

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

Monthly Environmental
Monitoring and Audit Report
(No. 3) – February 2023

2023-03-13

Our Ref.: CL/91823/0299-VES
Date: 13 March 2023

By Email

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

Attn.: Mr. Alvin Kam

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

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

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

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

Dear Sir

Re: Contract No. EP/SP/77/15
North-East New Territories Landfill Extension (NENTX)
Monthly Environmental Monitoring and Audit Report (No.3) – February 2023

I refer to Conditions 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 verified the captioned "Monthly Environmental Monitoring and Audit Report (No.3) – February 2023" dated 13 March 2023.

Yours faithfully
MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD



Claudine Lee
Independent Environmental Checker

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

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



Ref: P521530-0000-REP-NN-0027

By Email

13 March 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.3) – February
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.3) – February 2023" dated 13 March 2023 for your verification.

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

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

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

Fredrick Leong
Environmental Team Leader

Encl.

1. Monthly Environmental Monitoring and Audit Report (No.3) – February 2023

cc.

1. IEC - Ms. Claudine Lee (By email: claudinelee@meinhardt.com.hk)
2. IEC Representative - Mr. Jimmy Lui (By email: jimmylui@meinhardt.com.hk)

Document Control Record

Document prepared by:

Aurecon Hong Kong Limited

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

T +852 3664 6888

F +852 3664 6999



E hongkong@aurecongroup.com

W aurecongroup.com

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

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

Document control						aurecon	
Report title		Monthly Environmental Monitoring and Audit Report (No. 3) – February 2023					
Document ID		Project number					
File path							
Client		Veolia Environmental Services Hong Kong Limited					
Client contact		Client reference					
Rev	Date	Revision details/status	Author	Reviewer	Verifier (if required)	Approver	
0	7 March 2023	Submit to IEC	Various	K.Chau		FL	
1	13 March 2023	Submit to IEC	Various	K.Chau		FL	
Current revision		1					

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

Contents

Contents

Executive Summary	1
1. Introduction	3
2. Project Information	5
3. Air Quality Monitoring	10
4. Noise Monitoring	19
5. Water Quality Monitoring	24
6. Waste Management	32
7. Landfill Gas Monitoring	33
8. Landscape and Visual	37
9. Cultural Heritage	38
10. Ecological Monitoring	39
11. Site Inspection and Audit	40
12. Environmental Non-conformance	42
13. Implementation Status on Environmental Mitigation Measures	43
14. Future Key Issues	44
15. Conclusion	45

Figure

Figure 1	Location of the Project Site
Figure 2	Impact Monitoring Locations

Appendix

Appendix A	Construction Program
Appendix B	Project Organization Chart & Management Structure
Appendix C	Monitoring Schedule for Reporting Month & Next Month
Appendix D	Calibration Certificates
Appendix E	Monitoring Results
Appendix F	Graphical Presentations
Appendix G	Notification of Environmental Quality Limits Exceedance
Appendix H	Wind Data
Appendix I	Waste Flow Table
Appendix J	Joint Environmental Site Inspection Records
Appendix K	Environmental Mitigation Implementation Schedule (EMIS)
Appendix L	Construction Site Activities
Appendix M	Mitigation Measures of Cultural Landscape Features
Appendix N	Ecological monitoring record
Appendix O	Detail Status of EP Submission

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 3rd Monthly EM&A Report presents the EM&A works conducted from 1 February 2023 to 28 February 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
-	Permanent site office foundation works with pouring of concrete
-	Site clearance
-	Installation of permanent fencing
-	Site formation
-	Tree felling

Environmental Monitoring and Audit Progress

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

Items	Times	Date
- Air Quality Monitoring during normal weekdays at each monitoring station	5 times	1, 7, 13, 18 & 24 February 2023
- Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	1, 7, 13 & 24 February 2023
- Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	7 February 2023
- Landfill Gas Monitoring during normal weekdays for Construction Works	24 times	1 to 4, 6 to 11, 13 to 18, 20 to 25 & 27 to 28 February 2023
- Post-translocation Monitoring during normal weekdays at recipient site	1 time	24 February 2023
- Post-transplantation monitoring and audit during normal weekdays for transplanted plants and receptor sites	2 times	8 & 24 February 2023
- Joint Environmental Site Inspection	5 times	1, 6, 13, 20 & 27 February 2023

Environmental Exceedance

1-hr TSP Monitoring

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

24-hr TSP Monitoring

1 Limit Level Exceedance for 24-hr TSP monitoring at AM1 was recorded during the reporting period. The exceedance was considered unlikely to be related to the project after the investigation.

No Action / Limit Level exceedance for 24-hr TSP monitoring at AM2 was recorded during the period.

1 Action Level Exceedance and 1 Limit Level Exceedance for 24-hr TSP monitoring at AM3 were recorded during the reporting period. The exceedances were considered to be attributed to external factors and unlikely to be related to the project after the investigation.

Noise, Surface Water Quality & Landfill Gas Monitoring

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

Environmental Non-conformance/Compliant/Summons and Prosecution

No non-compliance event and complaint were recorded during the reporting period.

No summons/prosecutions were received in this reporting period.

Reporting Change

There was no reporting change in the reporting period.

Future Key Issues

Works to be undertaken in the next month include:

-
- Material loading and unloading, site traffic

 - Permanent site office foundation works with pouring of concrete

 - Site clearance

 - Installation of permanent fencing

 - Site formation

 - Tree felling

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

1. Introduction

1.1. Background

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

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

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

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

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

1.3. Purpose of this Report

- 1.3.1. This is the 3rd Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 01 February 2023 to 28 February 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 **Table 2-1**. Construction programme is illustrated in **Appendix A**. Detailed construction activities are summarized in **Appendix L**.

Table 2-1 Major Construction Activities Undertaken in the Reporting Period

Construction Activities Undertaken	
-	Material loading and unloading, site traffic
-	Permanent site office foundation works with pouring of concrete
-	Site clearance
-	Installation of permanent fencing
-	Site formation
-	Tree felling

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 2-2**.

Table 2-2 Contact Information of Key Personnel

Party	Name	Contact Number
Contractor (Veolia Environmental Service Hong Kong Ltd.)	Mr. William Wan	2902 5296
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 2-3**. 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 2-3 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	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 Transplantation Monitoring	Submitted 6 th transplantation monitoring (8 February 2023) 7 th transplantation monitoring (24 February 2023)
2.8	2.10	Translocation and translocation monitoring	Translocation was carried out and the report submitted. 7 th monitoring (24 Feb 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 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 Contract	Approved on 13 May 2022
Registration of Waste Producer under Waste Disposal Ordinance	7043692	Throughout the Contract	Approved on 13 April 2022
Registration as Chemical Waste Producer	5213-642-P1034-18	Throughout the Contract	Approved on 11 July 2022
Construction Noise Permit	GW-RN1151-22	28 February 2023	Approved on 29 November 2022 (cancelled with effect from 14 February 2023)
Construction Noise Permit	GW-RN0131-23	13 May 2023	Approved on 9 February 2023
Effluent Discharge License under Water Pollution Control Ordinance	WT00042301-2022	31 October 2027	Approved on 18 October 2022 Variation of Licence (Approved on 7 February 2023)

2.5. Environmental Monitoring and Audit Progress

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

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

Items	Times	Date
- Air Quality Monitoring during normal weekdays at each monitoring station	5 times	1, 7, 13, 18 & 24 February 2023
- Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	1, 7, 13 & 24 February 2023
- Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	7 February 2023
- Landfill Gas Monitoring during normal weekdays for Construction Works	24 times	1 to 4, 6 to 11, 13 to 18, 20 to 25 & 27 to 28 February 2023
- Post-translocation Monitoring during normal weekdays at recipient site	1 time	24 February 2023
- Post-transplantation monitoring and audit during normal weekdays for transplanted plants and receptor sites	2 times	8 & 24 February 2023
- Joint Environmental Site Inspection	5 times	1, 6, 13, 20 & 27 February 2023

Air Quality

5 sets of 1-hr TSP & 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 TSP impact monitoring at AM1, AM2 & AM3 was recorded during the period.

1 Limit Level Exceedance for 24-hr TSP monitoring at AM1 was recorded during the reporting period. The exceedance was considered unlikely to be related to the project after the investigation.

No Action / Limit Level exceedance for 24-hr TSP monitoring at AM2 was recorded during the period.

1 Action Level Exceedance and 1 Limit Level Exceedance for 24-hr TSP monitoring at AM3 were recorded during the reporting period. The exceedances were considered to be attributed to external factors and unlikely to be related to the project after the investigation.

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 and Limit Levels of surface water quality was recorded during the reporting period

Landfill Gas

24 sets of landfill gas measurement were carried out at a designated monitoring location 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, LRAs 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 2 sets 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

ET weekly environmental site inspections were carried out on 1, 6, 13, 20 & 27 February 2023. A joint environmental site inspection was carried out by the representatives of the Employer's Representative (ER), the Contractor, IEC and the ET on 20 February 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)3 to AM1, AM2 & AM3, the measured air quality levels at AM1, AM2 & AM3 would represent the air quality levels at AM(D)1, AM(D)2 & AM(D)3.

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

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

3.1.3 Monitoring Equipment

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

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

Table 3-3 Dust Monitoring Equipment

Equipment	Model	Monitoring Station
High Volume Sampler (HVS)	TE-5170X (S/N: 1105)	AM1
	TE-5170X (S/N: 1106)	AM2
	TE-5170X (S/N: 1856)	AM3
Direct Reading Dust Meter	Sibata LD-5R (S/N: 0Z4545)	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)	AM1 to AM3

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 "ESCAPS" 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.

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 variable 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. Turn the knob orifice counter clock-wise to adjust the openings the four holes on the bottom open. Record the manometer reading and the reading from continuous flow recorder. At least 5 sets of data should be recorded.

3.1.5 Monitoring Results

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

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

Dust Monitoring Station	Average 1-hr TSP Concentration, $\mu\text{g}/\text{m}^3$ (Range)	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM1	27 (18 – 41)	>285	>500
AM2	28 (20 – 43)	>279	>500
AM3	33 (21 – 51)	>285	>500

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

Dust Monitoring Station	Average 24-hr TSP Concentration, $\mu\text{g}/\text{m}^3$ (Range)	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM1	145 (62 – 286)	>164	>260
AM2	89 (61 – 126)	>152	>260
AM3	181 (93 – 284)	>163	>260

3.1.5.2 The Summary of Impact 1-hr & 24-hr TSP Exceedance are shown in **Table 3-6**.

Table 3-6 Summary of Impact 1-hr & 24-hr TSP Exceedance

Dust Monitoring Station	Parameter	1-hr TSP	24-hr TSP	Exceedance Count
	Level Exceedance			
AM1	Action	-	-	0
	Limit	-	24 Feb 2023*	1
AM2	Action	-	-	0
	Limit	-	-	0
AM3	Action	-	18 Feb 2023*	1
	Limit	-	24 Feb 2023*	1

Remarks: * equal to non-project related

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

3.1.5.4 1 Limit Level Exceedance for 24-hr TSP monitoring at AM1 was recorded on 24 February 2023. The exceedance was considered unlikely to be related to the project after the investigation. The Notification of Environmental Quality Limits Exceedances are presented in **Appendix G**.

3.1.5.5 No Action / Limit Level exceedance for 24-hr TSP monitoring at AM2 was recorded during the period.

3.1.5.6 1 Action Level Exceedance and 1 Limit Level Exceedance for 24-hr TSP monitoring at AM3 was recorded on 18 & 24 February 2023. The exceedances were considered to be attributed to external factors and unlikely to be related to the project after the investigation. The Notification of Environmental Quality Limits Exceedances are presented in **Appendix G**.

3.1.6 Wind Data Monitoring

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

programme for the Project. The results for wind data monitoring are presented in **Appendix H**.

3.1.7 Recommended Mitigation Measures

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

- The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation.
- Dust emission from construction vehicle movement is confined within the worksites area.
- Watering facilities will be provided at every designated vehicular exit point.
- Good site practice is recommended during construction phase.

3.1.8 Event and Action Plan

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

Table 3-7 Event and Action Plan for dust impact

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

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

4 Noise Monitoring

4.1 Monitoring Requirement

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

4.2 Monitoring Locations, Parameters and Frequency

- 4.2.1 According to the EM&A Manual, two monitoring stations namely NM1 and NM2 are selected for the impact monitoring.
- 4.2.2 A baseline monitoring plan has been submitted to IEC and EPD on 31 May 2022 including the proposal with justification of change of monitoring locations. Due to limited access to the original monitoring locations at NM1 and NM2, the adjusted stations at NM1a and NM2a were agreed with IEC prior to the baseline and impact monitoring. The noise monitoring locations are summarized in **Table 4-1** and shown in **Figure 2**.
- 4.2.3 The detailed monitoring schedule is shown in **Appendix C**. The frequency and duration are shown in **Table 4-2**.

Table 4-1 Noise Monitoring Locations

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

Remarks:

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

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

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

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

Table 4-2 Noise Monitoring Parameters, Frequency and Duration

Monitoring Station	Parameter	Frequency and Duration
NM1a and NM2a	L_{Aeq} (30mins) average of 6 consecutive L_{eq} (5min); L_{10} (5min) & L_{90} (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
Sound Level Meter	NTi XL2 (S/N: A2A-09696-E0)
Acoustic Calibrator	Rion NC-75 (S/N: 34724243)
Anemometer	RS-90 (S/N: 210722168)

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 (L_{eq} (30-min) would be determined for daytime noise by calculating the logarithmic average of six L_{eq} (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.

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	52.8 (47.0 – 54.9)	When one documented complaint is received	>75dB(A)
NM2a	50.2 (46.2 – 54.5)		

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 dust 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 office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.
2. Select “Quiet plants” which comply with the BS 5228 Part 1 or TM standards.

4.7 Event and Action Plan

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

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

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

5 Water Quality Monitoring

5.1 Groundwater Monitoring

5.1.1 Monitoring Requirement

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

5.2 Surface Water Monitoring

5.2.1 Monitoring Requirement

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

5.2.2 Monitoring Locations, Parameters and Frequency

5.2.2.1 Impact surface water monitoring was carried out on 7 February 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
Water Quality Meter	Horiba U-53 (S/N: PORBNFNT)
Water Flow Meter	FP111 (S/N: 22K100859)

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 NH ₃ G
TKN	0.4 mg/L	0.1 mg/L	APHA 4500Norg: D
Nitrate	0.5 mg/L	0.01 mg/L	APHA 4500 NO ₃ I
Sulphate	5 mg/L	1 mg/L	USEPA 375.4
Sulphite	2 mg/L	2 mg/L	APHA 4500 SO ₃ 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. 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 7 February 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 are 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.

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

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	7.4	>7.7	>7.8	7.2	>7.6	>7.7
Electrical Conductivity in $\mu\text{S}/\text{cm}$	83	---	---	124	---	---
DO in mg/L	7.7	<7.4	<4	7.5	<5	<4
Turbidity in NTU	5.0	>9.2	>9.5	8.6	>108.3	>108.9
SS in mg/L	3.4	>9.7	>11.4	9.1	>94.5	>94.7
Alkalinity	16	---	---	42	---	---
COD	<5			7		
BOD ₅	<2			<2		
TOC	3			5		
Ammonia-nitrogen	0.11			0.29		
TKN	0.4			0.4		
Nitrate	0.02			0.01		
Sulphate	5			5		
Sulphite	<2			<2		
Phosphate	<0.01			<0.01		
Chloride	6			6		
Sodium	8390			5710		
Mg	420			720		
Ca	3100			7390		
K	550			1130		
Fe	490			10700		
Ni	3.0			<1		
Zn	11.0			34		
Mn	57			2910		
Cu	1.0			1		
Pb	<1			<1		
Cd	<0.2			<0.2		
Coliform Count	24			4200		
Oil and Grease	<5			<5		

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 Event and Action Plan

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

Table 5-6 Event and Action Plan for Water Quality

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

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

6 Waste Management

- 6.1.1 Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. Non-inert C&D materials were made up of general refuse, steels and paper/cardboard packaging materials. Steel materials generated from the Project were also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in **Appendix I**.
- 6.1.2 A total of 3.16 tonnes of yard waste was generated during the reporting period. A total of 503.29 tonnes of general refuse & 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 excavation or when working in any confined spaces, which have the potential for presence of LFG and risk of explosion or asphyxiation. The monitoring equipment should alarm, both audibly and visually, when the concentrations of the following gases were exceeded:

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

7.2 Monitoring Location

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.

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.

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

7.2.5 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**.

Table 7-1 Locations of LFG Monitoring during reporting period

Monitoring Location	Type of works
Portion A +58 mpD, +55 mpD Platform	Excavation Works

7.3 Monitoring Equipment

- 7.3.1 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**.

Table 7-2 LFG Monitoring Equipment

Equipment	Model
Gas Detector	PS200 (S/N: 373075)

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 7-3** shall be carried out.

Table 7-3 Action Plan for the monitoring during construction phase

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

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

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

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

7.5 Monitoring Results

- 7.5.1 The LFG monitoring was conducted at Portion A +58 mpD, +55 mpD Platform in February 2023 (Conducted on working days). The LFG monitoring results are summarized in **Table 7-4**.

Table 7-4 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 %
		Monitoring Results			
Portion A +58 mpD,+55 mpD Platform	1 Feb 2023	0	0	0	20.5
	2 Feb 2023	0	0	0	20.3
	3 Feb 2023	0	0	0	20.5
	4 Feb 2023	0	0	0	20.5
	6 Feb 2023	0	0	0	20.4
	7 Feb 2023	0	0	0	20.3
	8 Feb 2023	0	0	0	20.5
	9 Feb 2023	0	0	0	20.2
	10 Feb 2023	0	0	0	20.3
	11 Feb 2023	0	0	0	20.2
	13 Feb 2023	0	0	0	20.5
	14 Feb 2023	0	0	0	20.4
	15 Feb 2023	0	0	0	20.5
	16 Feb 2023	0	0	0	20.6
	17 Feb 2023	0	0	0	20.3
	18 Feb 2023	0	0	0	20.5
	20 Feb 2023	0	0	0	20.5
	21 Feb 2023	0	0	0	20.1
	22 Feb 2023	0	0	0	20.4
	23 Feb 2023	0	0	0	20.2
	24 Feb 2023	0	0	0	20.3
	25 Feb 2023	0	0	0	20.5
	27 Feb 2023	0	0	0	20.4
	28 Feb 2023	0	0	0	20.5
Action Level		>10% LEL	---	>0.5%** CO ₂	<19%

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

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

7.5.2 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**.

7.5.3 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

3.1.7.2 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 25 April 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 temporary 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 temporary 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 24 February 2023 based on the requirement of the approved Revised Translocation Proposal for the Endemic Freshwater Crab *Somanniathelphusa zanklon*. The 7th Post-Translocation Monitoring Report (February 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 8 and 24 February 2023 based on the requirement of the approved Transplantation Proposal for Plant Species of Conservation Importance (Rev.1). The 6th Post-transplantation Monitoring and Audit Report (8th February 2023) & 7th Post-transplantation Monitoring and Audit Report (24th February 2023) present 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	1 st (Aug 2022)	29 Aug 2022
	2 nd (Sep 2022)	28 Sep 2022
	3 rd (Oct 2022)	28 Oct 2022
	4 th (Nov 2022)	22 Nov 2022
	5 th (Dec 2022)	29 Dec 2022
	6 th (Jan 2023)	30 Jan 2023
	7 th (Feb 2023)	24 Feb 2023
Post-transplantation Monitoring	1 st	24 Nov 2022
	2 nd	9 Dec 2022
	3 rd	21 Dec 2022
	4 th	13 Jan 2023
	5 th	26 Jan 2023
	6 th	8 Feb 2023
	7 th	24 Feb 2023

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 1, 6, 13, 20 & 27 February 2023. A joint environmental site inspection was carried out by the representatives of the ER, the Contractor, IEC and the ET on 20 February 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:

01 February 2023

- Vehicle washing was implemented in SBA. The Contractor has been reminded to provide vehicle washing facility at the exit of SBA.
- The unpaved area in Portion D was dry and dusty. Dry and fugitive dust was observed in the work area in Portion A. The Contractor has been recommended to increase the frequency of watering to the unpaved area in Portion D and work area in Portion A.
- The open stockpiles in SBA were not covered with impervious sheets. The Contractor has been reminded to cover the stockpile with impervious sheets.
- The plant equipment in SBA was placed on the ground without impervious sheets. Plant equipment shall be placed on the impervious sheets.

06 February 2023

- Fugitive dust was observed in Portion A and D. The Contractor has been reminded to increase the frequently of watering unpaved area and work area or other dust suppression method in Portion A and D to minimize dust dispersion.
- Sand and silt shall be regularly removed from the sump pit in the vehicle washing bay in Portion A. The Contractor has been reminded to remove sand and silt in the sump pit and the channel at the vehicle washing bay regularly.

13 February 2023

- The Contractor was reminded that the frequently of watering unpaved area and work area or other dust suppression method in Portion A is reminded should be increased.

20 February 2023

- The fugitive dust was observed in Portion A. The Contractor is recommended to increase the frequency of watering to the unpaved area and work area in Portion A.
- The lack of NRMN Label was observed in the generator at SBA. The Contractor is recommended to label the NRMN Label on the generator at SBA.

27 February 2023

- The site area in SBA was dry and fugitive dust was observed. The Contractor has been reminded to schedule watering and to increase the frequency of watering if necessary in SBA.
- Vehicle washing shall be implemented in SBA. The Contractor has been reminded to implement vehicle washing at the exit of Portion.
- More than 20 bags of cement were not covered entirely by impervious sheets in SBA. The Contractor has been reminded to cover the cement bags entirely.
- The Contractor has been reminded to schedule watering for Portion D. The Contractor has been reminded to schedule watering and to increase the frequency of watering if necessary in Portion D.
- Construction runoff in the lower area at Portion D shall be collected and divided to silt removal facilities. The Contractor has been reminded to ensure construction runoff shall be divided into silt removal facilities.

11.1.4 No Environmental Protection Department-Regional Office (North) conducted general site inspection in February 2023.

12 Environmental Non-conformance

12.1 Summary of Monitoring Exceedance

1-hr TSP Monitoring

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

24-hr TSP Monitoring

- 12.1.2 1 Limit Level Exceedance for 24-hr TSP monitoring at AM1 was recorded during the reporting period. The exceedance was considered unlikely to be related to the project after the investigation.
- 12.1.3 No Action / Limit Level exceedance for 24-hr TSP monitoring at AM2 was recorded during the period.
- 12.1.4 1 Action Level Exceedance and 1 Limit Level Exceedance for 24-hr TSP monitoring at AM3 were recorded during the reporting period. The exceedances were considered to be attributed to external factors and unlikely to be related to the project after the investigation.

Noise, Surface Water Quality & Landfill Gas Monitoring

- 12.1.5 No exceedance of the Action and Limit Levels for was recorded at designated monitoring stations during the reporting period.

12.2 Summary of Environmental Non-compliance

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

12.3 Summary of Environmental Complaint

- 12.3.1 No environmental complaint was recorded during the reporting period.

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
-	Permanent site office foundation works with pouring of concrete
-	Site clearance
-	Installation of permanent fencing
-	Site formation
-	Tree felling
-	Material loading and unloading, site traffic

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 TSP impact monitoring at AM1, AM2 & AM3 was recorded during the period.
- 15.1.2 1 Limit Level Exceedance for 24-hr TSP monitoring at AM1 was recorded during the reporting period. The exceedance was considered unlikely to be related to the project after the investigation.
- 15.1.3 No Action / Limit Level exceedance for 24-hr TSP monitoring at AM2 was recorded during the period.
- 15.1.4 1 Action Level Exceedance and 1 Limit Level Exceedance for 24-hr TSP monitoring at AM3 were recorded during the reporting period. The exceedances were considered to be attributed to external factors and unlikely to be related to the project after the investigation.
- 15.1.5 Construction noise monitoring was carried out in the reporting month. No Action / Limit Level exceedance at NM1a & NM2a was recorded during the period.
- 15.1.6 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.
- 15.1.7 Surface water monitoring was carried out in the reporting month. No Action / Limit Level exceedance at WM1 & WM2 was recorded during the period.
- 15.1.8 Landfill Gas Monitoring was carried out in the reporting month. No exceedance of Limit Levels of LFG was recorded during the reporting period.
- 15.1.9 In terms of cultural heritage, implementation of the mitigation measures such as temporary 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.
- 15.1.10 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.
- 15.1.11 Five environmental site inspections were carried out in the reporting month. Recommendations on mitigation measures for Permit/ Licenses were given to the Contractor for remediating the deficiencies identified during the site inspections.
- 15.1.12 No environmental complaint was recorded during the reporting period.
- 15.1.13 No non-compliance event was recorded during the reporting period.
- 15.1.14 No notification of summons and prosecution was received during the reporting period.

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

Figure 1 Location of the Project Site

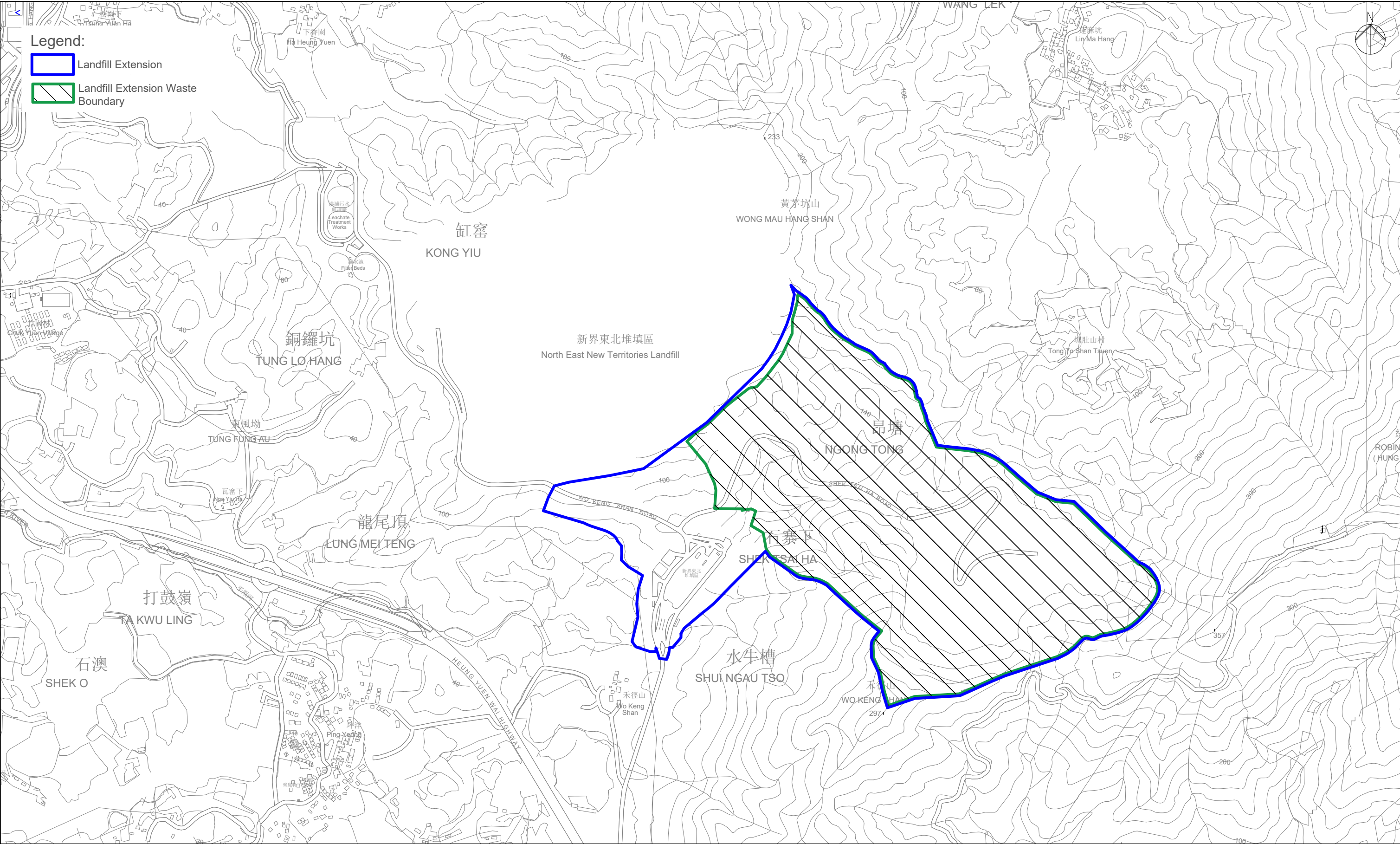



Figure 2 Impact Air, Noise & Surface Water Quality Monitoring Locations

Appendix A Construction Program



環境保護署

Environmental Protection Department

Remaining Level of Effort

Actual Work

Remaining Work

Critical Remaining Work

Milestone

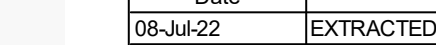
Summary

NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION

BASELINE PROGRAMME - EXTRACTED (REV.3)






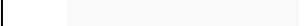
INITIAL WORKS (PHASE 1)

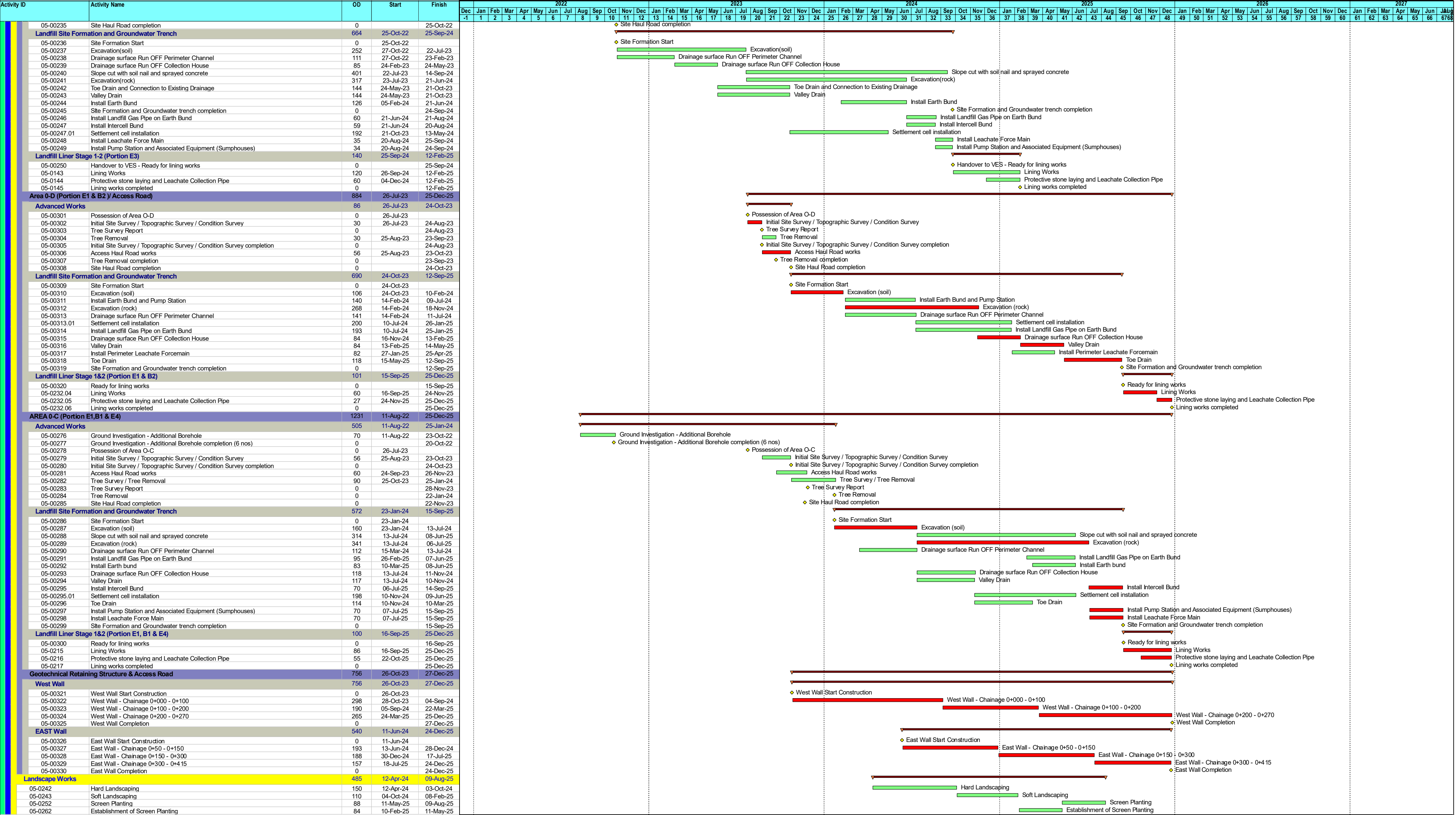
Page 1 of 4



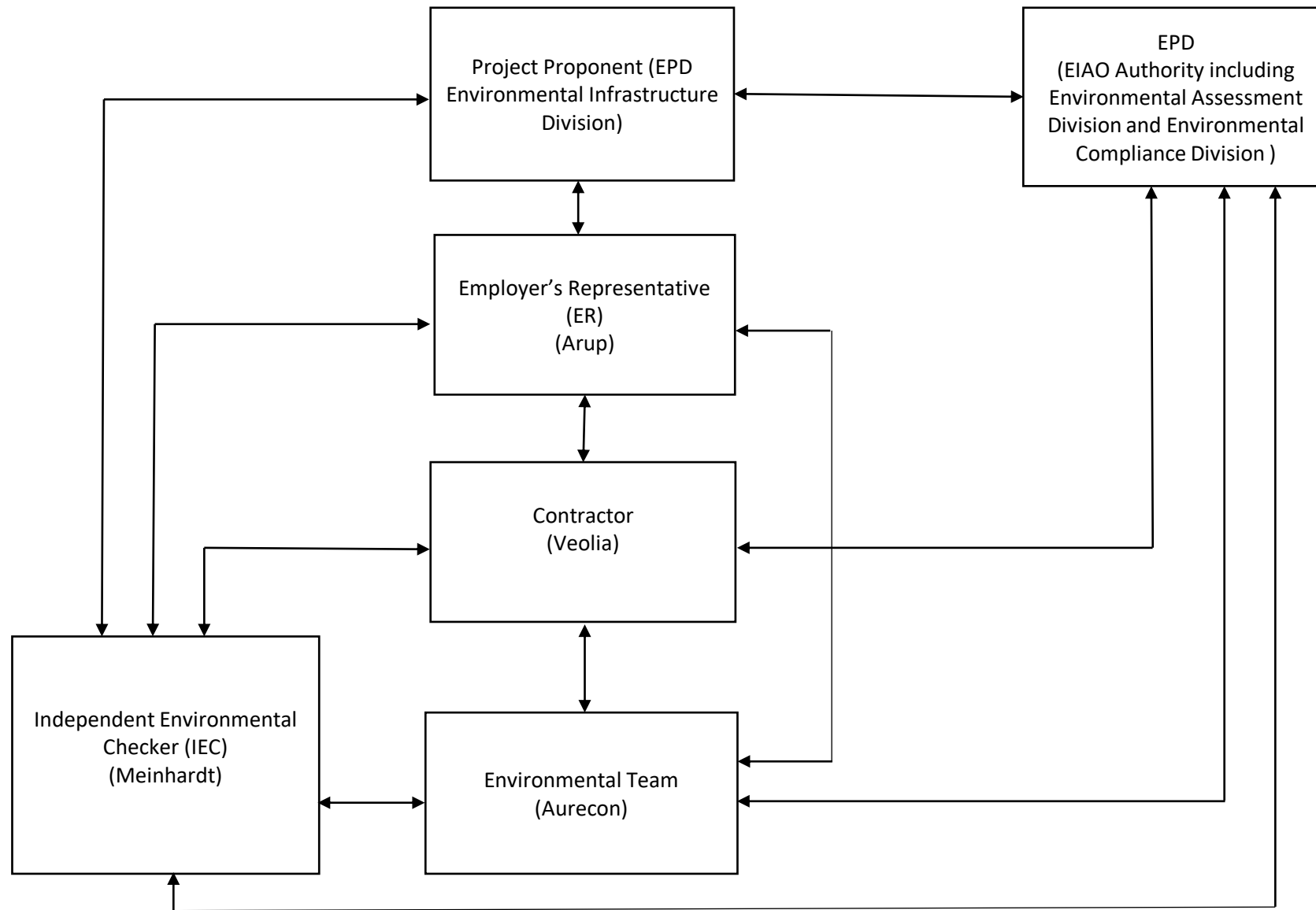
Date	Revision	Checked	Approved
08-Jul-22	EXTRACTED - ISSUED 14JAN2023	DW	AY

[illegible]

	<p>  Remaining Level of Effort Actual Work Remaining Work  Critical Remaining Work  Milestone  Summary </p>	<p align="center"> NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION BASELINE PROGRAMME - EXTRACTED (REV.3) INITIAL WORKS (PHASE 1) Page 3 of 4 </p>			Date	Revision	Checked	Approved
					08-Jul-22	EXTRACTED - ISSUED 14JAN2023	DW	AY



Appendix B Project Organization Chart & Management Structure



Notes:

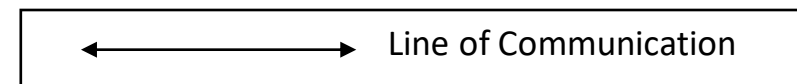
EPD - Environmental Protection Department

Arup – Ove Arup & Partners Limited

Veolia - Veolia Environmental Services Hong Kong Limited

Meinhardt - Meinhardt Infrastructure And Environment Limited

Aurecon - Aurecon Hong Kong Limited



Appendix C Monitoring Schedule for Reporting Month & Next Month

Impact Monitoring Schedule for NENT Landfill Extension (February 2023)

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

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).

Impact Monitoring Schedule for NENT Landfill Extension (March 2023)

3-2023						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
			1	2 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a Surface water quality monitoring at WM1 and WM2	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 Noise monitoring at NM1a and NM2a	21	22	23	24	25 Air quality monitoring at AM1, AM2 and AM3
26	27	28	29	30	31 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	

Remark:

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

Appendix D Calibration Certificates

Air Quality

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 Reference 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:

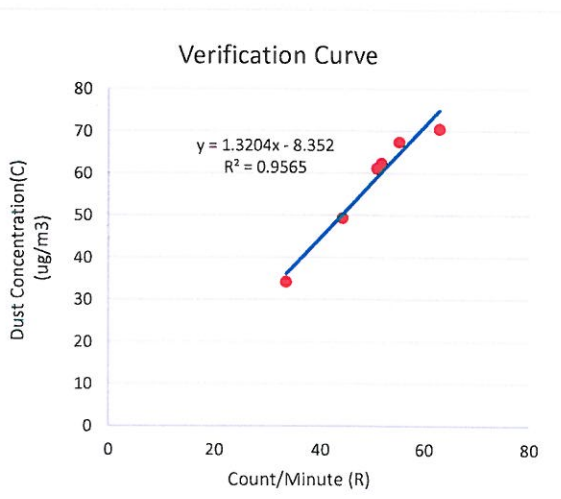
slope, mh= 1.3204

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: 
Technical Manager

Date: 05-12-2022

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

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

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

Verification Test No.	Date	Time			K-Factor	Counts/Minute (R)	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C)
		Start-time	End-time	Elapsed Time (in min)		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

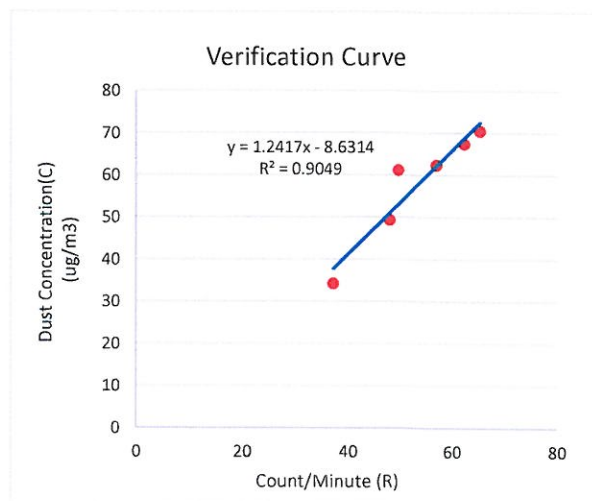
Verification Test Result: Strong Correlation, Results were accepted.

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

Verified By:


Technical Manager

Date: 05-12-2022



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

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

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

Verification Test No.	Date	Time			K-Factor	Counts/Minute (R)	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C)
		Start-time	End-time	Elapsed Time (in min)		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:

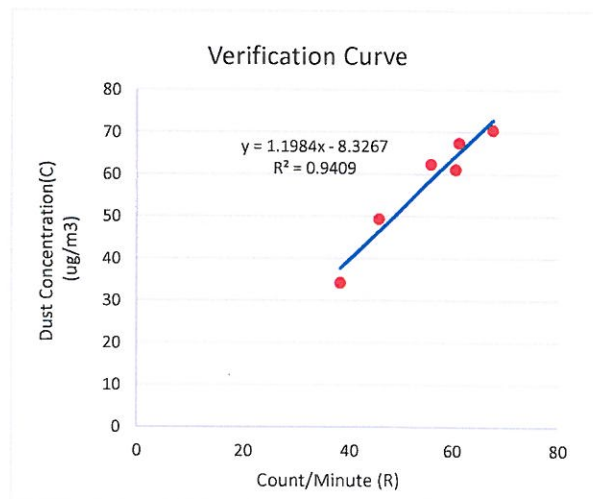
slope, mh= 1.1984

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: _____

Technical Manager

Date: 05-12-2022

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

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

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

Verification Test No.	Date	Time			K-Factor	Counts/Minute (R)	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C)
		Start-time	End-time	Elapsed Time (in min)		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:

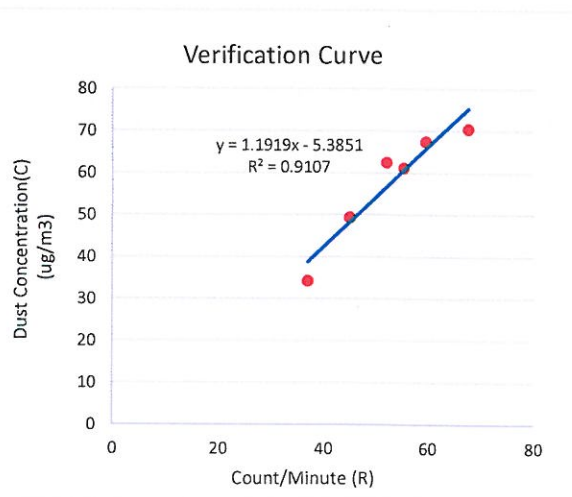
slope, mh= 1.1919

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: [Signature] Date: 05-12-2022
Technical Manager

Date: 30-Jan-2023

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	NENTX	Site ID:	AM2	Date:	30-Jan-2023
Serial No:	1106	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	765.1	Actual Temperature during Calibration (T_a) (deg K):	295.4
---	-------	--	-------

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)	Q_a , X-Axis (m^3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
1	2.00	0.701	42.0	42.33
2	2.60	0.798	45.0	45.35
3	3.80	0.963	50.0	50.39
4	4.60	1.059	55.0	55.43
5	5.60	1.167	58.0	58.45

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

$m =$	35.3651	$b =$	17.2173	Corr. Coeff =	0.9959
Sampler Set Point Flow Rate (SFR) =	1.1164	Sampler Chart Set Point (SSP) =	57		

Calculations

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

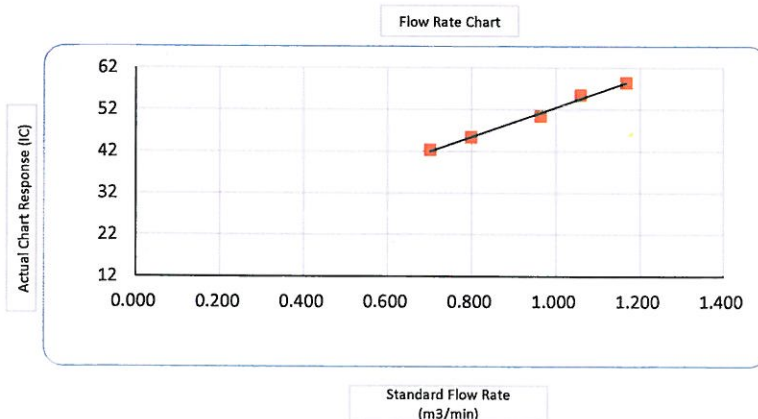
$$IC = I \cdot (\text{Sqrt}(P_a/P_{std}) \cdot (T_{std}/T_a))$$

$$SFR = 1.13 (P_{std} / P_a) (T_a / T_{std})$$

$$SSP = (m \cdot SFR + b) (\text{Sqrt}(P_a / P_{std}) (T_{std} / T_a))$$

Q_a = actual flow rate
 IC = corrected chart response
 I = actual chart response
 m_c = calibrator slope
 b_c = calibrator intercept
 T_a = actual temperature during calibration (deg K)
 P_a = actual pressure during calibration (mm Hg)

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)
 Where 1.13 is the designed sampling flow rate of PM10 samplers, m^3/min



Checked by: _____

Date: _____ 30-Jan-2023

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	NENTX	Site ID:	AM3	Date:	30-Jan-2023
Serial No:	1856	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	765.1	Actual Temperature during Calibration (T_a) (deg K):	296.9
---	-------	--	-------

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)	Q_a , X-Axis (m ³ /min)	I, CFM (chart)	IC, Y-Axis (corrected)
1	1.60	0.627	44.0	44.23
2	3.00	0.855	54.0	54.28
3	4.00	0.986	57.0	57.30
4	5.00	1.101	60.0	60.31
5	6.00	1.205	64.0	64.33

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

m=	33.5233	b=	24.0872	Corr. Coeff=	0.9921
Sampler Set Point Flow Rate (SFR)=	1.1221	Sampler Chart Set Point (SSP)=	62		

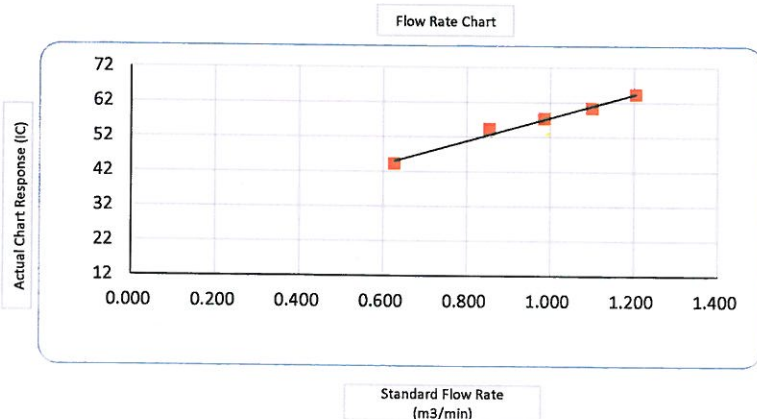
$$Q_a = 1/m_c \cdot [\text{Sqrt}(\Delta H_2O \cdot (P_a/P_{std}) \cdot (T_{std}/T_a)) - b_c]$$

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

Q_a = actual flow rate
 IC = corrected chart response
 I = actual chart response
 m_c = calibrator slope
 b_c = calibrator intercept
 T_a = actual temperature during calibration (deg K)
 P_a = actual pressure during calibration (mm Hg)

Calculations

$SFR = 1.13 (P_{std} / P_a) (T_a / T_{std})$
 $SSP = (m \cdot SFR + b) (\text{Sqrt}(P_a / P_{std}) (T_{std} / T_a))$
 m = sampler slope
 b = sampler intercept
 $T_{std} = 298 \text{ deg K}$
 $P_{std} = 760 \text{ mm Hg}$
 T_a = actual temperature during calibration (deg K)
 P_a = actual pressure during calibration (mm Hg)
 Where 1.13 is the designed sampling flow rate of PM10 samplers, m³/min



Checked by: _____

Date: 30-Jan-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)	$\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (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=	$\Delta Vol((Pa-\Delta P)/Pstd)(Tstd/Ta)$	Va=	$\Delta Vol((Pa-\Delta P)/Pa)$
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=	$1/m \left(\left(\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)} \right) - b \right)$

Standard Conditions

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

RECALIBRATION

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

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



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 :



Noise

Certificate of Calibration

for

Description: *Sound Level Meter*
Manufacturer: *NTi Audio*
Type No.: *XL2 (Serial No.: A2A-09696-E0)*
Microphone: *ACO 7052 (Serial No.:68840)*
Preamplifier: *NTi Audio M2211 MA220 (Serial No.:5287)*

Submitted by:

Customer: *Acumen Environmental Engineering and Technologies Co. Ltd.*
Address: *Unit D, 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
☐ 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: 24 March 2022

Date of calibration: 26 March 2022

Calibrated by: 
Calibration Technician

Certified by: 
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 26 March 2022



Certificate No.: APJ21-161-CC001

Page 1 of 4

1. Calibration Precaution:

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

2. Calibration Conditions:

Air Temperature: 22.6 °C
Air Pressure: 1006 hPa
Relative Humidity: 74.5 %

3. Calibration Equipment:

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV200041	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	94.1	±0.4

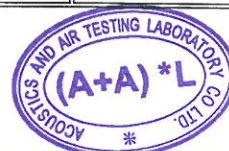
Linearity

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	94.1	Ref
				104		104.1	±0.3
				114		114.1	±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	94.1	Ref
		Slow				94.1	±0.3

Certificate No.: APJ21-161-CC001



Page 2 of 4

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	94	31.5	94.0	±2.0
				63	94.1	±1.5
				125	94.1	±1.5
				250	94.0	±1.4
				500	94.1	±1.4
				1000	94.1	Ref
				2000	94.3	±1.6
				4000	94.9	±1.6
				8000	93.6	+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	94	31.5	54.7	-39.4±2.0
				63	67.9	-26.2±1.5
				125	78.0	-16.1±1.5
				250	85.4	-8.6±1.4
				500	90.9	-3.2±1.4
				1000	94.1	Ref
				2000	95.5	+1.2±1.6
				4000	95.9	+1.0±1.6
				8000	92.5	-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	94	31.5	91.0	-3.0±2.0
				63	93.2	-0.8±1.5
				125	93.9	-0.2±1.5
				250	94.0	-0.0±1.4
				500	94.1	-0.0±1.4
				1000	94.1	Ref
				2000	94.1	-0.2±1.6
				4000	94.1	-0.8±1.6
				8000	90.6	-3.0+2.1; -3.1

5. Calibration Results Applied

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

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.05
	63 Hz	± 0.05
	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.

Certificate No.: APJ21-161-CC001



Page 4 of 4



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 °C, 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



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

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

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

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

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

CALIBRATION RESULT

1. Sound pressure level (with reference standard microphone)

Measured value	Expanded uncertainty *1
93.99 dB	0.09 dB

Specified secondary standard microphone:

Type : 4160

Serial number : 2973341

Reference Sound pressure : 2×10^{-5} Pa

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

Coverage factor $k=2$

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

BE OUT OF JCSS CALIBRATION

1. Frequency

Measured value	Measurement uncertainty ($k=2$)
1000.0 Hz	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 -

Certificate of Calibration

校正證書

Certificate No. : C216243

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC21-2101)

Date of Receipt / 收件日期 : 12 October 2021

Description / 儀器名稱 : Mini Anemometer

Manufacturer / 製造商 : RS PRO

Model No. / 型號 : RS-90

Serial No. / 編號 : 210722168

Supplied By / 委託者 : Acuity Sustainability Consulting Limited

Room C 11/F, Ford Glory Plaza, No. 37-39 Wing Hong Street,
Cheung Sha Wan, Kowloon

TEST CONDITIONS / 測試條件

Temperature / 溫度 : $(23 \pm 2)^{\circ}\text{C}$

Relative Humidity / 相對濕度 : $(50 \pm 25)\%$

Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 25 October 2021

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

The results are detailed in the subsequent page(s).

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

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Testo Industrial Services GmbH, Germany
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA

Tested By : CKLo
測試 : C K Lo
Assistant Engineer

Certified By : H C Chan
核證 : H C Chan
Engineer

Date of Issue : 26 October 2021
簽發日期

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。

Certificate of Calibration

校正證書

Certificate No. : C216243
證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- Test equipment :

Equipment ID	Description	Certificate No.
CL018	Portable Calibrator	C204749
CL041 & CL041B	Digital Thermometer	C212654
CL042 & CL042B	Digital Thermometer	C212655
CL292	Recorder	C214057
CL330	Environmental Chamber	C205909
CL386	Multi-function Measuring Instrument	S16494

- Test procedure : MA006 & MA130N.

- Results :

4.1 Air Velocity

Applied Value (m/s)	UUT Reading (m/s)	Measured Correction		
		Value (m/s)	Measurement Uncertainty	
			Expanded Uncertainty (m/s)	Coverage Factor
2.01	1.70	+0.31	0.15	2.0
4.00	3.75	+0.25	0.20	2.0
6.01	5.81	+0.20	0.25	2.0
8.00	7.74	+0.26	0.29	2.0
10.01	9.84	+0.17	0.34	2.0

The results presented are the mean of 10 measurements at each calibration point.

4.2 Temperature

Applied Value (°C)	UUT Reading (°C)	Measured Correction		
		Value (°C)	Measurement Uncertainty	
			Expanded Uncertainty (°C)	Coverage Factor
25.0	24.8	+0.2	0.5	2.0

The results presented are the mean of 3 measurements at each calibration point.

Remarks : - The Measured Corrections are defined as :
Value = Applied Value - UUT Reading

- The expanded uncertainties are for a level of confidence of 95 %.

Note :

Only the original copy or the laboratory's certified true copy is valid.

The values given in this 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 environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室書面批准。

Sun Creation Engineering Limited – Calibration & Testing Laboratory

c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 - 校正及檢測實驗室

c/o 香港新界屯門興安里一號四樓

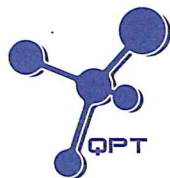
Tel/電話: (852) 2927 2606

Fax/傳真: (852) 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

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-BC010056
Date of Issue : 18 January 2023
Page No. : 1 of 2

PART A - CUSTOMER INFORMATION

Acuity Sustainability Consulting Limited

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

PART B - SAMPLE INFORMATION

Name of Equipment : HORIBA U-53
Manufacturer : HORIBA
Serial Number : PORBNFNT
Date of Received : 12 January 2023
Date of Calibration : 17 January 2023
Date of Next Calibration : 16 April 2023
Request No. : D-BC010056

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	3.94	-0.06	Satisfactory
7.42	7.54	0.12	Satisfactory
10.01	9.92	-0.09	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
10	11.03	1.03	Satisfactory
23	24.48	1.48	Satisfactory
33	34.19	1.19	Satisfactory

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


(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.51	-4.90	Satisfactory
20	19.04	-4.80	Satisfactory
30	29.62	-1.27	Satisfactory

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

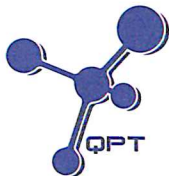
--- CONTINUED ON NEXT PAGE ---

AUTHORIZED
SIGNATORY:


LEE Chun-ning

Assistant Manager (Chemical Testing)

This report shall not be reproduced unless with prior written approval from this laboratory



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-BC010056

Date of Issue : 18 January 2023

Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
9.00	8.78	-0.22	Satisfactory
5.88	5.44	-0.44	Satisfactory
2.65	2.25	-0.40	Satisfactory
1.14	0.80	-0.34	Satisfactory

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

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.11	--	Satisfactory
10	10.0	0.0	Satisfactory
20	21.5	7.3	Satisfactory
100	108	8.0	Satisfactory
800	812	1.5	Satisfactory

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

Remark(s)

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

--- END OF REPORT ---



Calibration Certificate

Certificate No. 210252

Page 1 of 2 Pages

Customer : Acuity Sustainability Consulting Limited

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

Order No. : Q24081

Date of receipt : 31-Oct-22

Item Tested

Description : Flow Probe

Manufacturer : Global Water

Model : FP111

I.D. : --

Serial No. : 22K100859

Test Conditions

Date of Test : 7-Nov-22

Ambient Temperature : 23°C

Supply Voltage : --

Relative Humidity : 78%

Test Specifications

Calibration check.

Ref. Document/Procedure : V12

Test Results

All results were within the manufacturer's specification.

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

Main Test equipment used:

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

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

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

Calibrated by : 
Kin Wong

Approved by : 
Alan Chu

This Certificate is issued by:

Hong Kong Calibration Ltd.

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

Tel: 2425 8801 Fax: 2425 8646

Date: 7-Nov-22



Calibration Certificate

Certificate No. 210252

Page 2 of 2 Pages

Results :

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

Remarks : 1. UUT : Unit-Under-Test

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

----- END -----

Appendix E Monitoring Results

Air Quality

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

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level
								µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
1/2/2023	Sibata LD-5R	0Z4545	0.00114	Fine	14:30	15:30	16:30	32	41	35	36	285	500
7/2/2023	Sibata LD-5R	0Z4545	0.00114	Fine	14:50	15:50	16:50	22	23	20	22		
13/2/2023	Sibata LD-5R	0Z4545	0.00114	Fine	13:14	14:14	15:14	24	21	26	24		
18/2/2023	Sibata LD-5R	0Z4545	0.00114	Fine	9:00	10:00	11:00	18	21	19	19		
24/2/2023	Sibata LD-5R	942532	0.00108	Fine	13:00	14:00	15:00	32	33	36	34		
Average								27					
Max.								41					
Min.								18					

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

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level
								µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
1/2/2023	Sibata LD-5R	942532	0.00108	Fine	14:20	15:20	16:20	41	43	39	41	279	500
7/2/2023	Sibata LD-5R	882106	0.00107	Fine	14:10	15:10	16:10	20	22	21	21		
13/2/2023	Sibata LD-5R	882106	0.00107	Fine	14:00	15:00	16:00	24	23	22	23		
18/2/2023	Sibata LD-5R	942532	0.00108	Fine	9:15	10:15	11:15	22	21	23	22		
24/2/2023	Sibata LD-5R	882106	0.00107	Fine	13:30	14:30	15:30	32	36	33	34		
Average								28					
Max.								43					
Min.								20					

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

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
1/2/2023	Sibata LD-5R	882106	0.00107	Fine	14:44	15:44	16:44	51	49	48	49	285	500
7/2/2023	Sibata LD-5R	942532	0.00108	Fine	14:26	15:26	16:26	22	25	23	23		
13/2/2023	Sibata LD-5R	942532	0.00108	Fine	10:15	11:15	12:15	21	25	22	23		
18/2/2023	Sibata LD-5R	882106	0.00107	Fine	9:30	10:30	11:30	23	28	21	24		
24/2/2023	Sibata LD-5R	0Z4545	0.00114	Fine	11:00	12:00	13:00	45	49	38	44		
Average								33					
Max.								51					
Min.								21					

The Summary of TSP 24-hour Concentration (µg/m³) at Location AM1

Start Date	Avg Air Temp	Avg Atmospheric Pressure	Weather Condition	Elapse Time		Sampling Time	Averaged Flow Rate	Averaged Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
	(°C)	(hPa)		Initial	Final		(cfm)	(m³/min)		(m³)	Initial	Final	(g)		
1/2/2023	19.7	1016.9	Fine	469.91	493.91	1440	41	0.68	976	2.6766	2.8265	0.1499	154	164	260
7/2/2023	22.5	1016.3	Fine	517.91	541.91	1440	43	0.74	1067	2.6596	2.7256	0.0660	62		
13/2/2023	23.4	1016.3	Fine	541.91	565.91	1440	42.5	0.72	1038	2.6622	2.7522	0.0900	87		
18/2/2023	25.9	1017.9	Fine	565.91	589.91	1440	43.5	0.75	1083	2.6729	2.8326	0.1597	147		
24/2/2023	17.7	1021.7	Fine	589.91	613.91	1440	44	0.80	1148	2.7823	3.1107	0.3284	286		
												Average	145		
												Min	62		
												Max	286		

The Summary of 24-hour TSP Concentration (µg/m³) at Location AM2

Start Date	Avg Air Temp	Avg Atmospheric Pressure	Weather Condition	Elapse Time		Sampling Time	Averaged Flow Rate	Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
	(°C)	(hPa)		Initial	Final	(minutes)	(cfm)	(m³/min)	(m³)	Initial	Final	(g)	(µg/m³)	(µg/m³)	(µg/m3)
1/2/2023	19.7	1016.9	Fine	405.47	429.47	1440	42	0.72	1031	2.6825	2.7839	0.1014	98	152	260
7/2/2023	22.5	1016.3	Fine	429.47	453.47	1440	41.5	0.70	1001	2.6414	2.7072	0.0658	66		
13/2/2023	23.4	1016.3	Fine	453.47	477.47	1440	41	0.68	978	2.6705	2.7297	0.0592	61		
18/2/2023	25.9	1017.9	Fine	477.47	501.47	1440	43.5	0.75	1076	2.6689	2.7725	0.1036	96		
24/2/2023	17.7	1021.7	Fine	501.47	525.47	1440	38	0.61	879	2.7707	2.8811	0.1104	126		
												Average	89		
												Min	61		
												Max	126		

The Summary of 24-hour TSP Concentration (µg/m³) at Location AM3

Start Date	Avg Air Temp	Avg Atmospheric Pressure	Weather Condition	Elapse Time		Sampling Time	Averaged Flow Rate	Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
	(°C)	(hPa)		Initial	Final	(minutes)	(cfm)	(m³/min)	(m³)	Initial	Final	(g)	(µg/m³)	(µg/m³)	(µg/m3)
1/2/2023	19.7	1016.9	Fine	1246.11	1270.11	1440	45	0.64	923	2.6740	2.8211	0.1471	159	163	260
7/2/2023	22.5	1016.3	Fine	1297.12	1321.12	1440	47	0.69	999	2.6537	2.7643	0.1106	111		
13/2/2023	23.4	1016.3	Fine	1321.12	1345.12	1440	47.5	0.71	1017	2.6624	2.7573	0.0949	93		
18/2/2023	25.9	1017.9	Fine	1345.12	1369.12	1440	48	0.72	1034	2.6688	2.9322	0.2634	255		
24/2/2023	17.7	1021.7	Fine	1369.12	1393.12	1440	48	0.74	1070	2.6695	2.9738	0.3043	284		
												Average	181		
												Min	93		
												Max	284		

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

Noise

Impact Phase Construction Noise Monitoring Data at Location NM1

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	
1/2/2023	Fine	1.9	17:09	17:39	58.5	52.5	53.2	54.1	54.9	52.8	54.9	58.7	54.2	55.2	57.3	56.6	54.5	51	50	50.6	50.8	51.3	50.1	
7/2/2023	Fine	1.7	16:18	16:48	45.1	46.7	49.1	45.3	49.9	38.1	47.0	49.1	47.2	50.3	48.2	50.1	40.4	33.8	33.1	33.1	33	33	31.7	
13/2/2023	Fine	0	10:26	10:56	53.1	53.4	53.4	52.5	53.6	53.6	53.3	55.9	55.9	56.1	55.1	55.8	56.1	47.9	49.4	49.2	48.6	50	49.4	
24/2/2023	Fine	1.3	11:08	11:38	52.3	53.2	52.8	53.1	53.3	53.1	53.0	56.8	58.2	57.1	58.6	58.2	59.1	50.2	51.2	50.2	49.2	50.2	51.4	
											Average		52.8											
											Baseline Level		55.4											
											Action Level		When one valid documented complaint is received											
											Limit Level		75											

Impact Phase Construction Noise Monitoring Data at Location NM2

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
1/2/2023	Fine	2.4	15:10	15:40	48.5	46.2	41.4	43.7	47.1	46.8	46.2	51.2	50.5	44.5	47.8	47.1	48.5	33.9	35.1	33	33.9	34.9	34.2
7/2/2023	Fine	2.1	10:10	10:40	44.1	42.6	44.7	45.2	46.8	51.5	46.9	49.2	46.2	48.8	47.2	47.5	53.2	32	36	34.9	34.9	36.2	41.2
13/2/2023	Fine	0.4	16:05	16:35	53.6	57.8	53.6	54	54.5	50	54.5	56.1	59.3	55.9	56.5	58.2	51.1	45.2	42.8	42.2	45.2	44.9	46
24/2/2023	Fine	1.2	14:28	14:58	45.9	48.1	45.6	46.7	47.1	48.2	47.0	47.6	51.2	47.5	48.3	49.1	51.3	41.2	40.3	42.1	43.2	41.2	40.2
											Average		50.2										
											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
7-Feb-23	16:25	Fine	0.1	0.1	24.6	7.7	<7.4	<4	7.4	>7.7	>7.8	5.0	>9.2	>9.5	3.4	>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
7-Feb-23	10:40	Fine	0.13	0.10	23.58	7.5	<5	<4	7.2	>7.6	>7.7	8.6	>108.3	>108.9	9.1	>94.5	>94.7

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




CERTIFICATE OF ANALYSIS

Client	: ACUMEN LABORATORY AND TESTING LIMITED	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 10
Contact	: MR HUNTINGTON HUI	Contact	: Richard Fung	Work Order	: HK2304916
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	: htthui@acumen-env.com	E-mail	: richard.fung@alsglobal.com		
Telephone	: +852 2333 6823	Telephone	: +852 2610 1044		
Facsimile	: +852 2333 1316	Facsimile	: +852 2610 2021		
Project	: NENTX			Date Samples Received	: 07-Feb-2023
Order number	: ---	Quote number	: HKE/2751/2022_V2	Issue Date	: 21-Feb-2023
C-O-C number	: ---			No. of samples received	: 2
Site	:			No. of samples analysed	: 2

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

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

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

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F., Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong
Tel: +852 2610 1044 Fax: +852 2610 2021 www.alsglobal.com



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 07-Feb-2023 to 21-Feb-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: HK2304916

Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in chilled condition. The result(s) related only to the item(s) tested.

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.

Microbiological sample(s) was/ were collected in 250mL sterile plastic bottles containing sodium thiosulfate. Sample(s) arrived at the laboratory at 18:00.

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

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

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

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

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



Analytical Results

Sub-Matrix: WATER

Sample ID

Sampling date / time

				WM1	WM2	---	---	---
				07-Feb-2023	07-Feb-2023	---	---	---
Compound	CAS Number	LOR	Unit	HK2304916-001	HK2304916-002	-----	-----	-----
EA/ED: Physical and Aggregate Properties								
EA002: pH Value	----	0.1	pH Unit	6.4	6.5	---	---	---
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	61	112	---	---	---
EA025: Suspended Solids (SS)	----	0.1	mg/L	3.4	9.1	---	---	---
ED037: Total Alkalinity as CaCO3	----	1	mg/L	16	42	---	---	---
ED/EK: Inorganic Nonmetallic Parameters								
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	5	5	---	---	---
ED045K: Chloride	16887-00-6	0.5	mg/L	6	6	---	---	---
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	0.11	0.29	---	---	---
EK058A: Nitrate as N	14797-55-8	0.01	mg/L	0.02	0.01	---	---	---
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.4	0.4	---	---	---
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	---	---	---
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	---	---	---
EP: Aggregate Organics								
EP005: Total Organic Carbon	----	1	mg/L	3	5	---	---	---
EP020: Oil & Grease	----	5	mg/L	<5	<5	---	---	---
EP026C: Chemical Oxygen Demand	----	5	mg/L	<5	7	---	---	---
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	1	---	---	---
EG020: Lead	7439-92-1	1	µg/L	<1	<1	---	---	---
EG020: Manganese	7439-96-5	1	µg/L	57	2910	---	---	---
EG020: Nickel	7440-02-0	1	µg/L	3	<1	---	---	---
EG020: Zinc	7440-66-6	10	µg/L	11	34	---	---	---
EG032: Calcium	7440-70-2	50	µg/L	3100	7390	---	---	---
EG032: Iron	7439-89-6	10	µg/L	490	10700	---	---	---
EG032: Magnesium	7439-95-4	50	µg/L	420	720	---	---	---
EG032: Potassium	7440-09-7	50	µg/L	550	1130	---	---	---
EG032: Sodium	7440-23-5	50	µg/L	8390	5710	---	---	---



Sub-Matrix: WATER				Sample ID	WM1	WM2	----	----	----
				Sampling date / time	07-Feb-2023	07-Feb-2023	----	----	----
Compound	CAS Number	LOR	Unit		HK2304916-001	HK2304916-002	-----	-----	-----
EM: Microbiological Testing									
EM002: E. coli	----	1	CFU/100mL		NOT DETECTED	NOT DETECTED	----	----	----
EM003: Total Coliforms	----	1	CFU/100mL		24	4200	----	----	----



Laboratory Duplicate (DUP) Report

Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 4859726)								
HK2304537-015	Anonymous	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	140	140	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4860636)								
HK2304895-001	Anonymous	ED037: Total Alkalinity as CaCO3	----	1	mg/L	964	959	0.5
EA/ED: Physical and Aggregate Properties (QC Lot: 4860639)								
HK2304870-007	Anonymous	EA002: pH Value	----	0.1	pH Unit	9.6	9.5	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 4864853)								
HK2304999-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	86.4	86.0	0.5
HK2305003-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	55.4	54.8	1.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4859289)								
HK2304249-001	Anonymous	EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	15.8	15.6	0.8
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4862277)								
HK2304531-001	Anonymous	ED045K: Chloride	16887-00-6	1	mg/L	<1	<1	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4862279)								
HK2305076-001	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	283	256	10.1
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4862280)								
HK2305076-001	Anonymous	ED045K: Chloride	16887-00-6	1	mg/L	204	192	6.3
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4864981)								
HK2303582-001	Anonymous	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: 4879079)								
HK2306370-005	Anonymous	EK055K: Ammonia as N	7664-41-7	0.01	mg/L	17.0	17.0	0.5
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4884864)								
HK2306672-001	Anonymous	EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	0.0
EP: Aggregate Organics (QC Lot: 4870727)								
HK2305640-005	Anonymous	EP005: Total Organic Carbon	----	1	mg/L	<1	<1	0.0
EP: Aggregate Organics (QC Lot: 4879048)								
HK2304612-001	Anonymous	EP026C: Chemical Oxygen Demand	----	5	mg/L	<5	<5	0.0
EG: Metals and Major Cations - Total (QC Lot: 4859203)								
HK2304536-002	Anonymous	EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	30	30	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0

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

Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report							
					Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)		
Method: Compound	CAS Number	LOR	Unit	Result			LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 4859726)												
EA010: Electrical Conductivity @ 25°C		----	1	µS/cm	<1	146.9 µS/cm	102	----	93.5	106	----	----
					<1	1412 µS/cm	97.6	----	94.3	105	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 4860636)												
ED037: Total Alkalinity as CaCO3		----	1	mg/L	<1	50 mg/L	102	----	95.0	105	----	----
					<1	2000 mg/L	100.0	----	95.0	105	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 4864853)												
EA025: Suspended Solids (SS)		----	0.5	mg/L	<0.5	10 mg/L	106	----	82.4	118	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4859289)												
EK061A: Total Kjeldahl Nitrogen as N		----	0.1	mg/L	<0.1	0.5 mg/L	94.2	----	89.0	120	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4862277)												
ED045K: Chloride		16887-00-6	1	mg/L	<1	10 mg/L	99.3	----	88.2	108	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4862279)												
ED041K: Sulphate as SO4 - Turbidimetric		----	1	mg/L	<1	5 mg/L	100	----	89.8	108	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4862280)												



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)	
		Method: Compound	CAS Number	LOR		Unit	Result	LCS	DCS	Low	High
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4862280) - Continued											
ED045K: Chloride	16887-00-6	1	mg/L	<1	10 mg/L	100	----	88.2	108	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4864981)											
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	97.6	----	92.4	106	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4879079)											
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	95.1	----	89.3	109	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4884864)											
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	----	----	----	----	----	----	----
EP: Aggregate Organics (QC Lot: 4860347)											
EP030: Biochemical Oxygen Demand	----	----	mg/L	----	198 mg/L	93.9	----	78.6	118	----	----
EP: Aggregate Organics (QC Lot: 4870727)											
EP005: Total Organic Carbon	----	1	mg/L	<1	5 mg/L	112	----	78.1	123	----	----
				<1	100 mg/L	112	----	79.9	119	----	----
EP: Aggregate Organics (QC Lot: 4879048)											
EP026C: Chemical Oxygen Demand	----	----	mg/L	----	25 mg/L	98.4	----	92.0	108	----	----
				----	250 mg/L	103	----	92.3	106	----	----
EP: Aggregate Organics (QC Lot: 4879360)											
EP020: Oil & Grease	----	2	mg/L	<2	20 mg/L	98.8	----	84.2	110	----	----
EG: Metals and Major Cations - Total (QC Lot: 4859203)											
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	5 µg/L	94.7	----	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	102	----	89.0	111	----	----
EG020: Manganese	7439-96-5	1	µg/L	<1	50 µg/L	102	----	85.0	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	50 µg/L	103	----	87.0	110	----	----
EG020: Zinc	7440-66-6	10	µg/L	<10	50 µg/L	98.9	----	86.0	114	----	----
EG: Metals and Major Cations - Total (QC Lot: 4859208)											
EG032: Calcium	7440-70-2	50	µg/L	<50	2000 µg/L	101	----	85.0	115	----	----
EG032: Iron	7439-89-6	10	µg/L	<10	2000 µg/L	104	----	85.0	115	----	----
EG032: Magnesium	7439-95-4	50	µg/L	<50	2000 µg/L	104	----	85.0	115	----	----
EG032: Potassium	7440-09-7	50	µg/L	<50	2000 µg/L	101	----	85.0	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report							
					Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)		
Method: Compound	CAS Number	LOR	Unit	Result			LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations - Total (QC Lot: 4859208) - Continued												
EG032: Sodium		7440-23-5	50	µg/L	<50	2000 µg/L	99.9	----	85.0	115	----	----



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

Matrix: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4859289)										
HK2304249-001	Anonymous	EK061A: Total Kjeldahl Nitrogen as N	----	5 mg/L	90.5	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4862277)										
HK2304531-001	Anonymous	ED045K: Chloride	16887-00-6	5 mg/L	87.7	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4862279)										
HK2305076-001	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric	----	500 mg/L	90.2	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4862280)										
HK2305076-001	Anonymous	ED045K: Chloride	16887-00-6	50 mg/L	# Not Determined	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4864981)										
HK2303582-001	Anonymous	EK071K: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	99.4	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 4879079)										
HK2306370-005	Anonymous	EK055K: Ammonia as N	7664-41-7	50 mg/L	107	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 4870727)										
HK2305640-005	Anonymous	EP005: Total Organic Carbon	----	5 mg/L	92.5	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 4879048)										
HK2304612-001	Anonymous	EP026C: Chemical Oxygen Demand	----	10 mg/L	109	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 4859203)										
HK2304536-001	Anonymous	EG020: Cadmium	7440-43-9	5 µg/L	93.9	----	75.0	125	----	----
		EG020: Copper	7440-50-8	50 µg/L	103	----	75.0	125	----	----
		EG020: Lead	7439-92-1	50 µg/L	102	----	75.0	125	----	----
		EG020: Manganese	7439-96-5	50 µg/L	100	----	75.0	125	----	----
		EG020: Nickel	7440-02-0	50 µg/L	103	----	75.0	125	----	----
		EG020: Zinc	7440-66-6	50 µg/L	104	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 4859208)										
HK2304916-001	WM1	EG032: Calcium	7440-70-2	2000 µg/L	102	----	75.0	125	----	----

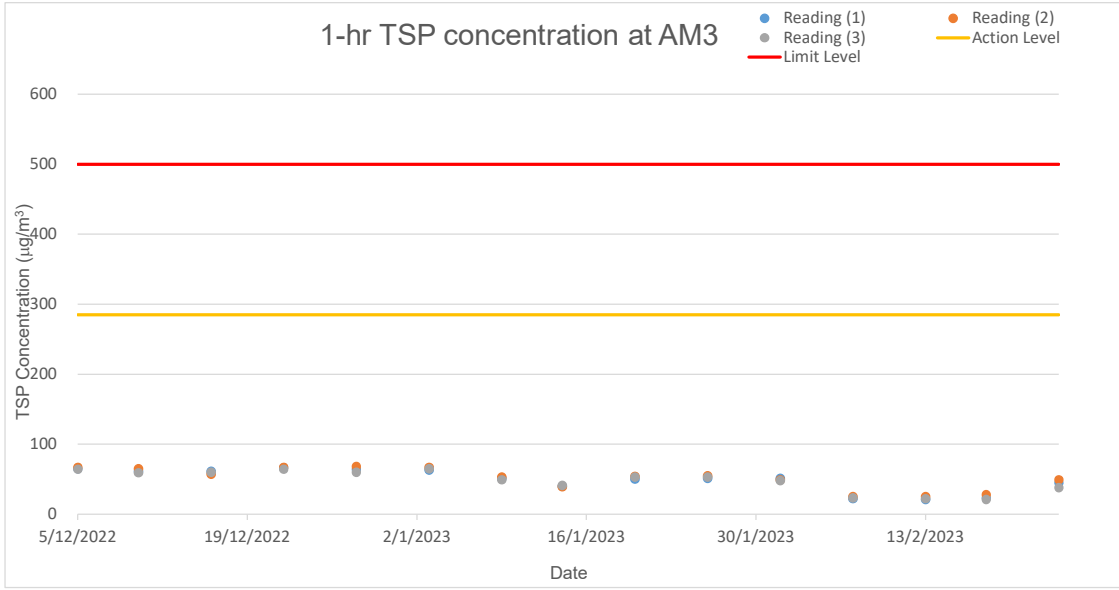
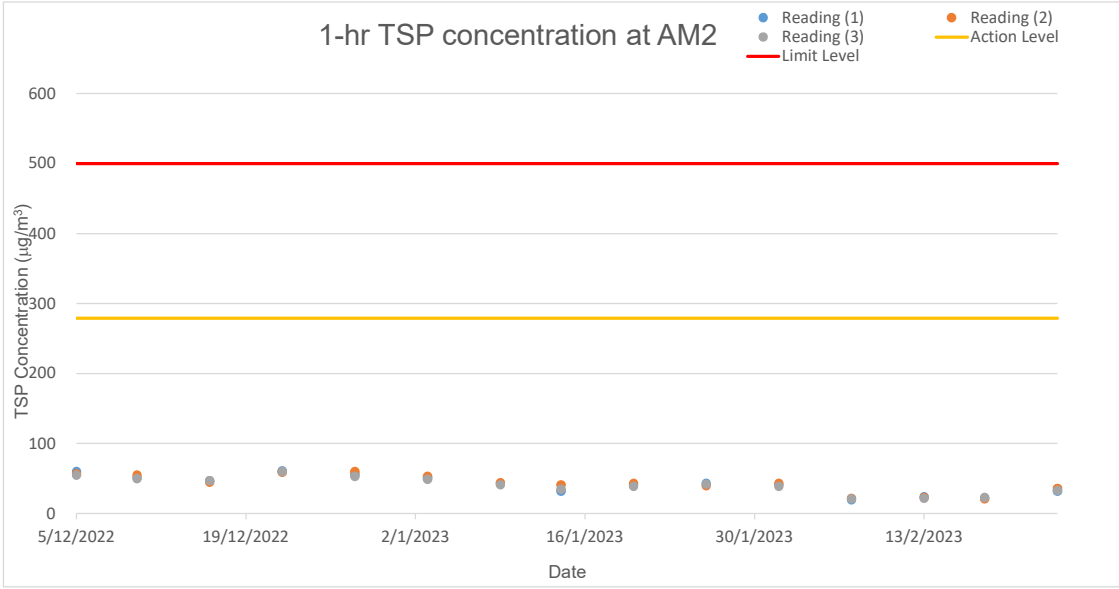
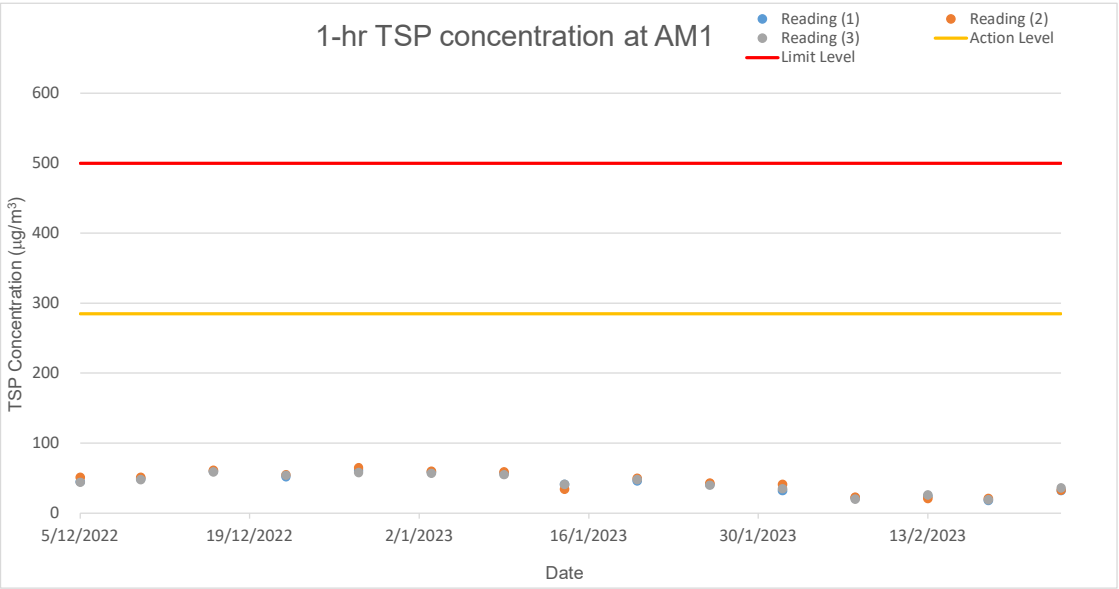


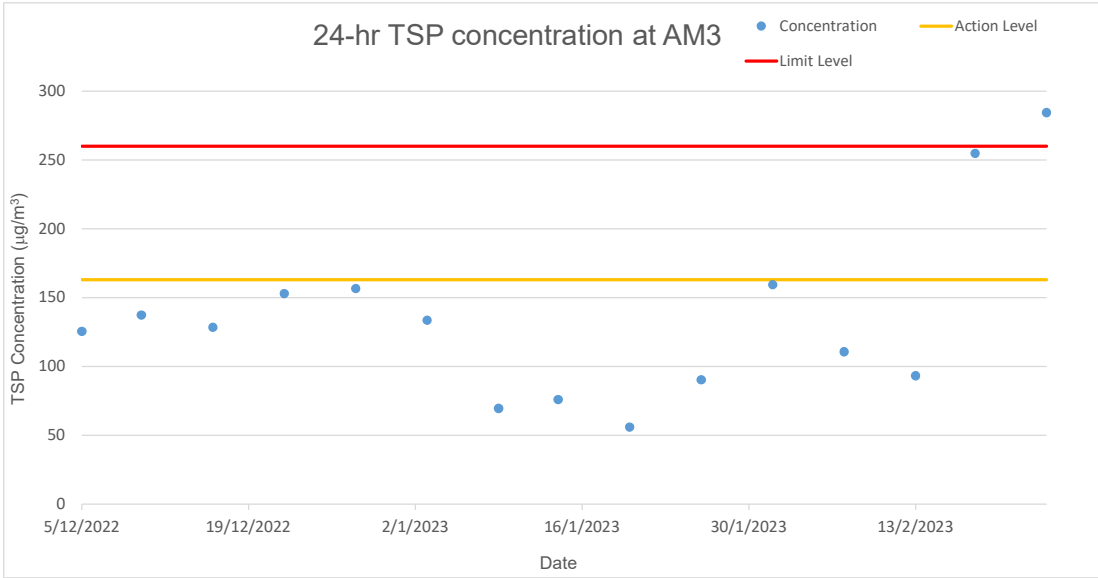
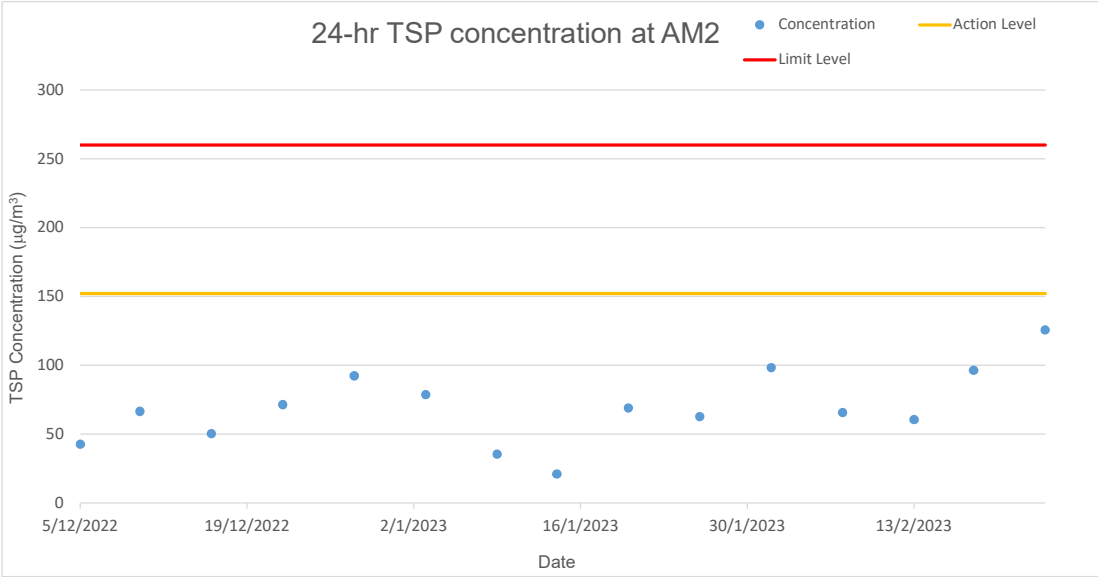
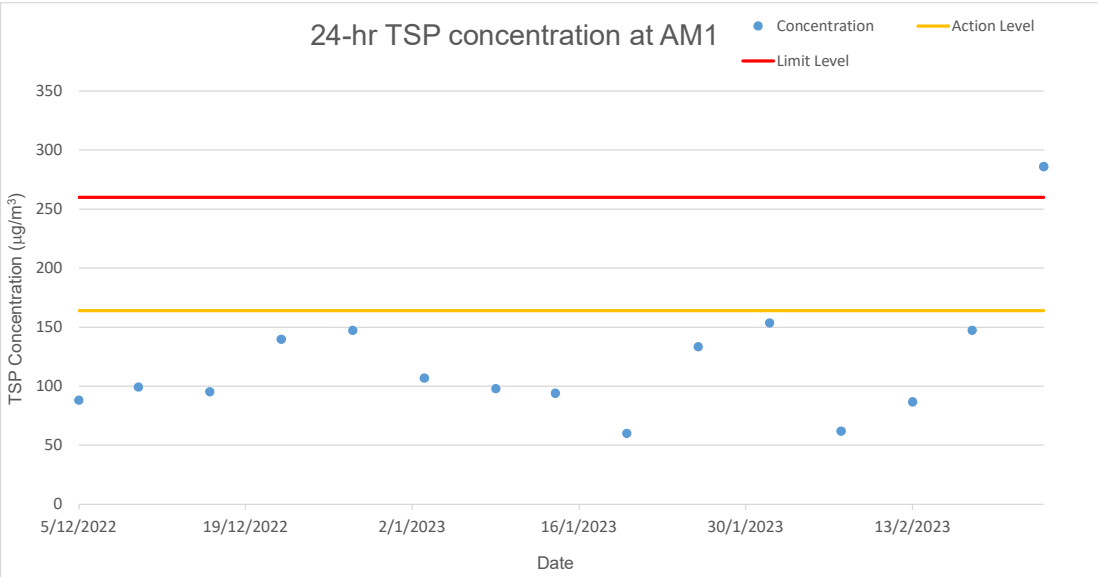
Matrix: WATER

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: 4859208) - Continued										
HK2304916-001	WM1	EG032: Iron	7439-89-6	2000 µg/L	103	----	75.0	125	----	----
		EG032: Magnesium	7439-95-4	2000 µg/L	99.8	----	75.0	125	----	----
		EG032: Potassium	7440-09-7	2000 µg/L	104	----	75.0	125	----	----
		EG032: Sodium	7440-23-5	2000 µg/L	# Not Determined	----	75.0	125	----	----

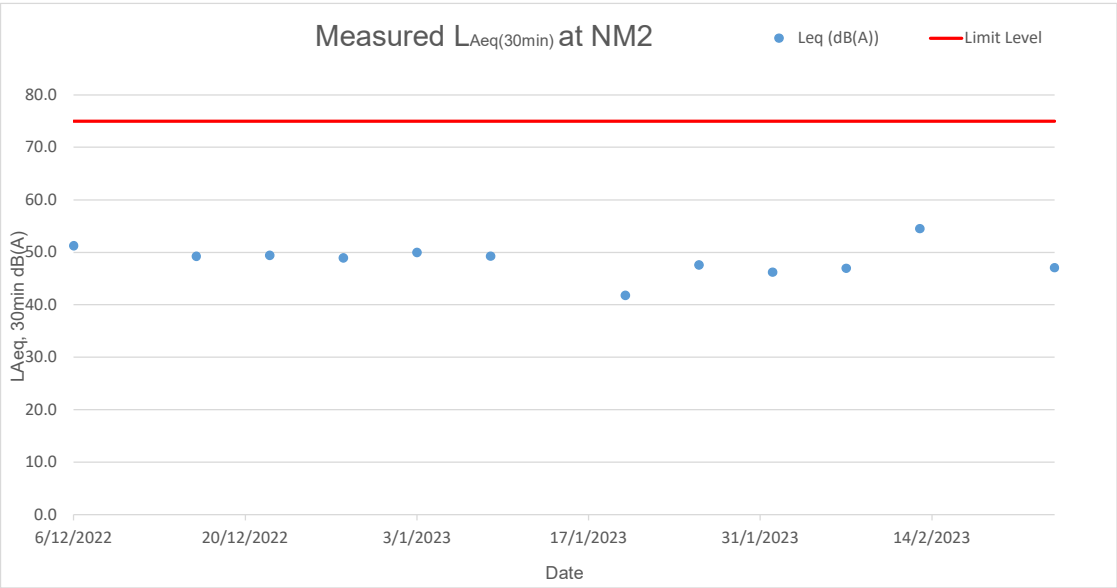
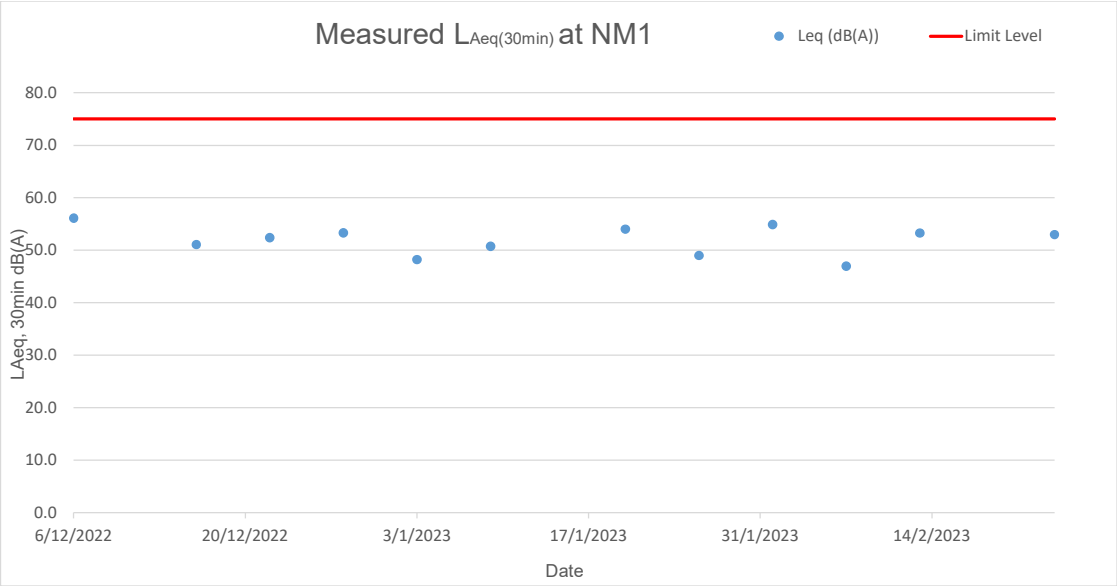
Appendix F Graphical Presentations

Air Quality



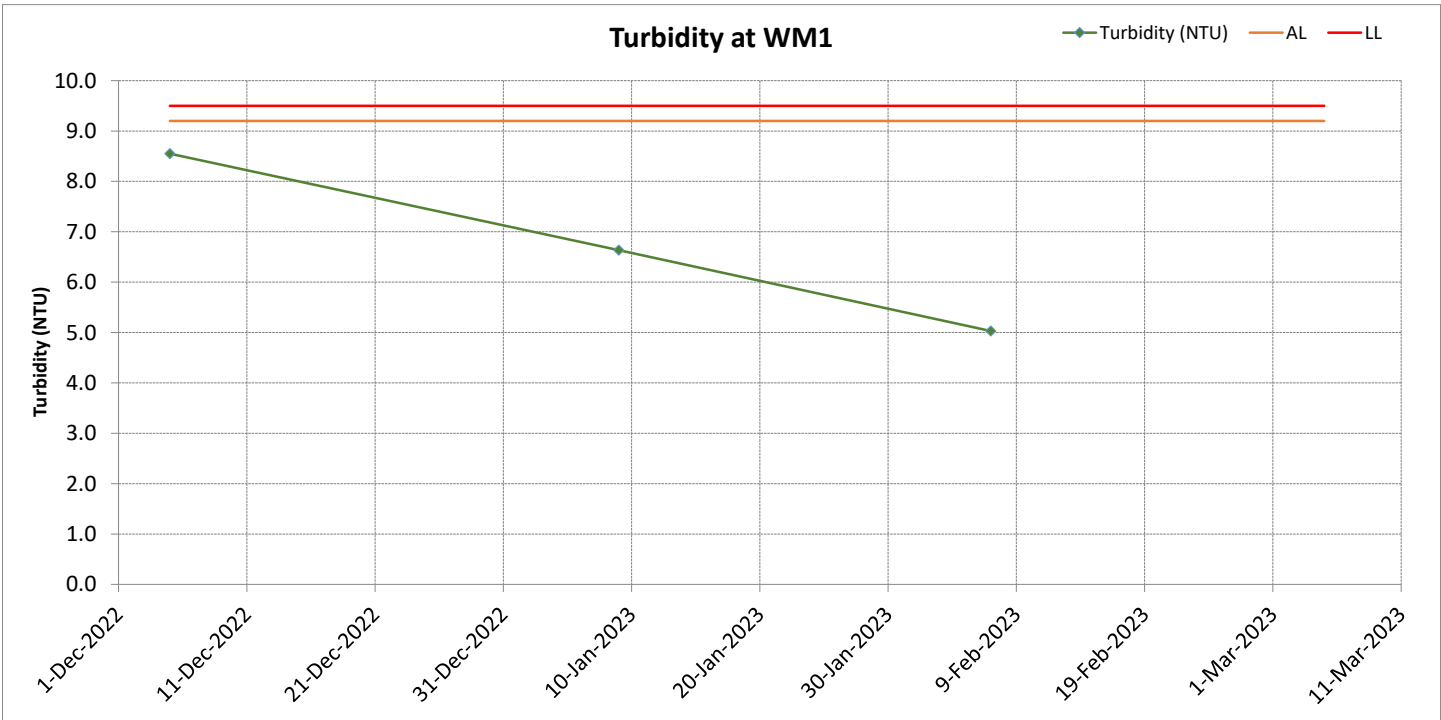
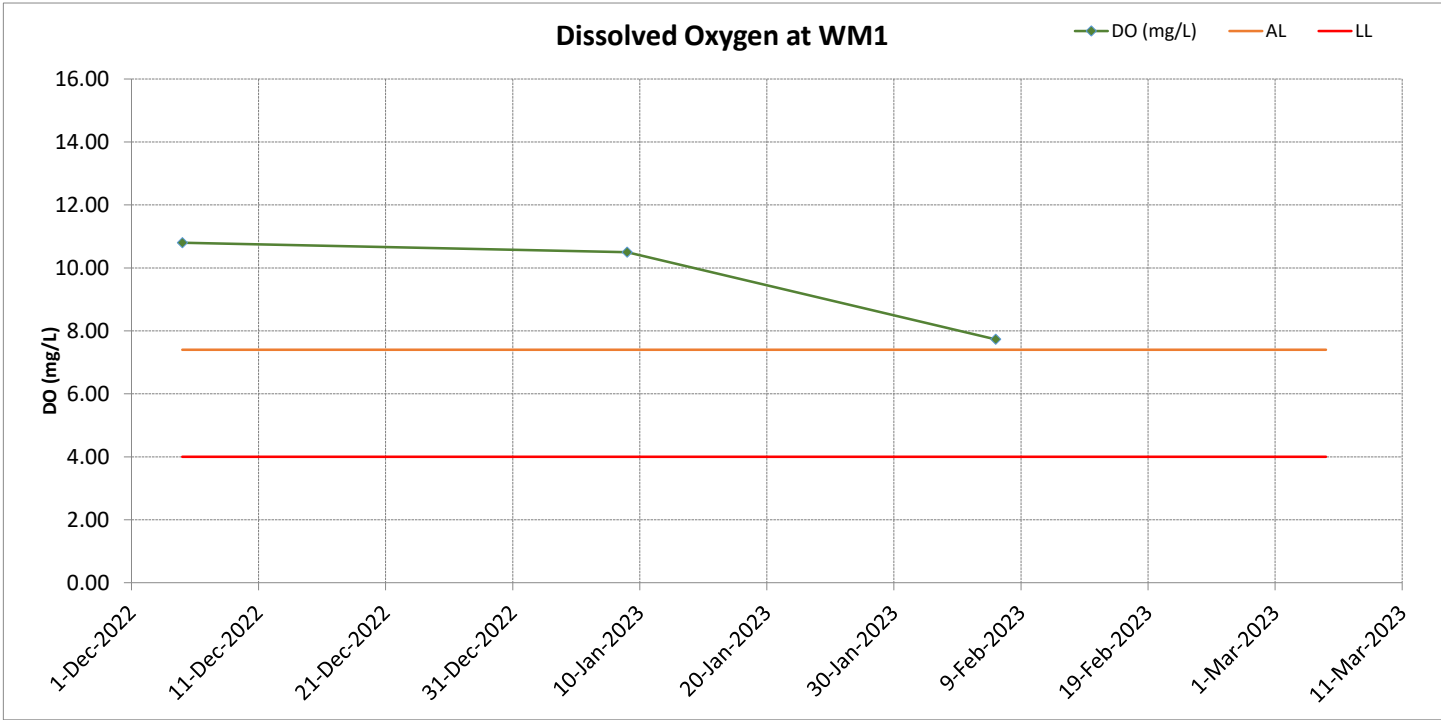


Noise

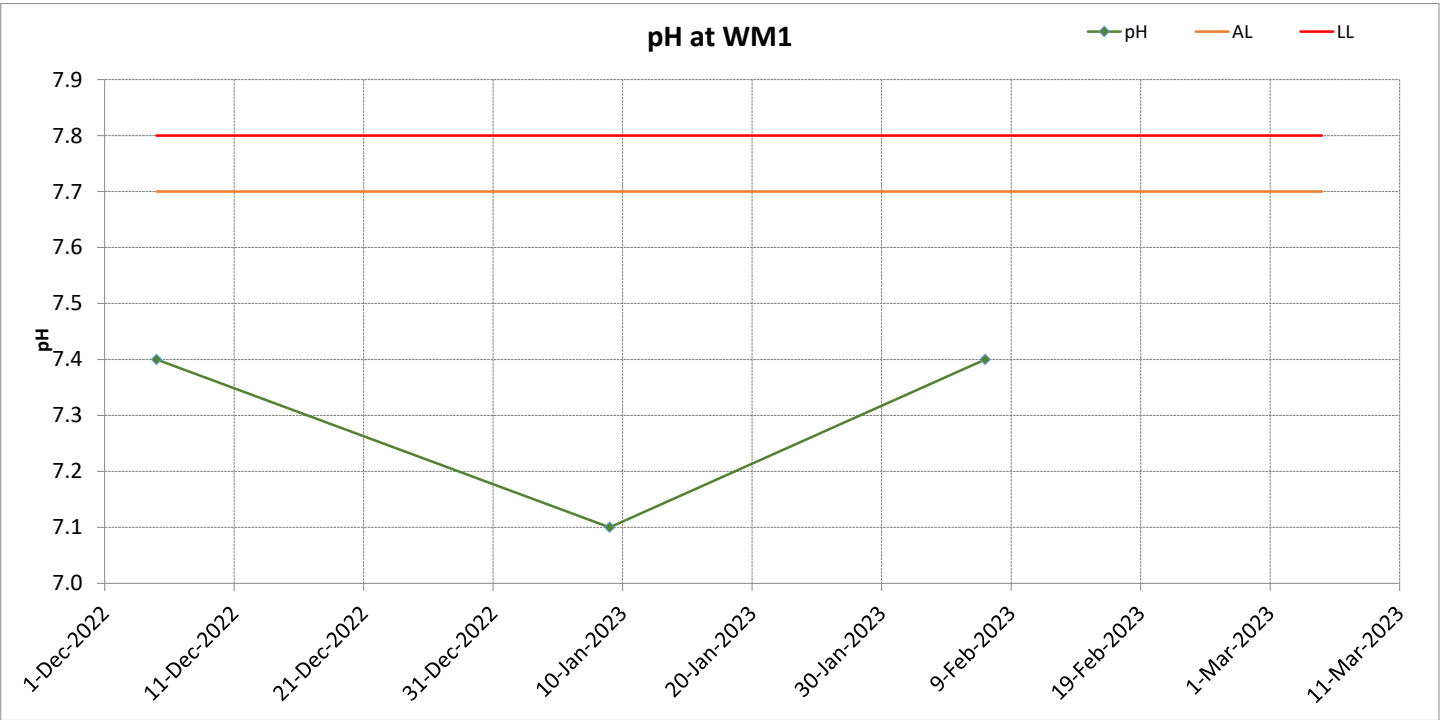
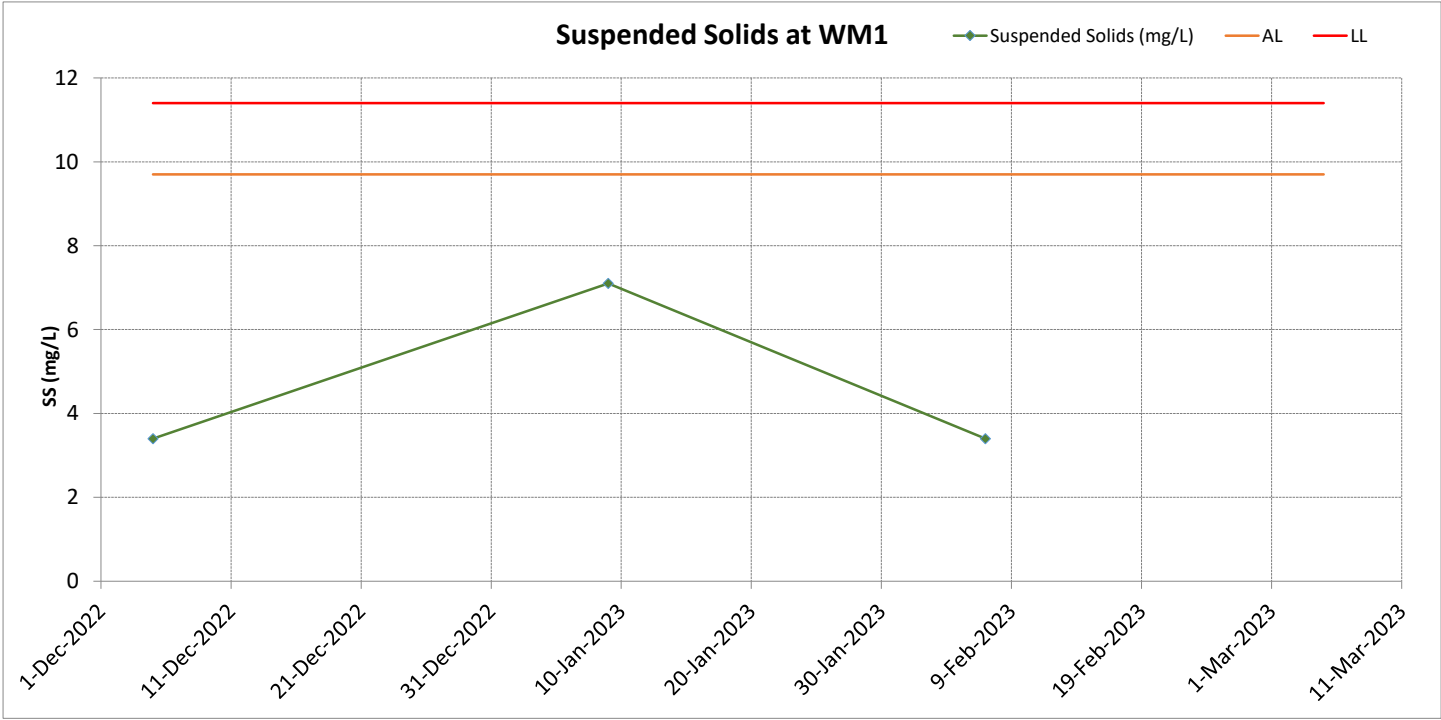


Water Quality

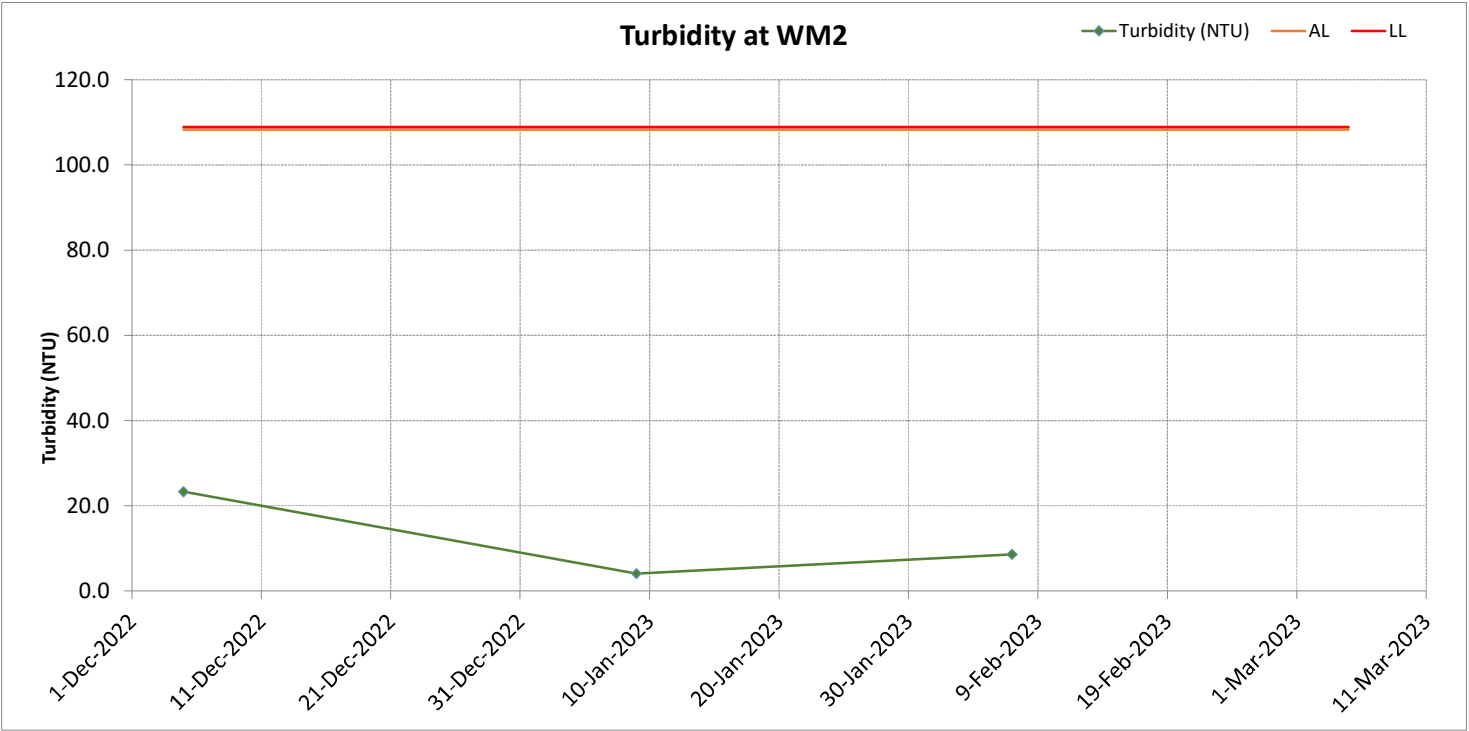
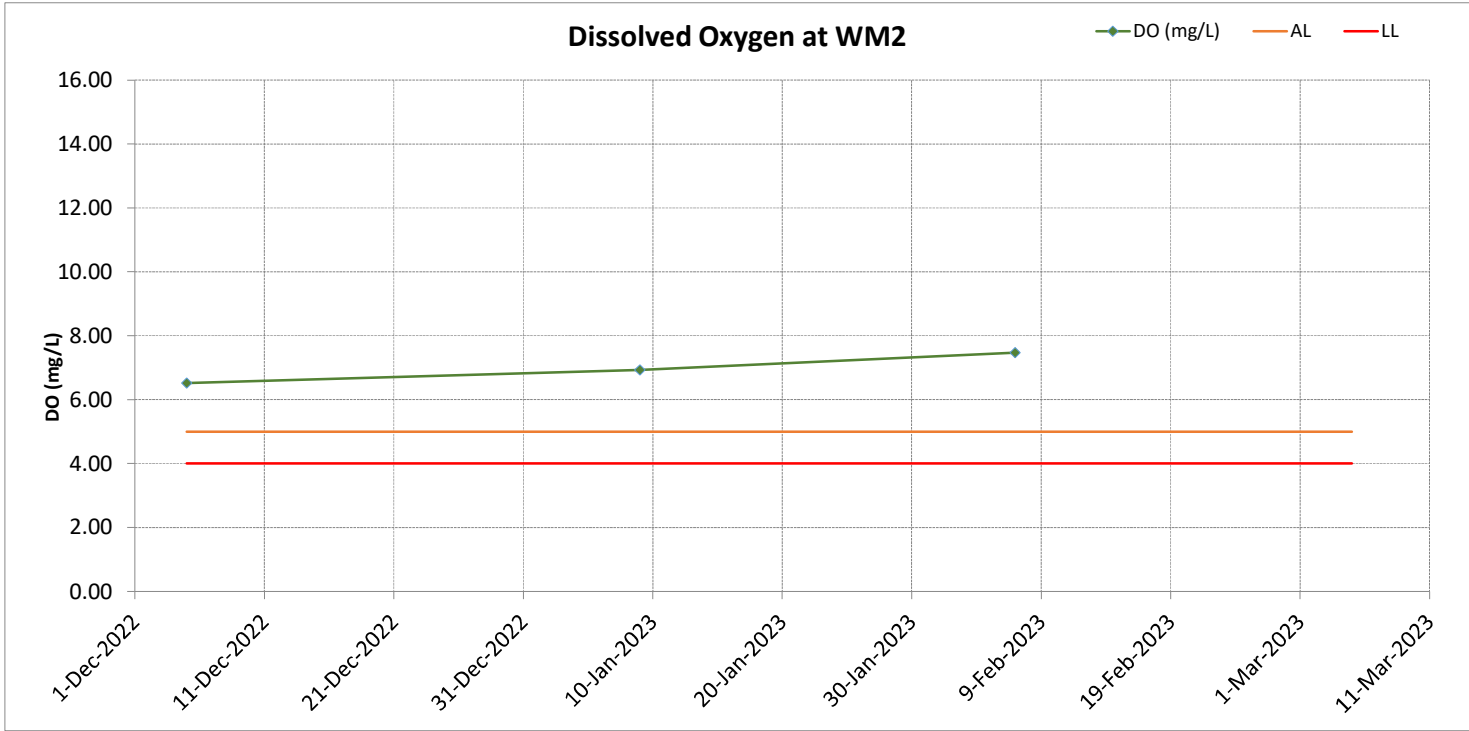
Surface Water Monitoring Results at WM1



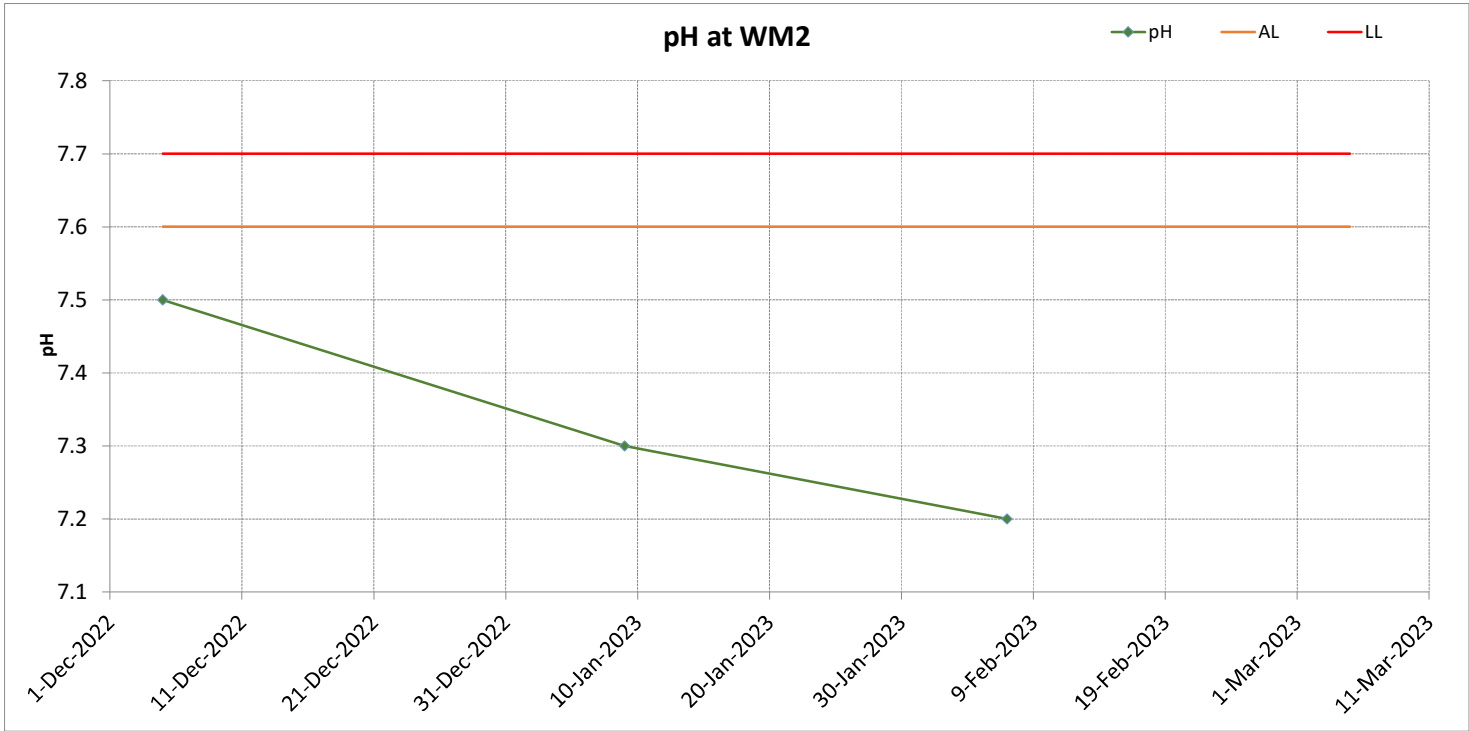
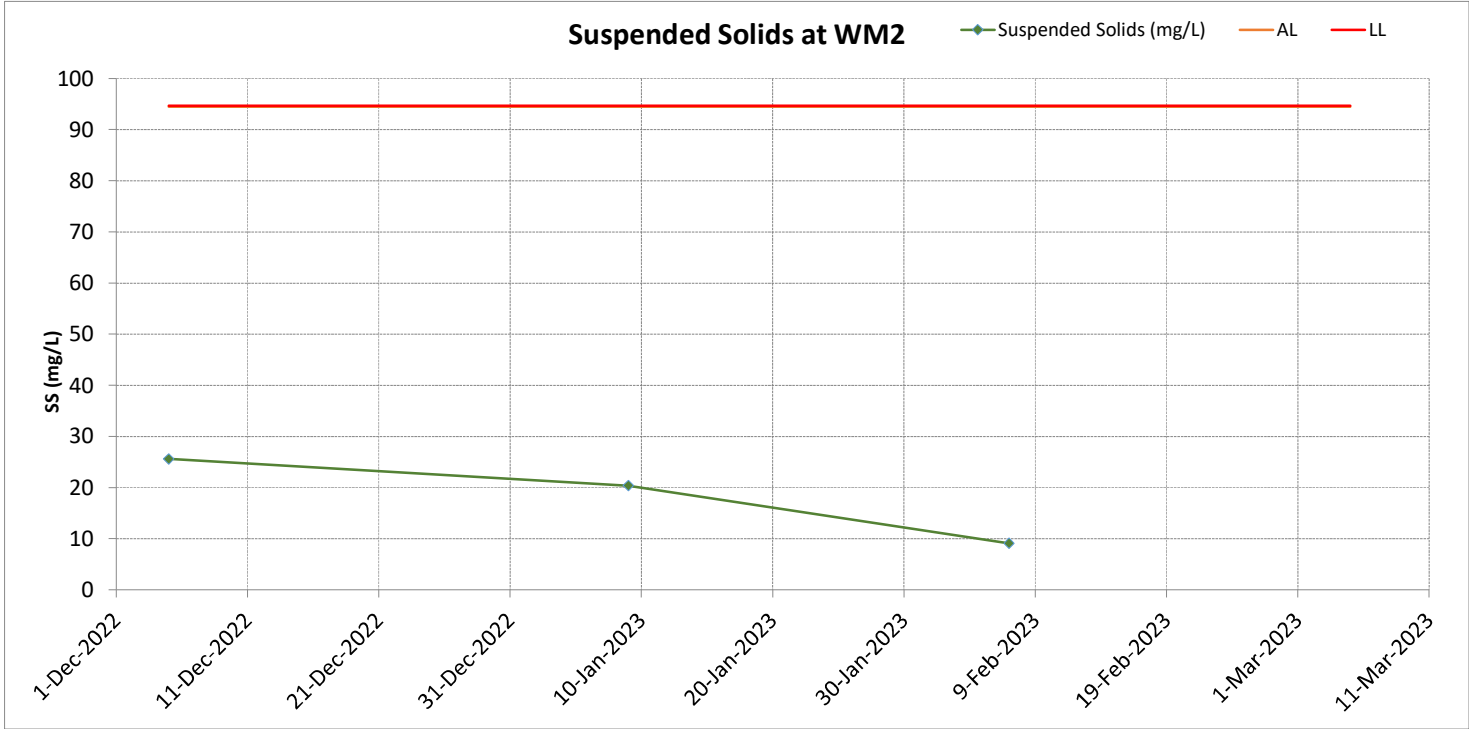
Surface Water Monitoring Results at WM1



Surface Water Monitoring Results at WM2



Surface Water Monitoring Results at WM2



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
	Level Exceedance			
AM1	Action	-	-	0
	Limit	-	24 Feb 2023*	1
AM2	Action	-	-	0
	Limit	-	-	0
AM3	Action	-	18 Feb 2023*	1
	Limit	-	24 Feb 2023*	1

Remarks: * equal to non-project related

Noise Monitoring

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

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	0
	Suspended Solids	0	0

Notification of Environmental Quality Limits Exceedance

Landfill Gas (LFG) Monitoring

LFG Monitoring Station	Monitoring Parameter(s)	No. of Exceedance
		Limit Level
Portion A +58 mpD,+55 mpD Platform	CH ₄	0
	CO ₂	0
	O ₂	0

Agreement No. CE 20/2004(EP) North East New Territories (NENT) Landfill Extension Notification of Environmental Quality Limits Exceedances			Notification No.: 001_20230218 Date: 28 February 2023											
Monitoring Data Received date: 23 February 2023														
Date of Notification: 23 February 2023 (by email)														
Works Inspected: Project Site Area & Monitoring Station AM3														
Monitoring Location: AM3 –Wo Keng Shan Tsuen														
Parameter: Air Quality (Construction Dust) – 24-hr TSP														
Action & Limit Levels			Measured Level											
Time Period	Action Level	Limit Level	Monitoring Period:	18 Feb 2023 10:32 to 19 Feb 2023 10:32										
24 hours	> 163	>260	Concentration (µg/m³)	255										
			Repeat Measured Level											
			Monitoring Period:	24 Feb 2023 10:53 to 25 Feb 2023 10:53										
			Concentration (µg/m³)	284										
Possible reason for Action or Limit Level Non-compliance: <p>An exceedance in Limit Level of 24-hr TSP air quality was recorded during impact monitoring at AM3 from 18 to 19 February 2023. Based on contractor's record, construction activities and mitigation measures conducted by contractor from 18 February 2023 [Photo 1 to Photo 6] were listed below:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="padding: 5px;">Construction Activities (18 Feb 2023)</th> <th style="padding: 5px;">Mitigation Measures</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Site Formation Work at Portion A (PM)</td> <td style="padding: 5px;">Wheel washing facilities with high-pressure water jets Frequent watering of the unpaved area and work area</td> </tr> <tr> <td style="padding: 5px;">Fire service building (FSB) foundation rebar fixing at Portion D</td> <td rowspan="3" style="padding: 5px; vertical-align: middle;">Non high dust emission construction works with the properly implemented dust mitigation measures (Frequent watering of the unpaved area and work area)</td> </tr> <tr> <td style="padding: 5px;">Fire services building (FSB) formwork erection at Portion D</td> </tr> <tr> <td style="padding: 5px;">Integrated building office (IOB) conducting the plate load test at Portion D</td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;">Water spraying by water hose & water tanker at SBA</td> </tr> </tbody> </table> <p>The path of water sprayed by water tanker and water spraying by water hose & water tanker schedule are presented in Appendix A.</p> <p>No construction work from the project was conducted on 19 February 2023 (Sunday).</p> <p>During the regular weekly site inspection on 13 & 20 February 2023, it was observed that the dust mitigation measures were implemented such as wheel washing facilities with high-pressure water jets have been provided at all site exits of the project and cleaning all vehicles before allowing them to leave the construction site to ensure that no mud or debris would be brought to the public area [Photos 5 to 6]. And the frequent watering of the unpaved area and work area were implemented in the construction site.</p> <p>According to the observations record during the monitoring period on 18 February 2023, no dusty construction works of the project was found by monitoring staff. The dust emission from vehicular was observed on the public road, Wo Keng Shan Road [Photo 7].</p> <p>Based on the HKO's record (Hong Kong Observatory Automatic Weather Station – Tai Kwu Ling), The prevailing wind direction is from southeast to east during the monitoring period. AM3 is at upwind direction at Portion A and Portion D. Therefore, the construction activities of the project may not cause the high level of concentration at AM3. Impact monitoring location and site area from the project are shown in Figure 1.</p>					Construction Activities (18 Feb 2023)	Mitigation Measures	Site Formation Work at Portion A (PM)	Wheel washing facilities with high-pressure water jets Frequent watering of the unpaved area and work area	Fire service building (FSB) foundation rebar fixing at Portion D	Non high dust emission construction works with the properly implemented dust mitigation measures (Frequent watering of the unpaved area and work area)	Fire services building (FSB) formwork erection at Portion D	Integrated building office (IOB) conducting the plate load test at Portion D		Water spraying by water hose & water tanker at SBA
Construction Activities (18 Feb 2023)	Mitigation Measures													
Site Formation Work at Portion A (PM)	Wheel washing facilities with high-pressure water jets Frequent watering of the unpaved area and work area													
Fire service building (FSB) foundation rebar fixing at Portion D	Non high dust emission construction works with the properly implemented dust mitigation measures (Frequent watering of the unpaved area and work area)													
Fire services building (FSB) formwork erection at Portion D														
Integrated building office (IOB) conducting the plate load test at Portion D														
	Water spraying by water hose & water tanker at SBA													

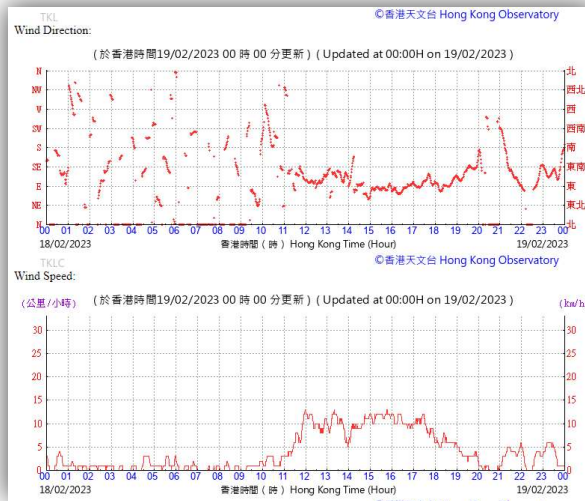
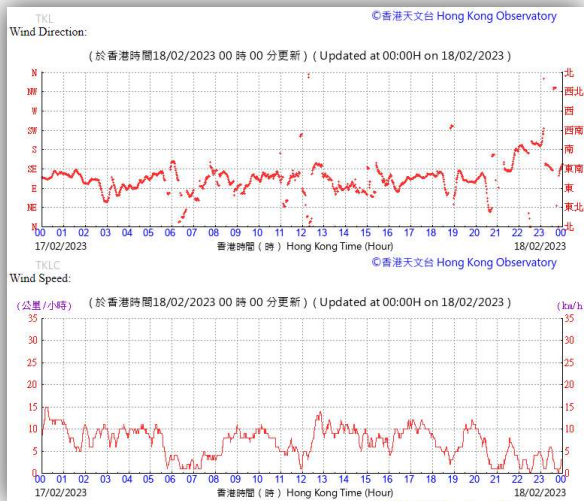


Photo 1 Traffic accident happened outside Portion A



Photo 2 Fire Services Building (FSB) formwork erection at Portion D





Photo 3 FSB Rebar Fixing at Portion D



Photo 4 Integrated Building Office (IOB) conducting the plate load test at Portion D



<p>Photo 5 Vehicle Wheel Washing Bay</p>	<p>Photo 6 Frequently watering of the unpaved area and work area</p>
	
<p>Photo 7 Dust emission from vehicular</p>	
	

Follow Up

Following the Event and Action Plan, a repeat monitoring was undertaken on 24 February 2023 to confirm findings which showed that the limit level exceedance occurred at AM3.

Actions taken/ to be taken:

Due to the measurement from 18 to 19 February 2023 exceeded the Action Level, the actions taken by ET in accordance with the Event/ Action Plan for dust impact were listed below:

- ✓ Identify source
- ✓ Inform IEC and Contractor
- ✓ Repeat measurement to confirm findings


Due to the repeat measurement from 24 to 25 February 2023 exceeded the Limit Level, the below actions will be taken by ET in accordance with the Event/ Action Plan for dust impact:

- ✓ Identify source
- ✓ Inform IEC and Contractor
- ✓ Repeat measurement to confirm findings
- ✓ Increase monitoring frequency to daily
- ✓ Assess effectiveness of Contractor's remedial actions and keep EPD and IEC/IC informed of the results

The monitoring frequency will be increased to daily starting from 1 March 2023. The Construction Dust Control

Mitigation Measures by the Environmental Mitigation Measure Implementation Schedule (EMIS) will continue to be implemented by the contractor.


Based on no construction works of the Project causing high dust emission with the properly implemented dust mitigation measures as above mention. Therefore, the exceedance was considered unlikely to be related to the Project.

Reviewed by: 

Keith Chau

Title: Deputy ET Leader

Date: 28 Feb 2023

Approved by: 

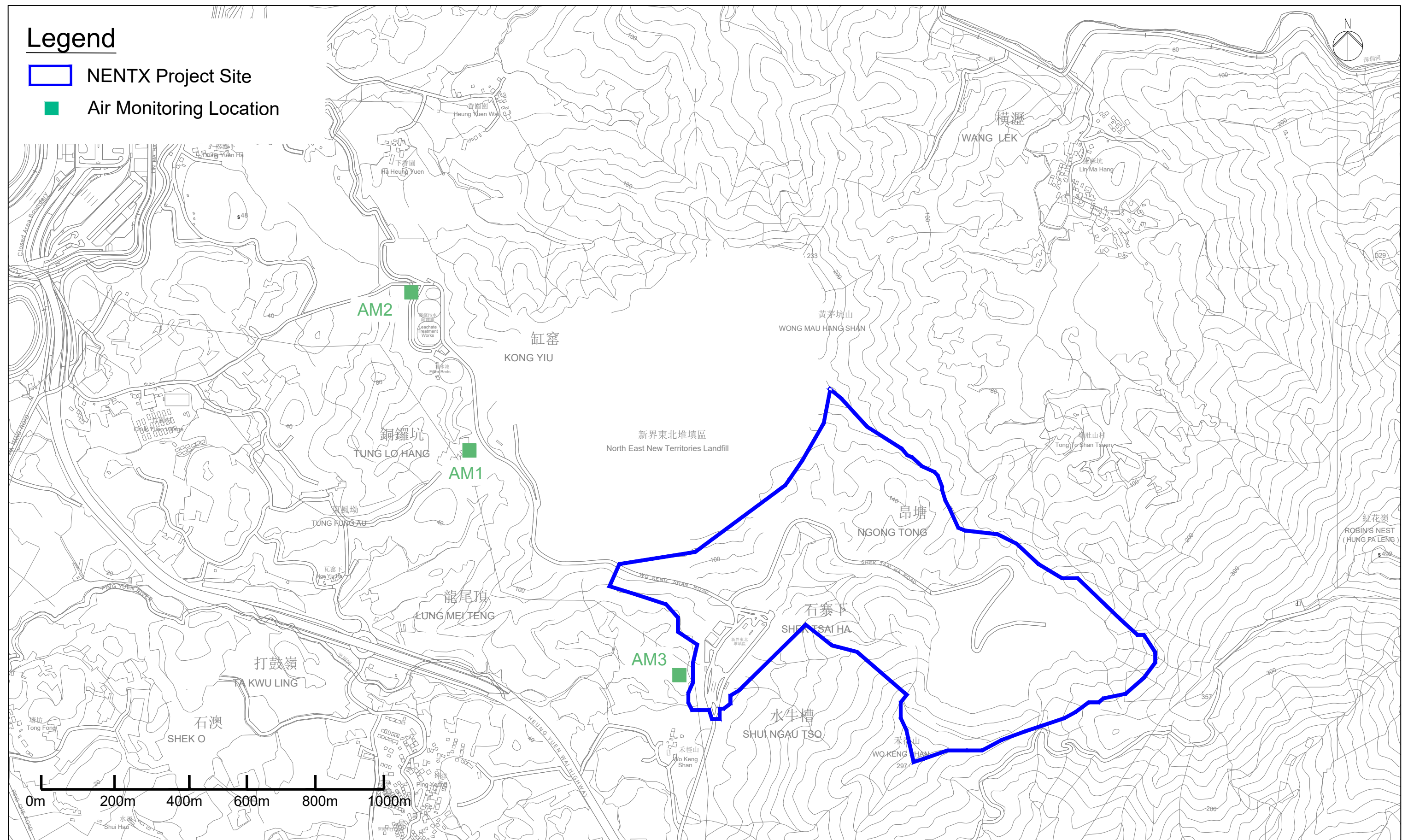
Fredrick Leong

Title: ET Leader

Date: 28 Feb 2023

Figure 1


Impact Monitoring Location




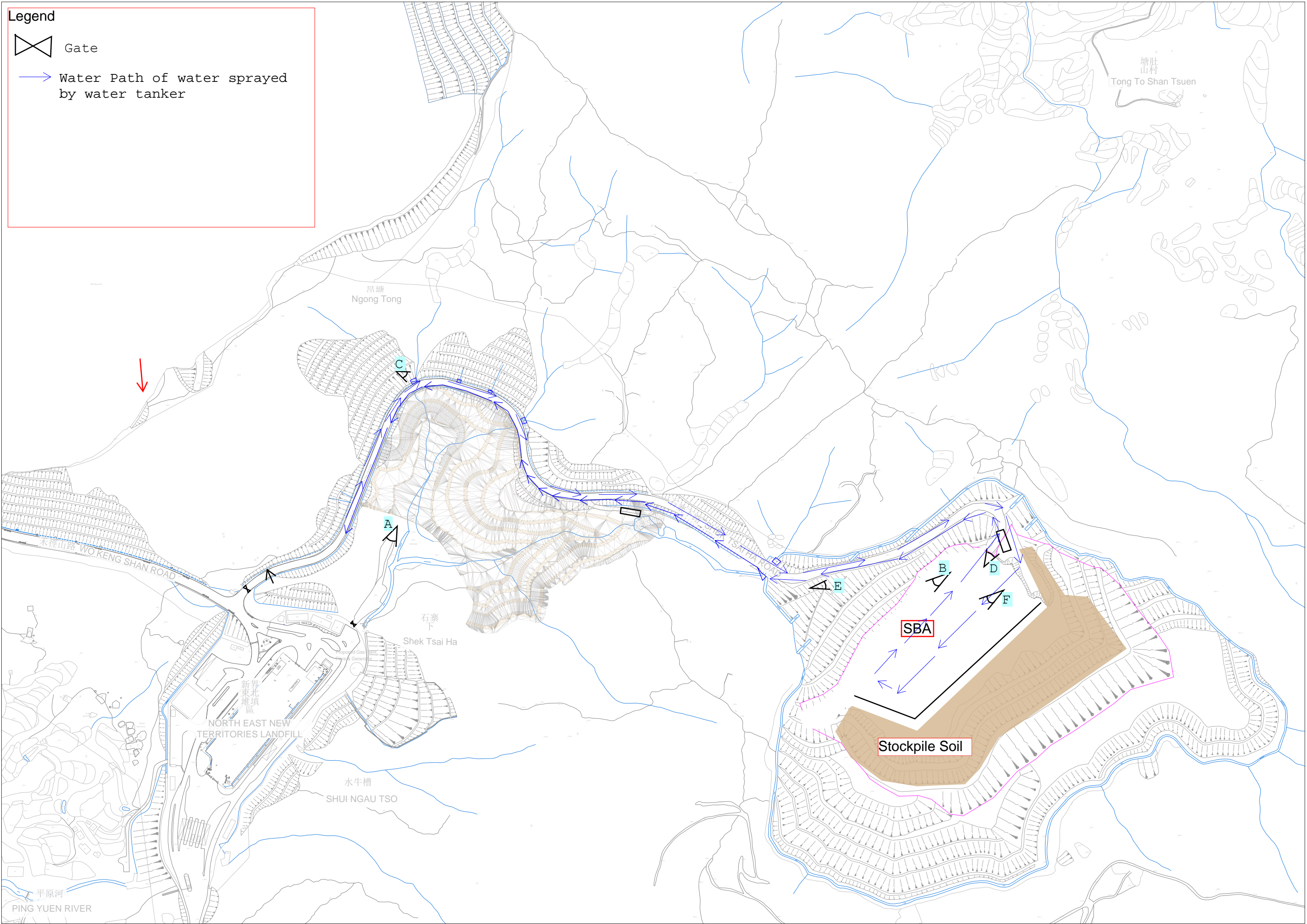
Appendix A

**Path of water spraying by water tanker & Water
spraying by water hose & water tanker
schedule**

Legend

 Gate

 Water Path of water sprayed by water tanker



NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
1	900	D		/			峰
1	930	E	SBA			/	傳
1	930	A		/			Alex
1	1100	D		/			峰
1	1115	E	SBA	/		/	傳
1	1115	A		/			Alex
1	1400	D		/			峰
1	1430	E	SBA			/	傳
1	1430	A		/			Alex
1	1600	D		/			峰
1	1630	E	SBA			/	傳
1	1630	A		/			Alex
2	900	D		/			峰
2	930	E	SBA			/	傳
2	930	A		/			Alex
2	1100	D		/			峰
2	1115	E	SBA			/	傳
2	1115	A		/			Alex
2	1400	D		/			峰
2	1430	E	SBA			/	傳
2	1430	A		/			Alex
2	1600	D		/			峰
2	1630	E	SBA			/	傳
2	1630	A		/			Alex
3	900	D		/			峰
3	930	E	SBA			/	傳
3	930	A		/			Alex
3	1100	D		/			峰
3	1115	E	SBA			/	傳
3	1115	A		/			Alex
3	1400	D		/			峰
3	1430	E	SBA			/	傳
3	1430	A		/			Alex
3	1600	D		/			峰
3	1630	E	SBA			/	傳
3	1630	A		/			Alex

Reviewed by: Konster GA
PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
4	900	D		/			峰
4	930	E	SBA			/	傳
4	930	A		/			Alex
4	1100	D		/			峰
4	1115	E	SBA			/	傳
4	1115	A		/			Alex
4	1400	D		/			峰
4	1430	E	SBA			/	傳
4	1430	A		/			Alex
4	1600	D		/			峰
4	1630	E	SBA			/	傳
4	1630	A		/			Alex
6	900	D		/			峰
6	930	E	SBA			/	傳
6	930	A		/			Alex
6	1100	D		/			峰
6	1115	E	SBA			/	傳
6	1115	A		/			Alex
6	1400	D		/			峰
6	1430	E	SBA			/	傳
6	1430	A		/			Alex
6	1600	D		/			峰
6	1630	E	SBA			/	傳
6	1630	A		/			Alex
7	900	D		/			峰
7	930	E	SBA			/	傳
7	930	A		/			Alex
7	1100	D		/			峰
7	1115	E	SBA			/	傳
7	1115	A		/			Alex
7	1400	D		/			峰
7	1430	E	SBA			/	傳
7	1430	A		/			Alex
7	1600	D		/			峰
7	1630	E	SBA			/	傳
7	1630	A		/			Alex

Reviewed by: lanth GA
PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
8	900	D		/			峰
8	930	E	SBA			/	傳
8	930	A		/			Alex
8	1100	D		/			峰
8	1115	E	SBA			/	傳
8	1115	A		/			Alex
8	1400	D		/			峰
8	1430	E	SBA			/	傳
8	1430	A		/			Alex
8	1600	D		/			峰
8	1630	E	SBA			/	傳
8	1630	A		/			Alex
9	900	D		/			峰
9	930	E	SBA			/	傳
9	930	A		/			Alex
9	1100	D		/			峰
9	1115	E	SBA			/	傳
9	1115	A		/			Alex
9	1400	D		/			峰
9	1430	E	SBA			/	傳
9	1430	A		/			Alex
9	1600	D		/			峰
9	1630	E	SBA			/	傳
9	1630	A		/			Alex
10	900	D		/			峰
10	930	E	SBA			/	傳
10	930	A		/			Alex
10	1100	D		/			峰
10	1115	E	SBA			/	傳
10	1115	A		/			Alex
10	1400	D		/			峰
10	1430	E	SBA			/	傳
10	1430	A		/			Alex
10	1600	D		/			峰
10	1630	E	SBA			/	傳
10	1630	A		/			Alex

Reviewed by:

Constantine
Lway
PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
11	900	D		/			峰
11	930	E	SBA			/	傳
11	930	A		/			Alex
11	1100	D		/			峰
11	1115	E	SBA			/	傳
11	1115	A		/			Alex
11	1400	D		/		/	峰
11	1430	E	SBA				傳
11	1430	A		/			Alex
11	1600	D		/		/	峰
11	1630	E	SBA				傳
11	1630	A		/			Alex
13	900	D		/			峰
13	930	E	SBA			/	傳
13	930	A		/			Alex
13	1100	D		/			峰
13	1115	E	SBA			/	傳
13	1115	A		/			Alex
13	1400	D		/			峰
13	1430	E	SBA			/	傳
13	1430	A		/			Alex
13	1600	D		/			峰
13	1630	E	SBA			/	傳
13	1630	A		/			Alex
14	900	D		/			峰
14	930	E	SBA			/	傳
14	930	A		/			Alex
14	1100	D		/			峰
14	1115	E	SBA			/	傳
14	1115	A		/			Alex
14	1400	D		/			峰
14	1430	E	SBA			/	傳
14	1430	A		/			Alex
14	1600	D		/			峰
14	1630	E	SBA			/	傳
14	1630	A		/			Alex

Reviewed by: kanth GA
PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
15	900	D		/			峰
15	930	E	SBA			/	傳
15	930	A		/			Alex
15	1100	D		/			峰
15	1115	E	SBA			/	傳
15	1115	A		/			Alex
15	1400	D		/			峰
15	1430	E	SBA			/	傳
15	1430	A		/			Alex
15	1600	D		/			峰
15	1630	E	SBA			/	傳
15	1630	A		/			Alex
16	900	D		/			峰
16	930	E	SBA			/	傳
16	930	A		/			Alex
16	1100	D		/			峰
16	1115	E	SBA			/	傳
16	1115	A		/			Alex
16	1400	D		/			峰
16	1430	E	SBA			/	傳
16	1430	A		/			Alex
16	1600	D		/			峰
16	1630	E	SBA			/	傳
16	1630	A		/			Alex
17	900	D		/		/	峰
17	930	E	SBA			/	傳
17	930	A		/			Alex
17	1100	D		/			峰
17	1115	E	SBA			/	傳
17	1115	A		/			Alex
17	1400	D		/			峰
17	1430	E	SBA			/	傳
17	1430	A		/			Alex
17	1600	D		/			峰
17	1630	E	SBA			/	傳
17	1630	A		/			Alex

Reviewed by: 1 canch
long BA
 /PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
18	900	D		/			峰
18	930	E	SBA			/	傳
18	930	A		/			Alex
18	1100	D		/			峰
18	1115	E	SBA			/	傳
18	1115	A		/			Alex
18	1400	D		/			峰
18	1430	E	SBA			/	傳
18	1430	A		/			Alex
18	1600	D		/			峰
18	1630	E	SBA			/	傳
18	1630	A		/			Alex
20	900	D		/			峰
20	930	E	SBA			/	傳
20	930	A		/			Alex
20	1100	D		/			峰
20	1115	E	SBA			/	傳
20	1115	A		/			Alex
20	1400	D		/			峰
20	1430	E	SBA			/	傳
20	1430	A		/			Alex
20	1600	D		/			峰
20	1630	E	SBA			/	傳
20	1630	A		/			Alex
21	900	D		/			峰
21	930	E	SBA			/	傳
21	930	A		/			Alex
21	1100	D		/			峰
21	1115	E	SBA			/	傳
21	1115	A		/			Alex
21	1400	D		/			峰
21	1430	E	SBA			/	傳
21	1430	A		/			Alex
21	1600	D		/			峰
21	1630	E	SBA			/	傳
21	1630	A		/			Alex

Reviewed by:

kanika
very

GA

PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
22	900	D		/			峰
22	930	E	SBA			/	傳
22	930	A		/			Alex
22	1100	D		/			峰
22	1115	E	SBA			/	傳
22	1115	A		/			Alex
22	1400	D		/			峰
22	1430	E	SBA			/	傳
22	1430	A		/			Alex
22	1600	D		/			峰
22	1630	E	SBA			/	傳
22	1630	A		/			Alex
23	900	D		/			峰
23	930	E	SBA			/	傳
23	930	A		/			Alex
23	1100	D		/			峰
23	1115	E	SBA			/	傳
23	1115	A		/			Alex
23	1400	D		/			峰
23	1430	E	SBA			/	傳
23	1430	A		/			Alex
23	1600	D		/			峰
23	1630	E	SBA			/	傳
23	1630	A		/			Alex
24	900	D		/		/	峰
24	930	E	SBA			/	傳
24	930	A		/			Alex
24	1100	D		/			峰
24	1115	E	SBA			/	傳
24	1115	A		/			Alex
24	1400	D		/			峰
24	1430	E	SBA			/	傳
24	1430	A		/			Alex
24	1600	D		/			峰
24	1630	E	SBA			/	傳
24	1630	A		/			Alex

Reviewed by: Konster JA
PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
25	900	D		/			峰
25	930	E	SBA			/	傳
25	930	A		/			Alex
25	1100	D		/			峰
25	1115	E	SBA			/	傳
25	1115	A		/			Alex
25	1400	D		/			峰
25	1430	E	SBA			/	傳
25	1430	A		/			Alex
25	1600	D		/			峰
25	1630	E	SBA			/	傳
25	1630	A		/			Alex
27	900	D		/			峰
27	930	E	SBA			/	傳
27	930	A		/			Alex
27	1100	D		/			峰
27	1115	E	SBA			/	傳
27	1115	A		/			Alex
27	1400	D		/			峰
27	1430	E	SBA			/	傳
27	1430	A		/			Alex
27	1600	D		/			峰
27	1630	E	SBA			/	傳
27	1630	A		/			Alex
28	900	D		/			峰
28	930	E	SBA			/	傳
28	930	A		/			Alex
28	1100	D		/			峰
28	1115	E	SBA			/	傳
28	1115	A		/			Alex
28	1400	D		/			峰
28	1430	E	SBA			/	傳
28	1430	A		/			Alex
28	1600	D		/		/	峰
28	1630	E	SBA			/	傳
28	1630	A		/			Alex

Reviewed by:

Kevin Long *LA*

PYE EO

Monitoring Data Received date: 28 February 2023

Date of Notification: 28 February 2023 (by email)

Works Inspected: Project Site Area & Monitoring Station AM1 & AM3

Monitoring Location: AM1 –Tung Lo Hang

Parameter: Air Quality (Construction Dust) – 24-hr TSP

Action & Limit Levels			Measured Level		Repeat Measured Level	
Time Period	Action Level	Limit Level	Monitoring Period:		Monitoring Period:	
24 hours	> 164	> 260	Concentration (µg/m ³)	286	Concentration (µg/m ³)	231

Monitoring Location: AM3 –Wo Keng Shan Tsuen

Parameter: Air Quality (Construction Dust) – 24-hr TSP

Action & Limit Levels			Measured Level		Repeat Measured Level	
Time Period	Action Level	Limit Level	Monitoring Period:		Monitoring Period:	
24 hours	> 163	> 260	Concentration (µg/m ³)	284	Concentration (µg/m ³)	277

Possible reason for Action or Limit Level Non-compliance:

An exceedance in Limit Level of 24-hr TSP air quality was recorded during impact monitoring at AM1 & AM3 from 24 to 25 February 2023. Based on contractor's record, construction activities and mitigation measures conducted by contractor from 24 to 25 February 2023 [Photo 1 to Photo 12] were listed below:

Construction Activities	Mitigation Measures
Site formation at Portion A	Water spraying by water hose at Portion A
Internal transportation of soil from Portion A to the SBA	Vehicle wash at the exit of Portion A and the SBA
	Water spraying by water tanker along the haul road between Portion A and the SBA (The route of water spraying by water tanker is shown in Figure 2)
Preparation works for permanent building foundation concrete pouring at Portion D	Water spraying by water hose at Portion D
Site Clearance at Portion E3-1	Covering of dusty materials at Portion D
Stockpiling at the SBA	

The path of water spraying by water tanker & the water spraying by water hose & water tanker schedule are presented in Appendix A.

No dusty construction works of the project were found by monitoring staff. The dust emission from vehicular was observed on the public road, Wo Keng Shan Road [Photo 13]. On the other hand, there was a fire incident on 24 February 2023 near the Project site according to the contractor's onsite record. [Photo 14]

Based on the HKO's record (Hong Kong Observatory Automatic Weather Station – Tai Kwu Ling), the prevailing wind direction is from southeast during the monitoring period. AM1 and AM3 are located at upwind direction at Portion A and Portion D. Therefore, the construction activities of the project may not cause the high level of concentration at AM1 & AM3. The monitoring location & site area are presented in **Figure 1**.

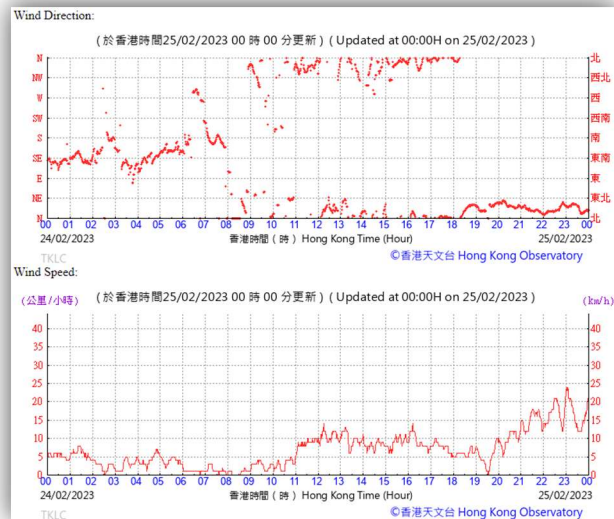
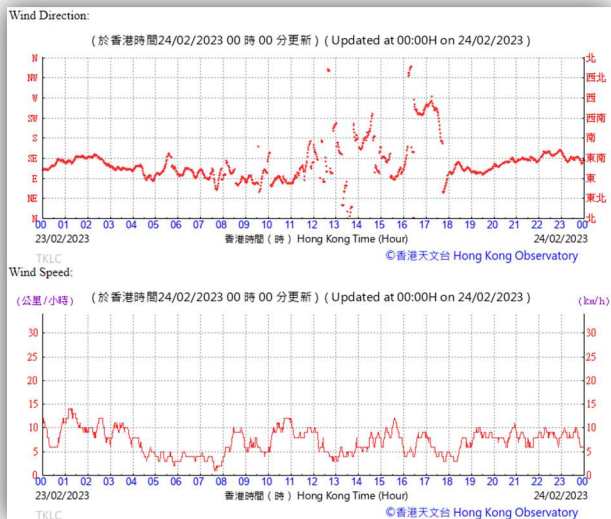


Photo 1 Frequently watering of the site exit at Portion A

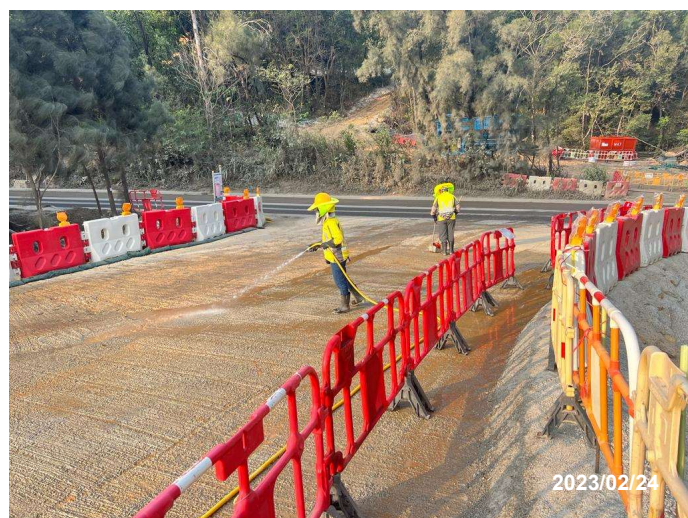


Photo 2 Frequently watering of the unpaved area and work area at Portion A



Photo 3 Frequently watering of the unpaved area and work area at Portion A



Photo 4 Frequently watering of the unpaved area and work area at Portion A

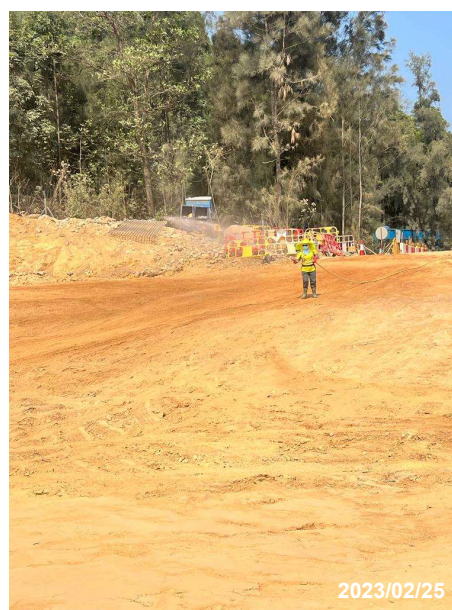


Photo 5 Frequently watering of the unpaved area and work area at Portion A



Photo 6 Vehicle wash at the exit of Portion A



Photo 7 Vehicle wash at the exit of Portion A

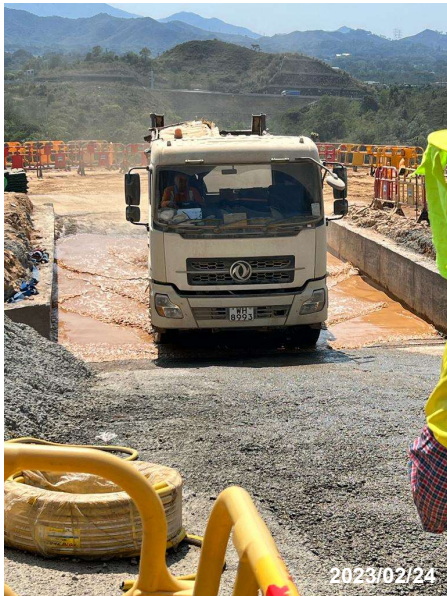


Photo 8 Vehicle wash at the exit of the SBA



Photo 9 Water spraying by water tanker along the haul road between Portion A and the SBA



Photo 10 Water spraying by water tanker along the haul road between Portion A and the SBA



<p>Photo 11 Water spraying by water hose at Portion D</p>	<p>Photo 12 Dusty Materials covered by impervious sheeting at Portion D</p>
 <p>2023/02/24</p>	 <p>2023/02/24</p>
<p>Photo 13 Dust emission from vehicular at Wo Keng Shan Road</p>	<p>Photo 14 Fire incident near the project site</p>
 <p>2023/02/24</p>	 <p>2023/02/24</p>
<p>Follow Up</p> <p>Based on contractor's record, construction activities were observed within the site area which included site formation at Portion A, internal transportation of soil from Portion A to the SBA, preparation works for permanent building foundation concrete pouring at Portion D, site clearance at Portion E3-1 & stockpiling at the SBA from 24 to 25 February 2023. No construction works causing high dust emission was found during the monitoring period. Following the Event and Action Plan, a repeat monitoring was undertaken on 1 March 2023 to confirm findings which showed that the action level exceedance occurred at AM1 & the limit level exceedance occurred at AM3.</p>	

Actions taken/ to be taken:

Due to the measurement from 24 to 25 February 2023 exceeded the Limit Level at AM1 & AM3, the actions taken by ET in accordance with the Event/ Action Plan for dust impact were listed below:

- ✓ Identify source
- ✓ Inform IEC and Contractor
- ✓ Repeat measurement to confirm findings
- ✓ Assess effectiveness of Contractor's remedial actions and keep EPD and IEC/IC informed of the results

Due to the repeat measurement from 1 to 2 March 2023 exceeded the Action Level at AM1, the below actions will be taken by ET in accordance with the Event/ Action Plan for dust impact:

- ✓ Identify source
- ✓ Inform IEC and Contractor
- ✓ Repeat measurement to confirm findings
- ✓ Increase monitoring frequency to daily

Due to the repeat measurement from 1 to 2 March 2023 exceeded the Limit Level at AM3, the below actions will be taken by ET in accordance with the Event/ Action Plan for dust impact:

- ✓ Identify source
- ✓ Inform IEC, IC and EPD the causes and actions taken for the exceedances
- ✓ Increase monitoring frequency to confirm findings
- ✓ Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented
- ✓ Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and IC informed of the results
- ✓ If exceedance stops, cease additional monitoring.

The monitoring frequency will be increased to daily starting from 1 March 2023. The Construction Dust Control Mitigation Measures by the Environmental Mitigation Measure Implementation Schedule (EMIS) will continue to be implemented by the contractor. The additional mitigation measures [Photo 15 to 21] are implemented by contractor. Details are shown below:

Additional Mitigation Measures	Start Date
Application of cement slurry at Portion A	10 March 2023
Water spraying by sprinklers at Portion A	1 March 2023
Hydroseeding at bare slope at Portion E3-2	26 February 2023 & 3 March 2023

Photo 15 Application of cement slurry at Portion A



Photo 16 Application of cement slurry at Portion A



Photo 17 Application of cement slurry at Portion A



Photo 18 Water spraying by water sprinklers at Portion A



Photo 19 Hydroseeding at bare slope at Portion E3-2



Photo 20 Hydroseeding at bare slope at Portion E3-2

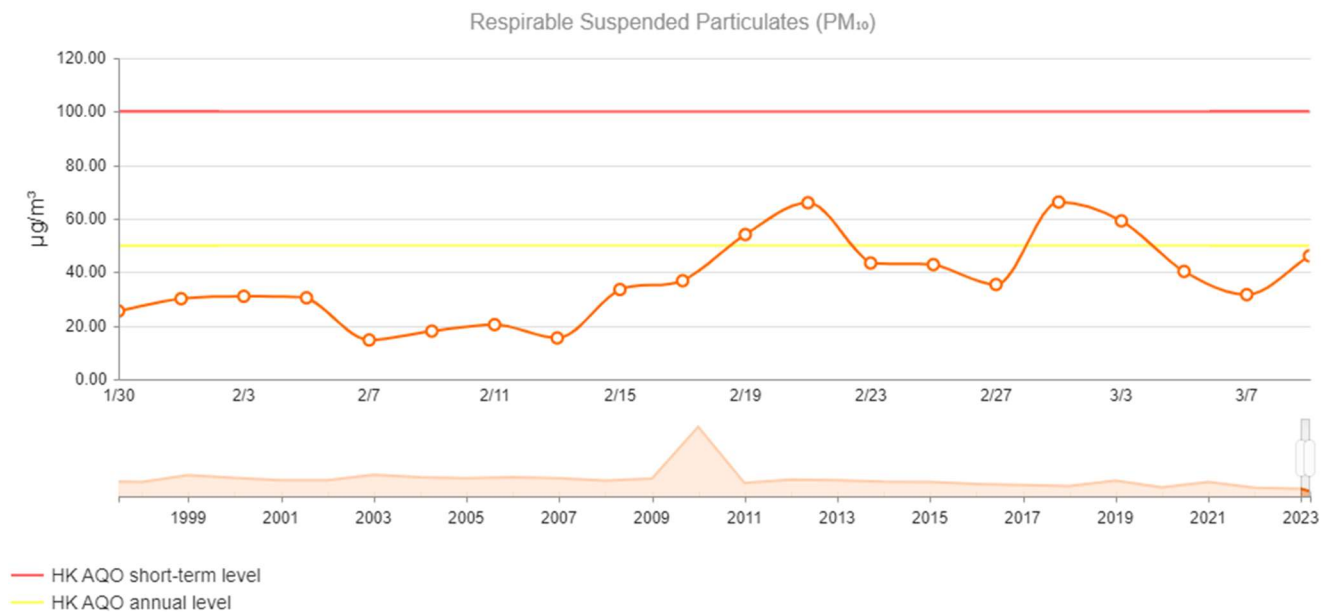


Photo 21 Hydroseeding at bare slope at Portion E3-2

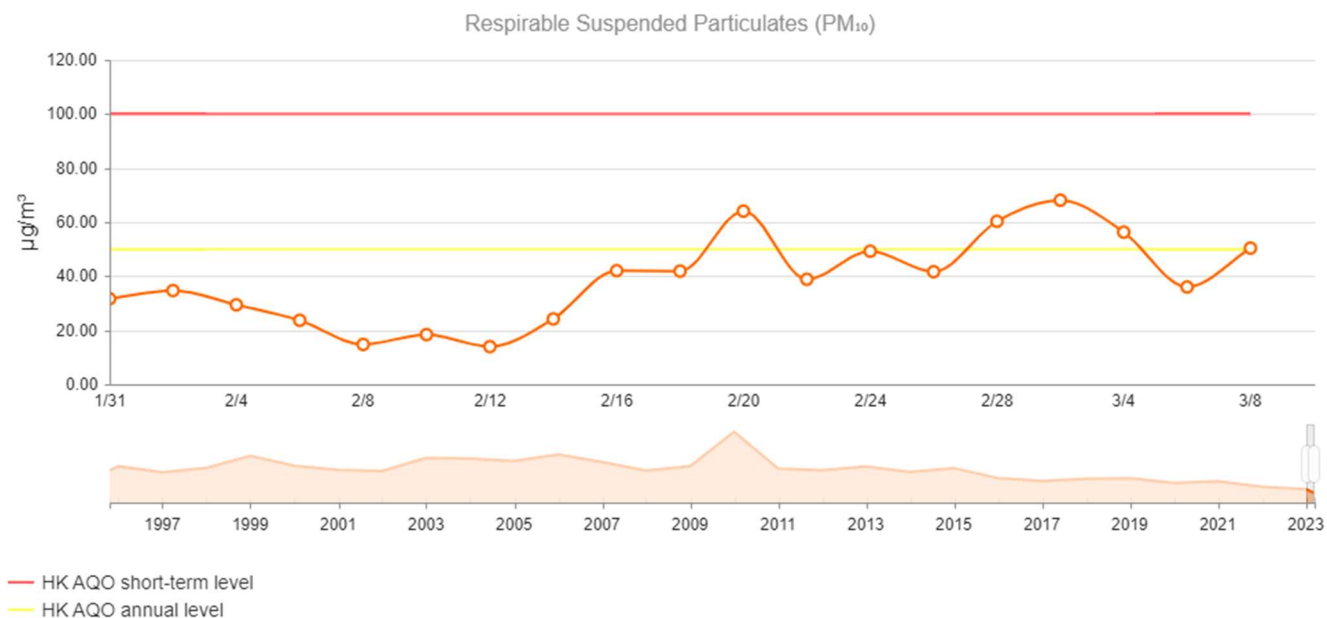


In view of the press releases from the government on 1 March 2023, the health risk category for Air Quality Health Index (AQHIs) may reach the "Serious" level on 1 March 2023 (<https://www.info.gov.hk/gia/general/202303/01/P2023030100565.htm?fontSize=1>). Respirable Suspended Particulates (RSP)(PM₁₀) is one of monitoring parameter from AQHIs. The RSP concentration at EPD Tai Po & Yuen Long monitoring station are shown in below:

Tai Po Station



Yuen Long Station



Both the TSP and RSP are suspended particles but refer to different diameters. TSP refers to the total amount of suspended particulate matter (PM₃₀) in the air, including both larger and smaller particles, while RSP refers explicitly to the smaller particles (PM₁₀). As such, RSP concentration can be considered a component of TSP concentration since it represents a subset of the total suspended particulate matter in the air. Therefore, the high RSP concentration recorded will affect the monitoring results

Based on no construction works of the Project causing high dust emission with the properly implemented dust mitigation measures as above mention. And the fire influence of high concentrations of regional background particulates was identified during the monitoring period. Therefore, the exceedances at AM1 & AM3 were considered to be attributed to external factors and mostly unlikely to be related to the Project.

Reviewed by: _____

Keith Chau

Title: Deputy ET Leader

Date: 13 Mar 2023

Approved by: _____

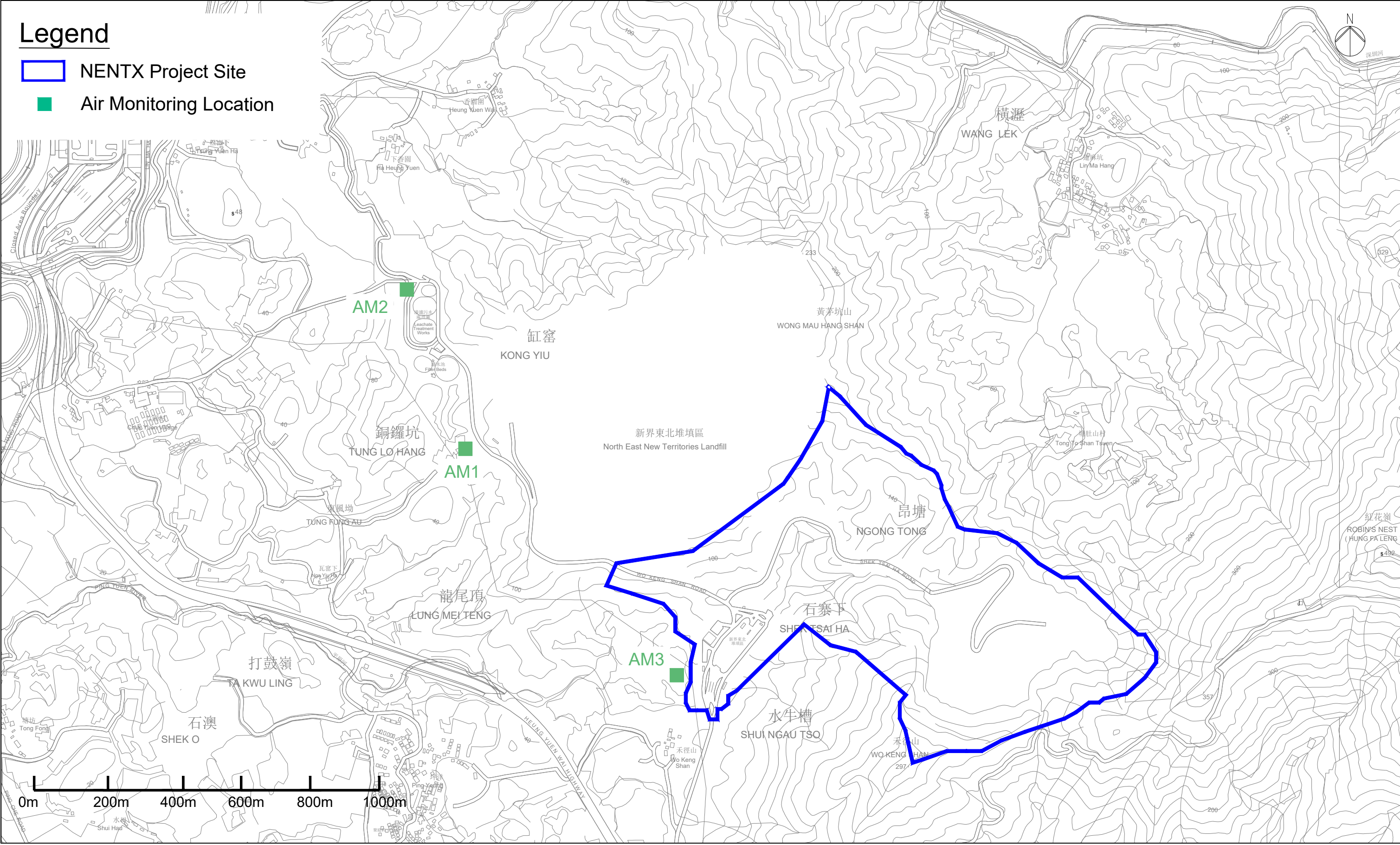
Fredrick Leong

Title: ET Leader

Date: 13 Mar 2023

Figure 1


Impact Monitoring Location




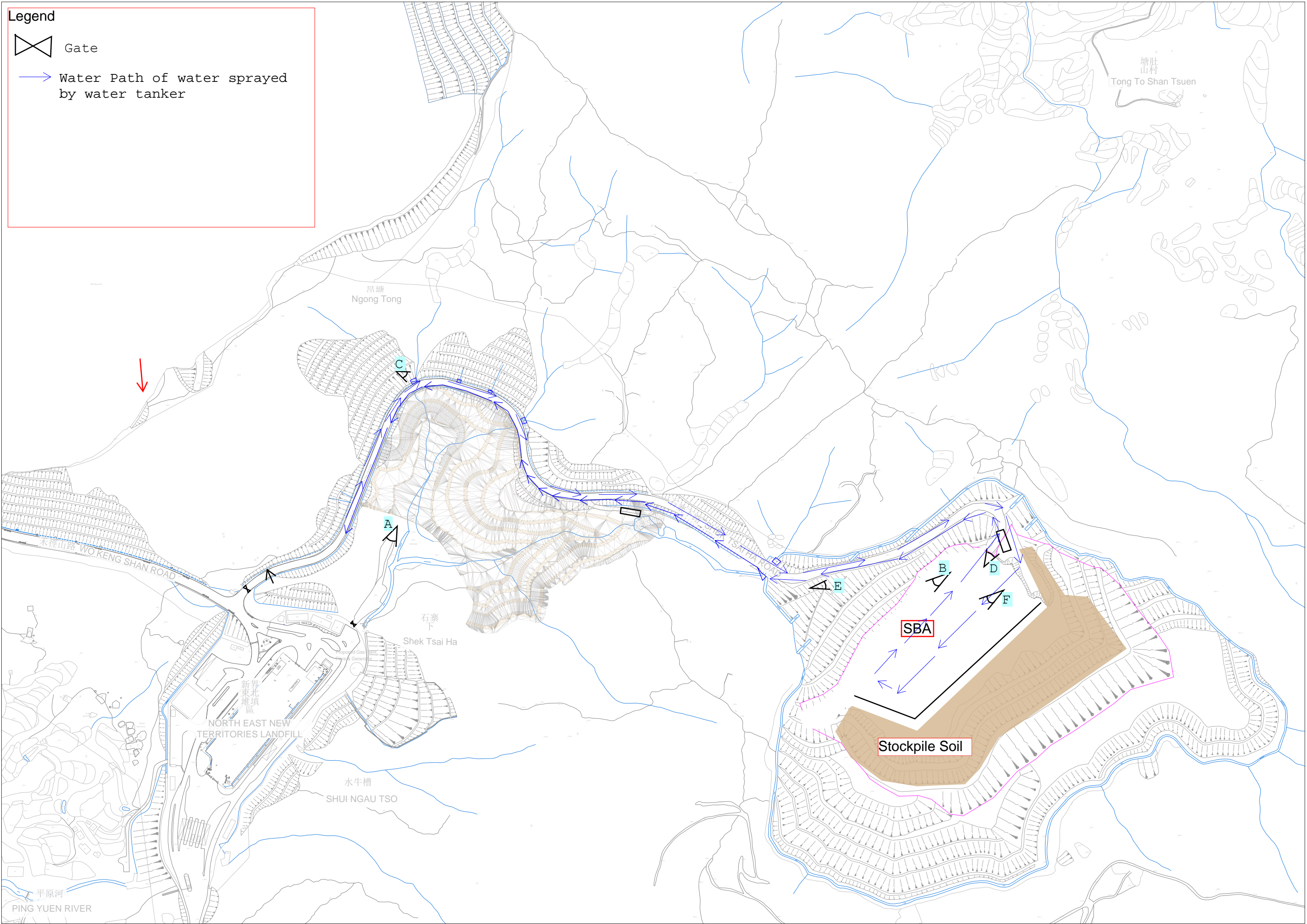
Appendix A

**Path of water spraying by water tanker & Water
spraying by water hose & water tanker
schedule**

Legend

 Gate

 Water Path of water sprayed by water tanker



NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
1	900	D		/			峰
1	930	E	SBA			/	傳
1	930	A		/			Alex
1	1100	D		/			峰
1	1115	E	SBA	/		/	傳
1	1115	A		/			Alex
1	1400	D		/			峰
1	1430	E	SBA			/	傳
1	1430	A		/			Alex
1	1600	D		/			峰
1	1630	E	SBA			/	傳
1	1630	A		/			Alex
2	900	D		/			峰
2	930	E	SBA			/	傳
2	930	A		/			Alex
2	1100	D		/			峰
2	1115	E	SBA			/	傳
2	1115	A		/			Alex
2	1400	D		/			峰
2	1430	E	SBA			/	傳
2	1430	A		/			Alex
2	1600	D		/			峰
2	1630	E	SBA			/	傳
2	1630	A		/			Alex
3	900	D		/			峰
3	930	E	SBA			/	傳
3	930	A		/			Alex
3	1100	D		/			峰
3	1115	E	SBA			/	傳
3	1115	A		/			Alex
3	1400	D		/			峰
3	1430	E	SBA			/	傳
3	1430	A		/			Alex
3	1600	D		/			峰
3	1630	E	SBA			/	傳
3	1630	A		/			Alex

Reviewed by: Konster GA
PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
4	900	D		/			峰
4	930	E	SBA			/	傳
4	930	A		/			Alex
4	1100	D		/			峰
4	1115	E	SBA			/	傳
4	1115	A		/			Alex
4	1400	D		/			峰
4	1430	E	SBA			/	傳
4	1430	A		/			Alex
4	1600	D		/			峰
4	1630	E	SBA			/	傳
4	1630	A		/			Alex
6	900	D		/			峰
6	930	E	SBA			/	傳
6	930	A		/			Alex
6	1100	D		/			峰
6	1115	E	SBA			/	傳
6	1115	A		/			Alex
6	1400	D		/			峰
6	1430	E	SBA			/	傳
6	1430	A		/			Alex
6	1600	D		/			峰
6	1630	E	SBA			/	傳
6	1630	A		/			Alex
7	900	D		/			峰
7	930	E	SBA			/	傳
7	930	A		/			Alex
7	1100	D		/			峰
7	1115	E	SBA			/	傳
7	1115	A		/			Alex
7	1400	D		/			峰
7	1430	E	SBA			/	傳
7	1430	A		/			Alex
7	1600	D		/			峰
7	1630	E	SBA			/	傳
7	1630	A		/			Alex

Reviewed by: lanth GA
PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
8	900	D		/			峰
8	930	E	SBA			/	傳
8	930	A		/			Alex
8	1100	D		/			峰
8	1115	E	SBA			/	傳
8	1115	A		/			Alex
8	1400	D		/			峰
8	1430	E	SBA			/	傳
8	1430	A		/			Alex
8	1600	D		/			峰
8	1630	E	SBA			/	傳
8	1630	A		/			Alex
9	900	D		/			峰
9	930	E	SBA			/	傳
9	930	A		/			Alex
9	1100	D		/			峰
9	1115	E	SBA			/	傳
9	1115	A		/			Alex
9	1400	D		/			峰
9	1430	E	SBA			/	傳
9	1430	A		/			Alex
9	1600	D		/			峰
9	1630	E	SBA			/	傳
9	1630	A		/			Alex
10	900	D		/			峰
10	930	E	SBA			/	傳
10	930	A		/			Alex
10	1100	D		/			峰
10	1115	E	SBA			/	傳
10	1115	A		/			Alex
10	1400	D		/			峰
10	1430	E	SBA			/	傳
10	1430	A		/			Alex
10	1600	D		/			峰
10	1630	E	SBA			/	傳
10	1630	A		/			Alex

Reviewed by: Constantine Kwok IA
PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
11	900	D		/			峰
11	930	E	SBA			/	傳
11	930	A		/			Alex
11	1100	D		/			峰
11	1115	E	SBA			/	傳
11	1115	A		/			Alex
11	1400	D		/		/	峰
11	1430	E	SBA				傳
11	1430	A		/			Alex
11	1600	D		/		/	峰
11	1630	E	SBA				傳
11	1630	A		/			Alex
13	900	D		/			峰
13	930	E	SBA			/	傳
13	930	A		/			Alex
13	1100	D		/			峰
13	1115	E	SBA			/	傳
13	1115	A		/			Alex
13	1400	D		/			峰
13	1430	E	SBA			/	傳
13	1430	A		/			Alex
13	1600	D		/			峰
13	1630	E	SBA			/	傳
13	1630	A		/			Alex
14	900	D		/			峰
14	930	E	SBA			/	傳
14	930	A		/			Alex
14	1100	D		/			峰
14	1115	E	SBA			/	傳
14	1115	A		/			Alex
14	1400	D		/			峰
14	1430	E	SBA			/	傳
14	1430	A		/			Alex
14	1600	D		/			峰
14	1630	E	SBA			/	傳
14	1630	A		/			Alex

Reviewed by: kanth GA
PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
15	900	D		/			峰
15	930	E	SBA			/	傳
15	930	A		/			Alex
15	1100	D		/			峰
15	1115	E	SBA			/	傳
15	1115	A		/			Alex
15	1400	D		/			峰
15	1430	E	SBA			/	傳
15	1430	A		/			Alex
15	1600	D		/			峰
15	1630	E	SBA			/	傳
15	1630	A		/			Alex
16	900	D		/			峰
16	930	E	SBA			/	傳
16	930	A		/			Alex
16	1100	D		/			峰
16	1115	E	SBA			/	傳
16	1115	A		/			Alex
16	1400	D		/			峰
16	1430	E	SBA			/	傳
16	1430	A		/			Alex
16	1600	D		/			峰
16	1630	E	SBA			/	傳
16	1630	A		/			Alex
17	900	D		/		/	峰
17	930	E	SBA			/	傳
17	930	A		/			Alex
17	1100	D		/			峰
17	1115	E	SBA			/	傳
17	1115	A		/			Alex
17	1400	D		/			峰
17	1430	E	SBA			/	傳
17	1430	A		/			Alex
17	1600	D		/			峰
17	1630	E	SBA			/	傳
17	1630	A		/			Alex

Reviewed by:

1 canch
long *BA*

PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
18	900	D		/			峰
18	930	E	SBA			/	傳
18	930	A		/			Alex
18	1100	D		/			峰
18	1115	E	SBA			/	傳
18	1115	A		/			Alex
18	1400	D		/			峰
18	1430	E	SBA			/	傳
18	1430	A		/			Alex
18	1600	D		/			峰
18	1630	E	SBA			/	傳
18	1630	A		/			Alex
20	900	D		/			峰
20	930	E	SBA			/	傳
20	930	A		/			Alex
20	1100	D		/			峰
20	1115	E	SBA			/	傳
20	1115	A		/			Alex
20	1400	D		/			峰
20	1430	E	SBA			/	傳
20	1430	A		/			Alex
20	1600	D		/			峰
20	1630	E	SBA			/	傳
20	1630	A		/			Alex
21	900	D		/			峰
21	930	E	SBA			/	傳
21	930	A		/			Alex
21	1100	D		/			峰
21	1115	E	SBA			/	傳
21	1115	A		/			Alex
21	1400	D		/			峰
21	1430	E	SBA			/	傳
21	1430	A		/			Alex
21	1600	D		/			峰
21	1630	E	SBA			/	傳
21	1630	A		/			Alex

Reviewed by:

kanika
very

GA

PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
22	900	D		/			峰
22	930	E	SBA			/	傳
22	930	A		/			Alex
22	1100	D		/			峰
22	1115	E	SBA			/	傳
22	1115	A		/			Alex
22	1400	D		/			峰
22	1430	E	SBA			/	傳
22	1430	A		/			Alex
22	1600	D		/			峰
22	1630	E	SBA			/	傳
22	1630	A		/			Alex
23	900	D		/			峰
23	930	E	SBA			/	傳
23	930	A		/			Alex
23	1100	D		/			峰
23	1115	E	SBA			/	傳
23	1115	A		/			Alex
23	1400	D		/			峰
23	1430	E	SBA			/	傳
23	1430	A		/			Alex
23	1600	D		/			峰
23	1630	E	SBA			/	傳
23	1630	A		/			Alex
24	900	D		/		/	峰
24	930	E	SBA			/	傳
24	930	A		/			Alex
24	1100	D		/			峰
24	1115	E	SBA			/	傳
24	1115	A		/			Alex
24	1400	D		/			峰
24	1430	E	SBA			/	傳
24	1430	A		/			Alex
24	1600	D		/			峰
24	1630	E	SBA			/	傳
24	1630	A		/			Alex

Reviewed by: Konster JA
PYE EO

NENTX Watering Schedule

Month

Feb-23

Date	Time	Portion	Area	Watering			Arranged by
				Water Hose	Sprinkler	Tanker	
25	900	D		/			峰
25	930	E	SBA			/	傳
25	930	A		/			Alex
25	1100	D		/			峰
25	1115	E	SBA			/	傳
25	1115	A		/			Alex
25	1400	D		/			峰
25	1430	E	SBA			/	傳
25	1430	A		/			Alex
25	1600	D		/			峰
25	1630	E	SBA			/	傳
25	1630	A		/			Alex
27	900	D		/			峰
27	930	E	SBA			/	傳
27	930	A		/			Alex
27	1100	D		/			峰
27	1115	E	SBA			/	傳
27	1115	A		/			Alex
27	1400	D		/			峰
27	1430	E	SBA			/	傳
27	1430	A		/			Alex
27	1600	D		/			峰
27	1630	E	SBA			/	傳
27	1630	A		/			Alex
28	900	D		/			峰
28	930	E	SBA			/	傳
28	930	A		/			Alex
28	1100	D		/			峰
28	1115	E	SBA			/	傳
28	1115	A		/			Alex
28	1400	D		/			峰
28	1430	E	SBA			/	傳
28	1430	A		/			Alex
28	1600	D		/		/	峰
28	1630	E	SBA			/	傳
28	1630	A		/			Alex

Reviewed by:

*Kan-tan
long* *LA*

PYE EO

Appendix H Wind Data

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230201 0000	3.1	E
20230201 0010	3.6	ESE
20230201 0020	3.9	ESE
20230201 0030	3.9	ESE
20230201 0040	3.9	ESE
20230201 0050	3.9	ESE
20230201 0100	3.3	ESE
20230201 0110	2.8	ESE
20230201 0120	2.2	ESE
20230201 0130	2.2	ESE
20230201 0140	2.2	ESE
20230201 0150	1.9	ESE
20230201 0200	1.7	SE
20230201 0210	1.4	ESE
20230201 0220	1.4	E
20230201 0230	0.3	SW
20230201 0240	1.1	E
20230201 0250	0.8	E
20230201 0300	1.4	E
20230201 0310	1.1	E
20230201 0320	1.1	E
20230201 0330	1.1	E
20230201 0340	0.8	ESE
20230201 0350	0.8	E
20230201 0400	0.3	E
20230201 0410	0.3	ESE
20230201 0420	0.8	E
20230201 0430	1.4	E
20230201 0440	1.7	ESE
20230201 0450	1.1	ESE
20230201 0500	0.6	ENE
20230201 0510	0.3	NW
20230201 0520	0	N
20230201 0530	0.3	NE
20230201 0540	0.3	N
20230201 0550	0.3	SSW
20230201 0600	0.3	SSW
20230201 0610	0	N
20230201 0620	0	N
20230201 0630	0	N
20230201 0640	0	N
20230201 0650	0	N
20230201 0700	0	N
20230201 0710	0	N
20230201 0720	0	N
20230201 0730	0	N
20230201 0740	0	N
20230201 0750	0	N
20230201 0800	0	N
20230201 0810	0	N
20230201 0820	0.3	SW
20230201 0830	0	N
20230201 0840	0.3	NE
20230201 0850	0.3	NNE
20230201 0900	0.3	-
20230201 0910	0.3	WNW
20230201 0920	0.3	N
20230201 0930	0	N
20230201 0940	0.6	NNE
20230201 0950	1.1	E
20230201 1000	2.8	E
20230201 1010	3.1	E
20230201 1020	3.3	E
20230201 1030	3.3	E
20230201 1040	3.3	E
20230201 1050	3.3	E
20230201 1100	3.6	E
20230201 1110	3.9	E
20230201 1120	3.6	E
20230201 1130	3.3	E
20230201 1140	3.9	E
20230201 1150	3.3	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230201 1200	3.9	E
20230201 1210	3.3	E
20230201 1220	3.3	E
20230201 1230	3.3	E
20230201 1240	3.1	E
20230201 1250	2.8	E
20230201 1300	3.3	E
20230201 1310	3.3	ESE
20230201 1320	3.6	E
20230201 1330	3.6	E
20230201 1340	3.3	E
20230201 1350	3.1	E
20230201 1400	2.5	ESE
20230201 1410	3.6	ESE
20230201 1420	3.3	E
20230201 1430	3.1	E
20230201 1440	3.1	ESE
20230201 1450	3.1	ESE
20230201 1500	3.3	E
20230201 1510	3.1	E
20230201 1520	3.3	E
20230201 1530	2.8	E
20230201 1540	2.8	ESE
20230201 1550	3.3	ESE
20230201 1600	3.1	E
20230201 1610	3.1	ESE
20230201 1620	3.1	E
20230201 1630	3.3	E
20230201 1640	3.9	E
20230201 1650	3.6	E
20230201 1700	3.3	E
20230201 1710	2.8	E
20230201 1720	3.3	ESE
20230201 1730	2.8	ESE
20230201 1740	2.8	ESE
20230201 1750	2.8	ESE
20230201 1800	3.3	ESE
20230201 1810	3.3	E
20230201 1820	3.3	E
20230201 1830	1.7	ESE
20230201 1840	1.7	SE
20230201 1850	2.2	ESE
20230201 1900	2.5	SE
20230201 1910	2.5	ESE
20230201 1920	1.7	ESE
20230201 1930	1.7	ESE
20230201 1940	1.9	ESE
20230201 1950	1.7	ESE
20230201 2000	2.2	ESE
20230201 2010	2.5	ESE
20230201 2020	1.7	ESE
20230201 2030	2.5	SE
20230201 2040	3.1	SE
20230201 2050	2.5	ESE
20230201 2100	2.2	ESE
20230201 2110	1.4	ESE
20230201 2120	1.7	ESE
20230201 2130	1.7	SE
20230201 2140	2.5	SE
20230201 2150	3.9	SE
20230201 2200	3.6	SE
20230201 2210	3.3	SE
20230201 2220	3.3	SE
20230201 2230	2.5	SE
20230201 2240	2.5	ESE
20230201 2250	2.5	SE
20230201 2300	2.8	SE
20230201 2310	2.5	SE
20230201 2320	2.8	SE
20230201 2330	2.2	ESE
20230201 2340	2.5	SE
20230201 2350	3.3	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230202 0000	3.3	SE
20230202 0010	2.8	ESE
20230202 0020	2.8	ESE
20230202 0030	2.8	ESE
20230202 0040	2.2	ESE
20230202 0050	1.9	ESE
20230202 0100	2.2	ESE
20230202 0110	1.9	SE
20230202 0120	2.2	SE
20230202 0130	2.2	ESE
20230202 0140	2.2	ESE
20230202 0150	1.7	ESE
20230202 0200	1.9	ESE
20230202 0210	1.4	ESE
20230202 0220	1.1	ESE
20230202 0230	1.9	ESE
20230202 0240	1.7	E
20230202 0250	1.4	ESE
20230202 0300	1.9	SE
20230202 0310	1.7	E
20230202 0320	1.9	ESE
20230202 0330	1.7	E
20230202 0340	1.4	ESE
20230202 0350	1.1	SSE
20230202 0400	1.1	ESE
20230202 0410	1.7	SE
20230202 0420	1.1	ESE
20230202 0430	1.1	ESE
20230202 0440	0.8	ESE
20230202 0450	0.8	ENE
20230202 0500	1.1	NNE
20230202 0510	0.3	-
20230202 0520	0.3	SSW
20230202 0530	0.3	SW
20230202 0540	0	N
20230202 0550	0.3	S
20230202 0600	0	N
20230202 0610	0.3	NNE
20230202 0620	0	N
20230202 0630	0	N
20230202 0640	0	N
20230202 0650	0	N
20230202 0700	0	N
20230202 0710	0	N
20230202 0720	0	N
20230202 0730	0	N
20230202 0740	0	N
20230202 0750	0	N
20230202 0800	0	N
20230202 0810	0.3	SSE
20230202 0820	0.6	SSE
20230202 0830	1.4	E
20230202 0840	2.2	ESE
20230202 0850	2.2	ESE
20230202 0900	2.2	ESE
20230202 0910	1.7	ESE
20230202 0920	1.7	SE
20230202 0930	2.2	SE
20230202 0940	1.7	SE
20230202 0950	3.1	E
20230202 1000	2.8	E
20230202 1010	3.3	E
20230202 1020	4.2	E
20230202 1030	3.9	ESE
20230202 1040	4.7	E
20230202 1050	5.3	ESE
20230202 1100	3.6	ESE
20230202 1110	4.2	ESE
20230202 1120	4.2	SE
20230202 1130	4.4	SE
20230202 1140	4.2	ESE
20230202 1150	4.2	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230202 1200	4.7	ESE
20230202 1210	3.3	E
20230202 1220	4.2	ESE
20230202 1230	3.9	ESE
20230202 1240	3.9	ESE
20230202 1250	4.4	E
20230202 1300	3.3	E
20230202 1310	3.3	E
20230202 1320	3.6	ESE
20230202 1330	3.1	ENE
20230202 1340	3.1	ESE
20230202 1350	2.5	SE
20230202 1400	3.3	ESE
20230202 1410	4.2	E
20230202 1420	3.3	E
20230202 1430	3.3	ESE
20230202 1440	3.3	E
20230202 1450	2.5	ESE
20230202 1500	3.1	ESE
20230202 1510	3.9	ENE
20230202 1520	3.3	E
20230202 1530	3.1	E
20230202 1540	3.3	E
20230202 1550	3.3	ESE
20230202 1600	3.3	E
20230202 1610	3.3	ESE
20230202 1620	3.3	ESE
20230202 1630	3.9	ESE
20230202 1640	4.2	ESE
20230202 1650	4.2	SE
20230202 1700	3.3	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230203 0020	3.3	ESE
20230203 0030	3.9	ESE
20230203 0040	3.3	ESE
20230203 0050	3.3	ESE
20230203 0100	3.3	ESE
20230203 0110	3.3	ESE
20230203 0120	3.9	ESE
20230203 0130	3.3	ESE
20230203 0140	2.8	ESE
20230203 0150	3.1	E
20230203 0200	3.1	E
20230203 0210	2.8	ESE
20230203 0220	2.5	ESE
20230203 0230	2.8	ESE
20230203 0240	2.5	ESE
20230203 0250	4.7	ESE
20230203 0300	3.9	E
20230203 0310	4.2	E
20230203 0320	3.9	E
20230203 0330	4.2	E
20230203 0340	3.6	E
20230203 0350	3.3	E
20230203 0400	3.3	E
20230203 0410	3.3	E
20230203 0420	3.3	E
20230203 0430	2.8	ESE
20230203 0440	3.3	ESE
20230203 0450	3.9	ESE
20230203 0500	3.9	ESE
20230203 0510	3.3	ESE
20230203 0520	3.3	ESE
20230203 0530	3.3	ESE
20230203 0540	2.8	ESE
20230203 0550	3.1	ESE
20230203 0600	2.8	ESE
20230203 0610	2.2	ESE
20230203 0620	2.5	E
20230203 0630	1.9	E
20230203 0640	1.1	E
20230203 0650	1.7	E
20230203 0700	2.2	E
20230203 0710	2.8	E
20230203 0720	2.2	E
20230203 0730	2.2	E
20230203 0740	1.4	ESE
20230203 0750	2.5	ESE
20230203 0800	2.2	SE
20230203 0810	1.7	ESE
20230203 0820	1.7	SE
20230203 0830	2.2	E
20230203 0840	1.9	E
20230203 0850	1.7	E
20230203 0900	1.7	ENE
20230203 0910	2.2	E
20230203 0920	1.4	E
20230203 0930	1.4	E
20230203 0940	1.4	SE
20230203 0950	0.8	ESE
20230203 1000	1.1	S
20230203 1010	1.1	SSW
20230203 1020	1.1	E
20230203 1030	1.1	E
20230203 1040	1.1	-
20230203 1050	1.1	ENE
20230203 1100	0.8	ENE
20230203 1110	1.4	SE
20230203 1120	1.4	ESE
20230203 1130	1.1	SSW
20230203 1140	0.8	SSW
20230203 1150	0.8	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230203 1200	1.1	NE
20230203 1210	2.2	SSE
20230203 1220	3.1	SSE
20230203 1230	2.2	E
20230203 1240	1.9	ENE
20230203 1250	2.2	ENE
20230203 1300	2.2	E
20230203 1310	2.5	ENE
20230203 1320	2.5	SE
20230203 1330	1.9	ESE
20230203 1340	2.8	ENE
20230203 1350	2.2	E
20230203 1400	0.8	S
20230203 1410	1.7	SSW
20230203 1420	1.7	SSE
20230203 1430	2.8	E
20230203 1440	2.5	E
20230203 1450	3.1	E
20230203 1500	3.6	ENE
20230203 1510	2.5	E
20230203 1520	1.9	ESE
20230203 1530	2.2	SSE
20230203 1540	2.8	SSE
20230203 1550	2.2	SSE
20230203 1600	2.2	ESE
20230203 1610	3.3	E
20230203 1620	2.8	ESE
20230203 1630	2.5	ESE
20230203 1640	2.5	ESE
20230203 1650	2.5	ESE
20230203 1700	2.5	ESE
20230203 1710	2.5	SE
20230203 1720	2.2	ESE
20230203 1730	1.9	ESE
20230203 1740	2.2	SE
20230203 1750	2.2	ESE
20230203 1800	2.2	SE
20230203 1810	2.2	SE
20230203 1820	2.5	SE
20230203 1830	2.8	SE
20230203 1840	3.3	SE
20230203 1850	1.7	SE
20230203 1900	2.8	SE
20230203 1910	3.1	SE
20230203 1920	1.4	SE
20230203 1930	1.4	SE
20230203 1940	1.7	SE
20230203 1950	1.4	SE
20230203 2000	0.8	WSW
20230203 2010	2.5	ESE
20230203 2020	2.2	SE
20230203 2030	2.2	SE
20230203 2040	1.7	SE
20230203 2050	1.7	ESE
20230203 2100	2.5	ESE
20230203 2110	2.2	ESE
20230203 2120	1.7	SE
20230203 2130	3.1	ESE
20230203 2140	2.8	ESE
20230203 2150	3.3	ESE
20230203 2200	2.2	E
20230203 2210	3.1	ESE
20230203 2220	3.3	ESE
20230203 2230	2.8	ESE
20230203 2240	3.3	ESE
20230203 2250	3.3	ESE
20230203 2300	3.3	ESE
20230203 2310	2.8	ESE
20230203 2320	3.3	E
20230203 2330	2.8	ESE
20230203 2340	2.8	ESE
20230203 2350	3.1	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230204 0000	1.7	E
20230204 0010	1.7	E
20230204 0020	3.9	ESE
20230204 0030	3.9	ESE
20230204 0040	2.8	ESE
20230204 0050	2.8	SE
20230204 0100	3.1	ESE
20230204 0110	3.1	ESE
20230204 0120	2.8	ESE
20230204 0130	2.8	ESE
20230204 0140	3.1	ESE
20230204 0150	3.3	ESE
20230204 0200	3.6	ESE
20230204 0210	3.3	ESE
20230204 0220	4.2	ESE
20230204 0230	3.3	ESE
20230204 0240	3.3	ESE
20230204 0250	2.5	ESE
20230204 0300	3.3	ESE
20230204 0310	3.6	ESE
20230204 0320	2.8	ESE
20230204 0330	2.8	ESE
20230204 0340	3.3	ESE
20230204 0350	2.2	ESE
20230204 0400	3.1	ESE
20230204 0410	2.8	ESE
20230204 0420	2.5	E
20230204 0430	2.8	E
20230204 0440	2.2	ESE
20230204 0450	1.7	ESE
20230204 0500	3.1	E
20230204 0510	3.1	ESE
20230204 0520	3.1	ESE
20230204 0530	2.2	ESE
20230204 0540	2.5	ESE
20230204 0550	2.5	ESE
20230204 0600	1.7	ESE
20230204 0610	1.7	SE
20230204 0620	2.5	ESE
20230204 0630	2.8	ESE
20230204 0640	2.8	ESE
20230204 0650	3.3	E
20230204 0700	3.1	E
20230204 0710	2.5	E
20230204 0720	3.1	E
20230204 0730	2.5	E
20230204 0740	2.8	ESE
20230204 0750	2.5	ESE
20230204 0800	2.5	E
20230204 0810	1.7	ESE
20230204 0820	3.1	ESE
20230204 0830	3.3	ESE
20230204 0840	3.3	ESE
20230204 0850	3.3	ESE
20230204 0900	2.5	ESE
20230204 0910	2.5	SE
20230204 0920	2.8	ESE
20230204 0930	2.8	ESE
20230204 0940	2.8	ESE
20230204 0950	2.8	E
20230204 1000	3.1	ESE
20230204 1010	5	SE
20230204 1020	4.4	ESE
20230204 1030	2.8	ESE
20230204 1040	2.8	ESE
20230204 1050	2.5	ESE
20230204 1100	2.8	E
20230204 1110	3.3	ESE
20230204 1120	3.9	E
20230204 1130	2.8	E
20230204 1140	1.4	ESE
20230204 1150	1.7	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230204 1200	3.1	ESE
20230204 1210	2.8	ESE
20230204 1220	3.3	ESE
20230204 1230	2.8	E
20230204 1240	2.5	E
20230204 1250	2.2	ESE
20230204 1300	2.8	E
20230204 1310	2.2	E
20230204 1320	3.1	E
20230204 1330	1.9	SE
20230204 1340	3.3	ESE
20230204 1350	2.5	E
20230204 1400	1.7	E
20230204 1410	3.1	ENE
20230204 1420	2.8	E
20230204 1430	2.8	ENE
20230204 1440	2.8	ENE
20230204 1450	2.5	ESE
20230204 1500	3.1	ESE
20230204 1510	3.3	E
20230204 1520	2.8	ENE
20230204 1530	2.8	E
20230204 1540	2.2	ESE
20230204 1550	2.5	ESE
20230204 1600	2.8	ESE
20230204 1610	3.1	ESE
20230204 1620	2.8	ESE
20230204 1630	2.2	ESE
20230204 1640	1.7	ESE
20230204 1650	1.7	ESE
20230204 1700	1.7	ESE
20230204 1710	1.7	E
20230204 1720	1.1	F
20230204 1730	1.7	ESE
20230204 1740	2.5	SE
20230204 1750	2.8	ESE
20230204 1800	2.2	ESE
20230204 1810	1.7	F
20230204 1820	1.1	ESE
20230204 1830	1.7	ESE
20230204 1840	2.2	ESE
20230204 1850	1.9	ESE
20230204 1900	1.7	SE
20230204 1910	1.7	ESE
20230204 1920	2.2	ESE
20230204 1930	2.5	ESE
20230204 1940	1.9	ESE
20230204 1950	2.2	ESE
20230204 2000	2.8	ESE
20230204 2010	2.2	ESE
20230204 2020	2.2	ESE
20230204 2030	2.2	ESE
20230204 2040	3.1	E
20230204 2050	1.7	E
20230204 2100	1.7	E
20230204 2110	1.7	E
20230204 2120	1.9	E
20230204 2130	1.4	ESE
20230204 2140	1.4	E
20230204 2150	1.7	ESE
20230204 2200	1.7	E
20230204 2210	1.9	E
20230204 2220	3.1	ESE
20230204 2230	3.3	ESE
20230204 2240	2.5	ESE
20230204 2250	2.2	ESE
20230204 2300	1.4	E
20230204 2310	1.1	E
20230204 2320	1.9	E
20230204 2330	2.5	E
20230204 2340	1.7	E
20230204 2350	1.4	ENE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230205 0000	2.5	E
20230205 0010	1.7	E
20230205 0020	1.4	ESE
20230205 0030	1.4	ESE
20230205 0040	1.1	ESE
20230205 0050	1.4	ESE
20230205 0100	2.2	E
20230205 0110	1.7	E
20230205 0120	2.2	E
20230205 0130	1.9	ENE
20230205 0140	1.7	E
20230205 0150	2.5	E
20230205 0200	2.5	E
20230205 0210	1.7	E
20230205 0220	1.1	ENE
20230205 0230	1.1	NNE
20230205 0240	1.7	E
20230205 0250	1.7	E
20230205 0300	0.8	ENE
20230205 0310	1.1	ENE
20230205 0320	0.8	NE
20230205 0330	1.1	ENE
20230205 0340	0.8	ENE
20230205 0350	0.3	SE
20230205 0400	1.4	E
20230205 0410	0.8	E
20230205 0420	1.7	E
20230205 0430	1.4	ESE
20230205 0440	1.4	E
20230205 0450	1.7	ESE
20230205 0500	1.7	E
20230205 0510	1.7	SE
20230205 0520	1.9	ESE
20230205 0530	1.1	E
20230205 0540	1.4	SE
20230205 0550	1.7	SE
20230205 0600	2.5	SE
20230205 0610	2.2	SE
20230205 0620	2.2	ESE
20230205 0630	2.2	ESE
20230205 0640	1.7	E
20230205 0650	2.8	E
20230205 0700	2.5	ESE
20230205 0710	1.7	ESE
20230205 0720	1.7	ESE
20230205 0730	2.5	SE
20230205 0740	2.2	ESE
20230205 0750	3.3	E
20230205 0800	2.5	ESE
20230205 0810	1.9	ESE
20230205 0820	1.9	ESE
20230205 0830	2.2	ESE
20230205 0840	1.7	ESE
20230205 0850	1.7	ESE
20230205 0900	1.7	ESE
20230205 0910	2.2	ESE
20230205 0920	1.9	ESE
20230205 0930	1.7	ESE
20230205 0940	1.7	E
20230205 0950	2.2	E
20230205 1000	2.5	E
20230205 1010	3.1	E
20230205 1020	3.3	E
20230205 1030	2.5	E
20230205 1040	2.8	ENE
20230205 1050	1.7	E
20230205 1100	2.8	E
20230205 1110	2.2	E
20230205 1120	2.2	ESE
20230205 1130	1.7	ESE
20230205 1140	2.2	E
20230205 1150	2.8	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230205 1200	2.8	ENE
20230205 1210	2.8	E
20230205 1220	2.2	E
20230205 1230	1.7	E
20230205 1240	0.8	ESE
20230205 1250	1.4	ESE
20230205 1300	1.1	SE
20230205 1310	0.8	S
20230205 1320	0.6	SSW
20230205 1330	0.3	SW
20230205 1340	0.6	S
20230205 1350	0.6	ESE
20230205 1400	0.8	SE
20230205 1410	0.3	SSE
20230205 1420	0.3	SSE
20230205 1430	0.3	NNE
20230205 1440	1.7	NNE
20230205 1450	1.7	N
20230205 1500	1.4	NE
20230205 1510	1.4	NNE
20230205 1520	1.1	N
20230205 1530	1.4	N
20230205 1540	1.4	NNE
20230205 1550	1.4	NNE
20230205 1600	0.3	-
20230205 1610	1.4	E
20230205 1620	2.8	E
20230205 1630	2.5	E
20230205 1640	2.2	ENE
20230205 1650	2.2	E
20230205 1700	3.1	ESE
20230205 1710	3.1	E
20230205 1720	2.5	E
20230205 1730	1.9	E
20230205 1740	2.2	ESE
20230205 1750	2.2	ESE
20230205 1800	1.1	E
20230205 1810	1.9	ESE
20230205 1820	2.5	ESE
20230205 1830	2.2	ESE
20230205 1840	2.5	SE
20230205 1850	4.7	SE
20230205 1900	3.3	SE
20230205 1910	3.1	ESE
20230205 1920	3.3	SE
20230205 1930	2.8	SE
20230205 1940	1.1	SSE
20230205 1950	1.4	SE
20230205 2000	1.7	ESE
20230205 2010	1.9	ESE
20230205 2020	2.2	ESE
20230205 2030	1.7	ENE
20230205 2040	1.4	E
20230205 2050	0.8	ESE
20230205 2100	1.7	E
20230205 2110	1.4	E
20230205 2120	1.1	ESE
20230205 2130	1.1	SE
20230205 2140	1.1	ESE
20230205 2150	1.1	SE
20230205 2200	1.4	SE
20230205 2210	1.4	SE
20230205 2220	0.8	SE
20230205 2230	0.3	-
20230205 2240	0	N
20230205 2250	0	N
20230205 2300	0.3	E
20230205 2310	0.8	E
20230205 2320	1.4	E
20230205 2330	0.8	ESE
20230205 2340	0.8	E
20230205 2350	0.8	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230206 0000	0.8	ESE
20230206 0010	0.8	ESE
20230206 0020	0.3	-
20230206 0030	0.3	-
20230206 0040	0.3	E
20230206 0050	0	N
20230206 0100	0	N
20230206 0110	0	N
20230206 0120	0.3	S
20230206 0130	0.3	SE
20230206 0140	0.3	-
20230206 0150	0	N
20230206 0200	0.3	S
20230206 0210	0.3	SW
20230206 0220	0	N
20230206 0230	0	N
20230206 0240	1.1	SE
20230206 0250	0.3	SSE
20230206 0300	0.8	ESE
20230206 0310	1.7	ESE
20230206 0320	1.1	SE
20230206 0330	1.7	SE
20230206 0340	1.4	ESE
20230206 0350	1.7	ESE
20230206 0400	1.7	SSE
20230206 0410	1.4	SE
20230206 0420	1.7	ESE
20230206 0430	1.1	SE
20230206 0440	0.8	ESE
20230206 0450	1.1	SE
20230206 0500	1.1	SE
20230206 0510	0.8	SE
20230206 0520	1.1	SE
20230206 0530	1.4	ESE
20230206 0540	1.7	ESE
20230206 0550	0.8	ESE
20230206 0600	0.8	ESE
20230206 0610	0.3	NE
20230206 0620	0.3	-
20230206 0630	0	N
20230206 0640	0	N
20230206 0650	0	N
20230206 0700	0	N
20230206 0710	0.3	WNW
20230206 0720	0	N
20230206 0730	0	N
20230206 0740	0	N
20230206 0750	0.3	ESE
20230206 0800	0	N
20230206 0810	0.3	NNE
20230206 0820	0.3	NNE
20230206 0830	0.3	WNW
20230206 0840	0.3	N
20230206 0850	0.6	N
20230206 0900	1.4	NNE
20230206 0910	1.1	NE
20230206 0920	0.6	NNE
20230206 0930	0.3	N
20230206 0940	1.1	N
20230206 0950	0.8	NE
20230206 1000	0.3	NE
20230206 1010	0.8	E
20230206 1020	1.4	E
20230206 1030	1.4	ESE
20230206 1040	1.7	E
20230206 1050	1.7	E
20230206 1100	2.2	E
20230206 1110	2.5	ESE
20230206 1120	2.2	ESE
20230206 1130	1.9	ESE
20230206 1140	1.7	ESE
20230206 1150	2.2	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230206 1200	2.5	E
20230206 1210	2.2	ESE
20230206 1220	3.1	E
20230206 1230	2.8	E
20230206 1240	2.2	ESE
20230206 1250	3.3	ESE
20230206 1300	2.8	ESE
20230206 1310	3.3	ESE
20230206 1320	2.8	ESE
20230206 1330	3.3	SE
20230206 1340	3.3	ESE
20230206 1350	3.6	ESE
20230206 1400	2.8	ESE
20230206 1410	2.8	ESE
20230206 1420	3.3	ESE
20230206 1430	3.3	E
20230206 1440	3.6	E
20230206 1450	3.3	E
20230206 1500	3.1	E
20230206 1510	2.5	ESE
20230206 1520	2.8	E
20230206 1530	2.8	ESE
20230206 1540	2.5	SE
20230206 1550	2.2	E
20230206 1600	1.9	ESE
20230206 1610	2.2	ESE
20230206 1620	2.8	ESE
20230206 1630	3.1	E
20230206 1640	3.3	ESE
20230206 1650	3.1	ESE
20230206 1700	3.3	ESE
20230206 1710	2.8	ESE
20230206 1720	3.3	ESE
20230206 1730	2.8	ESE
20230206 1740	2.8	ESE
20230206 1750	2.2	ESE
20230206 1800	2.2	ESE
20230206 1810	2.2	ESE
20230206 1820	1.9	SE
20230206 1830	1.7	ESE
20230206 1840	1.7	SE
20230206 1850	1.1	ESE
20230206 1900	1.7	ESE
20230206 1910	2.5	ESE
20230206 1920	2.5	ESE
20230206 1930	1.7	ESE
20230206 1940	1.7	ESE
20230206 1950	2.2	ESE
20230206 2000	2.8	ESE
20230206 2010	1.9	ESE
20230206 2020	2.2	ESE
20230206 2030	1.4	ESE
20230206 2040	1.7	ESE
20230206 2050	0.8	E
20230206 2100	0.8	E
20230206 2110	1.4	-
20230206 2120	0.3	NNE
20230206 2130	0	N
20230206 2140	0	N
20230206 2150	0.3	S
20230206 2200	1.4	SE
20230206 2210	1.7	SSE
20230206 2220	1.7	SSE
20230206 2230	1.7	SE
20230206 2240	1.7	SE
20230206 2250	0.8	SE
20230206 2300	0.6	SE
20230206 2310	0.8	SSW
20230206 2320	0.3	S
20230206 2330	0.8	SSE
20230206 2340	1.7	SE
20230206 2350	1.7	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230207 0000	1.4	ESE
20230207 0010	1.1	SE
20230207 0020	2.2	SE
20230207 0030	1.7	SE
20230207 0040	1.7	SE
20230207 0050	1.7	SE
20230207 0100	2.2	SE
20230207 0110	1.9	SE
20230207 0120	1.9	SE
20230207 0130	1.7	SE
20230207 0140	1.4	SE
20230207 0150	1.1	SE
20230207 0200	0.8	SE
20230207 0210	1.1	ESE
20230207 0220	1.4	ESE
20230207 0230	1.7	SE
20230207 0240	1.1	SE
20230207 0250	1.1	SE
20230207 0300	0.3	SSE
20230207 0310	0.8	ESE
20230207 0320	1.4	ESE
20230207 0330	0.3	-
20230207 0340	0.6	SE
20230207 0350	1.4	SE
20230207 0400	1.1	SE
20230207 0410	1.4	SE
20230207 0420	1.7	SSE
20230207 0430	0.3	-
20230207 0440	0.8	SSW
20230207 0450	0.6	S
20230207 0500	0	N
20230207 0510	0.3	ESE
20230207 0520	0.3	E
20230207 0530	0.3	SSE
20230207 0540	1.1	SE
20230207 0550	0.3	E
20230207 0600	0.8	ESE
20230207 0610	1.4	SE
20230207 0620	1.1	ESE
20230207 0630	0.6	SE
20230207 0640	0	N
20230207 0650	0.3	NW
20230207 0700	0	N
20230207 0710	0	N
20230207 0720	0	N
20230207 0730	0	N
20230207 0740	0	N
20230207 0750	0	N
20230207 0800	0.3	SSW
20230207 0810	0	N
20230207 0820	0	N
20230207 0830	0	N
20230207 0840	0	N
20230207 0850	0	N
20230207 0900	0	N
20230207 0910	0	N
20230207 0920	0	N
20230207 0930	0	N
20230207 0940	0.3	N
20230207 0950	0.3	ENE
20230207 1000	0	N
20230207 1010	0	N
20230207 1020	0.3	WSW
20230207 1030	0	N
20230207 1040	0	N
20230207 1050	0	N
20230207 1100	0	N
20230207 1110	0	N
20230207 1120	0.3	S
20230207 1130	0.3	N
20230207 1140	0	N
20230207 1150	0	N

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230207 1200	0.3	NE
20230207 1210	0.3	ESE
20230207 1220	0.8	E
20230207 1230	1.1	W
20230207 1240	1.4	W
20230207 1250	2.2	NW
20230207 1300	1.1	NW
20230207 1310	1.1	N
20230207 1320	1.1	N
20230207 1330	0.8	N
20230207 1340	0.8	NNE
20230207 1350	1.7	NNE
20230207 1400	0.8	-
20230207 1410	0.3	-
20230207 1420	0	N
20230207 1430	0.8	E
20230207 1440	0.8	SE
20230207 1450	0.3	-
20230207 1500	1.4	E
20230207 1510	0.8	ESE
20230207 1520	1.1	N
20230207 1530	1.1	N
20230207 1540	0.3	-
20230207 1550	0.8	E
20230207 1600	1.4	ENE
20230207 1610	1.4	E
20230207 1620	1.4	E
20230207 1630	1.7	ESE
20230207 1640	1.7	ESE
20230207 1650	1.7	ESE
20230207 1700	1.7	ESE
20230207 1710	2.2	ESE
20230207 1720	1.9	ESE
20230207 1730	2.2	ESE
20230207 1740	1.7	ESE
20230207 1750	1.7	ESE
20230207 1800	1.7	ESE
20230207 1810	1.7	ESE
20230207 1820	1.1	ESE
20230207 1830	1.1	SE
20230207 1840	0.8	SSW
20230207 1850	0.8	SE
20230207 1900	1.1	SE
20230207 1910	1.4	ESE
20230207 1920	1.1	SE
20230207 1930	1.7	ESE
20230207 1940	2.2	ESE
20230207 1950	2.8	ESE
20230207 2000	2.2	ESE
20230207 2010	2.2	ESE
20230207 2020	1.9	E
20230207 2030	1.4	ESE
20230207 2040	1.4	ESE
20230207 2050	1.4	ESE
20230207 2100	2.2	ESE
20230207 2110	2.2	SE
20230207 2120	2.5	SSE
20230207 2130	2.2	ESE
20230207 2140	2.5	ESE
20230207 2150	2.5	ESE
20230207 2200	3.1	ESE
20230207 2210	3.1	ESE
20230207 2220	3.3	ESE
20230207 2230	3.3	E
20230207 2240	3.1	ESE
20230207 2250	2.8	ESE
20230207 2300	2.5	ESE
20230207 2310	2.5	ESE
20230207 2320	2.8	ESE
20230207 2330	2.8	ESE
20230207 2340	2.5	ESE
20230207 2350	2.5	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230208 0000	2.5	E
20230208 0010	2.2	E
20230208 0020	2.2	E
20230208 0030	2.2	E
20230208 0030	2.5	E
20230208 0040	2.2	E
20230208 0050	1.9	E
20230208 0100	2.5	E
20230208 0110	3.1	E
20230208 0120	2.8	E
20230208 0130	2.2	E
20230208 0140	2.5	E
20230208 0150	3.3	E
20230208 0200	4.2	E
20230208 0210	2.8	E
20230208 0220	3.3	ENE
20230208 0230	3.6	ENE
20230208 0240	3.9	ENE
20230208 0250	3.9	ENE
20230208 0300	2.2	E
20230208 0310	1.4	ENE
20230208 0320	1.7	E
20230208 0330	2.5	E
20230208 0340	2.5	E
20230208 0350	2.8	E
20230208 0400	2.5	E
20230208 0410	1.7	ENE
20230208 0420	2.2	E
20230208 0430	2.2	E
20230208 0440	1.4	E
20230208 0450	2.2	E
20230208 0500	2.5	ENE
20230208 0510	2.2	ENE
20230208 0520	1.7	ESE
20230208 0530	3.1	E
20230208 0540	2.5	E
20230208 0550	1.7	E
20230208 0600	1.9	E
20230208 0610	2.2	E
20230208 0620	3.1	ESE
20230208 0630	3.1	ESE
20230208 0640	2.5	ESE
20230208 0650	3.3	ESE
20230208 0700	3.3	E
20230208 0710	2.8	ESE
20230208 0720	2.2	ESE
20230208 0730	2.8	E
20230208 0740	2.5	E
20230208 0750	2.8	E
20230208 0800	2.5	ESE
20230208 0810	2.2	E
20230208 0820	1.9	E
20230208 0830	1.7	ENE
20230208 0840	1.7	E
20230208 0850	1.4	ENE
20230208 0900	1.4	E
20230208 0910	2.2	ESE
20230208 0920	2.5	E
20230208 0930	1.1	E
20230208 0940	1.1	ESE
20230208 0950	1.1	E
20230208 1000	1.1	ESE
20230208 1010	1.4	SSE
20230208 1020	1.7	E
20230208 1030	1.9	E
20230208 1040	1.7	ESE
20230208 1050	1.7	ENE
20230208 1100	2.2	ENE
20230208 1110	1.7	E
20230208 1120	2.5	ENE
20230208 1130	2.8	E
20230208 1140	2.2	E
20230208 1150	1.7	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230208 1200	1.4	ESE
20230208 1210	1.7	SE
20230208 1220	2.2	ESE
20230208 1230	2.5	E
20230208 1240	2.5	E
20230208 1250	3.3	E
20230208 1300	2.8	E
20230208 1310	1.7	E
20230208 1320	3.3	ENE
20230208 1330	3.3	E
20230208 1340	3.9	ENE
20230208 1350	3.3	E
20230208 1400	3.3	E
20230208 1410	3.6	E
20230208 1420	3.9	E
20230208 1430	3.3	E
20230208 1440	2.2	E
20230208 1450	2.2	E
20230208 1500	1.7	E
20230208 1510	2.2	E
20230208 1520	2.5	E
20230208 1530	1.9	ESE
20230208 1540	1.7	ESE
20230208 1550	2.2	ESE
20230208 1600	2.2	E
20230208 1610	2.2	E
20230208 1620	2.5	E
20230208 1630	2.2	ESE
20230208 1640	2.5	ESE
20230208 1650	2.2	ESE
20230208 1700	1.7	ESE
20230208 1710	2.2	ESE
20230208 1720	2.8	ESE
20230208 1730	2.5	ESE
20230208 1740	1.9	E
20230208 1750	2.5	E
20230208 1800	2.5	ESE
20230208 1810	1.7	ESE
20230208 1820	1.1	ESE
20230208 1830	1.7	E
20230208 1840	1.7	ESE
20230208 1850	1.7	ESE
20230208 1900	1.7	ESE
20230208 1910	1.4	ESE
20230208 1920	2.5	E
20230208 1930	2.8	ESE
20230208 1940	2.5	ESE
20230208 1950	1.7	ESE
20230208 2000	2.8	ESE
20230208 2010	2.5	ESE
20230208 2020	2.8	ESE
20230208 2030	2.2	SE
20230208 2040	1.7	SE
20230208 2050	1.7	SE
20230208 2100	2.2	ESE
20230208 2110	1.7	ESE
20230208 2120	2.5	ESE
20230208 2130	2.2	ESE
20230208 2140	2.8	E
20230208 2150	2.8	ESE
20230208 2200	1.7	ESE
20230208 2210	1.7	ESE
20230208 2220	1.4	E
20230208 2230	2.5	E
20230208 2240	3.9	ESE
20230208 2250	4.7	ESE
20230208 2300	3.1	ESE
20230208 2310	3.3	ESE
20230208 2320	3.3	E
20230208 2330	3.9	ESE
20230208 2340	4.2	ESE
20230208 2350	4.7	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230209 0000	3.9	ESE
20230209 0010	4.2	ESE
20230209 0020	4.2	ESE
20230209 0030	4.7	ESE
20230209 0040	3.9	ESE
20230209 0050	3.3	ESE
20230209 0100	3.3	ESE
20230209 0110	2.8	SE
20230209 0120	3.3	ESE
20230209 0130	3.3	ESE
20230209 0140	2.8	ESE
20230209 0150	2.8	ESE
20230209 0200	2.2	E
20230209 0210	1.7	E
20230209 0220	2.8	E
20230209 0230	2.2	E
20230209 0240	2.5	E
20230209 0250	2.2	ESE
20230209 0300	1.7	ESE
20230209 0310	1.7	E
20230209 0320	2.2	ENE
20230209 0330	2.2	E
20230209 0340	2.2	E
20230209 0350	2.2	ESE
20230209 0400	1.9	E
20230209 0410	1.4	E
20230209 0420	1.1	ESE
20230209 0430	1.7	ESE
20230209 0440	1.7	SE
20230209 0450	1.7	E
20230209 0500	2.2	E
20230209 0510	1.4	ESE
20230209 0520	2.2	ESE
20230209 0530	2.5	ESE
20230209 0540	2.2	ESE
20230209 0550	2.2	E
20230209 0600	2.2	E
20230209 0610	1.9	ESE
20230209 0620	2.5	ESE
20230209 0630	2.5	ESE
20230209 0640	1.7	ESE
20230209 0650	1.7	ESE
20230209 0700	1.7	SE
20230209 0710	1.7	SE
20230209 0720	1.1	ESE
20230209 0730	1.4	ESE
20230209 0740	2.5	E
20230209 0750	2.5	E
20230209 0800	2.2	E
20230209 0810	2.2	E
20230209 0820	1.7	ENE
20230209 0830	1.7	ENE
20230209 0840	1.9	E
20230209 0850	1.4	E
20230209 0900	1.7	E
20230209 0910	1.7	E
20230209 0920	2.5	ENE
20230209 0930	2.2	E
20230209 0940	2.2	ENE
20230209 0950	2.2	E
20230209 1000	2.5	ESE
20230209 1010	2.8	ESE
20230209 1020	2.2	E
20230209 1030	2.5	ESE
20230209 1040	3.3	ESE
20230209 1050	3.3	E
20230209 1100	2.5	ESE
20230209 1110	2.5	ESE
20230209 1120	3.3	ESE
20230209 1130	3.1	ESE
20230209 1140	3.3	SE
20230209 1150	3.3	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230209 1200	2.8	ESE
20230209 1210	3.3	SE
20230209 1220	3.3	ESE
20230209 1230	3.3	E
20230209 1240	2.8	ESE
20230209 1250	3.9	ESE
20230209 1300	3.3	E
20230209 1310	3.3	ESE
20230209 1320	2.8	ESE
20230209 1330	2.8	E
20230209 1340	3.1	ENE
20230209 1350	3.9	ENE
20230209 1400	4.2	E
20230209 1410	3.6	E
20230209 1420	3.9	E
20230209 1430	2.8	ESE
20230209 1440	3.1	E
20230209 1450	2.8	E
20230209 1500	2.8	E
20230209 1510	2.8	E
20230209 1520	2.5	ESE
20230209 1530	3.1	E
20230209 1540	3.1	E
20230209 1550	2.8	E
20230209 1600	2.8	E
20230209 1610	3.3	E
20230209 1620	3.3	E
20230209 1630	2.8	ESE
20230209 1640	2.5	ESE
20230209 1650	2.8	E
20230209 1700	1.7	E
20230209 1710	2.8	E
20230209 1720	2.5	E
20230209 1730	3.3	ESE
20230209 1740	2.8	ESE
20230209 1750	3.3	ESE
20230209 1800	2.8	ESE
20230209 1810	1.7	ESE
20230209 1820	2.2	ESE
20230209 1830	1.7	ESE
20230209 1840	1.4	SE
20230209 1850	1.7	ESE
20230209 1900	0.8	-
20230209 1910	1.7	SSE
20230209 1920	1.1	SSE
20230209 1930	0.8	SE
20230209 1940	1.1	SE
20230209 1950	2.5	SE
20230209 2000	2.5	SSE
20230209 2010	1.7	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230210 0020	0.3	S
20230210 0030	0.3	WNW
20230210 0040	0.8	E
20230210 0050	0.6	SE
20230210 0100	1.1	SE
20230210 0110	0.8	ESE
20230210 0120	0.8	SE
20230210 0130	1.7	ESE
20230210 0140	1.7	SE
20230210 0150	1.4	ESE
20230210 0200	1.4	E
20230210 0210	1.7	ESE
20230210 0220	1.7	ESE
20230210 0230	1.4	ESE
20230210 0240	1.7	E
20230210 0250	1.7	E
20230210 0300	1.4	E
20230210 0310	0.3	E
20230210 0320	0.3	SSW
20230210 0330	1.1	ESE
20230210 0340	1.1	ENE
20230210 0350	0.3	E
20230210 0400	0.3	-
20230210 0410	0.3	WSW
20230210 0420	0.3	SSW
20230210 0430	1.1	SSE
20230210 0440	1.1	SSE
20230210 0450	0.6	SSE
20230210 0500	0.3	S
20230210 0510	1.1	SSW
20230210 0520	1.1	S
20230210 0530	0.8	S
20230210 0540	1.1	SE
20230210 0550	1.4	ESE
20230210 0600	2.2	SE
20230210 0610	2.2	SE
20230210 0620	1.7	SE
20230210 0630	1.1	ESE
20230210 0640	1.1	SE
20230210 0650	1.1	SE
20230210 0700	1.7	ESE
20230210 0710	1.7	ESE
20230210 0720	0.8	SE
20230210 0730	0.3	ESE
20230210 0740	1.4	SE
20230210 0750	1.1	SE
20230210 0800	1.1	SE
20230210 0810	1.4	SE
20230210 0820	1.1	SE
20230210 0830	0.6	E
20230210 0840	0.3	SE
20230210 0850	0.8	ESE
20230210 0900	0.8	ESE
20230210 0910	0.6	E
20230210 0920	0	N
20230210 0930	0	N
20230210 0940	0	N
20230210 0950	0	N
20230210 1000	0.3	ESE
20230210 1010	0	N
20230210 1020	0	N
20230210 1030	0	N
20230210 1040	0	N
20230210 1050	0.3	ENE
20230210 1100	0.3	NW
20230210 1110	0.3	N
20230210 1120	0.3	SSE
20230210 1130	0.3	S
20230210 1140	0.3	-
20230210 1150	1.1	SSE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230210 1200	1.1	SSE
20230210 1210	1.4	S
20230210 1220	1.4	S
20230210 1230	1.7	SSE
20230210 1240	1.7	SE
20230210 1250	2.5	E
20230210 1300	2.8	E
20230210 1310	2.8	E
20230210 1320	3.3	ENE
20230210 1330	2.8	ENE
20230210 1340	2.2	E
20230210 1350	2.8	E
20230210 1400	2.5	E
20230210 1410	3.1	E
20230210 1420	3.3	E
20230210 1430	3.1	E
20230210 1440	2.8	E
20230210 1450	3.3	ESE
20230210 1500	3.1	ESE
20230210 1510	3.3	E
20230210 1520	3.1	E
20230210 1530	3.3	E
20230210 1540	3.1	E
20230210 1550	2.8	E
20230210 1600	2.5	E
20230210 1610	2.8	ESE
20230210 1620	2.8	ESE
20230210 1630	3.3	E
20230210 1640	3.3	E
20230210 1650	3.1	E
20230210 1700	2.5	ESE
20230210 1710	3.1	ESE
20230210 1720	2.8	ESE
20230210 1730	2.8	ESE
20230210 1740	3.9	ESE
20230210 1750	3.1	ESE
20230210 1800	3.3	ESE
20230210 1810	2.2	ESE
20230210 1820	2.2	ESE
20230210 1830	2.2	ESE
20230210 1840	2.2	ESE
20230210 1850	2.5	ESE
20230210 1900	2.8	ESE
20230210 1910	2.5	ESE
20230210 1920	2.8	ESE
20230210 1930	2.8	ESE
20230210 1940	2.2	ESE
20230210 1950	1.7	ESE
20230210 2000	1.7	ESE
20230210 2010	2.8	ESE
20230210 2020	2.8	ESE
20230210 2030	3.1	ESE
20230210 2040	2.5	ESE
20230210 2050	2.2	ESE
20230210 2100	2.5	ESE
20230210 2110	2.2	ESE
20230210 2120	1.9	SE
20230210 2130	1.7	SE
20230210 2140	1.7	E
20230210 2150	2.5	ESE
20230210 2200	2.5	ESE
20230210 2210	2.8	ESE
20230210 2220	2.5	ESE
20230210 2230	2.5	ESE
20230210 2240	3.1	ESE
20230210 2250	3.3	E
20230210 2300	3.9	E
20230210 2310	3.3	E
20230210 2320	3.6	ESE
20230210 2330	3.3	ESE
20230210 2340	3.9	ESE
20230210 2350	3.3	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230211 0000	3.9	ESE
20230211 0010	3.9	ESE
20230211 0020	4.2	ESE
20230211 0030	4.2	ESE
20230211 0040	3.9	ESE
20230211 0050	4.2	ESE
20230211 0100	5	ESE
20230211 0110	5	ESE
20230211 0120	3.9	ESE
20230211 0130	4.2	ESE
20230211 0140	3.3	ESE
20230211 0150	3.3	ESE
20230211 0200	3.6	ESE
20230211 0210	3.3	ESE
20230211 0220	2.8	ESE
20230211 0230	2.8	ESE
20230211 0240	2.5	ESE
20230211 0250	2.2	ESE
20230211 0300	2.8	ESE
20230211 0310	2.5	ESE
20230211 0320	2.8	ESE
20230211 0330	2.2	ESE
20230211 0340	2.8	SE
20230211 0350	3.3	ESE
20230211 0400	2.5	ESE
20230211 0410	2.8	ESE
20230211 0420	2.8	ESE
20230211 0430	3.3	ESE
20230211 0440	2.5	ESE
20230211 0450	2.8	ESE
20230211 0500	3.3	ESE
20230211 0510	3.3	ESE
20230211 0520	3.1	ESE
20230211 0530	4.4	ESE
20230211 0540	4.2	ESE
20230211 0550	3.1	ESE
20230211 0600	3.9	ESE
20230211 0610	3.1	ESE
20230211 0620	3.3	ESE
20230211 0630	3.3	ESE
20230211 0640	4.2	ESE
20230211 0650	4.7	ESE
20230211 0700	3.9	ESE
20230211 0710	2.8	ESE
20230211 0720	1.7	SE
20230211 0730	1.7	SE
20230211 0740	1.4	ESE
20230211 0750	1.7	ESE
20230211 0800	2.2	SE
20230211 0810	2.5	SE
20230211 0820	2.2	ESE
20230211 0830	2.2	SE
20230211 0840	2.2	ESE
20230211 0850	2.5	ESE
20230211 0900	3.3	ESE
20230211 0910	3.3	E
20230211 0920	3.1	ESE
20230211 0930	2.2	E
20230211 0940	3.3	ESE
20230211 0950	2.8	ESE
20230211 1000	3.6	ESE
20230211 1010	3.3	ESE
20230211 1020	3.9	ESE
20230211 1030	3.6	ESE
20230211 1040	3.3	ESE
20230211 1050	3.3	E
20230211 1100	3.1	E
20230211 1110	3.9	E
20230211 1120	4.2	E
20230211 1130	3.9	E
20230211 1140	3.6	E
20230211 1150	4.2	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230211 1200	3.6	E
20230211 1210	4.2	E
20230211 1220	4.4	ESE
20230211 1230	4.2	E
20230211 1240	4.2	ESE
20230211 1250	4.4	ESE
20230211 1300	3.3	ESE
20230211 1310	3.6	ESE
20230211 1320	4.7	ESE
20230211 1330	4.2	ESE
20230211 1340	5	E
20230211 1350	5.3	ESE
20230211 1400	5	ESE
20230211 1410	3.9	ESE
20230211 1420	4.2	ESE
20230211 1430	4.2	ESE
20230211 1440	4.7	ESE
20230211 1450	4.7	ESE
20230211 1500	5	ESE
20230211 1510	5.3	ESE
20230211 1520	4.2	E
20230211 1530	4.2	E
20230211 1540	4.2	E
20230211 1550	3.3	E
20230211 1600	3.3	E
20230211 1610	3.9	E
20230211 1620	4.2	E
20230211 1630	4.4	ESE
20230211 1640	3.3	ESE
20230211 1650	3.1	ESE
20230211 1700	3.9	ESE
20230211 1710	2.8	ESE
20230211 1720	2.8	ESE
20230211 1730	3.3	ESE
20230211 1740	3.3	E
20230211 1750	3.9	ESE
20230211 1800	3.9	ESE
20230211 1810	3.3	ESE
20230211 1820	3.3	ESE
20230211 1830	3.9	ESE
20230211 1840	4.2	ESE
20230211 1850	4.7	ESE
20230211 1900	4.4	ESE
20230211 1910	3.3	ESE
20230211 1920	3.9	ESE
20230211 1930	3.3	ESE
20230211 1940	3.3	ESE
20230211 1950	3.9	ESE
20230211 2000	3.9	ESE
20230211 2010	3.3	ESE
20230211 2020	3.1	ESE
20230211 2030	2.5	ESE
20230211 2040	3.1	ESE
20230211 2050	2.5	ESE
20230211 2100	1.7	SE
20230211 2110	2.5	ESE
20230211 2120	2.5	E
20230211 2130	3.1	E
20230211 2140	2.5	ESE
20230211 2150	3.1	E
20230211 2200	3.9	ESE
20230211 2210	3.9	ESE
20230211 2220	4.4	ESE
20230211 2230	4.2	ESE
20230211 2240	4.2	ESE
20230211 2250	3.9	ESE
20230211 2300	3.3	ESE
20230211 2310	3.3	ESE
20230211 2320	3.3	ESE
20230211 2330	2.8	ESE
20230211 2340	3.3	ESE
20230211 2350	4.2	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230212 0000	3.3	ESE
20230212 0010	3.9	ESE
20230212 0020	3.9	ESE
20230212 0030	3.9	ESE
20230212 0040	2.2	E
20230212 0050	2.5	E
20230212 0100	2.2	E
20230212 0110	1.7	ESE
20230212 0120	1.7	E
20230212 0130	2.2	E
20230212 0140	2.5	E
20230212 0150	2.8	E
20230212 0200	2.5	ENE
20230212 0210	2.5	E
20230212 0220	3.3	ESE
20230212 0230	3.1	E
20230212 0240	2.8	E
20230212 0250	2.8	E
20230212 0300	2.5	E
20230212 0310	2.2	ESE
20230212 0320	2.5	ESE
20230212 0330	2.5	E
20230212 0340	2.8	E
20230212 0350	2.5	E
20230212 0400	2.5	E
20230212 0410	2.8	E
20230212 0420	2.5	E
20230212 0430	2.5	E
20230212 0440	2.5	E
20230212 0450	3.3	E
20230212 0500	3.1	E
20230212 0510	3.1	E
20230212 0520	2.8	E
20230212 0530	2.8	ESE
20230212 0540	2.5	ESE
20230212 0550	2.5	ESE
20230212 0600	2.5	ESE
20230212 0610	2.5	ESE
20230212 0620	2.5	ESE
20230212 0630	2.2	ESE
20230212 0640	2.5	ESE
20230212 0650	3.1	ESE
20230212 0700	3.1	E
20230212 0710	3.3	ESE
20230212 0720	4.7	E
20230212 0730	3.9	E
20230212 0740	3.3	E
20230212 0750	3.1	ENE
20230212 0800	3.3	E
20230212 0810	3.6	E
20230212 0820	3.3	E
20230212 0830	3.3	E
20230212 0840	4.2	E
20230212 0850	3.3	E
20230212 0900	3.9	E
20230212 0910	3.3	ESE
20230212 0920	3.1	ESE
20230212 0930	3.3	ESE
20230212 0940	2.8	ESE
20230212 0950	3.1	ESE
20230212 1000	4.2	ESE
20230212 1010	3.6	ESE
20230212 1020	4.2	E
20230212 1030	4.2	ESE
20230212 1040	4.2	ESE
20230212 1050	3.9	E
20230212 1100	4.4	E
20230212 1110	4.4	E
20230212 1120	4.4	E
20230212 1130	4.2	E
20230212 1140	4.4	E
20230212 1150	4.7	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230212 1200	4.7	E
20230212 1210	5	E
20230212 1220	4.2	ESE
20230212 1230	5	E
20230212 1240	5.3	ESE
20230212 1250	5	ESE
20230212 1300	4.4	ESE
20230212 1310	4.2	E
20230212 1320	4.2	ESE
20230212 1330	3.3	E
20230212 1340	3.3	E
20230212 1350	3.3	E
20230212 1400	3.3	E
20230212 1410	3.9	E
20230212 1420	4.2	E
20230212 1430	3.3	E
20230212 1440	4.2	E
20230212 1450	3.3	E
20230212 1500	3.3	E
20230212 1510	3.3	E
20230212 1520	2.8	E
20230212 1530	3.3	E
20230212 1540	3.3	E
20230212 1550	3.3	E
20230212 1600	3.1	E
20230212 1610	3.3	E
20230212 1620	3.1	E
20230212 1630	2.8	E
20230212 1640	3.3	E
20230212 1650	3.3	E
20230212 1700	3.9	E
20230212 1710	3.6	E
20230212 1720	3.3	E
20230212 1730	3.9	E
20230212 1740	3.9	E
20230212 1750	3.3	E
20230212 1800	2.8	E
20230212 1810	3.3	ESE
20230212 1820	2.8	ESE
20230212 1830	2.2	E
20230212 1840	1.9	ESE
20230212 1850	2.5	ESE
20230212 1900	2.2	E
20230212 1910	1.7	E
20230212 1920	2.5	ESE
20230212 1930	2.5	ESE
20230212 1940	2.8	ESE
20230212 1950	2.8	ESE
20230212 2000	2.8	ESE
20230212 2010	2.2	ESE
20230212 2020	2.2	ESE
20230212 2030	2.2	ESE
20230212 2040	2.2	SE
20230212 2050	3.1	ESE
20230212 2100	3.3	SE
20230212 2110	3.1	ESE
20230212 2120	3.3	ESE
20230212 2130	2.5	ESE
20230212 2140	2.8	ESE
20230212 2150	3.1	ESE
20230212 2200	3.3	ESE
20230212 2210	3.3	ESE
20230212 2220	3.1	ESE
20230212 2230	3.1	ESE
20230212 2240	3.3	ESE
20230212 2250	2.8	ESE
20230212 2300	3.3	ESE
20230212 2310	3.3	ESE
20230212 2320	2.8	ESE
20230212 2330	1.7	ESE
20230212 2340	2.5	E
20230212 2350	2.2	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230213 0000	2.5	E
20230213 0010	1.7	ESE
20230213 0020	1.7	ESE
20230213 0030	1.7	ESE
20230213 0040	1.9	ESE
20230213 0050	2.5	ESE
20230213 0100	2.8	ESE
20230213 0110	2.2	SE
20230213 0120	2.5	ESE
20230213 0130	2.2	ESE
20230213 0140	1.7	SE
20230213 0150	1.7	ESE
20230213 0200	1.4	ESE
20230213 0210	1.4	ESE
20230213 0220	1.7	SE
20230213 0230	1.7	SE
20230213 0240	2.2	SE
20230213 0250	1.7	SE
20230213 0300	1.4	SE
20230213 0310	1.7	SE
20230213 0320	1.7	SE
20230213 0330	2.8	SSE
20230213 0340	3.1	SE
20230213 0350	4.2	SE
20230213 0400	2.5	SE
20230213 0410	3.3	SE
20230213 0420	2.8	SE
20230213 0430	2.5	SE
20230213 0440	3.1	SE
20230213 0450	2.5	SE
20230213 0500	2.5	ESE
20230213 0510	1.9	ESE
20230213 0520	2.8	ESE
20230213 0530	3.1	SE
20230213 0540	3.3	SE
20230213 0550	2.8	ESE
20230213 0600	2.8	ESE
20230213 0610	2.5	ESE
20230213 0620	2.5	ESE
20230213 0630	2.8	ESE
20230213 0640	2.5	ESE
20230213 0650	3.1	ESE
20230213 0700	3.3	SE
20230213 0710	3.3	E
20230213 0720	2.8	ESE
20230213 0730	3.1	ESE
20230213 0740	3.3	ESE
20230213 0750	2.8	ESE
20230213 0800	3.3	ESE
20230213 0810	3.3	ESE
20230213 0820	3.3	ESE
20230213 0830	3.3	E
20230213 0840	3.3	ESE
20230213 0850	3.3	E
20230213 0900	3.1	ESE
20230213 0910	3.3	ESE
20230213 0920	2.5	ESE
20230213 0930	3.3	E
20230213 0940	3.1	ESE
20230213 0950	3.1	E
20230213 1000	3.3	ESE
20230213 1010	3.1	ESE
20230213 1020	2.8	E
20230213 1030	3.3	E
20230213 1040	2.8	E
20230213 1050	3.3	E
20230213 1100	2.2	E
20230213 1110	3.1	E
20230213 1120	2.8	E
20230213 1130	3.3	E
20230213 1140	3.3	E
20230213 1150	3.3	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230213 1200	3.3	E
20230213 1210	2.8	E
20230213 1220	3.3	E
20230213 1230	3.9	E
20230213 1240	4.2	E
20230213 1250	4.2	E
20230213 1300	4.2	E
20230213 1310	4.4	ESE
20230213 1320	4.2	E
20230213 1330	3.6	E
20230213 1340	3.6	E
20230213 1350	3.9	E
20230213 1400	3.3	E
20230213 1410	3.1	ESE
20230213 1420	3.3	E
20230213 1430	3.1	E
20230213 1440	3.1	E
20230213 1450	3.3	E
20230213 1500	3.3	E
20230213 1510	3.1	E
20230213 1520	3.3	E
20230213 1530	2.8	ESE
20230213 1540	3.1	ESE
20230213 1550	3.6	ESE
20230213 1600	3.3	ESE
20230213 1610	3.3	E
20230213 1620	2.5	ESE
20230213 1630	2.8	ESE
20230213 1640	2.5	E
20230213 1650	2.8	ESE
20230213 1700	2.8	ESE
20230213 1710	2.2	E
20230213 1720	2.8	ESE
20230213 1730	2.5	E
20230213 1740	2.5	ESE
20230213 1750	2.5	E
20230213 1800	2.2	ESE
20230213 1810	2.2	E
20230213 1820	2.8	ESE
20230213 1830	2.2	ESE
20230213 1840	1.4	ESE
20230213 1850	1.1	-
20230213 1900	1.1	E
20230213 1910	0.8	-
20230213 1920	0.3	-
20230213 1930	1.4	ESE
20230213 1940	1.1	ESE
20230213 1950	0.3	-
20230213 2000	0.6	S
20230213 2010	0.6	S
20230213 2020	0.6	S
20230213 2030	0.3	SE
20230213 2040	1.1	ESE
20230213 2050	0.8	SW
20230213 2100	0.3	SW
20230213 2110	0.3	S
20230213 2120	0.3	ESE
20230213 2130	0.3	-
20230213 2140	0	N
20230213 2150	0.3	-
20230213 2200	0.3	SSE
20230213 2210	0	N
20230213 2220	0	N
20230213 2230	0.3	SSW
20230213 2240	1.7	SW
20230213 2250	3.3	SW
20230213 2300	2.8	SW
20230213 2310	2.8	SW
20230213 2320	2.8	WSW
20230213 2330	3.1	WSW
20230213 2340	2.5	WSW
20230213 2350	2.2	NNW

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230214 0000	1.7	W
20230214 0010	2.2	WSW
20230214 0020	2.5	WNW
20230214 0030	2.5	WNW
20230214 0040	1.4	NW
20230214 0050	1.4	NNW
20230214 0100	1.7	NNW
20230214 0110	2.5	NW
20230214 0120	3.1	NW
20230214 0130	2.8	NNW
20230214 0140	3.1	NNW
20230214 0150	3.9	N
20230214 0200	3.9	N
20230214 0210	3.3	N
20230214 0220	3.9	N
20230214 0230	4.2	N
20230214 0240	3.9	N
20230214 0250	4.7	N
20230214 0300	4.2	N
20230214 0310	5.3	N
20230214 0320	4.4	N
20230214 0330	4.4	N
20230214 0340	4.2	N
20230214 0350	4.4	N
20230214 0400	4.7	N
20230214 0410	4.4	N
20230214 0420	5	N
20230214 0430	5.8	N
20230214 0440	4.7	N
20230214 0450	4.2	N
20230214 0500	4.7	N
20230214 0510	6.1	N
20230214 0520	5.3	N
20230214 0530	5.3	N
20230214 0540	5.3	N
20230214 0550	5.8	N
20230214 0600	6.1	N
20230214 0610	6.4	N
20230214 0620	5.8	N
20230214 0630	5	N
20230214 0640	5.6	N
20230214 0650	6.7	NNE
20230214 0700	5.3	NNE
20230214 0710	6.1	NNE
20230214 0720	6.9	N
20230214 0730	5	N
20230214 0740	5.8	N
20230214 0750	6.4	N
20230214 0800	5.8	NNE
20230214 0810	6.7	NNE
20230214 0820	6.7	N
20230214 0830	6.9	NNE
20230214 0840	6.4	NNE
20230214 0850	5.6	NNE
20230214 0900	5.3	N
20230214 0910	6.7	NNE
20230214 0920	6.4	NNE
20230214 0930	5.8	N
20230214 0940	6.7	NNE
20230214 0950	7.2	N
20230214 1000	5.3	N
20230214 1010	6.7	NNE
20230214 1020	5.3	N
20230214 1030	6.1	NNE
20230214 1040	5.6	N
20230214 1050	4.4	NNE
20230214 1100	4.7	N
20230214 1110	5	N
20230214 1120	5.3	N
20230214 1130	4.4	N
20230214 1140	6.1	NNE
20230214 1150	5.3	N

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230214 1200	4.4	NNE
20230214 1210	4.2	N
20230214 1220	4.7	N
20230214 1230	4.2	N
20230214 1240	4.7	N
20230214 1250	4.2	N
20230214 1300	3.3	N
20230214 1310	4.2	N
20230214 1320	3.3	N
20230214 1330	4.2	N
20230214 1340	4.7	NNE
20230214 1350	4.7	NNE
20230214 1400	3.3	NNE
20230214 1410	3.3	N
20230214 1420	3.9	NNE
20230214 1430	3.3	NNE
20230214 1440	3.9	NNE
20230214 1450	4.2	NNE
20230214 1500	2.8	N
20230214 1510	3.3	NNE
20230214 1520	4.2	NNE
20230214 1530	4.4	NNE
20230214 1540	3.9	NNE
20230214 1550	3.9	N
20230214 1600	4.2	NNE
20230214 1610	4.4	NNE
20230214 1620	3.6	NNE
20230214 1630	3.3	NNE
20230214 1640	3.9	NNE
20230214 1650	3.3	NNE
20230214 1700	3.3	NNE
20230214 1710	3.3	NNE
20230214 1720	3.9	NNE
20230214 1730	3.3	NNE
20230214 1740	3.1	NNE
20230214 1750	3.1	NNE
20230214 1800	2.8	NNE
20230214 1810	2.5	NNE
20230214 1820	2.8	NNE
20230214 1830	2.8	NNE
20230214 1840	2.5	NNE
20230214 1850	2.8	NNE
20230214 1900	2.5	NNE
20230214 1910	3.3	NNE
20230214 1920	3.3	NNE
20230214 1930	3.3	NNE
20230214 1940	3.3	NNE
20230214 1950	4.2	NNE
20230214 2000	4.2	NNE
20230214 2010	4.7	NNE
20230214 2020	4.7	NNE
20230214 2030	3.9	NNE
20230214 2040	4.7	NNE
20230214 2050	5	NNE
20230214 2100	3.3	NNE
20230214 2110	3.9	NNE
20230214 2120	4.2	NNE
20230214 2130	4.4	NNE
20230214 2140	3.3	NNE
20230214 2150	3.3	NNE
20230214 2200	2.5	NNE
20230214 2210	2.5	NNE
20230214 2220	3.3	NNE
20230214 2230	4.2	NNE
20230214 2240	4.2	NNE
20230214 2250	4.2	NNE
20230214 2300	3.3	NNE
20230214 2310	3.9	NNE
20230214 2320	4.7	NNE
20230214 2330	5	NNE
20230214 2340	4.7	NNE
20230214 2350	5	NNE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230215 0000	5.6	NNE
20230215 0010	5.8	NNE
20230215 0020	5.3	NNE
20230215 0030	5.3	NNE
20230215 0040	4.7	NNE
20230215 0050	4.4	N
20230215 0100	4.7	NNE
20230215 0110	5	NNE
20230215 0120	3.6	NNE
20230215 0130	4.2	NNE
20230215 0140	4.7	N
20230215 0150	4.7	NNE
20230215 0200	4.7	N
20230215 0210	5.8	NNE
20230215 0220	4.2	NNE
20230215 0230	3.3	NNE
20230215 0240	5	NNE
20230215 0250	4.2	N
20230215 0300	3.6	N
20230215 0310	4.7	N
20230215 0320	5	NNE
20230215 0330	4.4	N
20230215 0340	3.9	N
20230215 0350	3.9	N
20230215 0400	3.3	NNE
20230215 0410	3.3	NNE
20230215 0420	3.3	NNE
20230215 0430	4.2	NNE
20230215 0440	3.6	NNE
20230215 0450	4.7	N
20230215 0500	4.2	NNE
20230215 0510	4.7	N
20230215 0520	3.9	N
20230215 0530	3.9	N
20230215 0540	4.7	N
20230215 0550	5.3	N
20230215 0600	4.7	NNE
20230215 0610	5.3	NNE
20230215 0620	6.1	NNE
20230215 0630	4.7	NNE
20230215 0640	5.3	NNE
20230215 0650	5.3	NNE
20230215 0700	5.3	NNE
20230215 0710	4.7	NNE
20230215 0720	5.6	NNE
20230215 0730	5.3	NNE
20230215 0740	4.7	NNE
20230215 0750	4.7	NNE
20230215 0800	5	NNE
20230215 0810	3.9	NNE
20230215 0820	3.9	NNE
20230215 0830	4.2	NNE
20230215 0840	4.2	NNE
20230215 0850	5	NNE
20230215 0900	3.9	N
20230215 0910	3.9	NNE
20230215 0920	4.2	NNE
20230215 0930	4.2	N
20230215 0940	5	N
20230215 0950	5.3	N
20230215 1000	5.8	NNE
20230215 1010	5.3	NNE
20230215 1020	4.7	NNE
20230215 1030	5	NNE
20230215 1040	4.2	N
20230215 1050	4.7	NNE
20230215 1100	4.4	NNE
20230215 1110	4.2	NNE
20230215 1120	3.9	N
20230215 1130	4.2	N
20230215 1140	3.9	NNE
20230215 1150	2.8	N

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230215 1200	3.1	N
20230215 1210	2.8	N
20230215 1220	3.3	N
20230215 1230	2.5	N
20230215 1240	2.2	NNW
20230215 1250	3.3	-
20230215 1300	1.7	NNE
20230215 1310	2.2	N
20230215 1320	2.8	NNE
20230215 1330	2.5	NNE
20230215 1340	3.1	NNE
20230215 1350	3.1	NNW
20230215 1400	3.3	NNE
20230215 1410	3.3	N
20230215 1420	3.3	N
20230215 1430	3.3	N
20230215 1440	3.1	N
20230215 1450	3.3	NNE
20230215 1500	2.8	N
20230215 1510	3.1	N
20230215 1520	3.3	N
20230215 1530	3.3	N
20230215 1540	4.2	NNE
20230215 1550	3.3	NNE
20230215 1600	3.3	N
20230215 1610	3.3	NNE
20230215 1620	2.8	NE
20230215 1630	2.2	ENE
20230215 1640	1.4	ENE
20230215 1650	1.7	NNE
20230215 1700	3.3	NNE
20230215 1710	3.3	NNE
20230215 1720	3.3	NNE
20230215 1730	3.3	NNE
20230215 1740	3.1	NNE
20230215 1750	3.1	NNE
20230215 1800	2.8	NNE
20230215 1810	2.8	NNE
20230215 1820	2.8	NNE
20230215 1830	2.8	NNE
20230215 1840	2.2	NNE
20230215 1850	1.9	NE
20230215 1900	1.4	NE
20230215 1910	1.4	ENE
20230215 1920	1.1	NE
20230215 1930	0.8	ENE
20230215 1940	0.3	SSE
20230215 1950	0.3	SE
20230215 2000	0.8	E
20230215 2010	0.6	ESE
20230215 2020	0.6	NE
20230215 2030	0.6	E
20230215 2040	1.7	E
20230215 2050	1.4	E
20230215 2100	1.1	E
20230215 2110	0.8	ENE
20230215 2120	0.3	E
20230215 2130	0.8	ESE
20230215 2140	0.3	SSE
20230215 2150	0	N
20230215 2200	0	N
20230215 2210	0	N
20230215 2220	0	N
20230215 2230	0	N
20230215 2240	0	N
20230215 2250	0.3	SE
20230215 2300	0	N
20230215 2310	0	N
20230215 2320	0	N
20230215 2330	0	N
20230215 2340	0	N
20230215 2350	0.8	SSW

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230216 0000	0	N
20230216 0010	0.8	N
20230216 0020	0.8	N
20230216 0030	0.8	N
20230216 0040	1.1	NNE
20230216 0050	1.1	NE
20230216 0100	1.4	NNE
20230216 0110	0.8	NNE
20230216 0120	1.1	NNE
20230216 0130	1.4	NNE
20230216 0140	1.7	NNE
20230216 0150	1.7	N
20230216 0200	2.5	NNE
20230216 0210	2.8	NNE
20230216 0220	2.8	NNE
20230216 0230	2.8	NNE
20230216 0240	2.8	NNE
20230216 0250	2.5	NNE
20230216 0300	1.7	NE
20230216 0310	1.4	NE
20230216 0320	1.4	NE
20230216 0330	1.4	NE
20230216 0340	1.4	NNE
20230216 0350	1.4	NE
20230216 0400	1.7	N
20230216 0410	1.4	N
20230216 0420	1.7	N
20230216 0430	2.2	NNE
20230216 0440	2.2	NNE
20230216 0450	1.4	N
20230216 0500	1.4	N
20230216 0510	2.2	N
20230216 0520	1.7	N
20230216 0530	1.7	N
20230216 0540	1.7	N
20230216 0550	1.4	N
20230216 0600	2.2	N
20230216 0610	2.5	N
20230216 0620	2.2	N
20230216 0630	1.7	N
20230216 0640	2.2	N
20230216 0650	1.7	N
20230216 0700	1.7	N
20230216 0710	2.2	N
20230216 0720	1.9	N
20230216 0730	2.5	N
20230216 0740	3.1	N
20230216 0750	2.5	N
20230216 0800	3.3	N
20230216 0810	3.3	N
20230216 0820	2.5	N
20230216 0830	2.2	N
20230216 0840	3.1	N
20230216 0850	3.3	N
20230216 0900	2.8	N
20230216 0910	3.6	NNE
20230216 0920	3.1	N
20230216 0930	3.9	N
20230216 0940	3.9	N
20230216 0950	3.3	N
20230216 1000	4.4	N
20230216 1010	4.7	NNE
20230216 1020	3.9	N
20230216 1030	5.3	NNE
20230216 1040	4.2	N
20230216 1050	3.9	N
20230216 1100	3.9	N
20230216 1110	4.2	N
20230216 1120	3.9	NNE
20230216 1130	3.3	N
20230216 1140	3.1	N
20230216 1150	2.5	N

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230216 1200	2.2	N
20230216 1210	2.8	NNE
20230216 1220	1.4	N
20230216 1230	2.5	N
20230216 1240	1.7	N
20230216 1250	2.8	N
20230216 1300	2.2	N
20230216 1310	1.7	NW
20230216 1320	2.2	NNW
20230216 1330	1.7	-
20230216 1340	1.9	N
20230216 1350	1.4	N
20230216 1400	1.4	-
20230216 1410	1.1	ENE
20230216 1420	0.3	-
20230216 1430	1.1	-
20230216 1440	0.8	NE
20230216 1450	1.4	NE
20230216 1500	1.1	WNW
20230216 1510	0.8	N
20230216 1520	1.1	N
20230216 1530	0.6	NE
20230216 1540	1.1	NNW
20230216 1550	1.1	NNE
20230216 1600	0.8	NNE
20230216 1610	0.8	NE
20230216 1620	0.8	S
20230216 1630	1.7	ESE
20230216 1640	2.8	E
20230216 1650	2.5	ESE
20230216 1700	2.8	E
20230216 1710	2.8	E
20230216 1720	2.2	E
20230216 1730	2.8	E
20230216 1740	2.5	ESE
20230216 1750	2.8	ESE
20230216 1800	2.2	ESE
20230216 1810	2.8	ESE
20230216 1820	2.5	ESE
20230216 1830	3.1	ESE
20230216 1840	2.5	ESE
20230216 1850	2.2	ESE
20230216 1900	2.5	ESE
20230216 1910	2.5	ESE
20230216 1920	2.5	ESE
20230216 1930	2.5	ESE
20230216 1940	2.5	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230217 0020	3.3	ESE
20230217 0030	3.1	ESE
20230217 0040	3.3	SE
20230217 0050	3.3	SE
20230217 0100	3.3	SE
20230217 0110	2.8	ESE
20230217 0120	2.2	ESE
20230217 0130	1.7	SE
20230217 0140	1.7	SE
20230217 0150	1.7	ESE
20230217 0200	3.1	E
20230217 0210	2.2	ESE
20230217 0220	1.7	ESE
20230217 0230	2.5	ESE
20230217 0240	2.5	E
20230217 0250	2.8	ENE
20230217 0300	2.8	ENE
20230217 0310	1.9	E
20230217 0320	2.2	E
20230217 0330	2.2	ENE
20230217 0340	2.8	E
20230217 0350	2.8	E
20230217 0400	2.5	E
20230217 0410	2.8	E
20230217 0420	2.5	E
20230217 0430	2.8	ESE
20230217 0440	3.1	ESE
20230217 0450	2.5	ESE
20230217 0500	2.2	ESE
20230217 0510	2.5	SE
20230217 0520	2.8	ESE
20230217 0530	2.5	SE
20230217 0540	1.4	ESE
20230217 0550	0.6	ENE
20230217 0600	0.8	SSE
20230217 0610	1.1	SE
20230217 0620	0.6	NNE
20230217 0630	0.3	NNE
20230217 0640	0.3	E
20230217 0650	0.3	ENE
20230217 0700	0.3	-
20230217 0710	0.6	ENE
20230217 0720	0.3	E
20230217 0730	1.4	E
20230217 0740	1.1	ESE
20230217 0750	0.8	SE
20230217 0800	0.8	SE
20230217 0810	1.1	E
20230217 0820	1.7	SE
20230217 0830	2.2	SE
20230217 0840	2.2	E
20230217 0850	2.2	ESE
20230217 0900	3.1	E
20230217 0910	2.2	E
20230217 0920	2.5	ENE
20230217 0930	2.2	E
20230217 0940	2.2	ESE
20230217 0950	2.5	ESE
20230217 1000	2.5	ESE
20230217 1010	2.8	ESE
20230217 1020	2.5	ESE
20230217 1030	2.2	ESE
20230217 1040	2.2	ESE
20230217 1050	1.7	SE
20230217 1100	1.4	-
20230217 1110	1.4	NE
20230217 1120	1.4	E
20230217 1130	1.9	ESE
20230217 1140	1.4	ESE
20230217 1150	1.1	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230217 1200	0.6	E
20230217 1210	1.4	NE
20230217 1220	1.4	N
20230217 1230	2.2	SE
20230217 1240	3.3	SSE
20230217 1250	3.9	SE
20230217 1300	2.5	ESE
20230217 1310	2.8	ESE
20230217 1320	2.8	ESE
20230217 1330	2.2	E
20230217 1340	2.5	ESE
20230217 1350	3.1	E
20230217 1400	3.1	E
20230217 1410	2.5	E
20230217 1420	2.5	E
20230217 1430	2.8	E
20230217 1440	1.7	-
20230217 1450	2.5	E
20230217 1500	2.5	SE
20230217 1510	1.7	ENE
20230217 1520	1.7	E
20230217 1530	2.2	SE
20230217 1540	2.2	ESE
20230217 1550	2.2	E
20230217 1600	1.4	ESE
20230217 1610	1.7	ESE
20230217 1620	2.8	E
20230217 1630	2.2	E
20230217 1640	2.8	E
20230217 1650	2.8	ESE
20230217 1700	3.1	ESE
20230217 1710	3.1	ESE
20230217 1720	2.5	ESE
20230217 1730	3.3	ESE
20230217 1740	2.8	ESE
20230217 1750	2.8	ESE
20230217 1800	2.5	SE
20230217 1810	1.7	ESE
20230217 1820	1.7	SE
20230217 1830	1.4	ESE
20230217 1840	1.4	ENE
20230217 1850	0.6	SW
20230217 1900	1.1	ENE
20230217 1910	1.4	ESE
20230217 1920	1.7	SE
20230217 1930	2.8	ESE
20230217 1940	2.8	ESE
20230217 1950	3.3	ESE
20230217 2000	2.8	ESE
20230217 2010	2.5	ESE
20230217 2020	1.9	ESE
20230217 2030	1.7	E
20230217 2040	0.6	NE
20230217 2050	0.3	SSE
20230217 2100	0.3	-
20230217 2110	0.6	-
20230217 2120	0.8	SE
20230217 2130	1.7	SE
20230217 2140	1.7	SE
20230217 2150	1.1	S
20230217 2200	0.6	S
20230217 2210	0.8	S
20230217 2220	0.8	S
20230217 2230	0	N
20230217 2240	0.8	SSW
20230217 2250	1.1	SSW
20230217 2300	1.1	S
20230217 2310	0.3	-
20230217 2320	1.1	SE
20230217 2330	1.4	SE
20230217 2340	0.3	NW
20230217 2350	0.3	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230218 0000	0.8	SSE
20230218 0010	0	N
20230218 0020	0	N
20230218 0030	0	N
20230218 0040	0.8	SSE
20230218 0050	0.8	ESE
20230218 0100	0.3	ESE
20230218 0110	0.3	SE
20230218 0120	0.6	WNW
20230218 0130	0.3	NNW
20230218 0140	0.3	WNW
20230218 0150	0	N
20230218 0200	0.3	NE
20230218 0210	0.3	SSW
20230218 0220	0.3	WSW
20230218 0230	0.3	-
20230218 0240	0.3	E
20230218 0250	0.3	ESE
20230218 0300	0.3	SE
20230218 0310	0.3	WNW
20230218 0320	0	N
20230218 0330	0	N
20230218 0340	0.3	-
20230218 0350	0	N
20230218 0400	0	N
20230218 0410	0.3	SSW
20230218 0420	0	N
20230218 0430	0	N
20230218 0440	0.6	ESE
20230218 0450	0.8	SSW
20230218 0500	0.3	NW
20230218 0510	0.3	SW
20230218 0520	0.3	ENE
20230218 0530	0.3	-
20230218 0540	0.3	SSE
20230218 0550	0.6	SE
20230218 0600	0.3	WSW
20230218 0610	0.6	N
20230218 0620	0	N
20230218 0630	0	N
20230218 0640	0.3	-
20230218 0650	0	N
20230218 0700	0.6	SW
20230218 0710	0	N
20230218 0720	0	N
20230218 0730	0	N
20230218 0740	0.3	S
20230218 0750	0	N
20230218 0800	0	N
20230218 0810	0.3	ENE
20230218 0820	0	N
20230218 0830	0.3	S
20230218 0840	0	N
20230218 0850	0	N
20230218 0900	0.3	SE
20230218 0910	0	N
20230218 0920	0	N
20230218 0930	0.3	SW
20230218 0940	0.3	E
20230218 0950	0.3	ENE
20230218 1000	0.3	NE
20230218 1010	0.6	SSW
20230218 1020	0.6	W
20230218 1030	0.8	SW
20230218 1040	0.6	-
20230218 1050	0.3	SSW
20230218 1100	0.3	SE
20230218 1110	0.8	NE
20230218 1120	0.8	-
20230218 1130	0.8	-
20230218 1140	1.7	E
20230218 1150	1.9	ESE
20230218 1200	2.5	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230218 1200	3.3	ESE
20230218 1210	3.1	E
20230218 1220	3.1	E
20230218 1230	2.8	E
20230218 1240	2.5	E
20230218 1250	2.5	ESE
20230218 1300	2.8	ESE
20230218 1310	2.5	ENE
20230218 1320	3.6	ESE
20230218 1330	2.8	SE
20230218 1340	3.1	ESE
20230218 1350	1.9	ESE
20230218 1400	1.7	E
20230218 1410	2.5	SE
20230218 1420	2.5	E
20230218 1430	2.5	E
20230218 1440	2.8	E
20230218 1450	3.1	ENE
20230218 1500	3.3	ENE
20230218 1510	2.8	E
20230218 1520	3.3	E
20230218 1530	3.3	E
20230218 1540	3.1	E
20230218 1550	3.3	E
20230218 1600	3.3	ENE
20230218 1610	2.8	E
20230218 1620	3.3	ENE
20230218 1630	2.8	E
20230218 1640	2.8	E
20230218 1650	2.5	E
20230218 1700	2.8	E
20230218 1710	3.1	E
20230218 1720	2.8	E
20230218 1730	3.1	ESE
20230218 1740	2.2	ESE
20230218 1750	2.5	E
20230218 1800	1.7	E
20230218 1810	1.4	E
20230218 1820	1.7	E
20230218 1830	1.9	E
20230218 1840	1.7	E
20230218 1850	1.7	ESE
20230218 1900	1.4	ESE
20230218 1910	1.1	ESE
20230218 1920	0.8	ESE
20230218 1930	0.6	SE
20230218 1940	0.8	SE
20230218 1950	1.1	SE
20230218 2000	0.6	SSE
20230218 2010	0.3	SE
20230218 2020	0	N
20230218 2030	0	N
20230218 2040	0	N
20230218 2050	0	N
20230218 2100	0.3	SW
20230218 2110	0.8	SSW
20230218 2120	1.1	SSE
20230218 2130	1.1	SE
20230218 2140	1.1	ESE
20230218 2150	0.8	ESE
20230218 2200	1.4	E
20230218 2210	0.3	-
20230218 2220	0	N
20230218 2230	0	N
20230218 2240	1.1	E
20230218 2250	1.1	ESE
20230218 2300	0.8	SE
20230218 2310	1.4	ESE
20230218 2320	1.7	ESE
20230218 2330	1.4	SE
20230218 2340	0.3	ESE
20230218 2350	0.3	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230219 0000	0.3	S
20230219 0010	1.1	S
20230219 0020	1.1	SE
20230219 0030	1.1	SE
20230219 0040	1.4	SE
20230219 0050	1.4	SSE
20230219 0100	0.8	SSE
20230219 0110	0.6	ESE
20230219 0120	1.4	SE
20230219 0130	0.8	SE
20230219 0140	1.4	SE
20230219 0150	1.4	SE
20230219 0200	1.7	SE
20230219 0210	1.7	SSE
20230219 0220	2.2	SE
20230219 0230	1.7	SE
20230219 0240	1.1	ESE
20230219 0250	0.3	E
20230219 0300	0	N
20230219 0310	0	N
20230219 0320	0.3	NNE
20230219 0330	0.3	E
20230219 0340	0	N
20230219 0350	0	N
20230219 0400	0	N
20230219 0410	0	N
20230219 0420	0	N
20230219 0430	0	N
20230219 0440	0	N
20230219 0450	0	N
20230219 0500	0	N
20230219 0510	0	N
20230219 0520	0	N
20230219 0530	0	N
20230219 0540	0	N
20230219 0550	0	N
20230219 0600	0	N
20230219 0610	0.3	SE
20230219 0620	0.3	SE
20230219 0630	0	N
20230219 0640	0.3	NNE
20230219 0650	0	N
20230219 0700	0	N
20230219 0710	0.3	S
20230219 0720	0.3	SE
20230219 0730	0.3	E
20230219 0740	0	N
20230219 0750	0	N
20230219 0800	0.3	SE
20230219 0810	0.3	-
20230219 0820	0.3	-
20230219 0830	0.3	-
20230219 0840	2.2	SE
20230219 0850	1.4	SE
20230219 0900	0.8	S
20230219 0910	0.3	SE
20230219 0920	0.3	SE
20230219 0930	0.3	E
20230219 0940	0.6	ESE
20230219 0950	0.3	NNE
20230219 1000	0.3	-
20230219 1010	1.1	N
20230219 1020	1.4	NNW
20230219 1030	1.4	NNE
20230219 1040	1.7	N
20230219 1050	2.5	N
20230219 1100	2.5	NNW
20230219 1110	2.2	NW
20230219 1120	2.2	NNW
20230219 1130	2.5	NNW
20230219 1140	2.2	N
20230219 1150	3.9	NNE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230219 1200	3.1	N
20230219 1210	3.9	N
20230219 1220	3.3	N
20230219 1230	3.1	NNE
20230219 1240	3.3	NNE
20230219 1250	3.3	NNE
20230219 1300	3.1	NNE
20230219 1310	4.4	NNE
20230219 1320	2.8	N
20230219 1330	3.3	N
20230219 1340	2.8	NNW
20230219 1350	3.9	NNE
20230219 1400	4.7	N
20230219 1410	2.8	NNE
20230219 1420	3.9	NNE
20230219 1430	3.6	NNE
20230219 1440	3.1	NNE
20230219 1450	4.2	NNE
20230219 1500	3.3	NNE
20230219 1510	2.8	NNE
20230219 1520	3.3	NNE
20230219 1530	3.3	NNE
20230219 1540	1.7	ENE
20230219 1550	1.9	NNE
20230219 1600	1.4	NE
20230219 1610	2.8	NNE
20230219 1620	2.8	N
20230219 1630	3.3	NNE
20230219 1640	2.5	NE
20230219 1650	3.1	NNE
20230219 1700	2.8	NNE
20230219 1710	2.5	NNE
20230219 1720	3.1	NNE
20230219 1730	2.5	NNE
20230219 1740	3.1	NNE
20230219 1750	2.2	NE
20230219 1800	1.7	NNE
20230219 1810	2.2	NNE
20230219 1820	1.4	NNE
20230219 1830	1.7	NNE
20230219 1840	1.7	NNE
20230219 1850	1.4	NE
20230219 1900	2.5	NNE
20230219 1910	2.2	NE
20230219 1920	2.8	NE
20230219 1930	2.2	ENE
20230219 1940	2.8	ENE
20230219 1950	3.1	ESE
20230219 2000	3.1	E
20230219 2010	3.9	E
20230219 2020	3.3	E
20230219 2030	3.6	E
20230219 2040	3.9	E
20230219 2050	5	E
20230219 2100	4.2	ESE
20230219 2110	3.6	ESE
20230219 2120	3.3	E
20230219 2130	3.3	E
20230219 2140	3.1	E
20230219 2150	3.3	E
20230219 2200	3.1	E
20230219 2210	3.3	E
20230219 2220	3.3	E
20230219 2230	1.9	E
20230219 2240	2.2	E
20230219 2250	1.7	NE
20230219 2300	2.5	E
20230219 2310	2.2	ESE
20230219 2320	1.7	ESE
20230219 2330	1.7	ESE
20230219 2340	1.7	SE
20230219 2350	1.7	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230220 0000	1.4	SE
20230220 0010	1.1	SSE
20230220 0020	1.1	SSE
20230220 0030	1.1	SSE
20230220 0040	0.3	SSE
20230220 0050	0.3	SSE
20230220 0100	0.6	WSW
20230220 0110	0	N
20230220 0120	0.8	SSE
20230220 0130	0	N
20230220 0140	0.3	SW
20230220 0150	0.3	SSE
20230220 0200	0.3	SE
20230220 0210	0.3	ESE
20230220 0220	1.4	ESE
20230220 0230	1.9	ESE
20230220 0240	1.4	ESE
20230220 0250	0.6	ESE
20230220 0300	0.3	E
20230220 0310	0.3	ESE
20230220 0320	1.1	NNW
20230220 0330	1.1	NNE
20230220 0340	1.7	NNE
20230220 0350	3.3	NNE
20230220 0400	3.3	NNE
20230220 0410	3.3	NNE
20230220 0420	2.5	NE
20230220 0430	1.4	ENE
20230220 0440	1.1	NE
20230220 0450	3.1	NE
20230220 0500	3.9	NNE
20230220 0510	3.3	NNE
20230220 0520	3.3	NNE
20230220 0530	3.6	NNE
20230220 0540	4.2	NNE
20230220 0550	3.6	NNE
20230220 0600	3.3	NNE
20230220 0610	3.6	N
20230220 0620	3.9	NNE
20230220 0630	3.9	NNE
20230220 0640	5	NNE
20230220 0650	5.3	NNE
20230220 0700	5.8	NNE
20230220 0710	5	NNE
20230220 0720	4.7	NNE
20230220 0730	6.1	NNE
20230220 0740	4.2	NNE
20230220 0750	4.7	NNE
20230220 0800	4.4	NNE
20230220 0810	5.8	NNE
20230220 0820	4.7	NNE
20230220 0830	6.1	NNE
20230220 0840	5	NNE
20230220 0850	4.4	NNE
20230220 0900	4.7	NNE
20230220 0910	3.6	NNE
20230220 0920	3.9	NNE
20230220 0930	3.6	NNE
20230220 0940	4.2	NNE
20230220 0950	3.9	NNE
20230220 1000	3.3	NNE
20230220 1010	4.2	N
20230220 1020	3.3	NNE
20230220 1030	3.9	N
20230220 1040	4.2	NNE
20230220 1050	5	NNE
20230220 1100	4.2	NNE
20230220 1110	4.2	NNE
20230220 1120	3.9	NNE
20230220 1130	2.5	N
20230220 1140	2.5	N
20230220 1150	1.7	SSE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230220 1200	1.4	NE
20230220 1210	1.4	NE
20230220 1220	0.8	ESE
20230220 1230	1.7	SSE
20230220 1240	1.7	SSE
20230220 1250	1.7	E
20230220 1300	1.4	SE
20230220 1310	2.2	SE
20230220 1320	1.1	S
20230220 1330	1.1	E
20230220 1340	1.1	ENE
20230220 1350	1.7	NNW
20230220 1400	2.8	NW
20230220 1410	2.8	WNW
20230220 1420	2.2	NW
20230220 1430	1.9	WNW
20230220 1440	1.7	N
20230220 1450	1.1	WNW
20230220 1500	2.2	WNW
20230220 1510	2.8	WNW
20230220 1520	2.2	-
20230220 1530	1.9	WNW
20230220 1540	2.5	N
20230220 1550	2.5	NNE
20230220 1600	1.1	ESE
20230220 1610	1.7	E
20230220 1620	2.2	E
20230220 1630	1.7	ESE
20230220 1640	2.2	ESE
20230220 1650	2.8	ESE
20230220 1700	2.2	ESE
20230220 1710	2.5	ESE
20230220 1720	3.3	ESE
20230220 1730	3.1	ESE
20230220 1740	3.3	E
20230220 1750	3.3	ESE
20230220 1800	3.3	E
20230220 1810	3.3	E
20230220 1820	3.3	E
20230220 1830	4.2	ESE
20230220 1840	3.1	ESE
20230220 1850	1.1	-
20230220 1900	1.1	SE
20230220 1910	2.8	ESE
20230220 1920	2.8	ESE
20230220 1930	2.2	ESE
20230220 1940	2.8	ESE
20230220 1950	2.8	SE
20230220 2000	3.6	SE
20230220 2010	2.8	SE
20230220 2020	2.8	ESE
20230220 2030	2.2	ESE
20230220 2040	2.2	ESE
20230220 2050	1.4	ESE
20230220 2100	1.4	ESE
20230220 2110	2.2	ESE
20230220 2120	1.7	ESE
20230220 2130	2.2	SE
20230220 2140	2.5	SE
20230220 2150	3.1	SE
20230220 2200	2.8	SE
20230220 2210	2.2	SE
20230220 2220	2.8	SE
20230220 2230	2.8	SE
20230220 2240	1.9	SE
20230220 2250	2.2	ESE
20230220 2300	2.2	ESE
20230220 2310	3.1	ESE
20230220 2320	1.7	ESE
20230220 2330	2.5	ESE
20230220 2340	1.7	ESE
20230220 2350	1.9	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230221 0000	1.7	ESE
20230221 0010	2.5	ESE
20230221 0020	3.1	ESE
20230221 0030	3.1	ESE
20230221 0040	3.3	ESE
20230221 0050	2.8	SE
20230221 0100	2.5	ESE
20230221 0110	1.9	ESE
20230221 0120	1.7	ESE
20230221 0130	1.7	ESE
20230221 0140	2.2	ESE
20230221 0150	1.9	SE
20230221 0200	2.2	ESE
20230221 0210	1.7	SE
20230221 0220	1.7	SE
20230221 0230	1.4	SE
20230221 0240	1.7	SE
20230221 0250	1.9	SE
20230221 0300	1.4	SE
20230221 0310	1.1	ESE
20230221 0320	1.4	ESE
20230221 0330	1.4	E
20230221 0340	1.4	ESE
20230221 0350	1.7	SE
20230221 0400	1.1	ESE
20230221 0410	1.1	ESE
20230221 0420	0.8	E
20230221 0430	1.4	E
20230221 0440	1.7	E
20230221 0450	1.1	ESE
20230221 0500	2.2	ESE
20230221 0510	2.8	ESE
20230221 0520	2.5	ESE
20230221 0530	1.9	ESE
20230221 0540	1.7	ESE
20230221 0550	1.7	ESE
20230221 0600	1.7	ESE
20230221 0610	1.7	E
20230221 0620	1.1	ESE
20230221 0630	1.7	ESE
20230221 0640	0.8	ESE
20230221 0650	1.1	ESE
20230221 0700	0.6	ESE
20230221 0710	1.1	ESE
20230221 0720	1.1	ESE
20230221 0730	0.8	ESE
20230221 0740	1.4	E
20230221 0750	1.4	ESE
20230221 0800	1.4	ESE
20230221 0810	1.7	E
20230221 0820	1.7	E
20230221 0830	1.7	E
20230221 0840	2.8	E
20230221 0850	2.2	E
20230221 0900	1.7	E
20230221 0910	3.1	E
20230221 0920	2.5	ENE
20230221 0930	2.5	E
20230221 0940	3.3	E
20230221 0950	3.1	E
20230221 1000	2.8	ESE
20230221 1010	2.5	ESE
20230221 1020	2.2	ENE
20230221 1030	2.2	NE
20230221 1040	3.6	E
20230221 1050	3.3	E
20230221 1100	2.5	ENE
20230221 1110	3.3	ENE
20230221 1120	3.1	E
20230221 1130	2.8	ESE
20230221 1140	2.8	SE
20230221 1150	3.1	ESE
20230221 1200	3.3	E

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230221 1200	3.3	ESE
20230221 1210	3.3	E
20230221 1220	3.3	ENE
20230221 1230	2.8	E
20230221 1240	3.3	E
20230221 1250	2.8	ESE
20230221 1300	3.3	E
20230221 1310	3.3	E
20230221 1320	3.3	E
20230221 1330	3.6	E
20230221 1340	4.2	E
20230221 1350	4.2	E
20230221 1400	4.7	E
20230221 1410	4.4	E
20230221 1420	3.9	E
20230221 1430	4.7	E
20230221 1440	4.4	E
20230221 1450	5	E
20230221 1500	5.3	ESE
20230221 1510	5	ESE
20230221 1520	5	ESE
20230221 1530	4.7	ESE
20230221 1540	5.3	E
20230221 1550	4.7	ESE
20230221 1600	4.2	ESE
20230221 1610	5.8	ESE
20230221 1620	6.1	ESE
20230221 1630	5	ESE
20230221 1640	5.6	ESE
20230221 1650	5.3	ESE
20230221 1700	4.2	ESE
20230221 1710	4.4	SE
20230221 1720	4.2	SE
20230221 1730	4.2	ESE
20230221 1740	3.9	ESE
20230221 1750	3.3	ESE
20230221 1800	4.2	ESE
20230221 1810	4.2	ESE
20230221 1820	4.7	ESE
20230221 1830	4.4	SE
20230221 1840	4.2	SE
20230221 1850	4.7	ESE
20230221 1900	4.4	ESE
20230221 1910	4.2	ESE
20230221 1920	4.7	ESE
20230221 1930	5	ESE
20230221 1940	4.7	ESE
20230221 1950	5	ESE
20230221 2000	4.7	ESE
20230221 2010	4.2	ESE
20230221 2020	4.2	ESE
20230221 2030	4.4	ESE
20230221 2040	4.2	ESE
20230221 2050	3.6	ESE
20230221 2100	4.4	ESE
20230221 2110	4.4	SE
20230221 2120	4.7	SE
20230221 2130	3.3	SE
20230221 2140	3.3	SE
20230221 2150	3.6	SE
20230221 2200	3.3	ESE
20230221 2210	3.9	SE
20230221 2220	4.7	SE
20230221 2230	4.7	SE
20230221 2240	4.4	ESE
20230221 2250	4.2	SE
20230221 2300	3.6	ESE
20230221 2310	3.9	ESE
20230221 2320	4.4	ESE
20230221 2330	3.9	SE
20230221 2340	3.9	ESE
20230221 2350	4.4	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230222 0000	4.2	ESE
20230222 0010	3.3	ESE
20230222 0020	3.1	ESE
20230222 0030	3.1	ESE
20230222 0040	2.5	ESE
20230222 0050	3.1	ESE
20230222 0100	2.5	ESE
20230222 0110	1.7	ESE
20230222 0120	2.2	ESE
20230222 0130	1.9	ESE
20230222 0140	1.9	ESE
20230222 0150	2.5	ESE
20230222 0200	2.5	ESE
20230222 0210	1.7	ESE
20230222 0220	2.8	ESE
20230222 0230	3.1	ESE
20230222 0240	2.8	ESE
20230222 0250	3.3	SE
20230222 0300	3.3	SE
20230222 0310	2.8	SE
20230222 0320	3.1	ESE
20230222 0330	2.8	ESE
20230222 0340	1.9	ESE
20230222 0350	1.4	-
20230222 0400	1.1	ESE
20230222 0410	0.3	-
20230222 0420	0.3	E
20230222 0430	0.3	SE
20230222 0440	0.3	ESE
20230222 0450	1.7	E
20230222 0500	1.7	E
20230222 0510	1.4	E
20230222 0520	1.1	E
20230222 0530	1.7	E
20230222 0540	1.4	ENE
20230222 0550	1.4	ENE
20230222 0600	1.4	ENE
20230222 0610	1.4	ENE
20230222 0620	1.7	ENE
20230222 0630	1.4	ENE
20230222 0640	1.4	E
20230222 0650	1.7	E
20230222 0700	1.7	ESE
20230222 0710	2.2	ESE
20230222 0720	1.4	ESE
20230222 0730	0.8	ESE
20230222 0740	1.4	ESE
20230222 0750	1.7	ESE
20230222 0800	2.5	ESE
20230222 0810	2.2	ESE
20230222 0820	2.8	E
20230222 0830	3.1	E
20230222 0840	3.3	ESE
20230222 0850	2.5	E
20230222 0900	3.9	E
20230222 0910	3.3	E
20230222 0920	3.6	E
20230222 0930	3.3	ESE
20230222 0940	3.6	ESE
20230222 0950	3.9	E
20230222 1000	3.1	E
20230222 1010	3.3	ESE
20230222 1020	3.3	ESE
20230222 1030	3.3	ESE
20230222 1040	3.3	ESE
20230222 1050	3.6	ESE
20230222 1100	2.5	ESE
20230222 1110	2.2	SE
20230222 1120	1.9	ESE
20230222 1130	2.5	E
20230222 1140	2.5	E
20230222 1150	1.4	-

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230222 1200	0.8	WSW
20230222 1210	1.1	SE
20230222 1220	1.4	NNW
20230222 1230	1.4	-
20230222 1240	1.4	-
20230222 1250	1.7	-
20230222 1300	1.4	NNE
20230222 1310	1.1	NE
20230222 1320	2.5	E
20230222 1330	2.5	ENE
20230222 1340	1.9	SE
20230222 1350	2.8	E
20230222 1400	2.5	ESE
20230222 1410	2.8	ESE
20230222 1420	3.1	ESE
20230222 1430	3.3	E
20230222 1440	2.8	ESE
20230222 1450	2.5	ESE
20230222 1500	2.8	E
20230222 1510	2.8	E
20230222 1520	2.5	ESE
20230222 1530	3.3	E
20230222 1540	3.3	E
20230222 1550	3.3	E
20230222 1600	3.6	ESE
20230222 1610	3.3	E
20230222 1620	3.3	ESE
20230222 1630	3.3	ESE
20230222 1640	3.3	E
20230222 1650	3.9	ESE
20230222 1700	3.3	E
20230222 1710	3.6	ESE
20230222 1720	4.4	E
20230222 1730	3.6	E
20230222 1740	3.6	ESE
20230222 1750	3.1	ESE
20230222 1800	3.3	ESE
20230222 1810	4.2	ESE
20230222 1820	3.9	ESE
20230222 1830	2.8	E
20230222 1840	2.5	ESE
20230222 1850	1.7	ESE
20230222 1900	2.5	ESE
20230222 1910	2.2	ESE
20230222 1920	1.4	SE
20230222 1930	2.2	ESE
20230222 1940	2.5	ESE
20230222 1950	2.8	ESE
20230222 2000	2.5	SE
20230222 2010	2.8	SE
20230222 2020	2.8	SE
20230222 2030	3.1	SE
20230222 2040	3.1	SE
20230222 2050	2.5	ESE
20230222 2100	2.8	ESE
20230222 2110	2.5	SE
20230222 2120	1.7	ESE
20230222 2130	2.8	ESE
20230222 2140	3.3	ESE
20230222 2150	2.8	ESE
20230222 2200	3.1	ESE
20230222 2210	2.5	ESE
20230222 2220	2.8	E
20230222 2230	3.1	ESE
20230222 2240	3.1	ESE
20230222 2250	3.1	ESE
20230222 2300	1.7	ESE
20230222 2310	2.5	ESE
20230222 2320	1.7	ESE
20230222 2330	2.8	ESE
20230222 2340	2.8	ESE
20230222 2350	2.8	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230223 0000	3.1	ESE
20230223 0010	2.8	ESE
20230223 0020	1.7	ESE
20230223 0030	1.7	ESE
20230223 0040	1.7	SE
20230223 0050	2.8	SE
20230223 0100	3.1	SE
20230223 0110	3.9	SE
20230223 0120	3.3	SE
20230223 0130	3.3	SE
20230223 0140	2.8	SE
20230223 0150	2.8	SE
20230223 0200	2.5	SE
20230223 0210	2.8	SE
20230223 0220	2.5	SE
20230223 0230	3.3	SE
20230223 0240	3.3	SE
20230223 0250	2.2	ESE
20230223 0300	1.7	ESE
20230223 0310	2.8	ESE
20230223 0320	2.8	ESE
20230223 0330	2.8	ESE
20230223 0340	2.8	ESE
20230223 0350	2.2	ESE
20230223 0400	2.2	ESE
20230223 0410	2.2	ESE
20230223 0420	1.9	ESE
20230223 0430	1.1	E
20230223 0440	1.1	E
20230223 0450	1.4	E
20230223 0500	1.1	E
20230223 0510	0.8	E
20230223 0520	1.4	ESE
20230223 0530	0.8	SE
20230223 0540	1.4	SE
20230223 0550	0.6	ESE
20230223 0600	0.8	ESE
20230223 0610	1.1	E
20230223 0620	1.1	ESE
20230223 0630	1.1	ESE
20230223 0640	1.1	ESE
20230223 0650	1.1	E
20230223 0700	1.1	ESE
20230223 0710	1.1	E
20230223 0720	1.1	E
20230223 0730	1.1	ESE
20230223 0740	0.3	ENE
20230223 0750	0.6	E
20230223 0800	0.8	E
20230223 0810	1.7	SE
20230223 0820	1.7	ESE
20230223 0830	2.5	ESE
20230223 0840	2.5	ENE
20230223 0850	2.5	E
20230223 0900	1.7	E
20230223 0910	1.7	E
20230223 0920	1.7	ENE
20230223 0930	1.9	E
20230223 0940	1.4	ENE
20230223 0950	1.4	ESE
20230223 1000	1.4	SE
20230223 1010	2.5	ENE
20230223 1020	2.5	E
20230223 1030	2.8	E
20230223 1040	3.1	E
20230223 1050	3.3	E
20230223 1100	3.3	ENE
20230223 1110	2.2	E
20230223 1120	2.2	ESE
20230223 1130	2.2	ESE
20230223 1140	2.5	ESE
20230223 1150	2.8	S

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230223 1200	2.5	SE
20230223 1210	2.5	SE
20230223 1220	1.7	-
20230223 1230	1.4	E
20230223 1240	1.4	NNW
20230223 1250	0.8	ESE
20230223 1300	1.1	SSW
20230223 1310	1.4	SSE
20230223 1320	1.1	NNE
20230223 1330	1.4	NNE
20230223 1340	1.4	NNE
20230223 1350	1.4	S
20230223 1400	1.7	-
20230223 1410	1.4	SSE
20230223 1420	1.7	-
20230223 1430	2.2	SSW
20230223 1440	1.7	S
20230223 1450	2.2	ESE
20230223 1500	1.9	SSE
20230223 1510	2.2	SE
20230223 1520	2.5	SE
20230223 1530	2.8	E
20230223 1540	3.1	E
20230223 1550	2.2	ESE
20230223 1600	1.4	ESE
20230223 1610	1.4	SSE
20230223 1620	1.4	NNW
20230223 1630	1.1	WSW
20230223 1640	2.2	SW
20230223 1650	2.5	SW
20230223 1700	2.2	WSW
20230223 1710	2.2	W
20230223 1720	1.7	WSW
20230223 1730	1.1	WSW
20230223 1740	1.4	S
20230223 1750	0.8	ENE
20230223 1800	1.4	ESE
20230223 1810	1.1	E
20230223 1820	0.8	ESE
20230223 1830	1.7	ESE
20230223 1840	2.2	ESE
20230223 1850	1.7	ESE
20230223 1900	1.7	ESE
20230223 1910	2.5	ESE
20230223 1920	2.8	ESE
20230223 1930	2.2	E
20230223 1940	2.2	ESE
20230223 1950	2.5	ESE
20230223 2000	2.2	ESE
20230223 2010	2.2	ESE
20230223 2020	2.2	ESE
20230223 2030	1.9	SE
20230223 2040	2.2	SE
20230223 2050	2.8	SE
20230223 2100	2.5	SE
20230223 2110	2.2	SE
20230223 2120	2.2	SE
20230223 2130	1.9	SE
20230223 2140	1.7	SE
20230223 2150	2.2	SE
20230223 2200	2.5	SE
20230223 2210	2.2	SE
20230223 2220	2.5	SSE
20230223 2230	2.5	SE
20230223 2240	2.5	SE
20230223 2250	1.9	SSE
20230223 2300	2.2	SSE
20230223 2310	2.5	SE
20230223 2320	2.2	SE
20230223 2330	2.2	SE
20230223 2340	2.8	SE
20230223 2350	1.7	SE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230224 0000	1.7	SE
20230224 0010	1.4	ESE
20230224 0020	1.7	SE
20230224 0030	1.7	SE
20230224 0040	1.7	ESE
20230224 0050	1.4	SE
20230224 0100	1.1	SE
20230224 0110	1.4	SE
20230224 0120	1.7	SE
20230224 0130	1.9	SSE
20230224 0140	1.7	SE
20230224 0150	1.4	SE
20230224 0200	1.4	ESE
20230224 0210	1.1	SE
20230224 0220	0.8	SE
20230224 0230	0.8	SE
20230224 0240	0.3	-
20230224 0250	0.3	S
20230224 0300	0.8	S
20230224 0310	0.3	SSE
20230224 0320	0.3	SSE
20230224 0330	0.3	ESE
20230224 0340	1.4	SE
20230224 0350	0.6	ESE
20230224 0400	0.8	E
20230224 0410	1.1	ESE
20230224 0420	0.8	ESE
20230224 0430	0.8	SE
20230224 0440	0.8	SE
20230224 0450	1.4	SE
20230224 0500	1.9	SE
20230224 0510	1.4	SSE
20230224 0520	0.8	SSE
20230224 0530	0.8	SSE
20230224 0540	1.4	SSE
20230224 0550	1.1	SSE
20230224 0600	0.6	SSE
20230224 0610	0.3	SSE
20230224 0620	0.3	S
20230224 0630	0.3	WNW
20230224 0640	0.3	WNW
20230224 0650	0.3	W
20230224 0700	0.3	SSW
20230224 0710	0.8	S
20230224 0720	0.3	S
20230224 0730	0.3	S
20230224 0740	0.3	S
20230224 0750	0.3	SSE
20230224 0800	0	N
20230224 0810	0.3	NE
20230224 0820	0	N
20230224 0830	0	N
20230224 0840	0.3	NNE
20230224 0850	0.3	ENE
20230224 0900	0.3	NNW
20230224 0910	0.8	NW
20230224 0920	1.1	NW
20230224 0930	0.8	N
20230224 0940	0.3	W
20230224 0950	0.6	-
20230224 1000	0.8	N
20230224 1010	0.8	-
20230224 1020	0.6	-
20230224 1030	0.3	-
20230224 1040	1.1	N
20230224 1050	1.1	NE
20230224 1100	1.4	NNW
20230224 1110	2.2	NW
20230224 1120	2.5	N
20230224 1130	2.5	NNW
20230224 1140	2.5	N
20230224 1150	2.5	NNW

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230224 1200	2.8	NW
20230224 1210	2.8	N
20230224 1220	3.1	NNE
20230224 1230	2.8	NNE
20230224 1240	3.3	NNE
20230224 1250	3.1	NNE
20230224 1300	2.8	N
20230224 1310	3.3	NE
20230224 1320	2.8	N
20230224 1330	2.2	NNW
20230224 1340	2.8	NNW
20230224 1350	2.5	NW
20230224 1400	3.1	NNE
20230224 1410	1.7	WNW
20230224 1420	2.5	NNW
20230224 1430	1.7	W
20230224 1440	2.8	N
20230224 1450	2.5	NNW
20230224 1500	2.2	N
20230224 1510	1.7	NW
20230224 1520	2.5	NNW
20230224 1530	2.5	NNW
20230224 1540	2.8	N
20230224 1550	2.8	N
20230224 1600	2.5	N
20230224 1610	3.3	NNE
20230224 1620	2.8	N
20230224 1630	2.2	NNW
20230224 1640	2.2	N
20230224 1650	2.2	N
20230224 1700	2.2	NNW
20230224 1710	2.5	N
20230224 1720	2.2	N
20230224 1730	2.2	N
20230224 1740	2.2	N
20230224 1750	1.7	N
20230224 1800	1.4	N
20230224 1810	1.7	N
20230224 1820	1.7	N
20230224 1830	1.7	NNE
20230224 1840	1.4	NNE
20230224 1850	2.2	NNE
20230224 1900	2.2	NNE
20230224 1910	1.4	NNE
20230224 1920	1.1	NNE
20230224 1930	0.3	-
20230224 1940	1.1	NNE
20230224 1950	2.2	NNE
20230224 2000	2.5	NNE
20230224 2010	2.2	NE
20230224 2020	2.5	NNE
20230224 2030	3.1	NNE
20230224 2040	3.3	NNE
20230224 2050	2.8	NNE
20230224 2100	3.9	NNE
20230224 2110	3.3	NNE
20230224 2120	3.3	NNE
20230224 2130	5	NNE
20230224 2140	4.7	NNE
20230224 2150	4.4	NNE
20230224 2200	3.9	N
20230224 2210	3.9	NNE
20230224 2220	4.7	NNE
20230224 2230	5.8	NNE
20230224 2240	5.3	NNE
20230224 2250	3.3	NE
20230224 2300	6.4	NNE
20230224 2310	5.8	NNE
20230224 2320	4.7	NE
20230224 2330	3.6	NNE
20230224 2340	3.3	N
20230224 2350	4.4	NNE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230225 0000	6.1	NNE
20230225 0010	5.8	NNE
20230225 0020	5	NNE
20230225 0030	5	NNE
20230225 0040	5.3	NNE
20230225 0050	5	NNE
20230225 0100	5.6	NNE
20230225 0110	5.3	NNE
20230225 0120	6.4	NNE
20230225 0130	5.3	NNE
20230225 0140	5	NNE
20230225 0150	5	NNE
20230225 0200	6.1	NNE
20230225 0210	5.8	NNE
20230225 0220	5.3	NNE
20230225 0230	5.3	NNE
20230225 0240	4.7	NNE
20230225 0250	5	NNE
20230225 0300	4.2	NNE
20230225 0310	4.2	NNE
20230225 0320	3.3	NNE
20230225 0330	3.9	NNE
20230225 0340	3.3	NNE
20230225 0350	3.9	NNE
20230225 0400	3.3	NNE
20230225 0410	3.1	NNE
20230225 0420	3.3	NNE
20230225 0430	3.9	NNE
20230225 0440	4.2	NNE
20230225 0450	4.2	NNE
20230225 0500	3.9	NNE
20230225 0510	4.2	NNE
20230225 0520	4.4	NNE
20230225 0530	4.2	NNE
20230225 0540	3.9	NNE
20230225 0550	3.3	NNE
20230225 0600	4.7	NNE
20230225 0610	3.9	NNE
20230225 0620	3.9	NNE
20230225 0630	4.4	NNE
20230225 0640	4.4	NNE
20230225 0650	4.7	NNE
20230225 0700	4.2	NNE
20230225 0710	4.2	NNE
20230225 0720	4.2	NNE
20230225 0730	3.3	NNE
20230225 0740	3.3	NNE
20230225 0750	4.2	NNE
20230225 0800	4.4	NNE
20230225 0810	4.7	NNE
20230225 0820	4.2	NNE
20230225 0830	5.3	NNE
20230225 0840	5.6	NNE
20230225 0850	4.7	NNE
20230225 0900	5.3	NNE
20230225 0910	5.3	NNE
20230225 0920	5	NNE
20230225 0930	5.3	NNE
20230225 0940	6.4	NNE
20230225 0950	5.3	NNE
20230225 1000	6.4	NNE
20230225 1010	4.7	NNE
20230225 1020	5.8	NNE
20230225 1030	4.7	NNE
20230225 1040	4.7	NNE
20230225 1050	5.8	NNE
20230225 1100	4.7	NNE
20230225 1110	5.3	NNE
20230225 1120	5	NNE
20230225 1130	5	NNE
20230225 1140	5.3	NNE
20230225 1150		

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230225 1200	3.9	N
20230225 1210	5.3	N
20230225 1220	5.3	NNE
20230225 1230	5.3	NNE
20230225 1240	4.7	N
20230225 1250	4.7	NNE
20230225 1300	5.8	NE
20230225 1310	4.7	NNE
20230225 1320	5	NNE
20230225 1330	4.7	NNE
20230225 1340	4.7	NNE
20230225 1350	5	NNE
20230225 1400	4.7	NNE
20230225 1410	5.3	NNE
20230225 1420	5	NNE
20230225 1430	5	NNE
20230225 1440	5.3	NE
20230225 1450	5	NNE
20230225 1500	4.7	NNE
20230225 1510	4.2	NE
20230225 1520	5	NNE
20230225 1530	4.4	NNE
20230225 1540	3.9	NE
20230225 1550	4.2	NNE
20230225 1600	5	NNE
20230225 1610	4.4	NNE
20230225 1620	4.2	NE
20230225 1630	4.7	NE
20230225 1640	5.3	NNE
20230225 1650	4.7	NE
20230225 1700	4.2	NNE
20230225 1710	3.6	NE
20230225 1720	4.4	NE
20230225 1730	5	NE
20230225 1740	4.4	NE
20230225 1750	4.4	NE
20230225 1800	5.3	NNE
20230225 1810	4.2	NE
20230225 1820	3.9	NE
20230225 1830	4.4	NE
20230225 1840	3.3	NE
20230225 1850	3.3	NE
20230225 1900	4.2	NNE
20230225 1910	5	NE
20230225 1920	4.2	NNE
20230225 1930	2.5	NNE
20230225 1940	2.8	NE
20230225 1950	3.3	NE
20230225 2000	2.8	NE
20230225 2010	3.3	NE
20230225 2020	3.6	NNE
20230225 2030	4.4	NE
20230225 2040	2.5	NNE
20230225 2050	4.2	NNE
20230225 2100	4.4	NNE
20230225 2110	4.2	NNE
20230225 2120	4.7	NNE
20230225 2130	4.2	NNE
20230225 2140	5	NNE
20230225 2150	4.4	NNE
20230225 2200	4.2	NNE
20230225 2210	4.4	NNE
20230225 2220	4.2	NNE
20230225 2230	3.9	NNE
20230225 2240	4.4	NNE
20230225 2250	5.3	NNE
20230225 2300	4.7	NNE
20230225 2310	4.2	NNE
20230225 2320	5.6	NNE
20230225 2330	5	NNE
20230225 2340	4.7	NNE
20230225 2350	5.3	NNE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230226 0000	3.9	NNE
20230226 0010	3.9	NNE
20230226 0020	4.2	NNE
20230226 0030	4.2	NNE
20230226 0040	4.2	NNE
20230226 0050	3.6	N
20230226 0100	3.3	NNE
20230226 0110	3.3	NNE
20230226 0120	2.8	NNE
20230226 0130	3.9	NNE
20230226 0140	3.3	NNE
20230226 0150	3.3	NNE
20230226 0200	3.6	NNE
20230226 0210	3.3	NNE
20230226 0220	3.1	NNE
20230226 0230	3.3	NNE
20230226 0240	3.1	NNE
20230226 0250	3.3	NNE
20230226 0300	3.3	NNE
20230226 0310	3.3	NNE
20230226 0320	2.8	NNE
20230226 0330	2.8	NNE
20230226 0340	3.1	NNE
20230226 0350	3.3	NNE
20230226 0400	2.8	NNE
20230226 0410	2.5	NNE
20230226 0420	3.1	NNE
20230226 0430	2.8	N
20230226 0440	2.8	N
20230226 0450	2.8	N
20230226 0500	2.5	NNE
20230226 0510	2.5	N
20230226 0520	2.2	N
20230226 0530	2.8	N
20230226 0540	2.2	N
20230226 0550	2.8	N
20230226 0600	3.1	NNE
20230226 0610	3.3	NNE
20230226 0620	3.3	N
20230226 0630	4.2	NNE
20230226 0640	3.3	NNE
20230226 0650	3.9	N
20230226 0700	3.3	NNE
20230226 0710	3.3	NNE
20230226 0720	3.3	NNE
20230226 0730	3.6	N
20230226 0740	3.3	NNE
20230226 0750	3.1	NNE
20230226 0800	3.3	NNE
20230226 0810	2.8	NNE
20230226 0820	3.1	NNE
20230226 0830	3.1	N
20230226 0840	3.3	N
20230226 0850	3.3	N
20230226 0900	3.9	NNE
20230226 0910	4.4	N
20230226 0920	4.2	NNE
20230226 0930	3.9	NNE
20230226 0940	4.7	NNE
20230226 0950	3.3	N
20230226 1000	3.3	N
20230226 1010	4.2	N
20230226 1020	4.2	N
20230226 1030	4.7	NNE
20230226 1040	4.2	N
20230226 1050	3.9	NNE
20230226 1100	3.1	N
20230226 1110	3.1	N
20230226 1120	3.3	N
20230226 1130	4.2	NNE
20230226 1140	3.9	NNE
20230226 1150	4.7	NNE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230226 1200	5	NNE
20230226 1210	4.7	NNE
20230226 1220	4.2	NNE
20230226 1230	3.9	NNE
20230226 1240	3.1	N
20230226 1250	4.4	NNE
20230226 1300	4.7	NNE
20230226 1310	3.3	NNE
20230226 1320	4.2	N
20230226 1330	3.9	N
20230226 1340	4.2	NNE
20230226 1350	3.3	NNE
20230226 1400	2.8	NNE
20230226 1410	2.5	NE
20230226 1420	2.8	-
20230226 1430	4.4	NNE
20230226 1440	3.6	NNE
20230226 1450	2.5	N
20230226 1500	3.3	NNE
20230226 1510	2.5	N
20230226 1520	3.6	N
20230226 1530	2.5	NNE
20230226 1540	3.1	NNE
20230226 1550	3.3	NNE
20230226 1600	2.8	N
20230226 1610	3.3	NE
20230226 1620	3.3	ESE
20230226 1630	3.3	ESE
20230226 1640	3.3	ESE
20230226 1650	3.3	ESE
20230226 1700	3.3	ESE
20230226 1710	3.6	ESE
20230226 1720	4.2	ESE
20230226 1730	4.4	E
20230226 1740	4.2	E
20230226 1750	3.9	E
20230226 1800	4.2	E
20230226 1810	3.1	ESE
20230226 1820	2.8	E
20230226 1830	2.8	ESE
20230226 1840	3.1	ESE
20230226 1850	2.8	ESE
20230226 1900	2.8	ESE
20230226 1910	3.1	SE
20230226 1920	3.3	ESE
20230226 1930	1.7	ESE
20230226 1940	1.4	ESE
20230226 1950	1.4	ESE
20230226 2000	1.1	ESE
20230226 2010	1.7	SE
20230226 2020	2.5	SSE
20230226 2030	2.8	SE
20230226 2040	2.2	SE
20230226 2050	1.9	SE
20230226 2100	1.4	ESE
20230226 2110	1.7	ESE
20230226 2120	1.7	ESE
20230226 2130	1.7	ESE
20230226 2140	2.2	ESE
20230226 2150	2.8	ESE
20230226 2200	3.3	ESE
20230226 2210	4.4	ESE
20230226 2220	3.3	ESE
20230226 2230	2.8	ESE
20230226 2240	2.8	ESE
20230226 2250	2.5	ESE
20230226 2300	2.5	ESE
20230226 2310	2.8	ESE
20230226 2320	2.8	ESE
20230226 2330	3.1	ESE
20230226 2340	2.5	ESE
20230226 2350	3.3	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230227 0000	4.2	ESE
20230227 0010	3.3	ESE
20230227 0020	5	ESE
20230227 0030	5	ESE
20230227 0040	4.7	ESE
20230227 0050	4.4	ESE
20230227 0100	4.2	ESE
20230227 0110	3.3	ESE
20230227 0120	3.1	ESE
20230227 0130	3.9	ESE
20230227 0140	3.3	ESE
20230227 0150	3.3	ESE
20230227 0200	3.9	ESE
20230227 0210	2.8	E
20230227 0220	1.9	E
20230227 0230	1.1	E
20230227 0240	0.3	-
20230227 0250	0.6	-
20230227 0300	0.6	WNW
20230227 0310	1.1	WNW
20230227 0320	1.1	NW
20230227 0330	0.3	-
20230227 0340	0.6	WNW
20230227 0350	0.3	ESE
20230227 0400	0.3	ESE
20230227 0410	1.4	E
20230227 0420	1.4	ESE
20230227 0430	1.7	E
20230227 0440	1.4	ESE
20230227 0450	1.1	ESE
20230227 0500	1.7	ESE
20230227 0510	1.4	ESE
20230227 0520	0.8	SE
20230227 0530	0.8	SE
20230227 0540	0.8	ESE
20230227 0550	0.8	ESE
20230227 0600	0.6	SE
20230227 0610	0.8	ESE
20230227 0620	0.3	SW
20230227 0630	0.3	SE
20230227 0640	0.3	ESE
20230227 0650	0.6	SSW
20230227 0700	0.8	S
20230227 0710	0.6	ESE
20230227 0720	0.3	ENE
20230227 0730	0	N
20230227 0740	0.6	E
20230227 0750	0.8	ESE
20230227 0800	1.1	E
20230227 0810	1.4	ESE
20230227 0820	2.2	E
20230227 0830	2.5	E
20230227 0840	2.5	E
20230227 0850	2.2	E
20230227 0900	3.3	E
20230227 0910	2.8	ESE
20230227 0920	3.3	E
20230227 0930	3.3	ESE
20230227 0940	3.9	E
20230227 0950	3.9	E
20230227 1000	2.8	E
20230227 1010	3.9	ESE
20230227 1020	3.3	ESE
20230227 1030	3.3	ESE
20230227 1040	3.3	ESE
20230227 1050	3.3	ESE
20230227 1100	3.3	ENE
20230227 1110	3.9	E
20230227 1120	2.8	ESE
20230227 1130	3.3	ESE
20230227 1140	4.2	ESE
20230227 1150	3.6	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230227 1200	3.6	ESE
20230227 1210	3.3	SE
20230227 1220	2.5	ESE
20230227 1230	3.3	E
20230227 1240	2.8	ESE
20230227 1250	2.8	E
20230227 1300	2.5	E
20230227 1310	1.4	E
20230227 1320	1.4	SSW
20230227 1330	1.1	S
20230227 1340	2.2	SSE
20230227 1350	1.7	S
20230227 1400	1.7	-
20230227 1410	1.9	E
20230227 1420	1.9	ESE
20230227 1430	1.9	-
20230227 1440	3.1	E
20230227 1450	3.1	E
20230227 1500	4.2	ESE
20230227 1510	3.9	E
20230227 1520	3.3	ESE
20230227 1530	4.2	ESE
20230227 1540	3.9	E
20230227 1550	3.9	E
20230227 1600	3.9	E
20230227 1610	4.2	ESE
20230227 1620	4.7	E
20230227 1630	4.2	E
20230227 1640	4.2	E
20230227 1650	4.7	E
20230227 1700	4.4	ESE
20230227 1710	4.2	ESE
20230227 1720	3.1	ESE
20230227 1730	3.9	ESE
20230227 1740	4.2	ESE
20230227 1750	3.9	ESE
20230227 1800	3.9	ESE
20230227 1810	3.3	ESE
20230227 1820	3.3	ESE
20230227 1830	2.8	ESE
20230227 1840	2.8	ESE
20230227 1850	2.2	ESE
20230227 1900	1.4	ESE
20230227 1910	2.5	ESE
20230227 1920	1.7	ESE
20230227 1930	1.4	ESE
20230227 1940	1.4	ESE
20230227 1950	1.4	ESE
20230227 2000	1.7	E
20230227 2010	1.4	E
20230227 2020	1.1	ESE
20230227 2030	1.1	ESE
20230227 2040	1.4	SE
20230227 2050	1.4	ESE
20230227 2100	1.4	ESE
20230227 2110	1.7	ESE
20230227 2120	1.1	ESE
20230227 2130	1.7	SE
20230227 2140	2.5	SE
20230227 2150	1.4	ESE
20230227 2200	2.2	ESE
20230227 2210	2.8	ESE
20230227 2220	2.8	SE
20230227 2230	3.3	ESE
20230227 2240	2.5	ESE
20230227 2250	2.2	ESE
20230227 2300	2.8	ESE
20230227 2310	2.2	SE
20230227 2320	2.2	SE
20230227 2330	2.8	SE
20230227 2340	2.8	SE
20230227 2350	2.2	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230228 0000	2.8	SE
20230228 0010	3.3	SE
20230228 0020	3.3	SE
20230228 0030	3.3	SE
20230228 0040	4.4	SE
20230228 0050	4.2	SE
20230228 0100	2.8	SE
20230228 0110	0.8	ESE
20230228 0120	1.1	E
20230228 0130	1.1	-
20230228 0140	1.1	SE
20230228 0150	0.8	ENE
20230228 0200	1.1	ENE
20230228 0210	1.4	ENE
20230228 0220	1.7	ENE
20230228 0230	1.4	E
20230228 0240	1.4	E
20230228 0250	1.4	E
20230228 0300	0.8	ESE
20230228 0310	1.1	SE
20230228 0320	1.1	ESE
20230228 0330	0.8	ESE
20230228 0340	0.8	ESE
20230228 0350	0.8	ESE
20230228 0400	1.4	ENE
20230228 0410	1.1	ENE
20230228 0420	0.8	E
20230228 0430	0.8	ESE
20230228 0440	0.6	ESE
20230228 0450	0.3	ESE
20230228 0500	0.3	ESE
20230228 0510	0.8	SE
20230228 0520	0.8	SE
20230228 0530	1.1	ESE
20230228 0540	2.2	ESE
20230228 0550	1.4	SE
20230228 0600	1.7	ESE
20230228 0610	0.6	ESE
20230228 0620	1.1	ESE
20230228 0630	1.1	E
20230228 0640	0.8	ENE
20230228 0650	0.8	E
20230228 0700	1.4	E
20230228 0710	1.1	E
20230228 0720	1.7	ESE
20230228 0730	1.4	ESE
20230228 0740	1.1	E
20230228 0750	1.4	ESE
20230228 0800	1.1	ENE
20230228 0810	1.4	SE
20230228 0820	2.5	SE
20230228 0830	2.8	SE
20230228 0840	2.5	SE
20230228 0850	2.8	E
20230228 0900	2.5	ESE
20230228 0910	2.5	ESE
20230228 0920	2.5	E
20230228 0930	3.1	E
20230228 0940	2.5	E
20230228 0950	3.3	E
20230228 1000	3.3	E
20230228 1010	3.3	E
20230228 1020	2.8	E
20230228 1030	3.3	E
20230228 1040	3.1	E
20230228 1050	4.2	E
20230228 1100	3.9	E
20230228 1110	3.1	E
20230228 1120	3.3	E
20230228 1130	3.3	E
20230228 1140	3.9	ESE
20230228 1150	3.9	ESE

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (From)
20230228 1200	3.9	ESE
20230228 1210	4.4	SE
20230228 1220	3.9	ESE
20230228 1230	4.2	ESE
20230228 1240	3.9	ESE
20230228 1250	3.9	ESE
20230228 1300	3.1	ESE
20230228 1310	3.3	E
20230228 1320	3.1	E
20230228 1330	2.5	ESE
20230228 1340	2.5	ESE
20230228 1350	2.2	SSE
20230228 1400	3.1	E
20230228 1410	2.8	SE
20230228 1420	2.8	ESE
20230228 1430	3.3	E
20230228 1440	3.3	E
20230228 1450	2.8	E
20230228 1500	2.8	ESE
20230228 1510	2.8	E
20230228 1520	2.8	E
20230228 1530	3.3	ESE
20230228 1540	3.3	ENE
20230228 1550	3.3	E
20230228 1600	3.6	E
20230228 1610	3.3	E
20230228 1620	3.1	ESE
20230228 1630	3.3	ESE
20230228 1640	3.6	E
20230228 1650	3.9	E
20230228 1700	3.3	E
20230228 1710	3.9	E
20230228 1720	3.3	ESE
20230228 1730	3.6	E
20230228 1740	3.9	ESE
20230228 1750	3.9	ESE
20230228 1800	3.3	ESE
20230228 1810	3.1	ESE
20230228 1820	2.8	ESE
20230228 1830	1.7	ESE
20230228 1840	1.7	ESE
20230228 1850	1.7	ESE
20230228 1900	1.4	SE
20230228 1910	1.1	ESE
20230228 1920	1.1	S
20230228 1930	1.1	ESE
20230228 1940	1.7	SE
20230228 1950	1.4	SE
20230228 2000	1.4	SSE
20230228 2010	1.1	SSE
20230228 2020	1.1	SSE
20230228 2030	1.1	SSE
20230228 2040	0.8	SSE
20230228 2050	1.4	SSE
20230228 2100	0.8	SW
20230228 2110	1.1	S
20230228 2120	0.8	SSE
20230228 2130	0.3	SW
20230228 2140	0.3	S
20230228 2150	0	N
20230228 2200	1.9	SE
20230228 2210	1.1	E
20230228 2220	1.7	ESE
20230228 2230	1.4	ESE
20230228 2240	1.4	SE
20230228 2250	1.7	SE
20230228 2300	0.8	SE
20230228 2310	0.8	ESE
20230228 2320	1.1	SE
20230228 2330	1.1	SE
20230228 2340	0.8	SE
20230228 2350	0.8	SE

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	Chemical Waste	Others, e.g. general refuse & non-recyclable yard waste
		(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in '000L)	(in tonne)
Dec-22	384.77	300	0	0	0	0	0	0	0	11.49	0	73.28
Jan-23	15.38	0	0	0	0	0	0	0	0	0	0	15.38
Feb-23	503.29	0	0	0	0	0	0	0	0	3.16	0	503.29
Total	903.44	300	0	0	0	0	0	0	0	14.65	0	591.95

Note:

- The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- A total of 300 tonnes of hard rock and large broken concrete was generated from the contract in Dec 2022. Due to the hard rock and large broken concrete was stored in the project site, the contractor had not yet reused in the contract during reporting period. Therefore, the quantities do not count in "Reused in the Contract" between Dec-22 & Jan-23.
- Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

Appendix J Joint Environmental Site Inspection Records

Inspection Date:	1 February 2023	Inspected By:	Jason Man, Andy Ng
Time:	14:00	Weather Condition:	Sunny
Participants:	Henry Lau (ER), Kristy Wong (Contractor), Jason Man (ET), Andy Ng (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP No.: EP-292/2007 FEP No.: FEP-01/292/2007
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CNP No: GW-RN0824-22 GW-RN1151-22
A3	Is wastewater discharge licence available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B2	Are completed earthworks sealed as soon as practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B3	Are plant and equipment well maintained (i.e. without black smoke from powered plant)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B4	Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B5	Observed dust source(s)				
		<input checked="" type="checkbox"/> Wind erosion			
		<input type="checkbox"/> Vehicle/ Equipment Movements			
		<input type="checkbox"/> Loading/ unloading of materials			
		<input type="checkbox"/> Others: _____			
B6	Are unpaved areas/ designated roads watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 1
B7	Are dusty materials covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 2
B8	After removal of stockpile, are the remained dusty materials wetted with water and cleared from surface of roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B9	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B10	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
B11	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B12	Are all vehicles and plant cleaned before they leave the construction site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B13	Are hoarding $\geq 2.4\text{m}$ tall provided beside roads or area with public access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B14	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B15	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
B16	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B17	Is scaffolding erected around the perimeter of a building under construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B18	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B19	Is the skip for materials transport enclosed by impervious sheeting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B20	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
B21	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B22	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B23	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B24	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 six months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B25	Are the worksites wetted with water regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 3
B26	Is generation of dust avoided during loading or unloading?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B27	Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B28	Are appropriate speed limit sign displayed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B29	Are designated roads paved?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8/B30	Are site vehicle movements confined to designated roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B31	Are NRMM labels properly affixed on the PMEs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Activities					
D1	At the start of site establishment, are perimeter cut-off drains constructed to direct off-site water around the site with internal drainage works and erosion and sedimentation control facilities implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to such silt removal facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D3	Have dikes or embankments for flood protection implemented around the boundaries of earthwork areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
D4	Have temporary ditches provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D5	Are the sediment/ silt traps incorporated in the permanent drainage channels to enhance deposition rate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6	Are the retention time for silt/s and traps of the silt removal facilities be 5 minutes under maximum flow conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7	Is surface excavation works minimised during rainy seasons (April to September), as possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D8	Are all exposed earth areas completed or vegetated as soon as possible after earthworks completed, or alternatively, within 14 days of the cessation of earthworks where practicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D9	Are exposed slope surfaces covered by tarpaulin sheets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10	Have the overall slope of the site should be kept a minimum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11	Are all trafficked areas and access roads protected by coarse stone ballast	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D12	Is wastewater from temporary site facilities controlled to prevent direct discharge to surface	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D13	Are the silt removal facilities, channels and manholes maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D14	Is the deposited silt and grit removed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D15	Have the excavation of trenches in wet periods be dug and backfilled in short sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D16	Is rainwater pumped out from trenches discharged into storm drains via silt system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D17	Are open stockpiles of construction materials e.g. aggregates and sand of more than 50m ³ on site covered with tarpaulin or similar fabric during rainstorms?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D18	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D19	Are the discharges of surface run-off into foul sewer always prevented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D20	Is a wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
D21	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
D22	Is the section of construction road between the wheel washing bay and the public road surfaced with crushed stone or coarse gravel?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
D23	Are the vehicle wash-water have sand and silt settled out and removed at least on a weekly basis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
D24	Are site drainage systems provided over the entire project site with sediment control facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D25	Are sedimentation tanks provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D26	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D27	Are portable chemical toilets and sewage holding tanks provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D28	Is the sewage generated from toilets collected by licensed contractor and responsible for disposal and maintenance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D29	Is there any sediment plume observed in nearby watercourses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D30	Are oil interceptors provided in the site drainage system downstream of any oil/ fuel pollution sources? And the oil interceptors are emptied and cleaned regularly? Has a bypass provided to prevent flushing during heavy rain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
D31	Is chemical leakage or spillages contained and cleaned up immediately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D32	Service workshop and maintenance facilities located within a bunded area, and sumps and oil interceptors be provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E3	Does accumulation of waste avoid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E4	Is waste disposed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5	Regular waste collection by approved waste collector in purpose-built vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6	Burning of refuse on construction site prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Construction Waste					
E7	Are the temporary stockpiles maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8	Is the excavated fill material reused for backfilling and reinstatement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E9	Are the C&D materials sorted and recycled on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E10	Is there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E11	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E12	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E13	Is the durable formwork or plastic facing for construction works used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E14	Do the wooden hoardings avoid to be used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E15	Is metal hoarding used to enhance the possibility of recycling?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E16	Is the segregation and storage of C&D wastes undertaken in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E17	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E18	Do the excavated materials appear contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E19	If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E20	Is hydroseeding of the topsoil on the stockpile implemented to improve visual appearance and prevent soil erosion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Chemical / Fuel Storage Area					
E21	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E22	Are the storage area enclosed 3 sides by walls/ fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E23	Are the storage areas labelled and separated (if needed)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E24	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E25	Are the containers used for the storage of chemical wastes suitable for the substance that are holding, resist to corrosion, maintained in a good condition, and securely closed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E26	If no specification has been approved by EPD, are container with <450L capacity provided for storage of chemicals waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
Chemical Waste / Waste Oil					

E27	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E28	Are chemicals and waste oil recycled or disposed properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E29	Is chemical waste collected by licensed waste collectors and disposed of at licensed facility eg. Chemical Waste Treatment Centre?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Records					
E30	Is a licensed waste hauler used for waste collection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E31	Are the records of quantities of wastes generated, recycled and disposed properly kept?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E32	For the demolition material/ waste, is the number of loads for each day recorded as appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

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

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 no more than 10mm from exposed ground surface.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F13	For excavation works, Is LFG monitoring conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F14	Are LFG monitoring conducted periodically when any cracks on ground level encountered on-site? *Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F15b	Are temporary offices or buildings located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F16	Is a Safety Officer trained in the use of gas detection equipment and LFG- related hazards present on-site throughout the groundwork phase? *The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17a	Periodically during groundwork construction, Is the works area monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment? *The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17c	Are all measurements in excavations made with monitoring tube located not more than 10mm from exposed ground surface?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F18	For excavations deeper than 1m, are measurements conducted? • At ground surface before excavation commences;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed

	<ul style="list-style-type: none"> Immediately before any worker enters the excavation; At the beginning of each working day for entire period the excavation remains open; and Periodically throughout the working day whilst workers are in excavation. 				
F19	For excavations between 300mm and 1m, are measurements conducted? <ul style="list-style-type: none"> Directly after excavation has been completed; and Periodic all whilst excavation remains open. 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F20	For excavations less than 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed

G	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Is the work site confined within site boundaries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G2	Is damage to surrounding areas avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G3	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
G4	Is early planting using fast growing plants at strategic locations within site implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G5	Is boundary green belt planting implemented around the site perimeter and the construction of temporary soil bunds?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G6	Is temporary landscape treatment as green surface cover implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G7	Are existing and affected tree which identified as ecological significant preserved whenever possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed

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

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

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

Follow up action for previous Site Inspection:

1. The vehicle washing bay in Portion A has been repaved.

Observation(s):


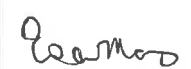

1. Vehicle washing shall be implemented in SBA.

Reminder(s):





1. The unpaved area in Portion D is dry and dusty.
2. The open stockpiles in SBA are not covered with impervious sheets.
3. The work area in Portion A is dry and fugitive dust is observed.
4. The plant equipment in SBA is placed on the ground without impervious sheets.

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







1. The Contractor has been reminded to provide vehicle washing facility at the exit of SBA.
2. The Contractor has been recommended to increase the frequency of watering to the unpaved area in Portion D and work area in Portion A.
3. The Contractor has been reminded to cover the stockpile with impervious sheets.
4. Plant equipment shall be placed on the impervious sheets.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Andy Ng	/	William	Sylvia Ho.
Date:	1 February 2023	/	1 Feb 23	1 Feb 2023

PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
 <p>1.Plant equipment was placed on the ground without impervious sheets in SBA.</p>	 <p>The hydraulic breaker was removed in SBA.</p>
 <p>2.The vehicle washing bay was not maintained properly in Portion A.</p>	 <p>The vehicle washing bay in Portion A has been repaved.</p>

Observation and Recommendation	Follow-up status
 <p>3.Sand and silt were accumulated in the channel of the vehicle washing bay in Portion A.</p>	 <p>The channel of vehicle washing bay has been cleared.</p>
 <p>4.Dusty stockpiles were not covered with impervious sheets in SBA.</p>	 <p>The dusty stockpiles have been covered with impervious sheets in SBA.</p>

Observation and Recommendation	Follow-up status
<div></div> <div>5.Oil stains were observed under the excavator in Portion D.</div>	<div></div> <div>Oil stains were cleared and disposed of as chemical waste.</div>
<div></div> <div>6.The exposed earth was dry and dusty in Portion D.</div>	<div></div> <div>The exposed earth was paved to prevent dust dispersion.</div>
<div></div> <div>7.Water spray or dust suppression chemical shall be provided during mechanical breaking operation in SBA.</div>	<div></div> <div>The breaking works were stopped and the mitigation measure was reminded to workers when conducting the breaking works.</div>

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
 <p>1. Vehicle washing shall be implemented in SBA.</p>	
 <p>2. The unpaved area in Portion D is dry and dusty.</p>	
 <p>3. The open stockpiles in SBA are not covered with impervious sheets.</p>	



4. The work area in Portion A is dry and fugitive dust is observed.



5. The plant equipment in SBA is placed on the ground without impervious sheets.

Inspection Date:	6 February 2023	Inspected By:	Andy Ng
Time:	14:00	Weather Condition:	Sunny
Participants:	Jackie Tam (ER), Kristy Wong (Contractor), Andy Ng (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP No.: EP-292/2007 FEP No.: FEP-01/292/2007
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CNP No: GW-RN0824-22 GW-RN1151-22
A3	Is wastewater discharge licence available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B2	Are completed earthworks sealed as soon as practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B3	Are plant and equipment well maintained (i.e. without black smoke from powered plant)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B4	Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B5	Observed dust source(s)				
	<input checked="" type="checkbox"/> Wind erosion				
	<input type="checkbox"/> Vehicle/ Equipment Movements				
	<input type="checkbox"/> Loading/ unloading of materials				
	<input type="checkbox"/> Others: _____				
B6	Are unpaved areas/ designated roads watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B7	Are dusty materials covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B8	After removal of stockpile, are the remained dusty materials wetted with water and cleared from surface of roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B9	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B10	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B11	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B12	Are all vehicles and plant cleaned before they leave the construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B13	Are hoarding $\geq 2.4\text{m}$ tall provided beside roads or area with public access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B14	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B15	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
B16	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B17	Is scaffolding erected around the perimeter of a building under construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B18	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B19	Is the skip for materials transport enclosed by impervious sheeting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B20	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
B21	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B22	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B23	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B24	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 six months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B25	Are the worksites wetted with water regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B26	Is generation of dust avoided during loading or unloading?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 1
B27	Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B28	Are appropriate speed limit sign displayed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B29	Are designated roads paved?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8/B30	Are site vehicle movements confined to designated roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B31	Are NRMM labels properly affixed on the PMEs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Activities					
D1	At the start of site establishment, are perimeter cut-off drains constructed to direct off-site water around the site with internal drainage works and erosion and sedimentation control facilities implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to such silt removal facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2
D3	Have dikes or embankments for flood protection implemented around the boundaries of earthwork areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
D4	Have temporary ditches provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D5	Are the sediment/ silt traps incorporated in the permanent drainage channels to enhance deposition rate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6	Are the retention time for silt/s and traps of the silt removal facilities be 5 minutes under maximum flow conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7	Is surface excavation works minimised during rainy seasons (April to September), as possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D8	Are all exposed earth areas completed or vegetated as soon as possible after earthworks completed, or alternatively, within 14 days of the cessation of earthworks where practicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D9	Are exposed slope surfaces covered by tarpaulin sheets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10	Have the overall slope of the site should be kept a minimum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11	Are all trafficked areas and access roads protected by coarse stone ballast	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D12	Is wastewater from temporary site facilities controlled to prevent direct discharge to surface	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D13	Are the silt removal facilities, channels and manholes maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D14	Is the deposited silt and grit removed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D15	Have the excavation of trenches in wet periods be dug and backfilled in short sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D16	Is rainwater pumped out from trenches discharged into storm drains via silt system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D17	Are open stockpiles of construction materials e.g. aggregates and sand of more than 50m ³ on site covered with tarpaulin or similar fabric during rainstorms?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D18	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D19	Are the discharges of surface run-off into foul sewer always prevented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D20	Is a wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D21	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22	Is the section of construction road between the wheel washing bay and the public road surfaced with crushed stone or coarse gravel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23	Are the vehicle wash-water have sand and silt settled out and removed at least on a weekly basis?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 2
D24	Are site drainage systems provided over the entire project site with sediment control facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Refer to Observation 2
D25	Are sedimentation tanks provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Refer to Observation 2
D26	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D27	Are portable chemical toilets and sewage holding tanks provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D28	Is the sewage generated from toilets collected by licensed contractor and responsible for disposal and maintenance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D29	Is there any sediment plume observed in nearby watercourses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D30	Are oil interceptors provided in the site drainage system downstream of any oil/ fuel pollution sources? And the oil interceptors are emptied and cleaned regularly? Has a bypass provided to prevent flushing during heavy rain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
D31	Is chemical leakage or spillages contained and cleaned up immediately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D32	Service workshop and maintenance facilities located within a bunded area, and sumps and oil interceptors be provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E3	Does accumulation of waste avoid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E4	Is waste disposed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5	Regular waste collection by approved waste collector in purpose-built vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6	Burning of refuse on construction site prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Construction Waste					
E7	Are the temporary stockpiles maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8	Is the excavated fill material reused for backfilling and reinstatement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E9	Are the C&D materials sorted and recycled on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E10	Is there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E11	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E12	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E13	Is the durable formwork or plastic facing for construction works used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E14	Do the wooden hoardings avoid to be used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E15	Is metal hoarding used to enhance the possibility of recycling?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E16	Is the segregation and storage of C&D wastes undertaken in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E17	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E18	Do the excavated materials appear contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E19	If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E20	Is hydroseeding of the topsoil on the stockpile implemented to improve visual appearance and prevent soil erosion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Chemical / Fuel Storage Area					
E21	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E22	Are the storage area enclosed 3 sides by walls/ fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E23	Are the storage areas labelled and separated (if needed)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E24	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E25	Are the containers used for the storage of chemical wastes suitable for the substance that are holding, resist to corrosion, maintained in a good condition, and securely closed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E26	If no specification has been approved by EPD, are container with <450L capacity provided for storage of chemicals waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
Chemical Waste / Waste Oil					

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 2)

E27	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E28	Are chemicals and waste oil recycled or disposed properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E29	Is chemical waste collected by licensed waste collectors and disposed of at licensed facility eg. Chemical Waste Treatment Centre?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Records					
E30	Is a licensed waste hauler used for waste collection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E31	Are the records of quantities of wastes generated, recycled and disposed properly kept?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E32	For the demolition material/ waste, is the number of loads for each day recorded as appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

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

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 no more than 10mm from exposed ground surface.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F13	For excavation works, Is LFG monitoring conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F14	Are LFG monitoring conducted periodically when any cracks on ground level encountered on-site? *Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F15b	Are temporary offices or buildings located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F16	Is a Safety Officer trained in the use of gas detection equipment and LFG- related hazards present on-site throughout the groundwork phase? *The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17a	Periodically during groundwork construction, Is the works area monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment? *The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17c	Are all measurements in excavations made with monitoring tube located not more than 10mm from exposed ground surface?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F18	For excavations deeper than 1m, are measurements conducted? • At ground surface before excavation commences;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed

	<ul style="list-style-type: none"> Immediately before any worker enters the excavation; At the beginning of each working day for entire period the excavation remains open; and Periodically throughout the working day whilst workers are in excavation. 				
F19	For excavations between 300mm and 1m, are measurements conducted? <ul style="list-style-type: none"> Directly after excavation has been completed; and Periodic all whilst excavation remains open. 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F20	For excavations less than 300mm, are monitoring omitted at the discretion of Safety Officer or appropriately qualified person?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed

G	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Is the work site confined within site boundaries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G2	Is damage to surrounding areas avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G3	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
G4	Is early planting using fast growing plants at strategic locations within site implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G5	Is boundary green belt planting implemented around the site perimeter and the construction of temporary soil bunds?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G6	Is temporary landscape treatment as green surface cover implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G7	Are existing and affected tree which identified as ecological significant preserved whenever possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed

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

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

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

Follow up action for previous Site Inspection:

1. The hydraulic breaker was removed in SBA.
2. The channel of vehicle washing bay has been cleared.
3. The dusty stockpiles have been covered with impervious sheets in SBA.

Observation(s):




1. Fugitive dust is observed in Portion A and D.

Reminder(s):

2. Sand and silt shall be regularly removed from the sump pit in the vehicle washing bay in Portion A.




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


1. The Contractor has been reminded to increase the frequency of watering unpaved area and work area or other dust suppression method in Portion A and D to minimize dust dispersion.
2. The Contractor has been reminded to remove sand and silt in the sump pit and the channel at the vehicle washing bay regularly.





	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Andy Ng	/	William Wan	Sylvia Ho
Date:	6 February 2023	/	6 February 2023	6 February 2023



PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
<div data-bbox="132 293 769 880" data-label="Image"> </div> <div data-bbox="132 891 638 1485" data-label="Image"> </div> <p data-bbox="132 1503 743 1554">1.Plant equipment was placed on the ground without impervious sheets in SBA.</p>	<div data-bbox="831 631 1554 1171" data-label="Image"> </div> <p data-bbox="831 1189 1251 1218">The hydraulic breaker was removed in SBA.</p>

Observation and Recommendation	Follow-up status
 <p>2.Sand and silt were accumulated in the channel of the vehicle washing bay in Portion A.</p>	 <p>The channel of vehicle washing bay has been cleared.</p>
 <p>3.Dusty stockpiles were not covered with impervious sheets in SBA.</p>	 <p>The dusty stockpiles have been covered with impervious sheets in SBA.</p>

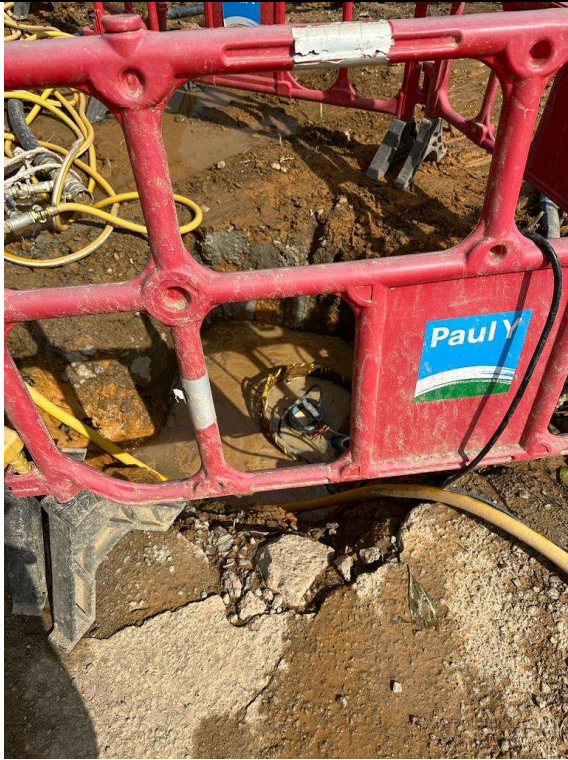
Observation and Recommendation	Follow-up status
<div></div> <p>4.Oil stains were observed under the excavator in Portion D.</p>	<div></div> <p>Oil stains were cleared and disposed of as chemical waste.</p>
<div></div> <p>5.The exposed earth was dry and dusty in Portion D.</p>	<div></div> <p>The exposed earth was paved to prevent dust dispersion.</p>

Observation and Recommendation	Follow-up status
 <p>6. Water spray or dust suppression chemical shall be provided during mechanical breaking operation in SBA.</p>	 <p>The breaking works were stopped and the mitigation measure was reminded to workers when conducting the breaking works.</p>
 <p>7. Vehicle washing shall be implemented in SBA.</p>	 <p>The vehicle washing were implemented in SBA.</p>

Observation and Recommendation	Follow-up status
 <p data-bbox="134 929 794 958">8. The work area in Portion A was dry and fugitive dust was observed.</p>	 <p data-bbox="831 853 1461 882">The Frequency of watering work area were increased in Portion A.</p>

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
   <p data-bbox="134 1910 601 1939">1. Fugitive dust is observed in Portion A and D.</p>	



2. Sand and silt shall be regularly removed from the sump pit in the vehicle washing bay in Portion A.

Inspection Date:	13 February 2023	Inspected By:	Jason Man
Time:	14:00	Weather Condition:	Hazy
Participants:	Jackie Tam (ER), Kristy Wong (Contractor), Andy Ng (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP No.: EP-292/2007 FEP No.: FEP-01/292/2007
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CNP No: GW-RN0824-22 GW-RN1151-22
A3	Is wastewater discharge licence available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B2	Are completed earthworks sealed as soon as practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B3	Are plant and equipment well maintained (i.e. without black smoke from powered plant)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B4	Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B5	Observed dust source(s)				
	<input checked="" type="checkbox"/> Wind erosion				
	<input type="checkbox"/> Vehicle/ Equipment Movements				
	<input type="checkbox"/> Loading/ unloading of materials				
	<input type="checkbox"/> Others: _____				
B6	Are unpaved areas/ designated roads watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 1
B7	Are dusty materials covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B8	After removal of stockpile, are the remained dusty materials wetted with water and cleared from surface of roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B9	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 2)

B10	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B11	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B12	Are all vehicles and plant cleaned before they leave the construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B13	Are hoarding $\geq 2.4\text{m}$ tall provided beside roads or area with public access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B14	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B15	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
B16	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B17	Is scaffolding erected around the perimeter of a building under construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B18	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B19	Is the skip for materials transport enclosed by impervious sheeting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B20	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
B21	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B22	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B23	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B24	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 six months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B25	Are the worksites wetted with water regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B26	Is generation of dust avoided during loading or unloading?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 1
B27	Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B28	Are appropriate speed limit sign displayed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B29	Are designated roads paved?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8/B30	Are site vehicle movements confined to designated roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B31	Are NRMM labels properly affixed on the PMEs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Activities					
D1	At the start of site establishment, are perimeter cut-off drains constructed to direct off-site water around the site with internal drainage works and erosion and sedimentation control facilities implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to such silt removal facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D3	Have dikes or embankments for flood protection implemented around the boundaries of earthwork areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
D4	Have temporary ditches provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D5	Are the sediment/ silt traps incorporated in the permanent drainage channels to enhance deposition rate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6	Are the retention time for silt/s and traps of the silt removal facilities be 5 minutes under maximum flow conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7	Is surface excavation works minimised during rainy seasons (April to September), as possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D8	Are all exposed earth areas completed or vegetated as soon as possible after earthworks completed, or alternatively, within 14 days of the cessation of earthworks where practicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D9	Are exposed slope surfaces covered by tarpaulin sheets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10	Have the overall slope of the site should be kept a minimum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11	Are all trafficked areas and access roads protected by coarse stone ballast	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D12	Is wastewater from temporary site facilities controlled to prevent direct discharge to surface	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D13	Are the silt removal facilities, channels and manholes maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D14	Is the deposit silt and grit removed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D15	Have the excavation of trenches in wet periods be dug and backfilled in short sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D16	Is rainwater pumped out from trenches discharged into storm drains via silt system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D17	Are open stockpiles of construction materials e.g. aggregates and sand of more than 50m ³ on site covered with tarpaulin or similar fabric during rainstorms?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D18	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D19	Are the discharges of surface run-off into foul sewer always prevented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D20	Is a wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D21	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22	Is the section of construction road between the wheel washing bay and the public road surfaced with crushed stone or coarse gravel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23	Are the vehicle wash-water have sand and silt settled out and removed at least on a weekly basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D24	Are site drainage systems provided over the entire project site with sediment control facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D25	Are sedimentation tanks provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D26	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D27	Are portable chemical toilets and sewage holding tanks provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D28	Is the sewage generated from toilets collected by licensed contractor and responsible for disposal and maintenance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D29	Is there any sediment plume observed in nearby watercourses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D30	Are oil interceptors provided in the site drainage system downstream of any oil/ fuel pollution sources? And the oil interceptors are emptied and cleaned regularly? Has a bypass provided to prevent flushing during heavy rain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
D31	Is chemical leakage or spillages contained and cleaned up immediately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D32	Service workshop and maintenance facilities located within a bunded area, and sumps and oil interceptors be provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E3	Does accumulation of waste avoid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E4	Is waste disposed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5	Regular waste collection by approved waste collector in purpose-built vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6	Burning of refuse on construction site prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Construction Waste					
E7	Are the temporary stockpiles maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8	Is the excavated fill material reused for backfilling and reinstatement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E9	Are the C&D materials sorted and recycled on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E10	Is there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E11	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E12	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E13	Is the durable formwork or plastic facing for construction works used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E14	Do the wooden hoardings avoid to be used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E15	Is metal hoarding used to enhance the possibility of recycling?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E16	Is the segregation and storage of C&D wastes undertaken in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E17	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E18	Do the excavated materials appear contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E19	If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E20	Is hydroseeding of the topsoil on the stockpile implemented to improve visual appearance and prevent soil erosion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Chemical / Fuel Storage Area					
E21	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E22	Are the storage area enclosed 3 sides by walls/ fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E23	Are the storage areas labelled and separated (if needed)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E24	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E25	Are the containers used for the storage of chemical wastes suitable for the substance that are holding, resist to corrosion, maintained in a good condition, and securely closed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E26	If no specification has been approved by EPD, are container with <450L capacity provided for storage of chemicals waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
Chemical Waste / Waste Oil					

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 2)

E27	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E28	Are chemicals and waste oil recycled or disposed properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E29	Is chemical waste collected by licensed waste collectors and disposed of at licensed facility eg. Chemical Waste Treatment Centre?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Records					
E30		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E31	Are the records of quantities of wastes generated, recycled and disposed properly kept?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E32	For the demolition material/ waste, is the number of loads for each day recorded as appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

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

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 no more than 10mm from exposed ground surface.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F13	For excavation works, Is LFG monitoring conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F14	Are LFG monitoring conducted periodically when any cracks on ground level encountered on-site? *Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F15b	Are temporary offices or buildings located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F16	Is a Safety Officer trained in the use of gas detection equipment and LFG- related hazards present on-site throughout the groundwork phase? *The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17a	Periodically during groundwork construction, Is the works area monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment? *The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17c	Are all measurements in excavations made with monitoring tube located not more than 10mm from exposed ground surface?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F18	For excavations deeper than 1m, are measurements conducted? • At ground surface before excavation commences;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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

G	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Is the work site confined within site boundaries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G2	Is damage to surrounding areas avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G3	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
G4	Is early planting using fast growing plants at strategic locations within site implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G5	Is boundary green belt planting implemented around the site perimeter and the construction of temporary soil bunds?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G6	Is temporary landscape treatment as green surface cover implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G7	Are existing and affected tree which identified as ecological significant preserved whenever possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed

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




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

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

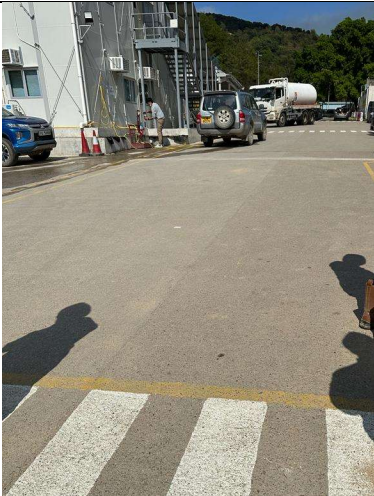

Follow up action for previous Site Inspection:**Reminder(s):**

1. The Contractor was reminded that the frequently of watering unpaved area and work area or other dust suppression method in Portion A is reminded should be increased.

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

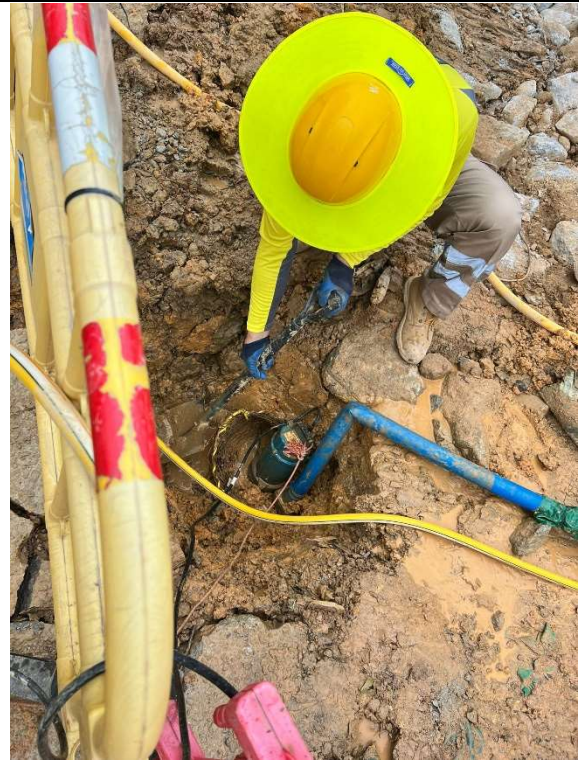
	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Jason Man	/	William Wan	Sylvia Ho
Date:	13 Feb 2023	/	13 Feb 2023	13 Feb 2023

PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
<div></div> <div></div> <div></div> <div>1. Fugitive dust is observed in Portion A and D.</div>	<div></div> <div>The Frequently of watering work area were increased in Portion A.</div> <div></div> <div>The Frequently of watering work area were increased in Portion D.</div>




2. Sand and silt shall be regularly removed from the sump pit in the vehicle washing bay in Portion A.



The sand and silt in the sump pit and the channel at the vehicle were removed.

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
 <p data-bbox="134 768 767 846">The Contractor was reminded that the frequent watering of the unpaved area and work area or other dust suppression methods in Portion A should be increased.</p>	

Inspection Date:	20 February 2023	Inspected By:	Jason Man
Time:	14:00	Weather Condition:	Fine
Participants:	Henry Lau (ER), Jimmy Lui (IEC), Kristy Wong (Contractor), Jason Man (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP No.: EP-292/2007 FEP No.: FEP-01/292/2007
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CNP No: GW-RN0824-22 GW-RN1151-22
A3	Is wastewater discharge licence available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B2	Are completed earthworks sealed as soon as practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B3	Are plant and equipment well maintained (i.e. without black smoke from powered plant)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B4	Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B5	Observed dust source(s)				
	<input checked="" type="checkbox"/> Wind erosion				
	<input type="checkbox"/> Vehicle/ Equipment Movements				
	<input type="checkbox"/> Loading/ unloading of materials				
	<input type="checkbox"/> Others: _____				
B6	Are unpaved areas/ designated roads watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B7	Are dusty materials covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B8	After removal of stockpile, are the remained dusty materials wetted with water and cleared from surface of roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B9	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B10	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B11	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B12	Are all vehicles and plant cleaned before they leave the construction site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B13	Are hoarding $\geq 2.4\text{m}$ tall provided beside roads or area with public access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B14	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B15	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No Observed
B16	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B17	Is scaffolding erected around the perimeter of a building under construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B18	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B19	Is the skip for materials transport enclosed by impervious sheeting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B20	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
B21	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B22	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B23	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B24	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 six months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B25	Are the worksites wetted with water regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B26	Is generation of dust avoided during loading or unloading?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B27	Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B28	Are appropriate speed limit sign displayed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B29	Are designated roads paved?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8/B30	Are site vehicle movements confined to designated roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B31	Are NRMM labels properly affixed on the PMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2

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

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Activities					
D1	At the start of site establishment, are perimeter cut-off drains constructed to direct off-site water around the site with internal drainage works and erosion and sedimentation control facilities implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to such silt removal facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D3	Have dikes or embankments for flood protection implemented around the boundaries of earthwork areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4	Have temporary ditches provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D5	Are the sediment/ silt traps incorporated in the permanent drainage channels to enhance deposition rate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6	Are the retention time for silt/s and traps of the silt removal facilities be 5 minutes under maximum flow conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7	Is surface excavation works minimised during rainy seasons (April to September), as possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D8	Are all exposed earth areas completed or vegetated as soon as possible after earthworks completed, or alternatively, within 14 days of the cessation of earthworks where practicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D9	Are exposed slope surfaces covered by tarpaulin sheets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10	Have the overall slope of the site should be kept a minimum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11	Are all trafficked areas and access roads protected by coarse stone ballast	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D12	Is wastewater from temporary site facilities controlled to prevent direct discharge to surface	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D13	Are the silt removal facilities, channels and manholes maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D14	Is the deposit silt and grit removed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D15	Have the excavation of trenches in wet periods be dug and backfilled in short sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D16	Is rainwater pumped out from trenches discharged into storm drains via silt system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D17	Are open stockpiles of construction materials e.g. aggregates and sand of more than 50m ³ on site covered with tarpaulin or similar fabric during rainstorms?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D18	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D19	Are the discharges of surface run-off into foul sewer always prevented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 2)

D20	Is a wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D21	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22	Is the section of construction road between the wheel washing bay and the public road surfaced with crushed stone or coarse gravel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D23	Are the vehicle wash-water have sand and silt settled out and removed at least on a weekly basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D24	Are site drainage systems provided over the entire project site with sediment control facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D25	Are sedimentation tanks provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D26	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D27	Are portable chemical toilets and sewage holding tanks provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D28	Is the sewage generated from toilets collected by licensed contractor and responsible for disposal and maintenance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D29	Is there any sediment plume observed in nearby watercourses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D30	Are oil interceptors provided in the site drainage system downstream of any oil/ fuel pollution sources? And the oil interceptors are emptied and cleaned regularly? Has a bypass provided to prevent flushing during heavy rain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
D31	Is chemical leakage or spillages contained and cleaned up immediately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D32	Service workshop and maintenance facilities located within a bunded area, and sumps and oil interceptors be provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E3	Does accumulation of waste avoid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E4	Is waste disposed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5	Regular waste collection by approved waste collector in purpose-built vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6	Burning of refuse on construction site prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Construction Waste					
E7	Are the temporary stockpiles maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8	Is the excavated fill material reused for backfilling and reinstatement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E9	Are the C&D materials sorted and recycled on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E10	Is there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E11	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E12	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E13	Is the durable formwork or plastic facing for construction works used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E14	Do the wooden hoardings avoid to be used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E15	Is metal hoarding used to enhance the possibility of recycling?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E16	Is the segregation and storage of C&D wastes undertaken in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E17	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E18	Do the excavated materials appear contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E19	If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E20	Is hydroseeding of the topsoil on the stockpile implemented to improve visual appearance and prevent soil erosion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Chemical / Fuel Storage Area					
E21	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E22	Are the storage area enclosed 3 sides by walls/ fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E23	Are the storage areas labelled and separated (if needed)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E24	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E25	Are the containers used for the storage of chemical wastes suitable for the substance that are holding, resist to corrosion, maintained in a good condition, and securely closed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E26	If no specification has been approved by EPD, are container with <450L capacity provided for storage of chemicals waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
Chemical Waste / Waste Oil					

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 2)

E27	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E28	Are chemicals and waste oil recycled or disposed properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E29	Is chemical waste collected by licensed waste collectors and disposed of at licensed facility eg. Chemical Waste Treatment Centre?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Records					
E30	Is a licensed waste hauler used for waste collection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E31	Are the records of quantities of wastes generated, recycled and disposed properly kept?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E32	For the demolition material/ waste, is the number of loads for each day recorded as appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

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

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 no more than 10mm from exposed ground surface.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F13	For excavation works, Is LFG monitoring conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F14	Are LFG monitoring conducted periodically when any cracks on ground level encountered on-site? *Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F15b	Are temporary offices or buildings located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F16	Is a Safety Officer trained in the use of gas detection equipment and LFG- related hazards present on-site throughout the groundwork phase? *The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17a	Periodically during groundwork construction, Is the works area monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment? *The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17c	Are all measurements in excavations made with monitoring tube located not more than 10mm from exposed ground surface?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F18	For excavations deeper than 1m, are measurements conducted? • At ground surface before excavation commences;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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

G	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Is the work site confined within site boundaries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G2	Is damage to surrounding areas avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G3	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G4	Is early planting using fast growing plants at strategic locations within site implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G5	Is boundary green belt planting implemented around the site perimeter and the construction of temporary soil bunds?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G6	Is temporary landscape treatment as green surface cover implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G7	Are existing and affected tree which identified as ecological significant preserved whenever possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed

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

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

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

Follow up action for previous Site Inspection:

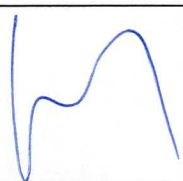
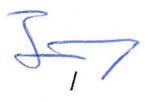


1. The frequent watering of the unpaved area and work area in Portion A were increased.

Observation(s):



1. The fugitive dust is observed in Portion A.
2. The lack of NRMN Label is observed in the generator at SBA.

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

1. The Contractor is recommended to increase the frequency of watering to the unpaved area and work area in Portion A.
2. The Contractor is recommended to label the NRMN Label on the generator at SBA.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:				
Name:	Jagan Man Andy Ng	Jimmy Lui	William Wan	Sylvia Ho
Date:	20 Feb 2023	20 Feb 2023	20 Feb 2023	20 Feb 2023

PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
 <p>The Contractor was reminded that the frequent watering of the unpaved area and work area or other dust suppression methods in Portion A should be increased.</p>	 <p>The frequent watering of the unpaved area and work area in Portion A were increased.</p>

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
 <p>1. The fugitive dust is observed in Portion A.</p>	
 <p>2. The lack of NRMN Label is observed in the generator at SBA.</p>	

Inspection Date:	27 February 2023	Inspected By:	Andy Ng, Jason Man
Time:	14:00	Weather Condition:	Sunny
Participants:	Sylvia Ho (ER), William Wan (Contractor), Andy Ng (ET), Jason Man (ET)		

A	Permits/Licenses	N/A or Not Observed	Yes	No	Remarks / Photo
A1	Are Environmental Permit, license/ other permit displayed at major site exit and vehicle access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EP No.: EP-292/2007 FEP No.: FEP-01/292/2007
A2	Are Construction Noise Permits/ Environmental license/ other permit available for inspection/posted at site entrance.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CNP No: GW-RN1151-22 GW-RN0131-23
A3	Is wastewater discharge licence available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A4	Are trip tickets for chemical waste and construction waste disposal available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
A5	Are relevant licence/permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B	Air Quality	N/A or Not Observed	Yes	No	Remarks / Photo
B1	Is open burning avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B2	Are completed earthworks sealed as soon as practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B3	Are plant and equipment well maintained (i.e. without black smoke from powered plant)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B4	Any remedial action undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B5	Observed dust source(s)				
		<input checked="" type="checkbox"/> Wind erosion			
		<input checked="" type="checkbox"/> Vehicle/ Equipment Movements			
		<input type="checkbox"/> Loading/ unloading of materials			
		<input type="checkbox"/> Others: _____			
B6	Are unpaved areas/ designated roads watered regularly to avoid dust generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 1
B7	Are dusty materials covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B8	After removal of stockpile, are the remained dusty materials wetted with water and cleared from surface of roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B9	Is the stockpile of dusty materials avoid to be extend beyond the pedestrian barriers, fencing or traffic cones?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B10	Are loaded dump trucks covered by impervious sheeting appropriately before leaving the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B11	Are wheel washing facilities with high pressure water jet provided at all site exits if practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2
B12	Are all vehicles and plant cleaned before they leave the construction site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2
B13	Are hoarding $\geq 2.4\text{m}$ tall provided beside roads or area with public access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B14	Is the portion of any road leading only to construction site (within 30m of a vehicle entrance or exit) kept clear of dusty materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B15	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No Observed
B16	Is the area involved demolition activities sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B17	Is scaffolding erected around the perimeter of a building under construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B18	Are effective dust screens, sheeting or netting provided to enclose the scaffolding from the ground floor level of the building, or a canopy provided from the first floor level up to the highest level of the scaffolding?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B19	Is the skip for materials transport enclosed by impervious sheeting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B20	Is every stock of more than 20 bags of cement or dry pulverized fuel ash (PFA) covered entirely by impervious sheeting or placed in an area sheltered on the top and 3 sides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 3
B21	Are the areas of washing facilities and the road section between the washing facilities and the exit point paved with concrete, bituminous materials or hardcores?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	In Progress at SBA
B22	Are the activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA carried out in a totally enclosed system or facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B23	Is any vent or exhaust fitted with an effective fabric filter or equipment air pollution control system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
B24	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 six months after last construction activity on the construction site or part of the construction site where the exposed earth lies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B25	Are the worksites wetted with water regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Reminder 1
B26	Is generation of dust avoided during loading or unloading?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
B27	Are all trucks loaded to a level within the side and tail boards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

B28	Are appropriate speed limit sign displayed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B29	Are designated roads paved?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8/B30	Are site vehicle movements confined to designated roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B31	Are NRMM labels properly affixed on the PME's?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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

D	Water Quality	N/A or Not Observed	Yes	No	Remarks / Photo
Construction Activities					
D1	At the start of site establishment, are perimeter cut-off drains constructed to direct off-site water around the site with internal drainage works and erosion and sedimentation control facilities implemented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D2	Are channels, earth bunds or sandbag barriers provided on site to properly direct stormwater to such silt removal facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D3	Have dikes or embankments for flood protection implemented around the boundaries of earthwork areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D4	Have temporary ditches provided to facilitate the runoff discharge into an appropriate watercourse, through a site/ sediment trap?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D5	Are the sediment/ silt traps incorporated in the permanent drainage channels to enhance deposition rate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D6	Are the retention time for silt/s and traps of the silt removal facilities be 5 minutes under maximum flow conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D7	Is surface excavation works minimised during rainy seasons (April to September), as possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	To be implemented during wet season
D8	Are all exposed earth areas completed or vegetated as soon as possible after earthworks completed, or alternatively, within 14 days of the cessation of earthworks where practicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D9	Are exposed slope surfaces covered by tarpaulin sheets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D10	Have the overall slope of the site should be kept a minimum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D11	Are all trafficked areas and access roads protected by coarse stone ballast	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D12	Is wastewater from temporary site facilities controlled to prevent direct discharge to surface	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D13	Are the silt removal facilities, channels and manholes maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D14	Is the deposit silt and grit removed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D15	Have the excavation of trenches in wet periods be dug and backfilled in short sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D16	Is rainwater pumped out from trenches discharged into storm drains via silt system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D17	Are open stockpiles of construction materials e.g. aggregates and sand of more than 50m ³ on site covered with tarpaulin or similar fabric during rainstorms?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D18	Are manholes adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D19	Are the discharges of surface run-off into foul sewer always prevented?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

D20	Is a wheel washing bay provided at every site exit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Refer to Observation 2
D21	Is the wheel wash overflow directed to silt removal facilities before being discharged to the storm drain?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D22	Is the section of construction road between the wheel washing bay and the public road surfaced with crushed stone or coarse gravel?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	In Progress at SBA
D23	Are the vehicle wash-water have sand and silt settled out and removed at least on a weekly basis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
D24	Are site drainage systems provided over the entire project site with sediment control facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D25	Are sedimentation tanks provided to treat the large amount of sediment-laden wastewater generated from wheel washing, site runoff and construction works?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D26	Is the treated wastewater reused for vehicle washing, dust suppression and general cleaning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D27	Are portable chemical toilets and sewage holding tanks provided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D28	Is the sewage generated from toilets collected by licensed contractor and responsible for disposal and maintenance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D29	Is there any sediment plume observed in nearby watercourses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D30	Are oil interceptors provided in the site drainage system downstream of any oil/ fuel pollution sources? And the oil interceptors are emptied and cleaned regularly? Has a bypass provided to prevent flushing during heavy rain?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
D31	Is chemical leakage or spillages contained and cleaned up immediately?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
D32	Service workshop and maintenance facilities located within a bunded area, and sumps and oil interceptors be provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

E	Waste / Chemical Management	N/A or Not Observed	Yes	No	Remarks / Photo
General Waste					
E1	Is the general waste generated on-site stored in enclosed bins or compaction units separately from the construction and chemical wastes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E2	Is the general waste collected properly by using the waste separation facilities for paper, aluminium cans, plastic bottles etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E3	Does accumulation of waste avoid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E4	Is waste disposed regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E5	Regular waste collection by approved waste collector in purpose-built vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E6	Burning of refuse on construction site prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Construction Waste					
E7	Are the temporary stockpiles maintained regularly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E8	Is the excavated fill material reused for backfilling and reinstatement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E9	Are the C&D materials sorted and recycled on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E10	Is there any contract documents provided to allow and promote the use of recycled aggregates where appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E11	Is the disposal of C&D materials avoided onto any sensitive locations e.g. agricultural lands etc.?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E12	Are the public fill and C&D waste segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E13	Is the durable formwork or plastic facing for construction works used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E14	Do the wooden hoardings avoid to be used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E15	Is metal hoarding used to enhance the possibility of recycling?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E16	Is the segregation and storage of C&D wastes undertaken in designated area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E17	Are waste storage area properly cleaned and do not cause windblown litter and dust nuisance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E18	Do the excavated materials appear contaminated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E19	If suspected contaminated, appropriate procedures followed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
E20	Is hydroseeding of the topsoil on the stockpile implemented to improve visual appearance and prevent soil erosion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Chemical / Fuel Storage Area					
E21	Are the fuel tanks and chemical storage areas provided with locks and sited on sealed areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E22	Are the storage area enclosed 3 sides by walls/ fence of ≥2m tall and bounded with adequate bund capacity (>110% of largest container) or do the storage area allow storage of 20% of total volume of waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E23	Are the storage areas labelled and separated (if needed)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E24	Do the storage areas have adequate ventilation and be covered to prevent rainfall entering?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E25	Are the containers used for the storage of chemical wastes suitable for the substance that are holding, resist to corrosion, maintained in a good condition, and securely closed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E26	If no specification has been approved by EPD, are container with <450L capacity provided for storage of chemicals waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
Chemical Waste / Waste Oil					

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 2)

E27	Is chemical waste or waste oil stored and labelled in English and Chinese properly in designated area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E28	Are chemicals and waste oil recycled or disposed properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
E29	Is chemical waste collected by licensed waste collectors and disposed of at licensed facility eg. Chemical Waste Treatment Centre?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Records					
E30	Is a licensed waste hauler used for waste collection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E31	Are the records of quantities of wastes generated, recycled and disposed properly kept?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E32	For the demolition material/ waste, is the number of loads for each day recorded as appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A

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

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 no more than 10mm from exposed ground surface.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F13	For excavation works, Is LFG monitoring conducted (1) at ground surface prior to excavation, (2) immediately before workers entering excavations, (3) at the beginning of each half-day work, and (4) periodically throughout the working day when workers are in the excavation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F14	Are LFG monitoring conducted periodically when any cracks on ground level encountered on-site? *Appropriate action should be taken in accordance with the action plan in Table 7.6 of EIA Report.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F15b	Are temporary offices or buildings located where free LFG has been proven or raised clear of ground at a separation distance of at least 500mm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F16	Is a Safety Officer trained in the use of gas detection equipment and LFG- related hazards present on-site throughout the groundwork phase? *The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: •CH ₄ : 0-100% and LEL: 0-100%/v •CO ₂ : 0-100% •O ₂ : 0-21%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17a	Periodically during groundwork construction, Is the works area monitored for CH ₄ CO ₂ and O ₂ using appropriately calibrated portable gas detection equipment? *The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not Observed
F17b	Is routine monitoring carried out in all excavations, manholes, created by temporary storage of building materials on-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F17c	Are all measurements in excavations made with monitoring tube located not more than 10mm from exposed ground surface?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F18	For excavations deeper than 1m, are measurements conducted? • At ground surface before excavation commences;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

(Construction Phase)

Environmental Site Inspection Checklist (Rev. 2)

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

G	Landscape and Visual Impacts	N/A or Not Observed	Yes	No	Remarks / Photo
G1	Is the work site confined within site boundaries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G2	Is damage to surrounding areas avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G3	Are the protective fencing erected along or beyond the perimeter of the tree protection zone of each individual tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G4	Is early planting using fast growing plants at strategic locations within site implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G5	Is boundary green belt planting implemented around the site perimeter and the construction of temporary soil bunds?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G6	Is temporary landscape treatment as green surface cover implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
G7	Are existing and affected tree which identified as ecological significant preserved whenever possible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Observed

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

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

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

Follow up action for previous Site Inspection:

1. The frequency of watering to the unpaved area and work area in Portion A were increased.
2. The NRMN Label was labelled on the generator at SBA.

Observation(s):

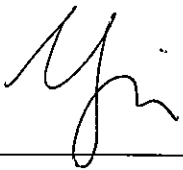
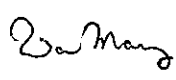

1. The site area in SBA is dry and fugitive dust is observed.
2. Vehicle washing shall be implemented in SBA.
3. More than 20 bags of cement are not covered entirely by impervious sheets in SBA.
4. Construction runoff shall be collected in lower area and divided to silt removal facilities at Portion D.

Reminder(s):

1. The Contractor has been reminded to schedule watering for Portion D.

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

1. The Contractor has been reminded to schedule watering and to increase the frequency of watering if necessary in SBA and Portion D.
2. The Contractor has been reminded to implement vehicle washing at the exit of Portion.
3. The Contractor has been reminded to cover the cement bags entirely.
4. The Contractor has been reminded to ensure construction runoff shall be divided into silt removal facilities.


	Environmental Team Representative:	IEC's Representative:	Contractor's Representative:	Engineer's Representative
Signature:		/		
Name:	Andy Ng	/	William Wan	Sylvia Ho
Date:	27 Feb 2023	/	27 Feb 2023	27 Feb 2023





PART I Follow-up status of the previous site inspection

Observation and Recommendation	Follow-up status
 <p>1. The fugitive dust is observed in Portion A.</p>	 <p>1. The frequency of watering to the unpaved area and work area in Portion A were increased.</p>
 <p>2. The lack of NRMN Label is observed in the generator at SBA.</p>	 <p>2. The NRMN Label was labelled on the generator at SBA.</p>

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
  <p>1. The site area in SBA is dry and fugitive dust is observed.</p>	  <p>The Contractor scheduled watering in SBA.</p>
 <p>2. Vehicle washing shall be implemented in SBA.</p>	 <p>The Vehicle washing was implemented in SBA</p>

Observation and Recommendation	Follow-up status
	 <p data-bbox="823 757 1469 813">The wheel washing facilities will be established in SBA at Mid-March 2023</p>
 <p data-bbox="129 1339 783 1395">3. More than 20 bags of cement are not covered entirely by impervious sheets in SBA.</p>	 <p data-bbox="823 1339 1469 1373">The cement bags were removed.</p>

Observation and Recommendation	Follow-up status
 <p>4. The Contractor has been reminded to schedule watering for Portion D.</p>	 <p>The Contractor scheduled watering in Portion D</p>
 <p>5. Construction runoff in the lower area at Portion D shall be collected and divided to silt removal facilities.</p>	 <p>The Contractor has set up pit and pump for water collection at Portion D.</p>

Appendix K Environmental Mitigation Implementation Schedule (EMIS)

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

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

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

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

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

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

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

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

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

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Erosion Control Measures							
S5.8.2	S5.2.2	<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	✓

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

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

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

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

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

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

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

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

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

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

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

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

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

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
LFG							
Within NENT Landfill Extension							
S7	LFG1	Special LFG precautions should be taken due to close proximity of NENT landfill extension site to existing landfill to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity).	To minimise the risk of LFG hazards to personnel in construction site	Contractor	Entire construction site	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97)	✓
S7	LFG2	Prominent safety warning signs should be erected on-site to alert all personnel and visitors of LFG hazards during excavation works.				F&IU (Confined Spaces) Regulations	✓
S7	LFG3	No smoking or burning should be permitted on-site.				Code of Practice on Safety and Health at Work in Confined Spaces	✓
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)	✓
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.				F&IU (Confined Spaces) Regulations Code of Practice on Safety and Health at Work in Confined Spaces	✓

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

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

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

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

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

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Landscape and Visual Phases							
S8	LV1	<u>Advanced screening tree planting</u> <ul style="list-style-type: none"> Early planting using fast growing trees and tall shrubs at strategic locations within site to block major view corridors to the site from the VSRs, and to locally screen haul roads, excavation works and site preparation works. Roadside planter and shrub planting design in front of Cheung Shan Temple. 	To minimise the impact on existing vegetation retained by personnel in construction To provide initiation on permanent landscape and visual mitigation measures	Contractor	Entire construction site	DEVB TC(W) No. 4/2020 - Tree Preservation DEVB TC(W)) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features	Advanced screen tree planting is under planning.
S8	LV2	<u>Boundary Green Belt planting</u> <ul style="list-style-type: none"> Considerable planting belts proposed around the site perimeter and the construction of temporary soil bunds will screen the landfill operations to a certain degree. Fast growing and fire resistant plant species will be used. 				DEVB TC(W) No. 6/2011 - Maintenance of Man-made Slopes and Emergency Repair on Stability of Land	To be implemented during operation phase
S8	LV3	<u>Temporary landscape treatment as green surface cover</u> <ul style="list-style-type: none"> For certain areas where landfilling operations would have to be suspended temporarily for periods of years, simple temporary landscape treatment such as hydroseeding should be considered. During construction and operational phases, grass hydroseeding or synthetic covering material of green colour should also be used as a temporary slope cover if applicable. 					Grass hydroseeding will be applied at Portion E3-2 within the coming 1 months.
S8	LV4	<u>Existing tree preservation</u> <ul style="list-style-type: none"> Transplant existing trees and vegetation, which are identified as ecologically significant in Ecological Impact Assessment and as rare tree species recorded in the tree survey, under circumstances where technically feasible. For all affected trees, the principle of avoidance of tree felling and tree transplanting of tree before felling should apply whenever possible. A tree felling application should be submitted to DEVB-GLTMS and be approved before any trees are felled or transplanted. 					✓







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

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Ecology							
General Protection Measures:							
S10	E1	Restriction of construction activities to the work areas that would be clearly demarcated.	To minimise environmental impacts and therefore potential ecological impacts within and near the construction site	Contractor	Entire construction site	Practice Note for Professional Persons (ProPECC), Construction Site Drainage (PN1/94)	✓
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.				Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes, EPD (1992)	✓
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.				ETWB TC(W)) No. 33/2002 Management of Construction and Demolition Material Including Rock	✓
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.				DEVB TC(W) No. 6/2010 Trip Ticket System for Disposal of Construction and Demolition Materials	✓
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.				ETWB TC(W)No.19/2005 Environmental Management on Construction Sites	✓
S10	E10	Construction phase mitigation measures in the Practice Note for Professional Persons on Construction Site Drainage.					✓

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

EIA Ref.	EM&A Log Ref	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Ecology							
General Protection Measures:							
S10	E11	Design and set up of the temporary on-site drainage system will be undertaken by the contractor prior to the commencement of construction.	To minimise environmental impacts and therefore potential ecological impacts within and near the construction site	Contractor	Entire construction	WBTC No. 12/2002, Specifications Facilitating the Use of Recycled Aggregates	✓
S10	E12	Design and incorporation of silt/sediment traps in the permanent drainage channels to enhance deposition rates and regular removal of repositied silt and grit.				WBTC Nos. 25/99,25/99A and 25/99C. Incorporation of Information on Construction and Demolition Material Management in Public Works Subcommittee Papers	✓
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.					To be implemented during rainy seasons
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 to SBA	PYE	Dust	Speed limit, covering of materials and water spraying
Permanent site office foundation works with pouring of concrete		Dec 22 to June 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 June 23	Portion A, Portion E3-1	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 June 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	PYE	Generation of C&D waste	Implementation of trip ticket system, waste recycling, internal waste transfer
Tree Felling		Dec 22 to June 23	Portion A (until Feb 23), Portion E3-1 (until June 23)	PYE	Generation of yard waste	Implementation of trip ticket system, waste recycling, internal waste transfer

Remark:

PYE is the Sub-contractor for this project.

Appendix M Mitigation Measures of Cultural Landscape Features

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



updated to 8.2.2023

completed chain link fencing
86/3055 = 3%

completed footing
329/3055 = 11%



CO-ORDINATES FOR SITE BOUNDARY

SETTING OUT POINT	EASTING	NORTHING
S001	835400.781	844596.481
S002	835438.429	844606.249
S003	835631.400	844641.074
S004	835733.447	844759.454
S005	835819.369	844833.170
S006	835836.645	844898.888
S007	835911.818	844941.811
S008	836022.263	845045.823
S009	836021.722	845091.072
S010	836072.201	845113.203
S011	836024.330	845102.135
S012	836052.016	845082.450
S013	836083.504	845043.440
S014	836088.244	845035.234
S015	836121.609	845003.991
S016	836146.485	844983.803
S017	836179.396	844961.955
S018	836211.083	844947.123
S019	836238.034	844932.217
S020	836254.713	844912.675
S021	836289.372	844882.150
S022	836312.748	844873.461
S023	836335.369	844846.516
S024	836351.365	844826.426
S025	836353.384	844805.700
S026	836354.427	844786.815
S027	836381.434	844701.456
S028	836411.540	844691.580
S029	836508.825	844650.525
S030	836649.132	844580.676
S031	836687.374	844561.038
S032	836744.096	844536.490
S033	836812.313	844599.086
S034	836853.605	844540.761
S035	836849.133	844531.092
S036	836887.082	844522.842
S037	836819.315	844509.453
S038	836792.456	844491.636
S039	836748.671	844500.361
S040	836701.349	844481.308

SETTING OUT POINT	EASTING	NORTHING
S041	836565.487	844476.508
S042	836448.643	844054.635
S043	836332.773	844048.000
S044	836281.225	844023.718
S045	836249.041	844004.518
S046	836238.083	844115.480
S047	836246.485	844132.568
S048	836221.116	844139.798
S049	836239.876	844071.358
S050	836103.489	844040.647
S051	836072.091	844054.080
S052	836026.843	844063.507
S053	835956.935	844116.156
S054	835946.240	844427.781
S055	835805.998	844286.810
S056	835736.615	844223.435
S057	835727.882	844215.170
S058	835728.112	844204.603
S059	835706.793	844179.533
S060	835696.903	844179.730
S061	835696.809	844164.637
S062	835691.380	844146.782
S063	835672.732	844153.163
S064	835663.311	844178.473
S065	835663.443	844166.287
S066	835648.026	844168.527
S067	835611.614	844181.018
S068	835601.744	844196.787
S069	835616.811	844258.937
S070	835613.886	844293.007
S071	835617.736	844332.081
S072	835628.887	844363.526
S073	835591.597	844388.318
S074	835579.889	844402.135
S075	835574.383	844442.323
S076	835564.883	844453.135
S077	835535.096	844476.300
S078	835516.674	844501.179
S079	835572.593	844532.405
S080	835589.243	844566.849

CO-ORDINATES FOR VEHICULAR ACCESS

SETTING OUT POINT	EASTING	NORTHING
V1	835537.106	844599.614
V1	835400.781	844596.481
V1	835338.934	844533.147
V2	835631.380	844448.783
V2	835672.232	844531.183
V2	835681.806	844191.963

LEGEND

SITE BOUNDARY

SETTING OUT POINT

NENT LANDFILL EXTENSION

WO KENG SHAN ROAD

S040-S041: 53m
S041-S042: 71m
S042-S043: 119m

46m

40m

D ISSUE FOR TENDER		SS	12/20												
Rev	Description	By	Date												
<p>ARUP 奧雅工程顧問 Ove Arup & Partners Hong Kong Limited</p> <p>Project Title Contract No. EP/SP/77/15 North East New Territories Landfill Extension</p> <p>Drawing Title SETTING OUT DETAILS OF SITE BOUNDARY</p> <p>Drawing no. 215523/01/016 Rev. 0</p> <table border="1"> <tr> <td>Drawn BY</td> <td>Date</td> <td>Checked PM</td> <td>Approved</td> </tr> <tr> <td></td> <td>06/20</td> <td></td> <td></td> </tr> <tr> <td>Scale</td> <td>1:2500 WA1</td> <td>Notation</td> <td>TENDER</td> </tr> </table> <p>COPYRIGHT RESERVED</p> <p>環境保護署 Environmental Protection Department</p>				Drawn BY	Date	Checked PM	Approved		06/20			Scale	1:2500 WA1	Notation	TENDER
Drawn BY	Date	Checked PM	Approved												
	06/20														
Scale	1:2500 WA1	Notation	TENDER												

Appendix N Ecological Monitoring Record

Post-translocation monitoring photo record extracted from post-translocation report (Febraury 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 : Branch condition of the transplanted individual AS-02.

B.2 Lamb of Tartary *Cibotium barometz*



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



Photo B.2.2. : Leaf condition of the transplanted individual CB-01.



Photo B.2.3. : Leaf condition of the transplanted individual CB-01.



Photo B.2.4. : Stem condition of the transplanted individual CB-01.

B.3 **Bottlebrush Orchid *Goodyera procera***



Photo B.3.1: Individual GP-01. Partially wilted leaf.



Photo B.3.2: Individual GP-02. Leaning.



Photo B.3.3: Individual GP-03. Perforated leaves.



Photo B.3.4: Individual GP-03. Perforated leaves.



Photo B.3.5: Individual GP-04.



Photo B.3.6: Individual GP-04. Partially wilted leaves.



Photo B.3.7: Individual GP-05. Partially wilted leaf.



Photo B.3.8: Individual GP-05. Partially wilted leaf.



Photo B.3.9: Individual GP-06. Partially wilted leaf.

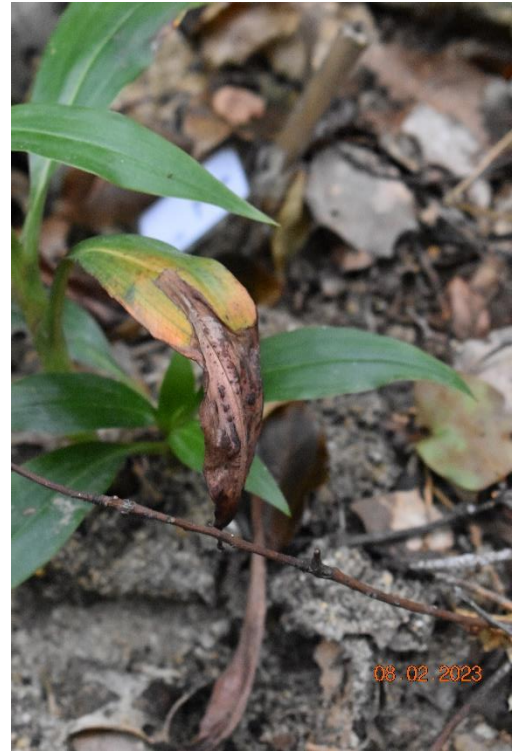


Photo B.3.10: Individual GP-06. Partially chlorotic and wilted leaf.



Photo B.3.11: Individual GP-07.



Photo B.3.12: Individual GP-07. Pest sign.



Photo B.3.13: Individual GP-08. Chlorotic leaves.



Photo B.3.14: Individual GP-08. Minor chlorotic leaves.



Photo B.3.15: Individual GP-09.



Photo B.3.16: Individual GP-10. Holes in leaves.



Photo B.3.17: Individual GP-11. Partially wilted leaves.



Photo B.3.18: Individual GP-12. Perforated leaves.



Photo B.3.19: Individual GP-13.



Photo B.3.20: Individual GP-14. Chlorotic leaves.



Photo B.3.21: Individual GP-15. Partially chlorotic leaves.



Photo B.3.22: Individual GP-16.



Photo B.3.23: Individual GP-17. Partially wilted leaf.



Photo B.3.24: Individual GP-18. Partially wilted leaves.



Photo B.3.25: Individual GP-19.

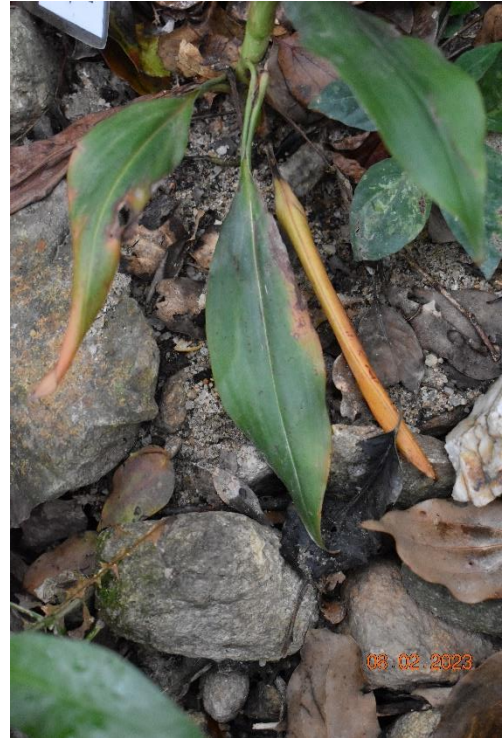


Photo B.3.26: Individual GP-19. Chlorotic and partially wilted leaves.

B.1 Incense Tree *Aquilaria sinensis*

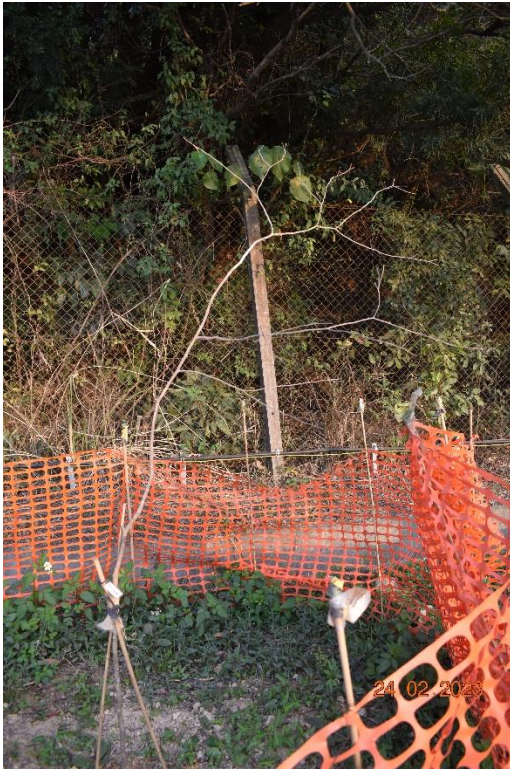


Photo B.1.1 : General view of the transplanted individual AS-03.



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



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

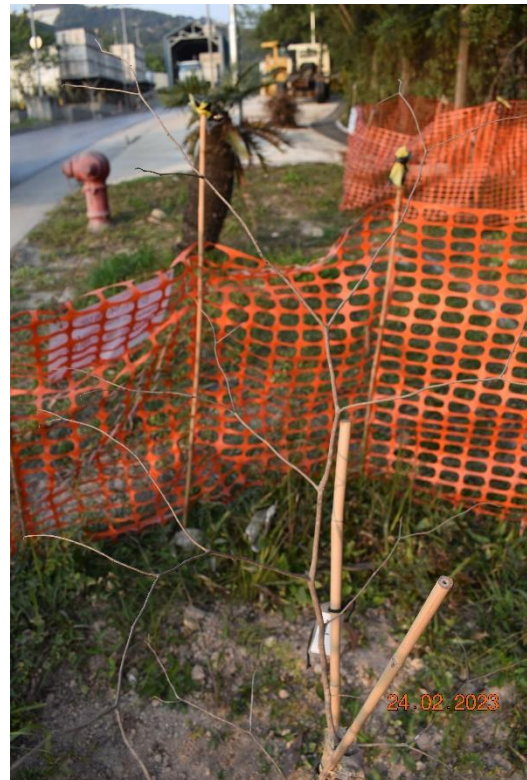


Photo B.1.4 : Branch condition of the transplanted individual AS-02.

B.2 Lamb of Tartary *Cibotium barometz*



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



Photo B.2.2. : Leaf condition of the transplanted individual CB-01.



Photo B.2.3. : Leaf condition of the transplanted individual CB-01.



Photo B.2.4. : Stem condition of the transplanted individual CB-01.

B.3 **Bottlebrush Orchid *Goodyera procera***



Photo B.3.1: Individual GP-01.



Photo B.3.2: Individual GP-02.



Photo B.3.3: Individual GP-03. Perforated leaves.



Photo B.3.4: Individual GP-03. Perforated leaves.



Photo B.3.5: Individual GP-04.



Photo B.3.6: Individual GP-04. Partially wilted leaves.



Photo B.3.7: Individual GP-05. Partially wilted leaf.



Photo B.3.8: Individual GP-05. Partially wilted leaf.



Photo B.3.9: Individual GP-06. Partially wilted leaf.

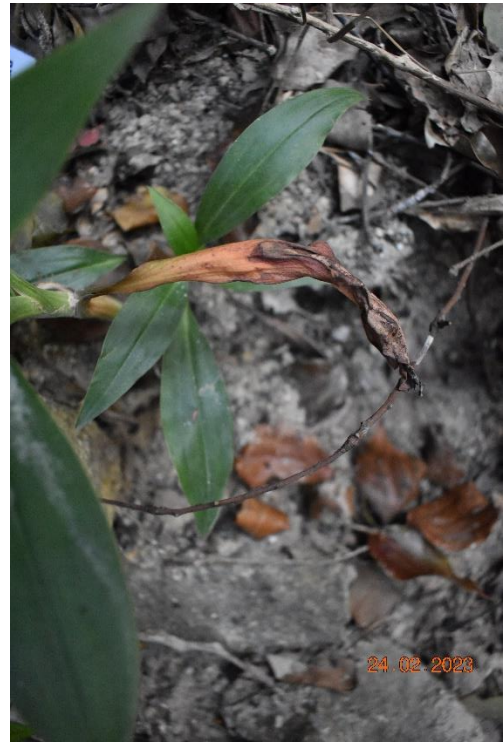


Photo B.3.10: Individual GP-06. Partially wilted leaf.



Photo B.3.11: Individual GP-07.

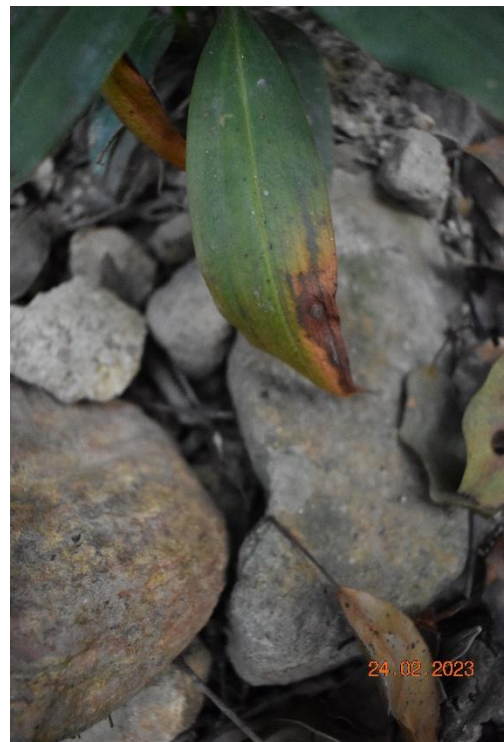


Photo B.3.12: Individual GP-07. Partially wilted leaf.



Photo B.3.13: Individual GP-08. Chlorotic leaves.



Photo B.3.14: Individual GP-08. Minor chlorotic leaves.



Photo B.3.15: Individual GP-09.



Photo B.3.16: Individual GP-10. Holes in leaves.



Photo B.3.17: Individual GP-11. Partially wilted leaves.



Photo B.3.18: Individual GP-12. Perforated leaves.



Photo B.3.19: Individual GP-13.



Photo B.3.20: Individual GP-14. Chlorotic leaves.



Photo B.3.21: Individual GP-15.



Photo B.3.22: Individual GP-16.



Photo B.3.23: Individual GP-17.



Photo B.3.24: Individual GP-18. Partially wilted leaves.



Photo B.3.25: Individual GP-19.

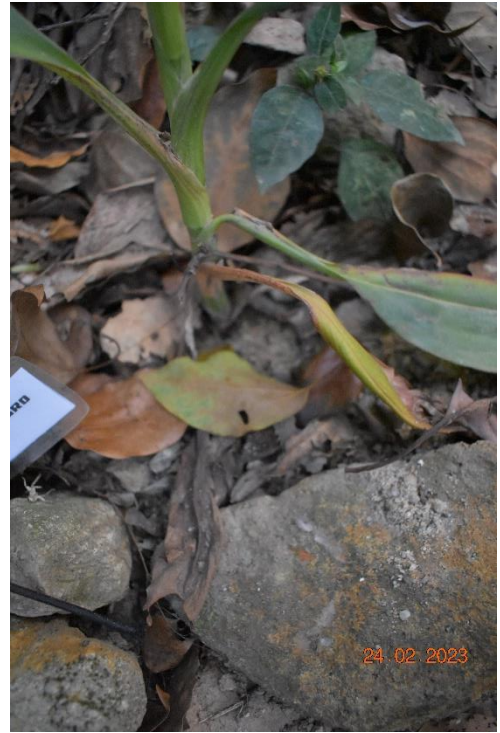


Photo B.3.26: Individual GP-19. Chlorotic leaves.

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	Submission Date (12 Oct 2022)
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	Submission Date (19 Jan 2023) 1 st monitoring (24 Nov 2022) 2 nd monitoring (9 Dec 2022) 3 rd monitoring (21 Dec 2022) 4 th monitoring (13 Jan 2023) 5 th monitoring (26 Jan 2023) 6 th monitoring (8 Feb 2023) 7 th monitoring (24 Feb 2023)
2.8	2.10	Translocation and translocation monitoring	Translocation was carried out in July 2022 Submission Date (27 December 2022) 1 st monitoring (29 Aug 2022) 2 nd monitoring (28 Sep 2022) 3 rd monitoring (28 Oct 2022) 4 th monitoring (28 Oct 2022) 5 th monitoring (29 Dec 2022) 6 th monitoring (30 Jan 2023) 7 th monitoring (24 Feb 2023)

FEP Condition	EP Condition	Submission / Measures	Status
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)

Prepared by:

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

T: +852 3664 6888

F: +852 3664 6999

E: hongkong@aurecongroup.com

aurecon

*Bringing ideas
to life*

