5	ESE
20230730 2320	3.1	ESE
20230730 2330	2.2	-
20230730 2340	2.5	SE
20230730 2350	1.4	S

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230731 0000	1.7	S
20230731 0010	2.8	-
20230731 0020	2.2	ENE
20230731 0030	1.4	ESE
20230731 0040	1.4	N
20230731 0050	1.7	ENE
20230731 0100	0.8	NNW
20230731 0110	1.4	-
20230731 0120	1.7	S
20230731 0130	1.1	SW
20230731 0140	0.8	SSW
20230731 0150	1.4	N
20230731 0200	2.2	NNW
20230731 0210	1.7	NNW
20230731 0220	1.7	NW
20230731 0230	1.9	NNW
20230731 0240	2.2	NNW
20230731 0250	1.7	NW
20230731 0300	2.8	N
20230731 0310	1.7	N
20230731 0320	2.8	NNE
20230731 0330	1.7	N
20230731 0340	1.4	NNW
20230731 0350	1.7	N
20230731 0400	1.7	NNE
20230731 0410	2.5	NE
20230731 0420	1.1	NNE
20230731 0430	1.4	E
20230731 0440	2.5	ESE
20230731 0450	2.5	E
20230731 0500	2.5	E
20230731 0510	2.8	E
20230731 0520	2.8	E
20230731 0530	2.5	E
20230731 0540	3.1	ESE
20230731 0550	2.5	E
20230731 0600	3.1	E
20230731 0610	2.8	ESE
20230731 0620	2.5	E
20230731 0630	2.2	ESE
20230731 0640	2.8	ESE
20230731 0650	2.8	ESE
20230731 0700	2.8	ESE
20230731 0710	2.5	SE
20230731 0720	2.8	ESE
20230731 0730	2.2	ESE
20230731 0740	1.9	ESE
20230731 0750	1.4	SE
20230731 0800	2.2	SE
20230731 0810	2.2	SE
20230731 0820	1.7	SE
20230731 0830	1.4	SE
20230731 0840	1.4	SE
20230731 0850	1.7	SE
20230731 0900	1.4	ESE
20230731 0910	1.1	ESE
20230731 0920	0.8	-
20230731 0930	1.4	ESE
20230731 0940	1.7	E
20230731 0950	2.2	ESE
20230731 1000	2.2	ESE
20230731 1010	1.7	ESE
20230731 1020	1.7	ESE
20230731 1030	1.7	SE
20230731 1040	2.2	ESE
20230731 1050	2.2	ESE
20230731 1100	1.7	ESE
20230731 1110	2.5	ESE
20230731 1120	2.5	ESE
20230731 1130	1.9	ESE
20230731 1140	1.7	SE
20230731 1150	1.7	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230731 1200	1.7	ESE
20230731 1210	1.7	ESE
20230731 1220	1.7	SE
20230731 1230	1.1	E
20230731 1240	1.4	E
20230731 1250	1.4	E
20230731 1300	1.4	E
20230731 1310	1.4	E
20230731 1320	1.4	ESE
20230731 1330	1.4	SE
20230731 1340	0.8	SE
20230731 1350	0.8	SE
20230731 1400	1.1	ESE
20230731 1410	0.6	SE
20230731 1420	0	N
20230731 1430	0	N
20230731 1440	0	N
20230731 1450	0.3	SSW
20230731 1500	0.6	SSE
20230731 1510	1.1	SE
20230731 1520	1.4	SE
20230731 1530	1.7	ESE
20230731 1540	0.8	SE
20230731 1550	0.3	WNW
20230731 1600	0.3	WNW
20230731 1610	0.3	W
20230731 1620	0.3	W
20230731 1630	0	N
20230731 1640	0	N
20230731 1650	0	N
20230731 1700	0	N
20230731 1710	0	N
20230731 1720	0.3	N
20230731 1730	0	N
20230731 1740	0	N
20230731 1750	0	N
20230731 1800	0.3	SW
20230731 1810	0	N
20230731 1820	0	N
20230731 1830	0	N
20230731 1840	0	N
20230731 1850	0	N
20230731 1900	0.3	N
20230731 1910	0.3	NW
20230731 1920	0.3	NE
20230731 1930	0.3	NW
20230731 1940	0.3	NNE
20230731 1950	0.3	N
20230731 2000	0.8	WNW
20230731 2010	0.8	N
20230731 2020	1.4	NNE
20230731 2030	0.8	NNE
20230731 2040	1.1	N
20230731 2050	1.4	NNW
20230731 2100	1.1	NW
20230731 2110	0.8	SSW
20230731 2120	1.4	-
20230731 2130	2.2	ESE
20230731 2140	2.2	N
20230731 2150	1.1	-
20230731 2200	2.8	ESE
20230731 2210	3.3	ESE
20230731 2220	3.1	ESE
20230731 2230	3.1	ESE
20230731 2240	3.3	ESE
20230731 2250	3.3	SE
20230731 2300	3.3	SE
20230731 2310	3.3	ESE
20230731 2320	3.3	ESE
20230731 2330	3.3	ESE
20230731 2340	3.3	E
20230731 2350	3.3	ESE

The relevant wind data of Ta Kwu Ling weather station is extracted from the Hong Kong Observatory website (https://www.hko.gov.hk/en/wxinfo/awsgis/regional_weather_gis.html)

Appendix I Waste Flow Table

Waste Flow Table

Month	Total Quantity Generated	Total Quantities of Inert C&D Materials to be Generated from the Contract					Total Quantities of Recyclables Generation				Total Quantities of C&D Materials to be Generated from the Contract		
		Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / Cardboard Packaging	Plastics	Yard Waste (to Y-Park)	Chemical Waste	General Refuse	Others, e.g. non-recyclable yard waste
	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in '000L)	(in tonne)	(in tonne)
Dec-22	84.77	0	0	0	0	0	0	0	0	11.49	0	7.53	65.75
Jan-23	24.51	0	0	0	0	0	0	0	0	0	0	24.51	0
Feb-23	506.45	0	0	0	0	0	0	0	0	3.16	0	5.85	497.44
Mar-23	9,581.15	0	0	9,187	0	0	0	0	0	3.69	0	6.96	383.5
Apr-23	18,532.07	0	0	18,466	0	0	0	0	0	1.97	0	5.81	58.29
May-23	28,889.61	0	0	28,473	0	0	0	0	0	0	0	7.45	409.16
Jun-23	11,574.89	0	0	11,211	0	0	0	0	0	2.38	0	14.69	346.82
Jul-23	50,595.49	0	0	50,307	0	0	0	0	0	0	0	25.54	262.95
Total	119,788.94	0.00	0.00	117,644.00	0.00	0.00	0.00	0.00	0.00	22.69	0.00	98.34	2,023.91

Note:

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 material.

Appendix J Joint Environmental Site Inspection Records

Inspection Date:	3 July 2023	Inspected By:	Andy Ng
Time:	14:00	Weather Condition:	Sunny
Participants:	Sylvia Ho (ER), V.C. Lau (Contractor), Kristy Wong (Contractor), Andy Ng (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A3	Is wastewater discharge licence available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B2	Are plant and equipment well maintained (i.e. without black smoke from powered plant)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B3	Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B4	Are the worksites wetted with water regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B5	Are NRMM labels properly affixed on the PMEs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B6	Observed dust source(s)	<input type="checkbox"/> Wind erosion <input type="checkbox"/> Vehicle/ Equipment Movements <input type="checkbox"/> Loading/ unloading of materials <input checked="" type="checkbox"/> Others: <u>Not Observed</u>			
Air Pollution Control (Construction Dust) Regulation					
Part I Control Requirements for Notifiable Works					
Demolition of building					
B7	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Construction of the superstructure of a building					
B8	Is scaffolding erected around the perimeter of a building under construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

B9	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B10	Is the skip for materials transport enclosed by impervious sheeting ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Part III General Control Requirements					
Site boundary and entrance					
B11	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B12	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B13	Are the hoarding $\geq 2.4\text{m}$ tall provided at the site boundary near a road, street, service lane or other area accessible to the public?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Assess road					
B14	Are every main haul road (having a vehicle passing rate of higher than 4 in any 30 minutes) paved with concrete, bituminous materials, hardcores or metal plates, and kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B15	Are every main haul road sprayed with water or a dust suppression chemical?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B16	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B17	Are appropriate speed limit sign displayed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B18	Is unpaved main haul road wet by water spraying?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Cement and dry pulverized fuel ash (PFA)					
B19	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
B20	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B21	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Exposed earth					
B22	Is the exposed earth properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within 6 months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Part IV Control Requirements for Individual Activities					
Stockpiling of dusty materials					
B23	Are the stockpiling of dusty materials (a) covered entirely by impervious sheeting or (b) placed in an area sheltered on the top and the 3 sides or (c) sprayed with water or a dust suppression chemical to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2
B24	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Loading, unloading or transfer of dusty materials					
B25	Are all dusty materials sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B26	Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Use of vehicles					
B27	Are every vehicle washed immediately to remove any dusty materials from its body and wheels before leaving a construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B28	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B29	Are site vehicle movements confined to designated roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pneumatic or power-driven drilling, cutting and polishing					
B30	Are surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operations takes place sprayed with water or a dust suppression chemical continuously? *Unless the process is accompanied by the operation of an effective dust extraction and filtering device.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Debris handling					
B31	Are any debris covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B32	Are every debris chute shall be enclosed by impervious sheeting or similar materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B33	Are the watering spray or a dust suppression chemical conducted before debris is dumped into a debris chute?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

Excavation or earth moving				
B34	Are the working area of any excavation or earth moving operation sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Site clearance				
B35	Are the working area for the uprooting of trees, shrubs, or vegetation or for the removal of boulders, poles, pillars or temporary or permanent structures sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B36	Are all demolished items (including trees, shrubs, vegetation, boulders, poles, pillars, structures, debris, rubbish and other items arising from site clearance) that may dislodge dust particles covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides within a day of demolition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

C	Construction Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is well-maintained plant operated on-site and plant served regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C2	Are vehicles and equipment switched off or throttled down while not in use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C3	Is the noise directed away from nearby NSRs ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C4	Are the silencers or mufflers properly fitted on construction equipment and maintained regularly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C5	Are mobile and/or noisy plant sited as far away from NSRs as possible and practicable and orientated so that the noise is directed away from nearby NSRs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C6	Are material stockpiles , mobile container office and other structures utilised to screen noisy activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C7	Is temporary hoarding installed located on the site boundaries between noisy construction activities and NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C8	Are noise barriers (typically density @14kg/m ²) acoustic mat or full enclosure close to noise plants including air compressor, generators and saw etc. provided to protect NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C9	Is the sequencing operation of construction plants where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C10	Is the hoarding maintained properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C11	Air compressors (500 kPa or above) and hand held percussive breaker (mass of above 10 kg) with valid noise labels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C12	Are compressor operated with doors closed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C13	QPME used with valid noise labels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C14	Major noise source(s)	<input checked="" type="checkbox"/> Traffic <input checked="" type="checkbox"/> Construction activities inside of site <input type="checkbox"/> Construction activities outside of site <input type="checkbox"/> Others: _____			

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Runoff					
D1a	At the start of site establishment, are perimeter cut-off drains constructed to direct off-site water around the site with internal drainage works and erosion and sedimentation control facilities implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D1b	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to silt removal facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 1
D2a	Have dikes or embankments for flood protection implemented around the boundaries of earthwork areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2b	Have temporary ditches provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2c	Are the sediment/ silt traps incorporated in the permanent drainage channels to enhance deposition rate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D3	Are the retention time for silt/s and traps of the silt removal facilities be 5 minutes under maximum flow conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4a	Are surface excavation works minimised during rainy seasons (April to September), as possible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4b	Are all exposed earth areas completed or vegetated as soon as possible after earthworks completed, or alternatively, within 14 days of the cessation of earthworks where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4c	Are exposed slope surfaces covered by tarpaulin sheets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	To be treated with shotcrete at part of slope surface.
D5a	Have the overall slope of the site should be kept a minimum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D5b	Are all trafficked areas and access roads protected by coarse stone ballast?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6a	Are all drainage facilities and erosion and sediment control structures inspected regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6b	Are all drainage facilities and erosion and sediment control structures maintained to ensure proper and efficient operation at all times and particularly following rainstorms?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6c	Is the deposited silt and grit removed regularly and disposed of by spreading evenly over stable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7a	Have the excavation of trenches in wet periods be dug and backfilled in short sections?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7b	Is rainwater pumped out from trenches discharged into storm drains via silt system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D8	Are open stockpiles of construction materials e.g. aggregates and sand of more than 50m ³ on site covered with tarpaulin or similar fabric during rainstorms?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D9a	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D9b	Are the discharges of surface run-off into foul sewer always prevented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10a	Are particular attention paid to the control of silty surface runoff during storm event ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10b	Are the precautions to be taken at any time of year when rainstorms are likely? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly. ii. Temporarily exposed slope surfaces should be cover by tarpaulin. iii. Temporary access roads should be protected by crushed stone or gravel. iv. Intercepting channels should be provided (e.g. along the crest/edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. v. Trenches should be dug and backfilled in short sections. Measures should be taken to minimize the ingress of rainwater into trenches.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10c	Are the actions to be taken when a rainstorm is imminent or forecast ? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be checked to ensure that they can function properly. ii. Open stockpiles of construction materials (e.g. aggregates, sand and fill materials) on site should be covered with tarpaulin or similar fabric. iii. All temporary covers to slopes and stockpiles should be secured.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10d	Are the actions to be taken during or after rainstorms ? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be checked and maintained to ensure satisfactory working conditions. Attention should be given to safety when carrying out this work.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11a	Are all vehicles and plant cleaned before leaving a construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11b	Is the wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11c	Are the vehicle wash-water have sand and silt settled out and removed at least on a weekly basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11d	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11e	Is the section of construction road between the wheel washing bay and the public road paved with backfill?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11f	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D12a	Are oil interceptors provided in the site drainage system downstream of any oil/ fuel pollution sources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D12b	Are the oil interceptors are emptied and cleaned regularly to prevent the release of O&G into the storm water drainage system after accidental spillage?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

D12c	Has a bypass provided to prevent flushing during heavy rain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D13	Are the construction solid waste, debris and rubbish on site collected, handled and disposed of properly? (same with waste item)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D14	Are all fuel tanks and storage areas provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D15	Is Intercepting bund or barrier along the roadside constructed to prevent pollution risk arising from work area (waste reception area)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D16	Are site drainage systems provided over the entire project site with sediment control facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D17	Are sedimentation tanks provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D18	Is there any sediment plume observed in nearby watercourses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Sewage Effluent from Workforce (On-site sanitary facilities)					
D19a	Are portable chemical toilets and sewage holding tanks provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D19b	Is the sewage generated from toilets collected by licensed contractor and responsible for disposal and maintenance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D20	Are the notices posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Accidental Spillage of Chemical (Service workshop and maintenance facilities)					
D21a	Are the service workshop and maintenance facilities located within a bunded area, and sumps and oil interceptors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
D21b	Are all maintenance of equipment involving activities with potential for leakage and spillage undertaken within the areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
D21c	Is chemical leakage or spillages contained and cleaned up immediately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
Surface Water Drainage System					
D22a	Is the temporary surface water drainage system provided to manage runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22b	Does the system consist of channel as constructed around the perimeter of the site area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22c	Does the system collect surface water from the areas of higher elevations to those of lower elevations and ultimately to the discharge point?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22d	Is the erosion minimised?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23a	Does the system include the use of a silt fence around the soil stockpile areas to prevent sediment from entering the system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23b	Is the regular cleaning carried out to prevent blockage of the passage of waste flow in silt fence?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
Waste Management					
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2a	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2b	Does accumulation of waste avoid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2c	Is waste disposed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2d	Regular waste collection by approved waste collector in purpose-built vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E3	Burning of refuse on construction site prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C&D Materials					
E4a	Are there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E4b	Are the C&D materials sorted and recycled on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5a	Is the durable formwork or plastic facing for construction works used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5b	Do the wooden hoardings avoid to be used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5c	Is metal hoarding used to enhance the possibility of recycling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6a	Are the concrete and masonry used as general fill ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6b	Are the steel reinforcement bars used by scrap steel mills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6c	Is the segregation and storage of C&D wastes undertaken in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6d	Does the use of reusable steel formwork maximise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E7a	Are the temporary stockpiles maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E7b	Is the excavated fill material reused for backfilling and reinstatement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8a	Are the excavated slope, stockpile material and bund walls covered by tarpaulin?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8b	Are covering trucks or transporting wastes in enclosed containers when transportation of waste ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8c	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E9	Is hydroseeding of the topsoil on the stockpile implemented to improve visual appearance and prevent soil erosion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E10	Is the nomination of approved personnel to be responsible for good site practices and making arrangements for collection of all wastes generated on-site and effective disposal implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

E11	Are the training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concept implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E12	Are the regular cleaning and maintenance programme for drainage systems, sumps, oil interceptors?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1								
E13a	Are wood, steel and other metals separated for re-use and/or recycling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E13b	Do the excavated materials appear contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
E13c	If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
E14	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E15	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
Chemical Waste / Waste Oil													
E16	Are chemicals and waste oil recycled or disposed properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
Chemical Packaging													
E17a	Have the containers a capacity of <450 L unless the specification has been approved by EPD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
E17b	Are the containers (holding, resistant to corrosion, maintained in a good condition, and securely closed) used for storage of chemical wastes ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Chemical Labelling													
E18	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area? <table border="1"> <thead> <tr> <th>Capacity of Container</th> <th>Dimensions of Label</th> </tr> </thead> <tbody> <tr> <td>< 50L</td> <td>No less than 90 x 100mm</td> </tr> <tr> <td>50 to 450L</td> <td>No less than 120 x 150mm</td> </tr> <tr> <td>> 450L</td> <td>No less than 180 x 200mm</td> </tr> </tbody> </table>	Capacity of Container	Dimensions of Label	< 50L	No less than 90 x 100mm	50 to 450L	No less than 120 x 150mm	> 450L	No less than 180 x 200mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Capacity of Container	Dimensions of Label												
< 50L	No less than 90 x 100mm												
50 to 450L	No less than 120 x 150mm												
> 450L	No less than 180 x 200mm												
Chemical Waste / Fuel Storage Area													
E19a	Are the storage area are clearly labelled and separated (if needed)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2								
E19b	Are the storage area enclosed 3 sides by walls/fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2								
E19c	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering and reduce heat from sunlight?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2								
E19d	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2								
E20	Is chemical waste collected by licensed waste collectors and disposed of at licensed facility eg. Chemical Waste Treatment Centre?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									

Records					
E21	Is a licensed waste hauler used for waste collection ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E22	Are the records of quantities of wastes generated, recycled and disposed properly kept?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E23	For the demolition material / waste, is the number of loads for each day recorded as appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

F	Landfill Gas (LFG)	N/A or Not Observed	Yes	No	Remarks / Photo
Within NENT Landfill Extension					
F1	Are special LFG precautions taken to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F2	Are prominent safety warning signs erected on-site to alert all personnel and visitors of LFG hazards during excavation works.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F3	Is no smoking or burning permitted on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F4	Are prominent 'No smoking' and 'No Naked Flames' signs erected on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F5	Is no worker allowed to work alone at any time in excavated trenches or confined areas on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F6	Is adequate fire fighting equipment provided on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F7	Are construction equipment equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F8	Are electrical motors and extension cords explosion-proof and intrinsically safe for use on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F9	Is 'Permit to Work' system implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F10	Are welding, flame-cutting or other hot works conducted only under 'Permit to Work' system following clear safety requirements, gas monitoring procedures and presence of qualified persons to supervise the works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F11a	For pipng assembly or conduit construction , are all valves and seals closed immediately after installation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11b	Are the pipe ends sealed on one side during installation if installation of large diameter pipes (diameter > 600mm) is required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11c	Is forced ventilation implemented prior to operation of installed pipeline ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11d	Is forced ventilation implemented for works inside trenches deeper than 1m ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F12	Is frequency and location of LFG monitoring within excavation area determined prior to commencement of works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

	*LFG monitoring in excavations should be conducted at < 10mm from exposed ground surface.				
F13	For excavation works, Is LFG monitoring conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F14	Are LFG monitoring conducted periodically when any cracks on ground level encountered on-site? *Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F15a	Are LFG precautionary measures involved in excavation and pipng works provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F15b	Are temporary offices or buildings located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F16	Is a Safety Officer trained in the use of gas detection equipment and LFG- related hazards present on-site throughout the groundwork phase? *The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17a	Periodically during groundwork construction, Is the works area monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment? *The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17c	Are all measurements in excavations made with monitoring tube located < 10mm from exposed ground surface?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F18	For excavations > 1m, are measurements conducted? • At ground surface before excavation commences; • Immediately before any worker enters the excavation; • At the beginning of each working day for entire period the excavation remains open; and	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

	<ul style="list-style-type: none"> Periodically throughout the working day whilst workers are in excavation. 				
F19	<p>For excavations 300mm to 1m, are measurements conducted?</p> <ul style="list-style-type: none"> Directly after excavation has been completed; and Periodic all whilst excavation remains open. 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F20	For excavations < 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

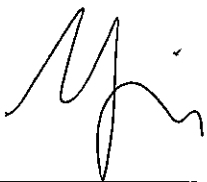

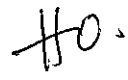
G	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Is the work site confined within site boundaries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G2	Is damage to surrounding areas avoided ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G3	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Advanced screening tree planting					
G4a	Is early planting using fast growing plants and tall shrubs at strategic locations within site implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G4b	Are the roadside planter and shrub planting implemented in front of Cheung Sha Temple ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Boundary Green Belt planting					
G5	Are the fast growing and fire-resistant plant species planted around the site perimeter?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Temporary landscape treatment as green surface cover					
G6	Are grass hydroseeding or synthetic covering material of green colour used as a temporary slope cover ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Existing tree preservation					
G7	Are existing and affected tree which identified as ecological significant preserved whenever possible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

H	Ecology	N/A or Not Observed	Yes	No	Remarks / Photo
H1	Is transplantation of the important plant species implemented? Is post-transplantation maintained and monitored regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

I	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Environmental Complaint received during this week?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



J	General Housekeeping / Others	N/A or Not Observed	Yes	No	Remarks / Photo
J1	Are the defined boundaries of working areas identified to prevent loss of vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
J2	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

<u>Follow up action for previous Site Inspection:</u>
<u>Observation(s):</u> 1. Dusty stockpiles in Portion A shall be covered with impervious sheets when they are not in used. 2. Muddy water is observed at the vehicular entrance in Portion A. 3. Chemical containers in SBA shall be stored properly to prevent any potential of chemical leakage and generation of chemical waste.
<u>Reminder(s):</u> Nil
<u>Corrective Actions – Mitigation Measures Implemented or Proposed (if any):</u> 1. The Contractor has been reminded to cover the dusty stockpile with impervious sheets. 2. The Contractor has been reminded to clear the muddy water and divert the muddy water to wastewater treatment facility. 3. Th Contractor has been reminded to provide proper chemical storage area on site.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Jason Man Andy Ng	/	Kristy Wong	Sylvia Ho
Date:	3 July 2023	/	3 July 2023	3 July 2023

PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
<p>5 June 2023</p> <p>SBA</p>  <p>Portion E3-1</p>   <p>Observation: The stagnant water and silt in the drip trays shall be clear off in Portion B2 and SBA.</p>	<p style="text-align: center;">Waiting for Contractor's Input</p>

Observation and Recommendation	Follow-up status
<p><u>26 June 2023</u></p>  <p>Observation: The sediment at the drainage system and site boundary, especially at the lower elevations should be kept cleaning regularly. (Most of sediment was found at the lower elevations of Portion A). The contractor should ensure no untreated construction runoff discharging directly outside the site boundary of the project.</p>	<p>Waiting for Contractor's Input</p>
<p><u>26 June 2023</u></p>  <p>Observation: The accumulate water at the drip tray near Portion E2 was found.</p>	<p>Waiting for Contractor's Input</p>

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
 <p>1. Dusty stockpiles in Portion A shall be covered with impervious sheets when they are not in used.</p>	
 <p>2. Muddy water is observed at the vehicular entrance in Portion A.</p>	



3. Chemical containers in SBA shall be stored properly to prevent any potential of chemical leakage and generation of chemical waste.

PART III Temporary Drainage System Photo Record during the environmental site inspection

<p>Temporary Drainage System at Portion D</p> 	<p>Temporary Drainage System at Portion D</p> 
<p>Silt fencing at Portion B1-2</p> 	<p>Drainage trench at Portion B1-2</p> 

Inspection Date:	10 July 2023	Inspected By:	Jason Man
Time:	14:00	Weather Condition:	Sunny
Participants:	Sylvia Ho (ER), V.C. Lau (Contractor), Kristy Wong (Contractor), Jason Man (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A3	Is wastewater discharge licence available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B2	Are plant and equipment well maintained (i.e. without black smoke from powered plant)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B3	Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B4	Are the worksites wetted with water regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B5	Are NRMM labels properly affixed on the PMEs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B6	Observed dust source(s)				
		<input checked="" type="checkbox"/>	Wind erosion		
		<input checked="" type="checkbox"/>	Vehicle/ Equipment Movements		
		<input type="checkbox"/>	Loading/ unloading of materials		
		<input type="checkbox"/>	Others: _____		
Air Pollution Control (Construction Dust) Regulation					
Part I Control Requirements for Notifiable Works					
Demolition of building					
B7	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Construction of the superstructure of a building					
B8	Is scaffolding erected around the perimeter of a building under construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

B9	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B10	Is the skip for materials transport enclosed by impervious sheeting ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Part III General Control Requirements					
Site boundary and entrance					
B11	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B12	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B13	Are the hoarding $\geq 2.4\text{m}$ tall provided at the site boundary near a road, street, service lane or other area accessible to the public?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Assess road					
B14	Are every main haul road (having a vehicle passing rate of higher than 4 in any 30 minutes) paved with concrete, bituminous materials, hardcores or metal plates, and kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B15	Are every main haul road sprayed with water or a dust suppression chemical?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B16	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B17	Are appropriate speed limit sign displayed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B18	Is unpaved main haul road wet by water spraying?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Cement and dry pulverized fuel ash (PFA)					
B19	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B20	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B21	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Exposed earth					
B22	Is the exposed earth properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within 6 months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Part IV Control Requirements for Individual Activities					
Stockpiling of dusty materials					
B23	Are the stockpiling of dusty materials (a) covered entirely by impervious sheeting or (b) placed in an area sheltered on the top and the 3 sides or (c) sprayed with water or a dust suppression chemical to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B24	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Loading, unloading or transfer of dusty materials					
B25	Are all dusty materials sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B26	Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Use of vehicles					
B27	Are every vehicle washed immediately to remove any dusty materials from its body and wheels before leaving a construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B28	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2
B29	Are site vehicle movements confined to designated roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pneumatic or power-driven drilling, cutting and polishing					
B30	Are surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operations takes place sprayed with water or a dust suppression chemical continuously? *Unless the process is accompanied by the operation of an effective dust extraction and filtering device.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Debris handling					
B31	Are any debris covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B32	Are every debris chute shall be enclosed by impervious sheeting or similar materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

B33	Are the watering spray or a dust suppression chemical conducted before debris is dumped into a debris chute?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Excavation or earth moving					
B34	Are the working area of any excavation or earth moving operation sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Site clearance					
B35	Are the working area for the uprooting of trees, shrubs, or vegetation or for the removal of boulders, poles, pillars or temporary or permanent structures sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B36	Are all demolished items (including trees, shrubs, vegetation, boulders, poles, pillars, structures, debris, rubbish and other items arising from site clearance) that may dislodge dust particles covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides within a day of demolition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

C	Construction Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is well-maintained plant operated on-site and plant served regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C2	Are vehicles and equipment switched off or throttled down while not in use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C3	Is the noise directed away from nearby NSRs ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C4	Are the silencers or mufflers properly fitted on construction equipment and maintained regularly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C5	Are mobile and/or noisy plant sited as far away from NSRs as possible and practicable and orientated so that the noise is directed away from nearby NSRs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C6	Are material stockpiles , mobile container office and other structures utilised to screen noisy activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C7	Is temporary hoarding installed located on the site boundaries between noisy construction activities and NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C8	Are noise barriers (typically density @14kg/m ²) acoustic mat or full enclosure close to noise plants including air compressor, generators and saw etc. provided to protect NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C9	Is the sequencing operation of construction plants where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C10	Is the hoarding maintained properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C11	Air compressors (500 kPa or above) and hand held percussive breaker (mass of above 10 kg) with valid noise labels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C12	Are compressor operated with doors closed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C13	QPME used with valid noise labels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C14	Major noise source(s)	<input checked="" type="checkbox"/> Traffic <input checked="" type="checkbox"/> Construction activities inside of site <input type="checkbox"/> Construction activities outside of site <input type="checkbox"/> Others: _____			

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Runoff					
D1a	At the start of site establishment, are perimeter cut-off drains constructed to direct off-site water around the site with internal drainage works and erosion and sedimentation control facilities implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D1b	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to silt removal facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2a	Have dikes or embankments for flood protection implemented around the boundaries of earthwork areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2b	Have temporary ditches provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2c	Are the sediment/ silt traps incorporated in the permanent drainage channels to enhance deposition rate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D3	Are the retention time for silt/s and traps of the silt removal facilities be 5 minutes under maximum flow conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4a	Are surface excavation works minimised during rainy seasons (April to September), as possible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4b	Are all exposed earth areas completed or vegetated as soon as possible after earthworks completed, or alternatively, within 14 days of the cessation of earthworks where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4c	Are exposed slope surfaces covered by tarpaulin sheets?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	To be treated with shotcrete at part of slope surface. Refer to Observation 5
D5a	Have the overall slope of the site should be kept a minimum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D5b	Are all trafficked areas and access roads protected by coarse stone ballast?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6a	Are all drainage facilities and erosion and sediment control structures inspected regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6b	Are all drainage facilities and erosion and sediment control structures maintained to ensure proper and efficient operation at all times and particularly following rainstorms?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6c	Is the deposited silt and grit removed regularly and disposed of by spreading evenly over stable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 3 & 4
D7a	Have the excavation of trenches in wet periods be dug and backfilled in short sections?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7b	Is rainwater pumped out from trenches discharged into storm drains via silt system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D8	Are open stockpiles of construction materials e.g. aggregates and sand of more than 50m ³ on site covered with tarpaulin or similar fabric during rainstorms?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D9a	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D9b	Are the discharges of surface run-off into foul sewer always prevented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10a	Are particular attention paid to the control of silty surface runoff during storm event ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10b	Are the precautions to be taken at any time of year when rainstorms are likely? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly. ii. Temporarily exposed slope surfaces should be cover by tarpaulin. iii. Temporary access roads should be protected by crushed stone or gravel. iv. Intercepting channels should be provided (e.g. along the crest/edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. v. Trenches should be dug and backfilled in short sections. Measures should be taken to minimize the ingress of rainwater into trenches.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 4
D10c	Are the actions to be taken when a rainstorm is imminent or forecast ? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be checked to ensure that they can function properly. ii. Open stockpiles of construction materials (e.g. aggregates, sand and fill materials) on site should be covered with tarpaulin or similar fabric. iii. All temporary covers to slopes and stockpiles should be secured.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10d	Are the actions to be taken during or after rainstorms ? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be checked and maintained to ensure satisfactory working conditions. Attention should be given to safety when carrying out this work.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11a	Are all vehicles and plant cleaned before leaving a construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11b	Is the wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11c	Are the vehicle wash-water have sand and silt settled out and removed at least on a weekly basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11d	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11e	Is the section of construction road between the wheel washing bay and the public road paved with backfill?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11f	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D12a	Are oil interceptors provided in the site drainage system downstream of any oil/ fuel pollution sources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

D12b	Are the oil interceptors emptied and cleaned regularly to prevent the release of O&G into the storm water drainage system after accidental spillage?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D12c	Has a bypass provided to prevent flushing during heavy rain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D13	Are the construction solid waste, debris and rubbish on site collected, handled and disposed of properly? (same with waste item)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D14	Are all fuel tanks and storage areas provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D15	Is Intercepting bund or barrier along the roadside constructed to prevent pollution risk arising from work area (waste reception area)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D16	Are site drainage systems provided over the entire project site with sediment control facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D17	Are sedimentation tanks provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D18	Is there any sediment plume observed in nearby watercourses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Sewage Effluent from Workforce (On-site sanitary facilities)					
D19a	Are portable chemical toilets and sewage holding tanks provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D19b	Is the sewage generated from toilets collected by licensed contractor and responsible for disposal and maintenance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D20	Are the notices posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Accidental Spillage of Chemical (Service workshop and maintenance facilities)					
D21a	Are the service workshop and maintenance facilities located within a bunded area, and sumps and oil interceptors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
D21b	Are all maintenance of equipment involving activities with potential for leakage and spillage undertaken within the areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
D21c	Is chemical leakage or spillages contained and cleaned up immediately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
Surface Water Drainage System					
D22a	Is the temporary surface water drainage system provided to manage runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22b	Does the system consist of channel as constructed around the perimeter of the site area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22c	Does the system collect surface water from the areas of higher elevations to those of lower elevations and ultimately to the discharge point?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22d	Is the erosion minimised?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23a	Does the system include the use of a silt fence around the soil stockpile areas to prevent sediment from entering the system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D23b	Is the regular cleaning carried out to prevent blockage of the passage of waste flow in silt fence?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
------	--	--------------------------	-------------------------------------	--------------------------	--

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
Waste Management					
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2a	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
E2b	Does accumulation of waste avoid?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
E2c	Is waste disposed regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
E2d	Regular waste collection by approved waste collector in purpose-built vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E3	Burning of refuse on construction site prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C&D Materials					
E4a	Are there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E4b	Are the C&D materials sorted and recycled on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5a	Is the durable formwork or plastic facing for construction works used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5b	Do the wooden hoardings avoid to be used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5c	Is metal hoarding used to enhance the possibility of recycling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6a	Are the concrete and masonry used as general fill ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6b	Are the steel reinforcement bars used by scrap steel mills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6c	Is the segregation and storage of C&D wastes undertaken in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6d	Does the use of reusable steel formwork maximise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E7a	Are the temporary stockpiles maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E7b	Is the excavated fill material reused for backfilling and reinstatement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8a	Are the excavated slope , stockpile material and bund walls covered by tarpaulin?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Refer to Observation 5
E8b	Are covering trucks or transporting wastes in enclosed containers when transportation of waste ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8c	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E9	Is hydroseeding of the topsoil on the stockpile implemented to improve visual appearance and prevent soil erosion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

E10	Is the nomination of approved personnel to be responsible for good site practices and making arrangements for collection of all wastes generated on-site and effective disposal implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E11	Are the training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concept implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E12	Are the regular cleaning and maintenance programme for drainage systems, sumps, oil interceptors?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 3 & 4								
E13a	Are wood , steel and other metals separated for re-use and/or recycling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E13b	Do the excavated materials appear contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
E13c	If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
E14	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E15	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
Chemical Waste / Waste Oil													
E16	Are chemicals and waste oil recycled or disposed properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
Chemical Packaging													
E17a	Have the containers a capacity of <450 L unless the specification has been approved by EPD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
E17b	Are the containers (holding, resistant to corrosion, maintained in a good condition, and securely closed) used for storage of chemical wastes ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
Chemical Labelling													
E18	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area? <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Capacity of Container</th> <th>Dimensions of Label</th> </tr> </thead> <tbody> <tr> <td>< 50L</td> <td>No less than 90 x 100mm</td> </tr> <tr> <td>50 to 450L</td> <td>No less than 120 x 150mm</td> </tr> <tr> <td>> 450L</td> <td>No less than 180 x 200mm</td> </tr> </tbody> </table>	Capacity of Container	Dimensions of Label	< 50L	No less than 90 x 100mm	50 to 450L	No less than 120 x 150mm	> 450L	No less than 180 x 200mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Capacity of Container	Dimensions of Label												
< 50L	No less than 90 x 100mm												
50 to 450L	No less than 120 x 150mm												
> 450L	No less than 180 x 200mm												
Chemical Waste / Fuel Storage Area													
E19a	Are the storage area are clearly labelled and separated (if needed)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E19b	Are the storage area enclosed 3 sides by walls/fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								
E19c	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering and reduce heat from sunlight?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								

E19d	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/O
E20	Is chemical waste collected by licensed waste collectors and disposed of at licensed facility eg. Chemical Waste Treatment Centre?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Records					
E21	Is a licensed waste hauler used for waste collection ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E22	Are the records of quantities of wastes generated, recycled and disposed properly kept?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E23	For the demolition material / waste, is the number of loads for each day recorded as appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

F	Landfill Gas (LFG)	N/A or Not Observed	Yes	No	Remarks / Photo
Within NENT Landfill Extension					
F1	Are special LFG precautions taken to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F2	Are prominent safety warning signs erected on-site to alert all personnel and visitors of LFG hazards during excavation works.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F3	Is no smoking or burning permitted on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F4	Are prominent 'No smoking' and 'No Naked Flames' signs erected on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F5	Is no worker allowed to work alone at any time in excavated trenches or confined areas on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F6	Is adequate fire fighting equipment provided on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F7	Are construction equipment equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F8	Are electrical motors and extension cords explosion-proof and intrinsically safe for use on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F9	Is 'Permit to Work' system implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F10	Are welding, flame-cutting or other hot works conducted only under 'Permit to Work' system following clear safety requirements, gas monitoring procedures and presence of qualified persons to supervise the works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F11a	For pipng assembly or conduit construction , are all valves and seals closed immediately after installation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11b	Are the pipe ends sealed on one side during installation if installation of large diameter pipes (diameter > 600mm) is required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11c	Is forced ventilation implemented prior to operation of installed pipeline ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11d	Is forced ventilation implemented for works inside trenches deeper than 1m ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

F12	Is frequency and location of LFG monitoring within excavation area determined prior to commencement of works? *LFG monitoring in excavations should be conducted at < 10mm from exposed ground surface.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F13	For excavation works, Is LFG monitoring conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F14	Are LFG monitoring conducted periodically when any cracks on ground level encountered on-site? *Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F15a	Are LFG precautionary measures involved in excavation and pipng works provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F15b	Are temporary offices or buildings located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F16	Is a Safety Officer trained in the use of gas detection equipment and LFG- related hazards present on-site throughout the groundwork phase? *The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17a	Periodically during groundwork construction, Is the works area monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment? *The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17c	Are all measurements in excavations made with monitoring tube located < 10mm from exposed ground surface?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F18	For excavations > 1m, are measurements conducted? • At ground surface before excavation commences;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

	<ul style="list-style-type: none"> Immediately before any worker enters the excavation; At the beginning of each working day for entire period the excavation remains open; and Periodically throughout the working day whilst workers are in excavation. 				
F19	For excavations 300mm to 1m, are measurements conducted? <ul style="list-style-type: none"> Directly after excavation has been completed; and Periodic all whilst excavation remains open. 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F20	For excavations < 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

G	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Is the work site confined within site boundaries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G2	Is damage to surrounding areas avoided ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G3	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Advanced screening tree planting					
G4a	Is early planting using fast growing plants and tall shrubs at strategic locations within site implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G4b	Are the roadside planter and shrub planting implemented in front of Cheung Sha Temple ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Boundary Green Belt planting					
G5	Are the fast growing and fire-resistant plant species planted around the site perimeter?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Temporary landscape treatment as green surface cover					
G6	Are grass hydroseeding or synthetic covering material of green colour used as a temporary slope cover ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Existing tree preservation					
G7	Are existing and affected tree which identified as ecological significant preserved whenever possible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

H	Ecology	N/A or Not Observed	Yes	No	Remarks / Photo
H1	Is transplantation of the important plant species implemented? Is post-transplantation maintained and monitored regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

I	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Environmental Complaint received during this week?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

J	General Housekeeping / Others	N/A or Not Observed	Yes	No	Remarks / Photo
J1	Are the defined boundaries of working areas identified to prevent loss of vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
J2	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Follow up action for previous Site Inspection:**Observation(s):**




1. Full loading of the rubbish skips for general waste at the Portion D and lack of waste separation are found.
2. The loaded dump truck without covered by impervious sheeting is found.
3. The stagnant water, floating leaves, deposited silt and grit are found at the sedimentation basin near the wheel washing facilities at the Portion B1.
4. The high amount of deposited silt is found at the silt removal facilities at the Portion E3-1.
5. The exposed slope surfaces are not covered by tarpaulin sheets or treated with shotcrete at the Portion E3-1.

Reminder(s):

Nil



Corrective Actions – Mitigation Measures Implemented or Proposed (if any):**Observation(s):**


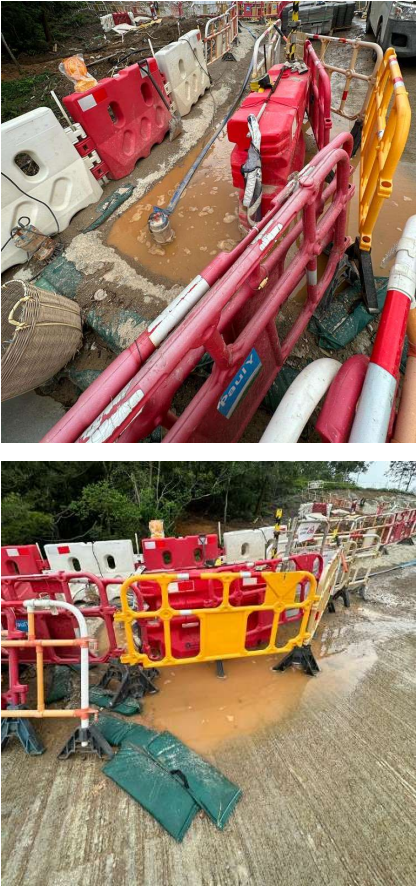
1. The contractor has been recommended that accumulation of waste should be avoid, the waste should be disposed regularly & the general waste should be collected properly by using the waste separation facilities for paper, aluminum cans and plastic bottles etc.
2. The contractor has been advised that the loaded dump trucks should be covered by impervious sheeting when transportation of materials was conducting at the assess road.
3. The contractor has been recommended that the stagnant water should be collected to silt removal facilities for treatment before reusing for wheel washing. The floating leaves, deposited silt and grit should be removed regularly.
4. The contractor has been advised that the deposited silt should be removed and regularly and increase the checking frequency of it, and the silt removal facilities should be maintained at good condition to maintain the high effectiveness of it.
5. The contractor has been recommended to implement the cover works of exposed slope surfaces by tarpaulin sheets or shotcrete at the Portion E3-1 to minimise the potential high concentration construction runoff to silt removal facilities.


	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Jason Man	/	Kristy Wong	Sylvia Ho
Date:	10 July 2023	/	10 July 2023	10 July 2023

PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
<p>5 June 2023</p> <p>SBA</p>  <p>Portion E3-1</p>   <p>Observation: The stagnant water and silt in the drip trays shall be clear off in Portion B2 and SBA.</p>	<p>Waiting for Contractor's Input</p>


Observation and Recommendation	Follow-up status
<p><u>26 June 2023</u></p>  <p>Observation: The sediment at the drainage system and site boundary, especially at the lower elevations should be kept cleaning regularly. (Most of sediment was found at the lower elevations of Portion A). The contractor should ensure no untreated construction runoff discharging directly outside the site boundary of the project.</p>	<p>Waiting for Contractor's Input</p>
<p><u>26 June 2023</u></p>  <p>Observation: The accumulate water at the drip tray near Portion E2 was found.</p>	<p>Waiting for Contractor's Input</p>


Observation and Recommendation	Follow-up status
<p>3 July 2023</p>  <p>Observation:</p> <ol style="list-style-type: none"> 1. Dusty stockpiles in Portion A shall be covered with impervious sheets when they are not in used. The Contractor was reminded to cover the dusty stockpile with impervious sheets. 	
<p>3 July 2023</p>  <p>Observation:</p> <ol style="list-style-type: none"> 2. Muddy water is observed at the vehicular entrance in Portion A. The Contractor was reminded to clear the muddy water and divert the muddy water to wastewater treatment facility. 	

Observation and Recommendation	Follow-up status
<p>3 July 2023</p>  <p>Observation:</p> <p>3. Chemical containers in SBA shall be stored properly to prevent any potential of chemical leakage and generation of chemical waste.</p>	


PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
 <p>Observation:</p> <ol style="list-style-type: none"> 1. Full loading of the rubbish skips for general waste at the Portion D and lack of waste separation are found. The contractor has been recommended that accumulation of waste should be avoid, the waste should be disposed regularly & the general waste should be collected properly by using the waste separation facilities for paper, aluminium cans, and plastic bottles etc. 	

Observation and Recommendation	Follow-up status
 <p>Observation:</p> <ol style="list-style-type: none"> The loaded dump truck without covered by impervious sheeting is found. The contractor has been advised that the loaded dump trucks should be covered by impervious sheeting when transportation of materials was conducting at the assess road. 	

Observation and Recommendation	Follow-up status
 <p>Observation:</p> <p>3. The stagnant water, floating leaves, deposited silt and grit are found at the sedimentation basin near the wheel washing facilities at the Portion B1. The contractor has been recommended that the stagnant water should be collected to silt removal facilities for treatment before reusing for wheel washing. The floating leaves, deposited silt and grit should be removed regularly.</p>	

Observation and Recommendation	Follow-up status
 <p>Observation:</p> <p>4. The high amount of deposited silt is found at the silt removal facilities at the Portion E3-1. The contractor has been advised that the deposited silt should be removed regularly and increase the checking frequency of it, and the silt removal facilities should be maintained at good condition to maintain the high effectiveness of it.</p>	

Observation and Recommendation	Follow-up status
 <p>Observation:</p> <p>5. The exposed slope surfaces are not covered by tarpaulin sheets or treated with shotcrete at the Portion E3-1. The contractor has been recommended to implement the cover works of exposed slope surfaces by tarpaulin sheets or shotcrete at the Portion E3-1 to minimise the potential high concentration construction runoff to silt removal facilities.</p>	

PART III Temporary Surface Water Drainage System (TSWD) Photo Record during the environmental site inspection

<p>Photo 1 TSWD at Portion D</p> 	<p>Photo 2 TSWD at Portion D</p> 
<p>Photo 3 Cut-off drain with silt fence at Portion B1-2 (Front)</p> 	<p>Photo 4 Cut-off drain with silt fence at Portion B1-2 (Front)</p> 
<p>Photo 5 Cut-off drain with silt fence at Portion B1-2 (Back)</p> 	<p>Photo 6 Cut-off drain with silt fence at Portion B1-2 (Back)</p> 

Photo 7 Cut-off drain with silt fence at Portion B1-2 (Front)



Photo 8 Sedimentation Basins at Portion E3-1



Photo 9 Sedimentation Basins at Portion E3-1



Photo 10 Channel at Portion E3-1



Inspection Date:	18 July 2023	Inspected By:	Jason Man, Andy Ng
Time:	14:00	Weather Condition:	Rainy
Participants:	Sylvia Ho (ER), Kristy Wong (Contractor), Jason Man (ET), Andy Ng (ET), Echo Hung (IEC)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Refer to Observation 3
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A3	Is wastewater discharge licence available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B2	Are plant and equipment well maintained (i.e. without black smoke from powered plant)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B3	Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B4	Are the worksites wetted with water regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B5	Are NRMM labels properly affixed on the PMEs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B6	Observed dust source(s)	<input type="checkbox"/> Wind erosion <input type="checkbox"/> Vehicle/ Equipment Movements <input type="checkbox"/> Loading/ unloading of materials <input checked="" type="checkbox"/> Others: <u>Not Observed</u>			
Air Pollution Control (Construction Dust) Regulation					
Part I Control Requirements for Notifiable Works					
Demolition of building					
B7	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Construction of the superstructure of a building					
B8	Is scaffolding erected around the perimeter of a building under construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

B9	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B10	Is the skip for materials transport enclosed by impervious sheeting ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Part III General Control Requirements					
Site boundary and entrance					
B11	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B12	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B13	Are the hoarding $\geq 2.4\text{m}$ tall provided at the site boundary near a road, street, service lane or other area accessible to the public?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Assess road					
B14	Are every main haul road (having a vehicle passing rate of higher than 4 in any 30 minutes) paved with concrete, bituminous materials, hardcores or metal plates, and kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B15	Are every main haul road sprayed with water or a dust suppression chemical?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B16	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B17	Are appropriate speed limit sign displayed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B18	Is unpaved main haul road wet by water spraying?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Cement and dry pulverized fuel ash (PFA)					
B19	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B20	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B21	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Exposed earth					
B22	Is the exposed earth properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within 6 months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 1

Part IV Control Requirements for Individual Activities					
Stockpiling of dusty materials					
B23	Are the stockpiling of dusty materials (a) covered entirely by impervious sheeting or (b) placed in an area sheltered on the top and the 3 sides or (c) sprayed with water or a dust suppression chemical to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B24	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Loading, unloading or transfer of dusty materials					
B25	Are all dusty materials sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B26	Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Use of vehicles					
B27	Are every vehicle washed immediately to remove any dusty materials from its body and wheels before leaving a construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B28	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B29	Are site vehicle movements confined to designated roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pneumatic or power-driven drilling, cutting and polishing					
B30	Are surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operations takes place sprayed with water or a dust suppression chemical continuously? *Unless the process is accompanied by the operation of an effective dust extraction and filtering device.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Debris handling					
B31	Are any debris covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B32	Are every debris chute shall be enclosed by impervious sheeting or similar materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

B33	Are the watering spray or a dust suppression chemical conducted before debris is dumped into a debris chute?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Excavation or earth moving					
B34	Are the working area of any excavation or earth moving operation sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Site clearance					
B35	Are the working area for the uprooting of trees, shrubs, or vegetation or for the removal of boulders, poles, pillars or temporary or permanent structures sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B36	Are all demolished items (including trees, shrubs, vegetation, boulders, poles, pillars, structures, debris, rubbish and other items arising from site clearance) that may dislodge dust particles covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides within a day of demolition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

C	Construction Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is well-maintained plant operated on-site and plant served regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C2	Are vehicles and equipment switched off or throttled down while not in use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C3	Is the noise directed away from nearby NSRs ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C4	Are the silencers or mufflers properly fitted on construction equipment and maintained regularly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C5	Are mobile and/or noisy plant sited as far away from NSRs as possible and practicable and orientated so that the noise is directed away from nearby NSRs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C6	Are material stockpiles , mobile container office and other structures utilised to screen noisy activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C7	Is temporary hoarding installed located on the site boundaries between noisy construction activities and NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C8	Are noise barriers (typically density @14kg/m ²) acoustic mat or full enclosure close to noise plants including air compressor, generators and saw etc. provided to protect NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C9	Is the sequencing operation of construction plants where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C10	Is the hoarding maintained properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C11	Air compressors (500 kPa or above) and hand held percussive breaker (mass of above 10 kg) with valid noise labels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C12	Are compressor operated with doors closed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C13	QPME used with valid noise labels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C14	Major noise source(s)	<input checked="" type="checkbox"/> Traffic <input checked="" type="checkbox"/> Construction activities inside of site <input type="checkbox"/> Construction activities outside of site <input type="checkbox"/> Others: _____			

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Runoff					
D1a	At the start of site establishment, are perimeter cut-off drains constructed to direct off-site water around the site with internal drainage works and erosion and sedimentation control facilities implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D1b	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to silt removal facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
D2a	Have dikes or embankments for flood protection implemented around the boundaries of earthwork areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2b	Have temporary ditches provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2c	Are the sediment/ silt traps incorporated in the permanent drainage channels to enhance deposition rate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D3	Are the retention time for silt/s and traps of the silt removal facilities be 5 minutes under maximum flow conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4a	Are surface excavation works minimised during rainy seasons (April to September), as possible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4b	Are all exposed earth areas completed or vegetated as soon as possible after earthworks completed, or alternatively, within 14 days of the cessation of earthworks where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4c	Are exposed slope surfaces covered by tarpaulin sheets?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	To be treated with shotcrete at part of slope surface.
D5a	Have the overall slope of the site should be kept a minimum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D5b	Are all trafficked areas and access roads protected by coarse stone ballast?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6a	Are all drainage facilities and erosion and sediment control structures inspected regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6b	Are all drainage facilities and erosion and sediment control structures maintained to ensure proper and efficient operation at all times and particularly following rainstorms?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6c	Is the deposited silt and grit removed regularly and disposed of by spreading evenly over stable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7a	Have the excavation of trenches in wet periods be dug and backfilled in short sections?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7b	Is rainwater pumped out from trenches discharged into storm drains via silt system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D8	Are open stockpiles of construction materials e.g. aggregates and sand of more than 50m ³ on site covered with tarpaulin or similar fabric during rainstorms?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D9a	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D9b	Are the discharges of surface run-off into foul sewer always prevented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10a	Are particular attention paid to the control of silty surface runoff during storm event ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10b	Are the precautions to be taken at any time of year when rainstorms are likely? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly. ii. Temporarily exposed slope surfaces should be cover by tarpaulin. iii. Temporary access roads should be protected by crushed stone or gravel. iv. Intercepting channels should be provided (e.g. along the crest/edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. v. Trenches should be dug and backfilled in short sections. Measures should be taken to minimize the ingress of rainwater into trenches.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10c	Are the actions to be taken when a rainstorm is imminent or forecast ? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be checked to ensure that they can function properly. ii. Open stockpiles of construction materials (e.g. aggregates, sand and fill materials) on site should be covered with tarpaulin or similar fabric. iii. All temporary covers to slopes and stockpiles should be secured.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10d	Are the actions to be taken during or after rainstorms ? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be checked and maintained to ensure satisfactory working conditions. Attention should be given to safety when carrying out this work.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11a	Are all vehicles and plant cleaned before leaving a construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11b	Is the wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11c	Are the vehicle wash-water have sand and silt settled out and removed at least on a weekly basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11d	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11e	Is the section of construction road between the wheel washing bay and the public road paved with backfill?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11f	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D12a	Are oil interceptors provided in the site drainage system downstream of any oil/ fuel pollution sources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D12b	Are the oil interceptors are emptied and cleaned regularly to prevent the release of O&G into the storm water drainage system after accidental spillage?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

D12c	Has a bypass provided to prevent flushing during heavy rain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D13	Are the construction solid waste, debris and rubbish on site collected, handled and disposed of properly? (same with waste item)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D14	Are all fuel tanks and storage areas provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D15	Is Intercepting bund or barrier along the roadside constructed to prevent pollution risk arising from work area (waste reception area)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D16	Are site drainage systems provided over the entire project site with sediment control facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D17	Are sedimentation tanks provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D18	Is there any sediment plume observed in nearby watercourses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Sewage Effluent from Workforce (On-site sanitary facilities)					
D19a	Are portable chemical toilets and sewage holding tanks provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D19b	Is the sewage generated from toilets collected by licensed contractor and responsible for disposal and maintenance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D20	Are the notices posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Accidental Spillage of Chemical (Service workshop and maintenance facilities)					
D21a	Are the service workshop and maintenance facilities located within a bunded area, and sumps and oil interceptors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
D21b	Are all maintenance of equipment involving activities with potential for leakage and spillage undertaken within the areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
D21c	Is chemical leakage or spillages contained and cleaned up immediately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
Surface Water Drainage System					
D22a	Is the temporary surface water drainage system provided to manage runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22b	Does the system consist of channel as constructed around the perimeter of the site area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22c	Does the system collect surface water from the areas of higher elevations to those of lower elevations and ultimately to the discharge point?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22d	Is the erosion minimised?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23a	Does the system include the use of a silt fence around the soil stockpile areas to prevent sediment from entering the system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23b	Is the regular cleaning carried out to prevent blockage of the passage of waste flow in silt fence?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
Waste Management					
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2a	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
E2b	Does accumulation of waste avoid?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
E2c	Is waste disposed regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
E2d	Regular waste collection by approved waste collector in purpose-built vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E3	Burning of refuse on construction site prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C&D Materials					
E4a	Are there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E4b	Are the C&D materials sorted and recycled on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5a	Is the durable formwork or plastic facing for construction works used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5b	Do the wooden hoardings avoid to be used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5c	Is metal hoarding used to enhance the possibility of recycling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6a	Are the concrete and masonry used as general fill ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6b	Are the steel reinforcement bars used by scrap steel mills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6c	Is the segregation and storage of C&D wastes undertaken in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6d	Does the use of reusable steel formwork maximise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E7a	Are the temporary stockpiles maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E7b	Is the excavated fill material reused for backfilling and reinstatement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8a	Are the excavated slope , stockpile material and bund walls covered by tarpaulin?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8b	Are covering trucks or transporting wastes in enclosed containers when transportation of waste ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8c	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E9	Is hydroseeding of the topsoil on the stockpile implemented to improve visual appearance and prevent soil erosion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E10	Is the nomination of approved personnel to be responsible for good site practices and making arrangements for collection of all wastes generated on-site and effective disposal implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

E11	Are the training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concept implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E12	Are the regular cleaning and maintenance programme for drainage systems, sumps, oil interceptors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E13a	Are wood, steel and other metals separated for re-use and/or recycling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E13b	Do the excavated materials appear contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
E13c	If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
E14	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E15	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
Chemical Waste / Waste Oil													
E16	Are chemicals and waste oil recycled or disposed properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
Chemical Packaging													
E17a	Have the containers a capacity of <450 L unless the specification has been approved by EPD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
E17b	Are the containers (holding, resistant to corrosion, maintained in a good condition, and securely closed) used for storage of chemical wastes ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
Chemical Labelling													
E18	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area? <table border="1"> <thead> <tr> <th>Capacity of Container</th> <th>Dimensions of Label</th> </tr> </thead> <tbody> <tr> <td>< 50L</td> <td>No less than 90 x 100mm</td> </tr> <tr> <td>50 to 450L</td> <td>No less than 120 x 150mm</td> </tr> <tr> <td>> 450L</td> <td>No less than 180 x 200mm</td> </tr> </tbody> </table>	Capacity of Container	Dimensions of Label	< 50L	No less than 90 x 100mm	50 to 450L	No less than 120 x 150mm	> 450L	No less than 180 x 200mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Capacity of Container	Dimensions of Label												
< 50L	No less than 90 x 100mm												
50 to 450L	No less than 120 x 150mm												
> 450L	No less than 180 x 200mm												
Chemical Waste / Fuel Storage Area													
E19a	Are the storage area are clearly labelled and separated (if needed)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E19b	Are the storage area enclosed 3 sides by walls/fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								
E19c	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering and reduce heat from sunlight?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								
E19d	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								
E20	Is chemical waste collected by licensed waste collectors and disposed of at licensed facility eg. Chemical Waste Treatment Centre?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									

Records					
E21	Is a licensed waste hauler used for waste collection ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E22	Are the records of quantities of wastes generated, recycled and disposed properly kept?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E23	For the demolition material / waste, is the number of loads for each day recorded as appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

F	Landfill Gas (LFG)	N/A or Not Observed	Yes	No	Remarks / Photo
Within NENT Landfill Extension					
F1	Are special LFG precautions taken to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F2	Are prominent safety warning signs erected on-site to alert all personnel and visitors of LFG hazards during excavation works.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F3	Is no smoking or burning permitted on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F4	Are prominent 'No smoking' and 'No Naked Flames' signs erected on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F5	Is no worker allowed to work alone at any time in excavated trenches or confined areas on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F6	Is adequate fire fighting equipment provided on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F7	Are construction equipment equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F8	Are electrical motors and extension cords explosion-proof and intrinsically safe for use on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F9	Is 'Permit to Work' system implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F10	Are welding, flame-cutting or other hot works conducted only under 'Permit to Work' system following clear safety requirements, gas monitoring procedures and presence of qualified persons to supervise the works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F11a	For pipng assembly or conduit construction , are all valves and seals closed immediately after installation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11b	Are the pipe ends sealed on one side during installation if installation of large diameter pipes (diameter > 600mm) is required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11c	Is forced ventilation implemented prior to operation of installed pipeline ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11d	Is forced ventilation implemented for works inside trenches deeper than 1m ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F12	Is frequency and location of LFG monitoring within excavation area determined prior to commencement of works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

	*LFG monitoring in excavations should be conducted at < 10mm from exposed ground surface.				
F13	For excavation works, Is LFG monitoring conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F14	Are LFG monitoring conducted periodically when any cracks on ground level encountered on-site? *Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F15a	Are LFG precautionary measures involved in excavation and pipng works provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F15b	Are temporary offices or buildings located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F16	Is a Safety Officer trained in the use of gas detection equipment and LFG- related hazards present on-site throughout the groundwork phase? *The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17a	Periodically during groundwork construction, Is the works area monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment? *The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17c	Are all measurements in excavations made with monitoring tube located < 10mm from exposed ground surface?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F18	For excavations > 1m, are measurements conducted? • At ground surface before excavation commences; • Immediately before any worker enters the excavation; • At the beginning of each working day for entire period the excavation remains open; and	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

	<ul style="list-style-type: none"> Periodically throughout the working day whilst workers are in excavation. 				
F19	For excavations 300mm to 1m, are measurements conducted? <ul style="list-style-type: none"> Directly after excavation has been completed; and Periodic all whilst excavation remains open. 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F20	For excavations < 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	





G	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Is the work site confined within site boundaries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G2	Is damage to surrounding areas avoided ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G3	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Advanced screening tree planting					
G4a	Is early planting using fast growing plants and tall shrubs at strategic locations within site implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G4b	Are the roadside planter and shrub planting implemented in front of Cheung Sha Temple ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Boundary Green Belt planting					
G5	Are the fast growing and fire-resistant plant species planted around the site perimeter?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Temporary landscape treatment as green surface cover					
G6	Are grass hydroseeding or synthetic covering material of green colour used as a temporary slope cover ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Existing tree preservation					
G7	Are existing and affected tree which identified as ecological significant preserved whenever possible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

H	Ecology	N/A or Not Observed	Yes	No	Remarks / Photo
H1	Is transplantation of the important plant species implemented? Is post-transplantation maintained and monitored regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

I	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Environmental Complaint received during this week?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
J General Housekeeping / Others					
J1	Are the defined boundaries of working areas identified to prevent loss of vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	




J2	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
----	---	--------------------------	-------------------------------------	--------------------------	--


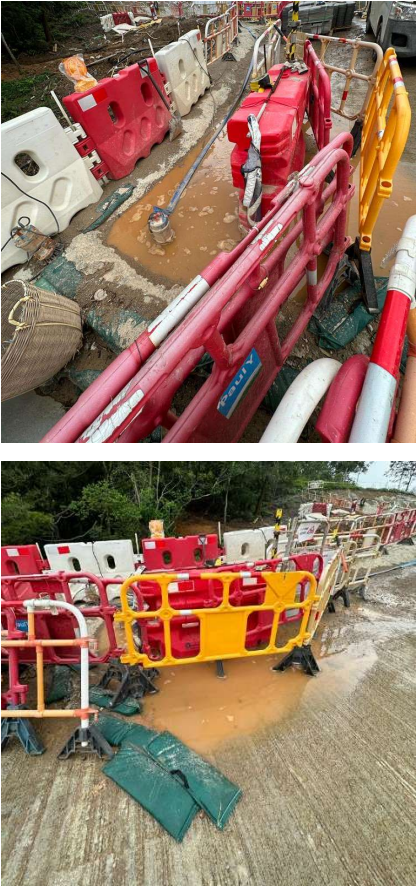
<u>Follow up action for previous Site Inspection:</u>
<u>Observation(s):</u> <ol style="list-style-type: none">1. The earth bund along the edge of the slope in Portion A is collapsed.2. The stagnant water in the drip trays should be cleared off In Portion A.3. EP shall be displayed at the entrance of portion.4. Holes are found on the silt fencing.
<u>Reminder(s):</u> <ol style="list-style-type: none">1. Surface Protection in Portion A should be maintained properly after the rainfall.
<u>Corrective Actions – Mitigation Measures Implemented or Proposed (if any):</u> <ol style="list-style-type: none">1. The earth bund along the edge of the slope in Portion A should be reconstructed to prevent surface runoff flowing outside the site boundary. The Contractor has been reminded to review the height of the earth bund to ensure the surface runoff should not flow outside the site boundary.2. The Contractor has been reminded to clear the drip tray after the rainfall.3. The Contractor has been reminded to display the EP at the entrance of each portion.4. The Contractor has been recommended to review and replace the damage silt fencing in SBA to fulfill EP condition 2.13b.5. The Contractor has been reminded to conduct maintenance work on the slope surface in Portion A.





	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:				
Name:	Jason Man	Echo Hung	Kristy Wong	Sylvia Ho
Date:	18 July 2023	18 July 2023	18 July 2023	18 July 2023

PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
<p>5 June 2023</p> <p>SBA</p>  <p>Portion E3-1</p>   <p>Observation: The stagnant water and silt in the drip trays shall be clear off in Portion B2 and SBA.</p>	<p>Waiting for Contractor's Input</p>

Observation and Recommendation	Follow-up status
<p><u>26 June 2023</u></p>  <p>Observation: The sediment at the drainage system and site boundary, especially at the lower elevations should be kept cleaning regularly. (Most of sediment was found at the lower elevations of Portion A). The contractor should ensure no untreated construction runoff discharging directly outside the site boundary of the project.</p>	<p>Waiting for Contractor's Input</p>
<p><u>26 June 2023</u></p>  <p>Observation: The accumulate water at the drip tray near Portion E2 was found.</p>	

Observation and Recommendation	Follow-up status
<p><u>3 July 2023</u></p>  <p>Observation: Dusty stockpiles in Portion A shall be covered with impervious sheets when they are not in used. The Contractor was reminded to cover the dusty stockpile with impervious sheets.</p>	
<p><u>3 July 2023</u></p>  <p>Observation: Muddy water is observed at the vehicular entrance in Portion A. The Contractor was reminded to clear the muddy water and divert the muddy water to wastewater treatment facility.</p>	

Observation and Recommendation	Follow-up status
<p>3 July 2023</p>  <p>Observation:</p> <p>Chemical containers in SBA shall be stored properly to prevent any potential of chemical leakage and generation of chemical waste.</p>	 <p>The chemicals were removed in SBA.</p>
<p>10 July 2023</p>  <p>Observation:</p> <p>Full loading of the rubbish skips for general waste at the Portion D and lack of waste separation were found. The contractor has been recommended that accumulation of waste should be avoid, the waste should be disposed regularly & the general waste should be collected properly by using the waste separation facilities for paper, aluminium cans, and plastic bottles etc.</p>	 <p>General waste was disposed.</p>

10 July 2023



Observation:

The loaded dump truck without covered by impervious sheeting was found. The contractor has been advised that the loaded dump trucks should be covered by impervious sheeting when transportation of materials was conducting at the assess road.

10 July 2023



Observation:

The stagnant water, floating leaves, deposited silt and grit were found at the sedimentation basin near the wheel washing facilities at the Portion B1. The contractor has been recommended that the stagnant water should be collected to silt removal facilities for treatment before reusing for wheel washing. The floating leaves, deposited silt and grit should be removed regularly.

10 July 2023



Observation:

The high amount of deposited silt was found at the silt removal facilities at the Portion E3-1. The contractor has been advised that the deposited silt should be removed regularly and increase the checking frequency of it, and the silt removal facilities should be maintained at good condition to maintain the high effectiveness of it.



The Contractor arranged cleaning works for silt removal facility.

10 July 2023





Observation:

The exposed slope surfaces were not covered by tarpaulin sheets or treated with shotcrete at the Portion E3-1. The contractor has been recommended to implement the cover works of exposed slope surfaces by tarpaulin sheets or shotcrete at the Portion E3-1 to minimise the potential high concentration construction runoff to silt removal facilities.




The exposed slopes were covered with impervious sheets in Portion E3.

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
 <p><u>Observation:</u> The earth bund along the edge of the slope in Portion A is collapsed.</p>	
 <p><u>Reminder:</u> Surface Protection in Portion A should be maintained properly after the rainfall.</p>	

Observation and Recommendation	Follow-up status
 <p><u>Observation</u> The stagnant water in the drip trays should be cleared off In Portion A.</p>	
 <p><u>Observation:</u> EP shall be displayed at the entrance of portion.</p>	

Observation and Recommendation	Follow-up status
 <p><u>Observation</u> Holes are found on the site fencing.</p>	

PART III Temporary Surface Water Drainage System (TSWD) Photo Record during the environmental site inspection

<p>Temporary Drainage System in Portion D</p>	<p>Temporary Drainage System in Portion D</p>
	
<p>Slope Protection in Portion A</p>	<p>Slope Protection in Portion A</p>
	
<p>Temporary Drainage System in SBA</p>	<p>Silt Fencing in SBA</p>
	

Silt Removal Facility and Slope Protection in Portion E3	Surface Protection in Portion E3
 A photograph showing a silt removal facility. In the foreground, there are yellow and red safety barriers. A green generator or pump unit is visible, with a red container labeled 'W48' nearby. Workers in yellow safety gear are standing near the equipment. The background shows a steep, excavated slope with some vegetation.	 A photograph showing surface protection measures. A steep slope is covered with white and green tarps. A blue metal structure is visible on the left side. Safety barriers are present along the edge of the site.
Sedimentation Basin in Portion E3	
 A photograph of a sedimentation basin. The basin is filled with water and has concrete structures. Safety barriers are visible in the foreground. The background shows a large, excavated area with some vegetation.	

Inspection Date:	24 July 2023	Inspected By:	Andy Ng
Time:	14:00	Weather Condition:	Sunny
Participants:	Jackie Tam (ER), Kristy Wong (Contractor), Andy Ng (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A3	Is wastewater discharge licence available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B2	Are plant and equipment well maintained (i.e. without black smoke from powered plant)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B3	Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B4	Are the worksites wetted with water regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 3
B5	Are NRMM labels properly affixed on the PMEs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B6	Observed dust source(s)	<input type="checkbox"/> Wind erosion <input type="checkbox"/> Vehicle/ Equipment Movements <input type="checkbox"/> Loading/ unloading of materials <input checked="" type="checkbox"/> Others: <u>Not Observed</u>			
Air Pollution Control (Construction Dust) Regulation					
Part I Control Requirements for Notifiable Works					
Demolition of building					
B7	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Construction of the superstructure of a building					
B8	Is scaffolding erected around the perimeter of a building under construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

B9	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B10	Is the skip for materials transport enclosed by impervious sheeting ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Part III General Control Requirements					
Site boundary and entrance					
B11	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B12	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B13	Are the hoarding $\geq 2.4\text{m}$ tall provided at the site boundary near a road, street, service lane or other area accessible to the public?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Assess road					
B14	Are every main haul road (having a vehicle passing rate of higher than 4 in any 30 minutes) paved with concrete, bituminous materials, hardcores or metal plates, and kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B15	Are every main haul road sprayed with water or a dust suppression chemical?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B16	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B17	Are appropriate speed limit sign displayed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B18	Is unpaved main haul road wet by water spraying?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Cement and dry pulverized fuel ash (PFA)					
B19	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B20	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B21	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Exposed earth					
B22	Is the exposed earth properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within 6 months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Part IV Control Requirements for Individual Activities					
Stockpiling of dusty materials					
B23	Are the stockpiling of dusty materials (a) covered entirely by impervious sheeting or (b) placed in an area sheltered on the top and the 3 sides or (c) sprayed with water or a dust suppression chemical to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B24	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Loading, unloading or transfer of dusty materials					
B25	Are all dusty materials sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B26	Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Use of vehicles					
B27	Are every vehicle washed immediately to remove any dusty materials from its body and wheels before leaving a construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B28	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B29	Are site vehicle movements confined to designated roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pneumatic or power-driven drilling, cutting and polishing					
B30	Are surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operations takes place sprayed with water or a dust suppression chemical continuously? *Unless the process is accompanied by the operation of an effective dust extraction and filtering device.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Debris handling					
B31	Are any debris covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B32	Are every debris chute shall be enclosed by impervious sheeting or similar materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

B33	Are the watering spray or a dust suppression chemical conducted before debris is dumped into a debris chute?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Excavation or earth moving					
B34	Are the working area of any excavation or earth moving operation sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Site clearance					
B35	Are the working area for the uprooting of trees, shrubs, or vegetation or for the removal of boulders, poles, pillars or temporary or permanent structures sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B36	Are all demolished items (including trees, shrubs, vegetation, boulders, poles, pillars, structures, debris, rubbish and other items arising from site clearance) that may dislodge dust particles covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides within a day of demolition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

C	Construction Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is well-maintained plant operated on-site and plant served regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C2	Are vehicles and equipment switched off or throttled down while not in use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C3	Is the noise directed away from nearby NSRs ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C4	Are the silencers or mufflers properly fitted on construction equipment and maintained regularly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C5	Are mobile and/or noisy plant sited as far away from NSRs as possible and practicable and orientated so that the noise is directed away from nearby NSRs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C6	Are material stockpiles , mobile container office and other structures utilised to screen noisy activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C7	Is temporary hoarding installed located on the site boundaries between noisy construction activities and NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C8	Are noise barriers (typically density @14kg/m ²) acoustic mat or full enclosure close to noise plants including air compressor, generators and saw etc. provided to protect NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C9	Is the sequencing operation of construction plants where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C10	Is the hoarding maintained properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C11	Air compressors (500 kPa or above) and hand held percussive breaker (mass of above 10 kg) with valid noise labels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C12	Are compressor operated with doors closed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C13	QPME used with valid noise labels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C14	Major noise source(s)	<input checked="" type="checkbox"/> Traffic <input checked="" type="checkbox"/> Construction activities inside of site <input type="checkbox"/> Construction activities outside of site <input type="checkbox"/> Others: _____			

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Runoff					
D1a	At the start of site establishment, are perimeter cut-off drains constructed to direct off-site water around the site with internal drainage works and erosion and sedimentation control facilities implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D1b	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to silt removal facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1 and 2
D2a	Have dikes or embankments for flood protection implemented around the boundaries of earthwork areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2b	Have temporary ditches provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2c	Are the sediment/ silt traps incorporated in the permanent drainage channels to enhance deposition rate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D3	Are the retention time for silt/s and traps of the silt removal facilities be 5 minutes under maximum flow conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4a	Are surface excavation works minimised during rainy seasons (April to September), as possible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4b	Are all exposed earth areas completed or vegetated as soon as possible after earthworks completed, or alternatively, within 14 days of the cessation of earthworks where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4c	Are exposed slope surfaces covered by tarpaulin sheets?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	To be treated with shotcrete at part of slope surface.
D5a	Have the overall slope of the site should be kept a minimum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D5b	Are all trafficked areas and access roads protected by coarse stone ballast?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6a	Are all drainage facilities and erosion and sediment control structures inspected regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6b	Are all drainage facilities and erosion and sediment control structures maintained to ensure proper and efficient operation at all times and particularly following rainstorms?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6c	Is the deposited silt and grit removed regularly and disposed of by spreading evenly over stable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 1
D7a	Have the excavation of trenches in wet periods be dug and backfilled in short sections?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7b	Is rainwater pumped out from trenches discharged into storm drains via silt system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D8	Are open stockpiles of construction materials e.g. aggregates and sand of more than 50m ³ on site covered with tarpaulin or similar fabric during rainstorms?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D9a	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D9b	Are the discharges of surface run-off into foul sewer always prevented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10a	Are particular attention paid to the control of silty surface runoff during storm event ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10b	Are the precautions to be taken at any time of year when rainstorms are likely? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly. ii. Temporarily exposed slope surfaces should be cover by tarpaulin. iii. Temporary access roads should be protected by crushed stone or gravel. iv. Intercepting channels should be provided (e.g. along the crest/edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. v. Trenches should be dug and backfilled in short sections. Measures should be taken to minimize the ingress of rainwater into trenches.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10c	Are the actions to be taken when a rainstorm is imminent or forecast ? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be checked to ensure that they can function properly. ii. Open stockpiles of construction materials (e.g. aggregates, sand and fill materials) on site should be covered with tarpaulin or similar fabric. iii. All temporary covers to slopes and stockpiles should be secured.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10d	Are the actions to be taken during or after rainstorms ? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be checked and maintained to ensure satisfactory working conditions. Attention should be given to safety when carrying out this work.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11a	Are all vehicles and plant cleaned before leaving a construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11b	Is the wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11c	Are the vehicle wash-water have sand and silt settled out and removed at least on a weekly basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11d	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11e	Is the section of construction road between the wheel washing bay and the public road paved with backfill?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11f	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D12a	Are oil interceptors provided in the site drainage system downstream of any oil/ fuel pollution sources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D12b	Are the oil interceptors are emptied and cleaned regularly to prevent the release of O&G into the storm water drainage system after accidental spillage?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

D12c	Has a bypass provided to prevent flushing during heavy rain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D13	Are the construction solid waste, debris and rubbish on site collected, handled and disposed of properly? (same with waste item)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D14	Are all fuel tanks and storage areas provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D15	Is Intercepting bund or barrier along the roadside constructed to prevent pollution risk arising from work area (waste reception area)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D16	Are site drainage systems provided over the entire project site with sediment control facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D17	Are sedimentation tanks provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D18	Is there any sediment plume observed in nearby watercourses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Sewage Effluent from Workforce (On-site sanitary facilities)					
D19a	Are portable chemical toilets and sewage holding tanks provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D19b	Is the sewage generated from toilets collected by licensed contractor and responsible for disposal and maintenance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D20	Are the notices posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Accidental Spillage of Chemical (Service workshop and maintenance facilities)					
D21a	Are the service workshop and maintenance facilities located within a bunded area, and sumps and oil interceptors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
D21b	Are all maintenance of equipment involving activities with potential for leakage and spillage undertaken within the areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
D21c	Is chemical leakage or spillages contained and cleaned up immediately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
Surface Water Drainage System					
D22a	Is the temporary surface water drainage system provided to manage runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22b	Does the system consist of channel as constructed around the perimeter of the site area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22c	Does the system collect surface water from the areas of higher elevations to those of lower elevations and ultimately to the discharge point?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22d	Is the erosion minimised?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23a	Does the system include the use of a silt fence around the soil stockpile areas to prevent sediment from entering the system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23b	Is the regular cleaning carried out to prevent blockage of the passage of waste flow in silt fence?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
Waste Management					
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2a	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2b	Does accumulation of waste avoid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2c	Is waste disposed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2d	Regular waste collection by approved waste collector in purpose-built vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E3	Burning of refuse on construction site prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C&D Materials					
E4a	Are there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E4b	Are the C&D materials sorted and recycled on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5a	Is the durable formwork or plastic facing for construction works used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5b	Do the wooden hoardings avoid to be used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5c	Is metal hoarding used to enhance the possibility of recycling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6a	Are the concrete and masonry used as general fill ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6b	Are the steel reinforcement bars used by scrap steel mills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6c	Is the segregation and storage of C&D wastes undertaken in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6d	Does the use of reusable steel formwork maximise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E7a	Are the temporary stockpiles maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E7b	Is the excavated fill material reused for backfilling and reinstatement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8a	Are the excavated slope, stockpile material and bund walls covered by tarpaulin?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8b	Are covering trucks or transporting wastes in enclosed containers when transportation of waste ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8c	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E9	Is hydroseeding of the topsoil on the stockpile implemented to improve visual appearance and prevent soil erosion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E10	Is the nomination of approved personnel to be responsible for good site practices and making arrangements for collection of all wastes generated on-site and effective disposal implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

E11	Are the training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concept implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E12	Are the regular cleaning and maintenance programme for drainage systems, sumps, oil interceptors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E13a	Are wood, steel and other metals separated for re-use and/or recycling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E13b	Do the excavated materials appear contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
E13c	If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
E14	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E15	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
Chemical Waste / Waste Oil													
E16	Are chemicals and waste oil recycled or disposed properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
Chemical Packaging													
E17a	Have the containers a capacity of <450 L unless the specification has been approved by EPD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
E17b	Are the containers (holding, resistant to corrosion, maintained in a good condition, and securely closed) used for storage of chemical wastes ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
Chemical Labelling													
E18	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area? <table border="1"> <thead> <tr> <th>Capacity of Container</th> <th>Dimensions of Label</th> </tr> </thead> <tbody> <tr> <td>< 50L</td> <td>No less than 90 x 100mm</td> </tr> <tr> <td>50 to 450L</td> <td>No less than 120 x 150mm</td> </tr> <tr> <td>> 450L</td> <td>No less than 180 x 200mm</td> </tr> </tbody> </table>	Capacity of Container	Dimensions of Label	< 50L	No less than 90 x 100mm	50 to 450L	No less than 120 x 150mm	> 450L	No less than 180 x 200mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Capacity of Container	Dimensions of Label												
< 50L	No less than 90 x 100mm												
50 to 450L	No less than 120 x 150mm												
> 450L	No less than 180 x 200mm												
Chemical Waste / Fuel Storage Area													
E19a	Are the storage area are clearly labelled and separated (if needed)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E19b	Are the storage area enclosed 3 sides by walls/fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								
E19c	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering and reduce heat from sunlight?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								
E19d	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								
E20	Is chemical waste collected by licensed waste collectors and disposed of at licensed facility eg. Chemical Waste Treatment Centre?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									

Records					
E21	Is a licensed waste hauler used for waste collection ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E22	Are the records of quantities of wastes generated, recycled and disposed properly kept?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E23	For the demolition material / waste, is the number of loads for each day recorded as appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

F	Landfill Gas (LFG)	N/A or Not Observed	Yes	No	Remarks / Photo
Within NENT Landfill Extension					
F1	Are special LFG precautions taken to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F2	Are prominent safety warning signs erected on-site to alert all personnel and visitors of LFG hazards during excavation works.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F3	Is no smoking or burning permitted on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F4	Are prominent 'No smoking' and 'No Naked Flames' signs erected on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F5	Is no worker allowed to work alone at any time in excavated trenches or confined areas on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F6	Is adequate fire fighting equipment provided on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F7	Are construction equipment equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F8	Are electrical motors and extension cords explosion-proof and intrinsically safe for use on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F9	Is 'Permit to Work' system implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F10	Are welding, flame-cutting or other hot works conducted only under 'Permit to Work' system following clear safety requirements, gas monitoring procedures and presence of qualified persons to supervise the works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F11a	For pipng assembly or conduit construction , are all valves and seals closed immediately after installation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11b	Are the pipe ends sealed on one side during installation if installation of large diameter pipes (diameter > 600mm) is required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11c	Is forced ventilation implemented prior to operation of installed pipeline ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11d	Is forced ventilation implemented for works inside trenches deeper than 1m ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F12	Is frequency and location of LFG monitoring within excavation area determined prior to commencement of works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

	*LFG monitoring in excavations should be conducted at < 10mm from exposed ground surface.				
F13	For excavation works, Is LFG monitoring conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F14	Are LFG monitoring conducted periodically when any cracks on ground level encountered on-site? *Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F15a	Are LFG precautionary measures involved in excavation and pipng works provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F15b	Are temporary offices or buildings located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F16	Is a Safety Officer trained in the use of gas detection equipment and LFG- related hazards present on-site throughout the groundwork phase? *The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17a	Periodically during groundwork construction, Is the works area monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment? *The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17c	Are all measurements in excavations made with monitoring tube located < 10mm from exposed ground surface?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F18	For excavations > 1m, are measurements conducted? • At ground surface before excavation commences; • Immediately before any worker enters the excavation; • At the beginning of each working day for entire period the excavation remains open; and	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

	<ul style="list-style-type: none"> Periodically throughout the working day whilst workers are in excavation. 				
F19	<p>For excavations 300mm to 1m, are measurements conducted?</p> <ul style="list-style-type: none"> Directly after excavation has been completed; and Periodic all whilst excavation remains open. 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F20	For excavations < 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

G	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Is the work site confined within site boundaries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G2	Is damage to surrounding areas avoided ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G3	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Advanced screening tree planting					
G4a	Is early planting using fast growing plants and tall shrubs at strategic locations within site implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G4b	Are the roadside planter and shrub planting implemented in front of Cheung Sha Temple ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Boundary Green Belt planting					
G5	Are the fast growing and fire-resistant plant species planted around the site perimeter?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Temporary landscape treatment as green surface cover					
G6	Are grass hydroseeding or synthetic covering material of green colour used as a temporary slope cover ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Existing tree preservation					
G7	Are existing and affected tree which identified as ecological significant preserved whenever possible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

H	Ecology	N/A or Not Observed	Yes	No	Remarks / Photo
H1	Is transplantation of the important plant species implemented? Is post-transplantation maintained and monitored regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

I	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Environmental Complaint received during this week?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
J	General Housekeeping / Others	N/A or Not Observed	Yes	No	Remarks / Photo
J1	Are the defined boundaries of working areas identified to prevent loss of vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

J2	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
----	---	--------------------------	-------------------------------------	--------------------------	--

Follow up action for previous Site Inspection:

Waiting for Contractor's Input

Observation(s):

1. Dusty materials are entering in the exist channel in Portion A.
2. Earth bund shall be constructed at the edge of the slope to prevent surface runoff flowing outside the site in Portion A.
3. The work area in Portion A is dry and dusty.

Reminder(s):

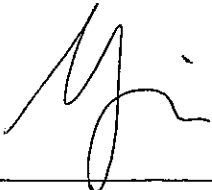



1. The accumulated silt in sedimentation basin Portion E3 shall be removed regularly.

Corretive Actions – Mitigation Measures Implemented or Proposed (if any):**Observation(s):**

1. Earth bund or sand barriers shall be provided along the existing channels in Portion A.
2. The Contractor has been recommended to construction earth bund along the edge of the slope in Portion A.
3. The Contractor has been advised to schedule watering in the work area and review the coverage of the water sprinkler.



Reminder(s):

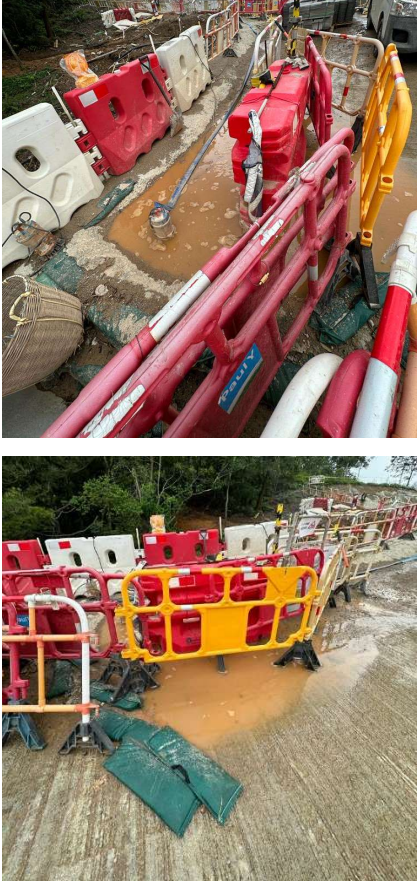

4. The Contractor has been reminded to clear up the accumulated silt regularly to ensure the proper function of the sedimentation basin.




	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:				
Name:	Andy Ng		Kristy Wong	Sylvia Ho
Date:	24 July 2023		24 July 2023	24 July 2023

PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
<p>5 June 2023</p> <p>SBA</p>  <p>Portion E3-1</p>   <p>Observation: The stagnant water and silt in the drip trays shall be clear off in Portion B2 and SBA.</p>	<p>Waiting for Contractor's Input</p>

Observation and Recommendation	Follow-up status
<p><u>26 June 2023</u></p>  <p>Observation: The sediment at the drainage system and site boundary, especially at the lower elevations should be kept cleaning regularly. (Most of sediment was found at the lower elevations of Portion A). The contractor should ensure no untreated construction runoff discharging directly outside the site boundary of the project.</p>	<p>Waiting for Contractor's Input</p>
<p><u>3 July 2023</u></p>  <p>Observation: Dusty stockpiles in Portion A shall be covered with impervious sheets when they are not in used. The Contractor was reminded to cover the dusty stockpile with impervious sheets.</p>	<p>Waiting for Contractor's Input</p>

Observation and Recommendation	Follow-up status
<p>3 July 2023</p>  <p>Observation:</p> <p>Muddy water is observed at the vehicular entrance in Portion A. The Contractor was reminded to clear the muddy water and divert the muddy water to wastewater treatment facility.</p>	<p style="text-align: center;">Waiting for Contractor's Input</p>
<p>10 July 2023</p>  <p>Observation:</p> <p>The loaded dump truck without covered by impervious sheeting was found. The contractor has been advised that the loaded dump trucks should be covered by impervious sheeting when transportation of materials was conducting at the access road.</p>	<p style="text-align: center;">Waiting for Contractor's Input</p>

Observation and Recommendation	Follow-up status
<p>10 July 2023</p>  <p>Observation:</p> <p>The stagnant water, floating leaves, deposited silt and grit were found at the sedimentation basin near the wheel washing facilities at the Portion B1. The contractor has been recommended that the stagnant water should be collected to silt removal facilities for treatment before reusing for wheel washing. The floating leaves, deposited silt and grit should be removed regularly.</p>	<p>Waiting for Contractor's Input</p>
<p>10 July 2023</p>  <p>Observation:</p> <p>The exposed slope surfaces were not covered by tarpaulin sheets or treated with shotcrete at the Portion E3-1. The contractor has been recommended to implement the cover works of exposed slope surfaces by tarpaulin sheets or shotcrete at the Portion E3-1 to minimise the potential high concentration construction runoff to silt removal facilities.</p>	 <p>The exposed slopes were covered with impervious sheets in Portion E3.</p>

Observation and Recommendation	Follow-up status
<p>18 July 2023</p>  <p><u>Observation:</u></p> <p>The earth bund along the edge of the slope in Portion A is collapsed.</p>	<p>Waiting for Contractor's Input</p>
<p>18 July 2023</p>   <p><u>Observation</u></p> <p>The stagnant water in the drip trays should be cleared off In Portion A.</p>	<p>Waiting for Contractor's Input</p>

18 July 2023



Observation:

EP shall be displayed at the entrance of portion.

Waiting for Contractor's Input

18 July 2023





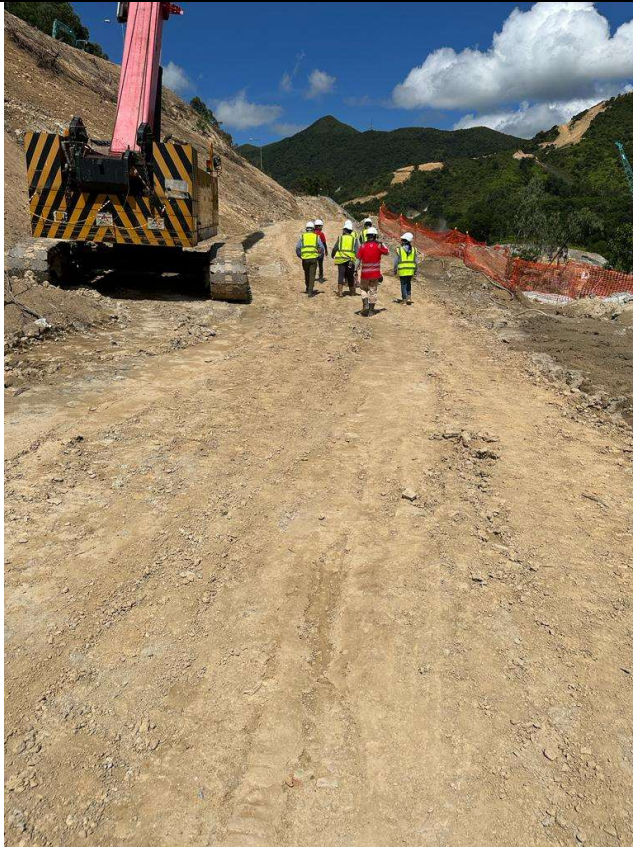
Observation

Holes were found on the site fencing.

Waiting for Contractor's Input

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
 <p>Observation: Dusty materials are entering in the exist channel in Portion A.</p>	
 <p>Observation: Earth bund shall be constructed at the edge of the slope to prevent surface runoff flowing outside the site in Portion A.</p>	



Observation:

The work area in Portion A is dry and dusty.



Reminder:

The accumulated silt in sedimentation basin Portion E3 shall be removed regularly.

PART III Temporary Surface Water Drainage System (TSWD) Photo Record during the environmental site inspection

<p>Portion A: Silt Removal Facility</p> 	<p>Portion A: Surface Protection</p> 
<p>Portion A: Surface Protection and Earth Bund</p> 	<p>Portion E: Surface Protection</p> 
<p>Portion E: Surface Protection</p> 	<p>Portion E3: Surface Protection and Sedimentaion Basin</p> 

Portion E3: Surface Protection, Silt Removal Facility and Sedimentaion Basin



Inspection Date:	31 July 2023	Inspected By:	Jason Man
Time:	14:00	Weather Condition:	Fine
Participants:	Kim Tang (ER), Kristy Wong (Contractor), Jason Man (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A3	Is wastewater discharge licence available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B2	Are plant and equipment well maintained (i.e. without black smoke from powered plant)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B3	Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B4	Are the worksites wetted with water regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B5	Are NRMM labels properly affixed on the PMEs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B6	Observed dust source(s)				
		<input checked="" type="checkbox"/> Wind erosion			
		<input checked="" type="checkbox"/> Vehicle/ Equipment Movements			
		<input checked="" type="checkbox"/> Loading/ unloading of materials			
		<input type="checkbox"/> Others: _____			
Air Pollution Control (Construction Dust) Regulation					
Part I Control Requirements for Notifiable Works					
Demolition of building					
B7	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Construction of the superstructure of a building					
B8	Is scaffolding erected around the perimeter of a building under construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

B9	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B10	Is the skip for materials transport enclosed by impervious sheeting ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Part III General Control Requirements					
Site boundary and entrance					
B11	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B12	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B13	Are the hoarding $\geq 2.4\text{m}$ tall provided at the site boundary near a road, street, service lane or other area accessible to the public?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Assess road					
B14	Are every main haul road (having a vehicle passing rate of higher than 4 in any 30 minutes) paved with concrete, bituminous materials, hardcores or metal plates, and kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B15	Are every main haul road sprayed with water or a dust suppression chemical?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B16	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B17	Are appropriate speed limit sign displayed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B18	Is unpaved main haul road wet by water spraying?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 3
Cement and dry pulverized fuel ash (PFA)					
B19	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B20	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B21	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Exposed earth					
B22	Is the exposed earth properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within 6 months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Part IV Control Requirements for Individual Activities					
Stockpiling of dusty materials					
B23	Are the stockpiling of dusty materials (a) covered entirely by impervious sheeting or (b) placed in an area sheltered on the top and the 3 sides or (c) sprayed with water or a dust suppression chemical to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B24	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Loading, unloading or transfer of dusty materials					
B25	Are all dusty materials sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B26	Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Use of vehicles					
B27	Are every vehicle washed immediately to remove any dusty materials from its body and wheels before leaving a construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B28	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
B29	Are site vehicle movements confined to designated roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pneumatic or power-driven drilling, cutting and polishing					
B30	Are surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operations takes place sprayed with water or a dust suppression chemical continuously? *Unless the process is accompanied by the operation of an effective dust extraction and filtering device.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Debris handling					
B31	Are any debris covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B32	Are every debris chute shall be enclosed by impervious sheeting or similar materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B33	Are the watering spray or a dust suppression chemical conducted before debris is dumped into a debris chute?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

Excavation or earth moving				
B34	Are the working area of any excavation or earth moving operation sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Site clearance				
B35	Are the working area for the uprooting of trees, shrubs, or vegetation or for the removal of boulders, poles, pillars or temporary or permanent structures sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B36	Are all demolished items (including trees, shrubs, vegetation, boulders, poles, pillars, structures, debris, rubbish and other items arising from site clearance) that may dislodge dust particles covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides within a day of demolition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

C	Construction Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is well-maintained plant operated on-site and plant served regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C2	Are vehicles and equipment switched off or throttled down while not in use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C3	Is the noise directed away from nearby NSRs ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C4	Are the silencers or mufflers properly fitted on construction equipment and maintained regularly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C5	Are mobile and/or noisy plant sited as far away from NSRs as possible and practicable and orientated so that the noise is directed away from nearby NSRs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C6	Are material stockpiles , mobile container office and other structures utilised to screen noisy activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C7	Is temporary hoarding installed located on the site boundaries between noisy construction activities and NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C8	Are noise barriers (typically density @14kg/m ²) acoustic mat or full enclosure close to noise plants including air compressor, generators and saw etc. provided to protect NSRs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
C9	Is the sequencing operation of construction plants where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C10	Is the hoarding maintained properly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C11	Air compressors (500 kPa or above) and hand held percussive breaker (mass of above 10 kg) with valid noise labels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C12	Are compressor operated with doors closed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C13	QPME used with valid noise labels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C14	Major noise source(s)	<input checked="" type="checkbox"/> Traffic <input checked="" type="checkbox"/> Construction activities inside of site <input type="checkbox"/> Construction activities outside of site <input type="checkbox"/> Others: _____			

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Runoff					
D1a	At the start of site establishment, are perimeter cut-off drains constructed to direct off-site water around the site with internal drainage works and erosion and sedimentation control facilities implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D1b	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to silt removal facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Refer to Observation 1
D2a	Have dikes or embankments for flood protection implemented around the boundaries of earthwork areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2b	Have temporary ditches provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
D2c	Are the sediment/ silt traps incorporated in the permanent drainage channels to enhance deposition rate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D3	Are the retention time for silt/s and traps of the silt removal facilities be 5 minutes under maximum flow conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4a	Are surface excavation works minimised during rainy seasons (April to September), as possible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4b	Are all exposed earth areas completed or vegetated as soon as possible after earthworks completed, or alternatively, within 14 days of the cessation of earthworks where practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4c	Are exposed slope surfaces covered by tarpaulin sheets?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	To be treated with shotcrete at part of slope surface. Refer to Observation 2
D5a	Have the overall slope of the site should be kept a minimum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D5b	Are all trafficked areas and access roads protected by coarse stone ballast?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6a	Are all drainage facilities and erosion and sediment control structures inspected regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 3 and Reminder 1
D6b	Are all drainage facilities and erosion and sediment control structures maintained to ensure proper and efficient operation at all times and particularly following rainstorms?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 3 and Reminder 1
D6c	Is the deposited silt and grit removed regularly and disposed of by spreading evenly over stable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 3 and Reminder 1
D7a	Have the excavation of trenches in wet periods be dug and backfilled in short sections?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7b	Is rainwater pumped out from trenches discharged into storm drains via silt system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D8	Are open stockpiles of construction materials e.g. aggregates and sand of more than 50m ³ on site covered with tarpaulin or similar fabric during rainstorms?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D9a	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D9b	Are the discharges of surface run-off into foul sewer always prevented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10a	Are particular attention paid to the control of silty surface runoff during storm event ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 4
D10b	Are the precautions to be taken at any time of year when rainstorms are likely? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly. ii. Temporarily exposed slope surfaces should be cover by tarpaulin. iii. Temporary access roads should be protected by crushed stone or gravel. iv. Intercepting channels should be provided (e.g. along the crest/edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. v. Trenches should be dug and backfilled in short sections. Measures should be taken to minimize the ingress of rainwater into trenches.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(i) Refer to Observation 4
D10c	Are the actions to be taken when a rainstorm is imminent or forecast ? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be checked to ensure that they can function properly. ii. Open stockpiles of construction materials (e.g. aggregates, sand and fill materials) on site should be covered with tarpaulin or similar fabric. iii. All temporary covers to slopes and stockpiles should be secured.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10d	Are the actions to be taken during or after rainstorms ? (Appendix A2 of ProPECC PN 1/94) i. Silt removal facilities, channels and manholes should be checked and maintained to ensure satisfactory working conditions. Attention should be given to safety when carrying out this work.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 4
D11a	Are all vehicles and plant cleaned before leaving a construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11b	Is the wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11c	Are the vehicle wash-water have sand and silt settled out and removed at least on a weekly basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11d	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11e	Is the section of construction road between the wheel washing bay and the public road paved with backfill?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11f	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D12a	Are oil interceptors provided in the site drainage system downstream of any oil/ fuel pollution sources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

D12b	Are the oil interceptors emptied and cleaned regularly to prevent the release of O&G into the storm water drainage system after accidental spillage?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D12c	Has a bypass provided to prevent flushing during heavy rain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D13	Are the construction solid waste, debris and rubbish on site collected, handled and disposed of properly? (same with waste item)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D14	Are all fuel tanks and storage areas provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D15	Is Intercepting bund or barrier along the roadside constructed to prevent pollution risk arising from work area (waste reception area)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D16	Are site drainage systems provided over the entire project site with sediment control facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D17	Are sedimentation tanks provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D18	Is there any sediment plume observed in nearby watercourses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Sewage Effluent from Workforce (On-site sanitary facilities)					
D19a	Are portable chemical toilets and sewage holding tanks provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D19b	Is the sewage generated from toilets collected by licensed contractor and responsible for disposal and maintenance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D20	Are the notices posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Accidental Spillage of Chemical (Service workshop and maintenance facilities)					
D21a	Are the service workshop and maintenance facilities located within a bunded area, and sumps and oil interceptors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
D21b	Are all maintenance of equipment involving activities with potential for leakage and spillage undertaken within the areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
D21c	Is chemical leakage or spillages contained and cleaned up immediately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
Surface Water Drainage System					
D22a	Is the temporary surface water drainage system provided to manage runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22b	Does the system consist of channel as constructed around the perimeter of the site area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22c	Does the system collect surface water from the areas of higher elevations to those of lower elevations and ultimately to the discharge point?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22d	Is the erosion minimised?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23a	Does the system include the use of a silt fence around the soil stockpile areas to prevent sediment from entering the system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D23b	Is the regular cleaning carried out to prevent blockage of the passage of waste flow in silt fence?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
------	--	--------------------------	-------------------------------------	--------------------------	--

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
Waste Management					
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2a	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2b	Does accumulation of waste avoid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2c	Is waste disposed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2d	Regular waste collection by approved waste collector in purpose-built vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E3	Burning of refuse on construction site prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C&D Materials					
E4a	Are there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E4b	Are the C&D materials sorted and recycled on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5a	Is the durable formwork or plastic facing for construction works used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5b	Do the wooden hoardings avoid to be used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5c	Is metal hoarding used to enhance the possibility of recycling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6a	Are the concrete and masonry used as general fill ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6b	Are the steel reinforcement bars used by scrap steel mills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6c	Is the segregation and storage of C&D wastes undertaken in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6d	Does the use of reusable steel formwork maximise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E7a	Are the temporary stockpiles maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E7b	Is the excavated fill material reused for backfilling and reinstatement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8a	Are the excavated slope, stockpile material and bund walls covered by tarpaulin?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8b	Are covering trucks or transporting wastes in enclosed containers when transportation of waste ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8c	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E9	Is hydroseeding of the topsoil on the stockpile implemented to improve visual appearance and prevent soil erosion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E10	Is the nomination of approved personnel to be responsible for good site practices and making arrangements for collection of all wastes generated on-site and effective disposal implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

E11	Are the training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concept implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E12	Are the regular cleaning and maintenance programme for drainage systems, sumps, oil interceptors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E13a	Are wood, steel and other metals separated for re-use and/or recycling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E13b	Do the excavated materials appear contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
E13c	If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
E14	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E15	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
Chemical Waste / Waste Oil													
E16	Are chemicals and waste oil recycled or disposed properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 5								
Chemical Packaging													
E17a	Have the containers a capacity of <450 L unless the specification has been approved by EPD?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
E17b	Are the containers (holding, resistant to corrosion, maintained in a good condition, and securely closed) used for storage of chemical wastes ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A								
Chemical Labelling													
E18	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area? <table border="1"> <thead> <tr> <th>Capacity of Container</th> <th>Dimensions of Label</th> </tr> </thead> <tbody> <tr> <td>< 50L</td> <td>No less than 90 x 100mm</td> </tr> <tr> <td>50 to 450L</td> <td>No less than 120 x 150mm</td> </tr> <tr> <td>> 450L</td> <td>No less than 180 x 200mm</td> </tr> </tbody> </table>	Capacity of Container	Dimensions of Label	< 50L	No less than 90 x 100mm	50 to 450L	No less than 120 x 150mm	> 450L	No less than 180 x 200mm	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Capacity of Container	Dimensions of Label												
< 50L	No less than 90 x 100mm												
50 to 450L	No less than 120 x 150mm												
> 450L	No less than 180 x 200mm												
Chemical Waste / Fuel Storage Area													
E19a	Are the storage area are clearly labelled and separated (if needed)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									
E19b	Are the storage area enclosed 3 sides by walls/fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								
E19c	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering and reduce heat from sunlight?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								
E19d	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/O								
E20	Is chemical waste collected by licensed waste collectors and disposed of at licensed facility eg. Chemical Waste Treatment Centre?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>									

Records					
E21	Is a licensed waste hauler used for waste collection ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E22	Are the records of quantities of wastes generated, recycled and disposed properly kept?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E23	For the demolition material / waste, is the number of loads for each day recorded as appropriate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

F	Landfill Gas (LFG)	N/A or Not Observed	Yes	No	Remarks / Photo
Within NENT Landfill Extension					
F1	Are special LFG precautions taken to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F2	Are prominent safety warning signs erected on-site to alert all personnel and visitors of LFG hazards during excavation works.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F3	Is no smoking or burning permitted on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F4	Are prominent 'No smoking' and 'No Naked Flames' signs erected on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F5	Is no worker allowed to work alone at any time in excavated trenches or confined areas on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F6	Is adequate fire fighting equipment provided on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F7	Are construction equipment equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F8	Are electrical motors and extension cords explosion-proof and intrinsically safe for use on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/O
F9	Is 'Permit to Work' system implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F10	Are welding, flame-cutting or other hot works conducted only under 'Permit to Work' system following clear safety requirements, gas monitoring procedures and presence of qualified persons to supervise the works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F11a	For pipng assembly or conduit construction , are all valves and seals closed immediately after installation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11b	Are the pipe ends sealed on one side during installation if installation of large diameter pipes (diameter > 600mm) is required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11c	Is forced ventilation implemented prior to operation of installed pipeline ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F11d	Is forced ventilation implemented for works inside trenches deeper than 1m ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
F12	Is frequency and location of LFG monitoring within excavation area determined prior to commencement of works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

	*LFG monitoring in excavations should be conducted at < 10mm from exposed ground surface.				
F13	For excavation works, Is LFG monitoring conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F14	Are LFG monitoring conducted periodically when any cracks on ground level encountered on-site? *Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F15a	Are LFG precautionary measures involved in excavation and pipng works provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F15b	Are temporary offices or buildings located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F16	Is a Safety Officer trained in the use of gas detection equipment and LFG- related hazards present on-site throughout the groundwork phase? *The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17a	Periodically during groundwork construction, Is the works area monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment? *The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17c	Are all measurements in excavations made with monitoring tube located < 10mm from exposed ground surface?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F18	For excavations > 1m, are measurements conducted? • At ground surface before excavation commences; • Immediately before any worker enters the excavation; • At the beginning of each working day for entire period the excavation remains open; and	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 3)

	<ul style="list-style-type: none"> Periodically throughout the working day whilst workers are in excavation. 				
F19	For excavations 300mm to 1m, are measurements conducted? <ul style="list-style-type: none"> Directly after excavation has been completed; and Periodic all whilst excavation remains open. 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F20	For excavations < 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

G	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Is the work site confined within site boundaries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G2	Is damage to surrounding areas avoided ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G3	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Advanced screening tree planting					
G4a	Is early planting using fast growing plants and tall shrubs at strategic locations within site implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G4b	Are the roadside planter and shrub planting implemented in front of Cheung Sha Temple ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Boundary Green Belt planting					
G5	Are the fast growing and fire-resistant plant species planted around the site perimeter?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Temporary landscape treatment as green surface cover					
G6	Are grass hydroseeding or synthetic covering material of green colour used as a temporary slope cover ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Existing tree preservation					
G7	Are existing and affected tree which identified as ecological significant preserved whenever possible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

H	Ecology	N/A or Not Observed	Yes	No	Remarks / Photo
H1	Is transplantation of the important plant species implemented? Is post-transplantation maintained and monitored regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

I	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Environmental Complaint received during this week?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
J General Housekeeping / Others					
J1	Are the defined boundaries of working areas identified to prevent loss of vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

J2	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
----	---	--------------------------	-------------------------------------	--------------------------	--

Follow up action for previous Site Inspection:

Nil

Observation(s):

1. Earth bunds and ditches should be established at the boundary of the +52 mpd Platform of the Portion A.
2. The slope surface at the Portion E4 shall be covered by impervious sheet.
3. The assess road at the Portion E4 is dry.
4. The accumulated silt and grit were found near the sandbags barriers of the Portion E3-1 silt removal facilities.
5. The accumulated water at the drip tray under the silt removal facilities is found.

Reminder(s):

1. The contractor has been reminded that the particular attention should be paid to the control of silty surface runoff during upcoming storm event in accordance with Appendix A2 of ProPECC PN/94.

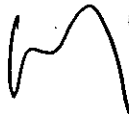


Corrective Actions – Mitigation Measures Implemented or Proposed (if any):

Observation(s):

1. The contractor has been advised that the earth bunds and ditches should be constructed at the boundary of the +52 mpd Platform of the Portion A. The sandbags barriers or other control of surface runoff measures should be provided at the boundary in short term to avoid the surface runoff flow to the earth bunds at the boundary of the +38 mpd platform directly.
2. The contractor has been recommended that the exposed slope at the Portion E4 should be covered by impervious sheet. The exposed slope at the Portion E4 should be treated with shotcrete for long term.
3. The contractor has been advised that the assess road at the Portion E4 should be sprayed with water when the assess road is dry to minimize the dust suppression. The water sprinkler should be considered to establish at the assess road of the Portion E4.
4. The contractor has been advised that the silt and grit should be removed near the sandbags barriers of the Portion E3-1 silt removal facilities after heavy rain.
5. The contractor has been recommended to remove the accumulated water at the drip tray to minimize the potential chemical waste.

Reminder(s):

1. The contractor has been reminded that the particular attention should be paid to the control of silty surface runoff during upcoming storm event in accordance with Appendix A2 of ProPECC PN/94.


	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Jason Man	/	JC Lau Kristy Wong	Sylvia Ho
Date:	31 July 2023	/	31 July 2023	31 July 2023

PART I Follow-up status of the previous site inspection


Observation and Recommendation	Follow-up status
<p>5 June 2023</p> <p>SBA</p>  <p>Portion E3-1</p>   <p>Observation: The stagnant water and silt in the drip trays shall be clear off in Portion B2 and SBA.</p>	<p style="text-align: center;">Waiting for Contractor's Input</p>

Observation and Recommendation	Follow-up status
<p><u>26 June 2023</u></p>  <p>Observation: The sediment at the drainage system and site boundary, especially at the lower elevations should be kept cleaning regularly. (Most of sediment was found at the lower elevations of Portion A). The contractor should ensure no untreated construction runoff discharging directly outside the site boundary of the project.</p>	<p>Waiting for Contractor's Input</p>
<p><u>3 July 2023</u></p>  <p>Observation: Dusty stockpiles in Portion A shall be covered with impervious sheets when they are not in used. The Contractor was reminded to cover the dusty stockpile with impervious sheets.</p>	<p>Waiting for Contractor's Input</p>



Observation and Recommendation	Follow-up status
<p><u>3 July 2023</u></p>  <p>Observation:</p> <p>Muddy water is observed at the vehicular entrance in Portion A. The Contractor was reminded to clear the muddy water and divert the muddy water to wastewater treatment facility.</p>	<p style="text-align: center;">Waiting for Contractor's Input</p>
<p><u>10 July 2023</u></p>  <p>Observation:</p> <p>The loaded dump truck without covered by impervious sheeting was found. The contractor has been advised that the loaded dump trucks should be covered by impervious sheeting when transportation of materials was conducting at the access road.</p>	<p style="text-align: center;">Waiting for Contractor's Input</p>


Observation and Recommendation	Follow-up status
<p><u>10 July 2023</u></p>  <p>Observation:</p> <p>The stagnant water, floating leaves, deposited silt and grit were found at the sedimentation basin near the wheel washing facilities at the Portion B1. The contractor has been recommended that the stagnant water should be collected to silt removal facilities for treatment before reusing for wheel washing. The floating leaves, deposited silt and grit should be removed regularly.</p>	<p style="text-align: center;">Waiting for Contractor's Input</p>

Observation and Recommendation	Follow-up status
<p><u>10 July 2023</u></p>  <p>Observation:</p> <p>The exposed slope surfaces were not covered by tarpaulin sheets or treated with shotcrete at the Portion E3-1. The contractor has been recommended to implement the cover works of exposed slope surfaces by tarpaulin sheets or shotcrete at the Portion E3-1 to minimise the potential high concentration construction runoff to silt removal facilities.</p>	 <p>The exposed slopes were covered with impervious sheets in Portion E3.</p>
<p><u>18 July 2023</u></p>  <p>Observation:</p> <p>The earth bund along the edge of the slope in Portion A is collapsed. The earth bund along the edge of the slope in Portion A should be reconstructed to prevent surface runoff flowing outside the site boundary. The Contractor has been recommended to review the height of the earth bund to ensure the surface runoff should not flow outside the site boundary.</p>	<p>Waiting for Contractor's Input</p>


Observation and Recommendation	Follow-up status
<p>18 July 2023</p>  <p>Observation:</p> <p>The stagnant water in the drip trays should be cleared off In Portion A. The Contractor was reminded to clear the drip tray after the rainfall.</p>	<p>Waiting for Contractor's Input</p>



Observation and Recommendation	Follow-up status
<p><u>18 July 2023</u></p>  <p>Observation: All environmental licence/permits shall be displayed at the entrance of portion. The Contractor was reminded to display all environmental licence/permits at the entrance of each portion.</p>	<p>Waiting for Contractor's Input</p>
<p><u>18 July 2023</u></p>  <p>Observation: Holes were found on the silt fence. The Contractor was recommended to review and replace the damage silt fence in SBA to fulfill FEP condition 2.13b.</p>	<p>Waiting for Contractor's Input</p>

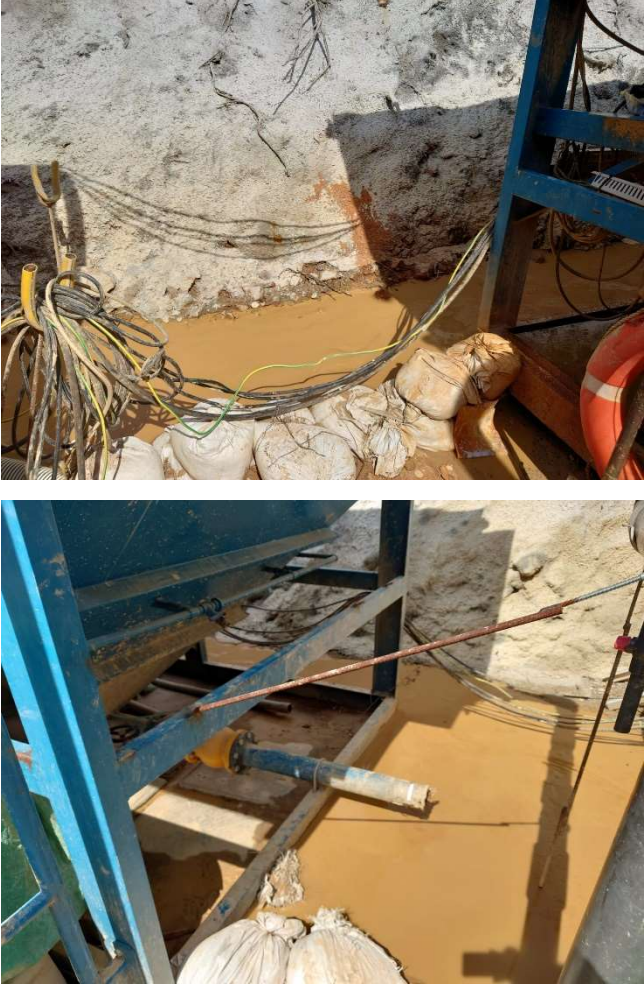
Observation and Recommendation	Follow-up status
<p><u>24 July 2023</u></p>  <p>Observation: Dusty materials are entering the exist channel in Portion A. Earth bund or sandbags barriers shall be provided along the existing channels in Portion A.</p>	<p>Waiting for Contractor's Input</p>
<p><u>24 July 2023</u></p>  <p>Observation: Earth bund shall be constructed at the edge of the slope to prevent surface runoff flowing outside the site in Portion A. The Contractor was recommended to construction earth bund along the edge of the slope in Portion A.</p>	<p>Waiting for Contractor's Input</p>


Observation and Recommendation	Follow-up status
<p><u>24 July 2023</u></p>  <p>Observation:</p> <p>The work area in Portion A is dry and dusty. The Contractor was recommended to schedule watering in the work area and review the coverage of the water sprinkler.</p>	<p style="text-align: center;">Waiting for Contractor's Input</p>

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
 <p>Observation:</p> <ol style="list-style-type: none"> 1. Earth bunds and ditches should be established at the boundary of the +52 mpd Platform of the Portion A. The contractor has been advised that the earth bunds and ditches should be constructed at the boundary of the +52 mpd Platform of the Portion A. The sandbags barriers or other control of surface runoff measures should be provided at the boundary in short term to avoid the surface runoff flow to the earth bunds at the boundary of the +38 mpd platform directly. 	<p>Waiting for Contractor's Input</p>

Observation and Recommendation	Follow-up status
 <p>Observation:</p> <ol style="list-style-type: none"> The slope surface at the Portion E4 shall be covered by impervious sheet. The contractor has been recommended that the exposed slope at the Portion E4 should be covered by impervious sheet. The exposed slope at the Portion E4 should be treated with shotcrete for long term. 	<p>Waiting for Contractor's Input</p>
 <p>Observation:</p> <ol style="list-style-type: none"> The assess road at the Portion E4 is dry. The contractor has been advised that the assess road at the Portion E4 should be sprayed with water when the assess road is dry to minimize the dust suppression. The water sprinkler should be considered to establish at the assess road of the Portion E4. 	<p>Waiting for Contractor's Input</p>

Observation and Recommendation	Follow-up status
 <p>Observation:</p> <p>4. The accumulated silt and grit were found near the sandbags barriers of the Portion E3-1 silt removal facilities. The contractor has been advised that the silt and grit should be removed near the sandbags barriers of the Portion E3-1 silt removal facilities after heavy rain.</p>	<p>Waiting for Contractor's Input</p>

Observation and Recommendation	Follow-up status
 <p>Observation:</p> <p>5. The accumulated water at the drip tray under the silt removal facilities is found. The contractor has been reminded that the particular attention should be paid to the control of silty surface runoff during upcoming storm event in accordance with Appendix A2 of ProPECC PN/94.</p>	<p>Waiting for Contractor's Input</p>



Waiting for Contractor's Input

Reminder:

1. The contractor has been reminded that the particular attention should be paid to the control of silty surface runoff during upcoming storm event in accordance with Appendix A2 of ProPECC PN/94.

PART III Temporary Surface Water Drainage System (TSWD) Photo Record during the environmental site inspection

<p>Photo 1 TSWD at Portion D</p> 	<p>Photo 2 TSWD at Portion D</p> 
<p>Photo 3 TSWD at Portion D</p> 	<p>Photo 4 TSWD at Portion A</p> 
<p>Photo 5 Silt Removal Facilities at Portion A</p> 	<p>Photo 6 Silt Removal Facilities at Portion A</p> 

<p>Photo 7 Silt Removal Facilities at Portion A</p>	<p>Photo 8 Slope protection at Portion A</p>
	
<p>Photo 9 TSWD at Portion D</p>	<p>Photo 10 Cut-off drain with site fence at Portion B2 (Infront)</p>
	
<p>Photo 11 Cut-off drain with site fence at Portion B2 (Back)</p>	<p>Photo 12 Cut-off drain with site fence at Portion B2 (Back)</p>
	

Photo 13 Channel at Portion E3-1



Appendix K Environmental Mitigation Implementation Schedule (EMIS)

North East New Territories (NENT) Landfill Extension
Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref.	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Air Quality							
S3.8.1	S3.1.8	<p>The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation.</p> <ul style="list-style-type: none"> Dust emission from construction vehicle movement is confined within the worksites area. Watering facilities will be provided at every designated vehicular exit point. Good site practice is recommended during construction phase. 	Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria.	Contractor	Entire NENT Landfill Extension site	To control the dust impact to within the HKAQO and TM - EIA criteria (Ref. 1-hr and 24hr TSP levels are 500 µg/m ³ and 260 µg/m ³ , respectively)	✓
Construction Noise							
S4	S4.9	<p>1) Use of good site practices to limit noise emissions by considering the following:</p> <ul style="list-style-type: none"> Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; Machines and plant (such as trucks, cranes) 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, where possible, be orientated so that the noise is directed away from nearby NSRs; Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works; Mobile plant should be sited as far away from NSRs as possible and practicable; Material stockpiles, mobile container site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities. 	Control construction airborne noise by means of good site practices	Contractor	Entire construction site	Noise Control Ordinance	✓
S4	S4.9	<p>2) Select "Quiet plants" which comply with the BS 5228 Part 1 or TM standards.</p>	Reduce the noise levels of plant items	Contractor	Entire construction site	Noise Control Ordinance & its TM Annex 5, TM-EIA	✓

North East New Territories (NENT) Landfill Extension
 Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Construction Runoff							
S5.8.1	S5.2.1	<p>Construction on Site Runoff</p> <ul style="list-style-type: none"> At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities. The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/sediment trap. The sediment/silt traps should be incorporated in the permanent drainage channels to enhance deposition rates. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silts and sediment traps should be 5 minutes under maximum flow conditions. Construction works should be programmed to minimize surface excavation works during the rainy seasons (April to September). All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means. The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows, and all traffic areas and access roads protected by coarse stone ballast. An additional advantage accruing from the use of crushed stone is the positive traction gained during prolonged periods of inclement weather and the reduction of surface sheet flows. All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas. 	Control construction runoff and erosion from site surface, drainage channel, stockpiles, wheel washing facilities, etc to minimize water quality during construction stage	Contractor	Entire construction site	ProPECC PN 1/94 Water Pollution Control Ordinance	✓

North East New Territories (NENT) Landfill Extension
 Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Construction Runoff (Cont'd)							
S5.8.1	S5.2.1	<ul style="list-style-type: none"> Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities. Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50 m³ should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers. Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes. All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing bay should be provided at every construction site exit. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. Oil interceptors should be provided in the site drainage system downstream of any oil/fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain. 	Control construction runoff and erosion from site surface, drainage channel, stockpiles, wheel washing facilities, etc to minimize water quality during construction stage	Contractor	Entire Construction site	ProPECC PN 1/94 Water Pollution Control Ordinance	✓

North East New Territories (NENT) Landfill Extension
 Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Construction Runoff							
S5.8.1	S5.2.1	<ul style="list-style-type: none"> Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts. Requirements for solid waste management are detailed in Section 6 of this Report. All fuel tanks and storage areas should be provided with docks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby. To prevent pollution risks arising from works area (waste reception area) and haul roads, intercepting bund or barrier along the roadside should be constructed. 	Control construction runoff and erosion from site surface, drainage channel, stockpiles, wheel washing facilities, etc to minimize water quality during construction stage	Contractor	Entire construction site	ProPECC PN 1/94 Water Pollution Control Ordinance	✓
S5.8.1	S5.2.1	<p><u>Sewage Effluent from Workforce</u></p> <ul style="list-style-type: none"> Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance. Notices will be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project. Regular environmental audit on the construction site can provide an effective control of any malpractices and can achieve continual improvement of environmental performance on site. 	Control sewage effluent arising from the sanitary facilities provided for the on-site construction workforce	Contractor	On-site sanitary facilities	ProPECC PN 1/94 Water Pollution Control Ordinance Waste Disposal Ordinance	✓
S5.8.1	S5.2.1	<p><u>Accidental Spillage of Chemical</u></p> <p>Any service workshop and maintenance facilities shall be located within a bunded area, and sumps and oil interceptors shall be provided. Maintenance of equipment involving activities with potential for leakage and spillage will only be undertaken within the areas.</p>	Control of chemical leakage	Contractor	Service workshop and maintenance facilities	ProPECC PN 1/94 Water Pollution Control Ordinance Waste Disposal Ordinance	✓

North East New Territories (NENT) Landfill Extension
 Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Erosion Control Measures							
S5.8.2	S5.2.2	<p><u>Erosion Control /Measures</u></p> <p>a. Preserve Natural Vegetation This Best Management Practices will involve preserving natural vegetation to the greatest extent possible during the construction process. and after construction where appropriate. Maintaining natural vegetation is the most effective and inexpensive form of erosion prevention control.</p> <p>b. Provision of Buffer Zone A buffer zone consists of an undisturbed area or strip of natural vegetation or an established suitable planting adjacent to a disturbed area that reduces erosion and runoff. The rooted vegetation holds soils acts as a wind break and filters runoff that may leave the site.</p> <p>c. Seeding (Temporary/Permanent) A well-established vegetative cover is one of the most effective methods of reducing erosion. Vegetation should be established on construction sites as the slopes are finished, rather than waiting until all the grading is complete. Besides, Hydroseeding will be applied on the surface of stockpiled soil and on temporary soil covers for inactive tipping areas to prevent soil erosion during rainy season.</p> <p>d. Ground Cover Ground Cover is a protective layer of straw or other suitable material applied to the soil surface. Straw mulch and/or hydromulch are also used in conjunction with seeding of critical areas for the establishment of temporary or permanent vegetation. Ground cover provides immediate temporary protection from erosion. Mulch also enhances plant establishment by conserving moisture, holding fertilizer, seed, and topsoil in place, and moderating soil temperatures.</p>	Erosion control	Contractor	Drainage system	ProPECC PN 1/94 Water Pollution Control Ordinance	✓

North East New Territories (NENT) Landfill Extension
 Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Erosion Control Measures							
S5.8.2	S5.2.2	<p>e. Hydraulic Application Hydraulic application is a mechanical method of applying erosion control materials to bare soil in order to establish erosion-resistant vegetation on disturbed areas and critical slopes. By using hydraulic equipment, soil amendments, mulch, tackifying agents, Bonded Fiber Matrix (BFM) and liquid co-polymers can be uniformly broadcast, as homogenous slurry, onto the soil. These erosion and dust control materials can often be applied in one operation.</p> <p>f. Sod Establishes permanent turf for immediate erosion protection and stabilizes rainageways.</p> <p>g. Matting There are numerous erosion control products available that can be described in various ways, such as matting, blankets, fabric and nets. These products are referred as matting. A wide range of materials and combination of materials are used to produce matting including, but not limited to: straw, jute, wood fiber, coir (coconut fiber), plastic netting, and Bonded Fiber Matrix. The selection of matting materials for a site can make a significant difference in the effectiveness of the Best Management Practices.</p> <p>h. Plastic Sheeting Plastic Sheeting will provide immediate protection to slopes and stockpiles. However, it has been known to transfer erosion problems because water will sheet flow off the plastic at high velocity. This is usually attributable to poor application, installation and maintenance.</p> <p>i. Dust Control Dust Control is one preventative measure to minimize the wind transport of soil, prevent traffic hazards and reduce sediment transported by wind and deposited in water resources.</p>	Erosion control	Contractor	Drainage system	ProPECC PN 1/94 Water Pollution Control Ordinance	✓

North East New Territories (NENT) Landfill Extension
 Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Surface Water Drainage System							
S5.8.2	S5.2.2	<p>Temporary surface water drainage system will be provided to manage runoff during construction and operation. This system will consist of channels as constructed around the perimeter of the site area. This system will collect surface water from the areas of higher elevations to those of lower elevations and ultimately to the point of discharge. Erosion will therefore be minimised.</p> <p>The temporary surface water drainage system will include the use of a silt fence around the soil stockpile areas to prevent sediment from entering the system. Regular cleaning will be carried out to prevent blockage of the passage of water flow in silt fence.</p> <p>Intermediate drainage system will be installed for filled cell/phase. The major purpose of the intermediate drainage system is to prevent the clean surface water run-off from the filled phases coming into contact with the waste mass in active cell and to prevent excessive surface water infiltration through the intermediate cover, thus contribute to increasing volume of leachate. The intermediate drainage system will collect the clean surface water run-off and divert it to the permanent discharge channels connected to the public drainage system.</p> <p>In addition, surface flow from the haul road (especially near the wheel washing facility) will be collected to a dry weather flow interceptor and conveyed to the on-site leachate treatment plant for further treatment.</p>	Surface Water Management/ Control run off	Contractor	Surface water system Construction	Water Pollution Control Ordinance TM-water	✓

North East New Territories (NENT) Landfill Extension
Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Waste Management							
S6	WM1	<p><u>C&D Materials</u></p> <p>Implement proper waste management measures during construction phase as stipulated in the Environmental Management Plan (EMP) in accordance with the ETWB TC(W) No. 19/2005 Environmental Management in Construction Sites.</p> <p>Implement a trip-ticket system to ensure that the movement of C&D materials are properly documented and verified in accordance with DEVB TC(W) No. 6/2010. Copies/counterfoils from trip-tickets (with quantities of C&D Materials off-site) should be kept for record purposes.</p> <p>Appropriate waste management should be implemented in accordance with the ETWB TC(W) No. 19/2005.</p> <p>Make provisions in Contract documents to allow and promote the use of recycled aggregates where appropriate. Ensure material balance in terms of excavated C&D materials in the design of NENT landfill extension project. The contract specifications should specify no excavated materials should be removed from the landfill extension site, but should be fully reused.</p> <p>Careful design, planning and good site management to minimise over-ordering and waste materials such as concrete, mortars and cement grouts. The design of formwork should maximise the use of standard wooden panels so that high reuse levels can be achieved. Alternatives such as steel formwork or plastic fencing should be considered to increase the potential for reuse.</p> <p>The Contractor should recycle as much as possible the C&D waste on-site through proper waste segregation on-site. Concrete and masonry should be used as general fill and steel reinforcement bars can be used by scrap steel mills. Proper areas should be designated for waste segregation and storage wherever site conditions permit. Maximise the use of reusable steel formwork to reduce the amount of C&D material.</p> <p>Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement. On-site sorting and segregation facility of all type of wastes is considered as one of the best practice in waste management and hence, should be implemented in all projects generating construction waste. The sorted public fill and C&D waste should be properly reused.</p>	Good site practice to minimise C&D waste generation and reuse/recycle all C&D on-site as far as possible	Contractor	Entire construction site	<p>Waste Disposal Ordinance</p> <p>ETWB TC(W) No. 19/2005</p> <p>DEVB TC(W) No. 6/2010</p>	✓

North East New Territories (NENT) Landfill Extension
Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
S6	WM1	<p><u>C&D Materials (Cont'd)</u> Excavated slope, stockpiled material and bund walls should be covered by tarpaulin until used in order to prevent wind-blown dust during dry weather, and to reduce muddy runoff during wet weather. Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.</p> <p>If any topsoil-like materials need to be stockpiled for any length of time, consideration should be given to hydroseeding of the topsoil on the stockpile to improve its visual appearance and prevent soil erosion.</p> <p>Nomination of approved personnel to be responsible for good site practices and making arrangements for collection of all wastes generated on-site and effective disposal.</p> <p>Training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concepts.</p> <p>Regular cleaning and maintenance programme systems, sumps and oil interceptors. Prior to disposal of C&D waste, wood, steel and other metals should be separated for re-use and/or recycling to minimise the quantity of waste to be disposed of to landfill. Proper storage and site practices should be implemented to minimise the potential for damage or contamination of construction materials.</p> <p>Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. Minimise excessive ordering of concrete, mortars and cement grout by doing careful check before ordering.</p>	Good site practice to minimise C&D waste generation and reuse/recycle all C&D on-site as far as possible	Contractor	Entire construction site	<p>Waste Disposal Ordinance</p> <p>ETWB TC(W) No. 19/2005</p> <p>DEVB TC(W) No. 6/2010</p>	✓
S6	WM2	<p><u>Chemical Waste</u> Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.</p> <p>Plant/equipment maintenance schedule should be designed to optimise maintenance effectiveness and to minimise the generation of chemical wastes. Where possible, chemical wastes (e.g. waste lube oil) should be recycled by licensed treatment facilities</p>	Ensure proper disposal of chemical waste generated on-site to minimise the associated hazards on human health and environment	Contractor	Entire construction site	<p>Waste Disposal (Chemical Waste) General Regulation</p> <p>Code of Practice on the Packaging, Labelling and Storage of Chemical Waste</p>	✓

North East New Territories (NENT) Landfill Extension
Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	
S6	WM2	<p><u>Chemical Waste (Cont'd)</u></p> <p>Containers used for storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; have a capacity of less than 450 liters unless the specification has been approved by the EPD. Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Regulation.</p> <p>The storage area for chemical wastes should be clearly labelled and used solely for storage of chemical waste, enclosed with at least 3 sides, having an impermeable floor and bund of sufficient capacity to accommodate 110% of volume of the largest container or 20 % of total volume of waste stored in that area, whichever is the greatest, having adequate ventilation, being covered to prevent rainfall entering, and being arranged so that incompatible materials are adequately separated.</p> <p>Chemical waste should be collected by licensed waste collectors and disposed of at licensed facility, e.g. Chemical Waste Treatment Centre.</p>	Ensure proper disposal of chemical waste generated on-site to minimise the associated hazards on human health and environment.	Contractor	Entire construction site	<p>Waste Disposal (Chemical Waste) General Regulation</p> <p>Code of Practice on the Packaging, Labelling and Storage of Chemical Waste</p>	✓
S6	WM3	<p><u>General Refuse</u></p> <p>General refuse generated on-site should be properly stored in enclosed bins or compaction units separately from construction and chemical wastes.</p> <p>All recyclable materials (separated from the general waste) should be stored on-site in appropriate containers with cover prior to collection by a local recycler for subsequent reuse and recycling. Residual, non-recyclable, general waste should be stored in appropriate containers to avoid odour. Regular collection should be arranged by an approved waste collector in purpose-built vehicles that minimise environmental impacts during transportation</p> <p>Reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimise odour, pest and litter impacts. Burning of refuse on construction sites is prohibited by law.</p> <p>Aluminium cans should be separated from general waste stream and collected by recyclers. Proper collection bins should be provided on- site to facilitate the waste sorting.</p>	Minimise generation of general refuse to avoid odour, pest and visual nuisance	Contractor	Entire construction site	Waste Disposal Ordinance	✓

North East New Territories (NENT) Landfill Extension
 Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	
S6	WM3	<u>General Refuse (Cont'd)</u> Office waste paper should be recycled if the volume warrants collection by recyclers. Participation in community waste paper recycling programme should be considered by the Contractor, including waste paper, aluminium cans, plastic bottles, waste batteries, etc.	Minimise generation of general refuse to avoid odour, pest and visual nuisance	Contractor	Entire construction site	Waste Disposal Ordinance	✓

North East New Territories (NENT) Landfill Extension
Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
LFG							
Within NENT Landfill Extension							
S7	LFG1	Special LFG precautions should be taken due to close proximity of NENT landfill extension site to existing landfill to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity).	To minimise the risk of LFG hazards to personnel in construction site	Contractor	Entire construction site	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97) F&IU (Confined Spaces) Regulations Code of Practice on Safety and Health at Work in Confined Spaces	✓
S7	LFG2	Prominent safety warning signs should be erected on-site to alert all personnel and visitors of LFG hazards during excavation works.					✓
S7	LFG3	No smoking or burning should be permitted on-site.					✓
S7	LFG4	Prominent 'No smoking' and 'No Naked Flames' signs should be erected on-site.					✓
S7	LFG5	No worker should be allowed to work alone at any time in excavated trenches or confined areas on-site.					✓
S7	LFG6	Adequate fire fighting equipment should be provided on-site.					✓
S7	LFG7	Construction equipment should be equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors.					✓
S7	LFG8	Electrical motors and extension cords should be explosion-proof and intrinsically safe for use on-site.					✓
S7	LFG9	'Permit to Work' system should be implemented.					✓
S7	LFG10	Welding, flame-cutting or other hot works should be conducted only under 'Permit to Work' system following clear safety requirements, gas monitoring procedures and presence of qualified persons to supervise the works.					✓
S7	LFG11	For piping assembly or conduit construction, all valves and seals should be closed immediately after installation to avoid accumulation and migration of LFG. If installation of large diameter pipes (diameter >600mm) is required, the pipe ends should be sealed on one side during installation. Forced ventilation is required prior to operation of installed pipeline. Forced ventilation should also be required for works inside trenches deeper than 1m.	To minimise the risk of LFG hazards to personnel in construction site	Contractor	Entire construction site	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97) F&IU (Confined Spaces) Regulations Code of Practice on Safety and Health at Work in Confined Spaces	✓
S7	LFG12	Frequency and location of LFG monitoring within excavation area should be determined prior to commencement of works. LFG monitoring in excavations should be conducted at no more than 10mm from exposed ground surface.					✓

North East New Territories (NENT) Landfill Extension
Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
LFG							
Within NENT Landfill Extension							
S7	LFG13	For excavation works, LFG monitoring should be conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation.	To minimise the risk of LFG hazards to personnel in construction site	Contractor	Entire construction site	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97) F&IU (Confined Spaces) Regulations Code of Practice on Safety and Health at Work in Confined Spaces	✓
S7	LFG14	Any cracks on ground level encountered on-site should be monitored for LFG periodically. Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.					✓
S7	LFG15	LFG precautionary measures involved in excavation and piping works should be provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase. Temporary offices or buildings should be located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm.					✓
S7	LFG16	For large development such as NENT landfill extension, a Safety Officer trained in the use of gas detection equipment and LFG-related hazards should be present on-site throughout the groundwork phase. The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%					✓
S7	LFG17	Periodically during groundwork construction, the works area should be monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment. The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person. Routine monitoring should be carried out in all excavations, manholes, created by temporary storage of building materials on-site. All measurements in excavations should be made with monitoring tube located not more than 10mm from exposed ground surface.					✓

North East New Territories (NENT) Landfill Extension
 Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Within NENT Landfill Extension (Cont'd)							
S7	LFG18	For excavations deeper than 1m, measurements should be conducted: <ul style="list-style-type: none"> At ground surface before excavation commences; Immediately before any worker enters the excavation; At the beginning of each working day for entire period the excavation remains open; and Periodically throughout the working day whilst workers are in excavation. 	To minimise the risk of LFG hazards to personnel in construction site	Contractor	Entire construction site	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97)	✓
S7	LFG19	For excavations between 300mm and 1m, measurements should be conducted: <ul style="list-style-type: none"> Directly after excavation has been completed; and Periodic all whilst excavation remains open. 				Code of Practice on Safety and Health at Work in Confined Spaces	✓
S7	LFG20	For excavations less than 300mm, monitoring may be omitted at the discretion of Safety Officer or appropriately qualified person.					✓

North East New Territories (NENT) Landfill Extension
Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Landscape and Visual Phases							
S8	LV1	<u>Advanced screening tree planting</u> <ul style="list-style-type: none"> Early planting using fast growing trees and tall shrubs at strategic locations within site to block major view corridors to the site from the VSRs, and to locally screen haul roads, excavation works and site preparation works. Roadside planter and shrub planting design in front of Cheung Shan Temple. 	To minimise the impact on existing vegetation retained by personnel in construction To provide initiation on permanent landscape and visual mitigation measures	Contractor	Entire construction site	DEVB TC(W) No. 4/2020 - Tree Preservation DEVB TC(W)) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features DEVB TC(W) No. 6/2011 - Maintenance of Man-made Slopes and Emergency Repair on Stability of Land	Advanced screen tree planting is under planning.
S8	LV2	<u>Boundary Green Belt planting</u> <ul style="list-style-type: none"> Considerable planting belts proposed around the site perimeter and the construction of temporary soil bunds will screen the landfill operations to a certain degree. Fast growing and fire resistant plant species will be used. 					To be implemented during operation phase
S8	LV3	<u>Temporary landscape treatment as green surface cover</u> <ul style="list-style-type: none"> For certain areas where landfilling operations would have to be suspended temporarily for periods of years, simple temporary landscape treatment such as hydroseeding should be considered. During construction and operational phases, grass hydroseeding or synthetic covering material of green colour should also be used as a temporary slope cover if applicable. 					Grass hydroseeding will be applied at Portion E3-2.
S8	LV4	<u>Existing tree preservation</u> <ul style="list-style-type: none"> Transplant existing trees and vegetation, which are identified as ecologically significant in Ecological Impact Assessment and as rare tree species recorded in the tree survey, under circumstances where technically feasible. For all affected trees, the principle of avoidance of tree felling and tree transplanting of tree before felling should apply whenever possible. A tree felling application should be submitted to DEVB-GLTMS and be approved before any trees are felled or transplanted. 					✓







North East New Territories (NENT) Landfill Extension
Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Ecology							
General Protection Measures:							
S10	E1	Restriction of construction activities to the work areas that would be clearly demarcated.	To minimise environmental impacts and therefore potential ecological impacts within and near the construction site	Contractor	Entire construction site	Practice Note for Professional Persons (ProPECC), Construction Site Drainage (PN1/94) Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes, EPD (1992) ETWB TC(W) No. 33/2002 Management of Construction and Demolition Material Including Rock DEVB TC(W) No. 6/2010 Trip Ticket System for Disposal of Construction and Demolition Materials ETWB TC(W)No.19/2005 Environmental Management on Construction Sites	✓
S10	E2	Reinstatement of the work areas immediately after completion of the works.					✓
S10	E3	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme.					✓
S10	E4	Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.					✓
S10	E5	Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs.					✓
S10	E6	Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works.					To be implemented
S10	E7	Mobile plant should be sited as far away from NSRs as possible and practicable.					✓
S10	E8	Material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.					✓
S10	E9	Use of "quiet" plant and working methods.					✓
S10	E10	Construction phase mitigation measures in the Practice Note for Professional Persons on Construction Site Drainage.					✓

North East New Territories (NENT) Landfill Extension
 Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Ecology							
General Protection Measures:							
S10	E11	Design and set up of the temporary on-site drainage system will be undertaken by the contractor prior to the commencement of construction.	To minimise environmental impacts and therefore potential ecological impacts within and near the construction site	Contractor	Entire construction	WBTC No. 12/2002, Specifications Facilitating the Use of Recycled Aggregates WBTC Nos. 25/99,25/99A and 25/99C. Incorporation of Information on Construction and Demolition Material Management in Public Works Subcommittee Papers	✓
S10	E12	Design and incorporation of silt/sediment traps in the permanent drainage channels to enhance deposition rates and regular removal of repositied silt and grit.					✓
S10	E13	Minimization of surface excavation works during the rainy seasons (April to September), and in particular,control of silty surface runoff during storm events, especially for areas located near steep slopes.					✓
S10	E14	Regular inspection and maintenance of all drainage facilities and erosion and sediment control structures to ensure proper and efficient operation at all times and particularly following rainstorms.					✓
S10	E15	Provision of oil interceptors in the drainage system downstream of any oil/fuel pollution sources					✓

Appendix L Construction Site Activities

Construction Activities	Photos	Where	Who	What - ENV Impacts	Mitigation Measures
Material loading and unloading, site traffic		Portion A, SBA to Alternative Disposal Ground	PYE	Dust, bringing mud to the common haul road	Speed limit, covering of materials and water spraying, lorry washing at the exit of the site
Permanent site office foundation works with pouring of concrete		Portion D	PYE	Washout flowing to site water discharge point, dust emissions	Avoid the spillage of concrete, lorry washing at designated area, operation and maintenance of water treatment facility at discharge point
Site clearance		Portion A, Portion E3-1, Portion E4, Portion E1/B2	PYE	Wash out going to surface water channel and site water discharge point, generation of yard waste	Cover exposed slope by tarpaulin, diversion of surface water, operation and maintenance of water treatment facility at discharge point, implementation of trip ticket system
Installation of permanent fencing		Portion A, Portion B1, Portion E4	PYE	Dust	Covering of cement storage area, enclosure of mixing area
Site formation		Portion A, Portion E3-1	PYE	Generation of C&D waste	Implementation of trip ticket system, waste recycling, internal waste transfer
Tree Felling		Portion E3-1, E4, E1/B2	PYE	Generation of yard waste	Implementation of trip ticket system, waste recycling, internal waste transfer

Remark:
PYE is the Sub-contractor for this project.

Appendix M Mitigation Measures of Cultural Landscape Features

DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.
ALL RIGHTS RESERVED.
© ENE AMP & PARTNERS HONG KONG LIMITED.

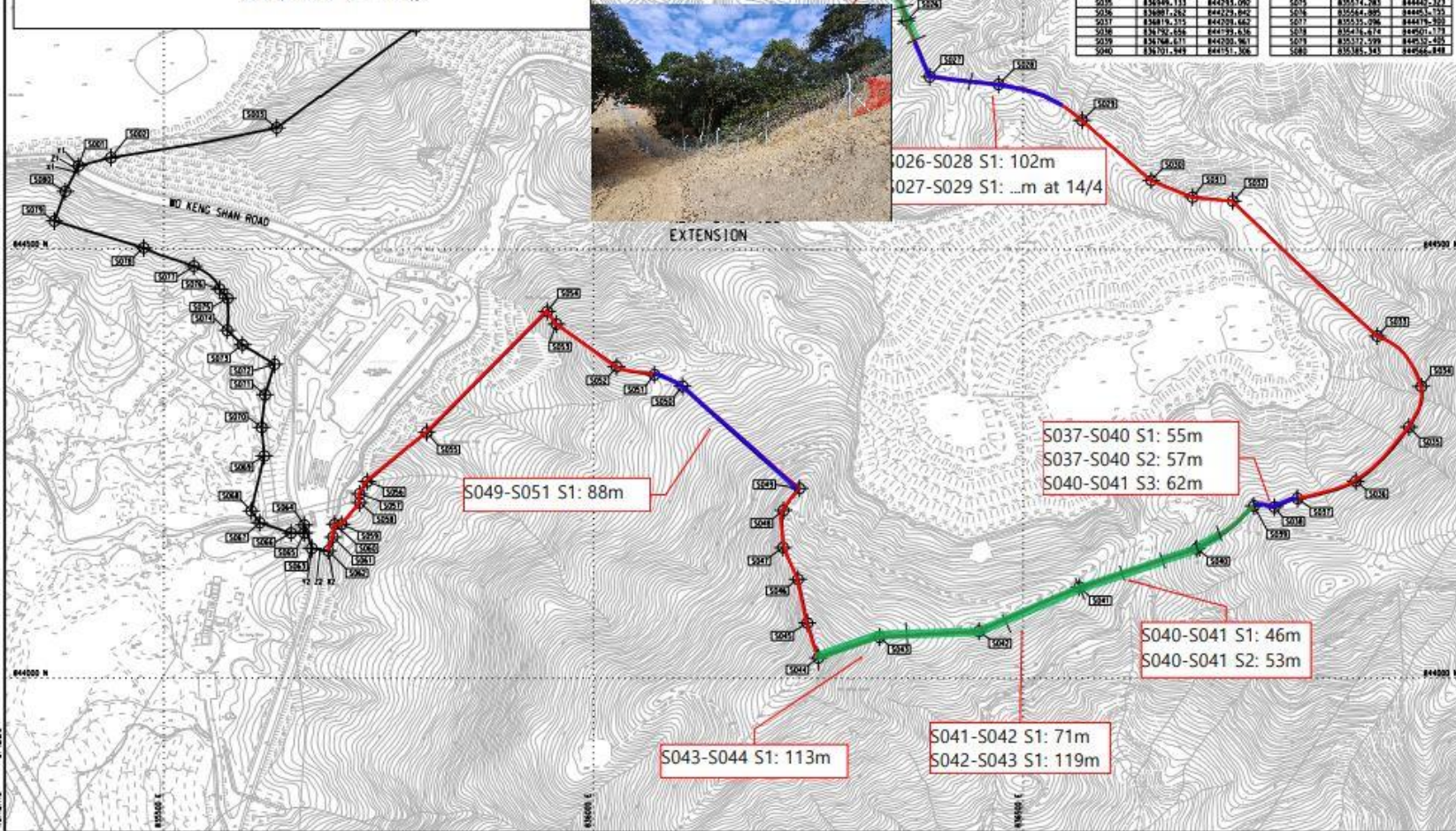


SB Fencing Progress Report as @ 13.3.2023

Start Date: 11.1.2023

Legend

- Proposed fencing length = 3055 m
- Completed footing 1252/3055 m = 41%
- Completed chain link fence 1006/3055 m = 33%



CO-ORDINATES FOR SITE BOUNDARY

SETTING OUT POINT	EASTING	NORTHING
S001	835400.763	844596.681
S002	83476.439	844596.228
S003	83451.400	84441.024
S004	83179.642	844752.456
S005	83876.959	844871.715
S006	83958.265	84498.564
S007	83971.578	84499.837
S008	84012.283	84505.252
S009	84021.422	84507.071
S010	84012.265	84515.203
S011	84024.332	84520.132
S012	84026.422	84522.456
S013	84098.064	84549.446
S014	84098.244	84556.234
S015	84111.658	84553.993
S016	84146.485	84483.801
S017	84176.396	84491.955
S018	84211.023	84487.723
S019	84238.014	84493.211
S020	84254.713	84491.2675
S021	84276.337	84482.156
S022	84312.248	84475.461
S023	84336.358	84446.516
S024	84376.385	84446.428
S025	84393.384	84433.702
S026	84364.427	84456.813
S027	84371.414	84451.854
S028	84471.540	84492.560
S029	84564.625	84453.735
S030	84649.132	84450.613
S031	84641.024	84441.024
S032	84744.086	84456.490
S033	84812.213	84479.086
S034	84876.455	84449.241
S035	84848.113	84473.062
S036	84881.282	84422.852
S037	84876.375	84473.665
S038	84792.656	84499.638
S039	84748.671	84470.961
S040	84701.949	84451.306

SETTING OUT POINT	EASTING	NORTHING
S041	84682.887	84476.358
S042	84648.443	84464.135
S043	84632.775	84408.500
S044	84641.595	84402.718
S045	84649.241	84404.518
S046	84618.243	84415.480
S047	84620.400	84452.506
S048	84621.176	84456.739
S049	84629.876	84457.358
S050	84603.489	84456.447
S051	84605.891	84454.689
S052	84604.843	84451.917
S053	84598.335	84443.126
S054	84594.240	84447.791
S055	84595.399	84444.410
S056	84576.415	84426.429
S057	84572.380	84425.710
S058	84578.112	84424.403
S059	84576.353	84416.372
S060	84568.933	84416.738
S061	84566.895	84416.917
S062	84567.380	84416.362
S063	84547.232	84411.583
S064	84548.311	84416.479
S065	84544.443	84416.397
S066	84548.326	84416.327
S067	84541.414	84411.518
S068	84567.144	84414.567
S069	84546.871	84428.437
S070	84541.597	84438.119
S071	84541.889	84426.125
S072	84541.746	84411.081
S073	84543.967	84432.526
S074	84541.597	84438.119
S075	84541.889	84426.125
S076	84541.746	84411.081
S077	84543.967	84432.526
S078	84541.597	84438.119
S079	84541.889	84426.125
S080	84541.746	84411.081

CO-ORDINATES FOR VEHICULAR ACCESS

SETTING OUT POINT	EASTING	NORTHING
V1	835297.108	844989.614
V2	834932.161	844936.687
V3	835298.934	844933.141
V4	834691.380	844146.162
V5	834672.232	844151.163
V6	834691.320	844149.363

LEGEND

- SITE BOUNDARY
- SETTING OUT POINT

Rev	Description	By	Date
0	ISSUE FOR TENDER	SS	12/20

Consultant
ARUP 奧雅納工程顧問
Ove Arup & Partners Hong Kong Limited

Project title
Contract No. EP/SP/77/15
North East New Territories
Landfill Extension

Drawing title
**SETTING OUT DETAILS
OF SITE BOUNDARY**

Drawing No.	215523/01/016	Rev.	0
Drawn By	Date	Checked By	Approved By
Scale	1:2500 (A1)	Status	TENDER



Appendix N Ecological Monitoring Record

Post-translocation monitoring photo record extracted from post-translocation report (July 2023)



Site photos of the monitoring area



Hand netting to search for *S. zanklon*



Kick-netting to search for *S. zanklon*



Direct Observation to search for *S. zanklon*

B.1 Incense Tree *Aquilaria sinensis*



Photo B.1.1 : General view of the transplanted individual AS-03.

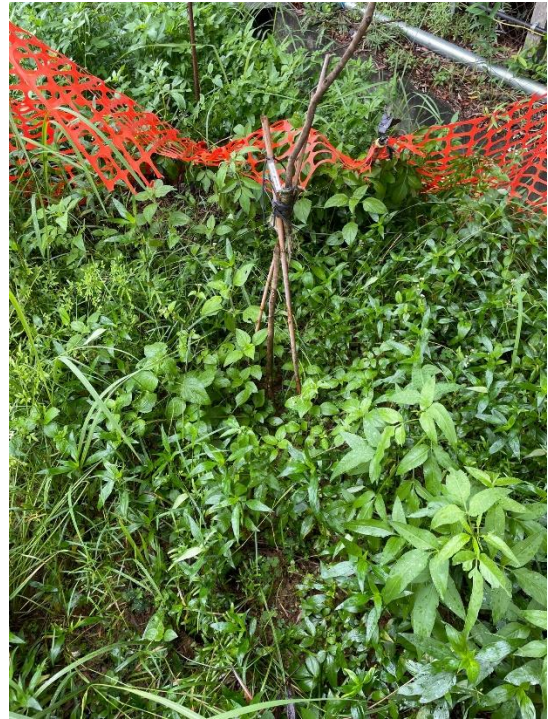


Photo B.1.2 : Stem condition of the transplanted individual AS-03.



Photo B.1.3 : General view of the transplanted individual AS-02.



Photo B.1.4 : Stem condition of the transplanted individual AS-02.

B.2 Lamb of Tartary *Cibotium barometz*



Photo B.2.1 : General view of the transplanted individual CB-01.



Photo B.2.2 : Leaf condition of the new foliage.



Photo B.2.3 : Leaf condition of the new foliage.



Photo B.2.4 : Leaf condition of the new foliage.

B.3 Bottlebrush Orchid *Goodyera procera*



Photo B.3.1: Individual GP-01.



Photo B.3.2: Individual GP-02.



Photo B.3.3: Individual GP-03.

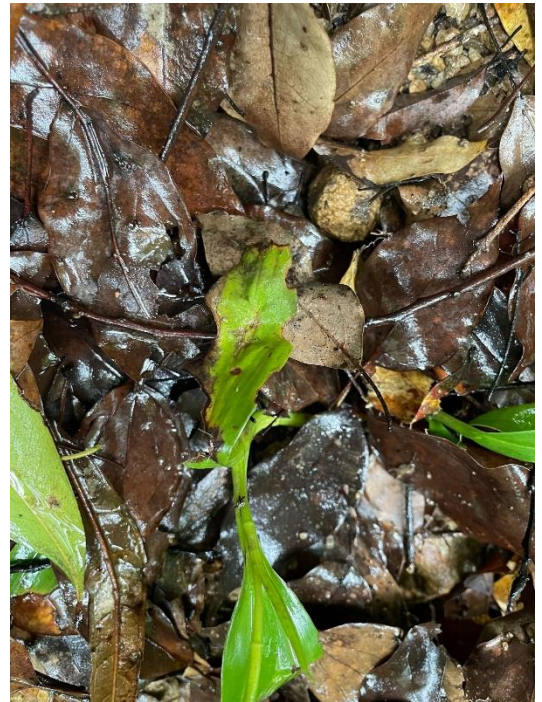


Photo B.3.4: Individual GP-03.



Photo B.3.5: Individual GP-06.



Photo B.3.6: Individual GP-06. Chlorotic leaf.



Photo B.3.7: Individual GP-07.



Photo B.3.8: Individual GP-08.



Photo B.3.9: Individual GP-09.



Photo B.3.10: Individual GP-10.



Photo B.3.11: Individual GP-11.

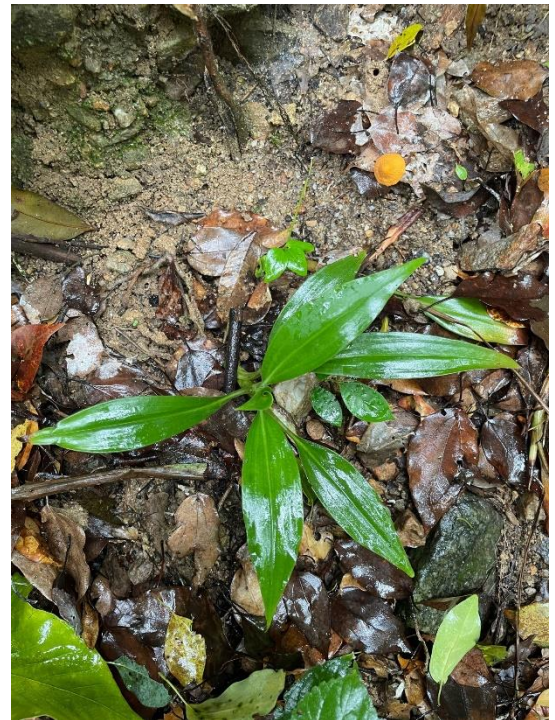


Photo B.3.12: Individual GP-12.



Photo B.3.13: Individual GP-13.

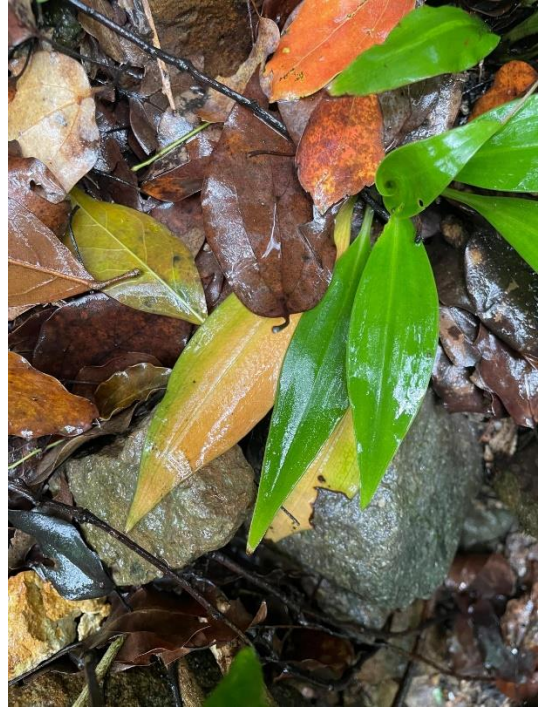


Photo B.3.14: Individual GP-13. Chlorotic leaves.



Photo B.3.15: Individual GP-14.



Photo B.3.16: Individual GP-15.



Photo B.3.17: Individual GP-16.



Photo B.3.18: Individual GP-17.



Photo B.3.19: Individual GP-19.

Appendix O Detail Status of EP Submission

Detail Status of Submissions required under the FEP & EP

FEP Condition	EP Condition	Submission / Measures	Status
2.1	2.3	Management Organization of Main Construction Companies	Submission Date (12 Oct 2022)
2.2	2.4	Setting up of Community Liaison Group (CLG)	Submission Date (12 Oct 2022) 1 st CLG meeting (12 Jan 2023)
2.3	2.5	Submission of EM&A Manual	Submission Date (12 Oct 2022)
2.4	2.6	Submission of Preservation of Cultural Landscape Features	Survey and Preservation of Grave Records: Submission Date (15 Oct 2022) Survey and Preservation of Boulder Paths: Submission Date (12 Oct 2022)
2.5	2.7	Submission of Vegetation Survey (Transplantation Proposal)	Submission Date (2 September 2022)
2.6	2.8	Submission of translocation proposal	Submission Date (8 July 2022)
2.7	2.9	Submission of Transplantation Report and Post-Transplantation Monitoring	Submission Date (19 Jan 2023) 1 st monitoring (24 Nov 2022) 2 nd monitoring (9 Dec 2022) 3 rd monitoring (21 Dec 2022) 4 th monitoring (13 Jan 2023) 5 th monitoring (26 Jan 2023) 6 th monitoring (8 Feb 2023) 7 th monitoring (24 Feb 2023) 8 th monitoring (20 Mar 2023) 9 th monitoring (21 Apr 2023) 10 th monitoring (17 May 2023) 11 th monitoring (16 Jun 2023) 12 th monitoring (12 Jul 2023)

FEP Condition	EP Condition	Submission / Measures	Status
2.8	2.10	Submission of Translocation Report and Post-Translocation Monitoring	<p>Translocation was carried out in July 2022</p> <p>Submission Date (27 December 2022)</p> <p>1st monitoring (29 Aug 2022)</p> <p>2nd monitoring (28 Sep 2022)</p> <p>3rd monitoring (28 Oct 2022)</p> <p>4th monitoring (28 Oct 2022)</p> <p>5th monitoring (29 Dec 2022)</p> <p>6th monitoring (30 Jan 2023)</p> <p>7th monitoring (24 Feb 2023)</p> <p>8th monitoring (20 Mar 2023)</p> <p>9th monitoring (19 Apr 2023)</p> <p>10th monitoring (12 May 2023)</p> <p>11th monitoring (7 Jun 2023)</p> <p>12th monitoring (18 Jul 2023)</p>
2.9	2.11	Submission of Detailed Landfill Gas Hazard Assessment Report	Submission Date (6 Oct 2022)
2.10	2.12	Submission of Waste Management Plan	Submission Date (30 December 2022)
3.2	3.2	Submission of Baseline Monitoring Report	Submission Date (30 Nov 2022)

Appendix P Cumulative complaint / enquiry log, Summaries of complaints and enquiries & Environmental complaint reports

Environmental Complaints Log

Complaint Ref. No.	Date of Complaint Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
C001_20221220	21 Dec 2022	Veolia (Contractor)	ET	Air Quality (Construction Dust)	5, 12 & 19 Dec 2022	It was noted from Veolia's email to the ET on 20 December 2022 that Veolia received complaint lodged regarding presenting much dusty materials at roundabout at Wo Keng Shan Road & dusty flying problem at Kowloon-bound traffic at Lung Shan Tunnel. No dusty materials and wastes were transported out from the NENTX site during the complaint period. During the regular weekly site inspection on 5, 12 & 19 December 2022, it was observed that the wheel washing facilities with high-pressure water jets have been provided at all site exits of NENTX and cleaned all vehicles before allowing them to leave the construction site to ensure that no mud or debris would be brought to the public area. All site vehicles of NENTX are also required to go through the auto wheel washing facility, which is managed by the operator of the NENT landfill, before entering the public area. The road section between the washing facilities and the exit point was paved with concrete, or bituminous materials were implemented in all site entrances. No mud generated from vehicles under the NENTX project after exiting the site entrance was observed. In conclusion, there is no direct evidence showing that the complaint is likely related to the NENTX project.	5 Jan 2023
C002_20230614	14 June 2023	EPD-RNG	ET	Water Quality	TBC	It was noted from EPD-RNG's email to the ET on 14 June 2023 that EPD received complaint lodged regarding the muddy water was observed at Lin MA Hang International Bridge. Investigation results and conclusion will be presented when the investigation finished.	TBC

Remarks:

1. "ET" equal to "Environmental Team"
2. "EPD-RNG" equal to "Environmental Protection Department-Regional Office (North)"

Environmental Enquiries Log

Enquiry Ref. No.	Date of Enquiry Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
E001_20230615	15 Jun 2023	EPD-RNG	ET	Water Quality	TBC	It was noted from EPD-RNG's email to the ET on 15 June 2023 that EPD received information regarding the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Location from EPD). Investigation results and conclusion will be presented when the investigation finished.	TBC

Remarks:










1. "ET" equal to "Environmental Team"
2. "EPD-RNG" equal to "Environmental Protection Department-Regional Office (North)"

Cumulative Statistics on Complaints

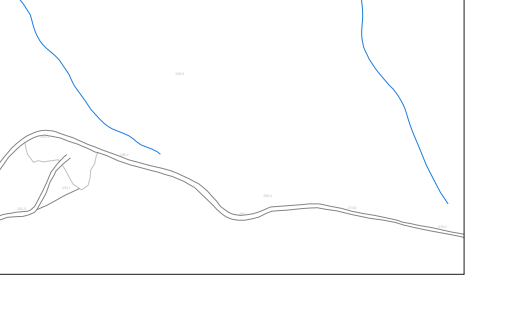
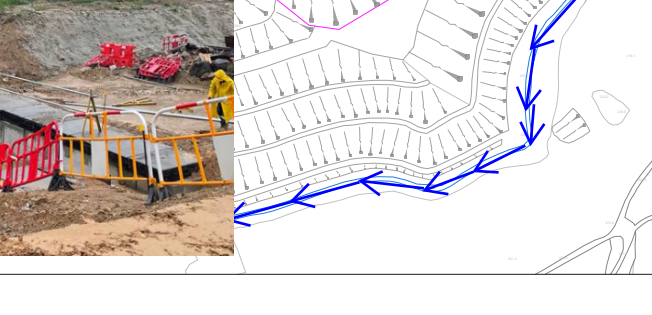
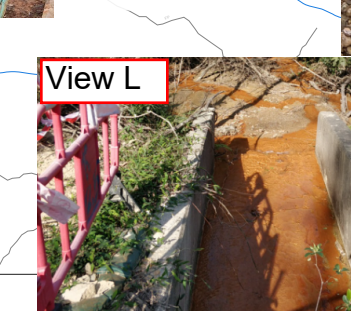
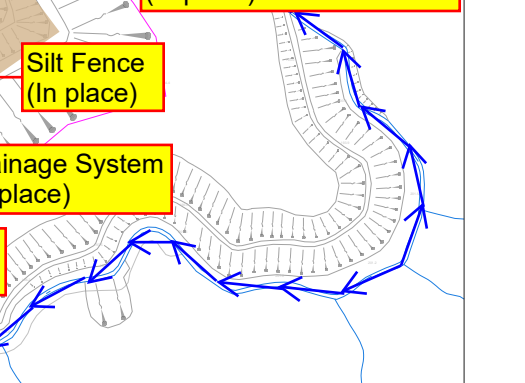
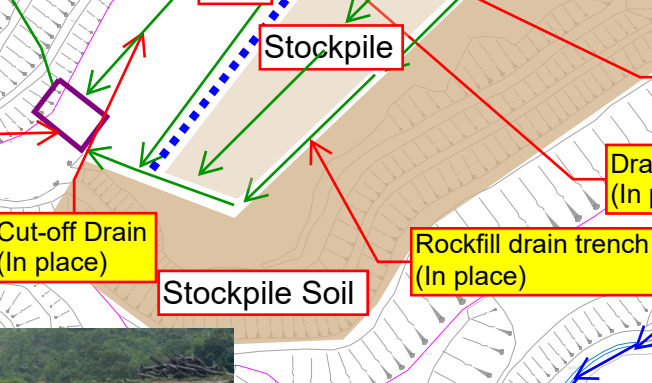
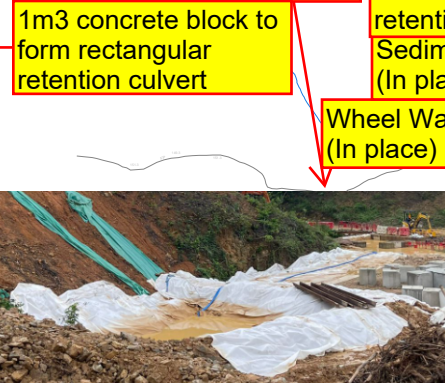
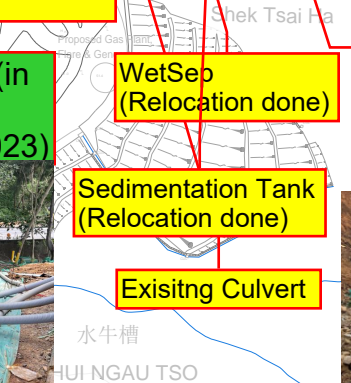
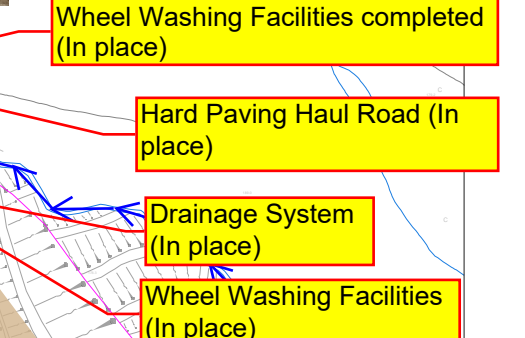
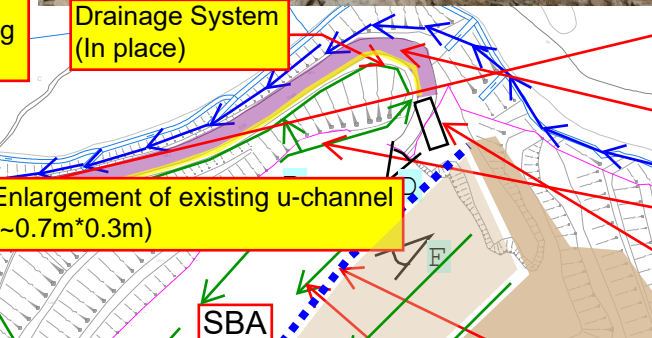
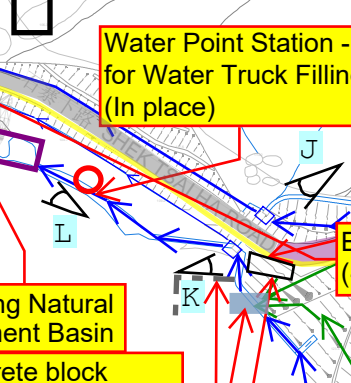
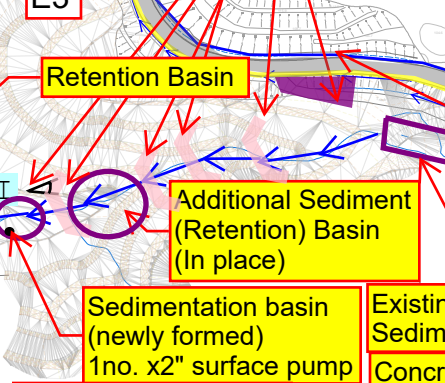
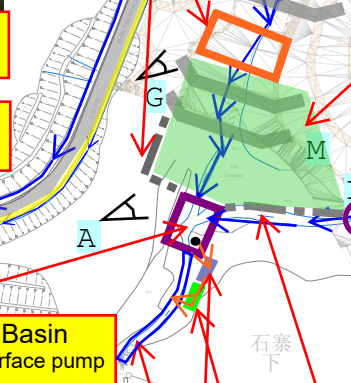
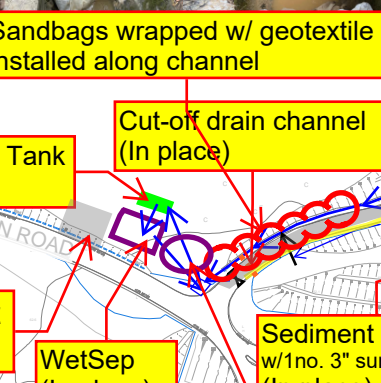
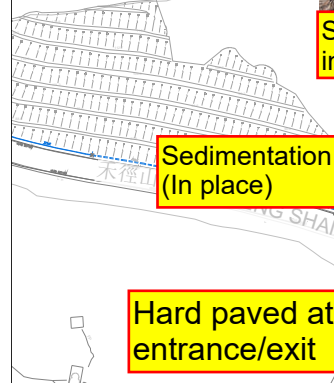
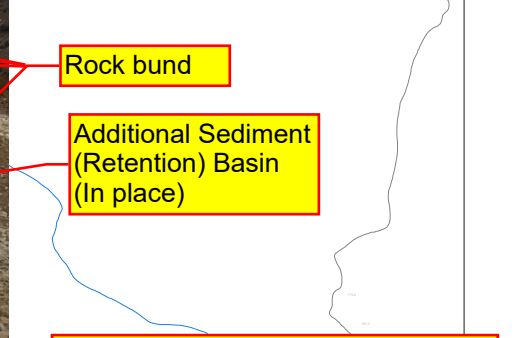
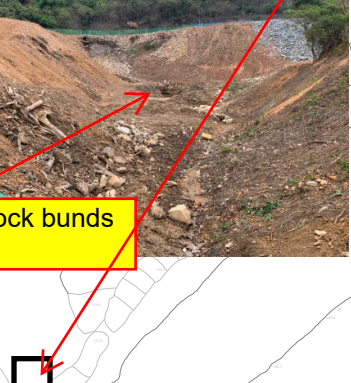
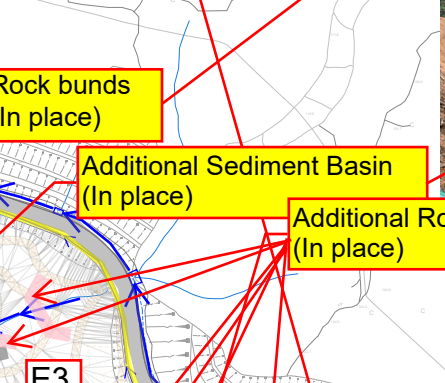
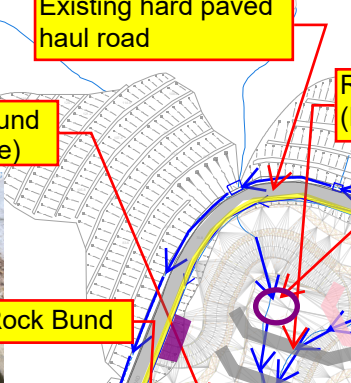
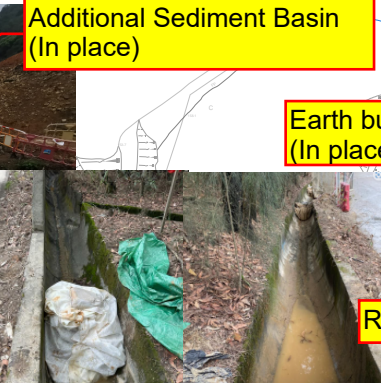
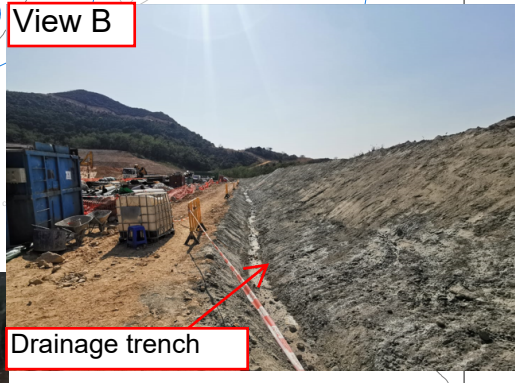
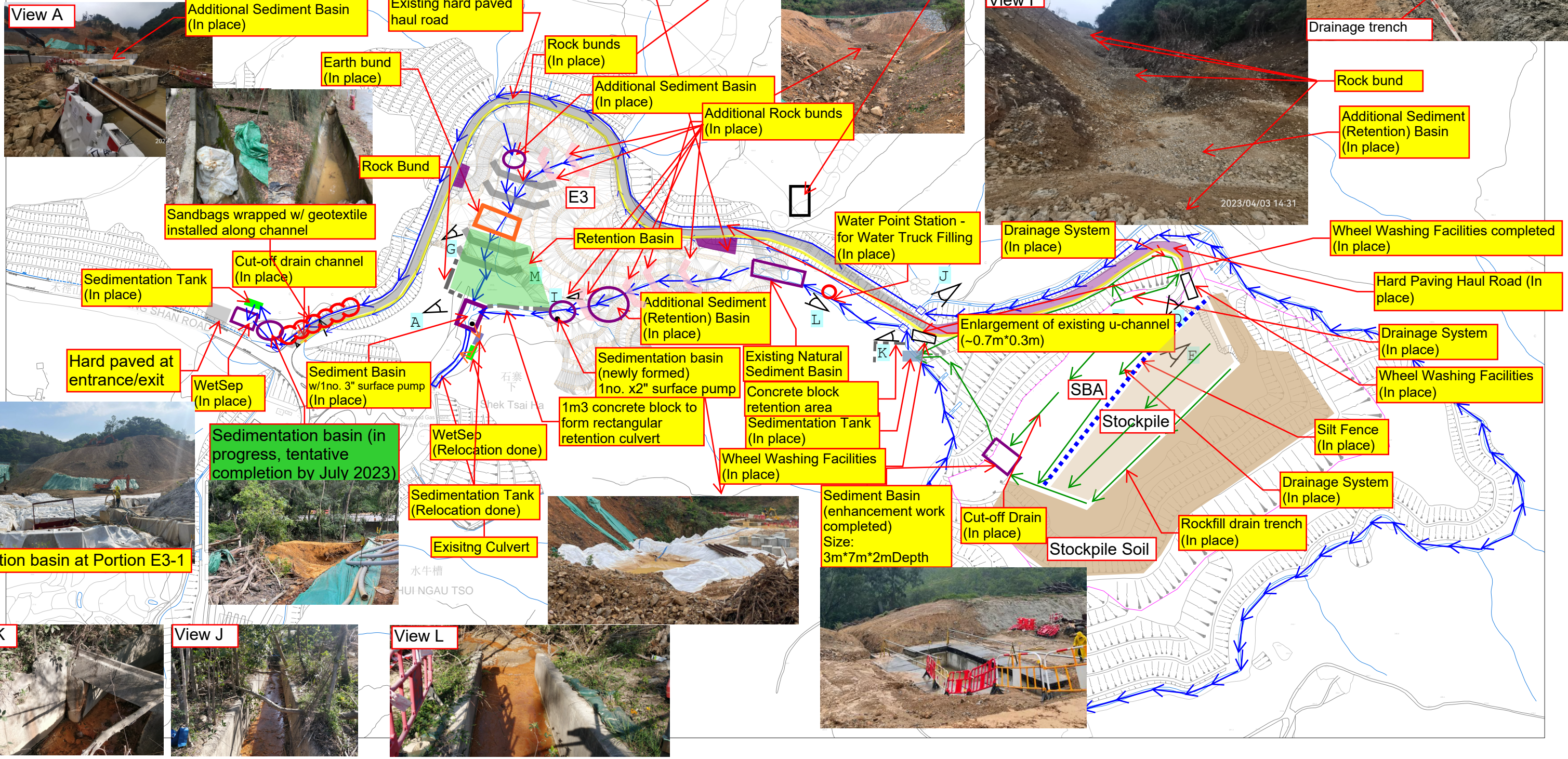
Aspects	Cumulative No. Brought Forward	No. of Complaints This Month	Cumulative Project-to-Date
Air Quality	1	0	1
Noise	0	0	0
Water Quality	0	1	1
Waste Management	0	0	0
Total	1	1	2

Appendix Q Implementation Status on Environmental Mitigation Measures

Legend

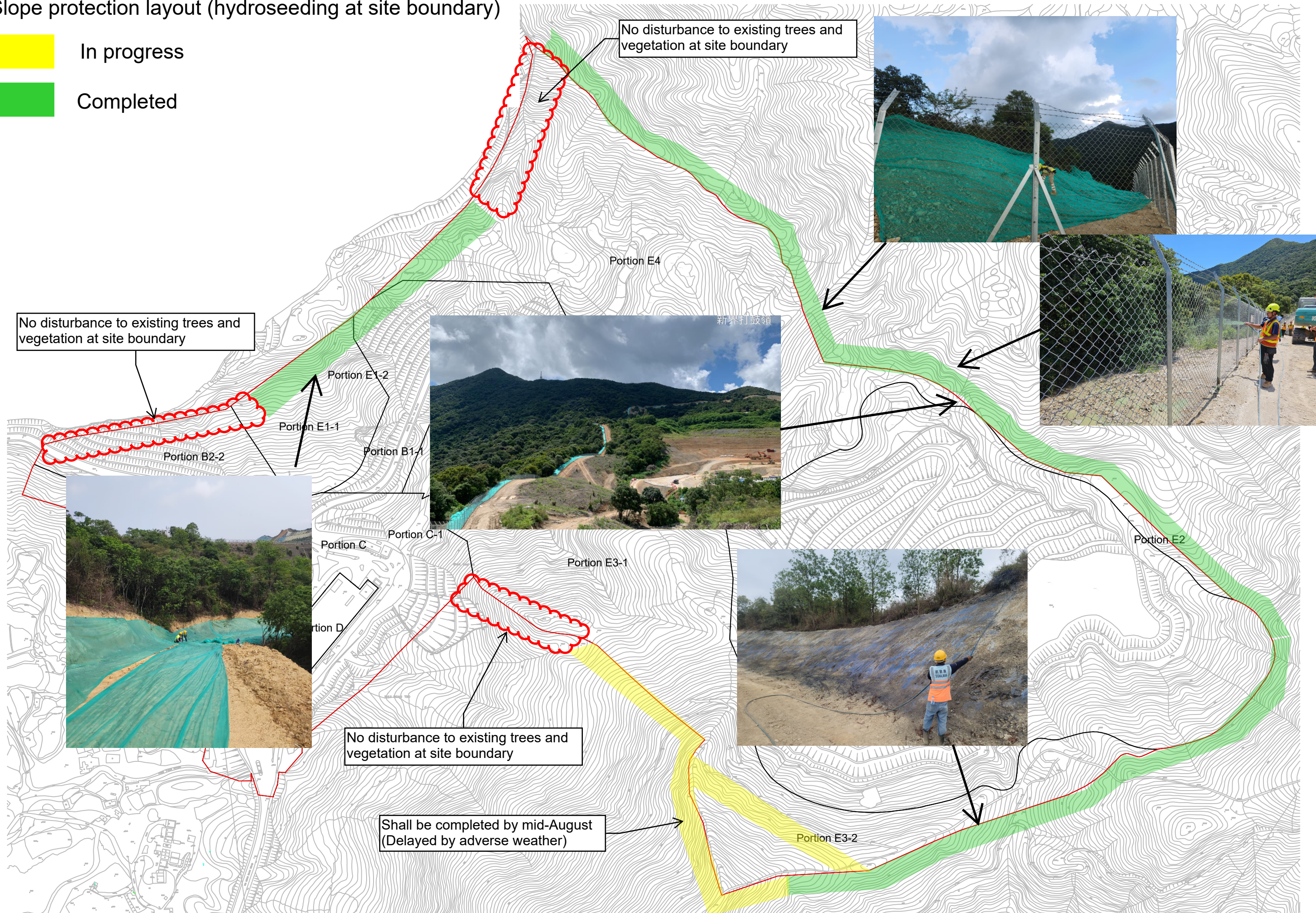
-  Gate
-  Underground pipe
-  Earth Bund (Sediment Trap)
-  Sediment Basin
-  WetSep
-  Existing Drainage system
-  Proposed Drainage system
-  Wheel Washing Facilities
-  Existing Catchpit

Updates from last submission



Slope protection layout (hydroseeding at site boundary)

-  In progress
-  Completed



Culvert Cleaning



Slope Protection



Slope Protection



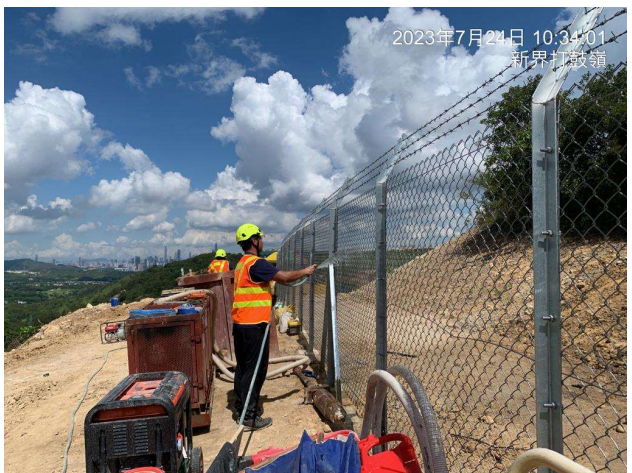
Hydroseeding



Hydroseeding



Hydroseeding



Prepared by:

Aurecon Hong Kong Limited
Unit 1608, 16/F, Tower B, Manulife Financial Centre,
223 – 231 Wai Yip Street, Kwun Tong,
Kowloon Hong Kong S. A. R.
T: +852 3664 6888
F: +852 3664 6999

aurecon

*Bringing ideas
to life*

hongkong@aurecongroup.com

E:

