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

Monthly Environmental Monitoring and Audit Report (No. 7) – June 2023

2023-07-13

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Our Ref.: CL/91823/0556-VES
Date: 13 July 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

Dear Sir

Re: Contract No. EP/SP/77/15
North-East New Territories Landfill Extension (NENTX)
Monthly Environmental Monitoring and Audit Report (No.7) – June 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.7) – June 2023" dated 13 July 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

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Unit 1608, 16/F, Tower B,
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Ref: P521530-0000-REP-NN-0062

By Email

13 July 2023

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.6) – May 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.7) – June 2023" dated 13 July 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

Fredrick Leong
Environmental Team Leader

Encl.
1. Monthly Environmental Monitoring and Audit Report (No.7) – June 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)

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

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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 7th Monthly EM&A Report presents the EM&A works conducted from 1 to 30 June 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	6 times	2, 8, 14, 20, 26 & 30 June 2023
-	Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	8, 14, 21 & 26 June 2023
-	Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	21 June 2023
-	Landfill Gas Monitoring during normal weekdays for Construction Works	25 times	1 to 3, 5 to 10, 12 to 17, 19 to 21, 23 to 24, 26 to 30 June 2023
-	Post-translocation Monitoring during normal weekdays at recipient site	1 time	7 June 2023
-	Post-transplantation monitoring and audit during normal weekdays for transplanted plants and receptor sites	1 time	16 June 2023
-	Joint Environmental Site Inspection	4 times	5, 12, 19 & 26 June 2023

Environmental Exceedance

Air Quality, Noise & Landfill Gas Monitoring

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

Surface Water Quality Monitoring
No exceedance of the Action Level was recorded at designated monitoring stations during the reporting period. 1 Turbidity exceedance of the Limit Level was recorded at WM2 during the reporting period. The investigation results will be presented when the investigation of limit level exceedance of surface water quality is finished.

Environmental Non-conformance/Compliant/Summons and Prosecution

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

1 complaint & 1 enquiry were recorded during the reporting period. The investigation results will be presented when the investigation was finished.

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	The Project mainly consists of the followings: - 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: - 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 7th 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 30 June 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 11th post-transplantation monitoring (16 Jun 2023)
2.8	2.10	Submission of Translocation Report and Post-Translocation Monitoring	Translocation was carried out and the report submitted. 11th post-translocation monitoring (7 Jun 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-RN0299-23	22 June 2023	Permit granted on 21 March 2023
Construction Noise Permit	GW-RN0619-23	22 September 2023	Permit granted on 16 June 2023 (replaced the CNP No. GW-RN0299-23)
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 **Table2-5**.

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	6 times	2, 8, 14, 20, 26 & 30 June 2023
-	Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	8, 14, 21 & 26 June 2023
-	Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	21 June 2023
-	Landfill Gas Monitoring during normal weekdays for Construction Works	25 times	1 to 3, 5 to 10, 12 to 17, 19 to 21, 23 to 24, 26 to 30 June 2023
-	Post-translocation Monitoring during normal weekdays at recipient site	1 time	7 June 2023
-	Post-transplantation monitoring and audit during normal weekdays for transplanted plants and receptor sites	1 time	16 June 2023
-	Joint Environmental Site Inspection	4 times	5, 12, 19 & 26 June 2023

Air Quality

6 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 at AM1, AM2 & AM3 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 of surface water quality was recorded during the reporting period. 1 turbidity exceedance of Limit Levels of surface water quality at

WM2 was recorded during the reporting period. The investigation results will be presented when the investigation of limit level exceedance of surface water quality is finished.

Landfill Gas

25 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

4 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 19 June 2023. The Contractor has generally implemented the mitigation measures as recommended.

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)3to 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)	5 Jul 2023	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: 3465)	28 Jun 2023	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, µg/m³ (Range)	Action Level, µg/m³	Limit Level, µg/m³
AM1	28 (15 – 38)	>285	>500
AM2	31 (21 – 45)	>279	>500
AM3	33 (21 – 45)	>285	>500

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

Dust Monitoring Station	Average 24-hr TSP Concentration, µg/m³ (Range)	Action Level, µg/m³	Limit Level, µg/m³
AM1	47 (28 – 95)	>164	>260
AM2	41 (32 – 54)	>152	>260
AM3	82 (43 – 130)	>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	• 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	• 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	• Rectify any unacceptable practice • Amend working methods if appropriate
Exceedance for two or more consecutive samples	• 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	• 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	• 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	• 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	• 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	• 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	• 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	• 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	• 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: 34724243)	10 Jul 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	58.6 (53.5 – 61.5)	When one documented complaint is received	>75dB(A)
NM2a	53.9 (48.5 – 57.7)		

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	• 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	• 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	• Submit noise mitigation proposals to IEC • Implement the agreed noise mitigation proposals
Exceedance of Limit Level	• 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	• 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	• 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 21 June 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 21 June 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	7.1	>7.7	>7.8	7.2	>7.6	>7.7
Electrical Conductivity in µS/cm	73	---	---	142	---	---
DO in mg/L	7.6	<7.4	<4	6.8	<5	<4
Turbidity in NTU	5.7	>9.2	>9.5	142.5	>108.3	>108.9
SS in mg/L	6.6	>9.7	>11.4	83.2	>94.5	>94.7
Alkalinity	15	---		35	---	
COD	9			14		
BOD_5	<2			<2		
TOC	2			2		
Ammonia-nitrogen	<0.01			0.14		
TKN	0.6			0.8		
Nitrate	0.06			0.32		
Sulphate	2			17		
Sulphite	<2			<2		
Phosphate	0.01			<0.01		
Chloride	6			11		
Sodium	6750			6830		
Mg	540			1560		
Ca	3340			18600		
K	830			3050		
Fe	570			3850		
Ni	<1			12.0		
Zn	13			51		
Mn	34			509		
Cu	1			6		
Pb	1			11		
Cd	<0.2			<0.2		
Coliform Count	220			4200		
Oil and Grease	<5			<5		

5.2.5.4 No exceedance of Action Levels of surface water monitoring was recorded during the reporting period. 1 turbidity exceedance of Limit Levels of surface water quality at WM2 was recorded during the reporting period.

5.2.5.5 The Summary of Impact Surface Water Quality Exceedance are shown in **Table 5-6**. The Notification of Environmental Quality Limits Exceedances will be presented in the report after the investigation.

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

Water Quality Monitoring Station	Parameter / Level Exceedance	pH	DO	Turbidity	SS	Exceedance Count
WM1	Action	0	0	0	0	0
	Limit	0	0	0	0	0
WM2	Action	0	0	0	0	0
	Limit	0	0	1 (21 Jun 23) #	0	1

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 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	• 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	• Verify Notification of Exceedance • Check monitoring data and Contractor's working methods	• Rectify unacceptable practice • Amend working methods if appropriate
Action level being exceeded by two or more consecutive sampling days	• 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	• 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	• 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	• 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	• 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	• 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	• 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	• 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	• 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 11,211 tonnes of C&D materials was reused at alternative disposal ground (NENT Landfill) during the reporting period. A total of 2.38 tonnes of Yard waste (collected to Y-Park) was generated during the reporting period. A total of 14.69 tonnes of general refuse and A total of 346.82 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:

- CH_4: >10% Lower Explosion Limit (LEL);
- CO_2: >0.5%; and
- O_2: <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 CO_2 at 0.5% is set for reference only, assuming no CO_2 emission from a particular location.

Depending on the baseline CO_2 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 June 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	1 Jun 2023	0	0	0	20.3
	2 Jun 2023	0	0	0	20.3
	3 Jun 2023	0	0	0	20.2
	5 Jun 2023	0	0	0	20.3
	6 Jun 2023	0	0	0	20.1
	7 Jun 2023	0	0	0	20.2
	8 Jun 2023	0	0	0	20.2
	9 Jun 2023	0	0	0	20.2
	10 Jun 2023	0	0	0	20.2
	12 Jun 2023	0	0	0	20.1
	13 Jun 2023	0	0	0	20.2
	14 Jun 2023	0	0	0	20.3
	15 Jun 2023	0	0	0	20.2
	16 Jun 2023	0	0	0	20.3
	17 Jun 2023	0	0	0	20.2
	19 Jun 2023	0	0	0	20.1
	20 Jun 2023	0	0	0	20.2
	21 Jun 2023	0	0	0	20.1
	23 Jun 2023	0	0	0	20.1
	24 Jun 2023	0	0	0	20.2
	26 Jun 2023	0	0	0	20.2
	27 Jun 2023	0	0	0	20.2
	28 Jun 2023	0	0	0	20.2
	29 Jun 2023	0	0	0	20.1
	30 Jun 2023	0	0	0	20.1
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 CO_2 at 0.5% is set for reference only, assuming no CO_2 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 In the reporting period, the post-translocation monitoring for the Endemic Freshwater Crab *Somanniathelphusa zanklon* was conducted on 7 Jun 2023 based on the requirement of the approved Revised Translocation Proposal for the Endemic Freshwater Crab *Somanniathelphusa zanklon*. The 11th Post-Translocation Monitoring Report (Jun 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.

10.1.2 The post-transplantation monitoring was conducted on 16 Jun 2023 based on the requirement of the approved Transplantation Proposal for Plant Species of Conservation Importance (Rev.1). The 11th Post-transplantation Monitoring and Audit Report (16th Jun 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.

10.1.3 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-translocation Monitoring	1st (Aug 2022)	29 Aug 2022
	2nd (Sep 2022)	28 Sep 2022
	3rd (Oct 2022)	28 Oct 2022
	4th (Nov 2022)	22 Nov 2022
	5th (Dec 2022)	29 Dec 2022
	6th (Jan 2023)	30 Jan 2023
	7th (Feb 2023)	24 Feb 2023
	8th (Mar 2023)	20 Mar 2023
	9th (Apr 2023)	19 Apr 2023
	10th (May 2023)	17 May 2023
	11th (Jun 2023)	7 Jun 2023
Post-transplantation Monitoring	1st	24 Nov 2022
	2nd	9 Dec 2022
	3rd	21 Dec 2022
	4th	13 Jan 2023
	5th	26 Jan 2023
	6th	8 Feb 2023
	7th	24 Feb 2023
	8th	20 Mar 2023
	9th	21 Apr 2023
	10th	12 May 2023
	11th	16 June 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 5, 12,19 & 26 Jun 2023. A joint environmental site inspection was carried out by the representatives of the ER, the Contractor, IEC and the ET on 19 Jun 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:

05 Jun 2023

Observation(s):

- The accumulate water was found the drip tray at Portion D. The contractor was recommended that the accumulate water in drip tray should be cleared regularly and after rainy 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 storm event in accordance with Appendix A2 of ProPECC PN 1/94.

12 Jun 2023

Observation(s):

- The stagnant water and silt in the drip trays shall be clear off in Portion B2 and SBA. The Contractor was recommended to clear drip trays.
- Watering shall be scheduled in Portion A under hot weather. The Contractor was recommended to schedule watering in Portion A.

Reminder(s):

- The Contractor was reminded to ensure channel and silt removal facilities shall be functioning properly for the upcoming rainfall. Silt removal facility and channel shall be maintained properly.

19 Jun 2023

Reminder(s):

- The Contractor was reminded to ensure silt removal facilities shall be functioning properly for the upcoming rainfall. Silt removal facility shall be functioning properly to ensure sufficient treatment for all wastewater before discharging to comply with WPCO.
- The Contractor was reminded that the bunding along the slope edge shall be properly maintained to prevent surface runoff during heavy rainfall at Portion A. Earth bund in Portion A shall be properly maintained.

26 Jun 2023

Observation(s):

- 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. The contractor was recommended that the sediment at the drainage system and site boundary, especially at the lower elevations should be kept cleaning regularly.
- The accumulate water at the drip tray near Portion E2 was found. The contractor was recommended that the accumulate water at the drip tray near Portion E2 should be cleaned after the rainy to minimize the potential chemical waste.

Reminder(s):

- The unpaved assess road was dry. The contractor was reminded to increase the frequency of watering at the Portion A.

11.1.4 1 general site inspection on 12 June 2023 was conducted by Environmental Protection Department-Regional Office (North) (EPD-RNG). 1 additional site inspection on 21 June 2023 for the Environmental Complaint received on 14 June 2023 & the Environmental Enquiry received on 15 June 2023 was conducted with EPD-RNG, ER, IC, IEC ET & Contractor.

12 Environmental Non-conformance

12.1 Summary of Monitoring Exceedance

12.1.1 No exceedance of the Action Levels was recorded at designated monitoring stations during the reporting period. 1 Turbidity exceedance of the Limit Level for surface water quality was recorded at WM2 during the reporting period. The investigation results will be presented when the investigation of limit level exceedance of surface water quality is finished.

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 1 complaint & 1 enquiry received from EPD-RNG on 14 & 15 June 2023 were recorded during the reporting period. The related complaint and enquiry are investigating by related parties in accordance with the requirement of EM&A Manual.

Environmental Complaint on 14 June 2023

12.3.2 The complaint about the water aspect was received by ET on 14 June 2023 at 12:08 via EPD-RNG email. The main content of the complaint mentioned the muddy water was observed at Lin Ma Hang International Bridge on 30 May 2023. The related investigation results will be presented when the investigation was finished.

Environmental Enquiry on 15 June 2023

12.3.3 The enquiry about the water aspect was received by ET on 15 June 2023 at 15:18 via EPD-RNG email. The main content of the enquiry mentioned the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Point from EPD). The related investigation results will be presented when the investigation was finished.

12.3.4 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	
Jun 2023	0	0	1#	0	0	0
Accumulate of project	1*	0	0	0	0	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.

12.3.5 Cumulative complaint / enquiry log, Summaries of complaints and enquiries & Environmental complaint reports are presented in **Appendix P**. The investigation results will be presented when the investigation was finished.

12.4 Summary of Environmental Summons and Successful Prosecution

12.4.1 No summons was received during the reporting period

13 Implementation Status on Environmental Mitigation Measures

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**.

14 Future Key Issues

14.1 Key Issues for the Coming Month

14.1.1 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

14.1.2 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

14.2 Monitoring Schedule for the Next Month

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

14.3 Construction Programme for the Next Month

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

15 Conclusion

15.1.1 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 at AM1, AM2 & AM3 was recorded during the period.

15.1.2 Construction noise monitoring was carried out in the reporting month. No Action / Limit Level exceedance at NM1a & NM2a was recorded during the period.

15.1.3 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.

15.1.4 Surface water monitoring was carried out in the reporting month. No Action Level exceedance of surface water monitoring was recorded during the reporting period. 1 turbidity Limit Level exceedance of surface water quality at WM2 was recorded during the reporting period. The investigation results will be presented when the investigation of limit level exceedance of surface water quality is finished.

15.1.5 Landfill Gas Monitoring was carried out in the reporting month. No exceedance of Limit Levels of LFG was recorded during the reporting period.

15.1.6 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.

15.1.7 Post-translocation Monitoring was carried out in the reporting period. No *S. zanklon individual* was found. Post-transplantation monitoring was carried out in the reporting month. The numbers, measurements and health conditions of the transplanted species are recorded.

15.1.8 Four 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.

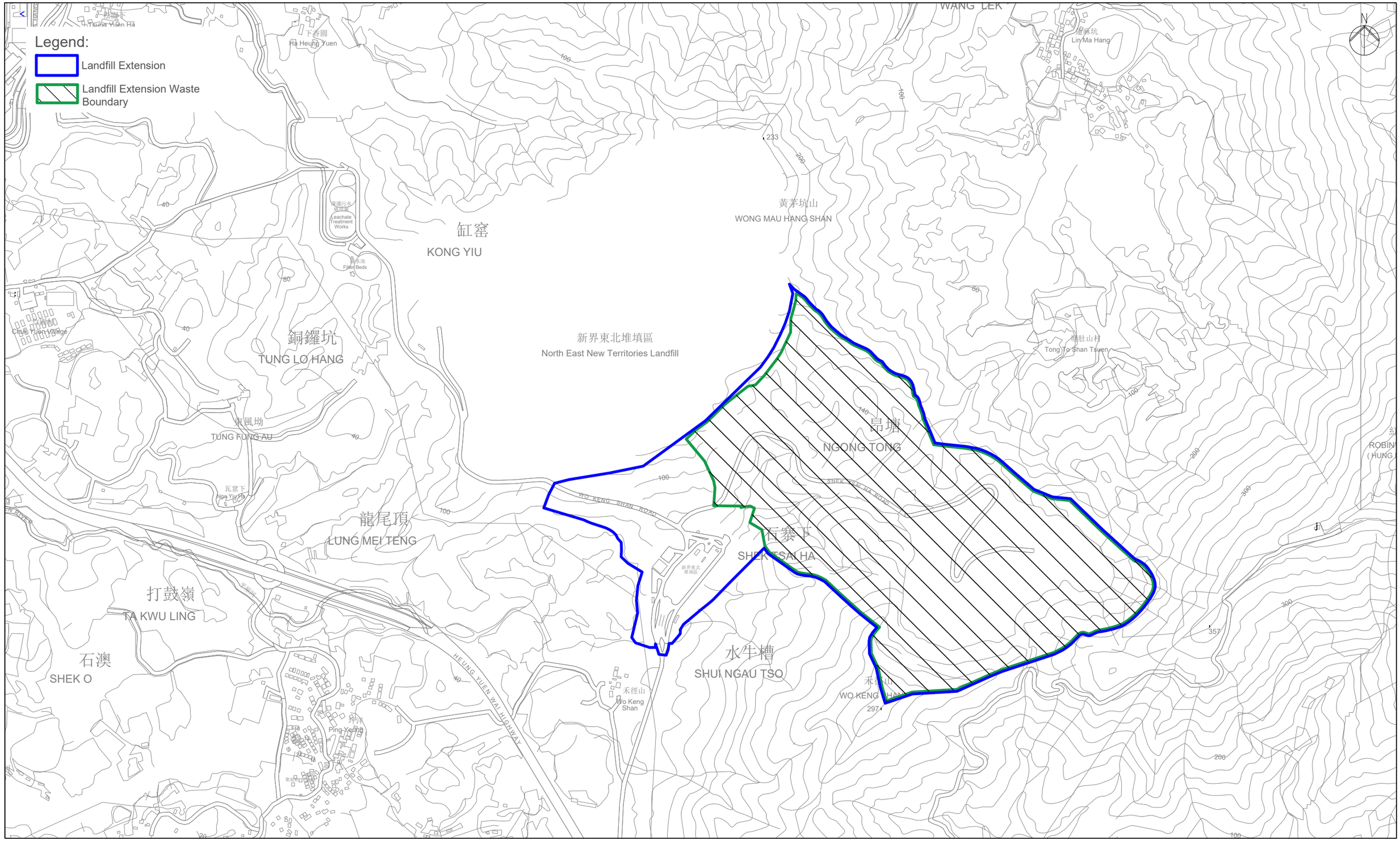
15.1.9 1 complaint & 1 enquiry received from EPD-RNG on 14 & 15 June 2023 were recorded during the reporting period. The related complaint and enquiry are investigating by related parties in accordance with the requirement of EM&A Manual. The investigation results will be presented when the investigation finished.

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

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

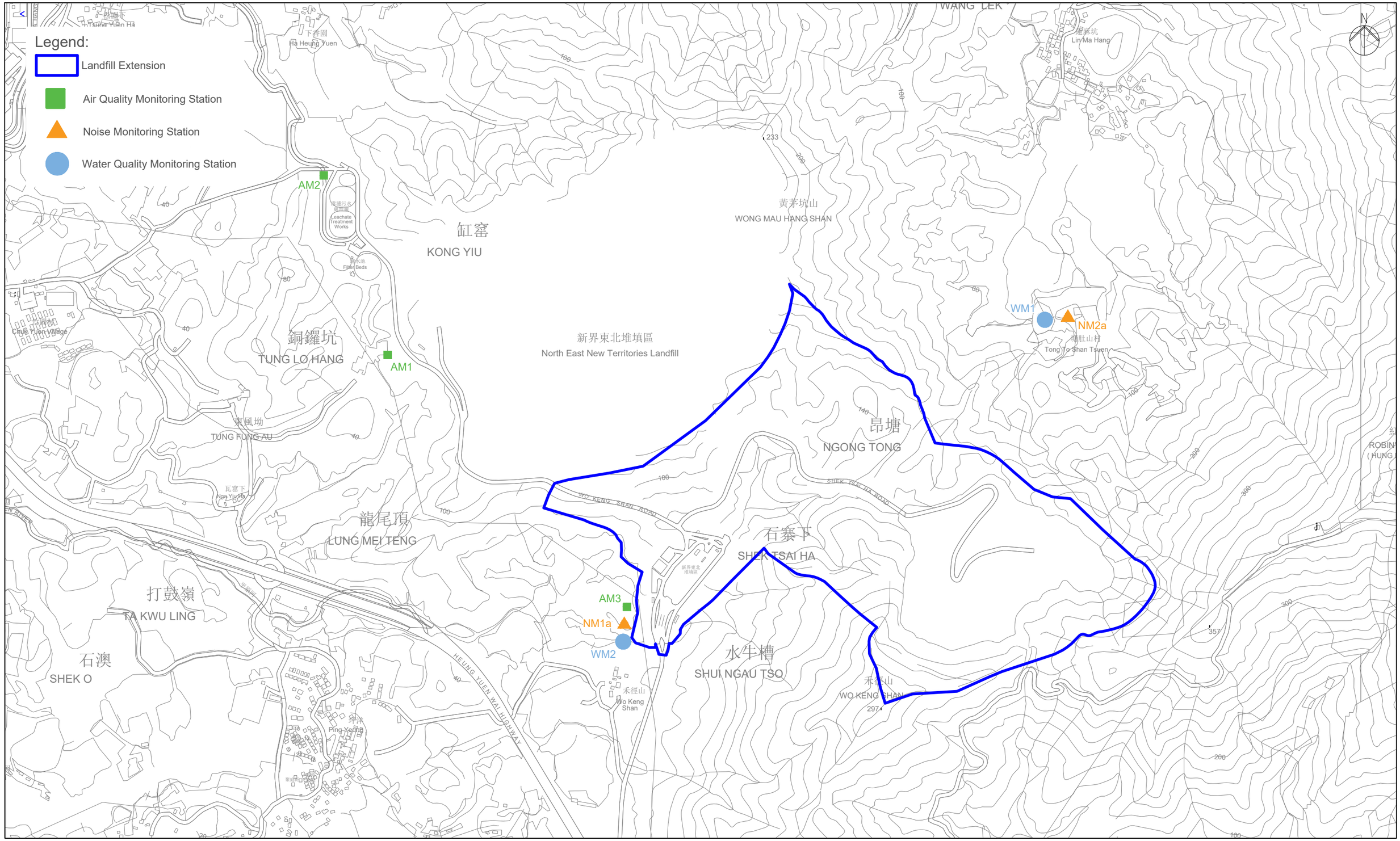
15.1.12 The ET will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Figure 1 Location of the Project Site



aurecon Aurecon Hong Kong Limited	North-East New Territories (NENT) Landfill Extension Location Plan of the Project Site	Figure 1.1 Scale: 1:10000

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

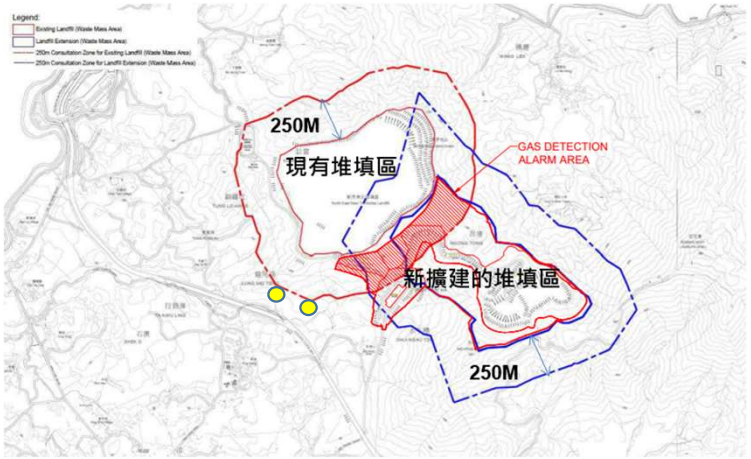


aurecon Aurecon Hong Kong Limited	North-East New Territories (NENT) Landfill Extension Impact Monitoring Locations	Figure 2 Scale: 1:10000

Figure 3 Landfill Gas Monitoring Locations

Gas Monitoring Point

Monitoring Frequency: 2 times per day



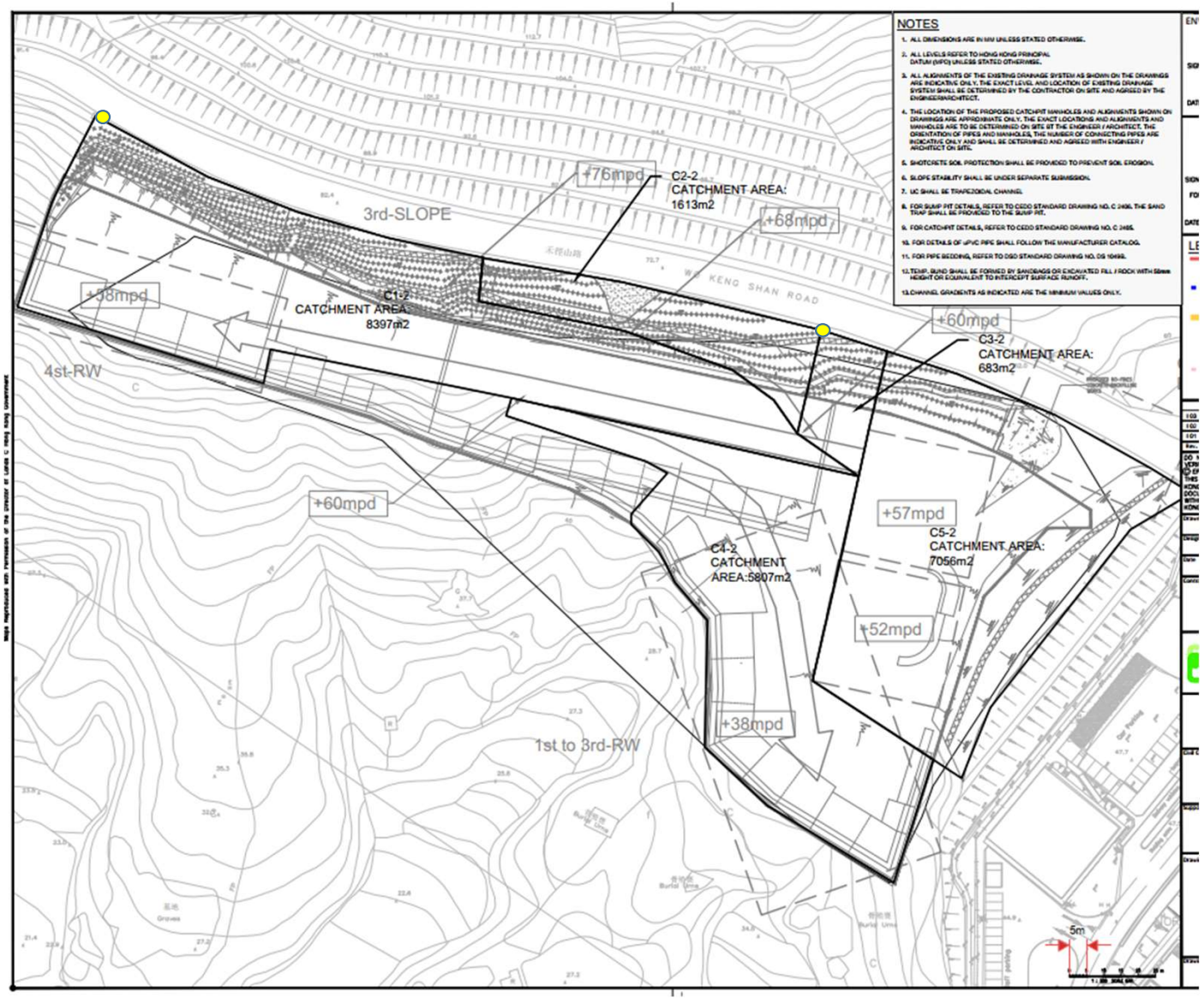
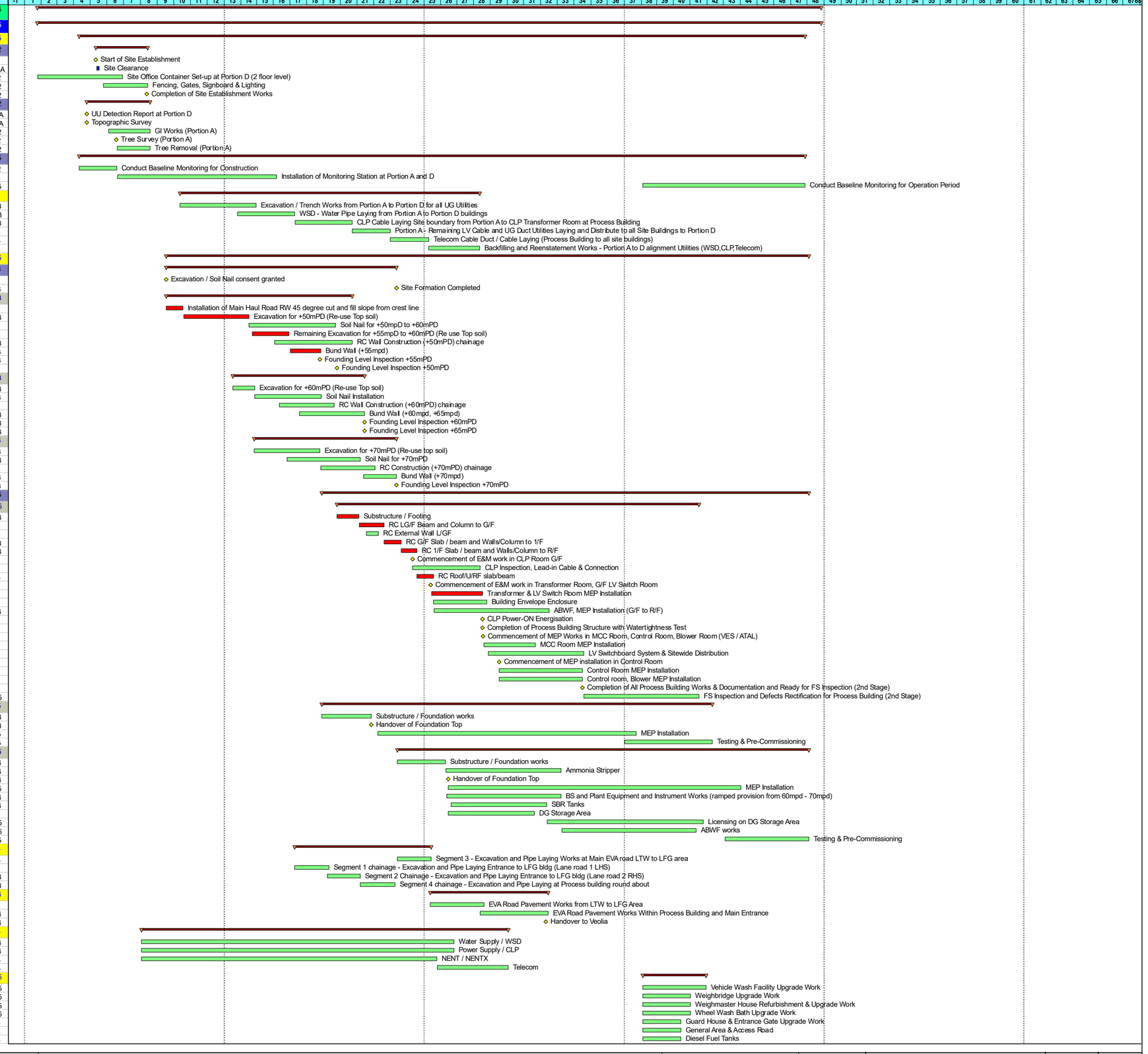


Figure 3 Landfill Gas Monitoring Locations

Appendix A Construction Programme

Activity ID	Activity Name	OD	Start	Finish
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	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-May-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 t	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 L/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/L/RF 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 S	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 - Undergound 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



環境保護署
Environmental Protection Department

- Remaining Level of Effort
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- Remaining Work
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- Summary

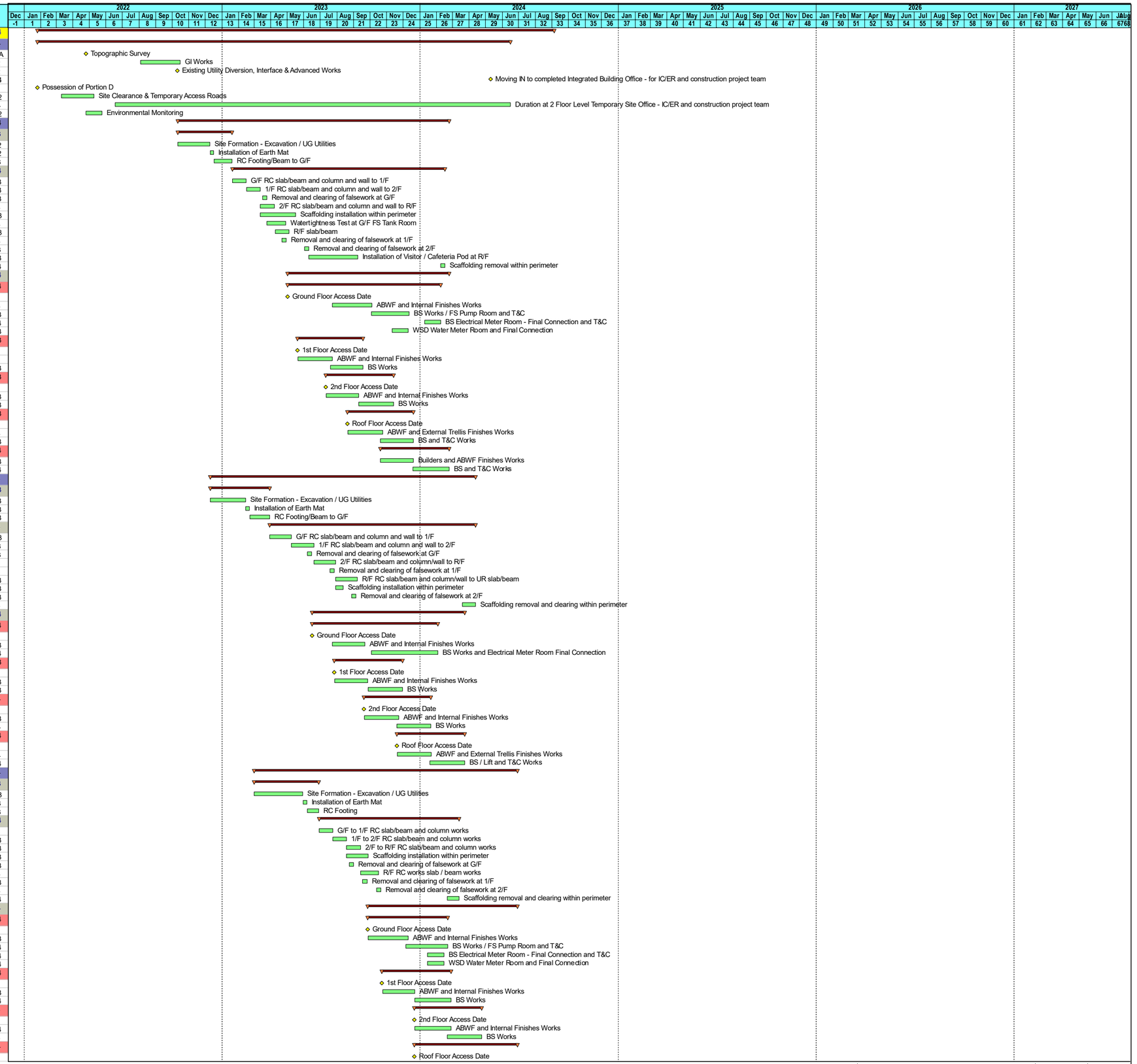
NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION

BASELINE PROGRAMME - EXTRACTED (REV.3)
INITIAL WORKS (PHASE 1)

VEOLIA

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

Activity ID	Activity Name	OD	Start	Finish
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-May-22
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-Jul-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
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環境保護署
Environmental Protection Department

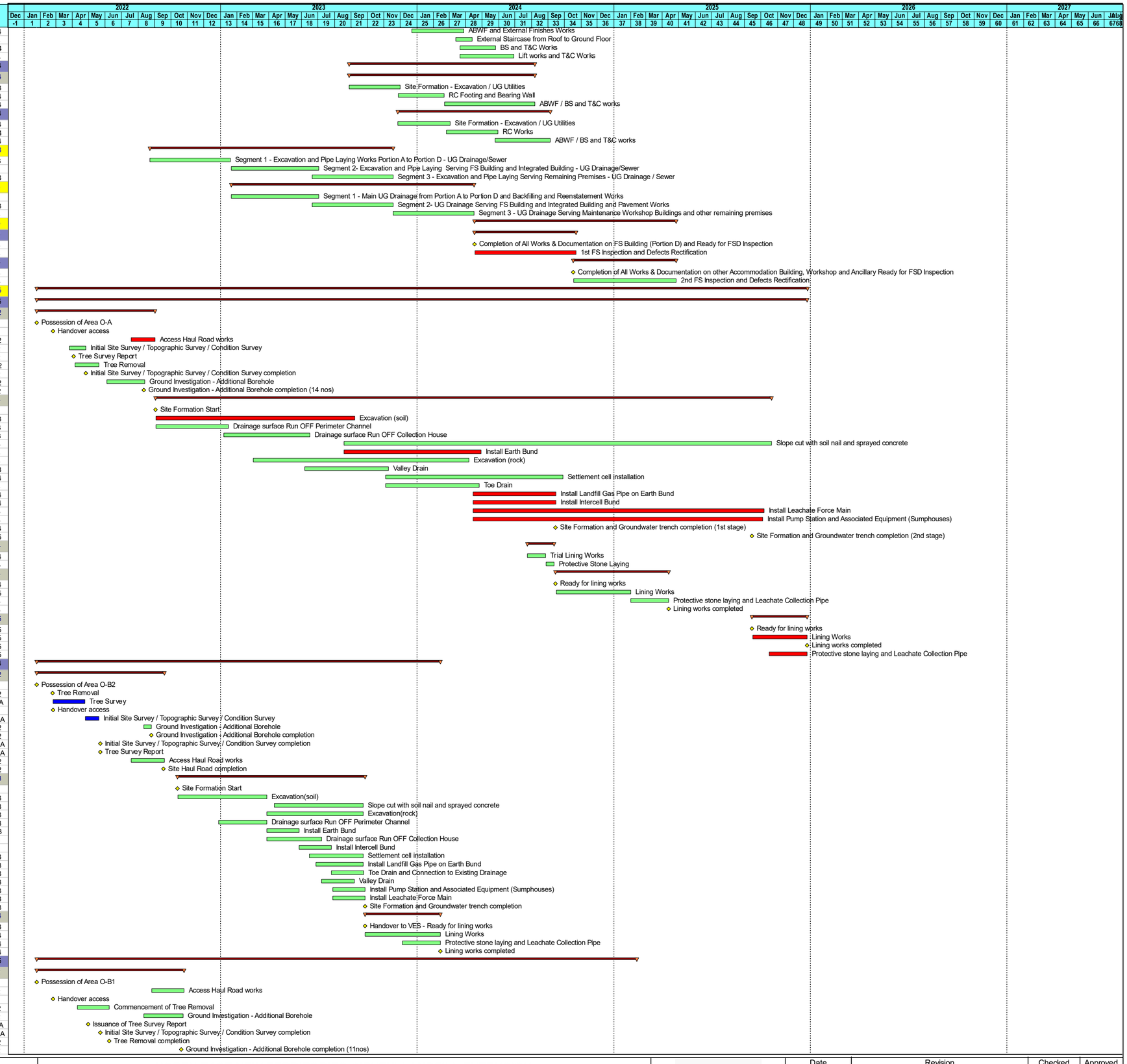
NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION

BASELINE PROGRAMME - EXTRACTED (REV.3)
INITIAL WORKS (PHASE 1)

VEOLIA

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

Activity ID	Activity Name	OD	Start	Finish
05-00181	ABWF and External Finishes Works	90	22-Dec-23	28-Mar-24
05-00182	External Staircase from Roof to Ground Floor	30	13-Mar-24	12-Apr-24
05-00183	BS and T&C Works	60	21-Mar-24	26-May-24
05-00184	Lift works and T&C Works	100	21-Mar-24	29-Jun-24
MAINTENANCE WORKSHOP		326	28-Aug-23	07-Aug-24
Vehicle		326	28-Aug-23	07-Aug-24
05-00185	Site Formation - Excavation / UG Utilities	90	28-Aug-23	30-Nov-23
05-00186	RC Footing and Bearing Wall	79	27-Nov-23	20-Feb-24
05-00187	ABWF / BS and T&C works	160	21-Feb-24	07-Aug-24
ANCILLARY BUILDINGS (PORTION D)		268	26-Nov-23	04-Sep-24
05-00188	Site Formation - Excavation / UG Utilities	90	26-Nov-23	02-Mar-24
05-00189	RC Works	90	24-Feb-24	30-May-24
05-00190	ABWF / BS and T&C works	100	25-May-24	04-Sep-24
PORTION D - Underground Drainage and Pipe Laying Works		428	22-Aug-22	17-Nov-23
05-00191	Segment 1 - Excavation and Pipe Laying Works Portion A to Portion D - UG Drainage/Sewer	142	22-Aug-22	19-Jan-23
05-00192	Segment 2- Excavation and Pipe Laying Serving FS Building and Integrated Building - UG Drai	150	21-Jan-23	02-Jul-23
05-00193	Segment 3 - Excavation and Pipe Laying Serving Remaining Premises - UG Drainage / Sewer	144	20-Jun-23	17-Nov-23
PORTION D - EVA Road Road Pavement Works		424	21-Jan-23	16-Apr-24
05-1818	Segment 1 - Main UG Drainage from Portion A to Portion D and Backfilling and Reenstatement	150	21-Jan-23	02-Jul-23
05-1819	Segment 2- UG Drainage Serving FS Building and Integrated Building and Pavement Works	144	20-Jun-23	17-Nov-23
05-1820	Segment 3 - UG Drainage Serving Maintenance Workshop Buildings and other remaining prem	140	17-Nov-23	16-Apr-24
FS Inspection Stages		357	17-Apr-24	26-Apr-25
Stage 1 FS Inspection		181	17-Apr-24	22-Oct-24
05-00194	Completion of All Works & Documentation on FS Building (Portion D) and Ready for FSD Inspec	0		17-Apr-24
05-00195	1st FS Inspection and Defects Rectification	180	18-Apr-24	22-Oct-24
Stage 2 FS Inspection		180	17-Oct-24	26-Apr-25
05-00196	Completion of All Works & Documentation on other Accommodation Building, Workshop and An	0		17-Oct-24
05-00197	2nd FS Inspection and Defects Rectification	180	18-Oct-24	26-Apr-25
Landfill Area (Portion E3, E4, E1, B1 & B2)		1402	25-Jan-22 A	27-Dec-25
AREA 0-A (E4 & B1)		1371	25-Jan-22 A	25-Dec-25
Advanced Works		150	25-Jan-22 A	01-Sep-22
05-00251	Possession of Area O-A	0	25-Jan-22 A	
05-00252	Handover access	0	24-Feb-22 A	
05-00253	Access Haul Road works	44	19-Jul-22	01-Sep-22
05-00254	Initial Site Survey / Topographic Survey / Condition Survey	27	26-Mar-22	25-Apr-22
05-00255	Tree Survey Report	0		03-Apr-22
05-00256	Tree Removal	38	06-Apr-22	20-May-22
05-00257	Initial Site Survey / Topographic Survey / Condition Survey completion	0		25-Apr-22
05-00258	Ground Investigation - Additional Borehole	70	04-Jun-22	13-Aug-22
05-00259	Ground Investigation - Additional Borehole completion (14 nos)	0		11-Aug-22
Landfill Site Formation and Groundwater Trench		1086	02-Sep-22	20-Oct-25
05-00260	Site Formation Start	0	02-Sep-22	
05-00261	Excavation (soil)	349	03-Sep-22	07-Sep-23
05-00262	Drainage surface Run OFF Perimeter Channel	126	03-Sep-22	15-Jan-23
05-00263	Drainage surface Run OFF Collection House	150	07-Jan-23	16-Jun-23
05-00264	Slope cut with soil nail and sprayed concrete	756	18-Aug-23	20-Oct-25
05-00265	Install Earth Bund	240	18-Aug-23	29-Apr-24
05-00266	Excavation (rock)	378	03-Mar-23	06-Apr-24
05-00267	Valley Drain	150	06-Jun-23	09-Nov-23
05-00267.01	Settlement cell installation	314	03-Nov-23	28-Sep-24
05-00268	Toe Drain	163	03-Nov-23	25-Apr-24
05-00269	Install Landfill Gas Pipe on Earth Bund	150	14-Apr-24	15-Sep-24
05-00270	Install Intercell Bund	150	14-Apr-24	15-Sep-24
05-00271	Install Leachate Force Main	518	14-Apr-24	06-Oct-25
05-00272	Install Pump Station and Associated Equipment (Sumphouses)	516	14-Apr-24	04-Oct-25
05-00273	Site Formation and Groundwater trench completion (1st stage)	0		14-Sep-24
05-00273.01	Site Formation and Groundwater trench completion (2nd stage)	0		14-Sep-25
Landfill Trial Area		50	24-Jul-24	11-Sep-24
05-00223	Trial Lining Works	35	24-Jul-24	27-Aug-24
05-00224	Protective Stone Laying	15	28-Aug-24	11-Sep-24
Landfill Liner Stage 1-3 (Portion E4, & B1) - 1st Stage		210	14-Sep-24	12-Apr-25
05-00274	Ready for lining works	0		14-Sep-24
05-0167	Lining Works	120	16-Sep-24	01-Feb-25
05-0168	Protective stone laying and Leachate Collection Pipe	60	01-Feb-25	12-Apr-25
05-0169	Lining works completed	0		12-Apr-25
Landfill Liner Stage 1-3 (Portion E4, & B1) - 2nd Stage		102	14-Sep-25	25-Dec-25
05-00275	Ready for lining works	0		14-Sep-25
05-1815	Lining Works	87	16-Sep-25	25-Dec-25
05-1816	Lining works completed	0		25-Dec-25
05-1817	Protective stone laying and Leachate Collection Pipe	60	16-Oct-25	25-Dec-25
AREA 0-B2 (Portion E3, B1 & E4)		719	25-Jan-22 A	13-Feb-24
Advanced Works		196	25-Jan-22 A	18-Sep-22
05-00198	Possession of Area O-B2	0	25-Jan-22 A	
05-00199	Tree Removal	0		23-Feb-22
05-00200	Tree Survey	58	24-Feb-22 A	24-Apr-22 A
05-00201	Handover access	0	24-Feb-22 A	
05-00202	Initial Site Survey / Topographic Survey / Condition Survey	29	25-Apr-22 A	20-May-22 A
05-00203	Ground Investigation - Additional Borehole	14	11-Aug-22	25-Aug-22
05-00204	Ground Investigation - Additional Borehole completion	0		25-Aug-22
05-00205	Initial Site Survey / Topographic Survey / Condition Survey completion	0		23-May-22 A
05-00206	Tree Survey Report	0		23-May-22 A
05-00207	Access Haul Road works	60	19-Jul-22	18-Sep-22
05-00208	Site Haul Road completion	0		17-Sep-22
Landfill Site Formation and Groundwater Trench		331	13-Oct-22	26-Sep-23
05-00209	Site Formation Start	0	13-Oct-22	
05-00210	Excavation(soil)	156	14-Oct-22	28-Mar-23
05-00211	Slope cut with soil nail and sprayed concrete	162	11-Apr-23	23-Sep-23
05-00212	Excavation(rock)	172	28-Mar-23	23-Sep-23
05-00213	Drainage surface Run OFF Perimeter Channel	84	28-Dec-22	28-Mar-23
05-00214	Install Earth Bund	54	28-Mar-23	27-May-23
05-00215	Drainage surface Run OFF Collection House	94	28-Mar-23	08-Jul-23
05-00216	Install Intercell Bund	58	27-May-23	26-Jul-23
05-00216.01	Settlement cell installation	98	15-Jun-23	23-Sep-23
05-00217	Install Landfill Gas Pipe on Earth Bund	88	27-Jun-23	23-Sep-23
05-00218	Toe Drain and Connection to Existing Drainage	60	26-Jul-23	24-Sep-23
05-00219	Valley Drain	60	08-Jul-23	06-Sep-23
05-00220	Install Pump Station and Associated Equipment (Sumphouses)	60	28-Jul-23	26-Sep-23
05-00221	Install Leachate Force Main	60	28-Jul-23	26-Sep-23
05-00222	Site Formation and Groundwater trench completion	0		26-Sep-23
Landfill Liner Stages 1&2 (Portion E3, B1 & E4)		140	26-Sep-23	13-Feb-24
05-00225	Handover to VES - Ready for lining works	0		26-Sep-23
05-0191	Lining Works	120	26-Sep-23	13-Feb-24
05-0192	Protective stone laying and Leachate Collection Pipe	60	05-Dec-23	13-Feb-24
05-0193	Lining works completed	0		13-Feb-24
AREA 0-B1 (Portion E3)		1040	25-Jan-22 A	12-Feb-25
Advanced Works		187	25-Jan-22 A	25-Oct-22
05-00226	Possession of Area O-B1	0	25-Jan-22 A	
05-00227	Access Haul Road works	58	26-Aug-22	25-Oct-22
05-00228	Handover access	0	24-Feb-22 A	
05-00229	Commencement of Tree Removal	52	10-Apr-22	08-Jun-22
05-00230	Ground Investigation - Additional Borehole	70	11-Aug-22	23-Oct-22
05-00231	Issuance of Tree Survey Report	0		30-Apr-22 A
05-00232	Initial Site Survey / Topographic Survey / Condition Survey completion	0		23-May-22 A
05-00233	Tree Removal completion	0		08-Jun-22
05-00234	Ground Investigation - Additional Borehole completion (11nos)	0		20-Oct-22



環境保護署
Environmental Protection Department

Remaining Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

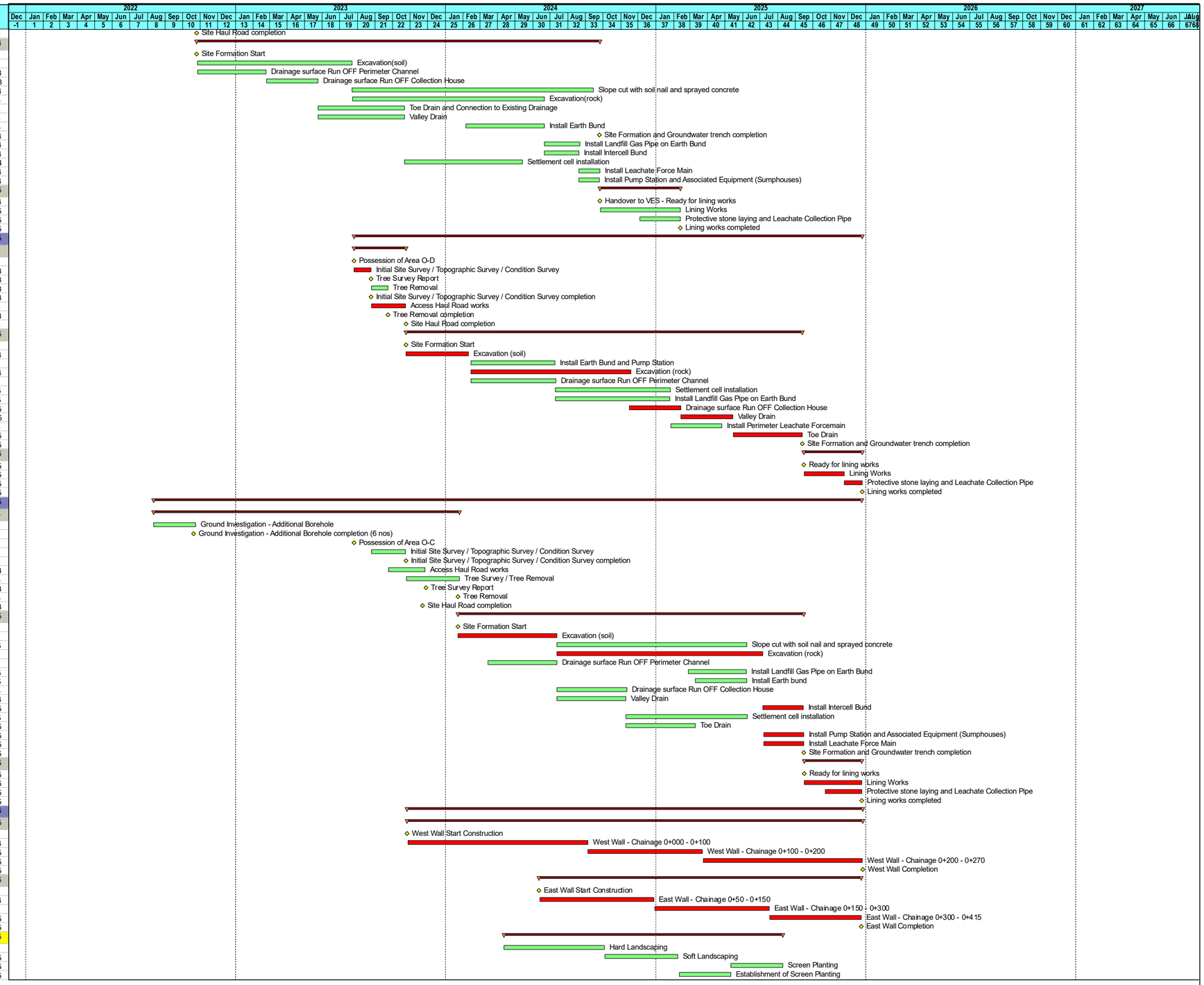
NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION

BASELINE PROGRAMME - EXTRACTED (REV.3)
INITIAL WORKS (PHASE 1)

VEOLIA

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

Activity ID	Activity Name	OD	Start	Finish
05-00235	Site Haul Road completion	0		25-Oct-22
Landfill Site Formation and Groundwater Trench		664	25-Oct-22	25-Sep-24
05-00236	Site Formation Start	0	25-Oct-22	
05-00237	Excavation(soil)	252	27-Oct-22	22-Jul-23
05-00238	Drainage surface Run OFF Perimeter Channel	111	27-Oct-22	23-Feb-23
05-00239	Drainage surface Run OFF Collection House	85	24-Feb-23	24-May-23
05-00240	Slope cut with soil nail and sprayed concrete	401	22-Jul-23	14-Sep-24
05-00241	Excavation(rock)	317	23-Jul-23	21-Jun-24
05-00242	Toe Drain and Connection to Existing Drainage	144	24-May-23	21-Oct-23
05-00243	Valley Drain	144	24-May-23	21-Oct-23
05-00244	Install Earth Bund	126	05-Feb-24	21-Jun-24
05-00245	Site Formation and Groundwater trench completion	0		24-Sep-24
05-00246	Install Landfill Gas Pipe on Earth Bund	60	21-Jun-24	21-Aug-24
05-00247	Install Intercell Bund	59	21-Jun-24	20-Aug-24
05-00247.01	Settlement cell installation	192	21-Oct-23	13-May-24
05-00248	Install Leachate Force Main	35	20-Aug-24	25-Sep-24
05-00249	Install Pump Station and Associated Equipment (Sumphouses)	34	20-Aug-24	24-Sep-24
Landfill Liner Stage 1-2 (Portion E3)		140	25-Sep-24	12-Feb-25
05-00250	Handover to VES - Ready for lining works	0		25-Sep-24
05-0143	Lining Works	120	26-Sep-24	12-Feb-25
05-0144	Protective stone laying and Leachate Collection Pipe	60	04-Dec-24	12-Feb-25
05-0145	Lining works completed	0		12-Feb-25
Area 0-D (Portion E1 & B2)/ Access Road)		884	26-Jul-23	25-Dec-25
Advanced Works		86	26-Jul-23	24-Oct-23
05-00301	Possession of Area O-D	0	26-Jul-23	
05-00302	Initial Site Survey / Topographic Survey / Condition Survey	30	26-Jul-23	24-Aug-23
05-00303	Tree Survey Report	0		24-Aug-23
05-00304	Tree Removal	30	25-Aug-23	23-Sep-23
05-00305	Initial Site Survey / Topographic Survey / Condition Survey completion	0		24-Aug-23
05-00306	Access Haul Road works	56	25-Aug-23	23-Oct-23
05-00307	Tree Removal completion	0		23-Sep-23
05-00308	Site Haul Road completion	0		24-Oct-23
Landfill Site Formation and Groundwater Trench		690	24-Oct-23	12-Sep-25
05-00309	Site Formation Start	0	24-Oct-23	
05-00310	Excavation (soil)	106	24-Oct-23	10-Feb-24
05-00311	Install Earth Bund and Pump Station	140	14-Feb-24	09-Jul-24
05-00312	Excavation (rock)	268	14-Feb-24	18-Nov-24
05-00313	Drainage surface Run OFF Perimeter Channel	141	14-Feb-24	11-Jul-24
05-00313.01	Settlement cell installation	200	10-Jul-24	26-Jan-25
05-00314	Install Landfill Gas Pipe on Earth Bund	193	10-Jul-24	25-Jan-25
05-00315	Drainage surface Run OFF Collection House	84	16-Nov-24	13-Feb-25
05-00316	Valley Drain	84	13-Feb-25	14-May-25
05-00317	Install Perimeter Leachate Forcemain	82	27-Jan-25	25-Apr-25
05-00318	Toe Drain	118	15-May-25	12-Sep-25
05-00319	Site Formation and Groundwater trench completion	0		12-Sep-25
Landfill Liner Stage 1&2 (Portion E1 & B2)		101	15-Sep-25	25-Dec-25
05-00320	Ready for lining works	0		15-Sep-25
05-0232.04	Lining Works	60	16-Sep-25	24-Nov-25
05-0232.05	Protective stone laying and Leachate Collection Pipe	27	24-Nov-25	25-Dec-25
05-0232.06	Lining works completed	0		25-Dec-25
AREA 0-C (Portion E1,B1 & E4)		1231	11-Aug-22	25-Dec-25
Advanced Works		505	11-Aug-22	25-Jan-24
05-00276	Ground Investigation - Additional Borehole	70	11-Aug-22	23-Oct-22
05-00277	Ground Investigation - Additional Borehole completion (6 nos)	0		20-Oct-22
05-00278	Possession of Area O-C	0	26-Jul-23	
05-00279	Initial Site Survey / Topographic Survey / Condition Survey	56	25-Aug-23	23-Oct-23
05-00280	Initial Site Survey / Topographic Survey / Condition Survey completion	0		24-Oct-23
05-00281	Access Haul Road works	60	24-Sep-23	26-Nov-23
05-00282	Tree Survey / Tree Removal	90	25-Oct-23	25-Jan-24
05-00283	Tree Survey Report	0		28-Nov-23
05-00284	Tree Removal	0		22-Jan-24
05-00285	Site Haul Road completion	0		22-Nov-23
Landfill Site Formation and Groundwater Trench		572	23-Jan-24	15-Sep-25
05-00286	Site Formation Start	0	23-Jan-24	
05-00287	Excavation (soil)	160	23-Jan-24	13-Jul-24
05-00288	Slope cut with soil nail and sprayed concrete	314	13-Jul-24	08-Jun-25
05-00289	Excavation (rock)	341	13-Jul-24	06-Jul-25
05-00290	Drainage surface Run OFF Perimeter Channel	112	15-Mar-24	13-Jul-24
05-00291	Install Landfill Gas Pipe on Earth Bund	95	26-Feb-25	07-Jun-25
05-00292	Install Earth bund	83	10-Mar-25	08-Jun-25
05-00293	Drainage surface Run OFF Collection House	118	13-Jul-24	11-Nov-24
05-00294	Valley Drain	117	13-Jul-24	10-Nov-24
05-00295	Install Intercell Bund	70	06-Jul-25	14-Sep-25
05-00295.01	Settlement cell installation	198	10-Nov-24	09-Jun-25
05-00296	Toe Drain	114	10-Nov-24	10-Mar-25
05-00297	Install Pump Station and Associated Equipment (Sumphouses)	70	07-Jul-25	15-Sep-25
05-00298	Install Leachate Force Main	70	07-Jul-25	15-Sep-25
05-00299	Site Formation and Groundwater trench completion	0		15-Sep-25
Landfill Liner Stage 1&2 (Portion E1, B1 & E4)		100	16-Sep-25	25-Dec-25
05-00300	Ready for lining works	0		16-Sep-25
05-0215	Lining Works	86	16-Sep-25	25-Dec-25
05-0216	Protective stone laying and Leachate Collection Pipe	55	22-Oct-25	25-Dec-25
05-0217	Lining works completed	0		25-Dec-25
Geotechnical Retaining Structure & Access Road		756	26-Oct-23	27-Dec-25
West Wall		756	26-Oct-23	27-Dec-25
05-00321	West Wall Start Construction	0	26-Oct-23	
05-00322	West Wall - Chainage 0+000 - 0+100	298	28-Oct-23	04-Sep-24
05-00323	West Wall - Chainage 0+100 - 0+200	190	05-Sep-24	22-Mar-25
05-00324	West Wall - Chainage 0+200 - 0+270	265	24-Mar-25	25-Dec-25
05-00325	West Wall Completion	0		27-Dec-25
EAST Wall		540	11-Jun-24	24-Dec-25
05-00326	East Wall Start Construction	0	11-Jun-24	
05-00327	East Wall - Chainage 0+50 - 0+150	193	13-Jun-24	28-Dec-24
05-00328	East Wall - Chainage 0+150 - 0+300	188	30-Dec-24	17-Jul-25
05-00329	East Wall - Chainage 0+300 - 0+415	157	18-Jul-25	24-Dec-25
05-00330	East Wall Completion	0		24-Dec-25
Landscape Works		485	12-Apr-24	09-Aug-25
05-0242	Hard Landscaping	150	12-Apr-24	03-Oct-24
05-0243	Soft Landscaping	110	04-Oct-24	08-Feb-25
05-0252	Screen Planting	88	11-May-25	09-Aug-25
05-0262	Establishment of Screen Planting	84	10-Feb-25	11-May-25



環境保護署
Environmental Protection Department

Remaining Level of Effort
Actual Work
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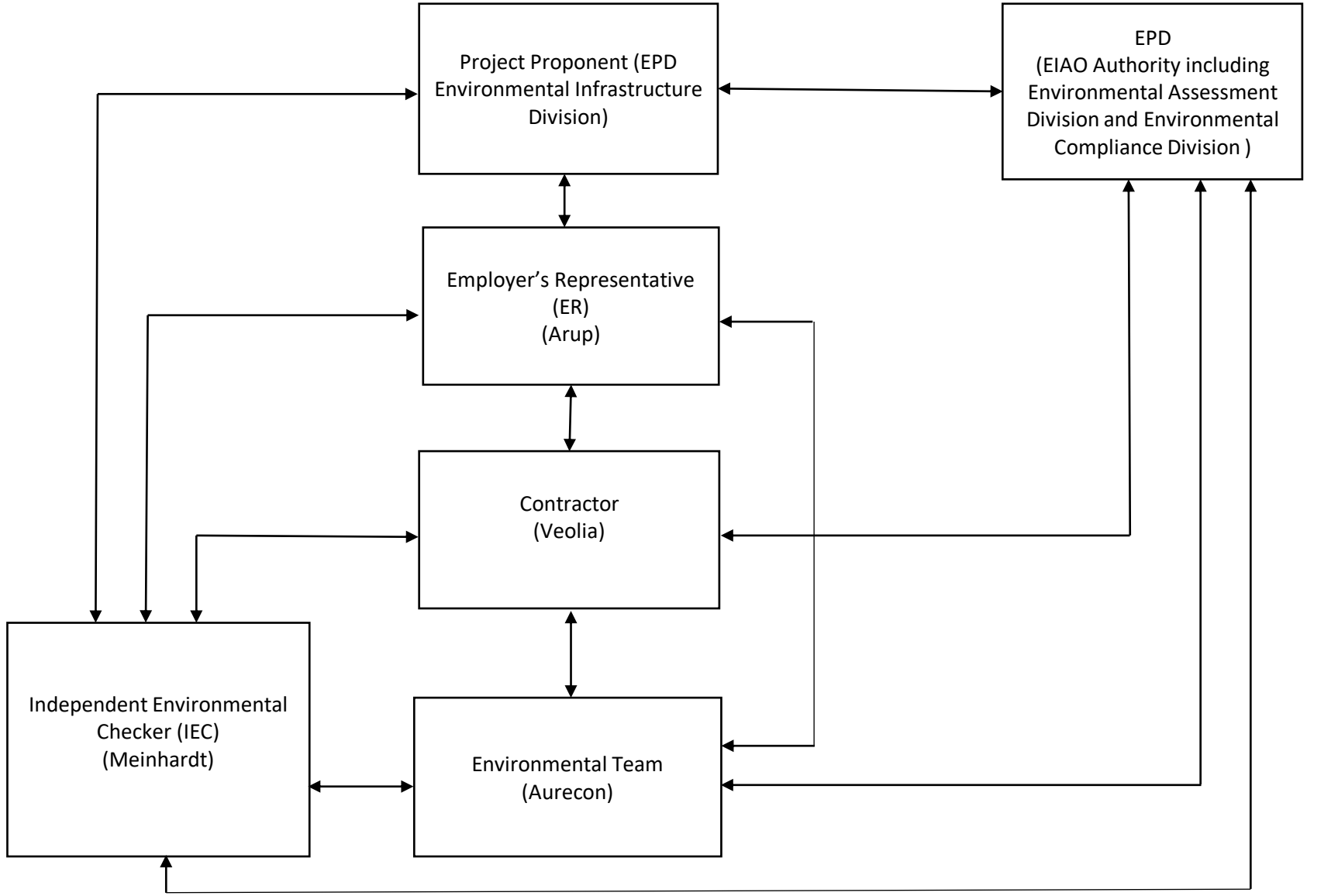
NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION

BASELINE PROGRAMME - EXTRACTED (REV.3)
INITIAL WORKS (PHASE 1)

VEOLIA

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

Line of Communication

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 Noise monitoring at NM1a and NM2a	**19**	**20**	**21**	**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 (June 2023) (version 8.0)

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

Remark:

1. 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).
2. Noise monitoring includes 30-minute construction noise monitoring at NM1a and NM2a (Ref.: Table 4.1 of the approved EM&A Manual).
3. 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).
4. Air quality monitoring at AM1 was postponed by one day to 27 June 2023 due to the electric supply.

Date: 16 June 2023

Appendix D Calibration Certificates

Air Quality

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Unit E, 12/f, Ford Glory Plaza
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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. 0Z4545
Our Report Refrence No. RPT-22-HVS-0026
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

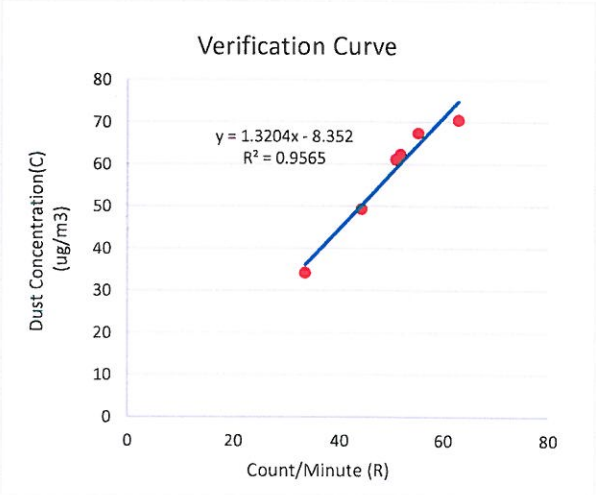
Verification Test No.	Date	Time			K-Factor	Counts/ Minute (R)	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C)
		Start-time	End-time	Elapsed Time (in min)	K-Factor (K=C/R)	x-axis			y axis
1	3/12/2022	194.73	198.08	201.00	0.00120	51	10251	R222043/1	61
2	3/12/2022	198.08	201.27	191.40	0.00102	34	6444	R222043/2	34
3	3/12/2022	201.27	204.35	184.80	0.00111	44	8193	R222043/3	49
4	4/12/2022	252.37	255.36	179.40	0.00122	55	9927	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	0.00112	63	11340	R222044/3	70
					0.00114				

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

By Linear Regression of y on x:

slope, mh= 1.3204
intercept,ch= -8.3520
*Correlation Coefficient,R= 0.9780
Verification Test Result: Strong Correlation, Results were accepted.

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



Verified By: _____ Date: 05-12-2022
Technical Manager

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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.: 882106
Our Report Refrence 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

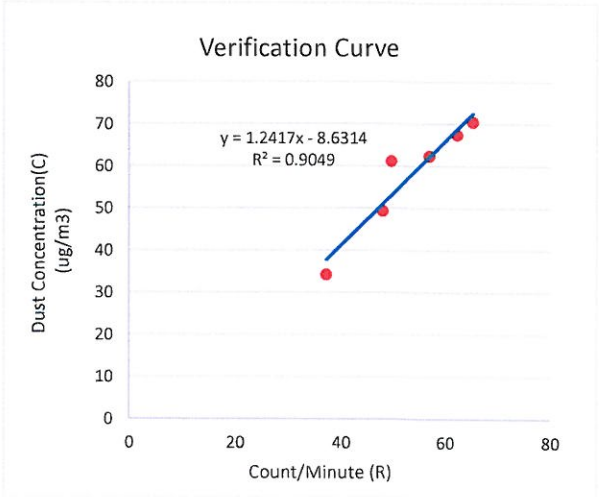
Verification Test No.	Date	Time			K-Factor	Counts/ Minute (R)	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C)
		Start-time	End-time	Elapsed Time (in min)	K-Factor (K=C/R)	x-axis			y axis
1	3/12/2022	194.73	198.08	201.00	0.00123	50	9983	R222043/1	61
2	3/12/2022	198.08	201.27	191.40	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: _____ Date: 05-12-2022
Technical Manager

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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. 882110
Our Report Refrence 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

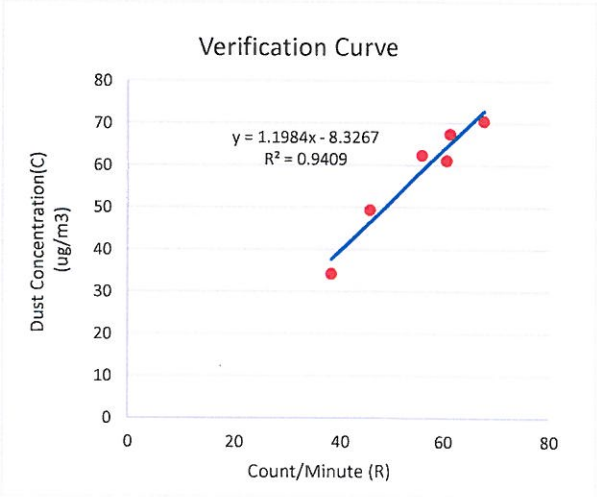
Verification Test No.	Date	Time			K-Factor	Counts/ Minute (R)	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C)
		Start-time	End-time	Elapsed Time (in min)	K-Factor (K=C/R)	x-axis			y axis
1	3/12/2022	194.73	198.08	201.00	0.00101	61	12194	R222043/1	61
2	3/12/2022	198.08	201.27	191.40	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: _____ Date: 05-12-2022
Technical Manager

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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 Refrence 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	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			y axis
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:

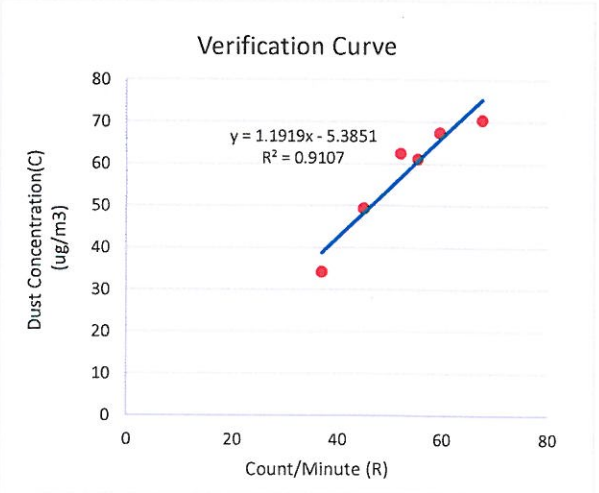
slope, mh= 1.1919

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: _____ Date: 05-12-2022

Technical Manager

ACUITY sustainability
Member of the Aurecon Group

aurecon

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	NENTX	Site ID:	AM1	Date:	06-May-2023
Serial No:	1105	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	760.8	Actual Temperature during Calibration (T_a) (deg K):	297.2

Calibration Orifice

Model:	TE-5025A	Slope (m_c):	2.05924
Serial No.:	3465	Intercept (b_c):	-0.01929
Calibration Due Date:	28-Jun-23	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	ΔH_2O (in)	Qa, X-Axis (m^3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	9.60	1.517	54.0	54.10
13	7.80	1.368	50.0	50.09
10	5.90	1.191	45.0	45.08
7	3.70	0.945	39.0	39.07
5	2.50	0.779	36.0	36.07

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

m= 24.7528 b= 16.1708 Corr. Coeff= 0.9975

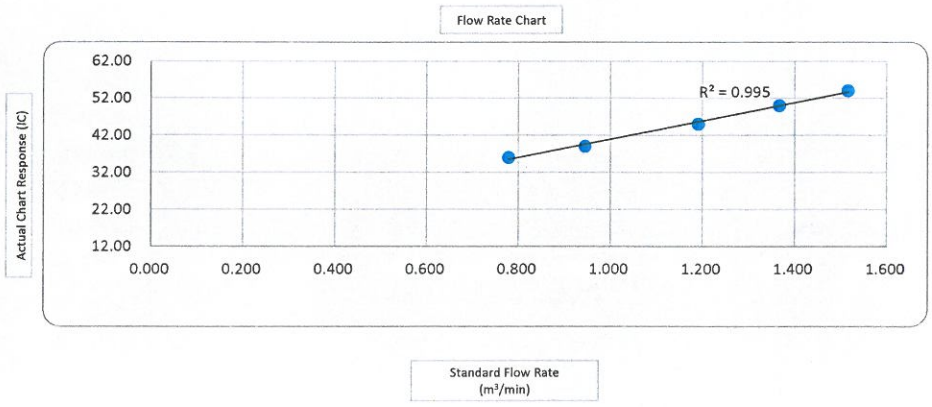
Calculations

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

$IC = I * (Sqrt (P_a/P_{Std}) * (T_{Std}/T_a))$

Qa = 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)



Checked by: HUI WAI FUNG
Laboratory Manager

Date: 06-May-2023

ACUITY sustainability
Member of the Aurecon Group

aurecon

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	NENTX	Site ID:	AM2	Date:	06-May-2023
Serial No:	1106	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	760.8	Actual Temperature during Calibration (T_a) (deg K):	297.2

Calibration Orifice

Model:	TE-5025A	Slope (m_c):	2.05924
Serial No.:	3465	Intercept (b_c):	-0.01929
Calibration Due Date:	28-Jun-23	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	ΔH_2O (in)	Qa, X-Axis (m^3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	11.00	1.623	57.0	57.11
13	8.90	1.461	52.0	52.10
10	6.90	1.287	46.0	46.09
7	4.40	1.030	39.0	39.07
5	2.60	0.794	33.0	33.06

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

m= 29.1007 b= 9.4295 Corr. Coeff= 0.9983

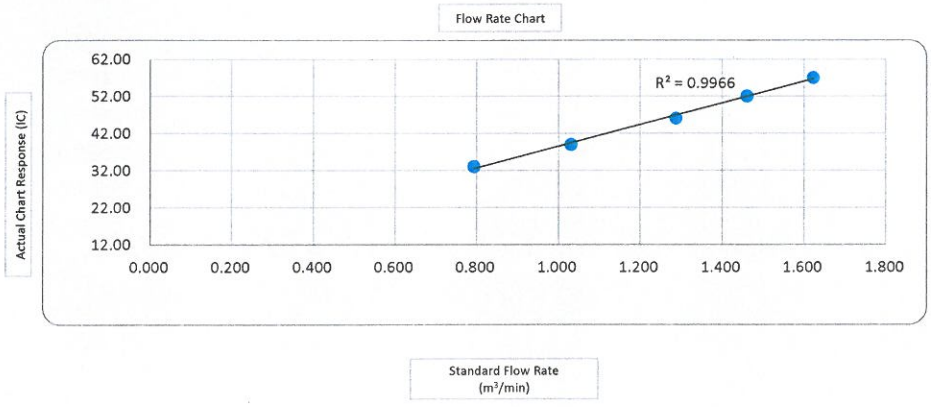
Calculations

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

$IC = I * (Sqrt (P_a/P_{Std}) * (T_{Std}/T_a))$

Qa = 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)



Checked by: HUI WAI FUNG
Laboratory Manager

Date: 06-May-2023

ACUITY sustainability
Member of the Aurecon Group

aurecon

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	NENTX	Site ID:	AM3	Date:	06-May-2023
Serial No:	1856	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	760.8	Actual Temperature during Calibration (T_a) (deg K):	297.2

Calibration Orifice

Model:	TE-5025A	Slope (m_c):	2.05924
Serial No.:	3465	Intercept (b_c):	-0.01929
Calibration Due Date:	28-Jun-23	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	ΔH_2O (in)	Qa, X-Axis (m^3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	10.60	1.593	62.0	62.12
13	8.20	1.403	57.0	57.11
10	6.20	1.221	52.0	52.10
7	4.20	1.006	45.0	45.08
5	2.30	0.747	40.0	40.07

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

m= 26.7568 b= 19.3460 Corr. Coeff= 0.9968

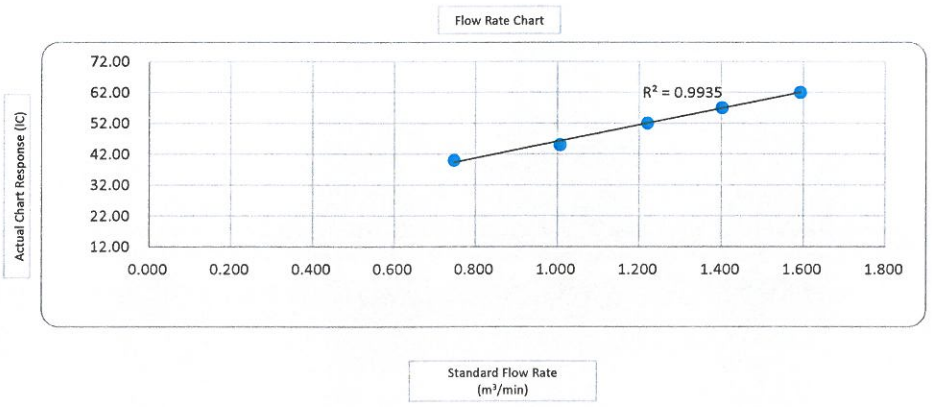
Calculations

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

$IC = I * (Sqrt (P_a/P_{Std}) * (T_{Std}/T_a))$

Qa = 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)



Checked by: HUI WAI FUNG
Laboratory Manager

Date: 06-May-2023

TISCH Environmental

RECALIBRATION DUE DATE:
June 28, 2023

Certificate of Calibration

Calibration Certification Information					
Cal. Date:	June 28, 2022	**Rootsmeter S/N:** 438320	**Ta:** 296	°K	
Operator:	Jim Tisch		**Pa:** 755.1	mm Hg	
Calibration Model #:	TE-5025A	**Calibrator S/N:** **3465**			

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4290	3.2	2.00
2	3	4	1	1.0130	6.4	4.00
3	5	6	1	0.9050	7.9	5.00
4	7	8	1	0.8590	8.8	5.50
5	9	10	1	0.7110	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)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9961	0.6970	1.4144	0.9958	0.6968	0.8854
0.9918	0.9791	2.0003	0.9915	0.9788	1.2522
0.9899	1.0938	2.2364	0.9895	1.0934	1.4000
0.9887	1.1509	2.3456	0.9883	1.1506	1.4683
0.9834	1.3831	2.8289	0.9830	1.3826	1.7708
QSTD	**m=**	**2.05924**	**QA**	**m=**	**1.28946**
	b=	**-0.01929**		**b=**	**-0.01207**
	r=	**0.99998**		**r=**	**0.99998**

Calculations

Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime

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= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

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

Tisch Environmental, Inc.
145 South Miami Avenue
Village of Cleves, OH 45002

www.tisch-env.com
TOLL FREE: (877)263-7610
FAX: (513)467-9009

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

ACOUSTICS AND AIR TESTING LABORATORY CO. LTD. (A+A)*L

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

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

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

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

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

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.

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail : inquiry@aa-lab.com

Certificate No. D224349E

JCSS 0197

CALIBRATION CERTIFICATE

Product	:	SOUND CALIBRATOR
Type	:	NC-75
Serial number	:	34724243
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 ℃, Relative humidity 49 %, Static pressure 99.9 kPa
Calibration date	:	05/07/2022 (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 : 11/07/2022 (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

Certificate No. D224349E

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	3.9×10^{-4} Hz

Working measurement standard universal counter:
Type : 53132A
Serial number : MY40005574
(JCSS Calibration Certificate No. 21081499079575510)

2. Total distortion

Measured value
0.2 %

Working measurement standard distortion meter:
Type : VA-2230A
Serial number : 11076061
(A2LA Calibration Certificate No. 1501-03080)

- closing -

RION

Hong Kong Calibration Ltd.
香 港 校 正 有限公司

A1

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 ± 3)°C **Relative Humidity :** (50 ± 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:

Equipment No.	Description	Cert. No.	Traceable to
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

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

Calibration Certificate

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

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

(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 form 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 form relevant international standards.

--- END OF REPORT ---

Hong Kong Calibration Ltd.
香 港 校 正 有限公司

Calibration Certificate

Certificate No. **210252**

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:

Equipment No.	Description	Cert. No.	Traceable to
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

Date: 7-Nov-22

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

Hong Kong Calibration Ltd.
香 港 校 正 有限公司

Calibration Certificate

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

PROMAT (HK) LTD
寶時(香港)有限公司
901 New Trend Centre, 704 Prince Edward Road East, San Po Kong, Kowloon, Hong Kong
Tel: (852)2661 2392 Fax: (852)2661 2086 Email: info@promat.hk http://www.promat.hk

PROMAT
Your Solution To Testing Instrument

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 : _____

PROMAT (HK) LTD 寶時

CERTIFICATION OF CALIBRATION

4533

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.

CH_4, CO_2 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

Calibration Instance: 114 IGC Instance: N/A

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_2S	52.6	53

Date of Issue : 18-Aug-2022 Approved by Signatory

Keeley Knight

Laboratory Inspection

End of Certificate

Calibration Instance:114 IGC Instance:N/A

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

Appendix E Monitoring Results

Air Quality

1-hour TSP Concentration (μg/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) μg/m^3	Reading (2) μg/m^3	Reading (3) μg/m^3	Average μg/m^3	Action Level μg/m^3	Limit Level μg/m^3	Action Level μg/m^3	Limit Level μg/m^3
2/6/2023	Sibata LD-5R	942532	0.00108	Fine	11:00	12:00	13:00	36	38	31	35	285	500	285	500
8/6/2023	Sibata LD-5R	942532	0.00108	Fine	11:20	12:20	13:20	16	24	19	20			285	500
14/6/2023	Sibata LD-5R	942532	0.00108	Cloudy	11:45	12:45	13:45	21	23	20	21			285	500
20/6/2023	Sibata LD-5R	942532	0.00108	Fine	15:00	16:00	17:00	24	28	25	26			285	500
27/6/2023	Sibata LD-5R	942532	0.00108	Fine	10:00	11:00	12:00	31	36	29	32			285	500
30/6/2023	Sibata LD-5R	942532	0.00108	Cloudy	10:40	11:40	12:40	31	34	30	32			285	500
							Average		**28**						
							Max.		**38**						
							Min.		**15**						

1-hour TSP Concentration (μg/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) μg/m^3	Reading (2) μg/m^3	Reading (3) μg/m^3	Average μg/m^3	Action Level μg/m^3	Limit Level μg/m^3	Action Level μg/m^3	Limit Level μg/m^3
2/6/2023	Sibata LD-5R	882106	0.00107	Fine	11:15	12:15	13:15	26	34	34	31	279	500	279	500
8/6/2023	Sibata LD-5R	882106	0.00107	Fine	14:44	15:44	16:44	21	29	23	24			279	500
14/6/2023	Sibata LD-5R	882106	0.00107	Cloudy	10:51	11:51	12:51	26	35	30	30			279	500
20/6/2023	Sibata LD-5R	882106	0.00107	Cloudy	14:30	15:30	16:30	41	45	40	42			279	500
26/6/2023	Sibata LD-5R	882106	0.00107	Fine	11:30	12:30	13:30	29	37	28	31			279	500
30/6/2023	Sibata LD-5R	882106	0.00107	Cloudy	10:50	11:50	12:50	21	32	23	25			279	500
							Average		**31**						
							Max.		**45**						
							Min.		**21**						

1-hour TSP Concentration (μg/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) μg/m^3	Reading (2) μg/m^3	Reading (3) μg/m^3	Average μg/m^3	Action Level μg/m^3	Limit Level μg/m^3	Action Level μg/m^3	Limit Level μg/m^3
2/6/2023	Sibata LD-5R	0Z4545	0.00114	Fine	11:45	12:45	13:45	39	40	44	41	285	500	285	500
8/6/2023	Sibata LD-5R	0Z4545	0.00114	Fine	11:50	12:50	13:50	21	29	29	26			285	500
14/6/2023	Sibata LD-5R	0Z4545	0.00114	Cloudy	11:19	12:19	13:19	30	34	33	30			285	500
20/6/2023	Sibata LD-5R	0Z4545	0.00114	Fine	14:00	15:00	16:00	31	36	32	42			285	500
26/6/2023	Sibata LD-5R	0Z4545	0.00114	Fine	11:01	12:01	13:01	31	45	36	37			285	500
30/6/2023	Sibata LD-5R	0Z4545	0.00114	Cloudy	10:20	11:20	12:20	24	30	26	27			285	500
							Average		**33**						
							Max.		**45**						
							Min.		**21**						

Remarks:

1. The 1-hr TSP Monitoring at AM1 was postponded by one day to 27 June 2023 due to the electirc supply.

The Summary of TSP 24-hour Concentration (μg/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
		(℃)	(hPa)	Initial	Final	(minutes)	(cfm)	(m^3/min)	(m^3)	Initial	Final	(g)	(μg/m^3)	(μg/m^3)	(μg/m3)
2/6/2023	Fine	30.8	1006.2	1191.47	1215.47	1440	40	0.94	1348	2.6747	2.8023	0.1276	95	164	260
8/6/2023	Fine	32.9	1005.7	1215.47	1239.47	1440	40	0.93	1339	2.6748	2.7240	0.0492	37		
14/6/2023	Cloudy	27.6	1005.0	1254.52	1278.52	1440	40.5	0.96	1386	2.6650	2.7177	0.0527	38		
20/6/2023	Fine	28.4	1007.4	1278.52	1302.52	1440	39.5	0.92	1331	2.6671	2.7114	0.0443	33		
27/6/2023	Fine	29.5	1009.7	1302.54	1326.54	1440	40	0.95	1361	2.7502	2.8205	0.0703	52		
30/6/2023	Cloudy	26.8	1006.3	1326.54	1350.54	1440	40	0.95	1363	2.7495	2.7882	0.0387	28		
												Average	**47**		
												Min	**28**		
												Max	**95**		

The Summary of 24-hour TSP Concentration (μg/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
		(℃)	(hPa)	Initial	Final	(minutes)	(cfm)	(m^3/min)	(m^3)	Initial	Final	(g)	(μg/m^3)	(μg/m^3)	(μg/m3)
2/6/2023	Fine	30.8	1006.2	964.46	988.46	1440	41	1.06	1529	2.6750	2.7578	0.0828	54	152	260
8/6/2023	Fine	32.9	1005.7	988.46	1012.46	1440	39.5	1.01	1448	2.6658	2.7441	0.0783	54		
14/6/2023	Cloudy	27.6	1005.0	1012.46	1036.46	1440	40	1.03	1488	2.6576	2.7108	0.0532	36		
20/6/2023	Fine	28.4	1036.5	1036.46	1060.46	1440	40	1.03	1490	2.6587	2.7136	0.0549	37		
26/6/2023	Fine	29.5	1009.9	1060.46	1084.46	1440	40.5	1.05	1516	2.6977	2.7459	0.0482	32		
30/6/2023	Cloudy	26.8	1006.3	1084.46	1108.46	1440	40	1.04	1493	2.6614	2.7088	0.0474	32		
												Average	**41**		
												Min	**32**		
												Max	**54**		

The Summary of 24-hour TSP Concentration (μg/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
		(℃)	(hPa)	Initial	Final	(minutes)	(cfm)	(m^3/min)	(m^3)	Initial	Final	(g)	(μg/m^3)	(μg/m^3)	(μg/m3)
2/6/2023	Fine	30.8	1006.2	1971.67	1995.67	1440	39	0.71	1023	2.6577	2.7908	0.1331	130	163	260
8/6/2023	Fine	32.9	1005.7	1995.67	2019.67	1440	41.5	0.80	1147	2.6758	2.8023	0.1265	110		
14/6/2023	Cloudy	27.6	1005.0	2019.67	2043.67	1440	39.5	0.73	1058	2.6601	2.7270	0.0669	63		
20/6/2023	Fine	28.4	1007.2	2043.69	2067.69	1440	41	0.79	1140	2.6637	2.7305	0.0668	59		
26/6/2023	Fine	29.5	1009.7	2067.69	2091.69	1440	42	0.83	1195	2.6818	2.7854	0.1036	87		
30/6/2023	Cloudy	26.8	1006.3	2091.69	2115.69	1440	42	0.83	1197	2.6674	2.7184	0.0510	43		
												Average	**82**		
												Min	**43**		
												Max	**130**		

Remarks:
1. Orange Text equal to exceed Action Level
2. Red Text equal to exceed Limit Level
3. The 24-hr TSP Monitoring at AM1 was postponded by one day to 27 June 2023 due to the electirc supply.

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
8/6/2023	Fine	2.1	11:00	11:30	61.4	61.9	60.4	61.1	61.9	62.2	61.5	63.4	63.2	60.4	61.1	61.9	62.2	59.4	59.1	58.2	59.4	58.8	57.2
14/6/2023	Cloudy	2.1	11:20	11:50	59.4	60.2	61.2	58.2	60.4	61.1	60.2	61.9	63.3	64.2	62.2	63.6	64.2	55.8	57.1	58.2	57.4	56.6	55.2
21/6/2023	Fine	0.3	14:00	14:30	56.2	51.6	52.9	53.3	51.6	53.4	53.5	61.7	52.8	54.5	55	53	54.5	50.2	49.6	50.8	49.7	49.1	50.2
26/6/2023	Fine	3.1	11:50	12:20	54.3	53.3	54.4	53.6	54.1	55.1	54.2	56.2	55.2	56.4	56.1	56.9	56.6	50.9	50.2	51.2	52.3	51.6	50.6

Average	58.6
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
8/6/2023	Fine	3.1	16:00	16:30	57.4	58.1	59.2	57.2	56.4	57.1	57.7	58.1	59.9	61.2	58.9	57.7	59.1	53.2	52.3	53.4	51.9	52.8	53.4
14/6/2023	Cloudy	2.1	14:00	14:30	53.2	52.4	54.1	54.6	55.1	53.6	53.9	54.5	53.4	55.2	56.2	59.1	54.6	50.3	51.4	52.1	52.4	53.2	51.2
21/6/2023	Fine	0.7	16:00	16:30	47.5	46.5	47.1	48.2	51.5	47.9	48.5	48.3	48	47.9	48.9	47.9	48	42.4	44.5	43.4	42.9	44.2	44.4
26/6/2023	Fine	3.2	16:00	16:30	49.1	50.1	51.2	49.4	48.1	48.3	49.5	51.9	52.2	52.9	51.4	51.1	52.6	45.2	46.2	45.1	46.6	44.2	45.1

Average	53.9
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
21-Jun-23	16:05	Fine	0.05	0.5	28.0	7.6	<7.4	<4	7.1	>7.7	>7.8	5.7	>9.2	>9.5	6.6	>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
21-Jun-23	14:03	Fine	0.15	0	27.3	6.7	<5	<4	7.2	>7.6	>7.7	142.5	>108.3	>108.9	83.2	>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"

3. Organe text equal to "Exceed Action Level"

4. Red text equal to "Exceed Limit Level"

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

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	: HK2324385
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	: NENTX			Date Samples Received	: 21-Jun-2023
Order number	: ----	Quote number	: HKE/2751/2022_V2	Issue Date	: 06-Jul-2023
C-O-C number	: ----			No. of samples received	: 2
Site	:			No. of samples analysed	: 2

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

Signatories	*Position*	*Authorised results for*
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 21-Jun-2023 to 05-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: HK2324385

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 250mL sterile plastic bottles containing sodium thiosulfate. Sample(s) arrived at the laboratory at 17:50.

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**

Compound	CAS Number	LOR	Unit	Sample ID	WM1	WM2	----	----	----
				Sampling date / time	21-Jun-2023	21-Jun-2023	----	----	----
					HK2324385-001	HK2324385-002	-------	-------	-------
EA/ED: Physical and Aggregate Properties									
EA002: pH Value	----	0.1	pH Unit		7.0	7.3	----	----	----
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm		57	154	----	----	----
EA025: Suspended Solids (SS)	----	0.1	mg/L		6.6	83.2	----	----	----
ED037: Total Alkalinity as CaCO3	----	1	mg/L		15	35	----	----	----
ED/EK: Inorganic Nonmetallic Parameters									
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L		2	17	----	----	----
ED045K: Chloride	16887-00-6	0.5	mg/L		6	11	----	----	----
EK055K: Ammonia as N	7664-41-7	0.01	mg/L		<0.01	0.14	----	----	----
EK058A: Nitrate as N	14797-55-8	0.01	mg/L		0.06	0.32	----	----	----
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.6	0.8	----	----	----
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		2	2	----	----	----
EP020: Oil & Grease	----	5	mg/L		<5	<5	----	----	----
EP026C: Chemical Oxygen Demand	----	5	mg/L		9	14	----	----	----
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		1	6	----	----	----
EG020: Lead	7439-92-1	1	µg/L		1	11	----	----	----
EG020: Manganese	7439-96-5	1	µg/L		34	509	----	----	----
EG020: Nickel	7440-02-0	1	µg/L		<1	12	----	----	----
EG020: Zinc	7440-66-6	10	µg/L		13	51	----	----	----
EG032: Calcium	7440-70-2	50	µg/L		3340	18600	----	----	----
EG032: Iron	7439-89-6	10	µg/L		570	3850	----	----	----
EG032: Magnesium	7439-95-4	50	µg/L		540	1560	----	----	----
EG032: Potassium	7440-09-7	50	µg/L		830	3050	----	----	----
EG032: Sodium	7440-23-5	50	µg/L		6750	6830	----	----	----

Sub-Matrix: WATER			Sample ID	WM1	WM2	----	----	----
			Sampling date / time	21-Jun-2023	21-Jun-2023	----	----	----
Compound	CAS Number	LOR	Unit	HK2324385-001	HK2324385-002	-------	-------	-------
EM: Microbiological Testing								
EM002: E. coli	----	1	CFU/100mL	160	2800	----	----	----
EM003: Total Coliforms	----	1	CFU/100mL	220	4200	----	----	----

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 5130115)								
HK2324385-002	WM2	EA025: Suspended Solids (SS)	----	0.5	mg/L	83.2	82.7	0.6
EA/ED: Physical and Aggregate Properties (QC Lot: 5130573)								
HK2324234-001	Anonymous	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	211	211	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5130574)								
HK2324384-001	Anonymous	EA002: pH Value	----	0.1	pH Unit	7.4	7.4	0.0
HK2324399-001	Anonymous	EA002: pH Value	----	0.1	pH Unit	8.0	8.0	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5130602)								
HK2324297-001	Anonymous	ED037: Total Alkalinity as CaCO3	----	1	mg/L	<1	<1	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130203)								
HK2324178-003	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	23	23	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130205)								
HK2324385-001	WM1	ED045K: Chloride	16887-00-6	1	mg/L	6	6	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130206)								
HK2324385-001	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: 5130211)								
HK2324385-001	WM1	EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5136653)								
HK2324080-001	Anonymous	EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5151752)								
HK2324385-001	WM1	EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.6	0.6	0.0
EP: Aggregate Organics (QC Lot: 5139108)								
HK2324856-001	Anonymous	EP005: Total Organic Carbon	----	1	mg/L	<50	<50	0.0
EP: Aggregate Organics (QC Lot: 5151348)								
HK2321471-001	Anonymous	EP026C: Chemical Oxygen Demand	----	5	mg/L	6	6	0.0
EG: Metals and Major Cations - Total (QC Lot: 5130258)								
HK2324385-002	WM2	EG032: Iron	7439-89-6	10	µg/L	3850	3610	6.5
		EG032: Calcium	7440-70-2	50	µg/L	18600	18400	1.5
		EG032: Magnesium	7439-95-4	50	µg/L	1560	1530	2.3
		EG032: Potassium	7440-09-7	50	µg/L	3050	2970	2.6
		EG032: Sodium	7440-23-5	50	µg/L	6830	6700	1.9

Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report: LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations - Total (QC Lot: 5130259)								
HK2324385-002	WM2	**EG020: Cadmium**	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	6	7	0.0
		EG020: Lead	7439-92-1	1	µg/L	11	11	0.0
		EG020: Manganese	7439-96-5	1	µg/L	509	506	0.7
		EG020: Nickel	7440-02-0	1	µg/L	12	12	0.0
		EG020: Zinc	7440-66-6	10	µg/L	51	51	0.0

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report: LOR	Unit	Result	Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report: Spike Concentration	Spike Recovery (%): LCS	DCS	Recovery Limits(%): Low	High	RPD (%): Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 5130115)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	10 mg/L	98.5	----	82.4	118	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 5130573)											
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	<1	146.9 µS/cm	101	----	93.5	106	----	----
				<1	1412 µS/cm	98.6	----	94.3	105	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 5130602)											
ED037: Total Alkalinity as CaCO3	----	1	mg/L	<1	50 mg/L	101	----	95.0	105	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130203)											
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	<1	5 mg/L	100	----	89.8	108	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130205)											
ED045K: Chloride	16887-00-6	1	mg/L	<1	10 mg/L	97.4	----	88.2	108	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130206)											
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	97.3	----	92.4	106	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130211)											
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	97.7	----	89.3	109	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5136653)											
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	----	----	----	----	----	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5151752)											

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)	
		LOR	Unit	Result		LCS	DCS	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5151752) - Continued											
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	0.5 mg/L	111	----	89.0	120	----	----
EP: Aggregate Organics (QC Lot: 5126405)											
EP030: Biochemical Oxygen Demand	----	----	mg/L	----	198 mg/L	93.0	----	78.6	118	----	----
EP: Aggregate Organics (QC Lot: 5139081)											
EP020: Oil & Grease	----	2	mg/L	<2	20 mg/L	86.4	----	84.2	110	----	----
EP: Aggregate Organics (QC Lot: 5139108)											
EP005: Total Organic Carbon	----	1	mg/L	<1	5 mg/L	98.7	----	78.1	123	----	----
				<1	100 mg/L	98.3	----	79.9	119	----	----
EP: Aggregate Organics (QC Lot: 5151348)											
EP026C: Chemical Oxygen Demand	----	----	mg/L	----	25 mg/L	101	----	92.0	108	----	----
				----	250 mg/L	96.9	----	92.3	106	----	----
EG: Metals and Major Cations - Total (QC Lot: 5130258)											
EG032: Calcium	7440-70-2	50	µg/L	<50	2000 µg/L	98.2	----	85.0	115	----	----
EG032: Iron	7439-89-6	10	µg/L	<10	2000 µg/L	105	----	85.0	115	----	----
EG032: Magnesium	7439-95-4	50	µg/L	<50	2000 µg/L	104	----	85.0	115	----	----
EG032: Potassium	7440-09-7	50	µg/L	<50	2000 µg/L	99.5	----	85.0	115	----	----
EG032: Sodium	7440-23-5	50	µg/L	<50	2000 µg/L	101	----	85.0	115	----	----
EG: Metals and Major Cations - Total (QC Lot: 5130259)											
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	104	----	90.0	111	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	50 µg/L	94.4	----	89.0	111	----	----
EG020: Manganese	7439-96-5	1	µg/L	<1	50 µg/L	97.4	----	85.0	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	50 µg/L	99.6	----	87.0	110	----	----
EG020: Zinc	7440-66-6	10	µg/L	<10	50 µg/L	111	----	86.0	114	----	----

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

Matrix: **WATER**

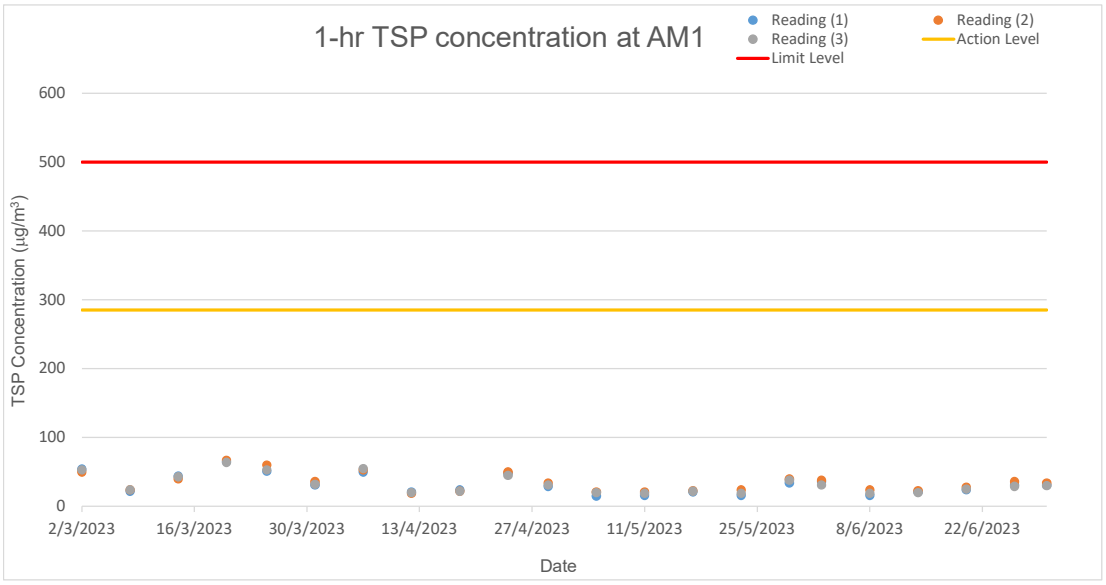
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130203)										
HK2324178-003	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric	----	50 mg/L	93.8	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130205)										
HK2324385-001	WM1	ED045K: Chloride	16887-00-6	5 mg/L	90.8	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130206)										
HK2324385-001	WM1	EK071K: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	98.5	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5130211)										
HK2324385-001	WM1	EK055K: Ammonia as N	7664-41-7	0.5 mg/L	100	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5151752)										
HK2324385-001	WM1	EK061A: Total Kjeldahl Nitrogen as N	----	0.5 mg/L	108	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5139108)										
HK2324856-001	Anonymous	EP005: Total Organic Carbon	----	250 mg/L	81.4	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5151348)										
HK2321471-001	Anonymous	EP026C: Chemical Oxygen Demand	----	10 mg/L	102	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5130258)										
HK2324385-001	WM1	EG032: Calcium	7440-70-2	2000 µg/L	95.2	----	75.0	125	----	----
		EG032: Iron	7439-89-6	2000 µg/L	110	----	75.0	125	----	----
		EG032: Magnesium	7439-95-4	2000 µg/L	103	----	75.0	125	----	----
		EG032: Potassium	7440-09-7	2000 µg/L	101	----	75.0	125	----	----
		EG032: Sodium	7440-23-5	2000 µg/L	92.9	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5130259)										
HK2324385-001	WM1	EG020: Cadmium	7440-43-9	5 µg/L	105	----	75.0	125	----	----
		EG020: Copper	7440-50-8	50 µg/L	110	----	75.0	125	----	----
		EG020: Lead	7439-92-1	50 µg/L	98.7	----	75.0	125	----	----
		EG020: Manganese	7439-96-5	50 µg/L	106	----	75.0	125	----	----
		EG020: Nickel	7440-02-0	50 µg/L	108	----	75.0	125	----	----

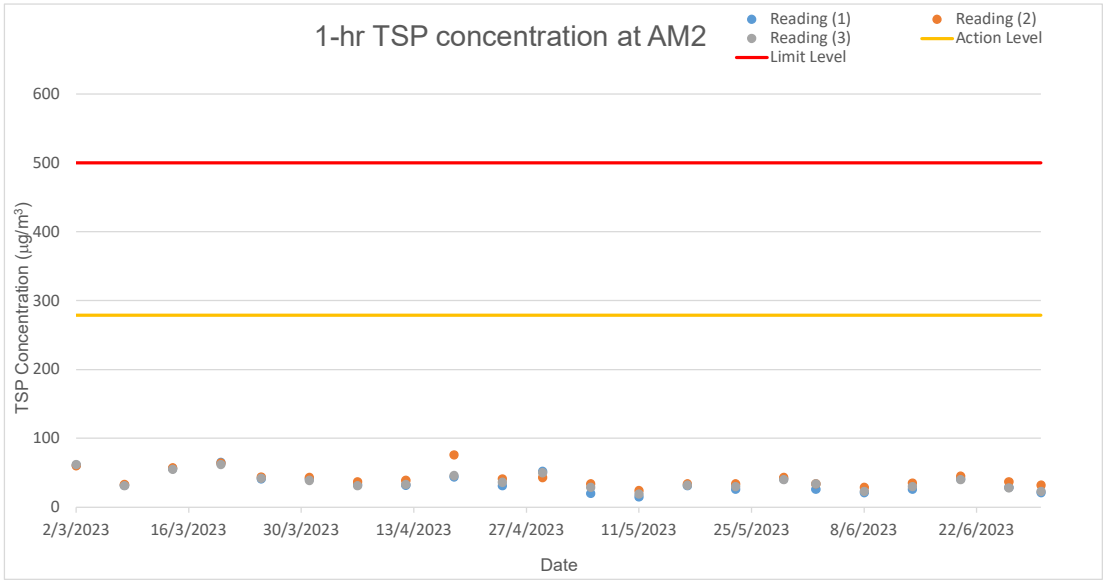
Matrix: **WATER**

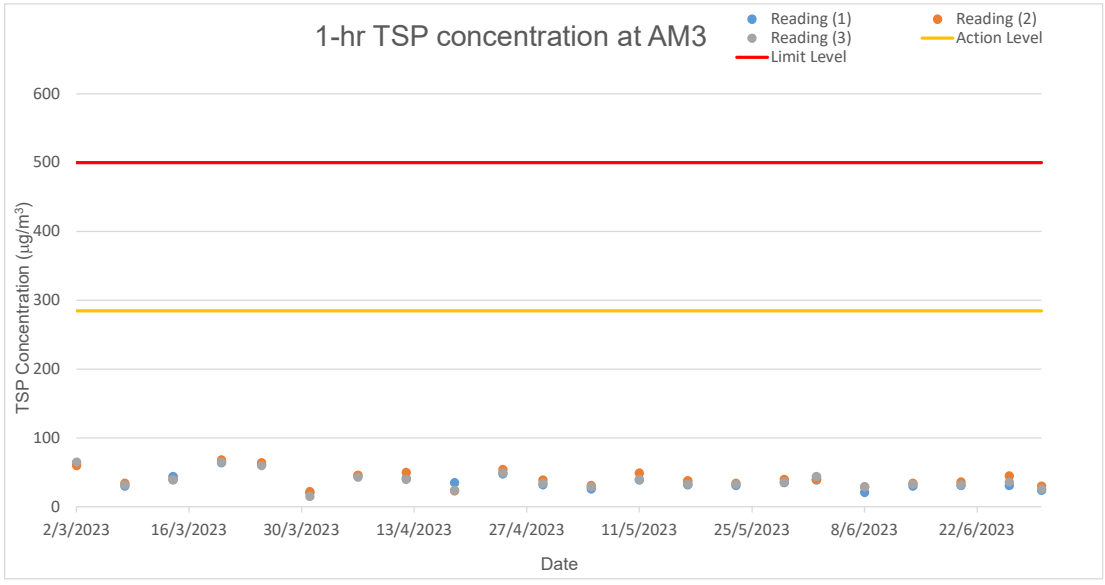
Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report										
				Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number		MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations - Total (QC Lot: 5130259) - Continued										
HK2324385-001	WM1	EG020: Zinc	7440-66-6	50 µg/L	96.7	----	75.0	125	----	----

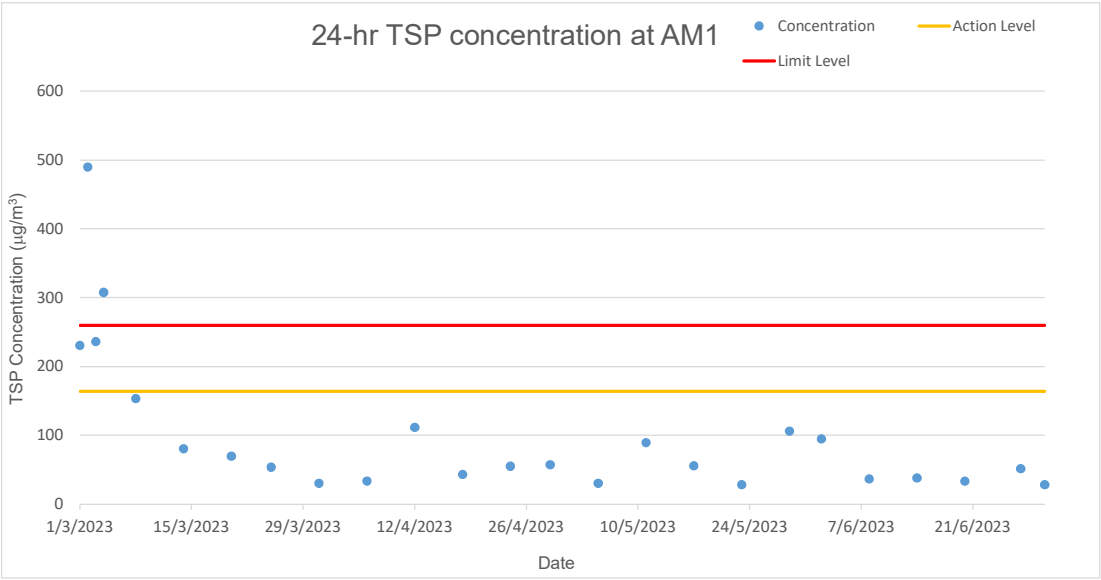
Appendix F Graphical Presentations

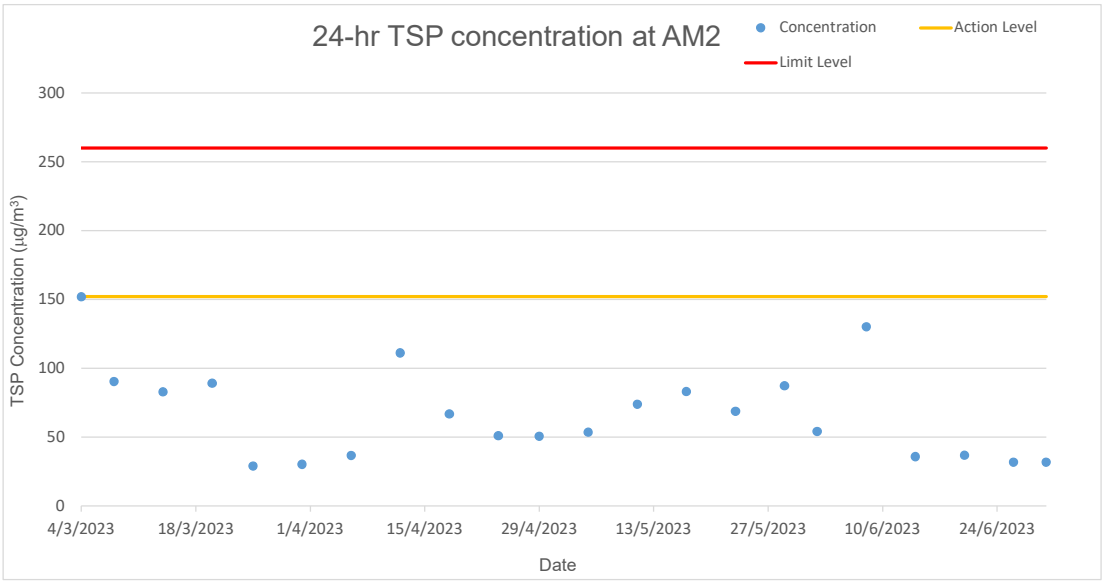
Air Quality

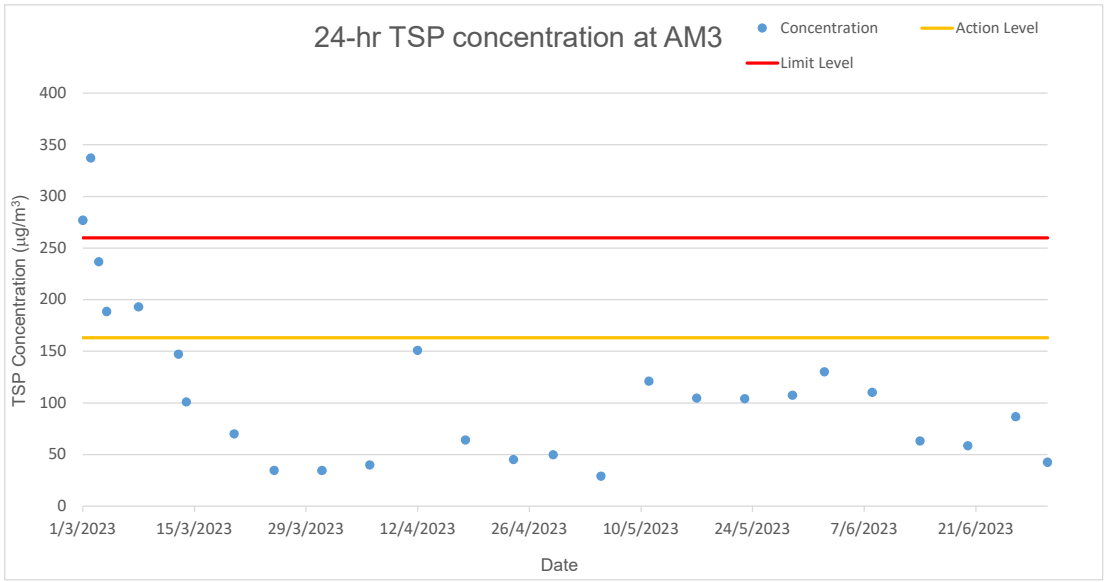

1-hr TSP concentration at AM1
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
2/3/2023
16/3/2023
30/3/2023
13/4/2023
27/4/2023
11/5/2023
25/5/2023
8/6/2023
22/6/2023
Date


1-hr TSP concentration at AM2
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
2/3/2023
16/3/2023
30/3/2023
13/4/2023
27/4/2023
11/5/2023
25/5/2023
8/6/2023
22/6/2023
Date

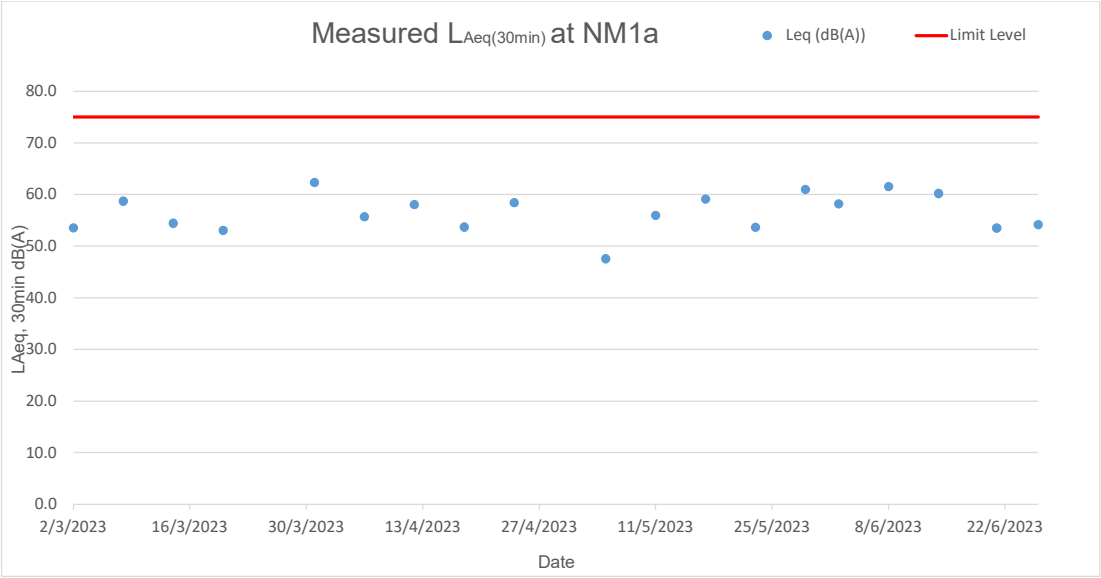

1-hr TSP concentration at AM3
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
2/3/2023
16/3/2023
30/3/2023
13/4/2023
27/4/2023
11/5/2023
25/5/2023
8/6/2023
22/6/2023
Date

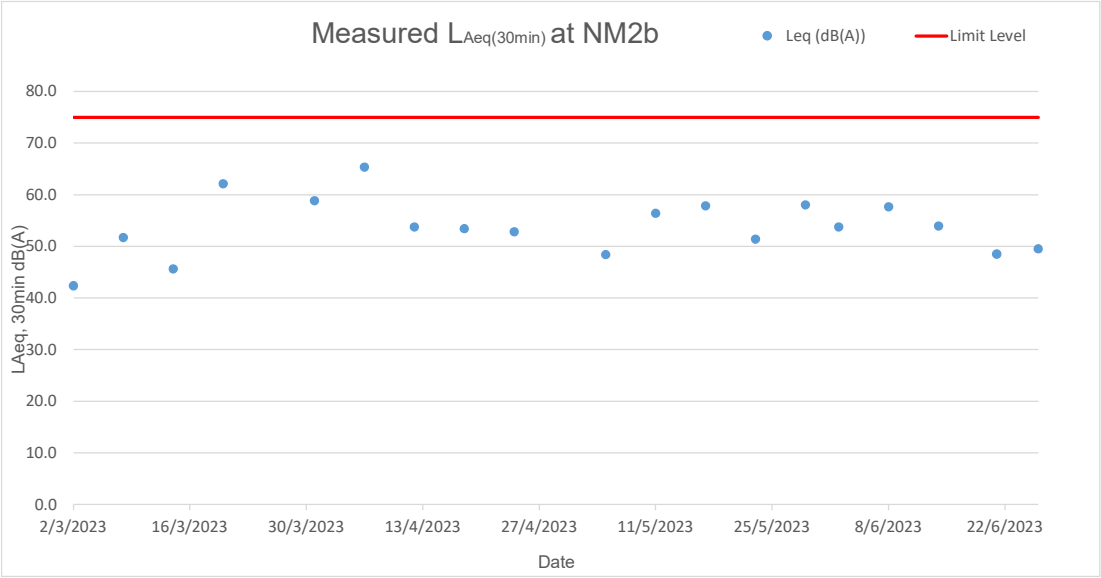

24-hr TSP concentration at AM1
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
600
500
400
300
200
100
0
1/3/2023
15/3/2023
29/3/2023
12/4/2023
26/4/2023
10/5/2023
24/5/2023
7/6/2023
21/6/2023
Date


24-hr TSP concentration at AM2
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
300
250
200
150
100
50
0
4/3/2023
18/3/2023
1/4/2023
15/4/2023
29/4/2023
13/5/2023
27/5/2023
10/6/2023
24/6/2023
Date


24-hr TSP concentration at AM3
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
400
350
300
250
200
150
100
50
0
1/3/2023
15/3/2023
29/3/2023
12/4/2023
26/4/2023
10/5/2023
24/5/2023
7/6/2023
21/6/2023
Date

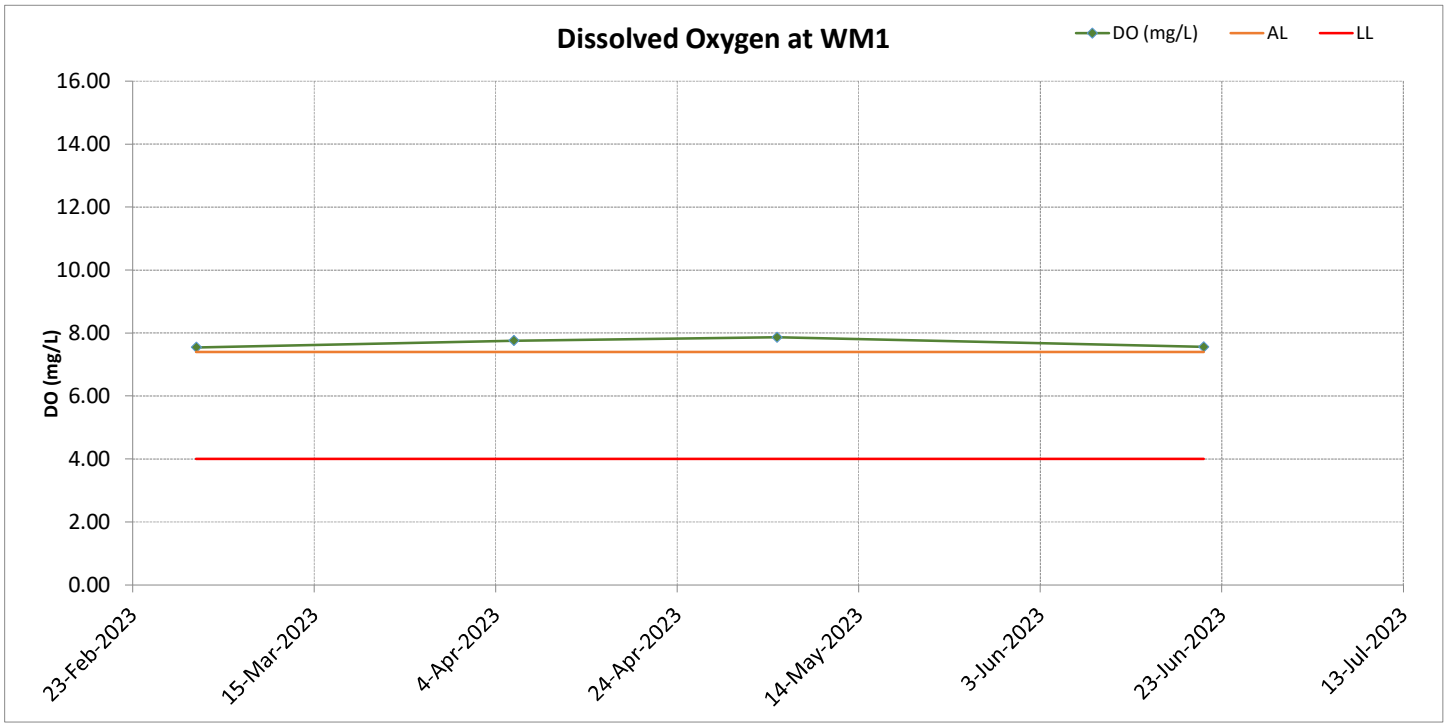
Noise

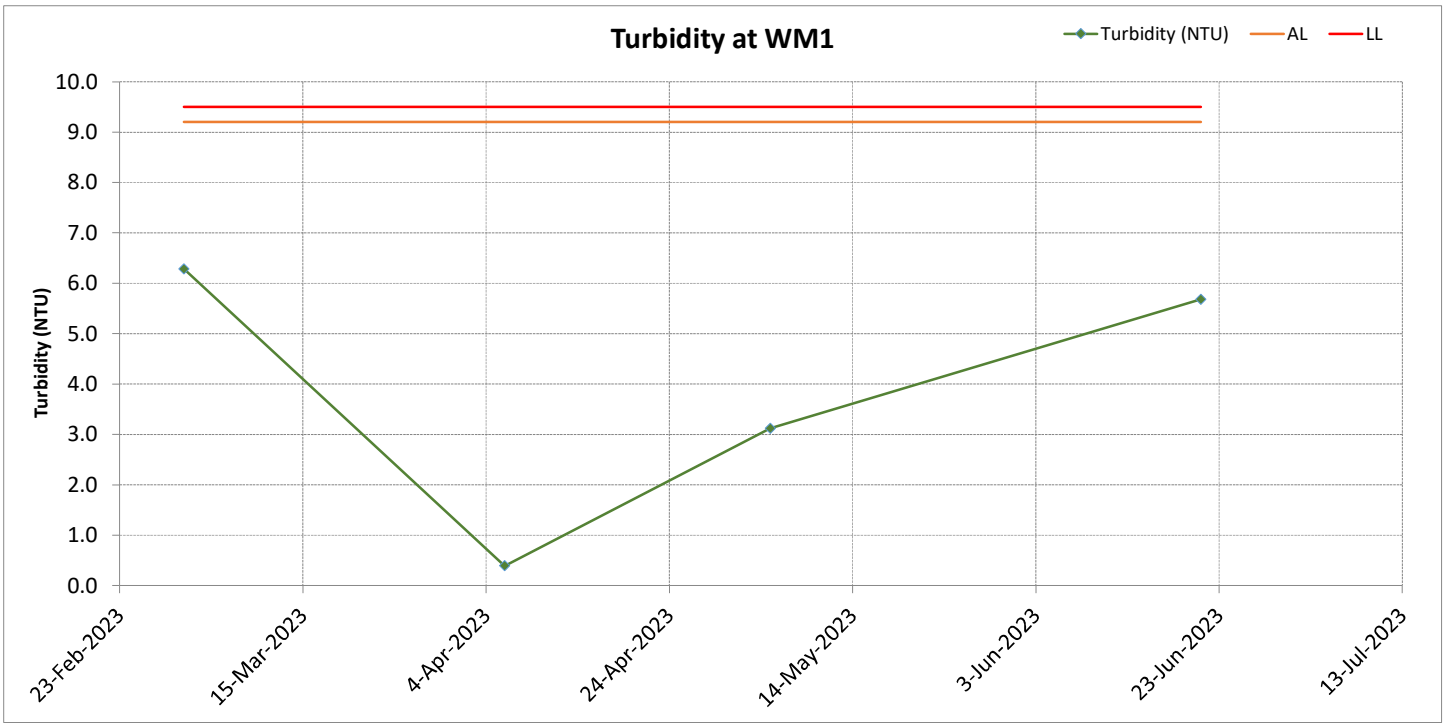

Measured LAeq(30min) at NM1a
Leq (dB(A))
Limit Level
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
LAeq, 30min dB(A)
2/3/2023
16/3/2023
30/3/2023
13/4/2023
27/4/2023
11/5/2023
25/5/2023
8/6/2023
22/6/2023
Date


Measured LAeq(30min) at NM2b
Leq (dB(A))
Limit Level
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
LAeq, 30min dB(A)
2/3/2023
16/3/2023
30/3/2023
13/4/2023
27/4/2023
11/5/2023
25/5/2023
8/6/2023
22/6/2023
Date

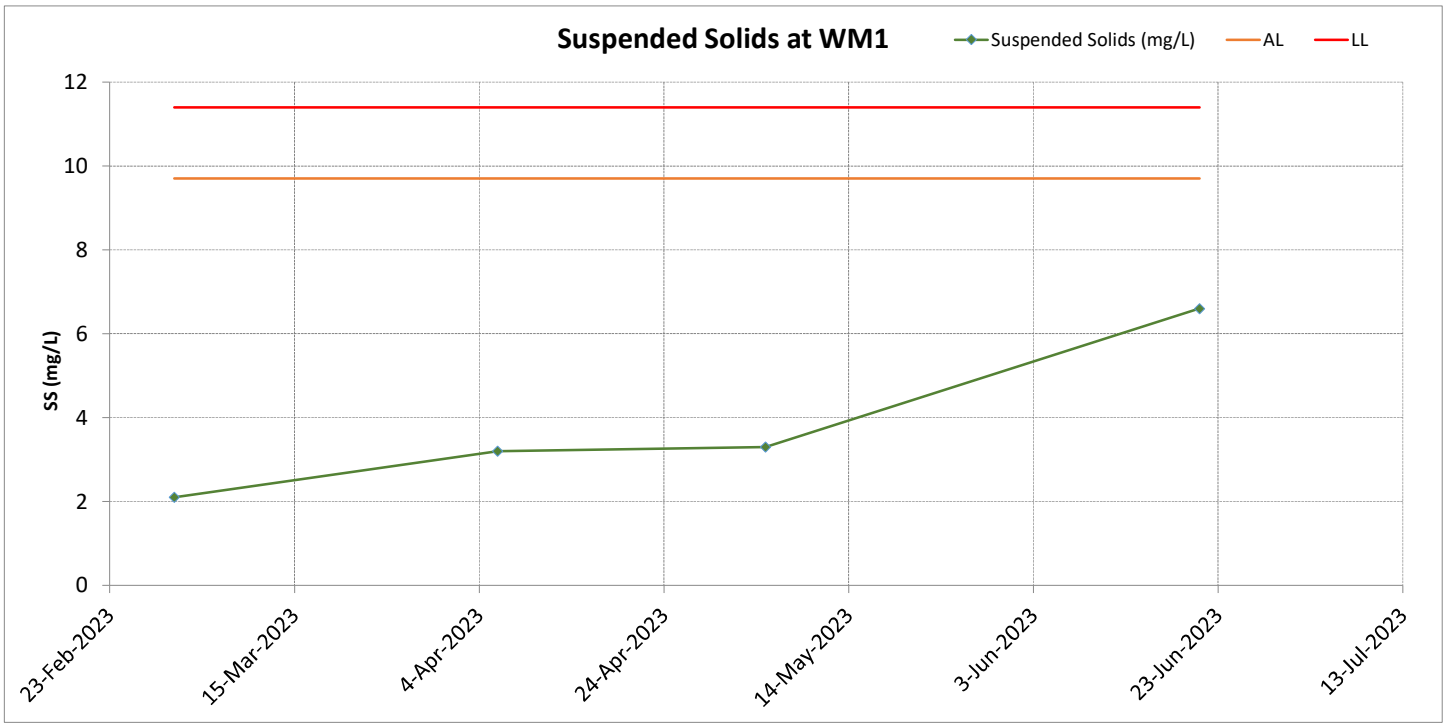
Water Quality

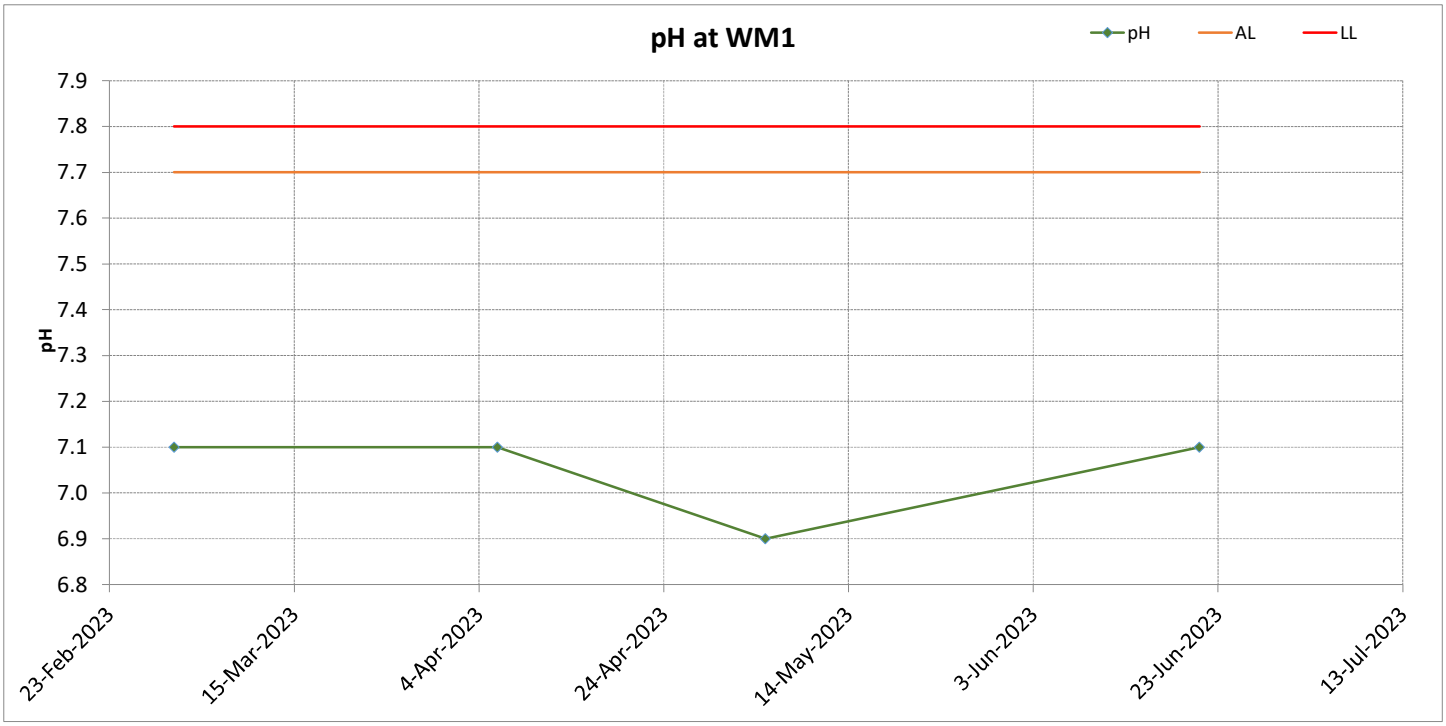
Surface Water Monitoring Results at WM1



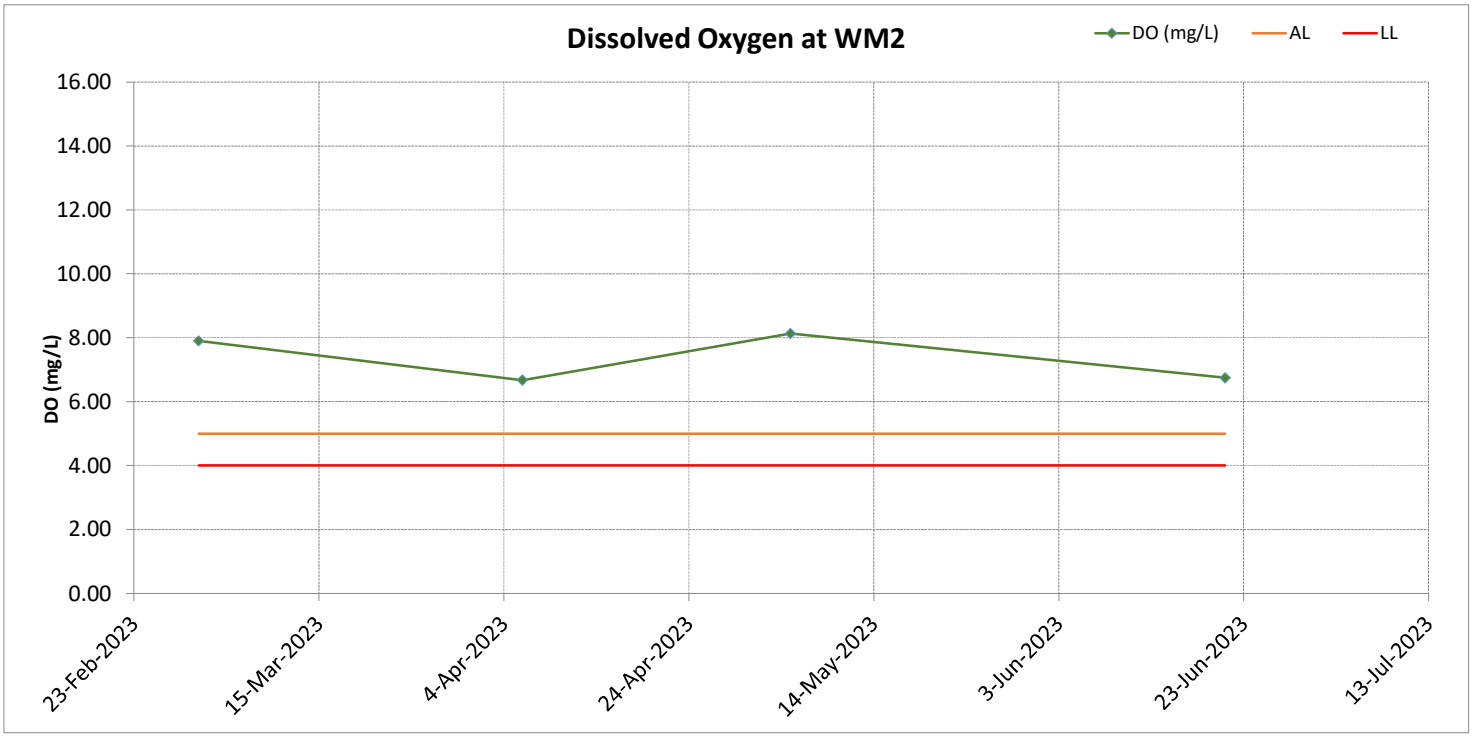


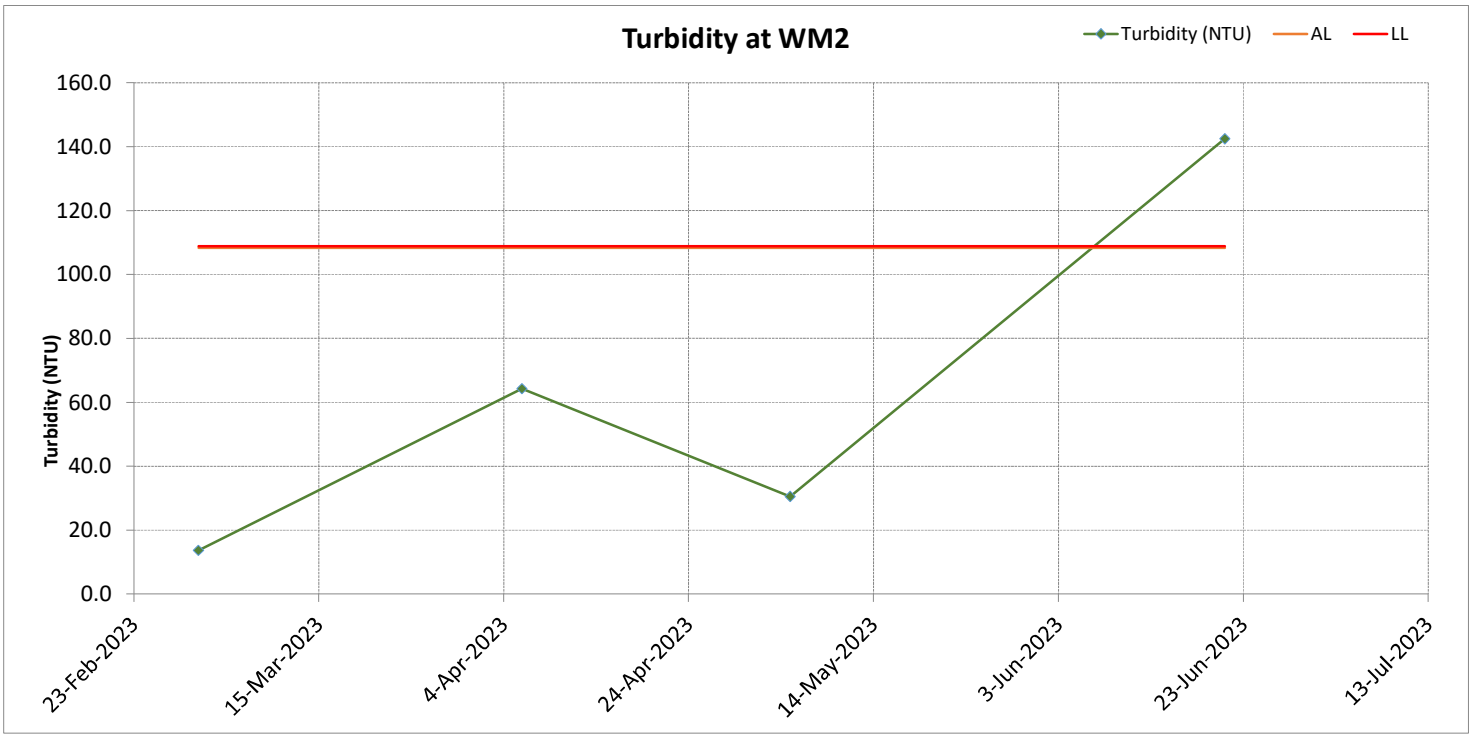
Surface Water Monitoring Results at WM1



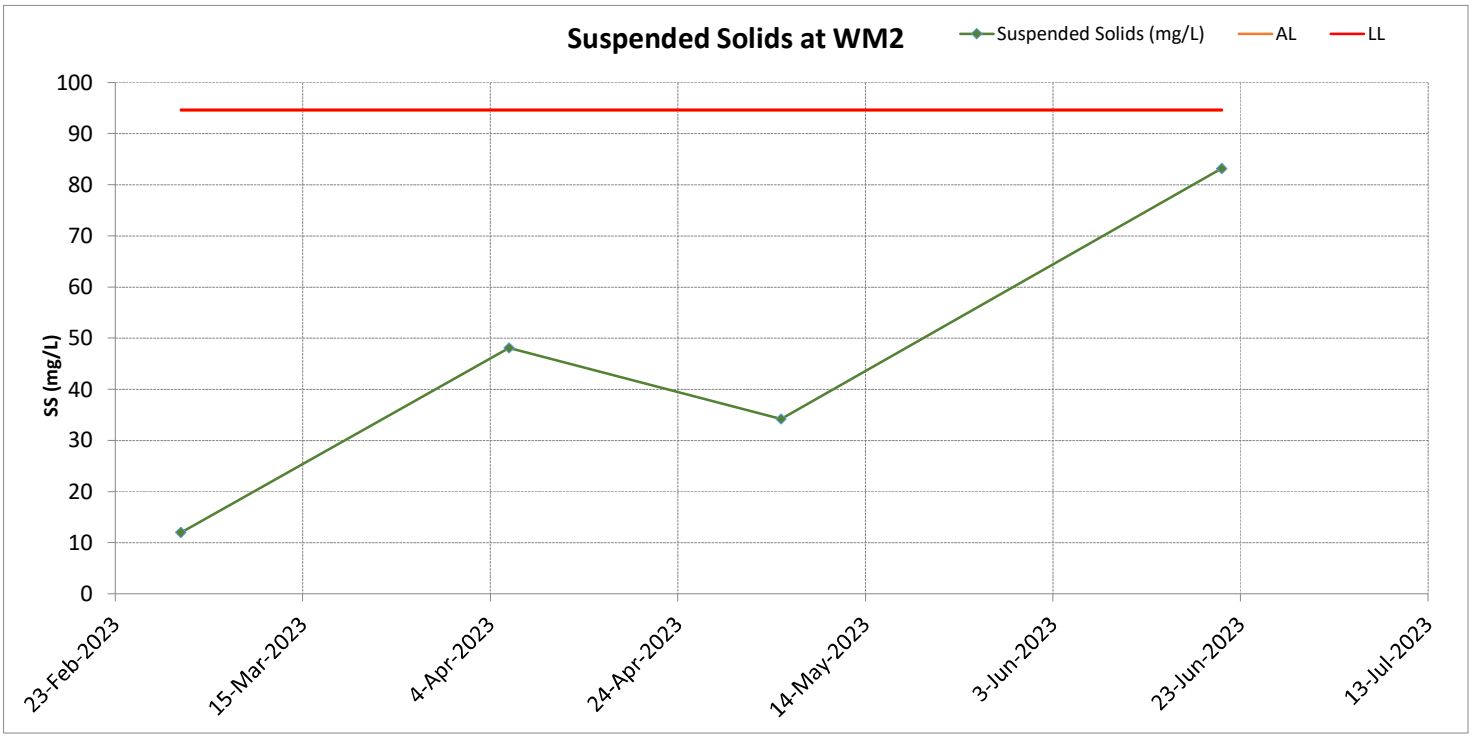


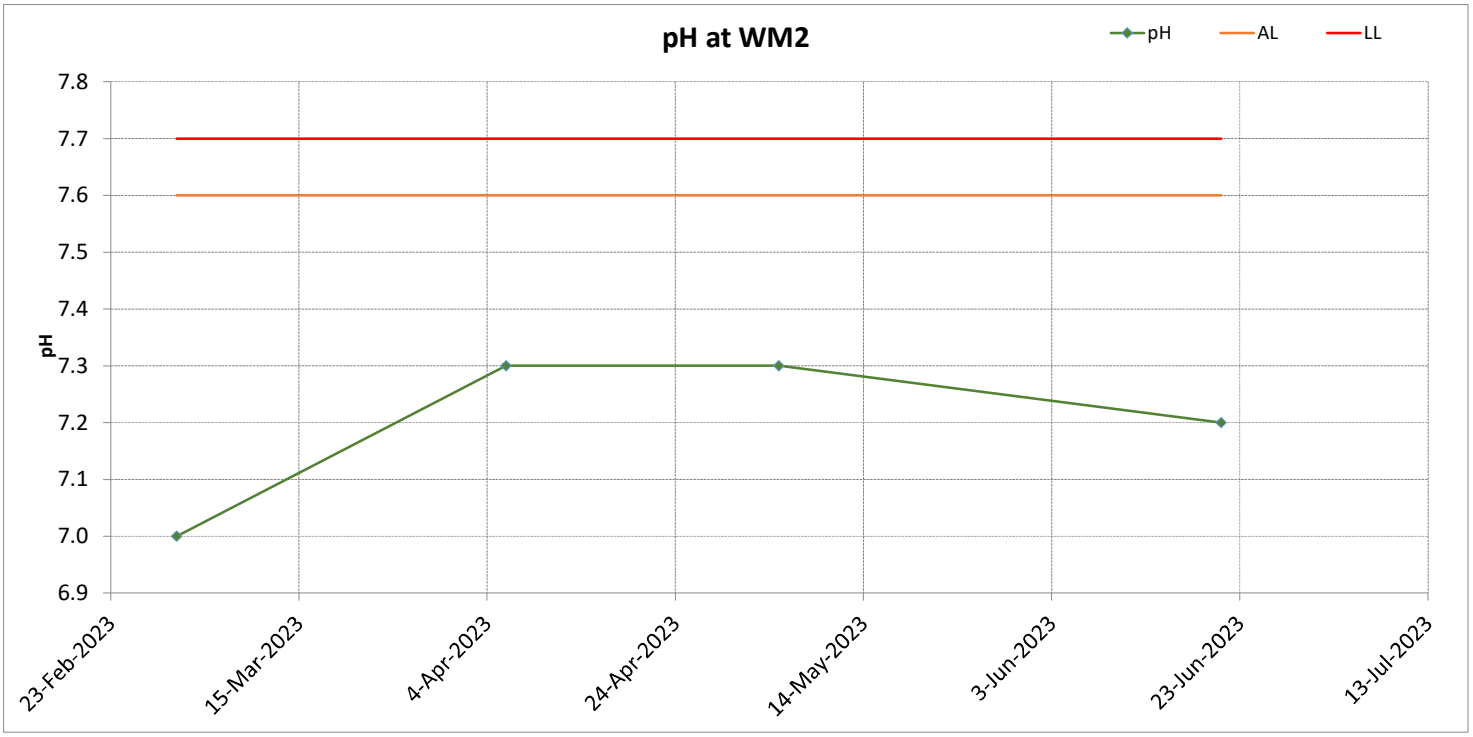
Surface Water Monitoring Results at WM2





Surface Water Monitoring Results at WM2





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	Monitoring Parameter(s)	No. of Exceedance	
		Action Level	Limit Level
WM1	Dissolved Oxygen	0	0
	pH	0	0
	Turbidity	0	0
	Suspended Solids	0	0
WM2	Dissolved Oxygen	0	0
	pH	0	0
	Turbidity	0	1#
	Suspended Solids	0	0

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)
20230601_0000	2.5	SE
20230601_0010	2.5	ESE
20230601_0020	1.7	SE
20230601_0030	2.5	ESE
20230601_0040	2.2	ESE
20230601_0050	2.8	ESE
20230601_0100		
20230601_0110	3.1	E
20230601_0120	2.5	ESE
20230601_0130	2.5	ESE
20230601_0140	2.5	SE
20230601_0150	2.5	ESE
20230601_0200	3.1	ESE
20230601_0210	2.8	ESE
20230601_0220	3.1	ESE
20230601_0230	3.1	ESE
20230601_0240	3.3	ESE
20230601_0250	2.5	ESE
20230601_0300	3.1	ESE
20230601_0310	3.1	ESE
20230601_0320	2.8	ESE
20230601_0330	2.8	E
20230601_0340	2.8	E
20230601_0350	2.5	E
20230601_0400	3.3	E
20230601_0410	2.5	ENE
20230601_0420	1.7	E
20230601_0430	2.2	ENE
20230601_0440	2.2	E
20230601_0450	1.4	NNE
20230601_0500	1.1	N
20230601_0510	1.4	N
20230601_0520	1.7	N
20230601_0530	0.8	N
20230601_0540	2.2	NNE
20230601_0550	2.8	NNE
20230601_0600	3.6	NNE
20230601_0610	3.3	NNE
20230601_0620	3.6	NNE
20230601_0630	3.3	NNE
20230601_0640	3.1	NNE
20230601_0650	3.3	NNE
20230601_0700	3.3	NNE
20230601_0710	3.3	NNE
20230601_0720	2.5	NNE
20230601_0730	2.2	NNE
20230601_0740	1.7	N
20230601_0750	2.2	N
20230601_0800	2.8	NNE
20230601_0810	2.2	N
20230601_0820	2.2	N
20230601_0830	1.7	NNE
20230601_0840	2.2	NNE
20230601_0850	1.7	N
20230601_0900	1.9	N
20230601_0910	2.5	N
20230601_0920	2.8	NNE
20230601_0930	2.5	N
20230601_0940	2.8	N
20230601_0950	3.1	NNE
20230601_1000	2.2	NNE
20230601_1010	1.7	NNE
20230601_1020	1.9	N
20230601_1030	2.5	NNE
20230601_1040	2.5	NNE
20230601_1050	3.1	NNE
20230601_1100	2.8	NNE
20230601_1110	3.3	NNE
20230601_1120	3.3	NNE
20230601_1130	4.4	NNE
20230601_1140	3.3	NNE
20230601_1150	4.2	NNE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230601_1200	3.9	NNE
20230601_1210	3.9	NNE
20230601_1220	4.7	NNE
20230601_1230	5	NNE
20230601_1240	4.4	N
20230601_1250	4.7	N
20230601_1300	4.7	N
20230601_1310	4.7	NNE
20230601_1320	5.3	NNE
20230601_1330	4.2	N
20230601_1340	4.7	N
20230601_1350	4.2	NNE
20230601_1400	3.9	NNE
20230601_1410	5	NNE
20230601_1420	4.7	NNE
20230601_1430	5.8	NNE
20230601_1440	5	NNE
20230601_1450	4.2	NNE
20230601_1500	4.7	NNE
20230601_1510	3.3	NNE
20230601_1520	4.7	N
20230601_1530	3.6	N
20230601_1540	3.9	N
20230601_1550	3.3	N
20230601_1600	3.3	N
20230601_1610	3.9	N
20230601_1620	3.3	N
20230601_1630	3.3	N
20230601_1640	4.7	NNE
20230601_1650	3.9	NNE
20230601_1700	5	NNE
20230601_1710	3.9	N
20230601_1720	3.1	N
20230601_1730	3.9	NNE
20230601_1740	3.6	N
20230601_1750	3.9	NNE
20230601_1800	3.9	NNE
20230601_1810	3.9	NNE
20230601_1820	4.4	NNE
20230601_1830	3.3	NE
20230601_1840	3.9	NNE
20230601_1850	3.6	NNE
20230601_1900	4.2	NNE
20230601_1910	3.3	NNE
20230601_1920	3.9	NNE
20230601_1930	3.3	NNE
20230601_1940	3.3	NNE
20230601_1950	3.3	NNE
20230601_2000	3.3	NNE
20230601_2010	3.9	N
20230601_2020	3.3	NNE
20230601_2030	2.8	N
20230601_2040	2.2	N
20230601_2050	2.8	N
20230601_2100	3.3	N
20230601_2110	4.2	N
20230601_2120	4.2	N
20230601_2130	3.3	N
20230601_2140	3.1	N
20230601_2150	3.1	N
20230601_2200	2.8	N
20230601_2210	3.9	N
20230601_2220	3.9	N
20230601_2230	3.9	N
20230601_2240	3.3	N
20230601_2250	3.9	N
20230601_2300	4.2	N
20230601_2310	3.3	N
20230601_2320	4.7	N
20230601_2330	3.1	N
20230601_2340	4.2	N
20230601_2350	3.6	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)
20230602_0000	3.3	NNE
20230602_0010	3.1	NNE
20230602_0020	3.3	NNE
20230602_0030	3.1	NNE
20230602_0040	3.3	N
20230602_0050	3.3	N
20230602_0100	3.6	N
20230602_0110	3.9	N
20230602_0120	3.9	N
20230602_0130	4.2	N
20230602_0140	3.9	N
20230602_0150	3.1	N
20230602_0200	3.1	N
20230602_0210	3.3	N
20230602_0220	3.1	N
20230602_0230	3.9	N
20230602_0240	3.3	N
20230602_0250	3.9	N
20230602_0300	3.1	N
20230602_0310	3.1	NNE
20230602_0320	2.8	NNE
20230602_0330	3.3	N
20230602_0340	3.6	N
20230602_0350	3.9	N
20230602_0400	3.3	N
20230602_0410	3.3	N
20230602_0420	3.1	N
20230602_0430	3.3	N
20230602_0440	3.3	N
20230602_0450	3.3	N
20230602_0500	3.3	N
20230602_0510	3.3	NNE
20230602_0520	3.3	NNE
20230602_0530	3.3	NNE
20230602_0540	3.3	NNE
20230602_0550	4.2	NNE
20230602_0600	3.3	N
20230602_0610	3.6	N
20230602_0620	4.4	N
20230602_0630	5	NNE
20230602_0640	4.4	NNE
20230602_0650	4.2	N
20230602_0700	3.9	N
20230602_0710	4.4	N
20230602_0720	4.7	NNE
20230602_0730	5.8	NNE
20230602_0740	5.3	NNE
20230602_0750	4.4	NNE
20230602_0800	5.3	NNE
20230602_0810	4.7	NNE
20230602_0820	4.2	NNE
20230602_0830	4.2	NNE
20230602_0840	4.2	N
20230602_0850	4.2	N
20230602_0900	3.3	N
20230602_0910	3.9	N
20230602_0920	3.1	N
20230602_0930	3.9	N
20230602_0940	4.7	NNE
20230602_0950	4.2	NNE
20230602_1000	3.3	NNE
20230602_1010	3.9	N
20230602_1020	5	NNE
20230602_1030	3.6	N
20230602_1040	3.3	N
20230602_1050	3.1	N
20230602_1100	3.3	N
20230602_1110	4.2	N
20230602_1120	3.3	N
20230602_1130	3.6	NNE
20230602_1140	3.3	NNE
20230602_1150	2.8	N

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230602_1200	3.6	N
20230602_1210	3.1	N
20230602_1220	3.1	N
20230602_1230	3.6	N
20230602_1240	3.3	N
20230602_1250	3.9	N
20230602_1300	4.2	NNE
20230602_1310	3.6	N
20230602_1320	3.9	NNE
20230602_1330	4.2	N
20230602_1340	4.4	N
20230602_1350	3.9	N
20230602_1400	4.7	N
20230602_1410	5	NNE
20230602_1420	3.6	NNE
20230602_1430	4.4	NNE
20230602_1440	4.4	NNE
20230602_1450	4.4	NNE
20230602_1500	4.2	NNE
20230602_1510	4.4	NNE
20230602_1520	4.2	NNE
20230602_1530	4.2	NNE
20230602_1540	4.4	NNE
20230602_1550	4.7	NNE
20230602_1600	3.3	NNE
20230602_1610	3.3	NNE
20230602_1620	3.6	NNE
20230602_1630	4.2	NNE
20230602_1640	3.6	NNE
20230602_1650	2.8	NNE
20230602_1700	2.8	NNE
20230602_1710	3.1	N
20230602_1720	3.3	NNE
20230602_1730	3.3	NNE
20230602_1740	3.9	NNE
20230602_1750	4.2	NNE
20230602_1800	3.3	NNE
20230602_1810	4.2	NNE
20230602_1820	3.9	NNE
20230602_1830	3.9	NNE
20230602_1840	1.9	ENE
20230602_1850	0.8	-
20230602_1900	0.3	N
20230602_1910	2.5	NNE
20230602_1920	1.4	NE
20230602_1930	0.3	-
20230602_1940	0.6	-
20230602_1950	0.8	NNE
20230602_2000	1.4	NNE
20230602_2010	0.8	N
20230602_2020	0	N
20230602_2030	0.3	-
20230602_2040	0.8	SW
20230602_2050	0.6	WNW
20230602_2100	0.3	-
20230602_2110	0.3	W
20230602_2120	0.3	NNW
20230602_2130	1.4	N
20230602_2140	2.5	N
20230602_2150	2.2	N
20230602_2200	2.5	N
20230602_2210	3.1	N
20230602_2220	1.9	N
20230602_2230	1.4	N
20230602_2240	1.1	N
20230602_2250	0.8	ENE
20230602_2300	0.8	NE
20230602_2310	0.8	E
20230602_2320	0	N
20230602_2330	1.1	SSE
20230602_2340	0.8	SE
20230602_2350	0.3	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)
20230603_0000	0	N
20230603_0010	0.8	SSE
20230603_0020	0.3	N
20230603_0030	0.3	-
20230603_0040	0	N
20230603_0050	0.3	SSW
20230603_0100	0.3	SW
20230603_0110	0.3	SW
20230603_0120	0.3	S
20230603_0130	0.3	SSE
20230603_0140	0.8	SSE
20230603_0150	0.3	-
20230603_0200	0.3	ESE
20230603_0210	0	N
20230603_0220	0	N
20230603_0230	0.3	-
20230603_0240	0.3	SSE
20230603_0250	0.6	S
20230603_0300	0.8	SSE
20230603_0310	0	N
20230603_0320	0.3	-
20230603_0330	0.3	SE
20230603_0340	0.3	-
20230603_0350	0.3	-
20230603_0400	0.3	S
20230603_0410	0	N
20230603_0420	0	N
20230603_0430	0	N
20230603_0440	0	N
20230603_0450	0	N
20230603_0500	0.3	S
20230603_0510	0.3	SSE
20230603_0520	0	N
20230603_0530	0.3	S
20230603_0540	0.3	SSE
20230603_0550	0.3	-
20230603_0600	0.3	NE
20230603_0610	0.3	-
20230603_0620	0	N
20230603_0630	0.3	S
20230603_0640	0.3	-
20230603_0650	0.3	S
20230603_0700	0.8	SSE
20230603_0710	0.3	SSE
20230603_0720	0.6	S
20230603_0730	0	N
20230603_0740	0	N
20230603_0750	0.3	S
20230603_0800	0.3	W
20230603_0810	0.3	S
20230603_0820	0.6	E
20230603_0830	0.3	-
20230603_0840	2.2	N
20230603_0850	1.7	NNW
20230603_0900	3.3	N
20230603_0910	3.1	N
20230603_0920	3.3	N
20230603_0930	2.8	N
20230603_0940	2.5	N
20230603_0950	2.5	N
20230603_1000	1.7	S
20230603_1010	3.1	ESE
20230603_1020	2.5	E
20230603_1030	2.8	E
20230603_1040	2.8	E
20230603_1050	2.5	ESE
20230603_1100	3.1	ESE
20230603_1110	3.1	ESE
20230603_1120	3.1	ESE
20230603_1130	3.1	ESE
20230603_1140	2.5	ESE
20230603_1150	3.1	ESE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230603_1200	2.2	-
20230603_1210	2.5	SE
20230603_1220	1.4	S
20230603_1230	1.7	S
20230603_1240	2.8	-
20230603_1250	2.2	ENE
20230603_1300	1.4	ESE
20230603_1310	1.4	N
20230603_1320	1.7	ENE
20230603_1330	0.8	NNW
20230603_1340	1.4	-
20230603_1350	1.7	S
20230603_1400	1.1	SW
20230603_1410	0.8	SSW
20230603_1420	1.4	N
20230603_1430	2.2	NNW
20230603_1440	1.7	NNW
20230603_1450	1.7	NW
20230603_1500	1.9	NNW
20230603_1510	2.2	NNW
20230603_1520	1.7	NW
20230603_1530	2.8	N
20230603_1540	1.7	N
20230603_1550	2.8	NNE
20230603_1600	1.7	N
20230603_1610	1.4	NNW
20230603_1620	1.7	N
20230603_1630	1.7	NNE
20230603_1640	2.5	NE
20230603_1650	1.1	NNE
20230603_1700	1.4	E
20230603_1710	2.5	ESE
20230603_1720	2.5	E
20230603_1730	2.5	E
20230603_1740	2.8	E
20230603_1750	2.8	E
20230603_1800	2.5	E
20230603_1810	3.1	ESE
20230603_1820	2.5	E
20230603_1830	3.1	E
20230603_1840	2.8	ESE
20230603_1850	2.5	E
20230603_1900	2.2	ESE
20230603_1910	2.8	ESE
20230603_1920	2.8	ESE
20230603_1930	2.8	ESE
20230603_1940	2.5	SE
20230603_1950	2.8	ESE
20230603_2000	2.2	ESE
20230603_2010	1.9	ESE
20230603_2020	1.4	SE
20230603_2030	2.2	SE
20230603_2040	2.2	SE
20230603_2050	1.7	SE
20230603_2100	1.4	SE
20230603_2110	1.4	SE
20230603_2120	1.7	SE
20230603_2130	1.4	ESE
20230603_2140	1.1	ESE
20230603_2150	0.8	-
20230603_2200	1.4	ESE
20230603_2210	1.7	E
20230603_2220	2.2	ESE
20230603_2230	2.2	ESE
20230603_2240	1.7	ESE
20230603_2250	1.7	ESE
20230603_2300	1.7	SE
20230603_2310	2.2	ESE
20230603_2320	2.2	ESE
20230603_2330	1.7	ESE
20230603_2340	2.5	ESE
20230603_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)
20230604_0000	1.9	ESE
20230604_0010	1.7	SE
20230604_0020	1.7	ESE
20230604_0030	1.7	ESE
20230604_0040	1.7	ESE
20230604_0050	1.7	SE
20230604_0100	1.1	E
20230604_0110	1.4	E
20230604_0120	1.4	E
20230604_0130	1.4	E
20230604_0140	1.4	E
20230604_0150	1.4	ESE
20230604_0200	1.4	SE
20230604_0210	0.8	SE
20230604_0220	0.8	SE
20230604_0230	1.1	ESE
20230604_0240	0.6	SE
20230604_0250	0	N
20230604_0300	0	N
20230604_0310	0	N
20230604_0320	0.3	SSW
20230604_0330	0.6	SSE
20230604_0340	1.1	SE
20230604_0350	1.4	SE
20230604_0400	1.7	ESE
20230604_0410	0.8	SE
20230604_0420	0.3	WNW
20230604_0430	0.3	WNW
20230604_0440	0.3	W
20230604_0450	0.3	W
20230604_0500	0	N
20230604_0510	0	N
20230604_0520	0	N
20230604_0530	0	N
20230604_0540	0	N
20230604_0550	0.3	N
20230604_0600	0	N
20230604_0610	0	N
20230604_0620	0	N
20230604_0630	0.3	SW
20230604_0640	0	N
20230604_0650	0	N
20230604_0700	0	N
20230604_0710	0	N
20230604_0720	0	N
20230604_0730	0.3	N
20230604_0740	0.3	NW
20230604_0750	0.3	NE
20230604_0800	0.3	NW
20230604_0810	0.3	NNE
20230604_0820	0.3	N
20230604_0830	0.8	WNW
20230604_0840	0.8	N
20230604_0850	1.4	NNE
20230604_0900	0.8	NNE
20230604_0910	1.1	N
20230604_0920	1.4	NNW
20230604_0930	1.1	NW
20230604_0940	0.8	SSW
20230604_0950	1.4	-
20230604_1000	2.2	ESE
20230604_1010	2.2	N
20230604_1020	1.1	-
20230604_1030	2.8	ESE
20230604_1040	3.3	ESE
20230604_1050	3.1	ESE
20230604_1100	3.1	ESE
20230604_1110	3.3	ESE
20230604_1120	3.3	SE
20230604_1130	3.3	SE
20230604_1140	3.3	ESE
20230604_1150	3.3	ESE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230604_1200	3.3	ESE
20230604_1210	3.3	E
20230604_1220	3.3	ESE
20230604_1230	3.3	ESE
20230604_1240	3.3	ESE
20230604_1250	3.3	ESE
20230604_1300	3.3	ESE
20230604_1310	3.1	ESE
20230604_1320	3.3	ESE
20230604_1330	2.8	E
20230604_1340	3.1	ESE
20230604_1350	2.5	E
20230604_1400	2.8	E
20230604_1410	3.1	E
20230604_1420	3.3	ESE
20230604_1430	2.8	ESE
20230604_1440	3.3	E
20230604_1450	2.8	E
20230604_1500	3.3	E
20230604_1510	3.3	E
20230604_1520	3.3	ESE
20230604_1530	3.3	E
20230604_1540	2.8	E
20230604_1550	3.3	E
20230604_1600	2.8	E
20230604_1610	2.8	E
20230604_1620	3.1	E
20230604_1630	3.3	E
20230604_1640	3.3	E
20230604_1650	2.8	E
20230604_1700	3.3	E
20230604_1710	3.3	E
20230604_1720	3.3	E
20230604_1730	3.3	E
20230604_1740	3.3	E
20230604_1750	3.1	E
20230604_1800	1.4	ESE
20230604_1810	2.2	ESE
20230604_1820	2.2	ESE
20230604_1830	2.8	ESE
20230604_1840	2.5	ESE
20230604_1850	2.2	ESE
20230604_1900	2.5	ESE
20230604_1910	2.2	ESE
20230604_1920	2.5	SE
20230604_1930	2.2	SE
20230604_1940	2.5	SE
20230604_1950	2.5	SE
20230604_2000	2.8	SE
20230604_2010	2.8	SE
20230604_2020	2.8	SE
20230604_2030	2.2	SE
20230604_2040	2.2	ESE
20230604_2050	2.2	ESE
20230604_2100	2.2	ESE
20230604_2110	2.2	ESE
20230604_2120	2.2	SE
20230604_2130	2.2	ESE
20230604_2140	2.2	ESE
20230604_2150	1.7	SE
20230604_2200	1.4	SE
20230604_2210	0.8	SE
20230604_2220	1.4	SE
20230604_2230	1.1	SE
20230604_2240	0.6	-
20230604_2250	0.3	SE
20230604_2300	0.6	SSE
20230604_2310	0.8	SSE
20230604_2320	0.8	SSE
20230604_2330	0.8	SE
20230604_2340	0.3	ESE
20230604_2350	0	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)
20230605_0000	0.6	S
20230605_0010	1.1	SSE
20230605_0020	1.9	SSE
20230605_0030	2.2	SSE
20230605_0040	1.7	SSE
20230605_0050	1.9	SSE
20230605_0100	2.2	SSE
20230605_0110	0.8	S
20230605_0120	0.3	-
20230605_0130	1.1	SSE
20230605_0140	0.8	SSE
20230605_0150	1.1	SSE
20230605_0200	0.8	SSE
20230605_0210	0.8	SSE
20230605_0220	0.8	SSE
20230605_0230	1.4	SE
20230605_0240	1.1	ESE
20230605_0250	0.8	SE
20230605_0300	1.1	E
20230605_0310	0.3	SE
20230605_0320	0.8	SE
20230605_0330	1.1	SE
20230605_0340	0.3	ESE
20230605_0350	0.3	E
20230605_0400	0.8	E
20230605_0410	0.3	ESE
20230605_0420	0	N
20230605_0430	0.3	ESE
20230605_0440	1.4	SE
20230605_0450	1.4	SE
20230605_0500	1.7	SE
20230605_0510	1.7	SE
20230605_0520	1.1	SSE
20230605_0530	0.8	SE
20230605_0540	1.4	SSE
20230605_0550	1.7	SE
20230605_0600	1.4	SE
20230605_0610	1.4	ESE
20230605_0620	1.1	E
20230605_0630	1.7	ESE
20230605_0640	1.7	ESE
20230605_0650	1.9	ESE
20230605_0700	1.7	ESE
20230605_0710	1.7	E
20230605_0720	1.1	ENE
20230605_0730	1.4	E
20230605_0740	1.1	ESE
20230605_0750	1.4	ESE
20230605_0800	1.7	ESE
20230605_0810	2.5	ESE
20230605_0820	2.2	E
20230605_0830	2.5	E
20230605_0840	2.8	ENE
20230605_0850	2.8	ENE
20230605_0900	3.1	E
20230605_0910	2.5	E
20230605_0920	3.1	E
20230605_0930	3.1	E
20230605_0940	3.1	ESE
20230605_0950	3.3	E
20230605_1000	3.3	E
20230605_1010	3.3	ESE
20230605_1020	3.1	ESE
20230605_1030	2.8	ESE
20230605_1040	3.3	E
20230605_1050	3.1	E
20230605_1100	3.3	ENE
20230605_1110	3.3	E
20230605_1120	3.3	E
20230605_1130	3.3	ESE
20230605_1140	2.8	ENE
20230605_1150	3.1	E

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230605_1200	3.1	ENE
20230605_1210	2.5	E
20230605_1220	2.5	ENE
20230605_1230	3.1	E
20230605_1240	2.8	E
20230605_1250	2.8	E
20230605_1300	3.3	E
20230605_1310	2.5	ESE
20230605_1320	2.2	E
20230605_1330	2.8	ESE
20230605_1340	2.5	E
20230605_1350	2.5	E
20230605_1400	2.8	E
20230605_1410	3.3	E
20230605_1420	2.8	E
20230605_1430	3.6	E
20230605_1440	3.3	E
20230605_1450	3.3	E
20230605_1500	3.3	E
20230605_1510	3.3	E
20230605_1520	3.9	E
20230605_1530	3.9	E
20230605_1540	3.9	E
20230605_1550	3.9	E
20230605_1600	3.6	E
20230605_1610	3.3	E
20230605_1620	3.1	E
20230605_1630	2.5	ESE
20230605_1640	2.2	E
20230605_1650	2.8	E
20230605_1700	3.3	E
20230605_1710	3.3	E
20230605_1720	3.3	E
20230605_1730	3.3	E
20230605_1740	3.1	ESE
20230605_1750	3.1	E
20230605_1800	2.8	ESE
20230605_1810	2.5	ESE
20230605_1820	1.7	E
20230605_1830	1.9	E
20230605_1840	1.7	E
20230605_1850	1.7	E
20230605_1900	1.9	E
20230605_1910	1.7	ENE
20230605_1920	1.7	E
20230605_1930	1.9	E
20230605_1940	2.2	ESE
20230605_1950	1.1	ESE
20230605_2000	1.4	SE
20230605_2010	1.4	ESE
20230605_2020	1.4	SSE
20230605_2030	1.1	SE
20230605_2040	1.1	SE
20230605_2050	1.1	SE
20230605_2100	1.4	SE
20230605_2110	1.7	SE
20230605_2120	2.2	SE
20230605_2130	1.7	SE
20230605_2140	1.7	SE
20230605_2150	1.1	ESE
20230605_2200	1.7	SE
20230605_2210	1.7	SE
20230605_2220	1.4	ESE
20230605_2230	1.4	ESE
20230605_2240	0.8	ENE
20230605_2250	0.8	ESE
20230605_2300	0.8	SSE
20230605_2310	1.4	ESE
20230605_2320	0.8	SE
20230605_2330	1.1	SE
20230605_2340	1.1	SE
20230605_2350	1.1	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)
20230606_0000	1.4	SE
20230606_0010	1.1	SE
20230606_0020	1.1	E
20230606_0030	1.4	E
20230606_0040	1.4	E
20230606_0050	1.4	E
20230606_0100	1.4	E
20230606_0110	1.4	E
20230606_0120	0.8	E
20230606_0130	1.1	E
20230606_0140	1.1	E
20230606_0150	1.1	ESE
20230606_0200	1.1	ESE
20230606_0210	1.4	SE
20230606_0220	1.1	SE
20230606_0230	0.8	SE
20230606_0240	0.3	-
20230606_0250	0.3	-
20230606_0300	1.1	SE
20230606_0310	1.1	SE
20230606_0320	0.8	ESE
20230606_0330	0.3	ESE
20230606_0340	0.8	ESE
20230606_0350	0.8	E
20230606_0400	0.8	E
20230606_0410	0.8	ESE
20230606_0420	0.6	ESE
20230606_0430	0.8	ESE
20230606_0440	1.1	ESE
20230606_0450	1.1	E
20230606_0500	1.1	E
20230606_0510	0.8	ESE
20230606_0520	1.4	SE
20230606_0530	1.1	ESE
20230606_0540	2.2	SE
20230606_0550	1.7	SE
20230606_0600	2.2	SE
20230606_0610	1.7	SSE
20230606_0620	1.7	SE
20230606_0630	1.4	SSE
20230606_0640	1.4	ESE
20230606_0650	2.2	ESE
20230606_0700	2.5	SE
20230606_0710	2.5	E
20230606_0720	2.5	ESE
20230606_0730	2.5	ESE
20230606_0740	2.8	ESE
20230606_0750	2.5	ESE
20230606_0800	2.5	E
20230606_0810	2.2	ESE
20230606_0820	1.9	E
20230606_0830	2.5	E
20230606_0840	2.5	E
20230606_0850	2.8	E
20230606_0900	2.8	E
20230606_0910	3.3	E
20230606_0920	3.3	E
20230606_0930	2.5	E
20230606_0940	2.5	ESE
20230606_0950	2.8	ESE
20230606_1000	2.8	ESE
20230606_1010	2.8	ESE
20230606_1020	2.8	ESE
20230606_1030	2.2	ENE
20230606_1040	2.5	E
20230606_1050	2.5	SE
20230606_1100	2.8	ESE
20230606_1110	1.9	ENE
20230606_1120	2.2	E
20230606_1130	2.2	SE
20230606_1140	2.8	ENE
20230606_1150	2.5	E

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230606_1200	2.5	E
20230606_1210	2.5	ESE
20230606_1220	2.2	E
20230606_1230	2.5	ESE
20230606_1240	2.5	ESE
20230606_1250	2.2	ESE
20230606_1300	1.7	SE
20230606_1310	2.5	ESE
20230606_1320	2.8	E
20230606_1330	3.1	ESE
20230606_1340	2.8	E
20230606_1350	3.1	E
20230606_1400	3.3	ESE
20230606_1410	3.3	ESE
20230606_1420	3.3	E
20230606_1430	3.3	E
20230606_1440	3.3	E
20230606_1450	3.6	E
20230606_1500	3.9	E
20230606_1510	3.3	E
20230606_1520	3.9	E
20230606_1530	2.5	ESE
20230606_1540	3.1	ESE
20230606_1550	3.3	E
20230606_1600	3.1	E
20230606_1610	3.3	E
20230606_1620	3.3	ESE
20230606_1630	3.3	E
20230606_1640	3.3	E
20230606_1650	3.3	E
20230606_1700	3.1	E
20230606_1710	3.3	E
20230606_1720	2.8	E
20230606_1730	2.8	ESE
20230606_1740	2.8	ESE
20230606_1750	3.3	ESE
20230606_1800	3.3	ESE
20230606_1810	3.1	E
20230606_1820	3.3	ESE
20230606_1830	3.1	ESE
20230606_1840	2.5	ESE
20230606_1850	3.1	ESE
20230606_1900	2.8	ESE
20230606_1910	2.8	SE
20230606_1920	2.8	ESE
20230606_1930	2.8	SE
20230606_1940	3.3	SE
20230606_1950	3.1	SE
20230606_2000	2.5	ESE
20230606_2010	2.5	ESE
20230606_2020	2.2	ESE
20230606_2030	2.2	ESE
20230606_2040	1.9	ESE
20230606_2050	2.5	SE
20230606_2100	2.8	SE
20230606_2110	2.2	SE
20230606_2120	2.5	SE
20230606_2130	2.5	SE
20230606_2140	3.1	SE
20230606_2150	2.5	SE
20230606_2200	2.5	SE
20230606_2210	2.2	SE
20230606_2220	2.2	SE
20230606_2230	2.5	SE
20230606_2240	2.8	SE
20230606_2250	3.1	SE
20230606_2300	2.5	SE
20230606_2310	2.5	SE
20230606_2320	2.5	SE
20230606_2330	3.3	ESE
20230606_2340	2.5	ESE
20230606_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)
20230607_0000	2.5	ESE
20230607_0010	2.2	SE
20230607_0020	1.7	SE
20230607_0030	2.5	ESE
20230607_0040	2.2	ESE
20230607_0050	2.2	ESE
20230607_0100	2.2	ESE
20230607_0110	1.7	ESE
20230607_0120	1.7	SE
20230607_0130	1.7	SE
20230607_0140	1.7	SE
20230607_0150	1.1	SSE
20230607_0200	1.7	SSE
20230607_0210	1.1	SE
20230607_0220	0.8	S
20230607_0230	1.1	ESE
20230607_0240	0.8	E
20230607_0250	0.8	E
20230607_0300	1.4	E
20230607_0310	1.4	ENE
20230607_0320	1.4	E
20230607_0330	1.1	ESE
20230607_0340	1.4	ESE
20230607_0350	1.7	SE
20230607_0400	1.1	SE
20230607_0410	1.4	ESE
20230607_0420	0.8	ESE
20230607_0430	0.8	E
20230607_0440	1.1	ESE
20230607_0450	0.3	E
20230607_0500	0.6	SE
20230607_0510	0.8	ESE
20230607_0520	1.1	ESE
20230607_0530	1.7	E
20230607_0540	0.8	SSE
20230607_0550	0.6	SSE
20230607_0600	1.1	NE
20230607_0610	1.1	ENE
20230607_0620	0.3	ENE
20230607_0630	1.1	SE
20230607_0640	0.3	SE
20230607_0650	0.8	SE
20230607_0700	0.8	ESE
20230607_0710	1.4	ESE
20230607_0720	1.4	ESE
20230607_0730	1.1	SE
20230607_0740	0.8	SE
20230607_0750	1.1	SE
20230607_0800	1.1	SE
20230607_0810	1.1	SE
20230607_0820	0.8	NE
20230607_0830	1.1	E
20230607_0840	1.7	E
20230607_0850	2.2	ESE
20230607_0900	2.5	E
20230607_0910	3.1	E
20230607_0920	2.5	E
20230607_0930	2.5	ESE
20230607_0940	2.8	E
20230607_0950	2.2	E
20230607_1000	1.7	ESE
20230607_1010	2.2	ESE
20230607_1020	2.2	ESE
20230607_1030	2.2	E
20230607_1040	2.5	ESE
20230607_1050	2.5	E
20230607_1100	2.8	E
20230607_1110	2.8	E
20230607_1120	3.3	E
20230607_1130	2.5	E
20230607_1140	2.8	SE
20230607_1150	2.8	E

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230607_1200	2.8	E
20230607_1210	2.8	E
20230607_1220	3.1	ESE
20230607_1230	2.8	E
20230607_1240	2.2	ESE
20230607_1250	2.5	E
20230607_1300	2.8	ENE
20230607_1310	2.5	E
20230607_1320	2.2	E
20230607_1330	2.5	E
20230607_1340	2.5	E
20230607_1350	2.5	E
20230607_1400	2.8	E
20230607_1410	2.8	ESE
20230607_1420	3.1	ESE
20230607_1430	2.8	ESE
20230607_1440	2.8	E
20230607_1450	2.2	ESE
20230607_1500	1.7	ESE
20230607_1510	1.7	ESE
20230607_1520	1.1	ESE
20230607_1530	0.6	SSW
20230607_1540	1.1	SE
20230607_1550	1.7	ESE
20230607_1600	1.7	ESE
20230607_1610	1.7	ESE
20230607_1620	1.7	E
20230607_1630	1.7	ESE
20230607_1640	2.5	ESE
20230607_1650	3.3	E
20230607_1700	3.3	E
20230607_1710	3.3	ESE
20230607_1720	2.8	ESE
20230607_1730	2.8	ESE
20230607_1740	3.3	ESE
20230607_1750	2.5	ESE
20230607_1800	2.2	ESE
20230607_1810	2.5	ESE
20230607_1820	1.4	ENE
20230607_1830	1.1	NNE
20230607_1840	0.8	-
20230607_1850	0.3	SSE
20230607_1900	1.7	SE
20230607_1910	0.8	N
20230607_1920	0.8	SE
20230607_1930	1.7	ESE
20230607_1940	1.4	ESE
20230607_1950	1.7	ESE
20230607_2000	2.2	ESE
20230607_2010	1.9	E
20230607_2020	1.1	E
20230607_2030	1.4	ENE
20230607_2040	1.4	E
20230607_2050	1.7	ESE
20230607_2100	1.1	SE
20230607_2110	0.3	SW
20230607_2120	0.3	S
20230607_2130	0.3	SE
20230607_2140	0.3	E
20230607_2150	0.8	E
20230607_2200	0.6	E
20230607_2210	1.1	E
20230607_2220	1.4	ENE
20230607_2230	1.1	ESE
20230607_2240	1.4	SE
20230607_2250	0.6	-
20230607_2300	0.3	SSW
20230607_2310	0	N
20230607_2320	0	N
20230607_2330	0.3	S
20230607_2340	0.8	SSE
20230607_2350	0.8	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)
20230608_0000	0.3	S
20230608_0010	1.1	SSE
20230608_0020	0.8	SSW
20230608_0030	0.6	SSW
20230608_0040	1.1	S
20230608_0050	1.4	SSE
20230608_0100	1.4	SSE
20230608_0110	1.4	SSE
20230608_0120	1.7	SE
20230608_0130	0.8	SE
20230608_0140	1.1	SE
20230608_0150	0.6	SE
20230608_0200	0.8	SSE
20230608_0210	1.7	SSE
20230608_0220	1.4	SE
20230608_0230	1.1	ESE
20230608_0240	1.7	ESE
20230608_0250	1.7	ESE
20230608_0300	1.7	ESE
20230608_0310	1.1	ESE
20230608_0320	1.7	ESE
20230608_0330	1.1	ESE
20230608_0340	0.8	ESE
20230608_0350	0.8	SE
20230608_0400	0.6	ESE
20230608_0410	1.4	ESE
20230608_0420	1.7	ESE
20230608_0430	1.7	E
20230608_0440	1.4	E
20230608_0450	1.7	ENE
20230608_0500	1.7	E
20230608_0510	0.8	SE
20230608_0520	1.1	SSE
20230608_0530	0.6	S
20230608_0540	0.8	S
20230608_0550	1.1	SSE
20230608_0600	0.3	-
20230608_0610	0	N
20230608_0620	0	N
20230608_0630	0.3	SE
20230608_0640	0.3	SSE
20230608_0650	0	N
20230608_0700	0.6	S
20230608_0710	1.1	S
20230608_0720	0.8	S
20230608_0730	0.3	SSE
20230608_0740	0.3	E
20230608_0750	0.3	-
20230608_0800	0.3	SSW
20230608_0810	0.3	SSW
20230608_0820	0	N
20230608_0830	0.3	NW
20230608_0840	0.8	NW
20230608_0850	0.8	WNW
20230608_0900	0.3	NW
20230608_0910	0	N
20230608_0920	0.3	SE
20230608_0930	1.1	E
20230608_0940	1.7	E
20230608_0950	1.7	E
20230608_1000	1.4	E
20230608_1010	1.4	E
20230608_1020	1.1	ENE
20230608_1030	1.7	ESE
20230608_1040	2.8	E
20230608_1050	2.8	ESE
20230608_1100	2.8	E
20230608_1110	2.5	E
20230608_1120	3.1	E
20230608_1130	1.9	E
20230608_1140	2.5	E
20230608_1150	2.8	E

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230608_1200	2.2	E
20230608_1210	2.8	E
20230608_1220	3.3	E
20230608_1230	3.1	E
20230608_1240	2.5	E
20230608_1250	2.2	E
20230608_1300	1.4	ESE
20230608_1310	0.8	E
20230608_1320	1.1	E
20230608_1330	1.4	E
20230608_1340	0.8	ENE
20230608_1350	0.6	SE
20230608_1400	0.8	ENE
20230608_1410	0.6	ESE
20230608_1420	0.3	ENE
20230608_1430	0.8	ENE
20230608_1440	0.8	NE
20230608_1450	1.4	ENE
20230608_1500	1.7	ENE
20230608_1510	2.2	ENE
20230608_1520	1.7	NNE
20230608_1530	1.7	ENE
20230608_1540	1.9	NE
20230608_1550	1.9	ENE
20230608_1600	1.7	ENE
20230608_1610	1.7	ENE
20230608_1620	1.7	E
20230608_1630	1.7	E
20230608_1640	1.4	E
20230608_1650	0.8	ESE
20230608_1700	1.4	E
20230608_1710	1.7	E
20230608_1720	1.7	E
20230608_1730	2.2	E
20230608_1740	2.2	ESE
20230608_1750	1.7	ESE
20230608_1800	0.8	ENE
20230608_1810	1.7	ENE
20230608_1820	1.4	ENE
20230608_1830	1.4	ENE
20230608_1840	1.4	ENE
20230608_1850	1.4	ENE
20230608_1900	1.4	ENE
20230608_1910	1.1	ENE
20230608_1920	1.1	ENE
20230608_1930	0.8	ENE
20230608_1940	1.4	ENE
20230608_1950	1.4	ENE
20230608_2000	1.7	NE
20230608_2010	1.7	ENE
20230608_2020	1.1	E
20230608_2030	0.8	E
20230608_2040	1.1	NE
20230608_2050	1.1	NE
20230608_2100	1.4	ENE
20230608_2110	1.1	ENE
20230608_2120	0.8	ENE
20230608_2130	1.1	NE
20230608_2140	1.1	NE
20230608_2150	1.1	E
20230608_2200	1.4	ENE
20230608_2210	1.1	NE
20230608_2220	0.8	E
20230608_2230	0.8	ESE
20230608_2240	1.4	ESE
20230608_2250	1.4	E
20230608_2300	1.4	E
20230608_2310	0.3	NE
20230608_2320	0.3	NNE
20230608_2330	0.3	N
20230608_2340	0.3	N
20230608_2350	0.3	ENE

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)
20230609_0000	0.8	ENE
20230609_0010	1.4	E
20230609_0020	1.1	NE
20230609_0030	1.1	NE
20230609_0030	0.8	E
20230609_0040	0.8	SE
20230609_0050	0.3	N
20230609_0100	1.1	E
20230609_0110	1.4	ESE
20230609_0120	1.1	ENE
20230609_0130	1.1	E
20230609_0140	0.8	ESE
20230609_0150	0	N
20230609_0200	0.8	ENE
20230609_0210	1.1	NE
20230609_0220	1.4	E
20230609_0230	1.1	ENE
20230609_0240	1.7	ENE
20230609_0250	1.7	ENE
20230609_0300	1.1	ENE
20230609_0310	1.4	E
20230609_0320	1.4	ENE
20230609_0330	1.4	ENE
20230609_0340	1.1	ENE
20230609_0350	0.8	NE
20230609_0400	0.8	ENE
20230609_0410	0.8	ENE
20230609_0420	0.3	ENE
20230609_0430	0.8	ESE
20230609_0440	0	N
20230609_0450	0.3	ENE
20230609_0500	1.1	E
20230609_0510	1.1	E
20230609_0520	0	N
20230609_0530	0.3	ENE
20230609_0540	0	N
20230609_0550	0.3	SE
20230609_0600	0.8	ESE
20230609_0610	1.1	ENE
20230609_0620	0.3	NE
20230609_0630	0.6	NNE
20230609_0640	0.3	NE
20230609_0650	0.8	NE
20230609_0700	0.8	ENE
20230609_0710	0	N
20230609_0720	0	N
20230609_0730	0.6	NNE
20230609_0740	0.8	NNE
20230609_0750	0.3	-
20230609_0800	1.1	E
20230609_0810	0.8	SE
20230609_0820	1.1	E
20230609_0830	1.9	E
20230609_0840	1.7	E
20230609_0850	1.7	E
20230609_0900	1.9	E
20230609_0910	2.2	E
20230609_0920	1.9	E
20230609_0930	1.7	ESE
20230609_0940	1.9	ESE
20230609_0950	1.9	ESE
20230609_1000	2.2	E
20230609_1010	2.5	E
20230609_1020	1.9	E
20230609_1030	2.5	E
20230609_1040	2.5	E
20230609_1050	2.5	ESE
20230609_1100	2.8	E
20230609_1110	2.8	E
20230609_1120	3.3	E
20230609_1130	2.8	ENE
20230609_1140	3.3	ESE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230609_1200	3.3	ESE
20230609_1210	3.1	E
20230609_1220	3.3	ESE
20230609_1230	3.3	E
20230609_1240	2.5	E
20230609_1250	3.3	E
20230609_1300	3.3	ENE
20230609_1310	3.6	E
20230609_1320	3.3	E
20230609_1330	3.3	ENE
20230609_1340	3.3	E
20230609_1350	3.3	E
20230609_1400	3.3	ENE
20230609_1410	4.2	E
20230609_1420	3.3	E
20230609_1430	3.3	E
20230609_1440	3.3	E
20230609_1450	3.1	E
20230609_1500	3.9	E
20230609_1510	3.6	E
20230609_1520	3.3	E
20230609_1530	4.2	E
20230609_1540	3.3	E
20230609_1550	3.3	E
20230609_1600	3.3	E
20230609_1610	3.3	E
20230609_1620	3.9	E
20230609_1630	3.6	ESE
20230609_1640	3.3	ESE
20230609_1650	3.9	ESE
20230609_1700	3.6	ESE
20230609_1710	4.2	ESE
20230609_1720	3.3	ESE
20230609_1730	3.1	E
20230609_1740	2.5	ESE
20230609_1750	2.8	ESE
20230609_1800	2.5	ESE
20230609_1810	1.9	ESE
20230609_1820	2.5	E
20230609_1830	2.5	ESE
20230609_1840	2.8	ESE
20230609_1850	2.2	SE
20230609_1900	1.7	SE
20230609_1910	2.5	SE
20230609_1920	2.2	SE
20230609_1930	2.8	ESE
20230609_1940	2.8	ESE
20230609_1950	3.1	ESE
20230609_2000	3.6	ESE
20230609_2010	3.3	ESE
20230609_2020	2.8	ESE
20230609_2030	2.8	ESE
20230609_2040	3.1	ESE
20230609_2050	2.8	SE
20230609_2100	3.3	SE
20230609_2110	3.3	SE
20230609_2120	2.5	SE
20230609_2130	2.2	SE
20230609_2140	2.5	ESE
20230609_2150	3.3	SE
20230609_2200	2.2	SE
20230609_2210	2.5	ESE
20230609_2220	3.6	ESE
20230609_2230	2.5	ESE
20230609_2240	2.8	ESE
20230609_2250	3.6	ESE
20230609_2300	3.3	ESE
20230609_2310	3.3	ESE
20230609_2320	3.9	SE
20230609_2330	3.3	ESE
20230609_2340	3.1	ESE
20230609_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)
20230610_0000	1.7	ESE
20230610_0010	2.5	ESE
20230610_0020	3.3	ESE
20230610_0030	2.5	ESE
20230610_0030	2.8	ESE
20230610_0040	3.1	ESE
20230610_0050	1.7	ESE
20230610_0100	2.2	ESE
20230610_0110	2.8	ESE
20230610_0120	2.5	ESE
20230610_0130	2.5	ESE
20230610_0140	2.5	ESE
20230610_0150	2.5	E
20230610_0200	2.5	E
20230610_0210	2.2	ESE
20230610_0220	1.7	E
20230610_0230	1.7	ESE
20230610_0240	1.9	E
20230610_0250	1.7	ESE
20230610_0300	1.7	E
20230610_0300	1.4	E
20230610_0320	1.7	E
20230610_0330	2.2	E
20230610_0340	2.5	E
20230610_0350	2.2	E
20230610_0400	2.2	E
20230610_0410	1.7	E
20230610_0420	2.5	E
20230610_0430	2.5	E
20230610_0440	1.7	ESE
20230610_0450	1.7	E
20230610_0500	1.7	E
20230610_0510	1.7	E
20230610_0520	1.7	E
20230610_0530	1.7	E
20230610_0540	1.7	ESE
20230610_0550	1.4	ESE
20230610_0600	1.9	SE
20230610_0610	1.7	ESE
20230610_0620	2.2	ESE
20230610_0630	2.8	ESE
20230610_0640	2.5	ESE
20230610_0650	2.2	E
20230610_0700	1.9	E
20230610_0710	2.2	ESE
20230610_0720	2.2	ESE
20230610_0730	2.5	ESE
20230610_0740	2.8	E
20230610_0750	2.5	E
20230610_0800	2.2	ESE
20230610_0810	2.2	E
20230610_0820	2.2	E
20230610_0830	2.5	ESE
20230610_0840	2.5	E
20230610_0850	2.5	E
20230610_0900	3.1	E
20230610_0910	3.3	E
20230610_0920	2.8	E
20230610_0930	2.8	E
20230610_0940	3.1	E
20230610_0950	3.3	E
20230610_1000	3.1	E
20230610_1010	3.3	E
20230610_1020	2.8	E
20230610_1030	3.3	ESE
20230610_1040	3.3	ESE
20230610_1050	3.6	ESE
20230610_1100	3.9	E
20230610_1110	3.9	E
20230610_1120	3.6	E
20230610_1130	4.2	E
20230610_1140	3.9	E

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230610_1200	3.3	E
20230610_1210	4.2	E
20230610_1220	3.9	E
20230610_1230	3.6	E
20230610_1240	3.9	ESE
20230610_1250	4.4	E
20230610_1300	3.9	E
20230610_1310	3.9	E
20230610_1320	4.2	E
20230610_1330	4.4	E
20230610_1340	3.9	E
20230610_1350	4.2	E
20230610_1400	4.2	E
20230610_1410	3.9	E
20230610_1420	4.4	E
20230610_1430	4.2	E
20230610_1440	4.2	E
20230610_1450	4.2	E
20230610_1500	3.6	E
20230610_1510	3.9	E
20230610_1520	3.9	E
20230610_1530	3.9	E
20230610_1540	3.3	E
20230610_1550	3.9	E
20230610_1600	3.6	E
20230610_1610	3.6	E
20230610_1620	3.9	E
20230610_1630	3.9	E
20230610_1640	3.6	E
20230610_1650	3.3	ENE
20230610_1700	3.3	E
20230610_1710	2.8	E
20230610_1720	2.5	ESE
20230610_1730	2.8	E
20230610_1740	2.8	E
20230610_1750	2.2	E
20230610_1800	2.8	ESE
20230610_1810	2.5	ESE
20230610_1820	1.7	ESE
20230610_1830	1.4	ESE
20230610_1840	1.7	ESE
20230610_1850	1.7	SE
20230610_1900	1.7	SE
20230610_1910	2.2	ESE
20230610_1920	2.2	ESE
20230610_1930	2.2	E
20230610_1940	2.5	E
20230610_1950	2.2	ESE
20230610_2000	2.2	E
20230610_2010	2.2	ESE
20230610_2020	2.2	ESE
20230610_2030	2.2	ESE
20230610_2040	2.5	ESE
20230610_2050	2.2	ESE
20230610_2100	2.2	ESE
20230610_2110	1.7	ESE
20230610_2120	1.7	ESE
20230610_2130	1.7	ESE
20230610_2140	1.7	ESE
20230610_2150	1.7	ESE
20230610_2200	1.7	ESE
20230610_2210	1.7	ESE
20230610_2220	1.7	ESE
20230610_2230	1.7	ESE
20230610_2240	1.7	ESE
20230610_2250	1.9	ESE
20230610_2300	1.7	ESE
20230610_2310	1.7	ESE
20230610_2320	1.4	ESE
20230610_2330	1.4	ESE
20230610_2340	1.7	ESE
20230610_2350	1.7	ESE

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Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230611_0000	2.2	SE
20230611_0010	1.7	ESE
20230611_0020	1.7	ESE
20230611_0030	1.7	ESE
20230611_0030	1.1	ESE
20230611_0040	1.1	ESE
20230611_0050	1.1	E
20230611_0100	1.7	E
20230611_0110	1.9	ESE
20230611_0120	1.4	ESE
20230611_0130	1.4	ESE
20230611_0140	0.8	E
20230611_0150	1.1	E
20230611_0200	1.4	ESE
20230611_0210	1.4	SE
20230611_0220	1.1	-
20230611_0230	1.4	ESE
20230611_0240	0.6	-
20230611_0250	0.8	ENE
20230611_0300	0.3	ENE
20230611_0310	0.3	ENE
20230611_0320	0.3	-
20230611_0330	0.8	ENE
20230611_0340	2.2	ENE
20230611_0350	2.2	ENE
20230611_0400	1.9	E
20230611_0410	2.2	ENE
20230611_0420	2.8	E
20230611_0430	3.1	E
20230611_0440	3.1	E
20230611_0450	3.3	E
20230611_0500	3.6	E
20230611_0510	3.3	E
20230611_0520	2.8	E
20230611_0530	3.1	E
20230611_0540	3.3	E
20230611_0550	3.3	ENE
20230611_0600	3.1	ENE
20230611_0610	2.5	E
20230611_0620	2.8	E
20230611_0630	3.1	E
20230611_0640	2.5	E
20230611_0650	2.5	ESE
20230611_0700	3.1	SE
20230611_0710	2.8	E
20230611_0720	3.1	ESE
20230611_0730	2.5	E
20230611_0740	2.8	ESE
20230611_0750	2.8	ESE
20230611_0800	2.5	ESE
20230611_0810	2.5	ESE
20230611_0820	2.8	E
20230611_0830	3.1	E
20230611_0840	2.8	E
20230611_0850	2.5	ESE
20230611_0900	3.1	E
20230611_0910	2.5	E
20230611_0920	2.5	E
20230611_0930	2.8	E
20230611_0940	2.8	ESE
20230611_0950	3.1	E
20230611_1000	3.3	E
20230611_1010	3.1	E
20230611_1020	2.5	E
20230611_1030	2.5	E
20230611_1040	2.2	ESE
20230611_1050	2.2	E
20230611_1100	1.7	E
20230611_1110	1.4	ESE
20230611_1120	2.2	ESE
20230611_1130	2.8	ESE
20230611_1140	2.2	ESE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230611_1200	1.7	ESE
20230611_1210	2.2	E
20230611_1220	1.7	ESE
20230611_1230	1.7	ESE
20230611_1240	1.7	ESE
20230611_1250	1.9	SE
20230611_1300	1.1	S
20230611_1310	1.7	SE
20230611_1320	0.8	ESE
20230611_1330	0.8	SE
20230611_1340	0.8	S
20230611_1350	0.3	N
20230611_1400	0.3	N
20230611_1410	0.3	NNE
20230611_1420	0.8	W
20230611_1430	0.8	SW
20230611_1440	0.3	SE
20230611_1450	0	N
20230611_1500	0.3	NW
20230611_1510	0.8	ESE
20230611_1520	0.3	WNW
20230611_1530	0.3	NNE
20230611_1540	0	N
20230611_1550	0.3	SW
20230611_1600	0.6	NW
20230611_1610	0.8	W
20230611_1620	1.1	S
20230611_1630	0.8	E
20230611_1640	1.1	ESE
20230611_1650	1.1	SW
20230611_1700	0.3	SW
20230611_1710	0.3	WNW
20230611_1720	0.3	E
20230611_1730	0.8	SE
20230611_1740	1.4	SE
20230611_1750	1.1	SSE
20230611_1800	1.4	S
20230611_1810	1.4	S
20230611_1820	1.1	S
20230611_1830	1.4	S
20230611_1840	0.8	SW
20230611_1850	0.8	E
20230611_1900	0.3	E
20230611_1910	0.3	WNW
20230611_1920	0.8	SSW
20230611_1930	0.8	SSE
20230611_1940	0.6	SE
20230611_1950	0	N
20230611_2000	0.3	S
20230611_2010	0.8	SSE
20230611_2020	1.4	SSE
20230611_2030	0.8	-
20230611_2040	0.3	SE
20230611_2050	0.3	-
20230611_2100	0.8	SSE
20230611_2110	0.3	WNW
20230611_2120	0.3	-
20230611_2130	0	N
20230611_2140	0	N
20230611_2150	0.3	ENE
20230611_2200	0.6	-
20230611_2210	0	N
20230611_2220	0.3	SSW
20230611_2230	0.3	-
20230611_2240	0	N
20230611_2250	0	N
20230611_2300	0.3	-
20230611_2310	0.8	ESE
20230611_2320	0.3	-
20230611_2330	0	N
20230611_2340	0	N
20230611_2350	0	N

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Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230612_0000	0	N
20230612_0010	0	N
20230612_0020	0	N
20230612_0030	0	N
20230612_0030	0	N
20230612_0040	0	N
20230612_0050	0.3	-
20230612_0100	0.8	ESE
20230612_0110	0.3	S
20230612_0120	1.1	SE
20230612_0130	1.7	ESE
20230612_0140	1.4	ESE
20230612_0150	2.5	NNE
20230612_0200	1.1	ENE
20230612_0210	1.9	NNE
20230612_0220	1.7	SSE
20230612_0230	1.4	E
20230612_0240	1.7	ENE
20230612_0250	0.8	NNE
20230612_0300	2.5	NNE
20230612_0310	2.8	NE
20230612_0320	1.4	SSW
20230612_0330	1.4	WSW
20230612_0340	0.3	ESE
20230612_0350	1.1	NE
20230612_0400	0.3	ENE
20230612_0410	1.4	WSW
20230612_0420	1.1	NNE
20230612_0430	1.1	ESE
20230612_0440	0.6	ESE
20230612_0450	0.3	-
20230612_0500	0.8	SE
20230612_0510	1.4	E
20230612_0520	1.7	E
20230612_0530	0.3	NE
20230612_0540	0.8	ENE
20230612_0550	0.6	-
20230612_0600	0.3	E
20230612_0610	1.1	NNE
20230612_0620	1.7	SE
20230612_0630	2.8	SSE
20230612_0640	1.1	SSE
20230612_0650	1.7	S
20230612_0700	1.1	S
20230612_0710	1.4	SE
20230612_0720	0.8	SSE
20230612_0730	0.8	-
20230612_0740	0.3	-
20230612_0750	0	N
20230612_0800	0.3	-
20230612_0810	1.1	SSE
20230612_0820	0.8	SE
20230612_0830	1.1	SSE
20230612_0840	0.8	WNW
20230612_0850	0.3	E
20230612_0900	1.1	ENE
20230612_0910	1.1	NNW
20230612_0920	1.4	NNE
20230612_0930	1.4	NNE
20230612_0940	1.4	ENE
20230612_0950	1.1	SE
20230612_1000	0.8	ESE
20230612_1010	0	N
20230612_1020	0	N
20230612_1030	0	N
20230612_1040	0.3	ESE
20230612_1050	0.3	E
20230612_1100	1.1	ESE
20230612_1110	1.1	ESE
20230612_1120	0.3	SSE
20230612_1130	0.6	SE
20230612_1140	0	N

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230612_1200	1.1	ESE
20230612_1210	1.4	SE
20230612_1220	1.4	SE
20230612_1230	0	N
20230612_1240	0.3	WNW
20230612_1250	0	N
20230612_1300	0.8	SSE
20230612_1310	1.1	S
20230612_1320	1.1	SE
20230612_1330	0.3	SSE
20230612_1340	0	N
20230612_1350	0.8	E
20230612_1400	1.4	ESE
20230612_1410	1.4	ESE
20230612_1420	0.8	ESE
20230612_1430	0.6	-
20230612_1440	0.8	ESE
20230612_1450	0	N
20230612_1500	0	N
20230612_1510	1.1	WSW
20230612_1520	1.1	WSW
20230612_1530	1.7	WSW
20230612_1540	1.7	SW
20230612_1550	2.8	SW
20230612_1600	2.2	SW
20230612_1610	1.4	SW
20230612_1620	1.4	SW
20230612_1630	0.8	W
20230612_1640	1.7	WSW
20230612_1650	2.2	SW
20230612_1700	1.7	WSW
20230612_1710	0.8	W
20230612_1720	0.6	W
20230612_1730	0.8	WSW
20230612_1740	0.3	SSW
20230612_1750	0	N
20230612_1800	0	N
20230612_1810	0	N
20230612_1820	0.6	NW
20230612_1830	1.1	WNW
20230612_1840	0.6	W
20230612_1850	0	N
20230612_1900	0.8	NNE
20230612_1910	0.8	E
20230612_1920	0.8	NE
20230612_1930	0.6	NE
20230612_1940	0.3	SSE
20230612_1950	0.8	N
20230612_2000	0.8	S
20230612_2010	0.3	-
20230612_2020	0.3	N
20230612_2030	0.3	NW
20230612_2040	0	N
20230612_2050	1.1	SE
20230612_2100	1.4	SSE
20230612_2110	0.8	SW
20230612_2120	1.4	SSE
20230612_2130	0.8	S
20230612_2140	0.8	ESE
20230612_2150	0.3	E
20230612_2200	0.3	SE
20230612_2210	0	N
20230612_2220	0	N
20230612_2230	0	N
20230612_2240	0	N
20230612_2250	0.3	E
20230612_2300	0	N
20230612_2310	0	N
20230612_2320	0	N
20230612_2330	0	N
20230612_2340	0	N
20230612_2350	0.3	ENE

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)
20230613_0000	0	N
20230613_0010	0	N
20230613_0020	0	N
20230613_0030	0	N
20230613_0040	0	N
20230613_0050	0	N
20230613_0100	0.3	-
20230613_0110	0	N
20230613_0120	0	N
20230613_0130	0	N
20230613_0140	0	N
20230613_0150	0	N
20230613_0200	0	N
20230613_0210	0	N
20230613_0220	0	N
20230613_0230	0	N
20230613_0240	0	N
20230613_0250	0	N
20230613_0300	0	N
20230613_0310	0.3	SSW
20230613_0320	0	N
20230613_0330	0.3	-
20230613_0340	0	N
20230613_0350	0	N
20230613_0400	2.2	S
20230613_0410	1.1	-
20230613_0420	0.6	SSE
20230613_0430	0.3	NW
20230613_0440	0.6	NE
20230613_0450	0.3	ENE
20230613_0500	0.3	W
20230613_0510	0	N
20230613_0520	0	N
20230613_0530	0.3	NE
20230613_0540	0.3	SW
20230613_0550	0.3	-
20230613_0600	0	N
20230613_0610	0	N
20230613_0620	0	N
20230613_0630	0	N
20230613_0640	0	N
20230613_0650	0	N
20230613_0700	0	N
20230613_0710	0	N
20230613_0720	0	N
20230613_0730	0	N
20230613_0740	0	N
20230613_0750	0	N
20230613_0800	0	N
20230613_0810	0.3	NE
20230613_0820	0	N
20230613_0830	0.3	SSW
20230613_0840	0.6	SSW
20230613_0850	0.6	SSE
20230613_0900	0	N
20230613_0910	0	N
20230613_0920	0	N
20230613_0930	0	N
20230613_0940	0	N
20230613_0950	0.3	WSW
20230613_1000	0.3	SW
20230613_1010	0.3	-
20230613_1020	0.3	-
20230613_1030	0	N
20230613_1040	0	N
20230613_1050	0	N
20230613_1100	0.6	WSW
20230613_1110	1.4	WSW
20230613_1120	0.8	WSW
20230613_1130	0.3	W
20230613_1140	0.6	W
20230613_1150	1.1	W

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230613_1200	1.1	W
20230613_1210	1.7	WNW
20230613_1220	1.7	W
20230613_1230	1.7	W
20230613_1240	1.4	W
20230613_1250	1.7	WSW
20230613_1300	1.7	W
20230613_1310	1.7	WNW
20230613_1320	1.1	NW
20230613_1330	1.1	WNW
20230613_1340	1.4	NW
20230613_1350	0.6	NNW
20230613_1400	0.8	NNW
20230613_1410	0.6	NNW
20230613_1420	0.6	WSW
20230613_1430	1.1	W
20230613_1440	1.7	W
20230613_1450	1.7	WSW
20230613_1500	1.7	W
20230613_1510	0.8	W
20230613_1520	1.1	WSW
20230613_1530	1.1	W
20230613_1540	0.3	WNW
20230613_1550	0.3	NW
20230613_1600	0.6	ENE
20230613_1610	0.6	ESE
20230613_1620	0.8	SE
20230613_1630	0.3	SSE
20230613_1640	0.8	SSE
20230613_1650	0.3	S
20230613_1700	0.3	SSE
20230613_1710	0	N
20230613_1720	0.3	NW
20230613_1730	0.3	NW
20230613_1740	0	N
20230613_1750	0	N
20230613_1800	0.8	SSW
20230613_1810	1.1	SSE
20230613_1820	0.6	SE
20230613_1830	0.3	NNW
20230613_1840	1.1	N
20230613_1850	2.5	NNE
20230613_1900	2.2	NW
20230613_1910	1.4	N
20230613_1920	0.6	SW
20230613_1930	0.3	SSE
20230613_1940	0.3	-
20230613_1950	0	N
20230613_2000	1.1	SE
20230613_2010	1.7	SE
20230613_2020	1.4	ESE
20230613_2030	1.4	ESE
20230613_2040	1.9	ESE
20230613_2050	1.7	ESE
20230613_2100	1.4	NE
20230613_2110	1.4	NNE
20230613_2120	0.8	-
20230613_2130	1.9	ESE
20230613_2140	1.7	ESE
20230613_2150	1.7	E
20230613_2200	1.1	ESE
20230613_2210	0.8	ESE
20230613_2220	1.7	SE
20230613_2230	1.7	ESE
20230613_2240	0.8	NW
20230613_2250	1.1	NW
20230613_2300	0.8	NNE
20230613_2310	0.3	NE
20230613_2320	0	N
20230613_2330	0.3	NE
20230613_2340	1.1	NNE
20230613_2350	0.3	NNE

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Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230614_0000	1.1	NE
20230614_0010	0.6	NE
20230614_0020	0.6	E
20230614_0020	0.6	ENE
20230614_0030	1.4	E
20230614_0040	1.4	ENE
20230614_0050	2.2	ENE
20230614_0100	2.2	ENE
20230614_0110	0.8	E
20230614_0120	0.3	-
20230614_0130	0.6	N
20230614_0140	1.1	NNE
20230614_0150	1.7	NNE
20230614_0200	1.4	N
20230614_0210	1.4	NNE
20230614_0220	1.4	N
20230614_0230	1.1	N
20230614_0240	1.1	N
20230614_0250	0.8	NNW
20230614_0300	0.8	N
20230614_0310	0	N
20230614_0320	0	N
20230614_0330	0.3	W
20230614_0340	0.8	WNW
20230614_0350	0.8	NNW
20230614_0400	1.1	N
20230614_0410	1.4	NNE
20230614_0420	0.3	-
20230614_0430	0	N
20230614_0440	0	N
20230614_0450	0.3	NW
20230614_0500	0.3	NNW
20230614_0510	0.6	N
20230614_0520	1.7	NNE
20230614_0530	1.1	NNE
20230614_0540	0.6	N
20230614_0550	0.6	NNW
20230614_0600	0.6	NNW
20230614_0610	1.7	N
20230614_0620	0.8	NNW
20230614_0630	0.6	NW
20230614_0640	0.3	NNW
20230614_0650	0.3	-
20230614_0700	0.3	NNE
20230614_0710	0.3	E
20230614_0720	1.1	E
20230614_0730	0.8	SSW
20230614_0740	0.6	WSW
20230614_0750	0.3	NNW
20230614_0800	0.3	NW
20230614_0810	0.3	NNW
20230614_0820	1.7	N
20230614_0830	1.4	N
20230614_0840	1.7	NNE
20230614_0850	1.4	N
20230614_0900	0.8	N
20230614_0910	1.1	N
20230614_0920	0.3	N
20230614_0930	0.8	NW
20230614_0940	0.3	NNW
20230614_0950	0.6	WNW
20230614_1000	0.3	NW
20230614_1010	0	N
20230614_1020	0	N
20230614_1030	0.8	E
20230614_1040	0.8	E
20230614_1050	2.5	E
20230614_1100	2.2	E
20230614_1110	1.9	E
20230614_1120	2.2	E
20230614_1130	2.2	E
20230614_1140	1.7	E

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230614_1200	1.4	ENE
20230614_1210	1.7	E
20230614_1220	1.7	ESE
20230614_1230	1.9	E
20230614_1240	1.7	ESE
20230614_1250	1.7	ESE
20230614_1300	2.2	E
20230614_1310	2.8	E
20230614_1320	3.3	E
20230614_1330	3.3	E
20230614_1340	3.6	E
20230614_1350	2.8	ESE
20230614_1400	3.1	E
20230614_1410	3.1	ESE
20230614_1420	2.5	SE
20230614_1430	2.2	E
20230614_1440	1.4	ESE
20230614_1450	1.7	E
20230614_1500	1.7	ESE
20230614_1510	1.7	ESE
20230614_1520	1.7	ESE
20230614_1530	1.7	ESE
20230614_1540	1.7	SE
20230614_1550	2.2	SE
20230614_1600	2.5	SE
20230614_1610	2.8	ESE
20230614_1620	2.2	ESE
20230614_1630	3.3	ESE
20230614_1640	3.3	ESE
20230614_1650	2.8	ESE
20230614_1700	3.3	E
20230614_1710	2.8	ESE
20230614_1720	3.1	ESE
20230614_1730	2.8	ESE
20230614_1740	2.5	E
20230614_1750	2.2	ESE
20230614_1800	2.8	ESE
20230614_1810	3.1	E
20230614_1820	2.2	ESE
20230614_1830	2.2	ESE
20230614_1840	2.5	E
20230614_1850	2.5	E
20230614_1900	1.4	ESE
20230614_1910	1.7	ESE
20230614_1920	1.4	ESE
20230614_1930	2.5	ESE
20230614_1940	2.5	ESE
20230614_1950	2.5	ESE
20230614_2000	2.2	ESE
20230614_2010	2.5	E
20230614_2020	2.5	E
20230614_2030	2.8	ESE
20230614_2040	2.5	E
20230614_2050	2.8	ESE
20230614_2100	3.3	ESE
20230614_2110	2.8	ESE
20230614_2120	2.8	ESE
20230614_2130	2.2	ESE
20230614_2140	2.2	ESE
20230614_2150	2.5	ESE
20230614_2200	2.2	ESE
20230614_2210	2.5	ESE
20230614_2220	3.1	ESE
20230614_2230	2.8	ESE
20230614_2240	2.5	SE
20230614_2250	2.8	ESE
20230614_2300	2.8	ESE
20230614_2310	2.2	ESE
20230614_2320	2.8	SE
20230614_2330	2.8	ESE
20230614_2340	2.8	ESE
20230614_2350	2.8	ESE

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Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230615_0000	2.8	ESE
20230615_0010	2.8	SE
20230615_0020	2.8	ESE
20230615_0020	2.8	SE
20230615_0030	2.8	SE
20230615_0040	3.3	SE
20230615_0050	3.6	SE
20230615_0100	2.5	SE
20230615_0110	2.2	SE
20230615_0120	3.1	SE
20230615_0130	2.5	SE
20230615_0140	2.2	SE
20230615_0150	2.5	ESE
20230615_0200	2.8	E
20230615_0210	2.5	E
20230615_0220	2.8	SE
20230615_0230	3.3	SE
20230615_0240	3.3	ESE
20230615_0250	4.4	ESE
20230615_0300	3.3	SE
20230615_0310	2.5	ESE
20230615_0320	3.3	ESE
20230615_0330	4.2	SE
20230615_0340	2.8	SE
20230615_0350	2.8	ESE
20230615_0400	2.5	ESE
20230615_0410	3.3	ESE
20230615_0420	3.9	ESE
20230615_0430	4.7	ESE
20230615_0440	3.3	SE
20230615_0450	2.2	SE
20230615_0500	2.5	SE
20230615_0510	3.1	SE
20230615_0520	4.2	SE
20230615_0530	3.9	SE
20230615_0540	3.9	ESE
20230615_0550	4.2	ESE
20230615_0600	4.2	SE
20230615_0610	3.9	SE
20230615_0620	4.7	SE
20230615_0630	3.6	ESE
20230615_0640	3.3	ESE
20230615_0650	2.8	ESE
20230615_0700	3.1	ESE
20230615_0710	3.3	ESE
20230615_0720	3.9	ESE
20230615_0730	3.3	E
20230615_0740	3.3	E
20230615_0750	3.3	E
20230615_0800	2.5	-
20230615_0810	3.1	E
20230615_0820	2.8	E
20230615_0830	2.8	ENE
20230615_0840	2.5	E
20230615_0850	1.4	ESE
20230615_0900	1.7	E
20230615_0910	1.1	E
20230615_0920	2.8	E
20230615_0930	1.7	ESE
20230615_0940	1.4	ESE
20230615_0950	0.3	-
20230615_1000	0.3	S
20230615_1010	0.8	SSE
20230615_1020	0.8	E
20230615_1030	0.8	SE
20230615_1040	0.8	ESE
20230615_1050	1.4	E
20230615_1100	1.7	ESE
20230615_1110	1.4	ESE
20230615_1120	1.4	E
20230615_1130	2.2	E
20230615_1140	3.3	E

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230615_1200	2.8	E
20230615_1210	2.8	E
20230615_1220	3.1	E
20230615_1230	3.3	E
20230615_1240	2.5	ESE
20230615_1250	2.2	E
20230615_1300	1.7	NNE
20230615_1310	2.2	NE
20230615_1320	1.7	E
20230615_1330	3.3	E
20230615_1340	2.8	ESE
20230615_1350	2.2	ESE
20230615_1400	2.5	ESE
20230615_1410	3.1	E
20230615_1420	3.3	ESE
20230615_1430	3.9	ESE
20230615_1440	3.9	ESE
20230615_1450	3.6	ESE
20230615_1500	2.5	ESE
20230615_1510	2.5	ESE
20230615_1520	1.9	ESE
20230615_1530	2.2	E
20230615_1540	2.5	ESE
20230615_1550	1.7	ESE
20230615_1600	1.1	ESE
20230615_1610	1.7	ESE
20230615_1620	1.7	ESE
20230615_1630	1.7	ESE
20230615_1640	1.4	ESE
20230615_1650	1.7	E
20230615_1700	2.2	ENE
20230615_1710	2.2	E
20230615_1720	2.5	E
20230615_1730	2.2	E
20230615_1740	2.5	E
20230615_1750	2.8	E
20230615_1800	2.8	E
20230615_1810	2.2	E
20230615_1820	2.2	E
20230615_1830	1.7	E
20230615_1840	1.1	E
20230615_1850	1.4	E
20230615_1900	1.7	E
20230615_1910	1.4	E
20230615_1920	1.1	ENE
20230615_1930	1.1	ENE
20230615_1940	1.7	ENE
20230615_1950	1.7	E
20230615_2000	1.7	E
20230615_2010	1.7	E
20230615_2020	1.4	E
20230615_2030	1.4	E
20230615_2040	0.8	NE
20230615_2050	1.1	ENE
20230615_2100	0.8	NNW
20230615_2110	1.1	NNE
20230615_2120	0.8	N
20230615_2130	0.8	-
20230615_2140	2.2	N
20230615_2150	1.7	NNE
20230615_2200	1.7	NNE
20230615_2210	1.4	NE
20230615_2220	0.3	-
20230615_2230	0.3	-
20230615_2240	0.8	N
20230615_2250	1.7	NNE
20230615_2300	1.9	N
20230615_2310	2.5	NNE
20230615_2320	3.6	N
20230615_2330	3.3	NNE
20230615_2340	2.8	N
20230615_2350	3.3	NNE

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Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230616_0000	3.3	NNE
20230616_0010	3.9	NNE
20230616_0020	3.3	N
20230616_0020	3.3	N
20230616_0030	3.9	N
20230616_0040	4.2	N
20230616_0050	3.3	N
20230616_0100	3.3	NNE
20230616_0110	2.8	NNE
20230616_0120	2.2	NNE
20230616_0130	1.9	N
20230616_0140	2.5	N
20230616_0150	2.2	N
20230616_0200	2.2	NNE
20230616_0210	1.7	N
20230616_0220	1.9	N
20230616_0230	2.2	N
20230616_0240	2.8	N
20230616_0250	2.5	N
20230616_0300	2.8	N
20230616_0310	4.2	N
20230616_0320	4.2	N
20230616_0330	3.3	N
20230616_0340	2.8	N
20230616_0350	3.6	N
20230616_0400	3.6	N
20230616_0410	3.9	N
20230616_0420	4.4	NNE
20230616_0430	3.3	NNE
20230616_0440	1.7	N
20230616_0450	1.4	NNW
20230616_0500	1.1	N
20230616_0510	1.1	N
20230616_0520	1.7	N
20230616_0530	2.5	N
20230616_0540	2.5	N
20230616_0550	3.1	N
20230616_0600	3.3	N
20230616_0610	3.9	NNE
20230616_0620	3.3	N
20230616_0630	3.6	NNE
20230616_0640	3.9	N
20230616_0650	3.6	N
20230616_0700	2.5	N
20230616_0710	2.8	N
20230616_0720	3.1	N
20230616_0730	3.9	NNE
20230616_0740	3.9	NNE
20230616_0750	2.5	NNE
20230616_0800	1.7	NE
20230616_0810	0.3	NE
20230616_0820	0.8	N
20230616_0830	1.7	NNE
20230616_0840	2.2	NNE
20230616_0850	1.7	NNE
20230616_0900	1.4	NNE
20230616_0910	1.4	NNE
20230616_0920	1.7	NNE
20230616_0930	2.2	N
20230616_0940	1.1	N
20230616_0950	1.7	N
20230616_1000	1.4	NNE
20230616_1010	1.1	NNE
20230616_1020	0	N
20230616_1030	0.3	SSE
20230616_1040	0	N
20230616_1050	0	N
20230616_1100	0.3	E
20230616_1110	0.3	SE
20230616_1120	0	N
20230616_1130	0.8	N
20230616_1140	1.7	N

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230616_1200	2.5	N
20230616_1210	2.2	N
20230616_1220	2.2	N
20230616_1230	2.2	N
20230616_1240	1.4	N
20230616_1250	1.7	N
20230616_1300	2.5	N
20230616_1310	2.5	N
20230616_1320	1.7	N
20230616_1330	2.2	N
20230616_1340	2.8	NNE
20230616_1350	2.8	N
20230616_1400	3.1	N
20230616_1410	3.3	N
20230616_1420	3.1	N
20230616_1430	2.8	NNE
20230616_1440	3.6	NNE
20230616_1450	3.9	NNE
20230616_1500	3.3	NNE
20230616_1510	3.9	NNE
20230616_1520	3.3	NNE
20230616_1530	2.5	NNE
20230616_1540	1.7	NE
20230616_1550	1.9	NNE
20230616_1600	1.4	NE
20230616_1610	1.4	SE
20230616_1620	0.8	-
20230616_1630	0.6	NE
20230616_1640	0.8	-
20230616_1650	0.8	E
20230616_1700	0.3	-
20230616_1710	0.3	NE
20230616_1720	1.1	N
20230616_1730	2.8	NNE
20230616_1740	3.3	NNE
20230616_1750	2.8	NNE
20230616_1800	1.9	NNE
20230616_1810	1.7	NNE
20230616_1820	2.5	NE
20230616_1830	2.5	NE
20230616_1840	2.2	NE
20230616_1850	0.8	NE
20230616_1900	0.3	E
20230616_1910	0.3	WNW
20230616_1920	0.3	-
20230616_1930	2.2	NNE
20230616_1940	3.1	NNE
20230616_1950	2.8	NNE
20230616_2000	3.3	NNE
20230616_2010	1.7	NE
20230616_2020	2.2	NE
20230616_2030	2.2	NE
20230616_2040	3.1	NE
20230616_2050	3.1	NNE
20230616_2100	3.3	NE
20230616_2110	2.2	NE
20230616_2120	2.8	NNE
20230616_2130	2.2	NNE
20230616_2140	1.4	ENE
20230616_2150	0.3	ESE
20230616_2200	0.6	S
20230616_2210	0.6	S
20230616_2220	0.3	SW
20230616_2230	0.8	NNW
20230616_2240	0.8	SSW
20230616_2250	0.3	-
20230616_2300	0.3	SE
20230616_2310	0.3	SSW
20230616_2320	0.3	-
20230616_2330	0.3	S
20230616_2340	0.8	SSW
20230616_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)
20230617_0000	0.3	SW
20230617_0010	0.3	-
20230617_0020	0	N
20230617_0030	0.3	NE
20230617_0040	0.3	SSE
20230617_0050	0	N
20230617_0100	0.3	SE
20230617_0110	0.3	SE
20230617_0120	0.3	-
20230617_0130	0.3	SSE
20230617_0140	0.3	SE
20230617_0150	0	N
20230617_0200	0	N
20230617_0210	0.3	SE
20230617_0220	0.3	SE
20230617_0230	0	N
20230617_0240	0	N
20230617_0250	0.3	SE
20230617_0300	0.3	SSE
20230617_0310	0	N
20230617_0320	0	N
20230617_0330	0	N
20230617_0340	0	N
20230617_0350	0.3	SSE
20230617_0400	0.3	-
20230617_0410	0	N
20230617_0420	0	N
20230617_0430	0	N
20230617_0440	0	N
20230617_0450	0	N
20230617_0500	0	N
20230617_0510	0	N
20230617_0520	0	N
20230617_0530	0	N
20230617_0540	0	N
20230617_0550	0	N
20230617_0600	0	N
20230617_0610	0	N
20230617_0620	0.3	SSE
20230617_0630	0.3	SSE
20230617_0640	0	N
20230617_0650	0	N
20230617_0700	0	N
20230617_0710	0	N
20230617_0720	0	N
20230617_0730	0	N
20230617_0740	0	N
20230617_0750	0	N
20230617_0800	0.3	N
20230617_0810	0.3	NE
20230617_0820	0.3	-
20230617_0830	1.1	NNW
20230617_0840	0.8	ENE
20230617_0850	0.3	N
20230617_0900	0.3	N
20230617_0910	0.8	N
20230617_0920	2.2	N
20230617_0930	2.8	NNE
20230617_0940	2.5	N
20230617_0950	2.2	NE
20230617_1000	2.2	NNE
20230617_1010	2.2	NNE
20230617_1020	2.2	NNW
20230617_1030	1.9	N
20230617_1040	2.2	N
20230617_1050	2.5	N
20230617_1100	3.3	NNE
20230617_1110	3.3	NNE
20230617_1120	2.8	NNE
20230617_1130	1.7	N
20230617_1140	2.2	N
20230617_1150	2.2	N

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230617_1200	2.5	NNE
20230617_1210	1.7	NNW
20230617_1220	1.7	NW
20230617_1230	1.4	NNE
20230617_1240	1.1	NNW
20230617_1250	1.1	NNE
20230617_1300	1.4	N
20230617_1310	1.1	SE
20230617_1320	1.4	S
20230617_1330	1.1	-
20230617_1340	1.4	WNW
20230617_1350	1.1	SW
20230617_1400	1.7	SW
20230617_1410	1.7	SW
20230617_1420	1.4	SW
20230617_1430	0.8	WSW
20230617_1440	1.7	S
20230617_1450	1.7	SW
20230617_1500	1.7	SSW
20230617_1510	1.4	SW
20230617_1520	1.1	SW
20230617_1530	0.8	-
20230617_1540	2.5	E
20230617_1550	2.5	E
20230617_1600	2.8	E
20230617_1610	3.3	E
20230617_1620	2.8	E
20230617_1630	2.8	E
20230617_1640	3.1	E
20230617_1650	3.3	E
20230617_1700	2.5	E
20230617_1710	2.8	ESE
20230617_1720	3.3	ESE
20230617_1730	2.8	ESE
20230617_1740	2.5	ESE
20230617_1750	1.7	E
20230617_1800	2.8	ESE
20230617_1810	3.1	ESE
20230617_1820	2.8	ESE
20230617_1830	3.3	ESE
20230617_1840	2.8	ESE
20230617_1850	2.8	ESE
20230617_1900	2.8	ESE
20230617_1910	2.5	E
20230617_1920	2.8	E
20230617_1930	2.2	E
20230617_1940	2.5	ESE
20230617_1950	2.2	ESE
20230617_2000	1.9	ESE
20230617_2010	2.2	ESE
20230617_2020	2.5	ESE
20230617_2030	2.2	ESE
20230617_2040	2.2	ESE
20230617_2050	2.5	ESE
20230617_2100	1.4	ESE
20230617_2110	1.1	SE
20230617_2120	1.4	ESE
20230617_2130	1.4	SE
20230617_2140	1.4	SE
20230617_2150	1.7	SE
20230617_2200	1.9	SE
20230617_2210	1.7	SE
20230617_2220	1.7	ESE
20230617_2230	1.4	SE
20230617_2240	1.7	ESE
20230617_2250	1.7	ESE
20230617_2300	1.7	SE
20230617_2310	1.4	ESE
20230617_2320	1.4	ESE
20230617_2330	1.7	ESE
20230617_2340	1.1	ENE
20230617_2350	0.8	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/awsgis/regional_weather_gis.html)

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230618_0000	0.3	NW
20230618_0010	0.3	NNW
20230618_0020	0.3	-
20230618_0030	0.3	NNW
20230618_0040	0.3	E
20230618_0050	1.1	ESE
20230618_0100	1.1	ESE
20230618_0110	0.8	ESE
20230618_0120	0.3	ESE
20230618_0130	1.1	ESE
20230618_0140	1.4	E
20230618_0150	2.5	ESE
20230618_0200	1.9	E
20230618_0210	1.7	E
20230618_0220	2.2	E
20230618_0230	1.9	E
20230618_0240	1.7	E
20230618_0250	1.7	ESE
20230618_0300	1.7	ESE
20230618_0310	1.7	SE
20230618_0320	1.7	SE
20230618_0330	1.4	SE
20230618_0340	1.1	ESE
20230618_0350	1.4	ESE
20230618_0400	1.4	ESE
20230618_0410	1.4	SE
20230618_0420	1.1	SE
20230618_0430	0.8	ESE
20230618_0440	0.8	ESE
20230618_0450	0.8	ESE
20230618_0500	1.1	ESE
20230618_0510	0.8	SE
20230618_0520	0.8	SE
20230618_0530	0.8	SE
20230618_0540	1.1	SE
20230618_0550	1.1	SSE
20230618_0600	1.1	SSE
20230618_0610	0.8	S
20230618_0620	0.6	SSE
20230618_0630	0.8	SSE
20230618_0640	0.8	SSE
20230618_0650	0.8	SSE
20230618_0700	0.3	-
20230618_0710	0.8	SSE
20230618_0720	0.8	SSE
20230618_0730	0.8	S
20230618_0740	0.8	SE
20230618_0750	1.4	ENE
20230618_0800	2.2	E
20230618_0810	2.8	E
20230618_0820	2.8	E
20230618_0830	3.3	ESE
20230618_0840	1.7	E
20230618_0850	3.1	ENE
20230618_0900	2.8	ESE
20230618_0910	3.9	ESE
20230618_0920	3.3	ESE
20230618_0930	3.3	ESE
20230618_0940	3.6	ESE
20230618_0950	3.9	E
20230618_1000	3.3	E
20230618_1010	3.1	E
20230618_1020	4.2	E
20230618_1030	3.3	E
20230618_1040	3.3	E
20230618_1050	3.9	E
20230618_1100	3.1	ESE
20230618_1110	4.2	E
20230618_1120	3.3	E
20230618_1130	3.6	E
20230618_1140	3.3	ESE
20230618_1150	3.6	ENE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230618_1200	3.9	E
20230618_1210	4.2	E
20230618_1220	3.3	E
20230618_1230	3.9	ESE
20230618_1240	3.3	ESE
20230618_1250	3.6	E
20230618_1300	2.8	E
20230618_1310	2.8	ENE
20230618_1320	2.5	-
20230618_1330	2.8	SE
20230618_1340	2.5	ESE
20230618_1350	2.8	E
20230618_1400	2.8	ESE
20230618_1410	2.8	ESE
20230618_1420	2.8	SE
20230618_1430	2.5	SE
20230618_1440	2.2	ESE
20230618_1450	2.2	E
20230618_1500	1.9	SE
20230618_1510	2.2	ESE
20230618_1520	2.5	SE
20230618_1530	2.2	ESE
20230618_1540	2.8	E
20230618_1550	2.5	E
20230618_1600	2.5	E
20230618_1610	3.1	E
20230618_1620	2.5	E
20230618_1630	2.8	ESE
20230618_1640	2.5	ESE
20230618_1650	2.5	E
20230618_1700	2.5	E
20230618_1710	2.2	E
20230618_1720	1.7	E
20230618_1730	1.9	ESE
20230618_1740	1.7	ESE
20230618_1750	1.7	SE
20230618_1800	2.8	ESE
20230618_1810	1.9	E
20230618_1820	2.5	E
20230618_1830	1.9	ESE
20230618_1840	1.4	ESE
20230618_1850	1.9	ESE
20230618_1900	1.4	E
20230618_1910	1.1	ESE
20230618_1920	0.8	ESE
20230618_1930	0.8	ESE
20230618_1940	0.6	NE
20230618_1950	1.4	ENE
20230618_2000	1.4	ENE
20230618_2010	1.1	E
20230618_2020	1.1	E
20230618_2030	1.1	E
20230618_2040	0.8	SE
20230618_2050	0.8	SE
20230618_2100	1.1	ESE
20230618_2110	0.3	-
20230618_2120	0	N
20230618_2130	0.3	NE
20230618_2140	0.3	ENE
20230618_2150	0.3	SSE
20230618_2200	0	N
20230618_2210	0	N
20230618_2220	0.3	NW
20230618_2230	0.8	NE
20230618_2240	0	N
20230618_2250	0	N
20230618_2300	0	N
20230618_2310	0	N
20230618_2320	0	N
20230618_2330	0	N
20230618_2340	0	N
20230618_2350	0	N

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Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230619_0000	0.3	SW
20230619_0010	0	N
20230619_0020	0	N
20230619_0030	0.3	ESE
20230619_0040	0.3	SSE
20230619_0050	0	N
20230619_0100	1.1	E
20230619_0110	0.3	ESE
20230619_0120	0.3	SSE
20230619_0130	0.3	-
20230619_0140	0.3	ENE
20230619_0150	0.3	ENE
20230619_0200	0.8	ENE
20230619_0210	0.8	E
20230619_0220	0.6	-
20230619_0230	0.3	E
20230619_0240	1.1	E
20230619_0250	0.8	E
20230619_0300	1.1	E
20230619_0310	0.8	ENE
20230619_0320	0.8	ENE
20230619_0330	0.8	ENE
20230619_0340	0.8	ENE
20230619_0350	0.8	ESE
20230619_0400	0.3	ESE
20230619_0410	0.8	E
20230619_0420	1.1	SE
20230619_0430	1.1	SSE
20230619_0440	1.1	SE
20230619_0450	0.3	SSE
20230619_0500	0.3	SW
20230619_0510	0.3	SW
20230619_0520	0	N
20230619_0530	0	N
20230619_0540	0	N
20230619_0550	0	N
20230619_0600	0	N
20230619_0610	0.3	S
20230619_0620	0.6	S
20230619_0630	0.3	SSE
20230619_0640	0.3	S
20230619_0650	0.3	SE
20230619_0700	0.3	SE
20230619_0710	1.1	SE
20230619_0720	1.4	SE
20230619_0730	1.1	SE
20230619_0740	1.1	E
20230619_0750	1.4	SE
20230619_0800	1.4	SE
20230619_0810	1.4	SE
20230619_0820	0.8	ESE
20230619_0830	0.8	SE
20230619_0840	0.8	SSE
20230619_0850	1.1	S
20230619_0900	0.8	NE
20230619_0910	0.3	-
20230619_0920	0.8	S
20230619_0930	0.3	S
20230619_0940	0.8	NE
20230619_0950	0.8	-
20230619_1000	0.8	WNW
20230619_1010	0.8	WSW
20230619_1020	0.3	SSE
20230619_1030	0.8	E
20230619_1040	0.3	NNE
20230619_1050	0.8	SSE
20230619_1100	1.1	SE
20230619_1110	0.8	S
20230619_1120	1.7	SE
20230619_1130	1.7	SE
20230619_1140	1.7	E
20230619_1150	1.4	E

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230619_1200	1.1	ENE
20230619_1210	1.7	SE
20230619_1220	1.7	ESE
20230619_1230	1.9	ENE
20230619_1240	2.2	ENE
20230619_1250	2.2	ENE
20230619_1300	1.4	E
20230619_1310	2.2	ESE
20230619_1320	1.4	ENE
20230619_1330	1.1	N
20230619_1340	1.7	-
20230619_1350	2.2	ENE
20230619_1400	0.8	SSW
20230619_1410	1.7	E
20230619_1420	1.7	SE
20230619_1430	2.8	ESE
20230619_1440	2.8	E
20230619_1450	2.5	E
20230619_1500	2.5	E
20230619_1510	2.5	ESE
20230619_1520	3.1	E
20230619_1530	3.3	E
20230619_1540	3.3	E
20230619_1550	3.3	E
20230619_1600	3.3	E
20230619_1610	3.1	E
20230619_1620	3.1	E
20230619_1630	3.3	E
20230619_1640	3.9	E
20230619_1650	3.3	ESE
20230619_1700	2.8	ESE
20230619_1710	2.8	ESE
20230619_1720	2.8	E
20230619_1730	2.2	E
20230619_1740	2.8	E
20230619_1750	2.5	E
20230619_1800	2.8	ESE
20230619_1810	2.5	ESE
20230619_1820	3.1	E
20230619_1830	2.5	E
20230619_1840	2.5	ESE
20230619_1850	2.5	ESE
20230619_1900	3.1	ESE
20230619_1910	1.7	E
20230619_1920	1.7	SE
20230619_1930	2.2	SE
20230619_1940	2.5	SE
20230619_1950	3.1	SE
20230619_2000	3.1	SE
20230619_2010	2.8	SE
20230619_2020	2.2	SE
20230619_2030	2.5	SE
20230619_2040	3.1	SE
20230619_2050	3.3	SE
20230619_2100	3.3	SE
20230619_2110	2.2	SE
20230619_2120	1.9	SE
20230619_2130	2.2	SE
20230619_2140	2.5	SE
20230619_2150	2.2	ESE
20230619_2200	1.7	SE
20230619_2210	2.5	ESE
20230619_2220	2.2	SE
20230619_2230	1.7	SE
20230619_2240	1.4	SE
20230619_2250	1.7	SE
20230619_2300	2.2	SE
20230619_2310	2.2	SE
20230619_2320	2.5	SE
20230619_2330	1.7	SE
20230619_2340	2.2	ESE
20230619_2350	2.2	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)
20230620_0000	1.7	ESE
20230620_0010	1.1	SE
20230620_0020	1.4	SE
20230620_0030	1.7	ESE
20230620_0040	1.7	ESE
20230620_0050	0.8	SE
20230620_0100	1.1	ESE
20230620_0110	1.4	SE
20230620_0120	1.4	SE
20230620_0130	1.7	ESE
20230620_0140	1.1	ESE
20230620_0150	1.1	ESE
20230620_0200	1.1	ESE
20230620_0210	1.4	ESE
20230620_0220	1.9	SE
20230620_0230	1.4	SE
20230620_0240	1.7	ESE
20230620_0250	1.7	ESE
20230620_0300	2.5	ESE
20230620_0310	1.7	ESE
20230620_0320	1.1	SSE
20230620_0330	1.4	SE
20230620_0340	1.7	ESE
20230620_0350	1.7	ESE
20230620_0400	2.2	SE
20230620_0410	2.2	ESE
20230620_0420	1.7	ESE
20230620_0430	1.7	ESE
20230620_0440	1.1	SE
20230620_0450	0.8	ESE
20230620_0500	1.4	ESE
20230620_0510	1.4	SE
20230620_0520	1.4	ESE
20230620_0530	1.1	ESE
20230620_0540	0.8	SE
20230620_0550	0.8	SSE
20230620_0600	0.8	SE
20230620_0610	1.7	ESE
20230620_0620	1.4	SE
20230620_0630	1.9	SE
20230620_0640	1.7	SE
20230620_0650	2.5	SE
20230620_0700	2.5	SE
20230620_0710	2.5	ESE
20230620_0720	3.1	ESE
20230620_0730	2.5	ESE
20230620_0740	2.2	ESE
20230620_0750	1.9	E
20230620_0800	1.9	E
20230620_0810	2.2	E
20230620_0820	2.2	E
20230620_0830	1.7	E
20230620_0840	2.5	E
20230620_0850	1.9	E
20230620_0900	1.4	NE
20230620_0910	1.1	ESE
20230620_0920	1.4	E
20230620_0930	0.8	ESE
20230620_0940	1.7	SSE
20230620_0950	1.4	S
20230620_1000	0.3	-
20230620_1010	1.1	W
20230620_1020	1.4	ESE
20230620_1030	0.8	W
20230620_1040	0.8	NW
20230620_1050	1.4	NNW
20230620_1100	1.7	WSW
20230620_1110	1.1	SSW
20230620_1120	1.4	WNW
20230620_1130	0.8	SW
20230620_1140	1.4	WSW
20230620_1150	1.4	S

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230620_1200	2.2	WSW
20230620_1210	1.7	WSW
20230620_1220	1.7	W
20230620_1230	1.7	W
20230620_1240	2.8	WNW
20230620_1250	2.2	W
20230620_1300	1.9	W
20230620_1310	2.2	W
20230620_1320	2.5	WSW
20230620_1330	2.8	SW
20230620_1340	2.5	WSW
20230620_1350	2.8	SSW
20230620_1400	3.1	WSW
20230620_1410	2.8	WSW
20230620_1420	3.3	SW
20230620_1430	3.1	WSW
20230620_1440	2.8	SW
20230620_1450	2.8	SW
20230620_1500	2.5	SW
20230620_1510	1.7	SW
20230620_1520	2.8	SW
20230620_1530	2.8	SW
20230620_1540	2.8	SW
20230620_1550	1.9	SW
20230620_1600	1.9	SW
20230620_1610	2.5	ESE
20230620_1620	3.9	ESE
20230620_1630	3.1	ESE
20230620_1640	3.9	ESE
20230620_1650	3.3	E
20230620_1700	3.3	ESE
20230620_1710	3.3	ESE
20230620_1720	3.6	ESE
20230620_1730	3.1	ESE
20230620_1740	3.1	ESE
20230620_1750	3.1	ESE
20230620_1800	3.3	ESE
20230620_1810	3.3	E
20230620_1820	2.8	ESE
20230620_1830	2.8	ESE
20230620_1840	2.5	ESE
20230620_1850	2.5	ESE
20230620_1900	2.2	ESE
20230620_1910	2.2	SE
20230620_1920	2.2	ESE
20230620_1930	1.7	SE
20230620_1940	1.9	ESE
20230620_1950	2.8	ESE
20230620_2000	2.2	ESE
20230620_2010	2.8	ESE
20230620_2020	2.5	ESE
20230620_2030	2.5	ESE
20230620_2040	2.8	SE
20230620_2050	1.7	ESE
20230620_2100	2.2	SE
20230620_2110	1.9	SE
20230620_2120	1.9	SE
20230620_2130	1.7	SE
20230620_2140	1.7	SE
20230620_2150	1.7	SE
20230620_2200	1.7	SE
20230620_2210	1.4	ESE
20230620_2220	1.7	SE
20230620_2230	1.7	SE
20230620_2240	1.1	ESE
20230620_2250	0.8	SE
20230620_2300	1.1	SE
20230620_2310	0.8	SE
20230620_2320	0.6	E
20230620_2330	1.1	SE
20230620_2340	0.8	SSE
20230620_2350	1.4	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)
20230621_0000	1.4	SE
20230621_0010	0.8	ESE
20230621_0020	0.8	ESE
20230621_0030	0.8	SE
20230621_0040	0.8	SSE
20230621_0050	0.6	S
20230621_0100	0	N
20230621_0110	0	N
20230621_0120	0	N
20230621_0130	0.3	SSW
20230621_0140	0.3	S
20230621_0150	0.3	SE
20230621_0200	0.3	SSE
20230621_0210	0.6	SE
20230621_0220	0.8	SE
20230621_0230	0.6	SSE
20230621_0240	0.3	SSW
20230621_0250	0.3	S
20230621_0300	0.8	SSE
20230621_0310	0.3	SSE
20230621_0320	0.3	S
20230621_0330	0.3	SSE
20230621_0340	0.3	SSE
20230621_0350	0.3	S
20230621_0400	0	N
20230621_0410	0.3	ENE
20230621_0420	0.3	SE
20230621_0430	0	N
20230621_0440	0	N
20230621_0450	0	N
20230621_0500	0	N
20230621_0510	0	N
20230621_0520	0	N
20230621_0530	0	N
20230621_0540	0	N
20230621_0550	0.3	SSE
20230621_0600	0.3	SE
20230621_0610	0.3	SSE
20230621_0620	0	N
20230621_0630	0	N
20230621_0640	0.3	SSE
20230621_0650	0	N
20230621_0700	0.8	SSE
20230621_0710	0.8	ESE
20230621_0720	1.4	ESE
20230621_0730	1.7	SSE
20230621_0740	1.4	SE
20230621_0750	1.1	SE
20230621_0800	1.4	SE
20230621_0810	1.4	SE
20230621_0820	1.4	SE
20230621_0830	0.8	-
20230621_0840	0.8	-
20230621_0850	0.6	S
20230621_0900	0.8	SW
20230621_0910	0.8	WNW
20230621_0920	0.8	WNW
20230621_0930	1.1	SW
20230621_0940	0.3	-
20230621_0950	0.8	W
20230621_1000	1.4	WNW
20230621_1010	0.8	WSW
20230621_1020	1.1	NW
20230621_1030	0.8	NE
20230621_1040	1.1	SW
20230621_1050	1.4	SSE
20230621_1100	0.8	SW
20230621_1110	0.3	-
20230621_1120	0.3	-
20230621_1130	2.2	SE
20230621_1140	3.3	ESE
20230621_1150	2.5	ESE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230621_1200	2.5	ESE
20230621_1210	2.5	ESE
20230621_1220	2.2	SE
20230621_1230	2.5	E
20230621_1240	2.5	E
20230621_1250	2.2	ENE
20230621_1300	2.8	ENE
20230621_1310	3.1	E
20230621_1320	2.8	ESE
20230621_1330	3.3	ESE
20230621_1340	3.3	E
20230621_1350	2.8	E
20230621_1400	3.3	E
20230621_1410	2.8	E
20230621_1420	3.9	E
20230621_1430	4.2	E
20230621_1440	3.6	E
20230621_1450	3.3	E
20230621_1500	3.3	E
20230621_1510	3.3	E
20230621_1520	3.9	E
20230621_1530	3.3	E
20230621_1540	3.3	E
20230621_1550	2.8	E
20230621_1600	3.1	E
20230621_1610	2.8	ESE
20230621_1620	3.3	ESE
20230621_1630	3.9	ESE
20230621_1640	3.3	ESE
20230621_1650	3.3	E
20230621_1700	2.8	E
20230621_1710	3.3	E
20230621_1720	3.3	E
20230621_1730	2.8	ESE
20230621_1740	2.5	ESE
20230621_1750	2.5	ENE
20230621_1800	2.8	E
20230621_1810	2.5	E
20230621_1820	3.1	E
20230621_1830	2.5	ESE
20230621_1840	2.2	ESE
20230621_1850	2.2	ESE
20230621_1900	2.5	E
20230621_1910	2.5	ESE
20230621_1920	2.5	E
20230621_1930	3.3	ESE
20230621_1940	2.5	E
20230621_1950	2.5	ESE
20230621_2000	3.3	ESE
20230621_2010	2.2	ESE
20230621_2020	1.7	ESE
20230621_2030	2.5	ESE
20230621_2040	2.8	ESE
20230621_2050	2.5	ESE
20230621_2100	2.8	ESE
20230621_2110	3.3	ESE
20230621_2120	2.8	ESE
20230621_2130	2.2	ESE
20230621_2140	3.1	E
20230621_2150	3.3	E
20230621_2200	3.1	ESE
20230621_2210	2.8	ESE
20230621_2220	2.2	ESE
20230621_2230	2.8	E
20230621_2240	2.8	E
20230621_2250	3.3	ESE
20230621_2300	3.3	ESE
20230621_2310	2.8	ESE
20230621_2320	3.1	E
20230621_2330	3.3	ESE
20230621_2340	3.1	ESE
20230621_2350	3.3	ESE

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Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230622_0000	2.8	ESE
20230622_0010	3.9	ESE
20230622_0020	3.9	ESE
20230622_0030	2.8	ESE
20230622_0040	3.9	ESE
20230622_0050	3.3	ESE
20230622_0100	4.2	ESE
20230622_0110	3.9	E
20230622_0120	4.4	E
20230622_0130	3.9	ESE
20230622_0140	4.4	ESE
20230622_0150	3.3	ESE
20230622_0200	3.3	ESE
20230622_0210	3.6	E
20230622_0220	3.9	E
20230622_0230	4.2	E
20230622_0240	3.9	ESE
20230622_0250	3.3	ESE
20230622_0300	3.6	ESE
20230622_0310	3.3	ESE
20230622_0320	3.1	E
20230622_0330	3.3	ESE
20230622_0340	2.8	E
20230622_0350	3.3	ESE
20230622_0400	2.8	ESE
20230622_0410	2.5	ESE
20230622_0420	2.5	E
20230622_0430	2.2	E
20230622_0440	2.5	ESE
20230622_0450	2.2	ESE
20230622_0500	2.8	ESE
20230622_0510	2.5	ESE
20230622_0520	2.5	ESE
20230622_0530	3.3	ESE
20230622_0540	3.9	ESE
20230622_0550	3.3	ESE
20230622_0600	3.9	ESE
20230622_0610	3.3	ESE
20230622_0620	2.8	ESE
20230622_0630	2.8	ESE
20230622_0640	2.5	ESE
20230622_0650	2.8	ESE
20230622_0700	2.8	ESE
20230622_0710	2.5	ESE
20230622_0720	3.1	ESE
20230622_0730	3.3	ESE
20230622_0740	4.2	ESE
20230622_0750	2.5	ESE
20230622_0800	2.5	ESE
20230622_0810	2.2	ESE
20230622_0820	1.7	-
20230622_0830	1.7	ESE
20230622_0840	1.7	E
20230622_0850	1.7	ESE
20230622_0900	2.2	E
20230622_0910	1.9	E
20230622_0920	2.2	E
20230622_0930	2.8	ESE
20230622_0940	3.3	ESE
20230622_0950	3.3	ESE
20230622_1000	1.9	E
20230622_1010	3.3	E
20230622_1020	3.3	ESE
20230622_1030	2.5	ESE
20230622_1040	3.1	ESE
20230622_1050	3.3	ESE
20230622_1100	2.8	ESE
20230622_1110	2.2	ESE
20230622_1120	3.1	ESE
20230622_1130	2.8	ESE
20230622_1140	2.8	ESE
20230622_1150	3.1	E

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230622_1200	2.5	ESE
20230622_1210	2.5	E
20230622_1220	2.8	ENE
20230622_1230	2.8	ENE
20230622_1240	3.1	ENE
20230622_1250	2.8	E
20230622_1300	2.5	E
20230622_1310	3.3	E
20230622_1320	3.3	E
20230622_1330	3.3	E
20230622_1340	3.3	E
20230622_1350	3.3	ESE
20230622_1400	3.6	E
20230622_1410	2.8	E
20230622_1420	3.3	E
20230622_1430	3.1	E
20230622_1440	3.3	E
20230622_1450	3.3	E
20230622_1500	3.3	ESE
20230622_1510	3.1	E
20230622_1520	3.3	ESE
20230622_1530	3.3	SE
20230622_1540	3.3	ESE
20230622_1550	3.9	ESE
20230622_1600	3.3	ESE
20230622_1610	3.3	SE
20230622_1620	3.3	ESE
20230622_1630	3.9	SE
20230622_1640	2.8	SE
20230622_1650	2.8	ESE
20230622_1700	3.3	ESE
20230622_1710	2.8	ESE
20230622_1720	3.3	E
20230622_1730	2.8	ESE
20230622_1740	2.8	ESE
20230622_1750	3.3	ESE
20230622_1800	3.3	ESE
20230622_1810	3.6	ESE
20230622_1820	3.3	ESE
20230622_1830	3.3	ESE
20230622_1840	3.1	ESE
20230622_1850	3.1	ESE
20230622_1900	3.3	ESE
20230622_1910	2.2	ESE
20230622_1920	2.2	ESE
20230622_1930	2.2	ESE
20230622_1940	3.3	SE
20230622_1950	2.8	ESE
20230622_2000	2.5	ESE
20230622_2010	2.8	SE
20230622_2020	3.3	ESE
20230622_2030	2.8	ESE
20230622_2040	2.8	ESE
20230622_2050	3.1	ESE
20230622_2100	3.3	SE
20230622_2110	3.3	SE
20230622_2120	3.3	SE
20230622_2130	3.3	ESE
20230622_2140	2.2	ESE
20230622_2150	3.1	ESE
20230622_2200	2.5	ESE
20230622_2210	2.5	ESE
20230622_2220	3.3	E
20230622_2230	2.2	ESE
20230622_2240	3.3	ESE
20230622_2250	3.9	ESE
20230622_2300	3.9	SE
20230622_2310	4.2	SE
20230622_2320	3.9	ESE
20230622_2330	4.2	SE
20230622_2340	4.2	ESE
20230622_2350	3.9	SE

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Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230623_0000	3.9	SE
20230623_0010	2.8	ESE
20230623_0020	3.1	ESE
20230623_0030	3.3	ESE
20230623_0040	3.3	ESE
20230623_0050	3.3	ESE
20230623_0100	4.2	ESE
20230623_0110	3.3	ESE
20230623_0120	3.6	SE
20230623_0130	3.3	ESE
20230623_0140	3.3	ESE
20230623_0150	3.3	E
20230623_0200	3.3	E
20230623_0210	3.1	E
20230623_0220	3.3	E
20230623_0230	3.9	E
20230623_0240	3.9	ESE
20230623_0250	3.3	ESE
20230623_0300	3.1	ESE
20230623_0310	3.1	ESE
20230623_0320	3.1	E
20230623_0330	2.5	SE
20230623_0340	2.5	ESE
20230623_0350	2.5	ESE
20230623_0400	2.8	ESE
20230623_0410	1.9	E
20230623_0420	1.7	E
20230623_0430	1.7	ESE
20230623_0440	2.5	ESE
20230623_0450	3.1	ESE
20230623_0500	2.5	ESE
20230623_0510	2.5	ESE
20230623_0520	2.5	ESE
20230623_0530	2.5	E
20230623_0540	3.1	E
20230623_0550	2.5	E
20230623_0600	2.5	ESE
20230623_0610	2.5	ESE
20230623_0620	1.7	ESE
20230623_0630	2.8	E
20230623_0640	2.8	E
20230623_0650	2.2	ESE
20230623_0700	2.2	ESE
20230623_0710	2.5	ESE
20230623_0720	2.8	ESE
20230623_0730	3.1	ESE
20230623_0740	3.3	ESE
20230623_0750	2.8	ESE
20230623_0800	2.2	E
20230623_0810	3.3	E
20230623_0820	3.1	ESE
20230623_0830	3.3	ESE
20230623_0840	3.3	ESE
20230623_0850	3.3	ESE
20230623_0900	2.8	ESE
20230623_0910	2.5	ESE
20230623_0920	2.5	ESE
20230623_0930	2.5	ESE
20230623_0940	2.8	ESE
20230623_0950	3.3	ESE
20230623_1000	3.3	ESE
20230623_1010	3.6	SE
20230623_1020	2.8	ESE
20230623_1030	3.3	SE
20230623_1040	3.1	ESE
20230623_1050	3.3	ESE
20230623_1100	3.9	ESE
20230623_1110	4.2	ESE
20230623_1120	3.9	E
20230623_1130	3.3	ESE
20230623_1140	2.8	ESE
20230623_1150	2.5	ESE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230623_1200	3.3	ESE
20230623_1210	2.8	ESE
20230623_1220	2.5	ESE
20230623_1230	2.8	ESE
20230623_1240	2.8	ESE
20230623_1250	2.8	ESE
20230623_1300	2.8	ESE
20230623_1310	2.2	E
20230623_1320	3.1	E
20230623_1330	3.3	ESE
20230623_1340	3.3	E
20230623_1350	3.3	E
20230623_1400	2.5	E
20230623_1410	2.5	ESE
20230623_1420	3.1	ESE
20230623_1430	3.3	SE
20230623_1440	3.3	SE
20230623_1450	3.3	E
20230623_1500	3.1	ESE
20230623_1510	3.3	ESE
20230623_1520	3.1	E
20230623_1530	2.2	ESE
20230623_1540	2.5	ESE
20230623_1550	3.1	ESE
20230623_1600	2.8	ESE
20230623_1610	2.8	ESE
20230623_1620	3.1	ESE
20230623_1630	2.8	ESE
20230623_1640	2.2	ESE
20230623_1650	2.2	E
20230623_1700	2.2	SE
20230623_1710	2.2	ESE
20230623_1720	2.2	ESE
20230623_1730	1.9	ESE
20230623_1740	1.7	ESE
20230623_1750	1.7	E
20230623_1800	2.5	ENE
20230623_1810	2.5	ENE
20230623_1820	2.5	ENE
20230623_1830	1.7	ESE
20230623_1840	2.2	SE
20230623_1850	1.7	SE
20230623_1900	2.5	SE
20230623_1910	2.2	SE
20230623_1920	2.2	SE
20230623_1930	2.5	SE
20230623_1940	1.9	ESE
20230623_1950	2.2	ESE
20230623_2000	2.8	SE
20230623_2010	2.5	SE
20230623_2020	3.1	SE
20230623_2030	2.8	SE
20230623_2040	3.3	ESE
20230623_2050	3.3	ESE
20230623_2100	3.3	ESE
20230623_2110	3.1	ESE
20230623_2120	2.8	ESE
20230623_2130	2.5	ESE
20230623_2140	2.5	E
20230623_2150	3.3	E
20230623_2200	2.5	E
20230623_2210	2.8	E
20230623_2220	2.2	ENE
20230623_2230	2.2	ENE
20230623_2240	2.5	E
20230623_2250	2.5	ENE
20230623_2300	2.2	ENE
20230623_2310	2.5	E
20230623_2320	2.2	E
20230623_2330	2.8	E
20230623_2340	2.5	ESE
20230623_2350	2.2	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)
20230624_0000	1.9	ESE
20230624_0010	2.2	ESE
20230624_0020	2.5	ESE
20230624_0030	3.1	E
20230624_0040	2.2	E
20230624_0050	2.8	E
20230624_0100	2.5	ENE
20230624_0110	2.2	E
20230624_0120	1.9	ENE
20230624_0130	2.2	E
20230624_0140	2.5	E
20230624_0150	2.5	E
20230624_0200	2.5	E
20230624_0210	2.2	E
20230624_0220	2.5	E
20230624_0230	2.5	E
20230624_0240	2.8	E
20230624_0250	2.5	E
20230624_0300	3.3	E
20230624_0310	2.8	E
20230624_0320	2.5	E
20230624_0330	1.7	ESE
20230624_0340	1.1	SE
20230624_0350	0.8	E
20230624_0400	0.8	ESE
20230624_0410	0.8	SSE
20230624_0420	0.8	S
20230624_0430	0.8	SE
20230624_0440	1.7	ESE
20230624_0450	0.8	ESE
20230624_0500	1.1	E
20230624_0510	1.7	ESE
20230624_0520	1.7	E
20230624_0530	0.8	ESE
20230624_0540	1.7	E
20230624_0550	1.1	ESE
20230624_0600	1.1	E
20230624_0610	1.1	ESE
20230624_0620	1.1	ESE
20230624_0630	1.4	E
20230624_0640	1.4	ESE
20230624_0650	1.1	ESE
20230624_0700	1.1	ESE
20230624_0710	1.7	ESE
20230624_0720	2.2	E
20230624_0730	2.2	E
20230624_0740	2.2	ESE
20230624_0750	1.7	ESE
20230624_0800	1.9	SE
20230624_0810	2.8	SE
20230624_0820	2.5	SE
20230624_0830	1.7	ESE
20230624_0840	1.7	ESE
20230624_0850	1.7	ESE
20230624_0900	2.5	SE
20230624_0910	1.9	E
20230624_0920	2.8	E
20230624_0930	2.8	ESE
20230624_0940	2.8	ESE
20230624_0950	2.8	SE
20230624_1000	2.5	ESE
20230624_1010	2.5	ESE
20230624_1020	1.9	ESE
20230624_1030	2.2	ESE
20230624_1040	2.8	E
20230624_1050	2.8	ESE
20230624_1100	2.8	ESE
20230624_1110	2.8	ESE
20230624_1120	2.5	ESE
20230624_1130	2.2	E
20230624_1140	3.3	E
20230624_1150	2.8	ESE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230624_1200	2.5	ESE
20230624_1210	2.5	E
20230624_1220	2.5	ESE
20230624_1230	3.3	E
20230624_1240	2.2	ESE
20230624_1250	3.1	ESE
20230624_1300	2.5	ESE
20230624_1310	2.8	E
20230624_1320	3.3	ESE
20230624_1330	2.8	E
20230624_1340	2.5	E
20230624_1350	2.5	E
20230624_1400	3.3	E
20230624_1410	3.1	E
20230624_1420	2.8	E
20230624_1430	3.3	E
20230624_1440	2.2	E
20230624_1450	2.5	E
20230624_1500	2.8	E
20230624_1510	2.2	E
20230624_1520	2.2	E
20230624_1530	1.7	ESE
20230624_1540	2.2	E
20230624_1550	2.2	E
20230624_1600	2.5	E
20230624_1610	2.2	E
20230624_1620	2.5	E
20230624_1630	2.5	E
20230624_1640	2.2	E
20230624_1650	2.2	E
20230624_1700	1.9	E
20230624_1710	1.7	ESE
20230624_1720	1.7	ESE
20230624_1730	1.7	E
20230624_1740	2.2	ESE
20230624_1750	1.7	E
20230624_1800	2.2	ESE
20230624_1810	1.7	ESE
20230624_1820	1.4	ESE
20230624_1830	1.4	ESE
20230624_1840	1.7	SE
20230624_1850	0.8	ESE
20230624_1900	1.4	SE
20230624_1910	1.7	SE
20230624_1920	1.7	SE
20230624_1930	1.4	SE
20230624_1940	1.7	SE
20230624_1950	1.7	ESE
20230624_2000	2.2	SE
20230624_2010	2.2	SE
20230624_2020	2.2	SE
20230624_2030	1.7	SE
20230624_2040	1.4	SE
20230624_2050	1.4	ESE
20230624_2100	1.1	ESE
20230624_2110	1.7	ESE
20230624_2120	1.4	SE
20230624_2130	1.1	ESE
20230624_2140	1.1	ESE
20230624_2150	1.1	E
20230624_2200	1.4	ESE
20230624_2210	1.7	E
20230624_2220	1.4	ESE
20230624_2230	1.7	E
20230624_2240	1.4	E
20230624_2250	1.7	ESE
20230624_2300	1.4	SE
20230624_2310	2.2	SE
20230624_2320	1.4	ESE
20230624_2330	1.4	SE
20230624_2340	1.1	SE
20230624_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)
20230625_0000	1.1	ESE
20230625_0010	1.1	ESE
20230625_0020	1.7	ESE
20230625_0030	1.7	SE
20230625_0040	2.2	ESE
20230625_0050	2.2	ESE
20230625_0100	1.7	SE
20230625_0110	2.2	SE
20230625_0120	1.7	SE
20230625_0130	1.4	SE
20230625_0140	1.7	SE
20230625_0150	1.4	SE
20230625_0200	1.4	ESE
20230625_0210	1.4	E
20230625_0220	1.9	E
20230625_0230	1.7	E
20230625_0240	1.4	E
20230625_0250	0.6	E
20230625_0300	0.3	SE
20230625_0310	0.6	E
20230625_0320	0.8	ENE
20230625_0330	1.1	E
20230625_0340	1.7	E
20230625_0350	1.1	E
20230625_0400	1.1	E
20230625_0410	1.1	E
20230625_0420	0.8	ESE
20230625_0430	1.4	ESE
20230625_0440	1.1	E
20230625_0450	0.3	NE
20230625_0500	0.3	-
20230625_0510	0.3	E
20230625_0520	1.1	E
20230625_0530	1.4	ENE
20230625_0540	0.8	E
20230625_0550	0.8	E
20230625_0600	0.3	SE
20230625_0610	1.1	ESE
20230625_0620	1.4	ENE
20230625_0630	1.7	E
20230625_0640	1.9	E
20230625_0650	1.7	E
20230625_0700	2.2	E
20230625_0710	1.4	ESE
20230625_0720	1.4	ESE
20230625_0730	1.1	ESE
20230625_0740	1.1	E
20230625_0750	1.7	ESE
20230625_0800	2.2	ESE
20230625_0810	1.4	ESE
20230625_0820	1.7	ESE
20230625_0830	1.9	ESE
20230625_0840	1.7	ESE
20230625_0850	1.4	ESE
20230625_0900	1.4	E
20230625_0910	1.4	E
20230625_0920	1.4	E
20230625_0930	1.7	E
20230625_0940	1.4	ESE
20230625_0950	1.1	E
20230625_1000	1.7	E
20230625_1010	1.4	ENE
20230625_1020	1.4	ESE
20230625_1030	1.7	ESE
20230625_1040	1.7	ESE
20230625_1050	1.4	E
20230625_1100	1.7	E
20230625_1110	1.9	E
20230625_1120	1.7	E
20230625_1130	1.9	E
20230625_1140	2.2	ENE
20230625_1150	2.5	ENE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230625_1200	2.2	ESE
20230625_1210	2.2	E
20230625_1220	2.8	ENE
20230625_1230	2.2	E
20230625_1240	2.5	ESE
20230625_1250	2.5	ESE
20230625_1300	2.2	E
20230625_1310	2.2	ESE
20230625_1320	2.2	ESE
20230625_1330	1.7	ESE
20230625_1340	1.4	SE
20230625_1350	1.7	ESE
20230625_1400	2.2	SE
20230625_1410	1.7	SSE
20230625_1420	2.5	SE
20230625_1430	2.5	E
20230625_1440	2.8	E
20230625_1450	2.5	ESE
20230625_1500	3.3	E
20230625_1510	3.3	E
20230625_1520	3.3	ESE
20230625_1530	3.3	E
20230625_1540	3.3	E
20230625_1550	2.8	E
20230625_1600	3.1	E
20230625_1610	2.5	E
20230625_1620	2.8	ESE
20230625_1630	2.5	ESE
20230625_1640	3.3	E
20230625_1650	2.8	E
20230625_1700	2.8	E
20230625_1710	2.5	E
20230625_1720	2.5	ESE
20230625_1730	2.5	E
20230625_1740	1.7	E
20230625_1750	1.7	E
20230625_1800	1.7	ESE
20230625_1810	2.2	E
20230625_1820	1.4	E
20230625_1830	1.4	SE
20230625_1840	1.7	ESE
20230625_1850	1.7	E
20230625_1900	1.4	E
20230625_1910	1.9	E
20230625_1920	2.5	ESE
20230625_1930	2.8	SE
20230625_1940	1.7	SE
20230625_1950	1.4	ESE
20230625_2000	1.7	ESE
20230625_2010	1.4	ESE
20230625_2020	1.4	ESE
20230625_2030	1.4	ESE
20230625_2040	1.7	E
20230625_2050	1.1	ESE
20230625_2100	1.1	ESE
20230625_2110	1.4	ESE
20230625_2120	1.7	ESE
20230625_2130	1.7	E
20230625_2140	1.7	E
20230625_2150	1.7	E
20230625_2200	1.7	E
20230625_2210	1.7	ESE
20230625_2220	1.7	ESE
20230625_2230	1.7	ESE
20230625_2240	1.9	ESE
20230625_2250	1.7	ESE
20230625_2300	1.7	E
20230625_2310	1.4	ESE
20230625_2320	1.4	ESE
20230625_2330	1.7	E
20230625_2340	1.4	ESE
20230625_2350	1.9	E

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Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230626_0000	2.2	E
20230626_0010	1.7	E
20230626_0020	1.7	E
20230626_0030	1.1	E
20230626_0040	1.1	E
20230626_0050	1.4	E
20230626_0100	1.1	E
20230626_0110	1.1	ESE
20230626_0120	1.4	ESE
20230626_0130	1.4	ESE
20230626_0140	0.8	ESE
20230626_0150	1.1	ESE
20230626_0200	1.1	ESE
20230626_0210	1.7	ESE
20230626_0220	1.1	ESE
20230626_0230	0.8	ESE
20230626_0240	0.8	SE
20230626_0250	1.4	ESE
20230626_0300	1.4	ESE
20230626_0310	0.8	ENE
20230626_0320	0.3	ESE
20230626_0330	0	N
20230626_0340	0.3	SE
20230626_0350	1.1	E
20230626_0400	0.8	E
20230626_0410	0	N
20230626_0420	0	N
20230626_0430	0.3	-
20230626_0440	1.1	SE
20230626_0450	0.8	ESE
20230626_0500	1.1	SE
20230626_0510	0.8	SE
20230626_0520	1.1	ESE
20230626_0530	1.4	ESE
20230626_0540	0.8	SE
20230626_0550	0.8	ESE
20230626_0600	0.3	-
20230626_0610	0.3	ESE
20230626_0620	0.6	ESE
20230626_0630	0.8	E
20230626_0640	1.4	ESE
20230626_0650	0.3	SE
20230626_0700	1.4	ESE
20230626_0710	1.7	ESE
20230626_0720	1.7	ESE
20230626_0730	2.5	ESE
20230626_0740	2.2	ESE
20230626_0750	2.2	ESE
20230626_0800	2.2	ESE
20230626_0810	1.7	E
20230626_0820	1.4	E
20230626_0830	1.9	E
20230626_0840	1.7	E
20230626_0850	2.2	E
20230626_0900	2.2	E
20230626_0910	1.9	E
20230626_0920	2.2	ESE
20230626_0930	2.2	E
20230626_0940	2.2	E
20230626_0950	1.7	ESE
20230626_1000	1.7	ESE
20230626_1010	2.5	ESE
20230626_1020	2.8	ESE
20230626_1030	2.5	ESE
20230626_1040	2.2	ESE
20230626_1050	2.8	ESE
20230626_1100	2.8	ESE
20230626_1110	3.3	ESE
20230626_1120	3.1	ESE
20230626_1130	2.8	E
20230626_1140	3.6	E
20230626_1150	3.3	E

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230626_1200	3.3	ESE
20230626_1210	3.3	E
20230626_1220	3.1	ESE
20230626_1230	2.5	ESE
20230626_1240	3.3	ESE
20230626_1250	3.3	E
20230626_1300	2.8	E
20230626_1310	3.3	E
20230626_1320	3.9	E
20230626_1330	3.3	E
20230626_1340	3.3	E
20230626_1350	3.3	E
20230626_1400	2.8	E
20230626_1410	2.5	ESE
20230626_1420	2.2	SE
20230626_1430	2.8	SSE
20230626_1440	2.5	SSE
20230626_1450	2.5	SSE
20230626_1500	2.2	SSE
20230626_1510	1.9	SE
20230626_1520	2.8	SSE
20230626_1530	2.8	SSE
20230626_1540	2.8	SSE
20230626_1550	2.5	SSE
20230626_1600	2.2	SE
20230626_1610	2.5	ENE
20230626_1620	2.8	E
20230626_1630	2.8	ESE
20230626_1640	3.1	E
20230626_1650	3.1	ESE
20230626_1700	3.1	E
20230626_1710	2.8	E
20230626_1720	2.8	E
20230626_1730	3.3	E
20230626_1740	3.1	ESE
20230626_1750	2.8	E
20230626_1800	2.8	E
20230626_1810	3.1	E
20230626_1820	3.1	ESE
20230626_1830	2.5	E
20230626_1840	2.8	E
20230626_1850	2.5	ESE
20230626_1900	3.1	ESE
20230626_1910	2.2	ESE
20230626_1920	2.5	E
20230626_1930	1.9	E
20230626_1940	2.2	ESE
20230626_1950	1.9	ESE
20230626_2000	1.7	E
20230626_2010	1.9	E
20230626_2020	1.7	ESE
20230626_2030	1.9	E
20230626_2040	1.7	E
20230626_2050	1.7	E
20230626_2100	1.4	E
20230626_2110	1.7	E
20230626_2120	1.7	ESE
20230626_2130	1.4	ESE
20230626_2140	1.1	SE
20230626_2150	1.4	ESE
20230626_2200	1.4	SE
20230626_2210	1.1	ESE
20230626_2220	1.4	ESE
20230626_2230	1.4	E
20230626_2240	0.8	ESE
20230626_2250	1.4	ESE
20230626_2300	1.4	ESE
20230626_2310	0.8	SSE
20230626_2320	0.8	E
20230626_2330	0.6	SSW
20230626_2340	0.8	SSE
20230626_2350	0.3	SSW

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Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230627_0000	0	N
20230627_0010	0	N
20230627_0020	0	N
20230627_0030	0	N
20230627_0040	0	N
20230627_0050	0.3	SE
20230627_0100	0	N
20230627_0110	0.3	ESE
20230627_0120	0.3	ESE
20230627_0130	0.3	-
20230627_0140	0	N
20230627_0150	0.3	E
20230627_0200	0.3	ENE
20230627_0210	0	N
20230627_0220	0.6	SW
20230627_0230	0.8	S
20230627_0240	0.3	SSE
20230627_0250	0.8	SE
20230627_0300	1.1	SE
20230627_0310	0.3	ESE
20230627_0320	0	N
20230627_0330	0	N
20230627_0340	0	N
20230627_0350	0.3	N
20230627_0400	0	N
20230627_0410	0.3	NNE
20230627_0420	0.8	ESE
20230627_0430	0.3	E
20230627_0440	1.1	E
20230627_0450	1.1	E
20230627_0500	0.3	SSW
20230627_0510	1.1	SSE
20230627_0520	1.7	ESE
20230627_0530	1.4	E
20230627_0540	0.3	SSE
20230627_0550	0.3	S
20230627_0600	0.3	NNW
20230627_0610	0.3	ENE
20230627_0620	0.6	E
20230627_0630	1.4	ESE
20230627_0640	1.1	ESE
20230627_0650	0.8	ESE
20230627_0700	1.1	E
20230627_0710	1.1	E
20230627_0720	0.8	E
20230627_0730	0.8	E
20230627_0740	1.4	ESE
20230627_0750	0.8	SE
20230627_0800	1.7	E
20230627_0810	2.2	ESE
20230627_0820	2.2	ESE
20230627_0830	1.7	ESE
20230627_0840	1.4	E
20230627_0850	1.7	ESE
20230627_0900	1.4	SE
20230627_0910	1.7	ESE
20230627_0920	2.2	ESE
20230627_0930	2.2	SE
20230627_0940	0.3	NNE
20230627_0950	0.8	SSW
20230627_1000	0	N
20230627_1010	0.3	ENE
20230627_1020	0.8	WNW
20230627_1030	0.3	S
20230627_1040	0.6	WSW
20230627_1050	1.9	WSW
20230627_1100	1.7	NW
20230627_1110	1.7	NNE
20230627_1120	0.5	NNE
20230627_1130	0.3	NNE
20230627_1140	0	N
20230627_1150	0.3	ESE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230627_1200	0.3	SSW
20230627_1210	0.6	ENE
20230627_1220	0.3	SSE
20230627_1230	0.6	WSW
20230627_1240	1.1	WNW
20230627_1250	0.8	S
20230627_1300	0.3	NW
20230627_1310	1.1	ESE
20230627_1320	0.3	N
20230627_1330	1.1	NNE
20230627_1340	0.8	NE
20230627_1350	0.8	SSE
20230627_1400	0.3	SSE
20230627_1410	0.3	SE
20230627_1420	0.8	SE
20230627_1430	1.1	S
20230627_1440	1.7	SW
20230627_1450	0.6	SSW
20230627_1500	0.3	E
20230627_1510	1.1	E
20230627_1520	0.6	ENE
20230627_1530	0.3	NNE
20230627_1540	0.3	NNE
20230627_1550	0	N
20230627_1600	0.3	SE
20230627_1610	0.8	ESE
20230627_1620	0.3	W
20230627_1630	0.3	NW
20230627_1640	0	N
20230627_1650	0.3	SSE
20230627_1700	0.8	E
20230627_1710	1.1	ESE
20230627_1720	0.3	SSE
20230627_1730	0.3	-
20230627_1740	0.3	NE
20230627_1750	0.3	-
20230627_1800	0	N
20230627_1810	0	N
20230627_1820	0.3	SSE
20230627_1830	0.3	E
20230627_1840	0	N
20230627_1850	0	N
20230627_1900	0	N
20230627_1910	0	N
20230627_1920	0	N
20230627_1930	0.3	ESE
20230627_1940	0.3	ESE
20230627_1950	0.3	E
20230627_2000	0.6	E
20230627_2010	1.1	ESE
20230627_2020	0.8	SE
20230627_2030	1.1	ESE
20230627_2040	1.7	ESE
20230627_2050	2.2	ESE
20230627_2100	1.1	ESE
20230627_2110	0.3	-
20230627_2120	0	N
20230627_2130	0.3	ESE
20230627_2140	0.6	S
20230627_2150	0.3	S
20230627_2200	0	N
20230627_2210	0	N
20230627_2220	0	N
20230627_2230	0	N
20230627_2240	0	N
20230627_2250	0	N
20230627_2300	0.3	ESE
20230627_2310	1.1	ESE
20230627_2320	1.1	ESE
20230627_2330	0.6	SE
20230627_2340	0.3	SSE
20230627_2350	0.8	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)
20230628_0000	1.4	SE
20230628_0010	1.7	SE
20230628_0020	1.7	SE
20230628_0030	1.7	SE
20230628_0040	2.2	ESE
20230628_0050	1.7	ESE
20230628_0100	1.4	SSE
20230628_0110	1.4	SSE
20230628_0120	1.7	SE
20230628_0130	1.7	SE
20230628_0140	1.4	ESE
20230628_0150	1.9	ESE
20230628_0200	1.9	ESE
20230628_0210	1.4	ESE
20230628_0220	0.8	SSE
20230628_0230	1.1	SSE
20230628_0240	0.8	SE
20230628_0250	0.8	SSE
20230628_0300	1.4	SSE
20230628_0310	1.7	SSE
20230628_0320	1.1	SSE
20230628_0330	1.4	SSE
20230628_0340	1.1	SE
20230628_0350	1.1	SSE
20230628_0400	1.4	SE
20230628_0410	1.1	SE
20230628_0420	1.1	SE
20230628_0430	0.6	S
20230628_0440	0.3	S
20230628_0450	0.3	SSE
20230628_0500	0.8	SSE
20230628_0510	1.1	SSE
20230628_0520	1.4	SSE
20230628_0530	0.3	S
20230628_0540	0.3	-
20230628_0550	0.3	SSW
20230628_0600	0.3	SW
20230628_0610	0.3	SE
20230628_0620	0.3	-
20230628_0630	0	N
20230628_0640	0	N
20230628_0650	0.3	WNW
20230628_0700	0	N
20230628_0710	0	N
20230628_0720	0.8	SSE
20230628_0730	0.6	SSE
20230628_0740	0.8	S
20230628_0750	0.8	SSE
20230628_0800	0.8	SSE
20230628_0810	0.8	SSE
20230628_0820	0.8	S
20230628_0830	0.3	S
20230628_0840	0.3	WSW
20230628_0850	0.3	S
20230628_0900	1.4	SSW
20230628_0910	1.4	SW
20230628_0920	1.4	WSW
20230628_0930	2.2	SSW
20230628_0940	3.1	SSE
20230628_0950	2.5	S
20230628_1000	2.8	S
20230628_1010	3.3	S
20230628_1020	3.9	S
20230628_1030	3.3	S
20230628_1040	3.3	S
20230628_1050	3.3	S
20230628_1100	4.2	SSE
20230628_1110	3.9	S
20230628_1120	2.8	S
20230628_1130	2.8	SSW
20230628_1140	3.3	SSW
20230628_1150	4.2	S

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230628_1200	4.2	S
20230628_1210	3.3	SSW
20230628_1220	3.3	SW
20230628_1230	3.3	S
20230628_1240	2.8	SSW
20230628_1250	3.9	S
20230628_1300	4.2	S
20230628_1310	3.3	S
20230628_1320	4.4	S
20230628_1330	4.4	S
20230628_1340	4.2	SSW
20230628_1350	4.2	SSW
20230628_1400	4.2	SSW
20230628_1410	3.9	S
20230628_1420	3.9	S
20230628_1430	2.8	S
20230628_1440	3.3	SSW
20230628_1450	3.3	SSW
20230628_1500	3.3	S
20230628_1510	3.3	S
20230628_1520	4.7	S
20230628_1530	4.2	S
20230628_1540	3.9	S
20230628_1550	3.1	S
20230628_1600	3.6	S
20230628_1610	3.9	S
20230628_1620	3.9	S
20230628_1630	3.3	SSW
20230628_1640	3.3	SSW
20230628_1650	3.3	SSW
20230628_1700	2.8	S
20230628_1710	3.3	S
20230628_1720	3.3	SSW
20230628_1730	2.2	SSE
20230628_1740	2.8	SSE
20230628_1750	2.8	SE
20230628_1800	2.2	SSE
20230628_1810	2.2	SSE
20230628_1820	2.5	SE
20230628_1830	1.7	SE
20230628_1840	1.1	ESE
20230628_1850	2.2	SE
20230628_1900	1.7	SE
20230628_1910	1.7	SE
20230628_1920	1.1	E
20230628_1930	1.1	E
20230628_1940	1.1	E
20230628_1950	1.1	ESE
20230628_2000	0.8	SE
20230628_2010	0.8	SE
20230628_2020	0.8	SE
20230628_2030	0.6	E
20230628_2040	0.8	ESE
20230628_2050	1.1	SE
20230628_2100	1.7	ESE
20230628_2110	1.4	ESE
20230628_2120	1.4	SE
20230628_2130	1.4	ESE
20230628_2140	1.4	SE
20230628_2150	1.4	SE
20230628_2200	1.4	SE
20230628_2210	1.4	SE
20230628_2220	1.4	SE
20230628_2230	1.4	SE
20230628_2240	0.8	SSE
20230628_2250	0.8	SE
20230628_2300	1.1	ESE
20230628_2310	1.7	ESE
20230628_2320	1.7	SSE
20230628_2330	1.7	SSE
20230628_2340	1.4	SSE
20230628_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)
20230629_0000	1.7	SSE
20230629_0010	1.7	SSE
20230629_0020	1.1	SE
20230629_0030	1.1	SSE
20230629_0040	1.1	SE
20230629_0050	1.4	SE
20230629_0100	1.7	SE
20230629_0110	1.4	SSE
20230629_0120	1.1	S
20230629_0130	1.1	S
20230629_0140	1.1	S
20230629_0150	1.7	S
20230629_0200	1.4	SSE
20230629_0210	1.1	S
20230629_0220	0.8	S
20230629_0230	1.9	S
20230629_0240	1.1	S
20230629_0250	1.4	S
20230629_0300	1.7	S
20230629_0310	0.3	-
20230629_0320	0	N
20230629_0330	0	N
20230629_0340	0	N
20230629_0350	0.3	NE
20230629_0400	0.3	NNE
20230629_0410	0	N
20230629_0420	0	N
20230629_0430	0	N
20230629_0440	0	N
20230629_0450	0.3	SW
20230629_0500	0.3	WSW
20230629_0510	0	N
20230629_0520	0.3	-
20230629_0530	0	N
20230629_0540	0	N
20230629_0550	0	N
20230629_0600	0	N
20230629_0610	0	N
20230629_0620	0	N
20230629_0630	0	N
20230629_0640	0	N
20230629_0650	0	N
20230629_0700	0	N
20230629_0710	0	N
20230629_0720	0	N
20230629_0730	0.3	ESE
20230629_0740	0.8	E
20230629_0750	1.1	ESE
20230629_0800	1.1	SE
20230629_0810	1.1	SE
20230629_0820	1.1	ESE
20230629_0830	0.8	ESE
20230629_0840	1.7	SSE
20230629_0850	1.4	SSW
20230629_0900	1.4	SW
20230629_0910	1.7	SW
20230629_0920	1.4	WSW
20230629_0930	1.7	SSW
20230629_0940	1.7	SSW
20230629_0950	2.2	SSW
20230629_1000	2.5	SSW
20230629_1010	1.7	SSE
20230629_1020	2.5	S
20230629_1030	2.8	SW
20230629_1040	1.7	SW
20230629_1050	2.8	S
20230629_1100	3.3	S
20230629_1110	3.3	S
20230629_1120	3.3	S
20230629_1130	3.3	SSW
20230629_1140	2.8	SSW
20230629_1150	3.9	SW

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230629_1200	3.9	WSW
20230629_1210	3.9	SW
20230629_1220	3.3	SSW
20230629_1230	2.8	SSW
20230629_1240	3.3	SW
20230629_1250	4.4	SSW
20230629_1300	3.1	SSW
20230629_1310	3.9	SSW
20230629_1320	2.8	S
20230629_1330	3.3	SW
20230629_1340	3.1	SW
20230629_1350	3.3	SSW
20230629_1400	3.3	SSW
20230629_1410	3.3	S
20230629_1420	3.1	SSW
20230629_1430	2.8	S
20230629_1440	2.2	SSW
20230629_1450	2.5	SW
20230629_1500	2.8	SW
20230629_1510	2.5	SW
20230629_1520	2.5	SW
20230629_1530	1.9	SW
20230629_1540	2.5	SW
20230629_1550	1.7	SW
20230629_1600	2.5	SW
20230629_1610	2.2	SSW
20230629_1620	2.5	SSW
20230629_1630	2.2	SSW
20230629_1640	3.1	SW
20230629_1650	3.3	SW
20230629_1700	3.3	SW
20230629_1710	3.3	SW
20230629_1720	2.8	WSW
20230629_1730	2.8	SW
20230629_1740	2.2	SW
20230629_1750	2.5	SSW
20230629_1800	2.5	S
20230629_1810	2.8	SSE
20230629_1820	2.5	SSE
20230629_1830	1.9	SSE
20230629_1840	2.5	SSE
20230629_1850	2.2	SSE
20230629_1900	1.1	ESE
20230629_1910	1.7	ESE
20230629_1920	1.9	ESE
20230629_1930	1.4	ESE
20230629_1940	1.1	ESE
20230629_1950	1.7	ESE
20230629_2000	2.5	E
20230629_2010	2.2	E
20230629_2020	2.5	E
20230629_2030	2.5	E
20230629_2040	2.2	E
20230629_2050	2.2	E
20230629_2100	2.2	ESE
20230629_2110	2.5	ESE
20230629_2120	2.2	ESE
20230629_2130	2.5	ESE
20230629_2140	2.2	ESE
20230629_2150	1.7	E
20230629_2200	1.1	E
20230629_2210	1.7	E
20230629_2220	1.4	ESE
20230629_2230	1.7	ESE
20230629_2240	1.7	E
20230629_2250	1.4	ESE
20230629_2300	1.4	ESE
20230629_2310	1.7	ESE
20230629_2320	1.1	ESE
20230629_2330	1.1	ESE
20230629_2340	0.8	ESE
20230629_2350	0.8	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)
20230630_0000	1.1	SE
20230630_0010	0.8	ESE
20230630_0020	1.1	ESE
20230630_0030	1.1	SE
20230630_0040	0.8	SE
20230630_0050	0.8	ESE
20230630_0100	0.8	ESE
20230630_0110	1.1	SE
20230630_0120	1.4	SE
20230630_0130	1.4	SE
20230630_0140	1.4	SE
20230630_0150	1.1	S
20230630_0200	1.1	SE
20230630_0210	1.1	SE
20230630_0220	0.8	SSE
20230630_0230	0.8	SE
20230630_0240	0.3	S
20230630_0250	0.3	SE
20230630_0300	0.8	ESE
20230630_0310	0.3	SW
20230630_0320	0.8	WNW
20230630_0330	0.3	WSW
20230630_0340	0.3	SSW
20230630_0350	0.3	NE
20230630_0400	0.8	NE
20230630_0410	0.3	E
20230630_0420	0	N
20230630_0430	0.3	SE
20230630_0440	0	N
20230630_0450	0.3	NNW
20230630_0500	0	N
20230630_0510	0	N
20230630_0520	0.8	SSE
20230630_0530	0.3	ESE
20230630_0540	0	N
20230630_0550	0.3	S
20230630_0600	0	N
20230630_0610	0.3	N
20230630_0620	0.8	ENE
20230630_0630	0.3	ENE
20230630_0640	0	N
20230630_0650	0.3	-
20230630_0700	0.3	-
20230630_0710	1.1	E
20230630_0720	1.7	E
20230630_0730	1.4	E
20230630_0740	1.4	ESE
20230630_0750	1.7	E
20230630_0800	2.2	ESE
20230630_0810	2.5	E
20230630_0820	1.7	E
20230630_0830	1.7	ENE
20230630_0840	1.4	E
20230630_0850	1.7	ESE
20230630_0900	1.9	ENE
20230630_0910	1.7	ENE
20230630_0920	1.4	WSW
20230630_0930	1.1	NNW
20230630_0940	1.1	WSW
20230630_0950	1.4	SW
20230630_1000	1.4	SW
20230630_1010	0.3	NNW
20230630_1020	1.4	NNW
20230630_1030	0.3	-
20230630_1040	0.3	NNE
20230630_1050	1.1	NE
20230630_1100	0.8	NNE
20230630_1110	1.1	NNE
20230630_1120	0.8	NNE
20230630_1130	0.3	NW
20230630_1140	0.6	WNW
20230630_1150	1.1	SSE

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230630_1200	1.7	ENE
20230630_1210	1.4	E
20230630_1220	1.1	ESE
20230630_1230	0.3	ESE
20230630_1240	0.8	E
20230630_1250	0.6	NE
20230630_1300	1.1	NNE
20230630_1310	0.8	ENE
20230630_1320	0.8	NNE
20230630_1330	0.3	N
20230630_1340	1.1	E
20230630_1350	1.7	E
20230630_1400	2.2	ESE
20230630_1410	2.8	E
20230630_1420	3.1	E
20230630_1430	2.8	E
20230630_1440	2.2	ENE
20230630_1450	1.7	E
20230630_1500	2.2	E
20230630_1510	2.5	E
20230630_1520	2.2	ESE
20230630_1530	2.2	E
20230630_1540	2.5	E
20230630_1550	2.8	E
20230630_1600	2.5	ESE
20230630_1610	2.5	ESE
20230630_1620	2.2	ESE
20230630_1630	2.5	E
20230630_1640	2.2	ESE
20230630_1650	2.2	ESE
20230630_1700	1.9	ESE
20230630_1710	2.2	E
20230630_1720	1.4	E
20230630_1730	1.7	ESE
20230630_1740	2.2	ESE
20230630_1750	1.7	ESE
20230630_1800	1.4	E
20230630_1810	1.4	E
20230630_1820	1.9	ESE
20230630_1830	2.2	ESE
20230630_1840	1.7	ESE
20230630_1850	2.2	ESE
20230630_1900	1.9	E
20230630_1910	1.7	E
20230630_1920	1.4	E
20230630_1930	1.1	E
20230630_1940	0.8	ENE
20230630_1950	1.1	E
20230630_2000	1.4	E
20230630_2010	0.6	ENE
20230630_2020	0.3	NNE
20230630_2030	0.3	E
20230630_2040	0.6	SE
20230630_2050	1.4	SE
20230630_2100	2.2	ESE
20230630_2110	1.7	ESE
20230630_2120	1.7	ESE
20230630_2130	1.4	SE
20230630_2140	0.8	SE
20230630_2150	0.3	SSW
20230630_2200	0.8	SSE
20230630_2210	0.3	SSE
20230630_2220	0.8	SSE
20230630_2230	0.8	ESE
20230630_2240	1.1	SE
20230630_2250	0.8	ESE
20230630_2300	1.1	SE
20230630_2310	1.7	ESE
20230630_2320	1.4	ESE
20230630_2330	1.9	SE
20230630_2340	2.2	SSE
20230630_2350	1.4	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)

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
Total	69,193.45	0.00	0.00	67,337.00	0.00	0.00	0.00	0.00	0.00	22.69	0.00	72.80	1,760.96

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:	05 June 2023	Inspected By:	Jason Man
Time:	14:00	Weather Condition:	Fine
Participants:	Sylvia Ho (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?	☐	☒	☐	
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	☐	☒	☐	
A3	Is wastewater discharge licence available for inspection?	☐	☒	☐	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	☐	☒	☐	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	☐	☒	☐	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is **open burning** avoided?	☐	☒	☐	
B2	Are **plant and equipment** well maintained (i.e. without black smoke from powered plant)?	☐	☒	☐	
B3	Any remedial action undertaken?	☒	☐	☐	N/A
B4	Are the **worksites** wetted with water regularly?	☐	☒	☐	
B5	Are **NRMM labels** properly affixed on the PMEs?	☐	☒	☐	
B6	Observed dust source(s)				
		☐ Wind erosion			
		☒ Vehicle/ Equipment Movements			
		☒ Loading/ unloading of materials			
		☐ 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?	☒	☐	☐	N/A
Construction of the superstructure of a building					
B8	Is **scaffolding** erected around the perimeter of a building under construction?	☒	☐	☐	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?	☒	☐	☐	N/A
B10	Is the **skip** for materials transport enclosed by **impervious sheeting**?	☒	☐	☐	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?	☐	☒	☐	
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?	☐	☒	☐	
B13	Are the **hoarding** ≥ 2.4m tall provided at the site boundary near a road, street, service lane or other area accessible to the public?	☐	☒	☐	
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, hardcorres or metal plates, and kept clear of dusty materials?	☐	☒	☐	
B15	Are every **main haul road** sprayed with water or a dust suppression chemical?	☐	☒	☐	
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?	☐	☒	☐	
B17	Are appropriate **speed limit sign** displayed?	☐	☒	☐	
B18	Is **unpaved main haul road** wet by water spraying?	☐	☐	☐	
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?	☒	☐	☐	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?	☒	☐	☐	N/A
B21	Is any vent or exhaust fitted with an **effective fabric filter or equipment air pollution control system**?	☒	☐	☐	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?	☐	☒	☐	

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**?	☐	☒	☐	
B24	Is the stockpile of dusty materials avoid to be extend beyond the **pedestrian barriers, fencing or traffic cones**?	☐	☒	☐	
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?	☐	☒	☐	
B26	Are **all trucks loaded** to a level within the side and tail boards?	☐	☒	☐	
Use of vehicles					
B27	Are **every vehicle washed Immediately** to remove any dusty materials from its body and wheels before leaving a construction site?	☐	☒	☐	
B28	Are **loaded dump trucks** covered by impervious sheeting appropriately before leaving the site?	☐	☒	☐	
B29	Are site **vehicle movements** confined to designated roads?	☐	☒	☐	
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.	☒	☐	☐	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?	☒	☐	☐	N/A
B32	Are every **debris chute** shall be enclosed by impervious sheeting or similar materials?	☒	☐	☐	N/A
B33	Are the watering spray or a dust suppression chemical conducted before **debris is dumped** into a debris chute?	☒	☐	☐	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?	☐	☒	☐	
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?	☐	☒	☐	
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?	☐	☒	☐	

C	Construction Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is **well-maintained plant** operated on-site and plant served regularly?	☐	☒	☐	
C2	Are **vehicles** and **equipment** switched off or throttled down while not in use?	☐	☒	☐	
C3	Is the noise directed away from nearby **NSRs**?	☐	☒	☐	
C4	Are the **silencers** or **mufflers** properly fitted on construction equipment and maintained regularly?	☒	☐	☐	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?	☐	☒	☐	
C6	Are **material stockpiles**, **mobile container officer** and **other structures** utilised to screen noisy activates?	☐	☒	☐	
C7	Is **temporary hoarding** installed located on the site boundaries between noisy construction activities and NSRs?	☒	☐	☐	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?	☒	☐	☐	N/O
C9	Is the sequencing **operation** of **construction plants** where practicable?	☐	☒	☐	
C10	Is the **hoarding** maintained properly?	☐	☒	☐	
C11	**Air compressors** (500 kPa or above) and **hand held percussive breaker** (mass of above 10 kg) with valid noise labels?	☐	☒	☐	
C12	Are **compressor** operated with doors closed?	☐	☒	☐	
C13	**QPME** used with valid noise labels?	☐	☐	☐	
C14	Major noise source(s)				
		☒ Traffic			
		☒ Construction activities inside of site			
		☐ Construction activities outside of site			
		☐ 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?	☐	☒	☐	
D1b	Are **channels**, **earth bunds** or **sandbag barriers** provided on site to properly direct stormwater to silt removal facilities?	☐	☒	☐	
D2a	Have **dikes** or **embankments** for **flood protection** implemented around the boundaries of earthwork areas?	☐	☒	☐	
D2b	Have **temporary ditches** provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	☐	☒	☐	
D2c	Are the **sediment/ silt traps** incorporated in the permanent drainage channels to enhance deposition rate?	☐	☒	☐	
D3	Are the **retention time for silt/s and traps** of the silt removal facilities be **5 minutes** under maximum flow conditions?	☐	☒	☐	
D4a	Are **surface excavation works** minimised during rainy seasons (April to September), as possible?	☐	☒	☐	
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?	☐	☒	☐	
D4c	Are **exposed slope surfaces** covered by tarpaulin sheets?	☐	☒	☐	To be treated with shotcrete at part of slope surface.
D5a	Have the **overall slope** of the site should be kept a minimum?	☐	☒	☐	
D5b	Are **all trafficked areas** and **access roads** protected by coarse stone ballast?	☐	☒	☐	
D6a	Are **all drainage facilities** and **erosion** and **sediment control structures** inspected regularly?	☐	☒	☐	
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?	☐	☒	☐	
D6c	Is the **deposited silt** and **grit** removed regularly and disposed of by spreading evenly over stable?	☐	☒	☐	
D7a	Have the **excavation** of **trenches** in wet periods be dug and backfilled in short sections?	☐	☒	☐	
D7b	Is rainwater pumped out from **trenches** discharged into storm drains via silt system?	☐	☒	☐	
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?	☐	☒	☐	
D9a	Are **manholes** adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	☐	☒	☐	

D9b	Are the **discharges** of **surface run-off** into foul sewer always prevented?	☐	☒	☐	
D10a	Are particular attention paid to the control of **silty surface runoff** during **storm event**?	☐	☒	☐	Refer to Reminder 1
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 facilitie**s, **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.	☐	☒	☐	Refer to Reminder 1
D10c	Are the actions to be taken when a **rainstorm** is **imminent** or **forecas**t? (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.	☐	☒	☐	Refer to Reminder 1
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.	☐	☒	☐	Refer to Reminder 1
D11a	Are **all vehicles** and **plant** cleaned before leaving a construction site?	☐	☒	☐	
D11b	Is the **wheel washing bay** provided at every site exit?	☐	☒	☐	
D11c	Are the **vehicle wash-water** have sand and silt settled out and removed at least on a weekly basis?	☐	☒	☐	
D11d	Is the **wheel wash** overflow directed to silt removal facilities before being discharged to the storm drain?	☐	☒	☐	
D11e	Is the section of **construction road between the wheel washing bay and the public road** paved with backfill?	☐	☒	☐	
D11f	Is the treated wastewater reused for **vehicle washing**, **dust suppression** and **general cleaning**?	☐	☒	☐	
D12a	Are **oil interceptors** provided in the site drainage system downstream of any oil/ fuel pollution sources?	☒	☐	☐	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?	☒	☐	☐	N/A

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

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?	☐	☒	☐	
E2a	Is the general waste collected properly by using the **waste separation facilities** for paper, aluminium cans, plastic bottles etc.?	☐	☒	☐	
E2b	Does **accumulation** of **waste** avoid?	☐	☒	☐	
E2c	Is **waste disposed** regularly?	☐	☒	☐	
E2d	Regular **waste collection** by approved waste collector in purpose-built vehicles?	☐	☒	☐	
E3	**Burning of refuse** on construction site prohibited?	☐	☒	☐	
C&D Materials					
E4a	Are there any **contract documents** provided to allow and promote the **use of recycled aggregates** where appropriate?	☐	☒	☐	
E4b	Are the **C&D materials** sorted and recycled on-site?	☐	☒	☐	
E5a	Is the **durable formwork** or **plastic facing** for construction works used?	☐	☒	☐	
E5b	Do the **wooden hoardings** avoid to be used?	☐	☒	☐	
E5c	Is **metal hoarding** used to enhance the possibility of recycling?	☐	☒	☐	
E6a	Are the concrete and masonry used as **general fill**?	☐	☒	☐	
E6b	Are the **steel reinforcement bars** used by scrap steel mills?	☐	☒	☐	
E6c	Is the **segregation** and **storage** of C&D wastes undertaken in designated area?	☐	☒	☐	
E6d	Does the **use of reusable steel formwork** maximise?	☐	☒	☐	
E7a	Are the **temporary stockpiles** maintained regularly?	☐	☒	☐	
E7b	Is the **excavated fill material** reused for backfilling and reinstatement?	☐	☒	☐	
E8a	Are the **excavated slope**, **stockpile material** and **bund walls** covered by tarpaulin?	☐	☒	☐	
E8b	Are covering trucks or transporting wastes in enclosed containers when **transportation of waste**?	☐	☒	☐	
E8c	Are **waste storage area** properly cleaned and do not cause windblown litter and dust nuisance?	☐	☒	☐	
E9	Is **hydroseeding** of the topsoil on the **stockpile** implemented to improve visual appearance and prevent soil erosion?	☐	☒	☐	
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?	☐	☒	☐	

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?	☐	☒	☐	
E12	Are the **regular cleaning** and **maintenance programme** for drainage systems, sumps, oil interceptors?	☐	☒	☐	
E13a	Are **wood**, **steel** and **other metals** separated for re-use and/or recycling?	☐	☒	☐	
E13b	Do the **excavated materials** appear contaminated?	☐	☐	☒	
E13c	If suspected contaminated, appropriate **procedures** followed?	☒	☐	☐	N/A
E14	Is the **disposal** of **C&D materials** avoided onto any sensitive locations e.g. agricultural lands etc.?	☐	☒	☐	
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?	☐	☒	☐	
Chemical Waste / Waste Oil					
E16	Are **chemicals** and **waste oil** recycled or disposed properly?	☐	☒	☐	Refer to Observation 1
Chemical Packaging					
E17a	Have the **containers** a capacity of **<450 L** unless the specification has been approved by EPD?	☒	☐	☐	
E17b	Are the **containers** (holding, resistant to corrosion, maintained in a good condition, and securely closed) used for **storage of chemical wastes**?	☒	☐	☐	
Chemical Labelling					
E18	Is chemical waste or waste oil **stored** and **labelled** in **English and Chinese** properly in designated area? 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)?	☒	☐	☐	N/O
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**?	☒	☐	☐	N/O
E19c	Do the **storage areas** have adequate **ventilation** and be covered to prevent rainfall entering and reduce heat from sunlight?	☒	☐	☐	N/O
E19d	Are the **fuel tanks** and **chemical storage areas** provided with locks and sited on sealed areas?	☒	☐	☐	N/O
E20	Is chemical waste collected by **licensed waste collectors** and disposed of at **licensed facility** eg. Chemical Waste Treatment Centre?	☐	☒	☐	

Records					
E21	Is a licensed waste hauler used for **waste collection**?	☐	☒	☐	
E22	Are the **records of quantities of wastes** generated, recycled and disposed properly kept?	☐	☒	☐	
E23	For the demolition material / waste, is the **number of loads** for each day recorded as appropriate?	☐	☒	☐	

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)?	☒	☐	☐	N/O
F2	Are **prominent safety warning signs** erected on-site to alert all personnel and visitors of LFG hazards during excavation works.?	☐	☒	☐	
F3	Is **no smoking** or **burning** permitted on-site?	☒	☐	☐	N/O
F4	Are prominent **'No smoking'** and **'No Naked Flames' signs** erected on-site?	☒	☐	☐	N/O
F5	Is no worker allowed to **work alone** at any time in excavated trenches or confined areas on-site?	☐	☒	☐	
F6	Is adequate **fire fighting equipment** provided on-site?	☐	☒	☐	
F7	Are **construction equipment** equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors?	☐	☒	☐	
F8	Are **electrical motors** and **extension cords** explosion-proof and intrinsically safe for use on-site?	☒	☐	☐	N/O
F9	Is **'Permit to Work'** system implemented?	☐	☒	☐	
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?	☐	☒	☐	
F11a	For **piping assembly or conduit construction**, are all valves and seals closed immediately after installation?	☒	☐	☐	N/A
F11b	Are the **pipe ends** sealed on one side during installation if installation of large diameter pipes (diameter > 600mm) is required?	☒	☐	☐	N/A
F11c	Is **forced ventilation** implemented prior to **operation of installed pipeline**?	☒	☐	☐	N/A
F11d	Is **forced ventilation** implemented for **works inside trenches deeper than 1m**?	☒	☐	☐	N/A
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.				
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?	☐	☒	☐	
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.	☐	☒	☐	
F15a	Are **LFG precautionary measures** involved in **excavation** and **piping works** provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase?	☐	☒	☐	
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?	☐	☒	☐	
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%	☐	☒	☐	
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.	☐	☒	☐	
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	☐	☒	☐	
F17c	Are all measurements in excavations made with monitoring tube located < 10mm from exposed ground surface?	☐	☒	☐	
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	☐	☒	☐	

	• Periodically throughout the working day whilst workers are in excavation.				
F19	For excavations 300mm to 1m, are measurements conducted? • Directly after excavation has been completed; and • Periodic all whilst excavation remains open.	☐	☒	☐	
F20	For excavations < 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	☐	☒	☐	

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

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?	☐	☒	☐	

I	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Environmental Complaint received during this week?	☐	☐	☒	

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	☐	☒	☐	
J2	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	☐	☒	☐	

Follow up action for previous Site Inspection:

1. The unrooting trees at Portion A was removed by contractor.
2. The sand and soil near the channel at Portion E3-1 was removed by contractor.
3. The entrance / exit at Portion B2 was cleaned by contractor.

Observation(s):

1. The accumulate water is found the drip tray at Portion D.

Reminder(s):

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

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

1. The contractor has been recommended that the accumulate water in drip tray should be cleared regularly and after rainy to minimize the potential chemical waste.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Jason Man	/	Kristy Wong	Sylvia Ho
Date:	5 Jun 2023	/	5 Jun 2023	5 Jun 2023

PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
03 April 2023  The exposed slope surface near the stream has been covered with impervious sheets as a temporary mitigation measure. Shotcrete will be applied to the exposed surface by the end of April to prevent surface runoff into channel in long term.	 The slope protection in Portion E3-1 is conducting in progress by contractor to minimize the high suspended solid surface runoff to treat by silt removal facilities & avoid it directly discharged to channel.
2 May 2023   Water in the drip tray shall be cleared off at Portion A.	Waiting for Contractor's Input

Observation and Recommendation	**Follow-up status**
8 May 2023  The Contractor has been reminded to cover the waste skip with impervious sheets during rainfall, to avoid accumulation of waste and to implement waste sorting.	Waiting for Contractor's Input
 22 May 2023 Observation: The unrooting trees at Portion A was not covered by impervious sheeting and or placed in an area sheltered on the top and the 3 sides within a day of demolition.	 The unrooting trees at Portion A was removed by contractor.

Observation and Recommendation	Follow-up status
 22 May 2023 Observation: The sand and soil near the channel at Portion E3-1 were found. The contractor was recommended to avoid the untreated surface runoff contaminated with related materials discharged to channel directly. All construction runoffs should be collected to silt removal facilities for treatment.	 The sand and soil near the channel at Portion E3-1 was removed by contractor.

Observation and Recommendation	Follow-up status
Portion B2   Portion A  29 May 2023 Observation: Portion of road leading to Portion A and Portion B2 shall be kept clear of dusty and muddy materials.	Portion B2  The entrance / exit at Portion B2 was cleaned by contractor. Portion A Waiting for Contractor's Input

Observation and Recommendation	Follow-up status
 29 May 2023 Observation: Slope protection work in Portion A shall be maintained properly to minimize dust dispersion and surface runoff.	Waiting for Contractor's Input
 29 May 2023 Observation: The accumulated uprooting trees is found behind the wetsep in Portion B2.	Waiting for Contractor's Input

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
  Observation: 1. The accumulate water is found the drip tray at Portion D. The contractor has been recommended that the accumulate water in drip tray should be cleared regularly and after rainy to minimize the potential chemical waste.	

Observation and Recommendation	**Follow-up status**
Reminder:  2. The contractor has been reminded that the particular attention should be pai to the control of silty surface runoff during storm event in accordance with Appendix A2 of ProPECC PN 1/94.	

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

Photo 1 Portion D	Photo 2 Portion D
	
Photo 3 Portion D	Photo 4 Portion B1 Sediment basin & Cut-off drain
	
Photo 5 Portion B1 Drainage system with silt fence at stockpile area	Photo 6 Portion B1 Existing channel
	

Photo 7 Portion B1 Existing channel	Photo 8 Portion B1 Existing channel
	
Photo 9 Portion B1 Existing channel	Photo 10 Portion E3 Silt removal facilities
	
Photo 11 Portion E3 Sediment Basin	Photo 12 Portion A Earth bunds with Silt fence
	

Inspection Date:	12 June 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?	☐	☒	☐	
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	☐	☒	☐	
A3	Is wastewater discharge licence available for inspection?	☐	☒	☐	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	☐	☒	☐	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	☐	☒	☐	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is **open burning** avoided?	☐	☒	☐	
B2	Are **plant and equipment** well maintained (i.e. without black smoke from powered plant)?	☐	☒	☐	
B3	Any remedial action undertaken?	☒	☐	☐	N/A
B4	Are the **worksites** wetted with water regularly?	☐	☐	☒	Refer to Observation 2
B5	Are **NRMM labels** properly affixed on the PMEs?	☐	☒	☐	
B6	Observed dust source(s)				
		☐ Wind erosion			
		☒ Vehicle/ Equipment Movements			
		☒ Loading/ unloading of materials			
		☐ 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?	☒	☐	☐	N/A
Construction of the superstructure of a building					
B8	Is **scaffolding** erected around the perimeter of a building under construction?	☒	☐	☐	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?	☒	☐	☐	N/A
B10	Is the **skip** for materials transport enclosed by **impervious sheeting**?	☒	☐	☐	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?	☐	☒	☐	
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?	☐	☒	☐	
B13	Are the **hoarding** ≥ 2.4m tall provided at the site boundary near a road, street, service lane or other area accessible to the public?	☐	☒	☐	
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, hardcorres or metal plates, and kept clear of dusty materials?	☐	☒	☐	
B15	Are every **main haul road** sprayed with water or a dust suppression chemical?	☐	☒	☐	
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?	☐	☒	☐	
B17	Are appropriate **speed limit sign** displayed?	☐	☒	☐	
B18	Is **unpaved main haul road** wet by water spraying?	☐	☐	☐	
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?	☒	☐	☐	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?	☒	☐	☐	N/A
B21	Is any vent or exhaust fitted with an **effective fabric filter or equipment air pollution control system**?	☒	☐	☐	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?	☐	☒	☐	

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**?	☐	☒	☐	
B24	Is the stockpile of dusty materials avoid to be extend beyond the **pedestrian barriers, fencing or traffic cones**?	☐	☒	☐	
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?	☐	☒	☐	
B26	Are **all trucks loaded** to a level within the side and tail boards?	☐	☒	☐	
Use of vehicles					
B27	Are **every vehicle washed Immediately** to remove any dusty materials from its body and wheels before leaving a construction site?	☐	☒	☐	
B28	Are **loaded dump trucks** covered by impervious sheeting appropriately before leaving the site?	☐	☒	☐	
B29	Are site **vehicle movements** confined to designated roads?	☐	☒	☐	
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.	☒	☐	☐	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?	☒	☐	☐	N/A
B32	Are every **debris chute** shall be enclosed by impervious sheeting or similar materials?	☒	☐	☐	N/A
B33	Are the watering spray or a dust suppression chemical conducted before **debris is dumped** into a debris chute?	☒	☐	☐	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?	☐	☒	☐	
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?	☐	☒	☐	
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?	☐	☒	☐	

C	Construction Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is **well-maintained plant** operated on-site and plant served regularly?	☐	☒	☐	
C2	Are **vehicles** and **equipment** switched off or throttled down while not in use?	☐	☒	☐	
C3	Is the noise directed away from nearby **NSRs**?	☐	☒	☐	
C4	Are the **silencers** or **mufflers** properly fitted on construction equipment and maintained regularly?	☒	☐	☐	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?	☐	☒	☐	
C6	Are **material stockpiles**, **mobile container officer** and **other structures** utilised to screen noisy activates?	☐	☒	☐	
C7	Is **temporary hoarding** installed located on the site boundaries between noisy construction activities and NSRs?	☒	☐	☐	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?	☒	☐	☐	N/O
C9	Is the sequencing **operation** of **construction plants** where practicable?	☐	☒	☐	
C10	Is the **hoarding** maintained properly?	☐	☒	☐	
C11	**Air compressors** (500 kPa or above) and **hand held percussive breaker** (mass of above 10 kg) with valid noise labels?	☐	☒	☐	
C12	Are **compressor** operated with doors closed?	☐	☒	☐	
C13	**QPME** used with valid noise labels?	☐	☐	☐	
C14	Major noise source(s)				
		☒ Traffic			
		☒ Construction activities inside of site			
		☐ Construction activities outside of site			
		☐ 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?	☐	☒	☐	
D1b	Are **channels**, **earth bunds** or **sandbag barriers** provided on site to properly direct stormwater to silt removal facilities?	☐	☒	☐	
D2a	Have **dikes** or **embankments** for **flood protection** implemented around the boundaries of earthwork areas?	☐	☒	☐	
D2b	Have **temporary ditches** provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	☐	☒	☐	
D2c	Are the **sediment/ silt traps** incorporated in the permanent drainage channels to enhance deposition rate?	☐	☒	☐	
D3	Are the **retention time for silt/s and traps** of the silt removal facilities be **5 minutes** under maximum flow conditions?	☐	☒	☐	
D4a	Are **surface excavation works** minimised during rainy seasons (April to September), as possible?	☐	☒	☐	
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?	☐	☒	☐	
D4c	Are **exposed slope surfaces** covered by tarpaulin sheets?	☐	☒	☐	To be treated with shotcrete at part of slope surface.
D5a	Have the **overall slope** of the site should be kept a minimum?	☐	☒	☐	
D5b	Are **all trafficked areas** and **access roads** protected by coarse stone ballast?	☐	☒	☐	
D6a	Are **all drainage facilities** and **erosion** and **sediment control structures** inspected regularly?	☐	☒	☐	
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?	☐	☒	☐	
D6c	Is the **deposited silt** and **grit** removed regularly and disposed of by spreading evenly over stable?	☐	☒	☐	
D7a	Have the **excavation** of **trenches** in wet periods be dug and backfilled in short sections?	☐	☒	☐	
D7b	Is rainwater pumped out from **trenches** discharged into storm drains via silt system?	☐	☒	☐	
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?	☐	☒	☐	
D9a	Are **manholes** adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	☐	☒	☐	

D9b	Are the **discharges** of **surface run-off** into foul sewer always prevented?	☐	☒	☐	
D10a	Are particular attention paid to the control of **silty surface runoff** during **storm event**?	☐	☐	☒	Refer to Reminder 1
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 facilitie**s, **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.	☐	☐	☒	Refer to Reminder 1
D10c	Are the actions to be taken when a **rainstorm** is **imminent** or **forecas**t? (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.	☐	☐	☒	Refer to Reminder 1
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.	☐	☐	☒	Refer to Reminder 1
D11a	Are **all vehicles** and **plant** cleaned before leaving a construction site?	☐	☒	☐	
D11b	Is the **wheel washing bay** provided at every site exit?	☐	☒	☐	
D11c	Are the **vehicle wash-water** have sand and silt settled out and removed at least on a weekly basis?	☐	☒	☐	
D11d	Is the **wheel wash** overflow directed to silt removal facilities before being discharged to the storm drain?	☐	☒	☐	
D11e	Is the section of **construction road between the wheel washing bay and the public road** paved with backfill?	☐	☒	☐	
D11f	Is the treated wastewater reused for **vehicle washing**, **dust suppression** and **general cleaning**?	☐	☒	☐	
D12a	Are **oil interceptors** provided in the site drainage system downstream of any oil/ fuel pollution sources?	☒	☐	☐	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?	☒	☐	☐	N/A

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

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?	☐	☒	☐	
E2a	Is the general waste collected properly by using the **waste separation facilities** for paper, aluminium cans, plastic bottles etc.?	☐	☒	☐	
E2b	Does **accumulation** of **waste** avoid?	☐	☒	☐	
E2c	Is **waste disposed** regularly?	☐	☒	☐	
E2d	Regular **waste collection** by approved waste collector in purpose-built vehicles?	☐	☒	☐	
E3	**Burning of refuse** on construction site prohibited?	☐	☒	☐	
C&D Materials					
E4a	Are there any **contract documents** provided to allow and promote the **use of recycled aggregates** where appropriate?	☐	☒	☐	
E4b	Are the **C&D materials** sorted and recycled on-site?	☐	☒	☐	
E5a	Is the **durable formwork** or **plastic facing** for construction works used?	☐	☒	☐	
E5b	Do the **wooden hoardings** avoid to be used?	☐	☒	☐	
E5c	Is **metal hoarding** used to enhance the possibility of recycling?	☐	☒	☐	
E6a	Are the concrete and masonry used as **general fill**?	☐	☒	☐	
E6b	Are the **steel reinforcement bars** used by scrap steel mills?	☐	☒	☐	
E6c	Is the **segregation** and **storage** of C&D wastes undertaken in designated area?	☐	☒	☐	
E6d	Does the **use of reusable steel formwork** maximise?	☐	☒	☐	
E7a	Are the **temporary stockpiles** maintained regularly?	☐	☒	☐	
E7b	Is the **excavated fill material** reused for backfilling and reinstatement?	☐	☒	☐	
E8a	Are the **excavated slope**, **stockpile material** and **bund walls** covered by tarpaulin?	☐	☒	☐	
E8b	Are covering trucks or transporting wastes in enclosed containers when **transportation of waste**?	☐	☒	☐	
E8c	Are **waste storage area** properly cleaned and do not cause windblown litter and dust nuisance?	☐	☒	☐	
E9	Is **hydroseeding** of the topsoil on the **stockpile** implemented to improve visual appearance and prevent soil erosion?	☐	☒	☐	
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?	☐	☒	☐	

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?	☐	☒	☐	
E12	Are the **regular cleaning** and **maintenance programme** for drainage systems, sumps, oil interceptors?	☐	☒	☐	
E13a	Are **wood**, **steel** and **other metals** separated for re-use and/or recycling?	☐	☒	☐	
E13b	Do the **excavated materials** appear contaminated?	☐	☐	☒	
E13c	If suspected contaminated, appropriate **procedures** followed?	☒	☐	☐	N/A
E14	Is the **disposal** of **C&D materials** avoided onto any sensitive locations e.g. agricultural lands etc.?	☐	☒	☐	
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?	☐	☒	☐	
Chemical Waste / Waste Oil					
E16	Are **chemicals** and **waste oil** recycled or disposed properly?	☐	☒	☐	Refer to Observation 1
Chemical Packaging					
E17a	Have the **containers** a capacity of **<450 L** unless the specification has been approved by EPD?	☒	☐	☐	
E17b	Are the **containers** (holding, resistant to corrosion, maintained in a good condition, and securely closed) used for **storage of chemical wastes**?	☒	☐	☐	
Chemical Labelling					
E18	Is chemical waste or waste oil **stored** and **labelled** in **English and Chinese** properly in designated area? 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)?	☒	☐	☐	N/O
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**?	☒	☐	☐	N/O
E19c	Do the **storage areas** have adequate **ventilation** and be covered to prevent rainfall entering and reduce heat from sunlight?	☒	☐	☐	N/O
E19d	Are the **fuel tanks** and **chemical storage areas** provided with locks and sited on sealed areas?	☒	☐	☐	N/O
E20	Is chemical waste collected by **licensed waste collectors** and disposed of at **licensed facility** eg. Chemical Waste Treatment Centre?	☐	☒	☐	

Records					
E21	Is a licensed waste hauler used for **waste collection**?	☐	☒	☐	
E22	Are the **records of quantities of wastes** generated, recycled and disposed properly kept?	☐	☒	☐	
E23	For the demolition material / waste, is the **number of loads** for each day recorded as appropriate?	☐	☒	☐	

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)?	☒	☐	☐	N/O
F2	Are **prominent safety warning signs** erected on-site to alert all personnel and visitors of LFG hazards during excavation works.?	☐	☒	☐	
F3	Is **no smoking** or **burning** permitted on-site?	☒	☐	☐	N/O
F4	Are prominent **'No smoking'** and **'No Naked Flames' signs** erected on-site?	☒	☐	☐	N/O
F5	Is no worker allowed to **work alone** at any time in excavated trenches or confined areas on-site?	☐	☒	☐	
F6	Is adequate **fire fighting equipment** provided on-site?	☐	☒	☐	
F7	Are **construction equipment** equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors?	☐	☒	☐	
F8	Are **electrical motors** and **extension cords** explosion-proof and intrinsically safe for use on-site?	☒	☐	☐	N/O
F9	Is **'Permit to Work'** system implemented?	☐	☒	☐	
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?	☐	☒	☐	
F11a	For **piping assembly or conduit construction**, are all valves and seals closed immediately after installation?	☒	☐	☐	N/A
F11b	Are the **pipe ends** sealed on one side during installation if installation of large diameter pipes (diameter > 600mm) is required?	☒	☐	☐	N/A
F11c	Is **forced ventilation** implemented prior to **operation of installed pipeline**?	☒	☐	☐	N/A
F11d	Is **forced ventilation** implemented for **works inside trenches deeper than 1m**?	☒	☐	☐	N/A
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.				
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?	☐	☒	☐	
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.	☐	☒	☐	
F15a	Are **LFG precautionary measures** involved in **excavation** and **piping works** provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase?	☐	☒	☐	
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?	☐	☒	☐	
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%	☐	☒	☐	
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.	☐	☒	☐	
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	☐	☒	☐	
F17c	Are all measurements in excavations made with monitoring tube located < 10mm from exposed ground surface?	☐	☒	☐	
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	☐	☒	☐	

	• Periodically throughout the working day whilst workers are in excavation.				
F19	For excavations 300mm to 1m, are measurements conducted? • Directly after excavation has been completed; and • Periodic all whilst excavation remains open.	☐	☒	☐	
F20	For excavations < 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	☐	☒	☐	

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

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?	☐	☒	☐	

I	**Environmental Complaint**	**N/A or Not Observed**	**Yes**	**No**	**Remarks / Photo**
I1	Environmental Complaint received during this week?	☐	☐	☒	

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	☐	☒	☐	
J2	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	☐	☒	☐	

Follow up action for previous Site Inspection:

1. The unrooting trees at Portion A was removed by contractor.
2. The sand and soil near the channel at Portion E3-1 was removed by contractor.
3. The entrance / exit at Portion B2 was cleaned by contractor.

Observation(s):

1. The stagnant water and silt in the drip trays shall be clear off in Portion B2 and SBA.
2. Watering shall be scheduled in Portion A under hot weather.

Reminder(s):

1. The Contractor has been reminded to ensure channel and silt removal facilities shall be functioning properly for the upcoming rainfall.

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

1. The Contractor has been reminded to clear drip trays.
2. The Contractor has been reminded to schedule watering in Portion A.
3. Silt removal facility and channel shall be maintained properly.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Andy Ng	/	V C LAU	Sylvia Ho
Date:	12 Jun 2023	/	12 Jun 2023	12 Jun 2023

PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
03 April 2023  The exposed slope surface near the stream has been covered with impervious sheets as a temporary mitigation measure. Shotcrete will be applied to the exposed surface by the end of April to prevent surface runoff into channel in long term.	 The slope protection in Portion E3-1 is conducting in progress by contractor to minimize the high suspended solid surface runoff to treat by silt removal facilities & avoid it directly discharged to channel.
2 May 2023   Water in the drip tray shall be cleared off at Portion A.	Waiting for Contractor's Input

Observation and Recommendation	**Follow-up status**
8 May 2023  The Contractor has been reminded to cover the waste skip with impervious sheets during rainfall, to avoid accumulation of waste and to implement waste sorting.	Waiting for Contractor's Input
22 May 2023  The unrooting trees at Portion A was not covered by impervious sheeting and or placed in an area sheltered on the top and the 3 sides within a day of demolition.	 The unrooting trees at Portion A was removed by contractor.

Observation and Recommendation	Follow-up status
22 May 2023  Observation: The sand and soil near the channel at Portion E3-1 were found. The contractor was recommended to avoid the untreated surface runoff contaminated with related materials discharged to channel directly. All construction runoffs should be collected to silt removal facilities for treatment.	 The sand and soil near the channel at Portion E3-1 was removed by contractor.

Observation and Recommendation	Follow-up status
29 May 2023 Portion B2   Portion A  Observation: Portion of road leading to Portion A and Portion B2 shall be kept clear of dusty and muddy materials.	Portion B2  The entrance / exit at Portion B2 was cleaned by contractor. Portion A Waiting for Contractor's Input

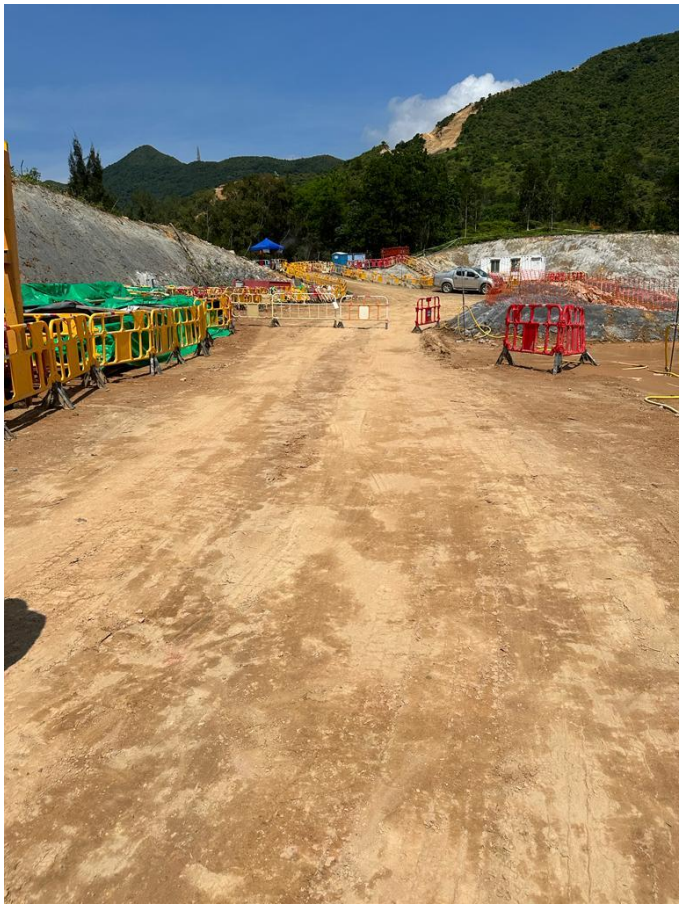
Observation and Recommendation	Follow-up status
29 May 2023  Observation: Slope protection work in Portion A shall be maintained properly to minimize dust dispersion and surface runoff.	Waiting for Contractor's Input
29 May 2023  Observation: The accumulated uprooting trees was found behind the wetsep in Portion B2.	Waiting for Contractor's Input

5 June 2023   Observation: The accumulate water was found the drip tray at Portion D. The contractor has been recommended that the accumulate water in drip tray should be cleared regularly and after rainy to minimize the potential chemical waste.	Waiting for Contractor's Input

5 June 2023  Reminder: The contractor has been reminded that the particular attention should be paid to the control of silty surface runoff during storm event in accordance with Appendix A2 of ProPECC PN 1/94.	Waiting for Contractor's Input

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
SBA  Portion E3-1   1. The stagnant water and silt in the drip trays shall be clear off in Portion B2 and SBA.	



2. Watering shall be scheduled in Portion A under hot weather.

Portion E3-1

SBA

Portion B2

3. The Contractor has been reminded to ensure channel and silt removal facilities shall be functioning properly for the upcoming rainfall.

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

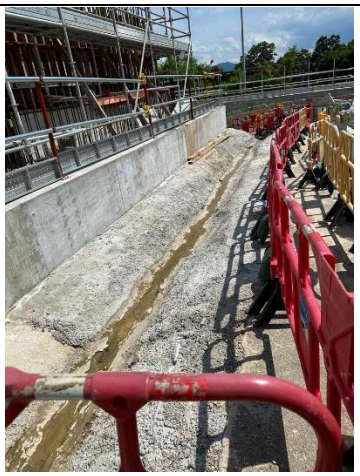
Photo 1 Silt Removal Facility in Portion B2	Photo 2 Portion B1 Existing channel
	
Photo 3 Portion B1 Drainage system with silt fence at stockpile area	Photo 4 Portion D
	
Photo 5 Silt removal facility for Portion D	Photo 6 Portion D
	

Photo 7 Portion A	Photo 8 Portion A
	

Inspection Date:	19 June 2023	Inspected By:	Daisy Au Yeung
Time:	14:00	Weather Condition:	Sunny
Participants:	Sylvia Ho (ER), V.C. Lau (Contractor), Kristy Wong (Contractor), Daisy Au Yeung (ET) and 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?	☐	☒	☐	
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	☐	☒	☐	
A3	Is wastewater discharge licence available for inspection?	☐	☒	☐	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	☐	☒	☐	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	☐	☒	☐	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is **open burning** avoided?	☐	☒	☐	
B2	Are **plant and equipment** well maintained (i.e. without black smoke from powered plant)?	☐	☒	☐	
B3	Any remedial action undertaken?	☒	☐	☐	N/A
B4	Are the **worksites** wetted with water regularly?	☐	☒	☐	
B5	Are **NRMM labels** properly affixed on the PMEs?	☐	☒	☐	
B6	Observed dust source(s)				
		☐ Wind erosion			
		☒ Vehicle/ Equipment Movements			
		☒ Loading/ unloading of materials			
		☐ 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?	☒	☐	☐	N/A
Construction of the superstructure of a building					
B8	Is **scaffolding** erected around the perimeter of a building under construction?	☒	☐	☐	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?	☒	☐	☐	N/A
B10	Is the **skip** for materials transport enclosed by **impervious sheeting**?	☒	☐	☐	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?	☐	☒	☐	
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?	☐	☒	☐	
B13	Are the **hoarding** ≥ 2.4m tall provided at the site boundary near a road, street, service lane or other area accessible to the public?	☐	☒	☐	
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, hardcorres or metal plates, and kept clear of dusty materials?	☐	☒	☐	
B15	Are every **main haul road** sprayed with water or a dust suppression chemical?	☐	☒	☐	
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?	☐	☒	☐	
B17	Are appropriate **speed limit sign** displayed?	☐	☒	☐	
B18	Is **unpaved main haul road** wet by water spraying?	☐	☐	☐	
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?	☒	☐	☐	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?	☒	☐	☐	N/A
B21	Is any vent or exhaust fitted with an **effective fabric filter or equipment air pollution control system**?	☒	☐	☐	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?	☐	☒	☐	

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**?	☐	☒	☐	
B24	Is the stockpile of dusty materials avoid to be extend beyond the **pedestrian barriers, fencing or traffic cones**?	☐	☒	☐	
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?	☐	☒	☐	
B26	Are **all trucks loaded** to a level within the side and tail boards?	☐	☒	☐	
Use of vehicles					
B27	Are **every vehicle washed Immediately** to remove any dusty materials from its body and wheels before leaving a construction site?	☐	☒	☐	
B28	Are **loaded dump trucks** covered by impervious sheeting appropriately before leaving the site?	☐	☒	☐	
B29	Are site **vehicle movements** confined to designated roads?	☐	☒	☐	
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.	☒	☐	☐	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?	☒	☐	☐	N/A
B32	Are every **debris chute** shall be enclosed by impervious sheeting or similar materials?	☒	☐	☐	N/A
B33	Are the watering spray or a dust suppression chemical conducted before **debris is dumped** into a debris chute?	☒	☐	☐	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?	☐	☒	☐	
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?	☐	☒	☐	
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?	☐	☒	☐	

C	Construction Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is **well-maintained plant** operated on-site and plant served regularly?	☐	☒	☐	
C2	Are **vehicles** and **equipment** switched off or throttled down while not in use?	☐	☒	☐	
C3	Is the noise directed away from nearby **NSRs**?	☐	☒	☐	
C4	Are the **silencers** or **mufflers** properly fitted on construction equipment and maintained regularly?	☒	☐	☐	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?	☐	☒	☐	
C6	Are **material stockpiles**, **mobile container officer** and **other structures** utilised to screen noisy activates?	☐	☒	☐	
C7	Is **temporary hoarding** installed located on the site boundaries between noisy construction activities and NSRs?	☒	☐	☐	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?	☒	☐	☐	N/O
C9	Is the sequencing **operation** of **construction plants** where practicable?	☐	☒	☐	
C10	Is the **hoarding** maintained properly?	☐	☒	☐	
C11	**Air compressors** (500 kPa or above) and **hand held percussive breaker** (mass of above 10 kg) with valid noise labels?	☐	☒	☐	
C12	Are **compressor** operated with doors closed?	☐	☒	☐	
C13	**QPME** used with valid noise labels?	☐	☒	☐	
C14	Major noise source(s)				
		☒ Traffic			
		☒ Construction activities inside of site			
		☐ Construction activities outside of site			
		☐ 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?	☐	☒	☐	
D1b	Are **channels**, **earth bunds** or **sandbag barriers** provided on site to properly direct stormwater to silt removal facilities?	☐	☐	☒	Refer to Reminder 2
D2a	Have **dikes** or **embankments** for **flood protection** implemented around the boundaries of earthwork areas?	☐	☒	☐	
D2b	Have **temporary ditches** provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	☐	☒	☐	
D2c	Are the **sediment/ silt traps** incorporated in the permanent drainage channels to enhance deposition rate?	☐	☒	☐	
D3	Are the **retention time for silt/s and traps** of the silt removal facilities be **5 minutes** under maximum flow conditions?	☐	☒	☐	
D4a	Are **surface excavation works** minimised during rainy seasons (April to September), as possible?	☐	☒	☐	
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?	☐	☒	☐	
D4c	Are **exposed slope surfaces** covered by tarpaulin sheets?	☐	☒	☐	To be treated with shotcrete at part of slope surface.
D5a	Have the **overall slope** of the site should be kept a minimum?	☐	☒	☐	
D5b	Are **all trafficked areas** and **access roads** protected by coarse stone ballast?	☐	☒	☐	
D6a	Are **all drainage facilities** and **erosion** and **sediment control structures** inspected regularly?	☐	☒	☐	
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?	☐	☒	☐	
D6c	Is the **deposited silt** and **grit** removed regularly and disposed of by spreading evenly over stable?	☐	☒	☐	
D7a	Have the **excavation** of **trenches** in wet periods be dug and backfilled in short sections?	☐	☒	☐	
D7b	Is rainwater pumped out from **trenches** discharged into storm drains via silt system?	☐	☒	☐	
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?	☐	☒	☐	
D9a	Are **manholes** adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	☐	☒	☐	

D9b	Are the **discharges** of **surface run-off** into foul sewer always prevented?	☐	☒	☐	
D10a	Are particular attention paid to the control of **silty surface runoff** during **storm event**?	☐	☐	☒	Refer to Reminder 1
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 facilitie**s, **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.	☐	☐	☒	Refer to Reminder 1
D10c	Are the actions to be taken when a **rainstorm** is **imminent** or **forecas**t? (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.	☐	☐	☒	Refer to Reminder 1
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.	☐	☐	☒	Refer to Reminder 1
D11a	Are **all vehicles** and **plant** cleaned before leaving a construction site?	☐	☒	☐	
D11b	Is the **wheel washing bay** provided at every site exit?	☐	☒	☐	
D11c	Are the **vehicle wash-water** have sand and silt settled out and removed at least on a weekly basis?	☐	☒	☐	
D11d	Is the **wheel wash** overflow directed to silt removal facilities before being discharged to the storm drain?	☐	☒	☐	
D11e	Is the section of **construction road between the wheel washing bay and the public road** paved with backfill?	☐	☒	☐	
D11f	Is the treated wastewater reused for **vehicle washing**, **dust suppression** and **general cleaning**?	☐	☒	☐	
D12a	Are **oil interceptors** provided in the site drainage system downstream of any oil/ fuel pollution sources?	☒	☐	☐	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?	☒	☐	☐	N/A

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

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?	☐	☒	☐	
E2a	Is the general waste collected properly by using the **waste separation facilities** for paper, aluminium cans, plastic bottles etc.?	☐	☒	☐	
E2b	Does **accumulation** of **waste** avoid?	☐	☒	☐	
E2c	Is **waste disposed** regularly?	☐	☒	☐	
E2d	Regular **waste collection** by approved waste collector in purpose-built vehicles?	☐	☒	☐	
E3	**Burning of refuse** on construction site prohibited?	☐	☒	☐	
C&D Materials					
E4a	Are there any **contract documents** provided to allow and promote the **use of recycled aggregates** where appropriate?	☐	☒	☐	
E4b	Are the **C&D materials** sorted and recycled on-site?	☐	☒	☐	
E5a	Is the **durable formwork** or **plastic facing** for construction works used?	☐	☒	☐	
E5b	Do the **wooden hoardings** avoid to be used?	☐	☒	☐	
E5c	Is **metal hoarding** used to enhance the possibility of recycling?	☐	☒	☐	
E6a	Are the concrete and masonry used as **general fill**?	☐	☒	☐	
E6b	Are the **steel reinforcement bars** used by scrap steel mills?	☐	☒	☐	
E6c	Is the **segregation** and **storage** of C&D wastes undertaken in designated area?	☐	☒	☐	
E6d	Does the **use of reusable steel formwork** maximise?	☐	☒	☐	
E7a	Are the **temporary stockpiles** maintained regularly?	☐	☒	☐	
E7b	Is the **excavated fill material** reused for backfilling and reinstatement?	☐	☒	☐	
E8a	Are the **excavated slope**, **stockpile material** and **bund walls** covered by tarpaulin?	☐	☒	☐	
E8b	Are covering trucks or transporting wastes in enclosed containers when **transportation of waste**?	☐	☒	☐	
E8c	Are **waste storage area** properly cleaned and do not cause windblown litter and dust nuisance?	☐	☒	☐	
E9	Is **hydroseeding** of the topsoil on the **stockpile** implemented to improve visual appearance and prevent soil erosion?	☐	☒	☐	
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?	☐	☒	☐	

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?	☐	☒	☐	
E12	Are the **regular cleaning** and **maintenance programme** for drainage systems, sumps, oil interceptors?	☐	☒	☐	
E13a	Are **wood**, **steel** and **other metals** separated for re-use and/or recycling?	☐	☒	☐	
E13b	Do the **excavated materials** appear contaminated?	☐	☐	☒	
E13c	If suspected contaminated, appropriate **procedures** followed?	☒	☐	☐	N/A
E14	Is the **disposal** of **C&D materials** avoided onto any sensitive locations e.g. agricultural lands etc.?	☐	☒	☐	
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?	☐	☒	☐	
Chemical Waste / Waste Oil					
E16	Are **chemicals** and **waste oil** recycled or disposed properly?	☐	☒	☐	
Chemical Packaging					
E17a	Have the **containers** a capacity of **<450 L** unless the specification has been approved by EPD?	☒	☐	☐	
E17b	Are the **containers** (holding, resistant to corrosion, maintained in a good condition, and securely closed) used for **storage of chemical wastes**?	☒	☐	☐	
Chemical Labelling					
E18	Is chemical waste or waste oil **stored** and **labelled** in **English and Chinese** properly in designated area? 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)?	☒	☐	☐	N/O
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**?	☒	☐	☐	N/O
E19c	Do the **storage areas** have adequate **ventilation** and be covered to prevent rainfall entering and reduce heat from sunlight?	☒	☐	☐	N/O
E19d	Are the **fuel tanks** and **chemical storage areas** provided with locks and sited on sealed areas?	☒	☐	☐	N/O
E20	Is chemical waste collected by **licensed waste collectors** and disposed of at **licensed facility** eg. Chemical Waste Treatment Centre?	☐	☒	☐	

Records					
E21	Is a licensed waste hauler used for **waste collection**?	☐	☒	☐	
E22	Are the **records of quantities of wastes** generated, recycled and disposed properly kept?	☐	☒	☐	
E23	For the demolition material / waste, is the **number of loads** for each day recorded as appropriate?	☐	☒	☐	

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)?	☒	☐	☐	N/O
F2	Are **prominent safety warning signs** erected on-site to alert all personnel and visitors of LFG hazards during excavation works.?	☐	☒	☐	
F3	Is **no smoking** or **burning** permitted on-site?	☒	☐	☐	N/O
F4	Are prominent **'No smoking'** and **'No Naked Flames' signs** erected on-site?	☒	☐	☐	N/O
F5	Is no worker allowed to **work alone** at any time in excavated trenches or confined areas on-site?	☐	☒	☐	
F6	Is adequate **fire fighting equipment** provided on-site?	☐	☒	☐	
F7	Are **construction equipment** equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors?	☐	☒	☐	
F8	Are **electrical motors** and **extension cords** explosion-proof and intrinsically safe for use on-site?	☒	☐	☐	N/O
F9	Is **'Permit to Work'** system implemented?	☐	☒	☐	
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?	☐	☒	☐	
F11a	For **piping assembly or conduit construction**, are all valves and seals closed immediately after installation?	☒	☐	☐	N/A
F11b	Are the **pipe ends** sealed on one side during installation if installation of large diameter pipes (diameter > 600mm) is required?	☒	☐	☐	N/A
F11c	Is **forced ventilation** implemented prior to **operation of installed pipeline**?	☒	☐	☐	N/A
F11d	Is **forced ventilation** implemented for **works inside trenches deeper than 1m**?	☒	☐	☐	N/A
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.				
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?	☐	☒	☐	
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.	☐	☒	☐	
F15a	Are **LFG precautionary measures** involved in **excavation** and **piping works** provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase?	☐	☒	☐	
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?	☐	☒	☐	
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%	☐	☒	☐	
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.	☐	☒	☐	
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	☐	☒	☐	
F17c	Are all measurements in excavations made with monitoring tube located < 10mm from exposed ground surface?	☐	☒	☐	
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	☐	☒	☐	

	• Periodically throughout the working day whilst workers are in excavation.				
F19	For excavations 300mm to 1m, are measurements conducted? • Directly after excavation has been completed; and • Periodic all whilst excavation remains open.	☐	☒	☐	
F20	For excavations < 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	☐	☒	☐	

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

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?	☐	☒	☐	

I	**Environmental Complaint**	**N/A or Not Observed**	**Yes**	**No**	**Remarks / Photo**
I1	Environmental Complaint received during this week?	☐	☐	☒	

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	☐	☒	☐	
J2	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	☐	☒	☐	

Follow up action for previous Site Inspection:

1. The unrooting trees at Portion A was removed by contractor.
2. The sand and soil near the channel at Portion E3-1 was removed by contractor.
3. The entrance / exit at Portion B2 was cleaned by contractor.

Observation(s):

Nill

Reminder(s):

1. The Contractor has been reminded to ensure silt removal facilities shall be functioning properly for the upcoming rainfall.
2. The bunding along the slope edge shall be properly maintained to prevent surface runoff during heavy rainfall at Portion A.

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

1. Silt removal facility shall be functioning properly to ensure sufficient treatment for all wastewater before discharging to comply with WPCO.
2. Earth bund in Portion A shall be properly maintained.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:				
Name:	Daisy Au Yeung	Echo Hung	Kristy Wong	Sylvia Ho
Date:	19 Jun 2023	19 Jun 2023	19 Jun 2023	19 Jun 2023

PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
03 April 2023  The exposed slope surface near the stream has been covered with impervious sheets as a temporary mitigation measure. Shotcrete will be applied to the exposed surface by the end of April to prevent surface runoff into channel in long term.	 The slope protection in Portion E3-1 is conducting in progress by contractor to minimize the high suspended solid surface runoff to treat by silt removal facilities & avoid it directly discharged to channel.
2 May 2023   Water in the drip tray shall be cleared off at Portion A.	Waiting for Contractor's Input

Observation and Recommendation	**Follow-up status**
8 May 2023  The Contractor has been reminded to cover the waste skip with impervious sheets during rainfall, to avoid accumulation of waste and to implement waste sorting.	 Waste Skip was removed in SBA.

Observation and Recommendation	Follow-up status
22 May 2023  Observation: The sand and soil near the channel at Portion E3-1 were found. The contractor was recommended to avoid the untreated surface runoff contaminated with related materials discharged to channel directly. All construction runoffs should be collected to silt removal facilities for treatment.	 The sand and soil near the channel at Portion E3-1 was removed by contractor.

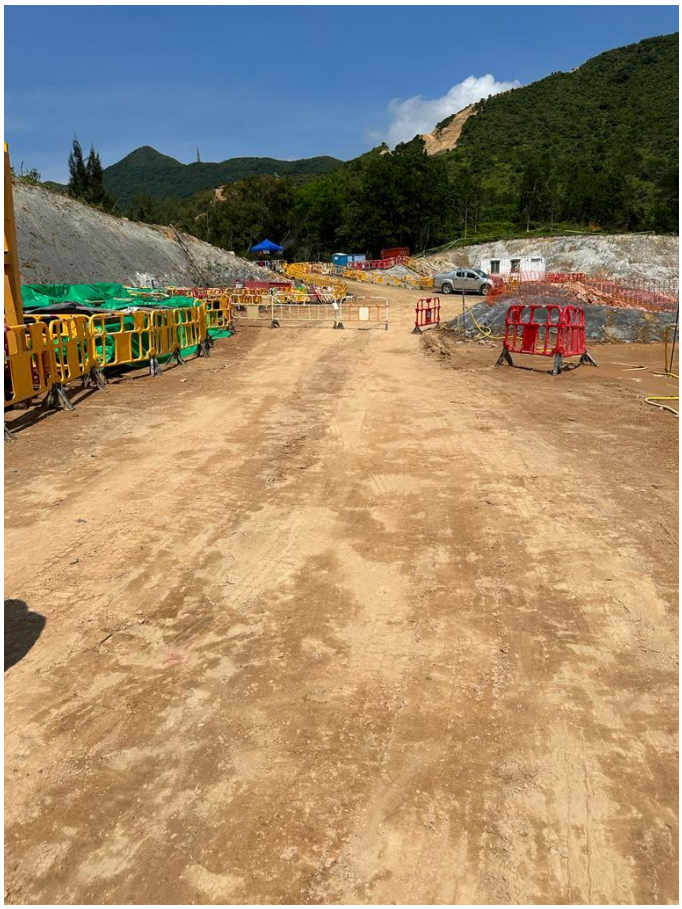
Observation and Recommendation	Follow-up status
29 May 2023 Portion B2   Portion A  Observation: Portion of road leading to Portion A and Portion B2 shall be kept clear of dusty and muddy materials.	Portion B2  The entrance / exit at Portion B2 was cleaned by contractor. Portion A Waiting for Contractor's Input

Observation and Recommendation	**Follow-up status**
29 May 2023  Observation: Slope protection work in Portion A shall be maintained properly to minimize dust dispersion and surface runoff.	 Slope surface has paved to minimize dust dispersion and surface runoff.
29 May 2023  Observation: The accumulated uprooting trees was found behind the wetsep in Portion B2.	Waiting for Contractor's Input

5 June 2023   Observation: The accumulate water was found the drip tray at Portion D. The contractor has been recommended that the accumulate water in drip tray should be cleared regularly and after rainy to minimize the potential chemical waste.	Waiting for Contractor's Input

5 June 2023  Reminder: The contractor has been reminded that the particular attention should be paid to the control of silty surface runoff during storm event in accordance with Appendix A2 of ProPECC PN 1/94.	Waiting for Contractor's Input

5 June 2023 SBA  Portion E3-1   Observation: The stagnant water and silt in the drip trays shall be clear off in Portion B2 and SBA.	Waiting for Contractor's Input

12 June 2023  Observation: Watering shall be scheduled in Portion A under hot weather.	Waiting for Contractor's Input

12 June 2023 Portion E3-1  SBA  Portion B2  1. The Contractor has been reminded to ensure channel and silt removal facilities shall be functioning properly for the upcoming rainfall.	Waiting for Contractor's Input

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
 	
 2. The bunding along the slope edge shall be properly maintained to prevent surface runoff during heavy rainfall at Portion A.	

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

Portion A Earth bund	Portion A Slope protection
	
Portion E3 Sedimentation Basin and Slope Protection	SBA Silt Fencing
	

Inspection Date:	26 June 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?	☐	☒	☐	
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	☐	☒	☐	
A3	Is wastewater discharge licence available for inspection?	☐	☒	☐	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	☐	☒	☐	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	☐	☒	☐	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is **open burning** avoided?	☐	☒	☐	
B2	Are **plant and equipment** well maintained (i.e. without black smoke from powered plant)?	☐	☒	☐	
B3	Any remedial action undertaken?	☒	☐	☐	N/A
B4	Are the **worksites** wetted with water regularly?	☐	☒	☐	
B5	Are **NRMM labels** properly affixed on the PMEs?	☐	☒	☐	
B6	Observed dust source(s)				
		☐ Wind erosion			
		☒ Vehicle/ Equipment Movements			
		☐ Loading/ unloading of materials			
		☐ 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?	☒	☐	☐	N/A
Construction of the superstructure of a building					
B8	Is **scaffolding** erected around the perimeter of a building under construction?	☒	☐	☐	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?	☒	☐	☐	N/A
B10	Is the **skip** for materials transport enclosed by **impervious sheeting**?	☒	☐	☐	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?	☐	☒	☐	
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?	☐	☒	☐	
B13	Are the **hoarding** ≥ 2.4m tall provided at the site boundary near a road, street, service lane or other area accessible to the public?	☐	☒	☐	
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, hardcorres or metal plates, and kept clear of dusty materials?	☐	☒	☐	
B15	Are every **main haul road** sprayed with water or a dust suppression chemical?	☐	☒	☐	
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?	☐	☒	☐	
B17	Are appropriate **speed limit sign** displayed?	☐	☒	☐	
B18	Is **unpaved main haul road** wet by water spraying?	☐	☐	☒	Refer to Reminder 1
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?	☒	☐	☐	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?	☒	☐	☐	N/A
B21	Is any vent or exhaust fitted with an **effective fabric filter or equipment air pollution control system**?	☒	☐	☐	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?	☐	☒	☐	

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**?	☐	☒	☐	
B24	Is the stockpile of dusty materials avoid to be extend beyond the **pedestrian barriers, fencing or traffic cones**?	☐	☒	☐	
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?	☐	☒	☐	
B26	Are **all trucks loaded** to a level within the side and tail boards?	☐	☒	☐	
Use of vehicles					
B27	Are **every vehicle washed Immediately** to remove any dusty materials from its body and wheels before leaving a construction site?	☐	☒	☐	
B28	Are **loaded dump trucks** covered by impervious sheeting appropriately before leaving the site?	☐	☒	☐	
B29	Are site **vehicle movements** confined to designated roads?	☐	☒	☐	
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.	☒	☐	☐	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?	☒	☐	☐	N/A
B32	Are every **debris chute** shall be enclosed by impervious sheeting or similar materials?	☒	☐	☐	N/A
B33	Are the watering spray or a dust suppression chemical conducted before **debris is dumped** into a debris chute?	☒	☐	☐	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?	☐	☒	☐	
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?	☐	☒	☐	
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?	☐	☒	☐	

C	Construction Noise	N/A or Not Observed	Yes	No	Remarks / Photo
C1	Is **well-maintained plant** operated on-site and plant served regularly?	☐	☒	☐	
C2	Are **vehicles** and **equipment** switched off or throttled down while not in use?	☐	☒	☐	
C3	Is the noise directed away from nearby **NSRs**?	☐	☒	☐	
C4	Are the **silencers** or **mufflers** properly fitted on construction equipment and maintained regularly?	☒	☐	☐	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?	☐	☒	☐	
C6	Are **material stockpiles**, **mobile container officer** and **other structures** utilised to screen noisy activates?	☐	☒	☐	
C7	Is **temporary hoarding** installed located on the site boundaries between noisy construction activities and NSRs?	☒	☐	☐	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?	☒	☐	☐	N/O
C9	Is the sequencing **operation** of **construction plants** where practicable?	☐	☒	☐	
C10	Is the **hoarding** maintained properly?	☐	☒	☐	
C11	**Air compressors** (500 kPa or above) and **hand held percussive breaker** (mass of above 10 kg) with valid noise labels?	☐	☒	☐	
C12	Are **compressor** operated with doors closed?	☐	☒	☐	
C13	**QPME** used with valid noise labels?	☐	☒	☐	
C14	Major noise source(s)				
		☒ Traffic			
		☒ Construction activities inside of site			
		☐ Construction activities outside of site			
		☐ 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?	☐	☒	☐	
D1b	Are **channels**, **earth bunds** or **sandbag barriers** provided on site to properly direct stormwater to silt removal facilities?	☐	☒	☐	
D2a	Have **dikes** or **embankments** for **flood protection** implemented around the boundaries of earthwork areas?	☐	☒	☐	
D2b	Have **temporary ditches** provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	☐	☒	☐	
D2c	Are the **sediment/ silt traps** incorporated in the permanent drainage channels to enhance deposition rate?	☐	☒	☐	
D3	Are the **retention time for silt/s and traps** of the silt removal facilities be **5 minutes** under maximum flow conditions?	☐	☒	☐	
D4a	Are **surface excavation works** minimised during rainy seasons (April to September), as possible?	☐	☒	☐	
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?	☐	☒	☐	
D4c	Are **exposed slope surfaces** covered by tarpaulin sheets?	☐	☒	☐	To be treated with shotcrete at part of slope surface.
D5a	Have the **overall slope** of the site should be kept a minimum?	☐	☒	☐	
D5b	Are **all trafficked areas** and **access roads** protected by coarse stone ballast?	☐	☒	☐	
D6a	Are **all drainage facilities** and **erosion** and **sediment control structures** inspected regularly?	☐	☒	☐	
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?	☐	☒	☐	
D6c	Is the **deposited silt** and **grit** removed regularly and disposed of by spreading evenly over stable?	☐	☐	☒	Refer to Observation 1
D7a	Have the **excavation** of **trenches** in wet periods be dug and backfilled in short sections?	☐	☒	☐	
D7b	Is rainwater pumped out from **trenches** discharged into storm drains via silt system?	☐	☒	☐	
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?	☐	☒	☐	
D9a	Are **manholes** adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	☐	☒	☐	

D9b	Are the **discharges** of **surface run-off** into foul sewer always prevented?	☐	☒	☐	
D10a	Are particular attention paid to the control of **silty surface runoff** during **storm event**?	☐	☒	☐	
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 facilitie**s, **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.	☐	☒	☐	
D10c	Are the actions to be taken when a **rainstorm** is **imminent** or **forecas**t? (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.	☐	☒	☐	
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.	☐	☒	☐	
D11a	Are **all vehicles** and **plant** cleaned before leaving a construction site?	☐	☒	☐	
D11b	Is the **wheel washing bay** provided at every site exit?	☐	☒	☐	
D11c	Are the **vehicle wash-water** have sand and silt settled out and removed at least on a weekly basis?	☐	☒	☐	
D11d	Is the **wheel wash** overflow directed to silt removal facilities before being discharged to the storm drain?	☐	☒	☐	
D11e	Is the section of **construction road between the wheel washing bay and the public road** paved with backfill?	☐	☒	☐	
D11f	Is the treated wastewater reused for **vehicle washing**, **dust suppression** and **general cleaning**?	☐	☒	☐	
D12a	Are **oil interceptors** provided in the site drainage system downstream of any oil/ fuel pollution sources?	☒	☐	☐	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?	☒	☐	☐	N/A

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

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?	☐	☒	☐	
E2a	Is the general waste collected properly by using the **waste separation facilities** for paper, aluminium cans, plastic bottles etc.?	☐	☒	☐	
E2b	Does **accumulation** of **waste** avoid?	☐	☒	☐	
E2c	Is **waste disposed** regularly?	☐	☒	☐	
E2d	Regular **waste collection** by approved waste collector in purpose-built vehicles?	☐	☒	☐	
E3	**Burning of refuse** on construction site prohibited?	☐	☒	☐	
C&D Materials					
E4a	Are there any **contract documents** provided to allow and promote the **use of recycled aggregates** where appropriate?	☐	☒	☐	
E4b	Are the **C&D materials** sorted and recycled on-site?	☐	☒	☐	
E5a	Is the **durable formwork** or **plastic facing** for construction works used?	☐	☒	☐	
E5b	Do the **wooden hoardings** avoid to be used?	☐	☒	☐	
E5c	Is **metal hoarding** used to enhance the possibility of recycling?	☐	☒	☐	
E6a	Are the concrete and masonry used as **general fill**?	☐	☒	☐	
E6b	Are the **steel reinforcement bars** used by scrap steel mills?	☐	☒	☐	
E6c	Is the **segregation** and **storage** of C&D wastes undertaken in designated area?	☐	☒	☐	
E6d	Does the **use of reusable steel formwork** maximise?	☐	☒	☐	
E7a	Are the **temporary stockpiles** maintained regularly?	☐	☒	☐	
E7b	Is the **excavated fill material** reused for backfilling and reinstatement?	☐	☒	☐	
E8a	Are the **excavated slope**, **stockpile material** and **bund walls** covered by tarpaulin?	☐	☒	☐	
E8b	Are covering trucks or transporting wastes in enclosed containers when **transportation of waste**?	☐	☒	☐	
E8c	Are **waste storage area** properly cleaned and do not cause windblown litter and dust nuisance?	☐	☒	☐	
E9	Is **hydroseeding** of the topsoil on the **stockpile** implemented to improve visual appearance and prevent soil erosion?	☐	☒	☐	
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?	☐	☒	☐	

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?	☐	☒	☐	
E12	Are the **regular cleaning** and **maintenance programme** for drainage systems, sumps, oil interceptors?	☐	☐	☒	Refer to Observation 1
E13a	Are **wood**, **steel** and **other metals** separated for re-use and/or recycling?	☐	☒	☐	
E13b	Do the **excavated materials** appear contaminated?	☐	☐	☒	
E13c	If suspected contaminated, appropriate **procedures** followed?	☒	☐	☐	N/A
E14	Is the **disposal** of **C&D materials** avoided onto any sensitive locations e.g. agricultural lands etc.?	☐	☒	☐	
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?	☐	☒	☐	
Chemical Waste / Waste Oil					
E16	Are **chemicals** and **waste oil** recycled or disposed properly?	☐	☒	☐	
Chemical Packaging					
E17a	Have the **containers** a capacity of **<450 L** unless the specification has been approved by EPD?	☒	☐	☐	
E17b	Are the **containers** (holding, resistant to corrosion, maintained in a good condition, and securely closed) used for **storage of chemical wastes**?	☒	☐	☐	
Chemical Labelling					
E18	Is chemical waste or waste oil **stored** and **labelled** in **English and Chinese** properly in designated area? 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)?	☒	☐	☐	N/O
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**?	☒	☐	☐	N/O
E19c	Do the **storage areas** have adequate **ventilation** and be covered to prevent rainfall entering and reduce heat from sunlight?	☒	☐	☐	N/O
E19d	Are the **fuel tanks** and **chemical storage areas** provided with locks and sited on sealed areas?	☒	☐	☐	N/O
E20	Is chemical waste collected by **licensed waste collectors** and disposed of at **licensed facility** eg. Chemical Waste Treatment Centre?	☐	☒	☐	

Records					
E21	Is a licensed waste hauler used for **waste collection**?	☐	☒	☐	
E22	Are the **records of quantities of wastes** generated, recycled and disposed properly kept?	☐	☒	☐	
E23	For the demolition material / waste, is the **number of loads** for each day recorded as appropriate?	☐	☒	☐	

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)?	☒	☐	☐	N/O
F2	Are **prominent safety warning signs** erected on-site to alert all personnel and visitors of LFG hazards during excavation works.?	☐	☒	☐	
F3	Is **no smoking** or **burning** permitted on-site?	☒	☐	☐	N/O
F4	Are prominent **'No smoking'** and **'No Naked Flames' signs** erected on-site?	☒	☐	☐	N/O
F5	Is no worker allowed to **work alone** at any time in excavated trenches or confined areas on-site?	☐	☒	☐	
F6	Is adequate **fire fighting equipment** provided on-site?	☐	☒	☐	
F7	Are **construction equipment** equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors?	☐	☒	☐	
F8	Are **electrical motors** and **extension cords** explosion-proof and intrinsically safe for use on-site?	☒	☐	☐	N/O
F9	Is **'Permit to Work'** system implemented?	☐	☒	☐	
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?	☐	☒	☐	
F11a	For **piping assembly or conduit construction**, are all valves and seals closed immediately after installation?	☒	☐	☐	N/A
F11b	Are the **pipe ends** sealed on one side during installation if installation of large diameter pipes (diameter > 600mm) is required?	☒	☐	☐	N/A
F11c	Is **forced ventilation** implemented prior to **operation of installed pipeline**?	☒	☐	☐	N/A
F11d	Is **forced ventilation** implemented for **works inside trenches deeper than 1m**?	☒	☐	☐	N/A
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.				
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?	☐	☒	☐	
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.	☐	☒	☐	
F15a	Are **LFG precautionary measures** involved in **excavation** and **piping works** provided in accordance with LFG Guidance Note and included in Safety Plan of construction phase?	☐	☒	☐	
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?	☐	☒	☐	
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%	☐	☒	☐	
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.	☐	☒	☐	
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	☐	☒	☐	
F17c	Are all measurements in excavations made with monitoring tube located < 10mm from exposed ground surface?	☐	☒	☐	
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	☐	☒	☐	

	• Periodically throughout the working day whilst workers are in excavation.				
F19	For excavations 300mm to 1m, are measurements conducted? • Directly after excavation has been completed; and • Periodic all whilst excavation remains open.	☐	☒	☐	
F20	For excavations < 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	☐	☒	☐	

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

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?	☐	☒	☐	

I	Environmental Complaint	N/A or Not Observed	Yes	No	Remarks / Photo
I1	Environmental Complaint received during this week?	☐	☐	☒	

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	☐	☒	☐	
J2	Are the portable toilets maintained in a state, which will not deter the workers from utilizing these portable toilets?	☐	☒	☐	

Follow up action for previous Site Inspection:

1. The slope protection in Portion E3-1 was implemented by the contractor to minimize the high concentration construction runoff.
2. The generator at Portion A was removed by contractor.
3. The accumulated unrooting trees behind the silt removal facility at Potion B2 were removed by the contractor.
4. The accumulate water in the drip tray at Portion D was cleaned up by the contractor.
5. The entrance / exit At Portion A was cleaned by contractor.
6. The silt removal facilities was functioning normally by the contractor.
7. The frequency of watering at the Potion A was increased by the contractor.

Observation(s):

1. 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.
2. The accumulate water at the drip tray near Portion E2 was found.

Reminder(s):

1. The unpaved assess road was dry. The contractor was reminded to increase the frequency of watering at the Portion A.

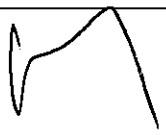
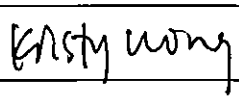
Corrective Actions – Mitigation Measures Implemented or Proposed (if any):

Observation(s):

1. The contractor was recommended that the sediment at the drainage system and site boundary, especially at the lower elevations should be kept cleaning regularly.
2. The contractor was recommended that the accumulate water at the drip tray near Portion E2 should be cleaned after the rainy to minimize the potential chemical waste.

Reminder(s):

1. The contractor was reminded to increase the frequency of watering at the unpaved assess road at the Portion A.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Jason Man	/		Sylvia Ho
Date:	26 Jun 2023	/	26 Jun 2023	26 Jun 2023

PART I Follow-up status of the previous site inspection

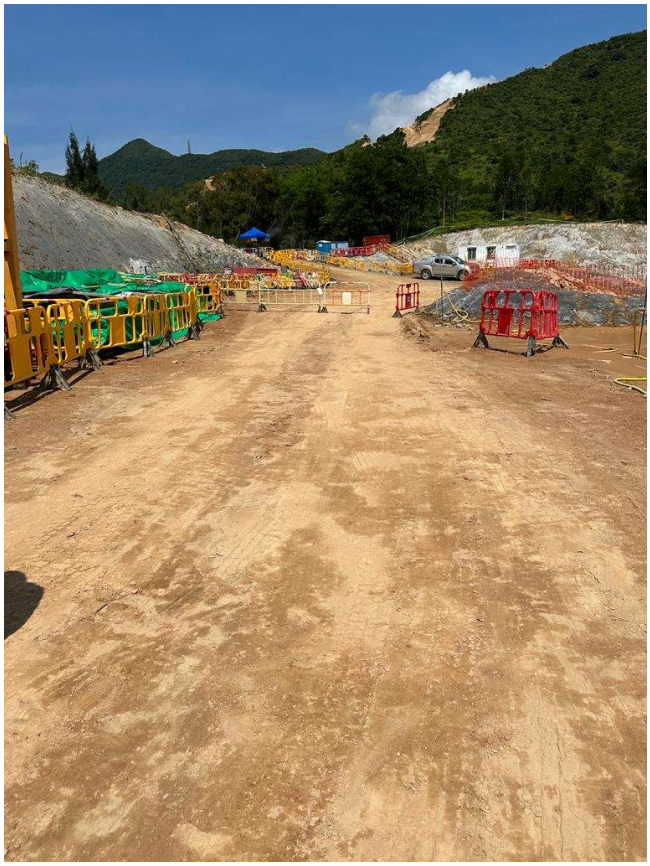
Observation and Recommendation	Follow-up status
03 April 2023  The exposed slope surface near the stream has been covered with impervious sheets as a temporary mitigation measure. Shotcrete will be applied to the exposed surface by the end of April to prevent surface runoff into channel in long term.	 The slope protection in Portion E3-1 was implemented by the contractor to minimize the high concentration construction runoff.
2 May 2023   Water in the drip tray shall be cleared off at Portion A.	 The generator at Portion A was removed by contractor.

Observation and Recommendation	Follow-up status
29 May 2023 Portion A  Observation: Portion of road leading to Portion A and Portion B2 shall be kept clear of dusty and muddy materials.	Portion A  The entrance / exit At Portion A was cleaned by contractor.
29 May 2023  Observation: The accumulated uprooting trees was found behind the wetsep in Portion B2.	 The accumulated unrooting trees behind the silt removal facility at Potion B2 were removed by the contractor.

Observation and Recommendation	**Follow-up status**
5 June 2023   Observation: The accumulate water was found the drip tray at Portion D. The contractor has been recommended that the accumulate water in drip tray should be cleared regularly and after rainy to minimize the potential chemical waste.	 The accumulate water in the drip tray at Portion D was cleaned up by the contractor.

Observation and Recommendation	Follow-up status
5 June 2023  Reminder: The contractor has been reminded that the particular attention should be paid to the control of silty surface runoff during storm event in accordance with Appendix A2 of ProPECC PN 1/94.	   The silt removal facilities was functioning normally by the contractor.

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

Observation and Recommendation	Follow-up status
12 June 2023  Observation: Watering shall be scheduled in Portion A under hot weather.	 The freqencuy of watering at the Potion A was increased by the contractor.

Observation and Recommendation	Follow-up status
12 June 2023 Portion E3-1  SBA  Portion B2  1. The Contractor has been reminded to ensure channel and silt removal facilities shall be functioning properly for the upcoming rainfall.	Waiting for Contractor's Input

Observation and Recommendation	Follow-up status
19 June 2023   Reminder: The Contractor has been reminded to ensure silt removal facilities shall be functioning properly for the upcoming rainfall.	

Observation and Recommendation	Follow-up status
19 June 2023  Reminder: 1. The bunding along the slope edge shall be properly maintained to prevent surface runoff during heavy rainfall at Portion A.	Waiting for Contractor's Input

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
  Observation: 1. 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.	

Observation and Recommendation	Follow-up status
 Observation: 2. The accumulate water at the drip tray near Portion E2 was found.	
 Reminder: 1. The accumulate water at the drip tray near Portion E2 was found. The contractor was reminded to increase the frequency of watering at the unpaved assess road at the Portion A.	

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

Temporary Drainage System at Portion D	Temporary Drainage System at Portion D
	
Temporary Drainage System at Portion D	Suitable Pump at the lower evelvation at Portion D
	
Suitable Pump at the lower evelvation at Portion D	Earth bunds at Portion A
	

Earth bunds at Portion A	Cut-off drain with silt fencing at Portion B1-2
	
Cut-off drain with silt fencing at Portion B1-2	Cut-off drain with silt fencing at Portion B1-2
	
Silt removal facilities at Portion E3-1 with slope protection	Silt removal facilities at Portion E3-1
	

Silt removal facilities at Portion E3-1	Silt removal facilities at Portion E3-1
	
Sedimentation Basins at Portion E3-1	Earth bunds with silt fencing at the site boundary of Portion A
	

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	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.	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 $\mu g/m^{-3}$ and 260 $\mu g/m^{-3}$, respectively)	✓
Construction Noise							
S4	S4.9	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.	Control construction airborne noise by means of good site practices	Contractor	Entire construction site	Noise Control Ordinance	✓
S4	S4.9	2) Select “Quiet plants” which comply with the BS 5228 Part 1 or TM standards.	Reduce the noise levels of plant items	Contractor	Entire construction site	Noise Control Ordinance & its TM Annex 5, TM-EIA	✓

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Construction Runoff							
S5.8.1	S5.2.1	Construction on Site Runoff • 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	✓

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Construction Runoff (Cont'd)							
S5.8.1	S5.2.1	• 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 m^3 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 silly 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 silly 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	✓

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Construction Runoff							
S5.8.1	S5.2.1	• 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	<u>Sewage Effluent from Workforce</u> • 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	<u>Accidental Spillage of Chemical</u> 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.	Control of chemical leakage	Contractor	Service workshop and maintenance facilities	ProPECC PN 1/94 Water Pollution Control Ordinance Waste Disposal Ordinance	✓

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Erosion Control Measures							
S5.8.2	S5.2.2	<u>Erosion Control /Measures</u> 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. 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. 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. 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.	Erosion control	Contractor	Drainage system	ProPECC PN 1/94 Water Pollution Control Ordinance	✓

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Erosion Control Measures							
S5.8.2	S5.2.2	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. f. Sod Establishes permanent turf for immediate erosion protection and stabilizes rainageways. 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. 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. 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.	Erosion control	Contractor	Drainage system	ProPECC PN 1/94 Water Pollution Control Ordinance	✓

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Surface Water Drainage System							
S5.8.2	S5.2.2	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. 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. 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. 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.	Surface Water Management/ Control run off	Contractor	Surface water system Construction	Water Pollution Control Ordinance TM-water	✓

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Waste Management							
S6	WM1	<u>C&D Materials</u> 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. 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. Appropriate waste management should be implemented in accordance with the ETWB TC(W) No. 19/2005. 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. 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. 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. 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.	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	Waste Disposal Ordinance ETWB TC(W) No. 19/2005 DEVB TC(W) No. 6/2010	✓

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S6	WM1	<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. 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. 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. Training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concepts. 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. 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.	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	Waste Disposal Ordinance ETWB TC(W) No. 19/2005 DEVB TC(W) No. 6/2010	✓
S6	WM2	<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. 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	Ensure proper disposal of chemical waste generated on-site to minimise the associated hazards on human health and environment	Contractor	Entire construction site	Waste Disposal (Chemical Waste) General Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	✓

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S6	WM2	<u>Chemical Waste (Cont'd)</u> 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. 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. Chemical waste should be collected by licensed waste collectors and disposed of at licensed facility, e.g. Chemical Waste Treatment Centre.	Ensure proper disposal of chemical waste generated on-site to minimise the associated hazards on human health and environment.	Contractor	Entire construction site	Waste Disposal (Chemical Waste) General Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	✓
S6	WM3	<u>General Refuse</u> General refuse generated on-site should be properly stored in enclosed bins or compaction units separately from construction and chemical wastes. 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 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. 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.	Minimise generation of general refuse to avoid odour, pest and visual nuisance	Contractor	Entire construction site	Waste Disposal Ordinance	✓

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S6	WM3	<u>General Refuse (Cont'd)</u> Office waste paper should recycled if the volume warrant 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	✓

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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.					✓

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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.					✓

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Within NENT Landfill Extension (Cont'd)							
S7	LFG18	For excavations deeper than 1m, measurements should be 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 • 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) F&IU (Confined Spaces) Regulations Code of Practice on Safety and Health at Work in Confined Spaces	✓
S7	LFG19	For excavations between 300mm and 1m, measurements should be conducted: • Directly after excavation has been completed; and • Periodic all whilst excavation remains open.					✓
S7	LFG20	For excavations less than 300mm, monitoring may be omitted at the discretion of Safety Officer or appropriately qualified person.					✓

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Landscape and Visual Phases							
S8	LV1	<u>Advanced screening tree planting</u> • 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> • 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> • 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> • 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.					✓

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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.					✓

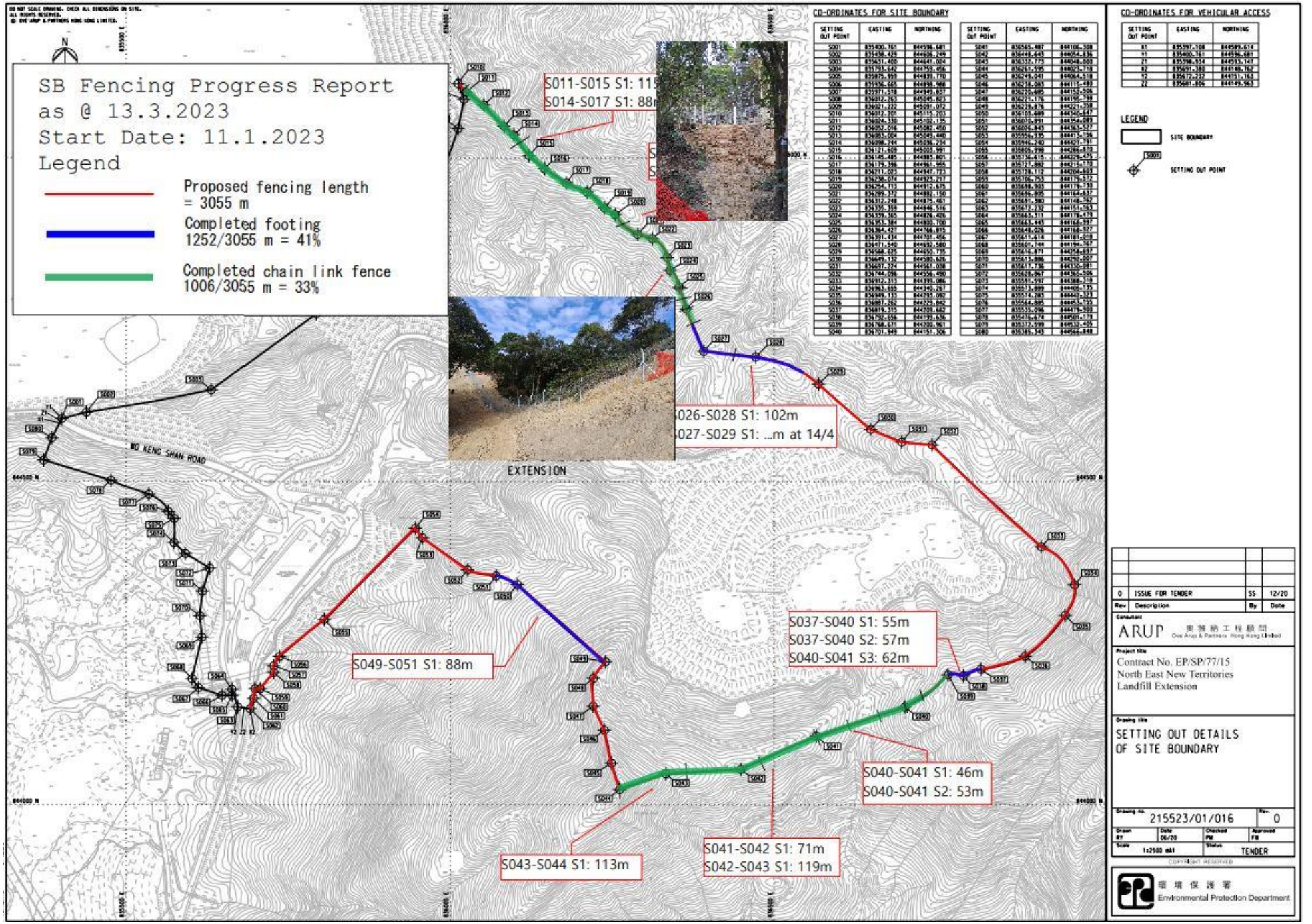
EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures 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 reposited 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	When	Where	Who	What - ENV Impacts	Mitigation Measures
Material loading and unloading, site traffic		Dec 22 to Dec 23	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		Dec 22 to Aug 23	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		Dec 22 to Aug 23	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		Dec 22 to Aug 23	Portion A, Portion B1, Portion E4	PYE	Dust	Covering of cement storage area, enclosure of mixing area
Site formation		Dec 22 to Dec 23	Portion A, Portion E3-1	PYE	Generation of C&D waste	Implementation of trip ticket system, waste recycling, internal waste transfer
Tree Felling		Dec 22 to Aug 23	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



CO-ORDINATES FOR SITE BOUNDARY

SETTING OUT POINT	EASTING	NORTHING
S001	836400.761	844596.681
S002	836438.429	844636.249
S003	836431.400	844641.004
S004	836393.642	844593.456
S005	836375.953	844571.110
S006	836336.665	844598.988
S007	836371.518	844549.837
S008	836312.263	844545.823
S009	836301.222	844501.072
S010	836312.320	844115.203
S011	836304.336	845702.135
S012	836252.096	845082.450
S013	836283.004	845049.440
S014	836298.744	845036.734
S015	836271.629	845015.991
S016	836145.485	844985.805
S017	836179.396	844961.955
S018	836211.003	844947.723
S019	836238.074	844923.217
S020	836254.113	844912.615
S021	836289.372	844882.150
S022	836312.248	844875.461
S023	836330.358	844846.516
S024	836339.363	844824.426
S025	836353.384	844800.700
S026	836364.427	844786.815
S027	836391.434	844761.456
S028	836471.540	844687.560
S029	836568.624	844693.710
S030	836649.132	844583.626
S031	836697.224	844561.018
S032	836744.096	844558.490
S033	836812.313	844539.086
S034	836963.655	844340.267
S035	836949.133	844293.092
S036	836987.262	844229.842
S037	836819.335	844208.662
S038	836792.656	844179.636
S039	836768.671	844200.961
S040	836701.949	844151.306

SETTING OUT POINT	EASTING	NORTHING
S041	836565.487	844106.358
S042	836448.643	844054.836
S043	836332.773	844048.000
S044	836251.595	844021.518
S045	836249.041	844064.518
S046	836218.263	844117.483
S047	836220.605	844152.526
S048	836221.176	844195.798
S049	836229.876	844221.838
S050	836210.689	844340.641
S051	836033.991	844354.089
S052	836006.843	844363.527
S053	835986.335	844411.708
S054	835966.740	844402.781
S055	835955.298	844386.873
S056	835936.415	844378.475
S057	835727.882	844215.030
S058	835728.172	844204.603
S059	835706.953	844176.572
S060	835688.903	844176.730
S061	835686.805	844164.637
S062	835687.380	844148.762
S063	835687.232	844141.153
S064	835663.311	844118.479
S065	835663.443	844108.997
S066	835648.026	844108.927
S067	835631.614	844101.028
S068	835620.744	844104.767
S069	835618.871	844098.697
S070	835633.896	844092.007
S071	835617.736	844110.081
S072	835623.967	844105.506
S073	835631.597	844088.118
S074	835633.809	844085.735
S075	835574.783	844042.323
S076	835564.805	844045.733
S077	835535.096	844079.702
S078	835416.674	844091.179
S079	835327.599	844052.425
S080	835385.343	844066.848

CO-ORDINATES FOR VEHICULAR ACCESS

SETTING OUT POINT	EASTING	NORTHING
X1	835397.108	844589.614
Y1	835400.161	844596.681
Z1	835398.934	844593.147
X2	835401.380	844586.762
Y2	835412.232	844591.163
Z2	835401.806	844589.963

LEGEND

SITE BOUNDARY

S001 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 RY | Date 06/20 | Checked PM | Approved FB

Scale 1:2500 @A1 | Status TENDER

環境保護署 Environmental Protection Department

Appendix N Ecological Monitoring Record

Post-translocation monitoring photo record extracted from post-translocation report (June 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. : New foliage of the transplanted individual CB-01.

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-01.

Photo B.3.3: Individual GP-02.

Photo B.3.4: Individual GP-04.

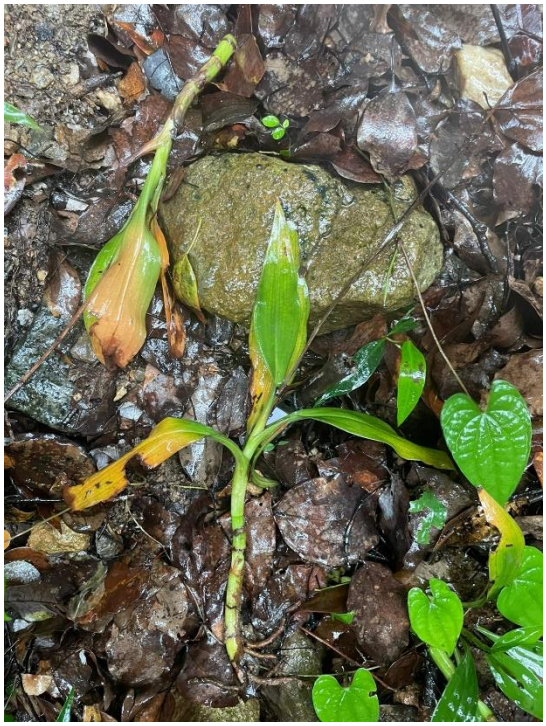


Photo B.3.5: Individual GP-05. Dead.

Photo B.3.6: Individual GP-06. Wilted flower.

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. Dead.

Photo B.3.12: Individual GP-12. Partially wilted leaf.

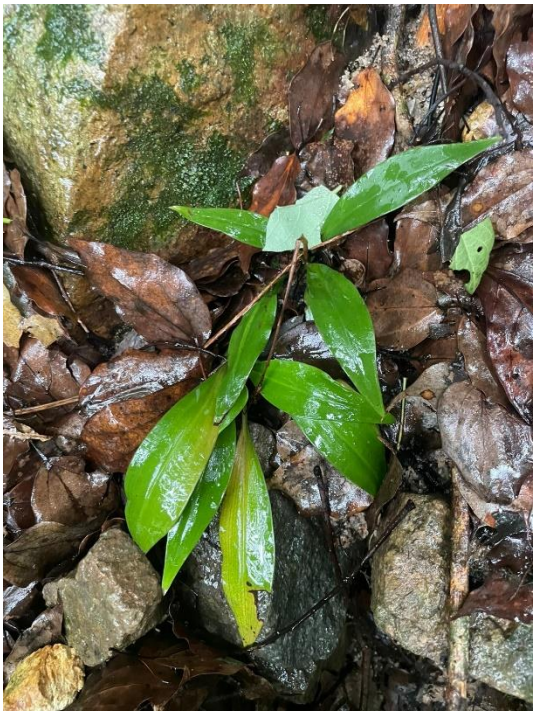


Photo B.3.13: Individual GP-13.

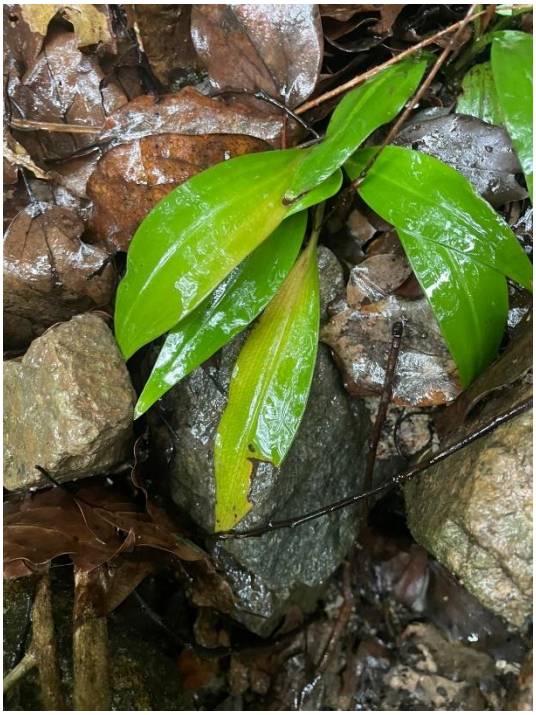


Photo B.3.14: Individual GP-13. Chlorotic leaves.

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. Dead.

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) 1st 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) 1st monitoring (24 Nov 2022) 2nd monitoring (9 Dec 2022) 3rd monitoring (21 Dec 2022) 4th monitoring (13 Jan 2023) 5th monitoring (26 Jan 2023) 6th monitoring (8 Feb 2023) 7th monitoring (24 Feb 2023) 8th monitoring (20 Mar 2023) 9th monitoring (21 Apr 2023) 10th monitoring (17 May 2023) 11th monitoring (16 Jun 2023)

FEP Condition	EP Condition	Submission / Measures	Status
2.8	2.10	Submission of Translocation Report and Post-Translocation Monitoring	Translocation was carried out in July 2022 Submission Date (27 December 2022) 1st monitoring (29 Aug 2022) 2nd monitoring (28 Sep 2022) 3rd monitoring (28 Oct 2022) 4th monitoring (28 Oct 2022) 5th monitoring (29 Dec 2022) 6th monitoring (30 Jan 2023) 7th monitoring (24 Feb 2023) 8th monitoring (20 Mar 2023) 9th monitoring (19 Apr 2023) 10th monitoring (12 May 2023) 11th monitoring (7 Jun 2023)
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

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