14 March 2024

Our Ref: BL/JC/MC/KW/N74463/24/tt

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

Attn: Ms. Trista Lau

Dear Sirs,

Contract No. EP/SP/77/15
North-East New Territories Landfill Extension (NENTX)
NENTX – Submission of Monthly EM&A Report (No. 15) - February 2024

In accordance with Condition 3.3 of the EP-292/2007 and FEP-02/292/2007 for the North East New Territories (NENT) Landfill Extension Project (the Project), we are now submitting 2 hard copies and one electronic copy (in CD-ROM format) of the Monthly EM&A Report (No. 15) - February 2024 for the construction stage dated 14 March 2024 together with ET's certification letter and IEC's verification for your perusal.

If you have any questions, please contact our Matt Choy at 2902 5261.

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

Colin Mitchell
Project Manager

Encl.

cc. EPD – Davy Lau / Nikita Chan (by email only)
Arup – Anson Cheung (1 copy & email)
MIEL – Steve Kok / Claudine Lee (email only)
Aurecon – Fredrick Leong (1 copy & email)
VHK – JC / MC / KW

40/F, One Taikoo Place, 979 King's Road, Quarry Bay, Hong Kong
Mailing: P.O. Box 265 Fanling Post Office, N.T.
Tel: +852 2902 5200 · Fax: +852 2177 3866

香港鰂魚涌英皇道979號太古坊一座40樓
郵寄: 粉嶺郵政局265號郵箱
Tel: +852 2902 5200 · Fax: +852 2177 3866

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

Monthly Environmental Monitoring and Audit Report (No. 15) – February 2024

2024-03-14

aurecon

Bringing ideas to life

MEINHARDT
Consulting Engineers . Planners . Managers
工程設計 . 策劃 . 統籌

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

Our Ref.: CL/91823/1098-VES
Date: 13 March 2024

By Email

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

Attn.: Mr. Colin Mitchell

Dear Sir

Re: Contract No. EP/SP/77/15
North-East New Territories Landfill Extension (NENTX)
Monthly Environmental Monitoring and Audit Report (No.15) – February 2024

I refer to Condition 3.3 under Environmental Permit No. EP-292/2007 and Further Environmental Permit No. FEP-01/292/2007 and FEP-02/292/2007, regarding the submission of a monthly Environmental Monitoring and Audit report. I hereby verify the captioned "Monthly Environmental Monitoring and Audit Report (No.15) – February 2024" dated 13 March 2024.

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

Yours faithfully
MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD

Claudine Lee
Independent Environmental Checker

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

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

Ref: P521530-0000-REP-NN-0085

By Email

13 March 2024

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.15) – February 2024

In accordance with the requirement specified in Condition 3.3 of Environmental Permit No. EP-292/2007 and Further Environmental Permit No. FEP-02/292/2007, we are pleased to submit the certified "Monthly Environmental Monitoring and Audit Report (No.15) – February 2024" dated 13 March 2024 for your verification.

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

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

Fredrick Leong
Environmental Team Leader

Encl.
1. Monthly Environmental Monitoring and Audit Report (No.15) – February 2024

cc.
1. Veolia (Contractor) – Mr. Matt Choy (By email: matt.choy@veolia.com)

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. 15) – February 2024				
Document ID			**Project number**			
File path						
Client		Veolia Hong Kong Holding Ltd.				
Client contact			**Client reference**			
Rev	**Date**	**Revision details/status**	**Author**	**Reviewer**	**Verifier** (if required)	**Approver**
0	7 March 2024	Submit to IEC	J Man	K.Chau		FL
1	14 March 2024	Submit to IEC	J Man	K.Chau		FL
Current revision		1				

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

Contents

Figure

Appendix

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 15th Monthly EM&A Report presents the EM&A works conducted from 1 to 29 February 2024 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during Report Period

The major construction works undertaken during the reporting period include:

-	Material loading and unloading, site traffic at Portion A, SBA to alternative disposal ground
-	Construction of site buildings at Portion D
-	Site clearance at Portion A, B2/E1, E3-1 & E4
-	Installation of permanent fencing at Portion A, B1 & E4
-	Site formation at Portion A & E3-1
-	Tree felling at Portion B2/E1, E3-1 & E4
-	Shotcreting (Permanent and Temporary)
-	Soil Nail Installation at Portion A, B2/E1 & E4

Environmental Monitoring and Audit Progress

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

	Items	Times	Date
-	Air Quality Monitoring during normal weekdays at each monitoring station	5 times	3, 9, 15, 21 & 27 February 2024
-	Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	9, 15, 21 & 27 February 2024
-	Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	15 February 2024
-	Landfill Gas Monitoring during normal weekdays for Construction Works	20 times	1 to 3, 5 to 8, 15 to 17, 19 to 24, 26 to 29 February 2024
-	Joint Environmental Site Inspection	4 times	5, 15, 19 & 26 February 2024

Environmental Exceedance

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

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

Environmental Non-Conformance/Complaint/Summons and Prosecution

No non-compliance event, complaint and summons/prosecutions were recorded during the reporting period.

Reporting Change

There was no reporting change in the reporting period.

Future Key Issues

Works to be undertaken in the next month include:

-	Material loading and unloading, site traffic at Portion A, SBA to alternative disposal ground
-	Construction of site buildings at Portion D
-	Site clearance at Portion A, B2/E1, E3-1 & E4
-	Installation of permanent fencing at Portion A, B1 & E4
-	Site formation at Portion A & E3-1
-	Tree felling at Portion B2/E1, E3-1 & E4
-	Shotcreting (Permanent and Temporary)
-	Soil Nail Installation at Portion A, B2/E1 & E4

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

1 Introduction

1.1 Background

1.1.1 The North East New Territories Landfill Extension (the NENTX Project) is located adjacent to the existing North East New Territories (NENT) Landfill at Ta Kwu Ling. The extension site is located in a valley covering mainly the existing NENT Landfill Stockpile and Borrow Area that was formed to the east of the existing landfill as part of the original site development of the landfill, and layout plan shown in **Figure 1**.

1.1.2 The NENTX is a designated project. The Environmental Impact Assessment (EIA) Report (AEIAR-111/2007) and an Environmental Monitoring and Audit Manual were approved on 20 September 2007. The project is governed by an Environmental Permit (EP) (EP-292/2007) which was granted on 26 November 2007. A further of EP (FEP) was applied and the FEP (FEP-01/292/2007) was subsequently granted on 28 April 2022. Another further of EP (FEP-02/292/2007) was subsequently granted on 23 August 2023.

1.1.3 In accordance with the requirements specified in Section 2.7 to 2.11 and Section 12.3 of the approved Environmental Monitoring and Audit (EM&A) Manual and Environmental Permit and Further Environmental Permit (EP and FEP) Condition 3.3, Monthly EM&A report should be submitted to the Director of Environmental Protection (DEP), within 2 weeks after the end of the reporting month. The submissions shall be certified by the Environmental Team (ET) Leader and verified by the Independent Environmental Checker (IEC).

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

1.2 Nature, Scale and Scope of the captioned Designated Project

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

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

Item(s)	Content
Nature of Designated Project	Construction and operation of a landfill for waste as defined in the "Waste Disposal Ordinance" (Cap. 354)
Scale and Scope of Designated Project	The Project mainly consists of the followings: - Construction and operation of a landfill extension of about 70 hectares with a target void space of at least 19 million cubic metres on the eastern side of the existing NENT Landfill, including the followings: - i. Site formation and preparation; ii. Installation of liner system; iii. Installation of leachate collection, treatment and disposal facilities; iv. Installation of gas collection, utilization and management facilities; v. Utilities provisions and drainage diversion; vi. Landfilling operation; vii. Restoration and aftercare in subsequent stages; and viii. Measures to mitigate environmental impacts as well as environmental monitoring and auditing to be implemented.

1.3 Purpose of this Report

1.3.1 This is the 15th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 01 to 29 February 2024.

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

Section 15 – Conclusion

2 Project Information

2.1 Construction Activities

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

2.2 Project Organization & Management Structure

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

Table 2-1 Contact Information of Key Personnel

Party	Name	Contact Number
Contractor (Veolia Hong Kong Holding Ltd.)	Mr. Matt Choy	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 2-2**. The detail status of statutory environmental compliance with the EP conditions under the EIAO, submission status under the FEP & EP for NENTX project are shown in **Appendix C**.

Table 2-2 Status of Submissions required under the FEP & EP during Reporting Period

FEP Condition	EP Condition	Submission / Measures	Status
2.1	2.3	Management Organization of Main Construction Companies	Submitted
2.2	2.4	Setting up of Community Liaison Group (CLG)	Community Liaison Group was set up.
2.3	2.5	Submission of EM&A Manual	Submitted
2.5	2.7	Submission of Vegetation Survey (Transplantation Proposal)	Submitted
2.6	2.8	Submission of translocation proposal	Submitted
2.7	2.9	Submission of Transplantation Report and Post-Transplantation Monitoring	Submitted
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
3.3	3.3	Submission of Monthly EM&A Report	Submitted

2.4 Status of Environmental Approval Document

2.4.1 A summary of the relevant valid permits, licences, and/or notifications on environmental protection for this Project since the granting of the FEP & EP is presented in **Table 2-3**.

Table 2-3 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-01/292/2007	Throughout the Contract	Permit granted on 28 April 2022
	FEP-02/292/2007	Throughout the Contract	Permit granted on23 August 2023
Notification of Construction Works as required under Air Pollution Control (Construction Dust) Regulation	479809	Throughout the Construction Phase	Notified on 13 May 2022
Registration of Waste Producer under Waste Disposal Ordinance	7043692	Throughout the Contract	Registered on 13 April 2022
Registration as Chemical Waste Producer	5213-642-P1034-18	Throughout the Contract	Registered on 11 July 2022
Effluent Discharge License under Water Pollution Control Ordinance	WT00042301-2022	31 October 2027	Permit granted on 18 October 2022 Variation of Licence (Permit granted on 7 February 2023)

2.5 Environmental Monitoring and Audit Progress

2.5.1 A summary of the monitoring activities in this reporting period is presented in **Table2-4**.

Table 2-4 Summary of the Monitoring Activities in this Reporting Period

	Items	Times	Date
-	Air Quality Monitoring during normal weekdays at each monitoring station	5 times	3, 9, 15, 21 & 27 February 2024
-	Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	9, 15, 21 & 27 February 2024
-	Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	15 February 2024
-	Landfill Gas Monitoring during normal weekdays for Construction Works	20 times	1 to 3, 5 to 8, 15 to 17, 19 to 24, 26 to 29 February 2024
-	Joint Environmental Site Inspection	4 times	5, 15, 19 & 26 February 2024

Air Quality

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

Noise

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

Groundwater

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

Surface Water Quality

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

Landfill Gas

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

Landscape and Visual

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

Cultural Heritage

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

Ecology

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

Environmental Site Inspection

4 weekly environmental site inspections were carried out during the reporting period. A joint environmental site inspection was carried out by the representatives of the Employer's Representative (ER), the Contractor, IEC and the ET on 19 February 2024. The Contractor has generally implemented part of the mitigation measures as recommended. No site inspection was conducted by Environmental Protection Department-Regional Office (North) (EPD-RNG) during the reporting period.

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 D**. The locations of dust monitoring stations are shown in **Table 3-1**. The monitoring parameters, frequency and duration are shown in **Table 3-2**.

Table 3-1 Locations of Dust Monitoring Stations

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

Remarks:

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

AM(D)1 Tung Lo Hang, AM(D)2 Heung Yuen Wai, AM(D)3 Wo Keng Shan Tsuen are the air monitoring stations for the construction phase EM&A programme as identified in the approved EM&A Manual for the Project. The access to Tung Lo Hang, Heung Yuen Wai and Wo Keng Shan Tsuen were denied. A search for alternative air monitoring locations (AM1, AM2 & AM3) was carried out during the site visit.

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

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

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

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

3.1.3 Monitoring Equipment

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

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

Table 3-3 Dust Monitoring Equipment

Equipment	Model	Expiry Date	Monitoring Station
High Volume Sampler (HVS)	TE-5170X (S/N: 1105)	3 Mar 2024	AM1
	TE-5170X (S/N: 1106)		AM2
	TE-5170X (S/N: 1856)		AM3
Direct Reading Dust Meter	Sibata LD-5R (S/N: 0Z4545)	27 Nov 2024	AM1 to AM3
	Sibata LD-5R (S/N: 882106)		
	Sibata LD-5R (S/N: 942532)		
Calibration Kit (for HVS)	TE-5028A (S/N: 3702)	31 Mar 2024	AM1 to AM3

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

3.1.4 Monitoring Methodology

1-hr TSP Monitoring

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

Measuring Procedures

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

Procedure of starting monitoring

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

Procedure of setting measurement timer

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

Calibration & Maintenance

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

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

Quality Audit

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

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

24-hr TSP Monitoring

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

Measuring Procedures

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

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

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

Calibration & Maintenance

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

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

The detail procedure of calibration of HVS is listed below:

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

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

3.1.5 Monitoring Results

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

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

Month	Average 1-hr TSP Concentration, μg/m³ (Range)		
	Dust Monitoring Station		
	AM1	AM2	AM3
Feb 2024	28 (24 – 36)	50 (39 – 56)	54 (40 – 62)
Action Level	**>285**	**>279**	**>285**
Limit Level	**>500**		

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

Month	Average 24-hr TSP Concentration, µg/m³ (Range)		
	Dust Monitoring Station		
	AM1	AM2	AM3
Feb 2024	98 (86 – 118)	118 (107 – 123)	117 (104 – 143)
Action Level	**>164**	**>152**	**>163**
Limit Level	**>260**		

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

Table 3-6 Summary of Impact 1-hr & 24-hr TSP Exceedance during the Reporting Period

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

Remarks: * equal to non-project related

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

3.1.6 Wind Data Monitoring

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

3.1.7 Recommended Mitigation Measures

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

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

3.1.8 Event and Action Plan

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

Table 3-7 Event and Action Plan for Dust Impact

Event	ET	IEC	Contractor
Exceedance of Action Level			
Exceedance for one sample	• Identify source • Prepare Notification of Exceedance • Inform IEC and Contractor • Repeat measurement to confirm findings • Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below action level	• Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss with ET and Contractor on proposed remedial measures	• Rectify any unacceptable practice • Amend working methods if appropriate
Exceedance for two or more consecutive samples	• Identify source • Prepare Notification of Exceedance • Inform Contractor and IEC • Repeat measurements to confirm findings • Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below action level • Discuss with IEC for remedial action required • Ensure remedial measures are properly implemented • Continue monitoring at daily intervals if exceedance is due to the Project • If no exceedance for 3 consecutive days, cease additional monitoring	• Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss with ET and Contractor on proposed remedial measures • Review with analysed results submitted by ET • Review the proposed remedial measures by Contractor • Supervise the implementation of remedial measures	• Submit proposals for remedial actions to IEC within 3 working days of notification • Implement the agreed proposals • Amend proposal if appropriate

Event	ET	IEC	Contractor
Exceedance of Limit Level			
Exceedance for one sample	• Identify source • Prepare Notification of Exceedance • Inform IEC and Contractor • Repeat measurement to confirm findings • Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below limit level • Assess effectiveness of Contractor's remedial actions and keep EPD and IEC informed of the results	• Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss with ET and Contractor potential remedial actions • Supervise the implementation of remedial measures	• Take immediate action to avoid further exceedance • Submit proposals for remedial actions to IEC within 3 working days of notification • Implement the agreed proposals • Amend proposal if appropriate
Exceedance for two or more consecutive samples	• Identify source • Prepare Notification of Exceedance • Inform IEC and EPD the causes and actions taken for the exceedances • Discuss with IEC for remedial action required • Ensure remedial measures are properly implemented • Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and informed of the results • Increase monitoring frequency to confirm findings • If exceedance stops, cease additional monitoring	• Verify the Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working methods • Discuss amongst ET and Contractor on the potential remedial actions. • Review Contractor's remedial actions whenever necessary to assure their effectiveness • Supervise the implementation of remedial measures	• Take immediate action to avoid further exceedance • Submit proposals for remedial actions to IEC of notification • Implement the agreed proposals • Resubmit proposals if problem still not under control • Stop the relevant activity of works until the exceedance is abated

4 Noise Monitoring

4.1 Monitoring Requirement

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

4.2 Monitoring Locations, Parameters and Frequency

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

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

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

Table 4-1 Noise Monitoring Locations

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

Remarks:

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

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

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

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

Table 4-2 Noise Monitoring Parameters, Frequency and Duration

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

4.3 Monitoring Equipment

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

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

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

Table 4-3 Noise Monitoring Equipment

Equipment	Model	Expiry Date
Sound Level Meter	NTi XL2 (S/N: A2A-09696-E0)	3 Apr 2024
Acoustic Calibrator	Rion NC-75 (S/N: 34724245)	2 Aug 2024
Anemometer	RS PRO RS-90 (S/N: 210722208)	12 Feb 2025

4.4 Monitoring Methodology

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

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

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

Calibration & Maintenance

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

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

4.5 Monitoring Results

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

Table 4-4 Summary of Noise Monitoring Results during Normal Working Hours (07:00-19:00, Monday to Saturday)

Month	Average Leq, 30min, dB(A) (Range)	
	Noise Monitoring Station	
	NM1a	NM2a
Feb 2024	60.7 (60.1 – 61.3)	57.0 (55.8 – 57.8)
Action Level	**When one documented complaint is received**	
Limit Level	**>75dB(A)**	

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 H**.

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

4.5.4 The Summary of Impact Noise Exceedance are shown in **Table 4-5**.

Table 4-5 Summary of Impact Noise Exceedance during the Reporting Period

Noise Monitoring Station		NM1(a)		NM2(a)	
Level Exceedance / Parameters		Action Level	Limit Level	Action Level	Limit Level
LA_{eq}(30mins)	Exceedance Date	-	-	-	-
	Exceedance Count	0	0	0	0

Remarks: * equal to non-project related

4.5.5 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 H**.

4.6 Recommended Mitigation Measures

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

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

4.7 Event and Action Plan

4.7.1 Should non-compliance of the criteria occurs, action in accordance with the action plan in **Table 4-6** shall be carried out.

Table 4-6 Event and Action Plan for Construction Noise Monitoring

Event	ET	IEC	Contractor
Exceedance of Action Level	• Identify source, investigate the causes of exceedance • Prepare Notification of Exceedance • Inform IEC and Contractor • Report the results of investigation to IEC, and Contractor • Discuss with Contractor and IEC for formulate remedial measures • Ensure remedial measures are properly implemented • Have additional monitoring if exceedance is due to the Project. If exceedance stops, cease additional monitoring	• Verify the Notification of Exceedance • Review the analysed results submitted by ET • Discuss with ET, and Contractor on the potential remedial actions • Review the proposed remedial measures • Supervise the implementation of remedial measures	• Submit noise mitigation proposals to IEC • Implement the agreed noise mitigation proposals
Exceedance of Limit Level	• Identify source, investigate the causes of exceedance • Prepare Notification of Exceedance • Inform IEC and Contractor • Repeat measurements to confirm findings • Discuss with Contractor and IEC for remedial measures • Ensure remedial measures are properly implemented • Assess effectiveness of Contractor's remedial actions and keep IEC and EPD informed of the results • Have additional monitoring if exceedance is due to the Project. If exceedance stops, cease additional monitoring	• Verify the Notification of Exceedance • Review the analysed results submitted by ET • Discuss with ET, and Contractor on the potential remedial actions • Review the proposed remedial measures • Supervise the implementation of remedial measures	• Take immediate action to avoid further exceedance • Submit proposals for remedial actions to IEC of notification • Implement the agreed proposals • Resubmit proposals if problem still not under control • Stop the relevant portion of works as determined by project proponent until the exceedance is abated.

5 Water Quality Monitoring

5.1 Groundwater Monitoring

5.1.1 Monitoring Requirement

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

5.2 Surface Water Monitoring

5.2.1 Monitoring Requirement

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

5.2.2 Monitoring Locations, Parameters and Frequency

5.2.2.1 Impact surface water monitoring was carried out 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 D**.

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 E**.

Table 5-3 Surface Water Quality Monitoring Equipment

Equipment	Model	Expiry Date
Water Quality Meter	HORIBA U-53 (S/N: PPHNOMXY)	3 Mar 2024
Water Flow Meter	Global Water FP211 (S/N: 22K100858)	26 Mar 2024

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 mS/cm	1 mS/cm	APHA 2510 B
Alkalinity	1 mg/L	1 mg/L	APHA 2320 B
COD	10 mg/L	5 mg/L	APHA 5220 C
BOD_5	3 mg/L	2 mg/L	APHA 5210 B
TOC	1 mg/L	1 mg/L	APHA 5310 B
SS	0.1 mg/L	0.1 mg/L	APHA 2540 D
Ammonia-nitrogen	0.2 mg/L	0.01 mg/L	APHA 4500 NH3 G
TKN	0.4 mg/L	0.1 mg/L	APHA 4500Norg: D
Nitrate	0.5 mg/L	0.01 mg/L	APHA 4500 NO3 I
Sulphate	5 mg/L	1 mg/L	USEPA 375.4
Sulphite	2 mg/L	2 mg/L	APHA 4500 SO3 B
Phosphate	0.01 mg/L	0.01 mg/L	APHA 4500-P B & F
Chloride	0.5 mg/L	0.5 mg/L	USEPA 325.1
Sodium	50 mg/L	50 mg/L	USEPA 6010C
Mg	50 mg/L	50 mg/L	USEPA 6010C
Ca	50 mg/L	50 mg/L	USEPA 6010C
K	50 mg/L	50 mg/L	USEPA 6010C
Fe	50 mg/L	10 mg/L	USEPA 6010C
Ni	1 mg/L	1 mg/L	USEPA 6020A
Zn	10 mg/L	10 mg/L	USEPA 6020A
Mn	1 mg/L	1 mg/L	USEPA 6020A
Cu	1 mg/L	1 mg/L	USEPA 6020A
Pb	1 mg/L	1 mg/L	USEPA 6020A
Cd	0.2 mg/L	0.2 mg/L	USEPA 6020A
Coliform Count	1 cfu/ 100mL	1 cfu/ 100mL	DoE section 7.8, 7.9.4.1 & 3
Oil and Grease	5 mg/L	5 mg/L	APHA 5520 B

QA/ QC Requirements

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

Decontamination Procedures

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

Sampling Management and Supervision

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

Quality Control Measures for Sample Testing

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

- One method blank; and
- One sample duplicate.

5.2.5 Monitoring Results

5.2.5.1 Impact surface water quality monitoring was conducted at WM1 and WM2 on 15 February 2024. No adverse weather was observed during reporting period. The detailed monitoring schedule is shown in **Appendix D**.

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

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

Table 5-5 Summary of Impact Surface Water Monitoring Results

Monitoring Parameter(s)	Monitoring Station					
	WM1			WM2		
	Monitoring Results	Action Level	Limit Level	Monitoring Results	Action Level	Limit Level
pH	7.5	>7.7	>7.8	7.4	>7.6	>7.7
DO in mg/L	7.6	<7.4	<4	7.5	<5	<4
Turbidity in NTU	8.3	>9.2	>9.5	32.7	>108.3	>108.9
Electrical Conductivity in µS/cm	123	---	---	207	---	---
SS in mg/L	2.0	>9.7	>11.4	12.3	>94.5	>94.7
Alkalinity in mg/L	<1	---		60	---	
COD in mg/L	<5			<5		
BOD_5 in mg/L	<2			<2		
TOC in mg/L	<1			1		
Ammonia-nitrogen in mg/L	0.02			0.07		
TKN in mg/L	0.2			0.2		
Nitrate in mg/L	0.40			0.27		
Sulphate in mg/L	104			29		
Sulphite in mg/L	<2			<2		
Phosphorus in mg/L	0.02			<0.01		
Chloride in mg/L	5			7		
Sodium in µg/L	4430			7290		
Magnesium in µg/L	590			1450		
Calcium in µg/L	5510			25400		
Potassium in µg/L	1530			3490		
Iron in µg/L	60			1620		
Nickel in µg/L	1.0			1		
Zinc in µg/L	35			10		
Manganese in µg/L	9			822		
Copper in µg/L	2.0			1		
Lead in µg/L	<1			<1		
Cadmium in µg/L	<0.2			<0.2		
Coliform Count in cfu/100mL	Not Detected			3400		
Oil and Grease in mg/L	<5			<5		

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

Table 5-6 Summary of Impact Surface Water Quality Exceedance during the Reporting Period

Surface Water Quality Monitoring Station		WM1		WM2	
Parameters \ Level Exceedance		Action Level	Limit Level	Action Level	Limit Level
pH	Exceedance Date	-	-	-	-
	Exceedance Count	0	0	0	0
DO	Exceedance Date	-	-	-	-
	Exceedance Count	0	0	0	0
Turbidity	Exceedance Date	-	-	-	-
	Exceedance Count	0	0	0	0
SS	Exceedance Date	-	-	-	-
	Exceedance Count	0	0	0	0

Remarks: * equal to non-project related

5.2.5.5 No exceedance of Action and Limit Level of surface water quality at designated locations was recorded during the reporting period. The Notification of Environmental Quality Limits Exceedance is presented in **Appendix H**.

5.2.6 Recommended Mitigation Measure

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

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

5.2.7 Implementation of the Temporary Surface Water Drainage System (TSWDS)

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

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

5.2.8 Event and Action Plan

5.2.8.1 Should non-compliance of the criteria occurs, action in accordance with the action plan in **Table 5-7** shall be carried out.

Table 5-7 Event and Action Plan for Water Quality

Event	ET	IEC	Contractor
Action level being exceeded by one sampling day	• Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor • Check monitoring data, all plant, equipment and Contractor's working methods • Repeat measurement on next day of exceedance	• Verify Notification of Exceedance • Check monitoring data and Contractor's working methods	• Rectify unacceptable practice • Amend working methods if appropriate
Action level being exceeded by two or more consecutive sampling days	• Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor • Check monitoring data, all plant, equipment and Contractor's working methods • Discuss with Contractor and IEC for remedial measures • Ensure mitigation measures are implemented • Increase the monitoring frequency to daily until no exceedance of Action level • Repeat measurement on next day of exceedance	• Verify Notification of Exceedance • Check monitoring data and Contractor's working method • Discuss with ET and Contractor on possible remedial actions • Review the proposed mitigation measures • Supervise the implementation of mitigation measures	• Submit proposal of additional mitigation measures to IEC of notification • Implement the agreed mitigation measures • Amend proposal if appropriate

Event	ET	IEC	Contractor
Limit Level being exceeded by one sampling day	• Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor; • Check monitoring data, all plant, equipment and Contractor's working methods • Discuss mitigation measures with IEC and Contractor • Ensure mitigation measure are implemented	• Verify Notification of Exceedance • Check monitoring data submitted By ET and Contractor's working method • Discuss with ET and Contractor on possible remedial actions • Review the proposed mitigation measures • Supervise the implementation of mitigation measures	• Critically review the working method • Rectify unacceptable practice • Take immediate corrective actions to avoid further exceedance • Submit proposal of mitigation measures to IEC • Implement the agreed mitigation measures •
Limit level being exceeded by two or more consecutive sampling days	• Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC, contractor and EPD • Check monitoring data, all plant, equipment and Contractor's working methods • Discuss mitigation measures with IEC and Contractor • Ensure mitigation measure are implemented	• Verify Notification of Exceedance • Check monitoring data submitted by ET and Contractor's working method • Discuss with ET and Contractor on possible remedial actions • Review the proposed mitigation measures • Supervise the implementation of mitigation measures	• Critically review the working method • Rectify unacceptable practice • Take immediate corrective actions to avoid further exceedance • Submit proposal of mitigation measures to IEC • Implement the agreed mitigation measures • Resubmit proposals if problem still not under control • Slow down or to stop relevant activity until exceedance is abated

6 Waste Management

6.1.1 Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. Non-inert C&D materials were made up of general refuse, steels and paper/cardboard packaging materials. Steel materials generated from the Project were also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in **Appendix J**.

6.1.2 A total of 106,218 tonnes of C&D materials was reused at alternative disposal ground (NENT Landfill) during the reporting period. A total of 1,771.16 tonnes of C&D materials was imported fill during the reporting period. No Yard waste (collected to Y-Park) was generated during the reporting period. A total of 53.76 tonnes of general refuse and A total of 133.17 tonnes of non-recyclable yard waste was generated during the reporting period. The general refuse generated from the Project were disposed of at the NENT Landfill.

6.1.3 The recommended waste management mitigation measures from EIA report are listed as followed:

- Implement a trip-ticket system to ensure that the movement of C&D materials are properly documented and verified in accordance with DEVB TC(W) No. 6/2010.
- Concrete and masonry should be used as general fill and steel reinforcement bars can be used by scrap steel mills.
- Proper areas should be designated for waste segregation and storage wherever site conditions permit.
- Maximise the use of reusable steel formwork to reduce the amount of C&D material.
- Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement.
- On-site sorting and segregation facility of all type of wastes is considered as one of the best practice in waste management and hence, should be implemented in all projects generating construction waste.
- The sorted public fill and C&D waste should be properly reused.
- Excavated slope, stockpiled material and bund walls should be covered by tarpaulin until used in order to prevent wind-blown dust during dry weather, and to reduce muddy runoff during wet weather.

7 Landfill Gas Monitoring

7.1 Monitoring Requirement during Construction

Monitoring for Construction Works

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

- CH_4: >10% Lower Explosion Limit (LEL);
- CO_2: >0.5%; and
- O_2: <18% by volume.

7.2 Monitoring Locations

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

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

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

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

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

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

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

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

Table 7-1 Locations of LFG Monitoring during Reporting Period

Monitoring Location	Type of works
Portion A +50 mpD to 70 mpD Platform	Excavation Works

7.3 Monitoring Equipment

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

Table 7-2 LFG Monitoring Equipment

Monitoring Parameters	Equipment	Model	Expiry Date
CH_4, CO_2 & O_2	Gas Analyser	GEM5000 (S/N: G505207)	30 Aug 2024

Table 7-3 Landfill Gas Monitoring Detection Limits

Parameters	Detection Limit
CH_4	1% LEL
O_2	0.1%
CO_2	0.1%

7.4 Event and Action Plan (EAP)

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

Table 7-4 Event and Action Plan for the Landfill Gas Monitoring during Construction Phase

Parameter	Monitoring Result	Action
Oxygen (O_2)	Action Level <19% O_2	Ventilate trench/void to restore O_2 to >19%
	Limit Level <18% O_2	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore O_2 to >19%
Methane (CH_4)	Action Level >10% LEL*	Prohibit hot works Increase ventilation to restore CH_4 to <10% LEL
	Limit Level >20% LEL*	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore CH_4 to <10% LEL
Carbon dioxide (CO_2)	Action Level** >0.5%** CO_2	Ventilate to restore CO_2 to <0.5%
	Limit Level >1.5% CO_2	Stop works Evacuate personnel / prohibit entry Increase ventilation to restore CO_2 to <0.5%

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

** This Action Level of CO_2 at 0.5% is set for reference only, assuming no CO_2 emission from a particular location.

Depending on the baseline CO_2 levels, the Action Level at a particular location will be changed.

7.5 Monitoring Results

7.5.1 The LFG monitoring was carried out two rounds (at the beginning of works in the morning and after lunch) at the working days. The monitoring period of each round of LFG monitoring is around 5 minutes.

7.5.2 The LFG monitoring was conducted at Portion A +50 mpD to 70 mpD Platform during the reporting period (Conducted on working days). The LFG monitoring results are summarized in **Table 7-5.**

Table 7-5 Summary of LFG Monitoring Results

LFG Monitoring Station	Monitoring Date	Monitoring Parameter(s)			
		CH_4 in %	LEL in %/v	CO_2 in %	O_2 in %
		Average Monitoring Results			
Portion A +50 mpD to 70 mpD Platform	1 Feb 2024	0	0	0	20.2
	2 Feb 2024	0	0	0	20.1
	3 Feb 2024	0	0	0	20.1
	5 Feb 2024	0	0	0	20.2
	6 Feb 2024	0	0	0	20.1
	7 Feb 2024	0	0	0	20.2
	8 Feb 2024	0	0	0	20.0
	15 Feb 2024	0	0	0	20.1
	16 Feb 2024	0	0	0	20.2
	17 Feb 2024	0	0	0	20.2
	19 Feb 2024	0	0	0	20.2
	20 Feb 2024	0	0	0	20.1
	21 Feb 2024	0	0	0	20.2
	22 Feb 2024	0	0	0	20.2
	23 Feb 2024	0	0	0	20.2
	24 Feb 2024	0	0	0	20.2
	26 Feb 2024	0	0	0	20.2
	27 Feb 2024	0	0	0	20.2
	28 Feb 2024	0	0	0	20.1
	29 Feb 2024	0	0	0	20.1
Action Level		>10% LEL	---	>0.5%** CO_2	<19%
Limit Level		>20% LEL	---	>1.5% CO_2	<18%

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

** This Limit Level of CO_2 at 0.5% is set for reference only, assuming no CO_2 emission from a particular location.

7.5.3 The Summary of Landfill Gas Exceedance are shown in **Table 7-6**.

Table 7-6 Summary of Landfill Gas Exceedance during the Reporting Period

Landfill Gas Monitoring Station		Portion A +50 mpD to 70 mpD Platform	
Parameters \ Level Exceedance		Action Level	Limit Level
CH_4	Exceedance Date	-	-
	Exceedance Count	0	0
CO_2	Exceedance Date	-	-
	Exceedance Count	0	0
O_2	Exceedance Date	-	-
	Exceedance Count	0	0

Remarks: * equal to non-project related

7.5.4 No exceedance of Action and 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 H**.

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

7.6 Recommended Mitigation Measures

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

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

8 Landscape and Visual

8.1 Monitoring Requirement

8.1.1 In order to monitor the landscape and visual impact after providing mitigation measures effectively, all the specified and affected LCAs, LRs and VSRs should be monitored. Implementation of the mitigation measures during construction phase of the Project has been monitored through the regular site inspection/audit.

8.1.2 All relevant environmental mitigation measures listed in the approved EIA Report and the EM&A Manual and their implementation status are summarised in **Appendix L**.

8.2 Result and Observation

8.2.1 Measures to mitigate the landscape and visual impacts during the construction phase has been checked to ensure compliance with the intended aims of the measures within the reporting period. The progress of the engineering works are regularly reviewed on site to identify the earliest practical opportunities for the landscape works to be undertaken.

8.2.2 In order to monitor the landscape and visual impact after providing mitigation measures effectively, all the specified and affected LCAs, LRs and VSRs should be monitored. Implementation of the mitigation measures during construction phase of the Project has been monitored through the regular site inspection/audit.

9 Cultural Heritage

9.1.1 The Mitigation measures for preservation of the cultural landscape feature located within the project area was conducted before commencement of construction of the project based on the requirement of Survey Report and Mapping Records for Boulder Paths BP1 & 2 & Conditions of G2, G4, G5 G6, G7, G8, G14, G15, G25, G26 and G27 within NENTX.

9.1.2 The survey and mapping works carried out on 23 August 2022 and the verification works carried out on 23 August 2022 confirmed that both 2 boulder paths BP1 and BP2 are fall outside the site boundary and the Project area.

9.1.3 All the affected graves within the waste boundary have been removed in accordance with section 119(1) of the Public Health and Municipal Services Ordinance (Cap 132). Removal of the graves as shown on Figure 2 attached to the FEP was proven by the visit of graves on 8 July 2022. All the graves as shown on Figure 2 attached to the FEP were abandoned and removed and no mitigation or preservation measures is necessary.

9.1.4 The Survey Report and Mapping Records for Boulder Paths BP1 & 2 was certified by ET on 10 Oct 2022, was verified by IEC and submitted to EPD on 12 Oct 2022. The Conditions of G2, G4, G5 G6, G7, G8, G14, G15, G25, G26 and G27 within NENTX was certified by ET, was verified by IEC and submitted to EPD on 15 Oct 2022. No later than four weeks before commencement of construction of the project in accordance with Condition 2.4 of the FEP-01/292/2007.

9.1.5 Implementation of the mitigation measures such as permanent fencing to protect the boulder path and setting up warning notices during construction phase of the Project has been monitored through the regular site inspection/audit. The permanent fencing locations are shown in **Appendix M**. In case of any presence of undiscovered grave during construction phase, AMO will be informed as soon as possible.

10 Ecological Monitoring

10.1.1 The post-transplantation monitoring had been completed in October 2023. No further post-transplantation monitoring will be conducted in accordance with the requirement of the approved Transplantation Proposal for Plant Species of Conservation Importance (Rev.1).

10.1.2 The post-translocation monitoring had been completed in July 2023. No further post-translocation monitoring will be conducted in accordance with the requirements of the Revised Translocation Proposal for the Endemic Freshwater Crab *Somanniathelphusa zanklon*.

10.1.3 The details of requirements, monitoring results and site inspection with photos for the post-translocation monitoring and post-transplantation monitoring would be reported separately.

10.1.4 The milestone of the ecological monitoring is presented in **Table 10-1.** The softcopies of the submissions are provided in https://www.nentx-ema.com/ep-submissions/.

Table 10-1 Milestone of the Ecological Monitoring

Type of Monitoring	Monitoring Event No.	Monitoring Date
Post-transplantation Monitoring	1st	24 Nov 2022
	2nd	9 Dec 2022
	3rd	21 Dec 2022
	4th	13 Jan 2023
	5th	26 Jan 2023
	6th	8 Feb 2023
	7th	24 Feb 2023
	8th	20 Mar 2023
	9th	21 Apr 2023
	10th	12 May 2023
	11th	16 Jun 2023
	12th	18 Jul 2023
	13th	11 Aug 2023
	14th	15 Sep 2023
	15 th	13 Oct 2023
Post-translocation Monitoring	1st (Aug 2022)	29 Aug 2022
	2nd (Sep 2022)	28 Sep 2022
	3rd (Oct 2022)	28 Oct 2022
	4th (Nov 2022)	22 Nov 2022
	5th (Dec 2022)	29 Dec 2022
	6th (Jan 2023)	30 Jan 2023
	7th (Feb 2023)	24 Feb 2023
	8th (Mar 2023)	20 Mar 2023
	9th (Apr 2023)	19 Apr 2023
	10th (May 2023)	17 May 2023
	11th (Jun 2023)	7 Jun 2023
	12th (Jul 2023)	12 Jul 2023

11 Site Inspection and Audit

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

11.1.2 Weekly ET environmental site inspections were conducted in the reporting period on 05, 15, 19 & 26 February 2024. A joint environmental site inspection was carried out by the representatives of the ER, the Contractor, IEC and the ET on 19 February 2024. The joint environmental site inspection records are shown in **Appendix K**. There was no noncompliance recorded during the site inspections.

11.1.3 Major findings and recommendations are summarized as follows:

05 February 2024

Observation(s):

- The exposed slope area at Portion B2 without covered by impervious sheet was observed. The contractor was advised to cover the exposed slope area by impervious sheet for short-term slope protection, and shotcrete for long-term slope protection.
- The accumulation of C&D materials at Portion D was observed. The contractor was reminded to provide enough waste skip for waste storage to avoid waste accumulation.
- The chemical containers at Portion D shall be stored and placed in the drip tray. The contractor was recommended to provide sufficient chemical drip tray for chemical storage to prevent chemical spillage.

Reminder(s):

- The Contractor was reminded that general waste shall be collected into the enclosed rubbish bins.

15 February 2024

Observation(s):

- The main haul road is dry and fugitive dust was observed at Portion E4 and SBA. The contractor was reminded to increase the frequency of watering to ensure that the surface of assess road is wetted and to prevent dust dispersion.

Reminder(s):

- The Contractor was reminded that the stockpiling of dusty material shall be covered by impervious sheet.

19 February 2024

Observation(s):

- The chemical containers without stored and placed on the drip tray at portion D and E3-1 was observed. The contractor was advised to provide enough drip tray at portion D and E3-1 for chemical storage to prevent chemical spillage.

26 February 2024

Observation(s):

- Unpaved main haul road was dusty and fugitive dust was observed at Portion SBA and Portion E4. The contractor was advised to increase the frequency of watering to ensure that the unpaved haul road surface is wetted and prevent dust dispersion.

- The accumulation of deposited silt and grit was observed at Portion A. The contractor was recommended to clean up and remove the deposited silt and grit regularly to prevent silt accumulation.

- Oil stain was found in the work area at Portion D and Portion A. The contractor was reminded to clean up the oil stain immediately and dispose of it as chemical waste. Also, the impervious sheet should be provided during using and placing chemicals.

- The accumulation of general waste and C&D waste was observed at Portion A. The contractor was recommended to provide sufficient enclosed bins for general waste disposal and waste skip for C&D waste disposal to separate and dispose the general and construction wastes.

- The chemical containers at Portion A shall be stored and placed properly. The contractor was advised to provide drip tray for chemical storage to prevent chemical spillage and land contamination.

11.1.4 No site inspection was conducted by Environmental Protection Department-Regional Office (North) (EPD-RNG) during reporting period.

12 Environmental Non-Conformance

12.1 Summary of Monitoring Exceedance

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

12.1.1 No exceedance of the Action and Limit Levels were recorded at designated monitoring stations during the reporting period. The Notification of Environmental Quality Limits Exceedance is presented in **Appendix H**.

12.1.2 The Summary of Impact 1-hr & 24-hr TSP Exceedance are shown in **Table 12-1**.

Table 12-1 Summary of Impact 1-hr & 24-hr TSP Exceedance during the Reporting Period

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

Remarks: * equal to non-project related

12.1.3 The Summary of Impact Noise Exceedance are shown in **Table 12-2**.

Table 12-2 Summary of Impact Noise Exceedance during the Reporting Period

Noise Monitoring Station		NM1(a)		NM2(a)	
Parameters \ Level Exceedance		Action Level	Limit Level	Action Level	Limit Level
LA_{eq}(30mins)	Exceedance Date	-	-	-	-
	Exceedance Count	0	0	0	0

Remarks: * equal to non-project related

12.1.4 The Summary of Impact Surface Water Quality Exceedance are shown in **Table 12-3**.

Table 12-3 Summary of Impact Surface Water Quality Exceedance during the Reporting Period

Surface Water Quality Monitoring Station		WM1		WM2	
Parameters / Level Exceedance		Action Level	Limit Level	Action Level	Limit Level
pH	Exceedance Date	-	-	-	-
	Exceedance Count	0	0	0	0
DO	Exceedance Date	-	-	-	-
	Exceedance Count	0	0	0	0
Turbidity	Exceedance Date	-	-	-	-
	Exceedance Count	0	0	0	0
SS	Exceedance Date	-	-	-	-
	Exceedance Count	0	0	0	0

Remarks: * equal to non-project related

12.1.5 The Summary of Landfill Gas Exceedance are shown in **Table 12-4**.

Table 12-4 Summary of Landfill Gas Exceedance during the reporting period

Landfill Gas Monitoring Station		Portion A +50 mpD to 70 mpD Platform	
Parameters / Level Exceedance		Action Level	Limit Level
CH_4	Exceedance Date	-	-
	Exceedance Count	0	0
CO_2	Exceedance Date	-	-
	Exceedance Count	0	0
O_2	Exceedance Date	-	-
	Exceedance Count	0	0

Remarks: * equal to non-project related

12.2 Summary of Environmental Non-Compliance

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

12.3 Summary of Environmental Complaint

12.3.1 No complaint was recorded during the reporting period. The cumulative statistics on environmental complaints are presented in **Table 12-5**.

Table 12-5 Cumulative Statistics on Environmental Complaints

Reporting Period		Environmental Aspects				
		Air Quality	Noise	Water Quality	Waste	Ecology
Feb 2024	Complaint Date	-	-	-	-	-
	No. of Complaint	0	0	0	0	0
Reporting Period Total		0	0	0	0	0
Accumulate of project		1*	0	5(1*)	0	0

Remarks: * equal to non-project related after the investigation.

12.3.2 Cumulative complaint / enquiry log, Summaries of complaints and enquiries are presented in **Appendix N**.

12.4 Summary of Environmental Summons and Successful Prosecution

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

13 Implementation Status on Environmental Mitigation Measures

13.1 General

13.1.1 The Contractor has generally implemented part of 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 L**.

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 A**.

-	Material loading and unloading, site traffic at Portion A, SBA to alternative disposal ground
-	Construction of site buildings at Portion D
-	Site clearance at Portion A, B2/E1, E3-1 & E4
-	Installation of permanent fencing at Portion A, B1 & E4
-	Site formation at Portion A & E3-1
-	Tree felling at Portion B2/E1, E3-1 & E4
-	Shotcreting (Permanent and Temporary)
-	Soil Nail Installation at Portion A, B2/E1 & E4

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

14.2 Monitoring Schedule for the Next Month

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

14.3 Construction Programme for the Next Month

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

15 Conclusion

15.1.1 1-hr & 24-hr TSP impact monitoring was carried out in the reporting month. No Action / Limit Level exceedance for 1-hr & 24-hr TSP impact monitoring was recorded during the period.

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

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

15.1.4 Surface Water Quality Monitoring was carried out in the reporting month. No Action / Limit Level exceedance of surface water quality was recorded during the reporting period.

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

15.1.6 In terms of cultural heritage, implementation of the mitigation measures such as permanent fencing to protect the boulder path and setting up warning notices during construction phase of the Project has been monitored through the regular site inspection/audit in the reporting period. All the mitigation measures are in order.

15.1.7 Four environmental site inspections were carried out in the reporting month. Recommendations on mitigation measures for Permit/ Licenses were given to the Contractor for remediating the deficiencies identified during the site inspections.

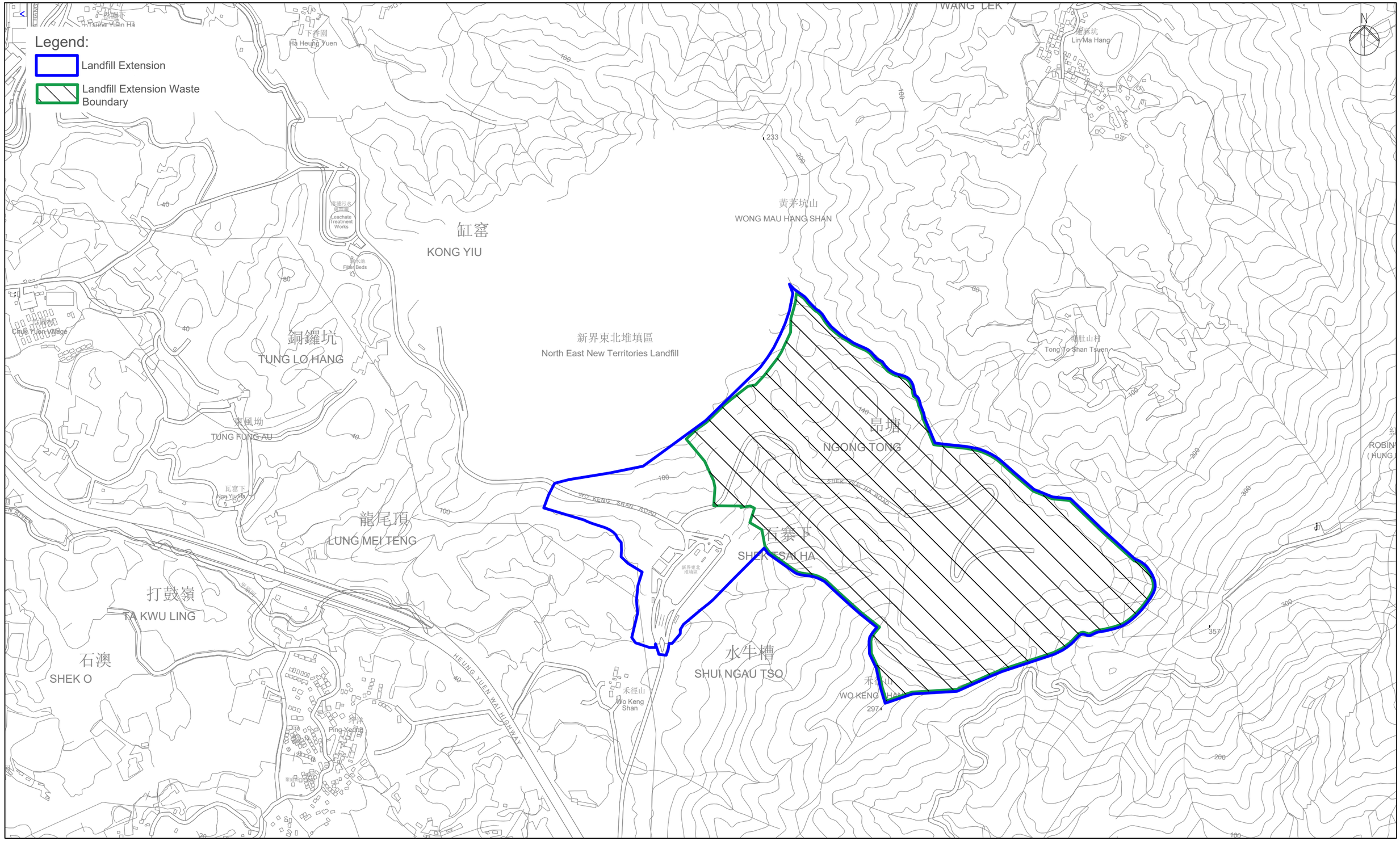
15.1.8 No complaint was recorded during the reporting period.

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

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

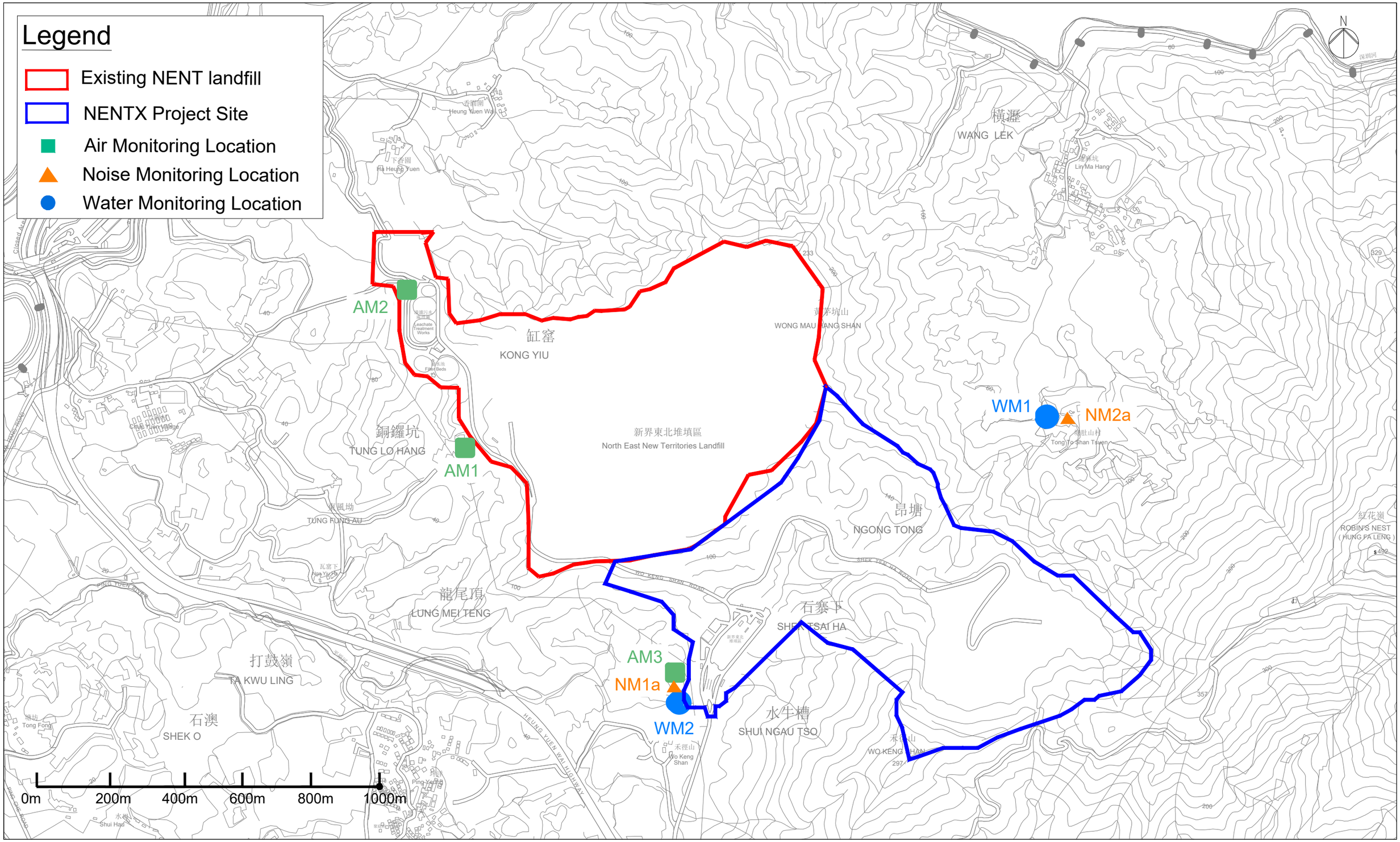
15.1.11 The ET will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Figure 1 Location of the Project Site



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

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

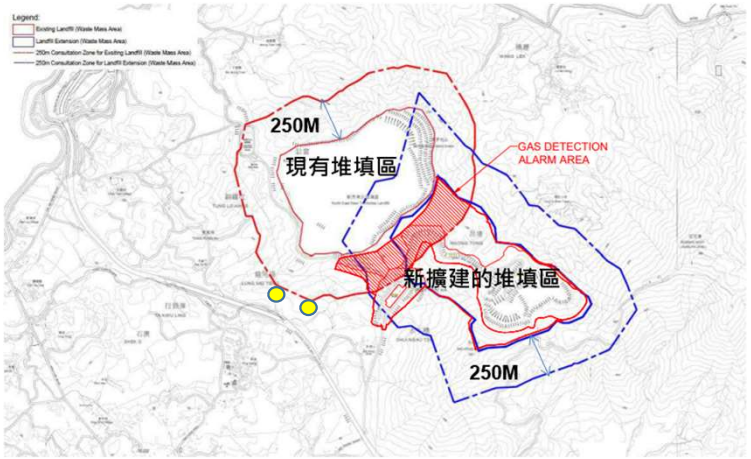


aurecon Aurecon Hong Kong Limited	North East New Territories (NENT) Landfill Extension Impact Monitoring Location	Figure 2

Figure 3 Landfill Gas Monitoring Locations

Gas Monitoring Point

Monitoring Frequency: 2 times per day



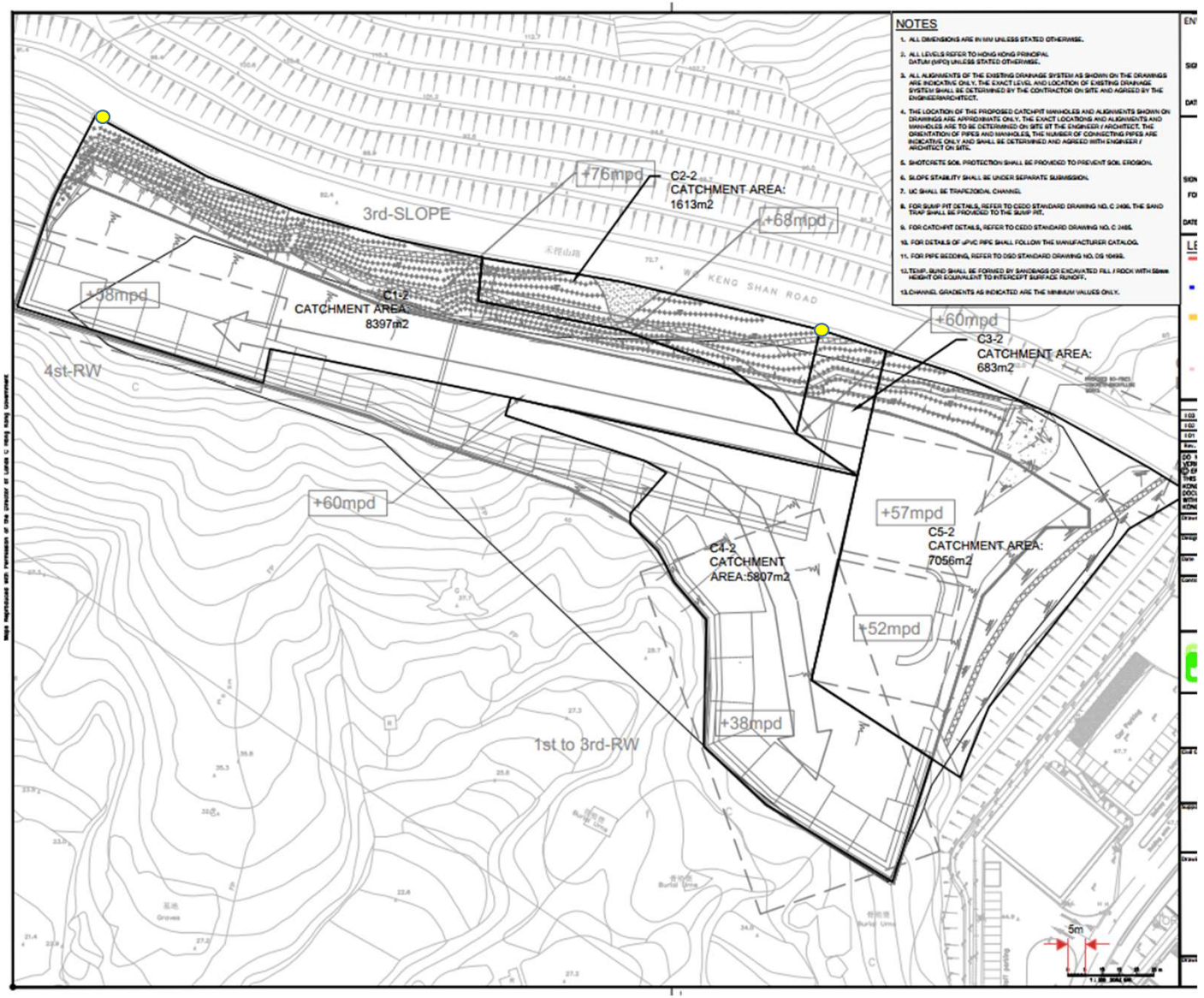
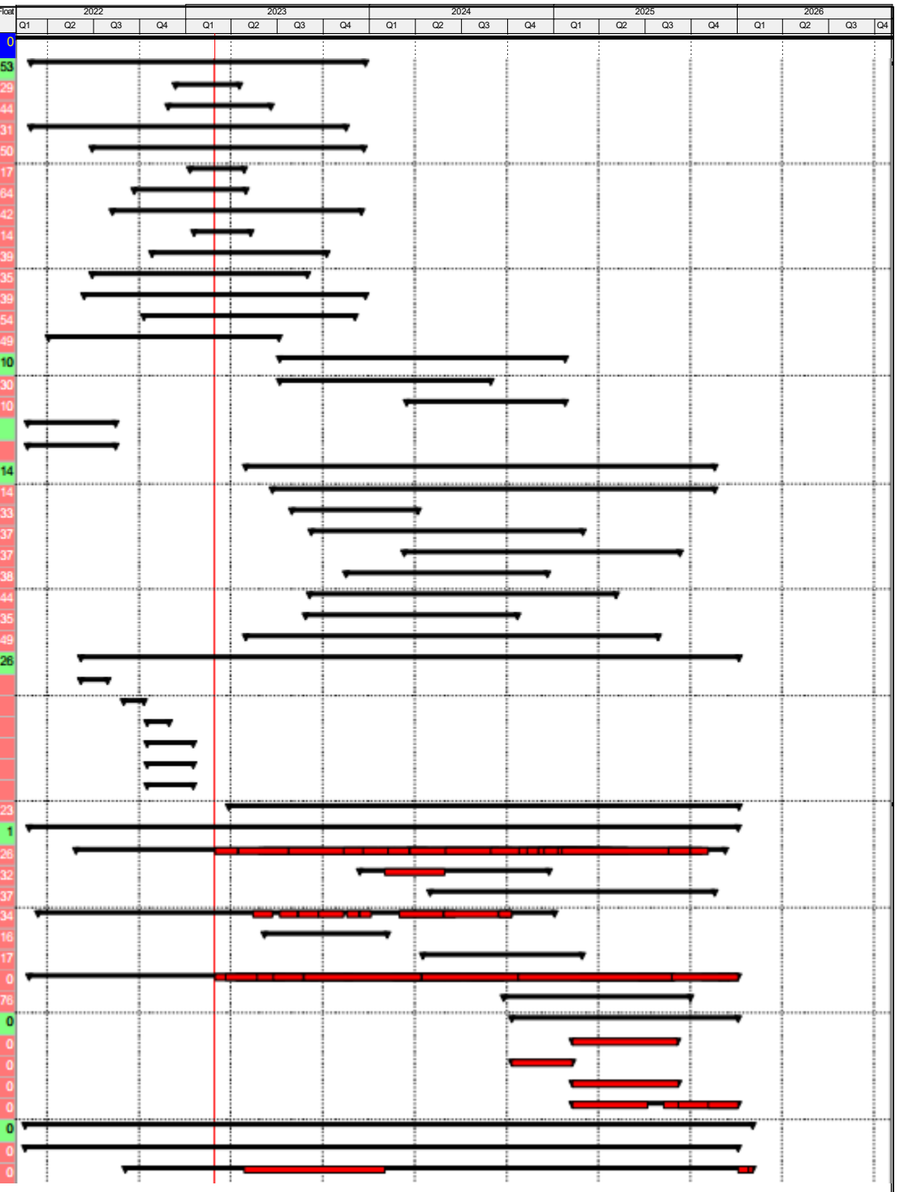


Figure 3 Landfill Gas Monitoring Locations

Appendix A Construction Programme & Construction Activities

Activity ID	Activity Name	At Completion Duration	Actual Start	Actual Finish	Early Start	Early Finish	Late Start	Late Finish	Predecessors	Successors	Total Float
NENTX_Updated Baseline Programme (Rev.4)		1826	25-Jan-22 A	25-Jan-27	28-Feb-23	25-Jan-27	28-Feb-23	25-Jan-27			0
DESIGN DEVELOPMENT		666	28-Feb-22 A	25-Dec-23	28-Feb-23	25-Dec-23	02-Mar-23	16-Feb-24			53
Portion A - Site Formation		91	12-Dec-22 A	17-Apr-23	28-Feb-23	17-Apr-23	07-Apr-23	26-May-23			29
Portion A & D Architectural Design		205	28-Nov-22 A	20-Jun-23	28-Feb-23	20-Jun-23	14-Mar-23	03-Aug-23			44
Portion A - Leachate Treatment Works & LFG Treatment Plant		626	28-Feb-22 A	15-Nov-23	28-Feb-23	15-Nov-23	05-Apr-23	16-Dec-23			31
Portion A - Process Building		540	30-Jun-22 A	21-Dec-23	28-Feb-23	21-Dec-23	04-Apr-23	09-Feb-24			50
Portion D Site Formation		109	10-Jan-23 A	28-Apr-23	04-Apr-23	28-Apr-23	20-Apr-23	15-May-23			17
Portion A and D Preliminary Utilities Arrangement		159	21-Sep-22 A	01-May-23	28-Feb-23	01-May-23	26-May-23	28-Jul-23			64
Site services detailed design for Portion A and D		496	09-Aug-22 A	17-Dec-23	28-Feb-23	17-Dec-23	11-Apr-23	28-Jan-24			42
Permanent Drainage - Portion A, C & D		80	19-Jan-23 A	10-May-23	28-Feb-23	10-May-23	20-Mar-23	30-May-23			14
Sewerage Management Plan - Portion A, C & D		249	26-Oct-22 A	09-Oct-23	25-Apr-23	09-Oct-23	19-Jun-23	01-Dec-23			39
Pavement Road and Traffic Design for Portoin A & D		306	30-Jun-22 A	31-Aug-23	06-Jul-23	31-Aug-23	24-Aug-23	19-Oct-23			35
Accommodation Buildings (Portion D)		401	13-Jun-22 A	25-Dec-23	28-Feb-23	25-Dec-23	08-Mar-23	16-Feb-24			39
Existing Structures (Portion C)		301	10-Oct-22 A	04-Dec-23	28-Feb-23	04-Dec-23	06-May-23	16-Feb-24			54
Landfill Area		457	04-Apr-22 A	05-Jul-23	28-Feb-23	05-Jul-23	02-Mar-23	23-Aug-23			49
FS Submisson and FSD Consent		406	07-Jul-23	24-Jan-25	07-Jul-23	24-Jan-25	21-Jul-23	07-Feb-25			10
Preliminary FS Submission		300	07-Jul-23	29-Aug-24	07-Jul-23	29-Aug-24	21-Jul-23	11-Oct-24			30
Process Building and Fire Services Building Detailed Design FS Submission		226	15-Mar-24	24-Jan-25	15-Mar-24	24-Jan-25	29-Mar-24	07-Feb-25			10
TECHNICAL SUBMISSION		125	22-Feb-22 A	16-Aug-22 A							
Project Control Plan and Report		125	22-Feb-22 A	16-Aug-22 A							
PROCUREMENT / FABRICATION / DELIVERY		933	01-May-23	18-Nov-25	01-May-23	18-Nov-25	18-Jun-23	03-Dec-25			14
General Material		880	23-Jun-23	18-Nov-25	23-Jun-23	18-Nov-25	07-Jul-23	03-Dec-25			14
LIFT		250	31-Jul-23	06-Apr-24	31-Jul-23	06-Apr-24	03-Sep-23	09-May-24			33
LTW - GFS and GRP Tanks		540	07-Sep-23	28-Feb-25	07-Sep-23	28-Feb-25	14-Oct-23	06-Apr-25			37
LTW - Lamella Settlers		550	10-Mar-24	10-Sep-25	10-Mar-24	10-Sep-25	15-Apr-24	17-Oct-25			37
LTW - Sludge Thicknening		400	16-Nov-23	20-Dec-24	16-Nov-23	20-Dec-24	24-Dec-23	27-Jan-25			38
LTW - Ammonia Stripper		610	04-Sep-23	06-May-25	04-Sep-23	06-May-25	19-Oct-23	20-Jun-25			44
Process Building(Electrial equipments)		420	28-Aug-23	21-Oct-24	28-Aug-23	21-Oct-24	03-Oct-23	25-Nov-24			35
LFG Plant		820	01-May-23	28-Jul-25	01-May-23	28-Jul-25	18-Jun-23	15-Sep-25			49
EPD REQUIREMENT - GI WORKS		1309	07-Jun-22 A	05-Jan-26	28-Mar-23	05-Jan-26	27-Apr-23	31-Jan-26			26
PORTION D		45	07-Jun-22 A	30-Jul-22 A							
PORTION A		32	31-Aug-22 A	11-Oct-22 A							
PORTION E3-1		38	17-Oct-22 A	30-Nov-22 A							
PORTION E4		76	17-Oct-22 A	17-Jan-23 A							
PORTION E3-1-A		76	17-Oct-22 A	17-Jan-23 A							
PORTION E1		76	17-Oct-22 A	17-Jan-23 A							
ENVIRONMENTAL MONITORING		821	28-Mar-23	05-Jan-26	28-Mar-23	05-Jan-26	27-Apr-23	31-Jan-26			23
CONSTRUCTION - INITIAL WORKS PHASE 1		1409	24-Feb-22 A	03-Jan-26	28-Feb-23	03-Jan-26	28-Feb-23	03-Jan-26			1
PORTION A		1291	28-May-22 A	08-Dec-25	28-Feb-23	08-Dec-25	28-Feb-23	03-Jan-26			26
SITEWIDE Underground UTILITIES (Portion A to Portion D)		302	14-Dec-23	23-Dec-24	14-Dec-23	23-Dec-24	02-Feb-24	08-Feb-25			32
Waste Reception Area (PORTION C) Construct by Others		460	02-May-24	18-Nov-25	02-May-24	18-Nov-25	27-May-24	03-Jan-26			37
PORTION D		1028	14-Mar-22 A	04-Jan-25	28-Feb-23	04-Jan-25	04-Mar-23	08-Feb-25			34
PORTION D - Underground Drainage / UG Utilities and Pipe Laying Works		200	07-Jun-23	05-Feb-24	07-Jun-23	05-Feb-24	28-Jun-23	01-Mar-24			16
PORTION D - EVA Road Road Pavement Works		257	16-Apr-24	27-Feb-25	16-Apr-24	27-Feb-25	07-May-24	19-Mar-25			17
Landfill Area (Portion E3-1, E4, E1, B1-1 & B2)		1409	24-Feb-22 A	03-Jan-26	28-Feb-23	03-Jan-26	28-Feb-23	03-Jan-26			0
Landscape Works (Landfill)		300	24-Sep-24	30-Sep-25	24-Sep-24	30-Sep-25	27-Dec-24	03-Jan-26			76
FS INSPECTION		450	11-Oct-24	04-Jan-26	11-Oct-24	04-Jan-26	11-Oct-24	04-Jan-26			0
Portion A - Readiness for FS inspection (Process Building)		210	07-Feb-25	05-Sep-25	07-Feb-25	05-Sep-25	08-Feb-25	06-Sep-25			0
Portion D : Readiness for FS inspection		120	11-Oct-24	08-Feb-25	11-Oct-24	08-Feb-25	11-Oct-24	08-Feb-25			0
2nd Inspection		210	07-Feb-25	06-Sep-25	07-Feb-25	06-Sep-25	08-Feb-25	06-Sep-25			0
FS Inspection Certificate		330	08-Feb-25	04-Jan-26	08-Feb-25	04-Jan-26	08-Feb-25	04-Jan-26			0
STATUTORY SUBMISSION		1446	16-Feb-22 A	01-Feb-26	28-Feb-23	01-Feb-26	02-Mar-23	01-Feb-26			0
Obtain Licences & Permits for Construction		1418	16-Feb-22 A	03-Jan-26	28-Feb-23	03-Jan-26	02-Mar-23	04-Jan-26			0
Obtain Licences & Permits for Operation		1246	04-Sep-22 A	01-Feb-26	28-Feb-23	01-Feb-26	15-Mar-23	01-Feb-26			0



環境保護署
Environmental Protection Department

Remaining Level of Effort
Remaining Work
Critical Remaining Work
Milestone
Summary

NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION
UPDATED BASELINE PROGRAMME (Rev.4)
Ececutive Summary
INITIAL WORKS (PHASE 1)

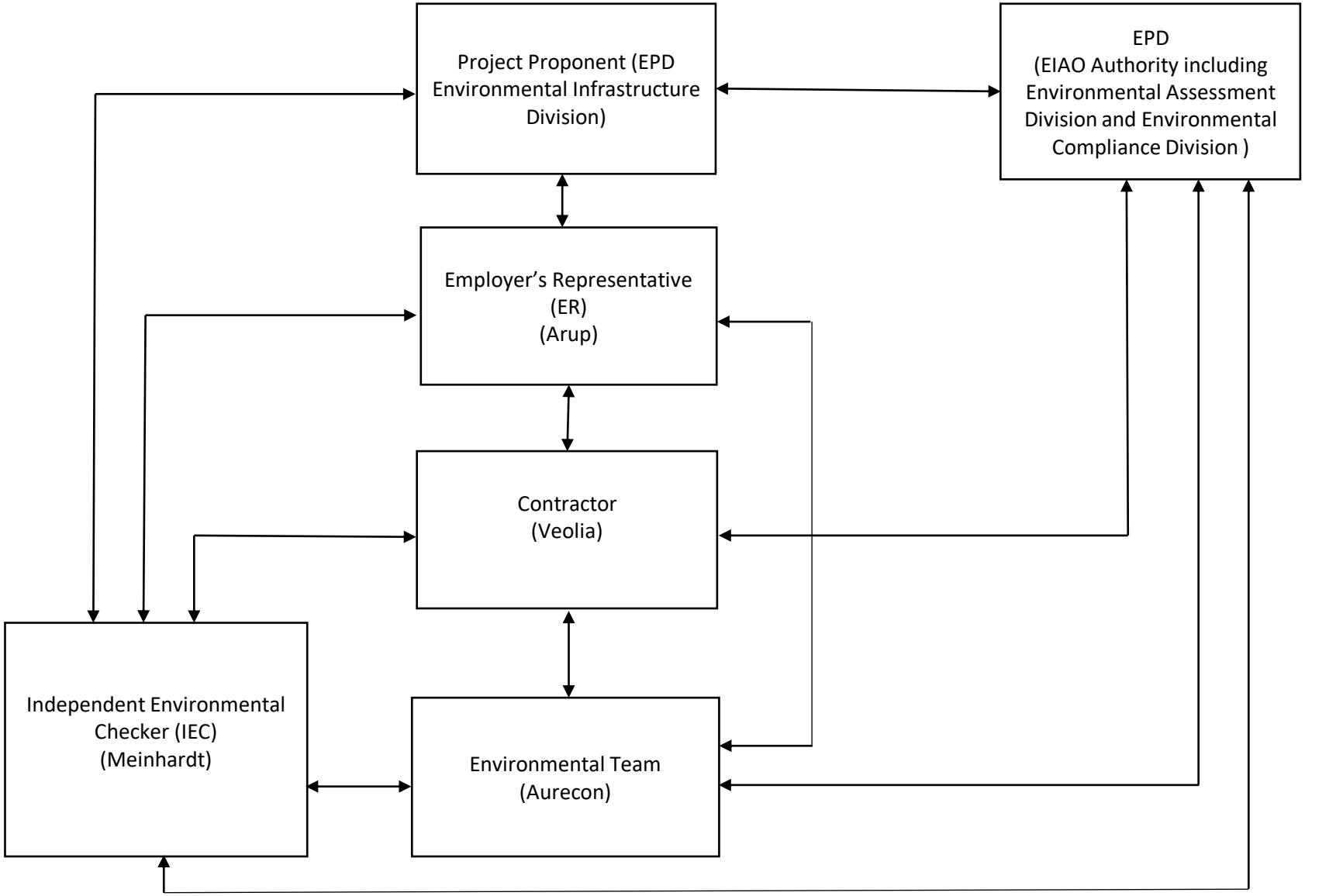
VEOLIA

Date	Revision	Ch...	Appr...
22-Jun-22	GENERAL REVISION		
31-Mar-23	GENERAL REVISION		

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

Remark:
PYE is the Sub-contractor for this project

Appendix B Project Organization Chart & Management Structure



Notes:
EPD - Environmental Protection Department
Arup – Ove Arup & Partners Limited
Veolia - Veolia Environmental Services Hong Kong Limited
Meinhardt - Meinhardt Infrastructure And Environment Limited
Aurecon - Aurecon Hong Kong Limited

Line of Communication

Appendix C Detail Status of FEP & EP Submission

Detail Status of Submissions required under the FEP & EP

FEP Condition	EP Condition	Submission / Measures	Status
2.1	2.3	Management Organization of Main Construction Companies	Submission Date (12 Oct 2022)
2.2	2.4	Setting up of Community Liaison Group (CLG)	Submission Date (12 Oct 2022) 1st CLG meeting (12 Jan 2023)
2.3	2.5	Submission of EM&A Manual	Submission Date (12 Oct 2022)
2.4	2.6	Submission of Preservation of Cultural Landscape Features	Survey and Preservation of Grave Records: Submission Date (15 Oct 2022) Survey and Preservation of Boulder Paths: Submission Date (12 Oct 2022)
2.5	2.7	Submission of Vegetation Survey (Transplantation Proposal)	Submission Date (2 September 2022)
2.6	2.8	Submission of translocation proposal	Submission Date (8 July 2022)
2.7	2.9	Submission of Transplantation Report and Post-Transplantation Monitoring	Submission Date (19 Jan 2023) 1st monitoring (24 Nov 2022) 2nd monitoring (9 Dec 2022) 3rd monitoring (21 Dec 2022) 4th monitoring (13 Jan 2023) 5th monitoring (26 Jan 2023) 6th monitoring (8 Feb 2023) 7th monitoring (24 Feb 2023) 8th monitoring (20 Mar 2023) 9th monitoring (21 Apr 2023) 10th monitoring (12 May 2023) 11th monitoring (16 Jun 2023) 12th monitoring (18 Jul 2023) 13th monitoring (11 Aug 2023) 14th monitoring (15 Sep 2023) 15th monitoring (13 Oct 2023)

FEP Condition	EP Condition	Submission / Measures	Status
2.8	2.10	Submission of Translocation Report and Post-Translocation Monitoring	Translocation was carried out in July 2022 Submission Date (27 December 2022) 1st monitoring (29 Aug 2022) 2nd monitoring (28 Sep 2022) 3rd monitoring (28 Oct 2022) 4th monitoring (22 Nov 2022) 5th monitoring (29 Dec 2022) 6th monitoring (30 Jan 2023) 7th monitoring (24 Feb 2023) 8th monitoring (20 Mar 2023) 9th monitoring (19 Apr 2023) 10th monitoring (17 May 2023) 11th monitoring (7 Jun 2023) 12th monitoring (12 Jul 2023)
2.9	2.11	Submission of Detailed Landfill Gas Hazard Assessment Report	Submission Date (6 Oct 2022)
2.10	2.12	Submission of Waste Management Plan	Submission Date (30 December 2022)
3.2	3.2	Submission of Baseline Monitoring Report	Submission Date (30 Nov 2022)
3.3	3.3	Submission of Monthly EM&A Report	1st report (Dec 2022) 2nd report (Jan 2023) 3rd report (Feb 2023) 4th report (Mar 2023) 5th report (Apr 2023) 6th report (May 2023) 7th report (Jun 2023) 8th report (Jul 2023) 9th report (Aug 2023) 10th report (Sep 2023) 11th report (Oct 2023) 12th report (Nov 2023) 13th report (Dec 2023) 14th report (Jan 2024) 15th report (Feb 2024)

Appendix D Monitoring Schedule for Reporting Month & Next Month

Impact Monitoring Schedule for NENT Landfill Extension (February 2024) (version 2.0)

2-2024						
Sun	**Mon**	**Tue**	**Wed**	**Thur**	**Fri**	**Sat**
	29 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	30	31	**1**	**2**	**3** Air quality monitoring at AM1, AM2 and AM3
4	**5**	**6**	**7**	**8**	**9** Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	**10**
11	**12**	**13**	**14**	**15** Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a Surface water quality monitoring at WM1 and WM2	**16**	**17**
18	**19**	**20**	**21** Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	**22**	**23**	**24**
25	**26**	**27** Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	**28**	1	2	3

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).
5. Please arrange a Veolia staff to accompany our staff(s) to each locations for every monitoring.

Impact Monitoring Schedule for NENT Landfill Extension (March 2024) (version 2.0)

3-2024						
Sun	**Mon**	**Tue**	**Wed**	**Thur**	**Fri**	**Sat**
		Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a			**1**	**2**
3	**4** Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	**5**	**6**	**7**	**8** Air quality monitoring at AM1, AM2 and AM3 Surface water quality monitoring at WM1 and WM2	**9**
10	**11**	**12** Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	**13**	**14**	**15**	**16**
17	**18** Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	**19**	**20**	**21**	**22** Air quality monitoring at AM1, AM2 and AM3	**23**
24	**25**	**26**	**27**	**28** Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	**29**	**30**
31	**1**	2	3 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	**4**	5	6

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).
5. Please arrange a Veolia staff to accompany our staff(s) to each locations for every monitoring.

Date: 19 February 2024

Appendix E Calibration Certificates

Air Quality

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

Information of Calibrated Equipement

Verification Test Date:	**28-Nov-23**	to	**30-Nov-23**	Next Verification Test Date:	**27-Nov-24**
Unit-under-Test- Model No.:	Sibata LD-5R				
Unit-under-Test Serial No.:	0Z4545				
Our Report Refrence No.:	RPT-23-HVS-0023				
Calibration Location:	AM2, location near the Leachate Treatment Works within the NENTX Landfill				

Standard Equipment Information

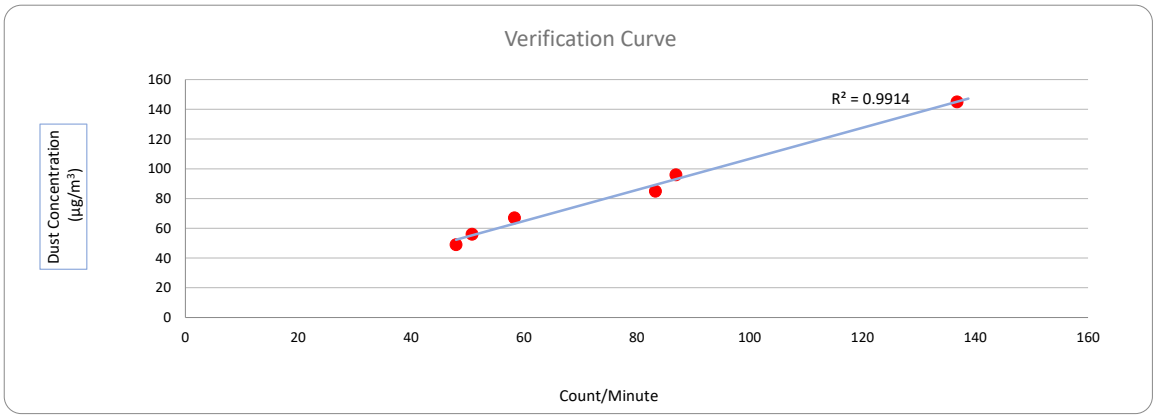
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

Equipement Vertification Result

Verification Test No.	Date	Duration			Results from Calibrated Equipement		Results from Standard Equipment
		Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (µg/m^3) y-axis
1	28/11/2023	8789.68	8792.68	180.00	15648	87	96
2	28/11/2023	8792.68	8795.68	180.00	14993	83	85
3	28/11/2023	8795.68	8798.68	180.00	8635	48	49
4	30/11/2023	8798.68	8801.68	180.00	10501	58	67
5	30/11/2023	8801.68	8804.68	180.00	24622	137	145
6	30/11/2023	8804.68	8807.68	180.00	9145	51	56

Linear Regression of y on x

Slope, K factor:	**1.0451**	Intercept:	**2.1545**	*Correlation Coefficient,R:	**0.9957**
Verification Test Result:	Strong Correlation, Results were accepted.			* If the Correlation Coefficient, R is <0.5. Checking and Re-verification are required.	



Operated By: Andy Li — Project Technician, Environmental — Date: 02-12-2023

Checked By: Tandy Tse — Senior Consultant, Environmental — Date: 02-12-2023

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

Information of Calibrated Equipement

Verification Test Date:	**28-Nov-23**	to	**30-Nov-23**	Next Verification Test Date:	**27-Nov-24**
Unit-under-Test- Model No.:	Sibata LD-5R				
Unit-under-Test Serial No.:	882106				
Our Report Refrence No.:	RPT-23-HVS-0021				
Calibration Location:	AM2, location near the Leachate Treatment Works within the NENTX Landfill				

Standard Equipment Information

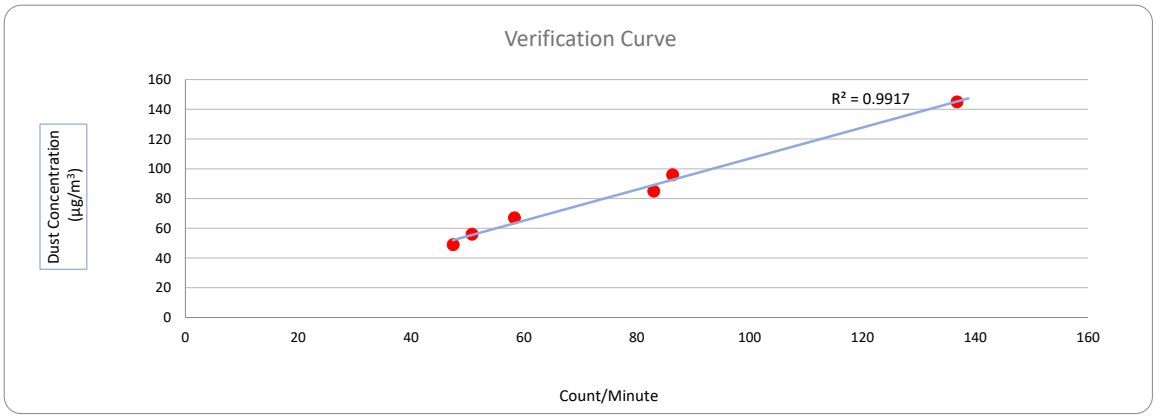
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

Equipement Vertification Result

Verification Test No.	Date	Duration			Results from Calibrated Equipement		Results from Standard Equipment
		Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (µg/m^3) y-axis
1	28/11/2023	8789.68	8792.68	180.00	15546	86	96
2	28/11/2023	8792.68	8795.68	180.00	14944	83	85
3	28/11/2023	8795.68	8798.68	180.00	8543	47	49
4	30/11/2023	8798.68	8801.68	180.00	10499	58	67
5	30/11/2023	8801.68	8804.68	180.00	24622	137	145
6	30/11/2023	8804.68	8807.68	180.00	9145	51	56

Linear Regression of y on x

Slope, K factor:	**1.0437**	Intercept:	**2.4993**	*Correlation Coefficient,R:	**0.9958**
Verification Test Result:	Strong Correlation, Results were accepted.			* If the Correlation Coefficient, R is <0.5. Checking and Re-verification are required.	



Operated By: Andy Li — Project Technician, Environmental — Date: 02-12-2023

Checked By: Tandy Tse — Senior Consultant, Environmental — Date: 02-12-2023

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

Information of Calibrated Equipement

Verification Test Date:	**28-Nov-23**	to	**30-Nov-23**	Next Verification Test Date:	**27-Nov-24**
Unit-under-Test- Model No.:	Sibata LD-5R				
Unit-under-Test Serial No.:	942532				
Our Report Refrence No.:	RPT-23-HVS-0022				
Calibration Location:	AM2, location near the Leachate Treatment Works within the NENTX Landfill				

Standard Equipment Information

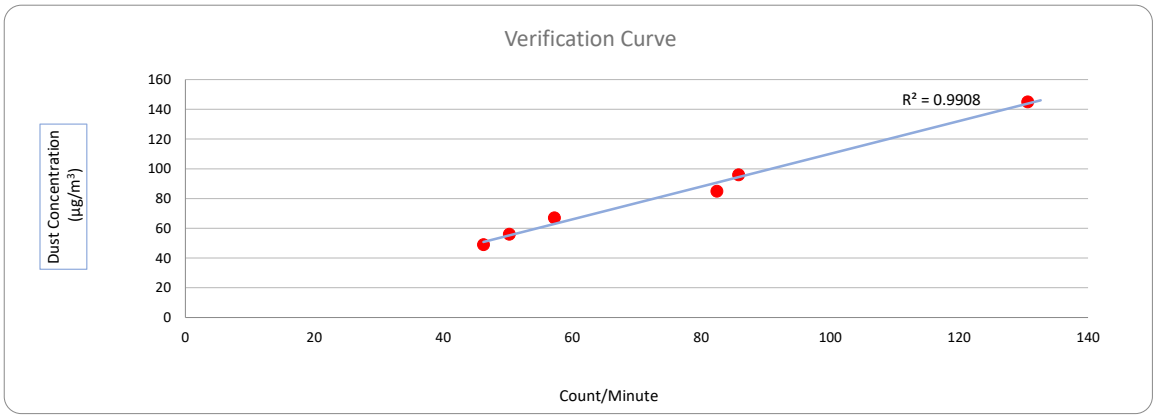
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

Equipement Vertification Result

Verification Test No.	Date	Duration			Results from Calibrated Equipement		Results from Standard Equipment
		Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (µg/m^3) y-axis
1	28/11/2023	8789.68	8792.68	180.00	15446	86	96
2	28/11/2023	8792.68	8795.68	180.00	14835	82	85
3	28/11/2023	8795.68	8798.68	180.00	8320	46	49
4	30/11/2023	8798.68	8801.68	180.00	10303	57	67
5	30/11/2023	8801.68	8804.68	180.00	23517	131	145
6	30/11/2023	8804.68	8807.68	180.00	9043	50	56

Linear Regression of y on x

Slope, K factor:	**1.1020**	Intercept:	**-0.1223**	*Correlation Coefficient,R:	**0.9954**
Verification Test Result:	Strong Correlation, Results were accepted.			* If the Correlation Coefficient, R is <0.5. Checking and Re-verification are required.	



Operated By: Andy Li — Project Technician, Environmental — Date: 02-12-2023

Checked By: Tandy Tse — Senior Consultant, Environmental — Date: 02-12-2023

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	**Representative For Wo Keng Shan Tsuen**	**Site ID:**	**AM3**	**Date:**	**04-Jan-2024**
Serial No:	**1856**	**Model:**	**TE-5170X**	**Operator:**	**Andy Li**

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	757.2	**Actual Temperature during Calibration (T_a) (deg K):**	234.0

Calibration Orifice

Model:	TE-5028A	**Slope (m_c):**	1.68024
Serial No.:	3702	**Intercept (b_c):**	-0.04353
Calibration Due Date:	31-Mar-24	**Corr. Coeff:**	0.99994

Calibration Data

Plate or Test #	ΔH_2O (in)	Qa, X-Axis (m^3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
1	8.90	2.026	60.0	67.58
2	7.00	1.800	54.0	60.83
3	6.40	1.722	50.0	56.32
4	4.80	1.495	45.0	50.69
5	3.40	1.262	40.0	45.06

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

m= 29.6458 b= 6.8595 Corr. Coeff= 0.9931

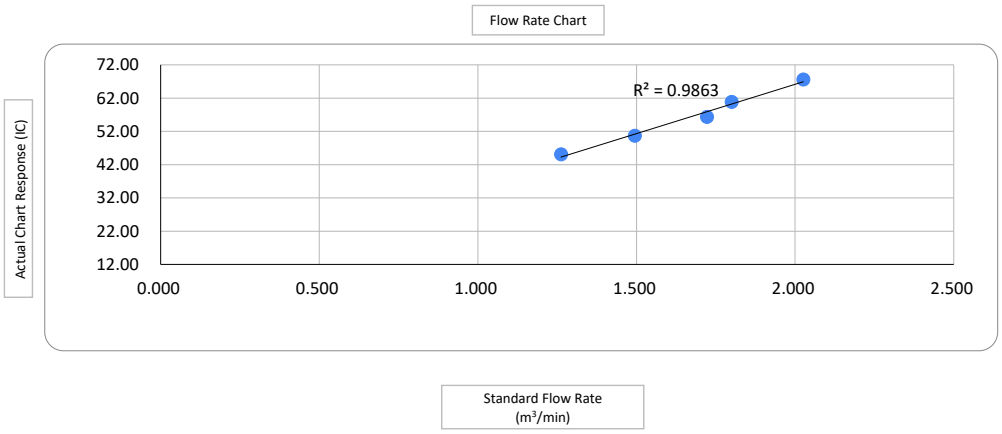
Calculations

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

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

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

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



Checked by: F.C Tsang
Environemntal Team Leader

Date: 04-Jan-2024

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	**Representative For Tung Lo Hang**	**Site ID:**	**AM1**	**Date:**	**04-Jan-2024**
Serial No:	**1105**	**Model:**	**TE-5170X**	**Operator:**	**Andy Li**

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	757.2	**Actual Temperature during Calibration (T_a) (deg K):**	234.0

Calibration Orifice

Model:	TE-5028A	**Slope (m_c):**	1.68024
Serial No.:	3702	**Intercept (b_c):**	-0.04353
Calibration Due Date:	31-Mar-24	**Corr. Coeff:**	0.99994

Calibration Data

Plate or Test #	ΔH_2O (in)	Qa, X-Axis (m^3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
1	9.80	2.125	56.0	63.08
2	8.80	2.015	54.0	60.83
3	7.60	1.874	51.0	57.45
4	6.40	1.722	48.0	54.07
5	4.20	1.400	40.0	45.06

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

m= 24.9080 b= 10.5891 Corr. Coeff= 0.9982

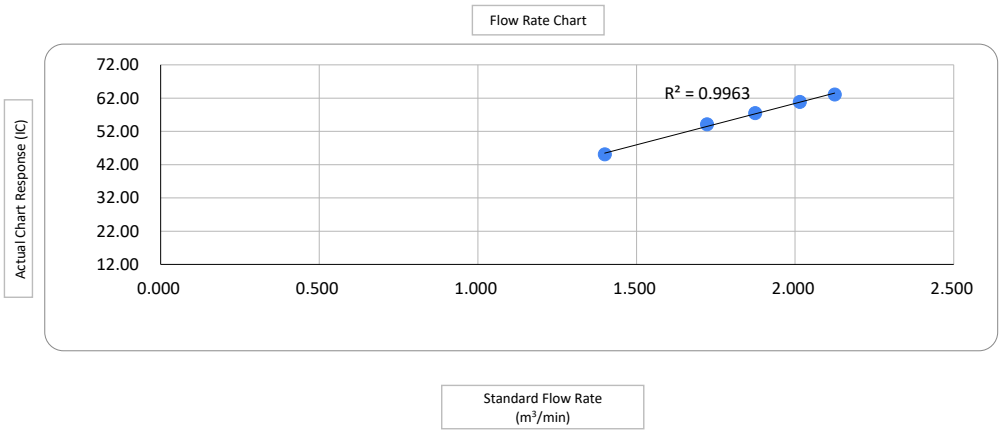
Calculations

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

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

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

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



Checked by: F.C Tsang
Environemntal Team Leader

Date: 04-Jan-2024

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	**Representative For Heung YuenWai**	**Site ID:**	**AM2**	**Date:**	**04-Jan-2024**
Serial No:	**1106**	**Model:**	**TE-5170X**	**Operator:**	**Andy Li**

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	757.2	**Actual Temperature during Calibration (T_a) (deg K):**	234.0

Calibration Orifice

Model:	TE-5028A	**Slope (m_c):**	1.68024
Serial No.:	3702	**Intercept (b_c):**	-0.04353
Calibration Due Date:	31-Mar-24	**Corr. Coeff:**	0.99994

Calibration Data

Plate or Test #	ΔH_2O (in)	Qa, X-Axis (m^3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
1	7.90	1.910	59.0	66.46
2	5.70	1.626	54.0	60.83
3	4.90	1.510	51.0	57.45
4	2.30	1.043	43.0	48.44
5	2.00	0.974	40.0	45.06

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

m= 22.1113 b= 24.4102 Corr. Coeff= 0.9966

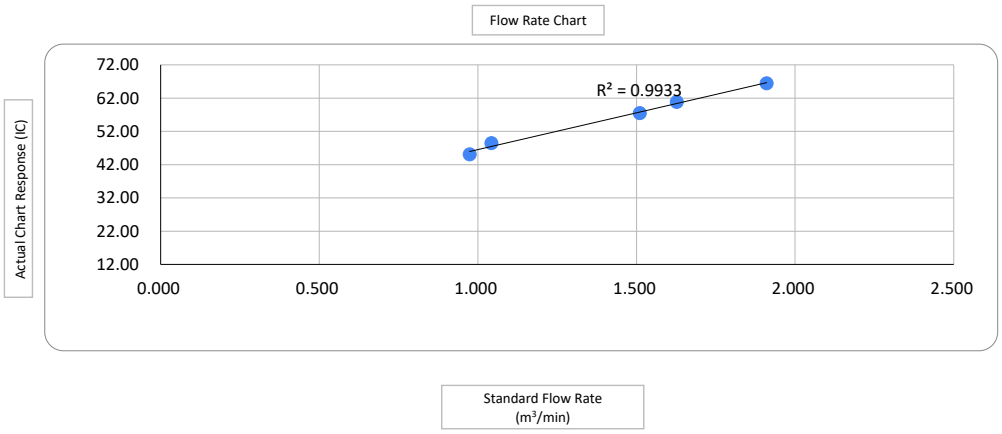
Calculations

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

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

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

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



Checked by: F.C Tsang
Environemntal Team Leader

Date: 04-Jan-2024

TISCH Environmental

RECALIBRATION DUE DATE:
March 31, 2024

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	March 31, 2023	**Rootsmeter S/N:** 438320	**Ta:** 294	°K
Operator:	Jim Tisch		**Pa:** 748.54	mm Hg
Calibration Model #:	TE-5028A	**Calibrator S/N:** **3702**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.3110	4.1	1.50
2	3	4	1	1.0280	6.7	2.50
3	5	6	1	0.9340	8.1	3.00
4	7	8	1	0.8680	9.4	3.50
5	9	10	1	0.6580	16.2	6.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9929	0.7573	1.2237	0.9945	0.7586	0.7676
0.9894	0.9624	1.5798	0.9910	0.9641	0.9909
0.9875	1.0573	1.7306	0.9892	1.0591	1.0855
0.9858	1.1357	1.8693	0.9874	1.1376	1.1725
0.9767	1.4844	2.4474	0.9784	1.4869	1.5351
QSTD	**m=**	**1.68024**	**QA**	**m=**	**1.05214**
	b=	**-0.04353**		**b=**	**-0.02731**
	r=	**0.99994**		**r=**	**0.99994**

Calculations

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

For subsequent flow rate calculations:

Qstd=	$1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$	**Qa=**	$1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

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

RECALIBRATION

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

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

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

Noise

(A+A)*L Acoustics and Air Testing Laboratory Co. Ltd.
聲學及空氣測試實驗室有限公司

Certificate of Calibration

for

Description:	*Sound Level Meter*
Manufacturer:	*NTi Audio*
Type No.:	*XL2 (Serial No.: A2A-09696-E0)*
Microphone:	*ACO 7052 (Serial No.:68914)*
Preamplifier:	*NTi Audio MA220 (Serial No.:10390)*

Submitted by:

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

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

☑ **Within (31.5Hz – 4kHz)**
☐ **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: 30 March 2023

Date of calibration: 04 April 2023

Date of NEXT calibration: 03 April 2024

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 04 April 2023

Certificate No.: APJ22-164-CC002

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

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

1. *Calibration Precaution:*

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.

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

2. *Calibration Conditions:*

Air Temperature:	21.5 °C
Air Pressure:	1005 hPa
Relative Humidity:	71.4 %

3. *Calibration Equipment:*

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

4. *Calibration Results*

Sound Pressure Level

Reference Sound Pressure Level

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

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

Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dB SPL	Fast	94	31.5	94.3	±2.0
				63	94.3	±1.5
				125	94.3	±1.5
				250	94.2	±1.4
				500	94.2	±1.4
				1000	94.1	Ref
				2000	93.8	±1.6
				4000	93.1	±1.6

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBA SPL	Fast	94	31.5	55.0	-39.4 ±2.0
				63	68.2	-26.2 ±1.5
				125	78.2	-16.1 ±1.5
				250	85.6	-8.6 ±1.4
				500	91.0	-3.2 ±1.4
				1000	94.1	Ref
				2000	95.0	+1.2 ±1.6
				4000	94.1	+1.0 ±1.6

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBC SPL	Fast	94	31.5	91.3	-3.0 ±2.0
				63	93.5	-0.8 ±1.5
				125	94.1	-0.2 ±1.5
				250	94.2	-0.0 ±1.4
				500	94.2	-0.0 ±1.4
				1000	94.1	Ref
				2000	93.6	-0.2 ±1.6
				4000	92.3	-0.8 ±1.6

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

5. *Calibration Results Applied*

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

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.15
	63 Hz	± 0.10
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

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

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

(A+A)*L Acoustics and Air Testing Laboratory Co. Ltd.
聲學及空氣測試實驗室有限公司

Certificate of Calibration

for

Description:	***Sound Level Calibrator***
Manufacturer:	***RION***
Type No.:	***NC-75***
Serial No.:	***34724245***

Submitted by:

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

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

☑ **Within**
☐ **Outside**

the allowable tolerance.

The test equipments used for calibration are traceable to National Standards via:
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 27 July 2023

Date of calibration: 3 August 2023

Date of NEXT calibration: 2 August 2024

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: **3 August 2023**

Certificate No.: APJ23-049-CC003

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

1. *Calibration Precautions:*

- 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 Specifications:*

Calibration check

3. *Calibration Conditions:*

Air Temperature:	22.6 °C
Air Pressure:	1006 hPa
Relative Humidity:	52.9 %

4. *Calibration Equipment:*

Test Equipment	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV220120	HOKLAS

5. *Calibration Results*

5.1 Sound Pressure Level

Nominal value dB	Accept lower level dB	Accept upper level dB	Measured value dB
94.0	93.6	94.4	94.0

Note:
The values given in this certification only related to the values measured at the time of the calibration.

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

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

A1

Calibration Certificate

Certificate No. 300737 Page 1 of 2 Pages

Customer : Acuity Sustainability Consulting Limited

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

Order No. : Q30320 **Date of receipt :** 2-Feb-23

Item Tested

Description : Hot Wire Anemometer

Manufacturer : RS PRO **I.D. :** ASCL-EQ-111

Model : RS-90 **Serial No. :** 210722208

Test Conditions

Date of Test : 13-Feb-23 **Supply Voltage :** --

Ambient Temperature : (23 ± 3)°C **Relative Humidity :** (50 ± 25) %

Test Specifications

Calibration check.

Ref. Document/Procedure : T03, Z04.

Test Results

All results were within the manufacturer's specification.

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

Main Test equipment used:

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

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

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

Calibrated by : James Yau **Approved by :** Steve Kwan

Date: 13-Feb-23

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

E

Calibration Certificate

Results :

1. Velocity

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

2. Temperature

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

Remark : 1. UUT: Unit-Under-Test
2. Uncertainty : ± (0.9 % + 0.16 m/s) for Velocity, ± 0.1 °C for Temperature, for a confidence probability of not less than 95 %.
3. Atmospheric Pressure: 1 002 hPa

---------- END ----------

Water Quality

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BC120001
Date of Issue : 05 December 2023

PART A - CUSTOMER INFORMATION

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

PART B - SAMPLE INFORMATION

Name of Equipment :	HORIBA U-53
Manufacturer :	HORIBA
Serial Number :	PPHNOMXY
Date of Received :	30 November 2023
Date of Calibration :	04 December 2023
Date of Next Calibration :	03 March 2024
Request No. :	D-BC120001

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500-H^+ B
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 23e 4500-O G (Membrane Electrode Method)
Turbidity	APHA 21e 2130 B (Nephelometric Method)

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.10	0.10	Satisfactory
7.42	7.44	0.02	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
36	36.77	0.77	Satisfactory
25	26.77	1.77	Satisfactory
15	16.26	1.26	Satisfactory

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

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	10.00	0.00	Satisfactory
20	21.07	5.35	Satisfactory
30	32.30	7.67	Satisfactory

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

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun-ning
Assistant Manager

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-BC120001
Date of Issue : 05 December 2023

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.99	7.66	-0.33	Satisfactory
5.00	4.68	-0.32	Satisfactory
2.58	2.21	-0.37	Satisfactory
0.10	0.07	-0.03	Satisfactory

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

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.62	--	Satisfactory
10	9.29	-7.1	Satisfactory
20	21.30	6.5	Satisfactory
100	105.00	5.0	Satisfactory
800	850.00	6.3	Satisfactory

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

Remark(s)

·The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.

·The results relate only to the calibrated equipment as received

·The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

·"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.

·The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

--- END OF REPORT ---

Hong Kong Calibration Ltd.
香港校正有限公司

Calibration Certificate

Certificate No. 300745

Customer : Acuity Sustainability Consulting Limited

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

Order No. : Q30320 **Date of receipt :** 2-Feb-23

Item Tested

Description : Global Flow Probe
Manufacturer : Global Water
Model : FP111
I.D. : --
Serial No. : 22K100858

Test Conditions

Date of Test : 27-Mar-23
Ambient Temperature : 20°C
Supply Voltage : --
Relative Humidity : 75%

Test Specifications

Calibration check.
Ref. Document/Procedure : V12

Test Results

All results were within the manufacturer's specification.
The results are shown in the attached page(s).

Main Test equipment used:

Equipment No.	Description	Cert. No.	Traceable to
S179	Std. Tape	301321	NIM-PRC
S136A	Stop Watch	201878	SCL-HKSAR

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

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

Calibrated by : Kin Wong

Approved by : Alan Chu

Date: 27-Mar-23

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

Calibration Certificate

Certificate No. 300745

Results :

Applied Value (m/s)	UUT Reading (m/s)	Mfr's Spec.
0.78	0.8	± 0.1 m/s

Remarks : 1. UUT : Unit-Under-Test
2. Uncertainty : ± 1 %, for a confidence probability of not less than 95%.

---------- END ----------

Landfill Gas

CERTIFICATION OF CALIBRATION

4533

Date Of Calibration: 31-Aug-2023

Certificate Number: G505207_1/33483

Issued by: QED Environmental Systems Ltd.

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

Description: Gas Analyser

Model: GEM5000

Serial Number: G505207

UKAS Accredited results:

Results after adjustment :

Methane (CH_4)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
5.0	5.0	0.072
15.0	15.1	0.13
60.0	59.7	0.42

Carbon Dioxide (CO_2)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
5.0	4.8	0.074
15.0	14.5	0.13
40.0	39.9	0.29

Oxygen (O_2)		
Certified Gas (%)	**Instrument Reading (%)**	**Uncertainty (%)**
20.2	20.3	0.25

The inwards assessment was carried out 21-Aug-2023.
The maximum adjustment is larger than the specification limit.
Inwards assessment data is available if requested.

All concentrations are molar.

CH_4, CO_2 readings recorded at : 33.2 °C ± 2.5 °C

O2 readings recorded at : 24.4 °C ± 2.5 °C

Barometric Pressure : 0998 mbar ± 4 mbar

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

Instrument has passed calibration as the measurement result is within the specification limit. The specification limit takes into account the measurement uncertainty.
The results relate only to the item calibrated

Calibration Instance:117 IGC Instance:117

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

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

Registered in England and Wales 1898734

CERTIFICATION OF CALIBRATION

4533

Date Of Calibration: 31-Aug-2023

Certificate Number: G505207_1/33483

Issued by: QED Environmental Systems Ltd.

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

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

Non-UKAS accredited results after adjustment:

Barometer (mbar)	
Reference	**Instrument Reading**
998	999

Additional Gas Cells		
Gas	**Certified Gas (ppm)**	**Instrument Reading (ppm)**
CO	501	507

Date of Issue : 07-Sep-2023 **Approved by Signatory**

Fani Zolota

Laboratory Inspection

End of Certificate

Calibration Instance: 117 IGC Instance: 117

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

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

Registered in England and Wales 1898734

Appendix F Monitoring Results

Air Quality

1-hour TSP Concentration (μg/m^3) at Location AM1

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1) μg/m^3	Reading (2) μg/m^3	Reading (3) μg/m^3	Average μg/m^3	Action Level μg/m^3	Limit Level μg/m^3
3/2/2024	Sibata LD-5R	882106	1.044	Fine	13:06	14:06	15:06	29	30	29	29	285	500
9/2/2024	Sibata LD-5R	882106	1.044	Fine	8:06	9:06	10:06	24	26	28	26		
15/2/2024	Sibata LD-5R	882106	1.044	Fine	8:15	9:15	10:15	26	28	27	27		
21/2/2024	Sibata LD-5R	882106	1.044	Fine	13:12	14:12	15:12	36	25	31	31		
27/2/2024	Sibata LD-5R	882106	1.044	Fine	14:44	15:44	16:44	26	28	30	28		
							Average	**28**					
							Max.	**36**					
							Min.	**24**					

1-hour TSP Concentration (μg/m^3) at Location AM2

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1) μg/m^3	Reading (2) μg/m^3	Reading (3) μg/m^3	Average μg/m^3	Action Level μg/m^3	Limit Level μg/m^3
3/2/2024	Sibata LD-5R	942532	1.102	Fine	13:16	14:16	15:16	51	53	50	51	279	500
9/2/2024	Sibata LD-5R	0Z4545	1.045	Fine	8:16	9:16	10:16	51	56	53	53		
15/2/2024	Sibata LD-5R	942532	1.102	Fine	8:31	9:31	10:31	53	51	56	53		
21/2/2024	Sibata LD-5R	942532	1.102	Fine	13:21	14:21	15:21	41	40	39	40		
27/2/2024	Sibata LD-5R	0Z4545	1.045	Fine	15:00	16:00	17:00	51	50	50	50		
							Average	**50**					
							Max.	**56**					
							Min.	**39**					

1-hour TSP Concentration (μg/m^3) at Location AM3

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1) μg/m^3	Reading (2) μg/m^3	Reading (3) μg/m^3	Average μg/m^3	Action Level μg/m^3	Limit Level μg/m^3
3/2/2024	Sibata LD-5R	0Z4545	1.045	Fine	13:24	14:24	15:24	60	61	62	61	285	500
9/2/2024	Sibata LD-5R	942532	1.102	Fine	8:50	9:50	10:50	51	53	53	52		
15/2/2024	Sibata LD-5R	0Z4545	1.045	Fine	8:46	9:46	10:46	55	57	50	54		
21/2/2024	Sibata LD-5R	0Z4545	1.045	Fine	13:40	14:40	15:40	50	40	51	47		
27/2/2024	Sibata LD-5R	942532	1.102	Fine	15:10	16:10	17:10	56	50	57	54		
							Average	**54**					
							Max.	**62**					
							Min.	**40**					

The Summary of TSP 24-hour Concentration (μg/m^3) at Location AM1

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time	Averaged Flow Rate	Averaged Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
		(℃)	(hPa)	Initial	Final	(minutes)	(cfm)	(m^3/min)	(m^3)	Initial	Final	(g)	(μg/m^3)	(μg/m^3)	(μg/m3)
3/2/2024	Fine	21.5	1018.8	2549.04	2573.04	1440	39	1.16	1667	2.7382	2.8979	0.1597	96	164	260
9/2/2024	Fine	13.6	1025.0	2576.69	2600.69	1440	40	1.23	1773	2.7398	2.8925	0.1527	86		
15/2/2024	Fine	21.4	1019.1	2603.92	2627.92	1440	39	1.16	1669	2.7476	2.9180	0.1704	102		
21/2/2024	Fine	26.5	1015.6	2630.57	2654.57	1440	39	1.14	1642	2.6754	2.8189	0.1435	87		
27/2/2024	Fine	24.4	1013.1	2656.68	2680.68	1440	39	1.14	1645	2.7513	2.9447	0.1934	118		
												Average	**98**		
												Min	**86**		
												Max	**118**		

The Summary of 24-hour TSP Concentration (μg/m^3) at Location AM2

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time	Averaged Flow Rate	Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
		(℃)	(hPa)	Initial	Final	(minutes)	(cfm)	(m^3/min)	(m^3)	Initial	Final	(g)	(μg/m^3)	(μg/m^3)	(μg/m3)
3/2/2024	Fine	21.5	1018.8	2091.91	2115.91	1440	42	0.79	1142	2.7611	2.8944	0.1333	117	152	260
9/2/2024	Fine	13.6	1026.5	2119.45	2143.45	1440	41	0.81	1169	2.7394	2.8827	0.1433	123		
15/2/2024	Fine	21.4	1019.1	2146.98	2170.98	1440	38	0.64	915	2.7344	2.8458	0.1114	122		
21/2/2024	Fine	26.5	1015.6	2173.10	2197.10	1440	38	0.61	884	2.6869	2.7817	0.0948	107		
27/2/2024	Fine	24.4	1013.1	2199.46	2223.46	1440	41	0.75	1083	2.6700	2.7999	0.1299	120		
												Average	**118**		
												Min	**107**		
												Max	**123**		

The Summary of 24-hour TSP Concentration (μg/m^3) at Location AM3

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse Time		Sampling Time	Averaged Flow Rate	Flow Rate	Total Flow Volume	Filter Weight (g)		Particulate weight	Concentration	Action Level	Limit Level
		(℃)	(hPa)	Initial	Final	(minutes)	(cfm)	(m^3/min)	(m^3)	Initial	Final	(g)	(μg/m^3)	(μg/m^3)	(μg/m3)
3/2/2024	Fine	22.5	1018.8	3096.98	3120.98	1440	42	1.20	1725	2.7539	2.9390	0.1851	107	163	260
9/2/2024	Fine	13.6	1025.0	3124.80	3148.80	1440	42	1.23	1771	2.7421	2.9270	0.1849	104		
15/2/2024	Fine	21.4	1019.1	3151.69	3175.69	1440	42	1.20	1731	2.7422	2.9896	0.2474	143		
21/2/2024	Fine	26.5	1015.6	3178.83	3202.83	1440	42	1.19	1706	2.6755	2.8868	0.2113	124		
27/2/2024	Fine	24.4	1013.1	3205.28	3229.28	1440	42	1.19	1709	2.6412	2.8234	0.1822	107		
												Average	**117**		
												Min	**104**		
												Max	**143**		

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

Noise

Impact Phase Construction Noise Monitoring Data at Location NM1a

Date	Weather	Wind speed	Start Time	End Time	L_{eq} (dB(A))							L_{10} (dB(A))						L_{90} (dB(A))					
		m/s			1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th
9/2/2024	Fine	2.1	10:30	11:00	59.2	60.2	61.4	60.6	62.6	61.1	61.0	62.3	62.4	63.6	62.6	64.6	63.1	54.2	58.2	59.4	58.5	60.4	59.4
15/2/2024	Fine	2.1	9:40	10:10	61.4	60.3	60.4	61.3	61.9	62.4	61.3	63.2	62.4	62.6	62.9	63.2	64.8	58.4	57.2	58.3	59.4	59.9	60.3
21/2/2024	Fine	1.7	9:10	9:40	59.2	60.1	61.2	60.3	59.6	59.9	60.1	61.2	62.6	63.1	61.4	60.4	61.2	56.2	59.1	59.2	59.1	55.2	57.2
27/2/2024	Fine	1.3	10:10	10:40	61.2	60.3	59.5	59.6	61.2	60.3	60.4	63.2	62.4	61.9	61.2	63.6	62.4	59.2	58.4	57.6	56.2	59.1	58.6
										Average	60.7												
										Baseline Level	55.4												
										Action Level	When one valid documented complaint is received												
										Limit Level	75												

Impact Phase Construction Noise Monitoring Data at Location NM2a

Date	Weather	Wind speed	Start Time	End Time	L_{eq} (dB(A))							L_{10} (dB(A))						L_{90} (dB(A))					
		m/s			1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th
9/2/2024	Fine	1.6	14:40	15:10	58.4	57.6	58.6	58	57.1	56.6	57.8	60.2	59.4	60.4	61.1	60.6	57.5	55.4	54.2	54.9	56.3	54.3	54.6
15/2/2024	Fine	1.7	16:14	16:44	58.3	59.1	57.4	58.4	57	56.2	57.8	60.3	62.1	59.2	61.4	60.4	59.4	54.3	53.2	53.2	54.2	55.2	56.2
21/2/2024	Fine	2.1	14:10	14:40	57.2	56.2	56.4	55.6	54.5	54.3	55.8	59.2	58.2	58.1	57.5	56.2	56.3	55.2	54.2	54.4	55	52.4	53.2
27/2/2024	Fine	1.2	14:30	15:00	56.2	55.2	56.4	57.2	55.6	54.6	55.9	56.2	57.6	58.6	59.2	57.2	55.6	52.6	51.4	52.6	53.1	52.4	53.1
										Average	57.0												
										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
15-Feb-24	16:14	Sunny	0.2	0.1	22.1	7.6	<7.4	<4	7.5	>7.7	>7.8	8.3	>9.2	>9.5	2.0	>9.7	>11.4

Monitoring Location: WM2

Date	Time	Weather	Water Depth (m)	Water Flow (L/s)	Water Temperature (°C)	DO (mg/L)			pH			Turbidity (NTU)			SS (mg/L)		
						Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level
15-Feb-24	8:08	Sunny	0.70	0.2	21.1	7.5	<5	<4	7.4	>7.6	>7.7	32.7	>108.3	>108.9	12.3	>94.5	>94.7

Remarks

1. Sample will be grabbed on surface when the water depth is less than 1m.

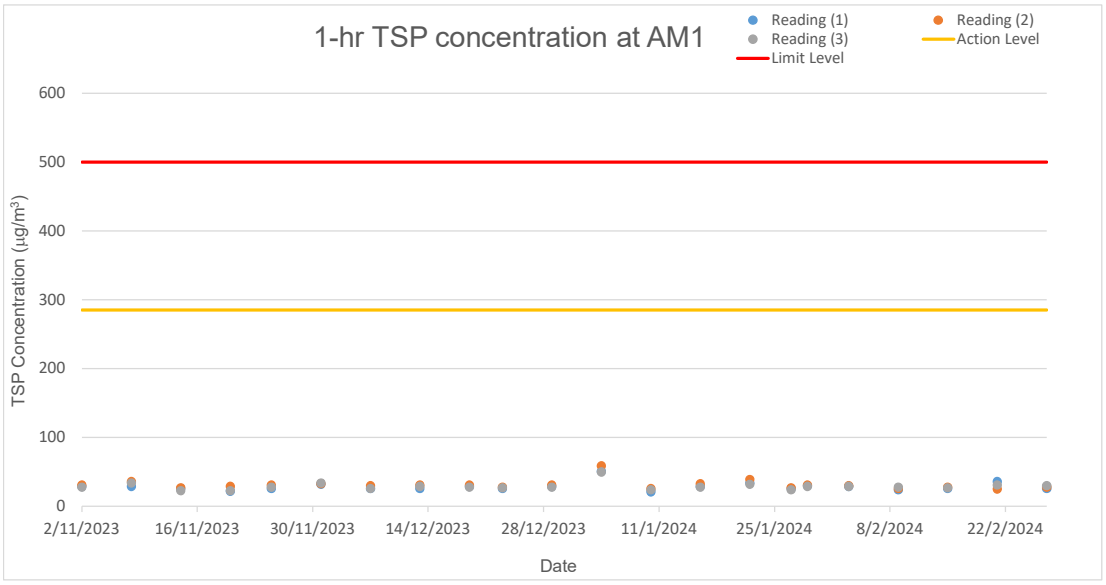
2. "TBC" equal to "To be confirm"

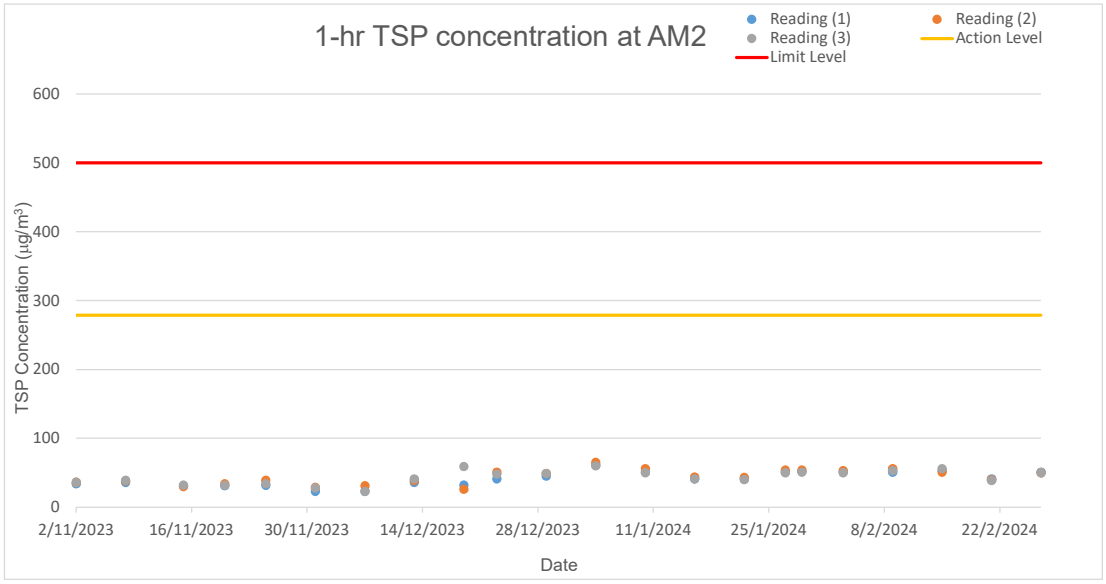
3. Orange Text equal to exceed Action Level

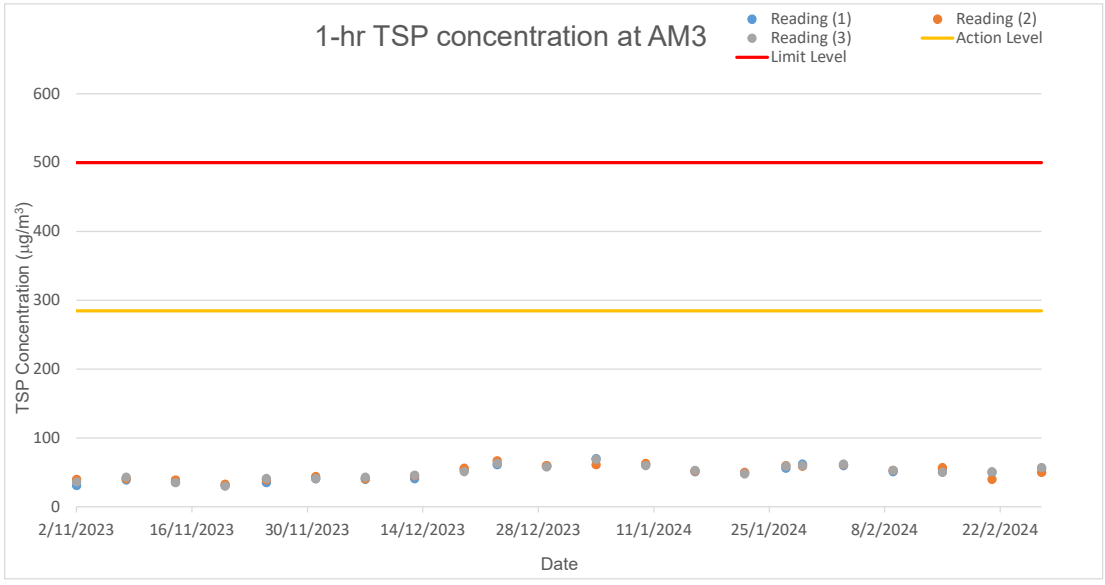
4. Red Text equal to exceed Limit Level

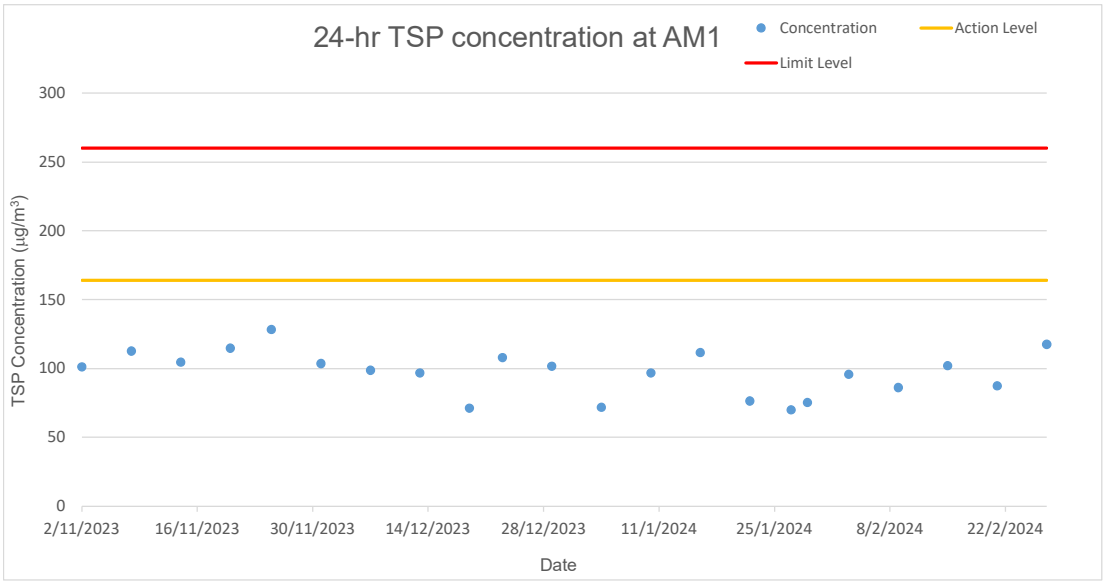
Appendix G Graphical Presentations

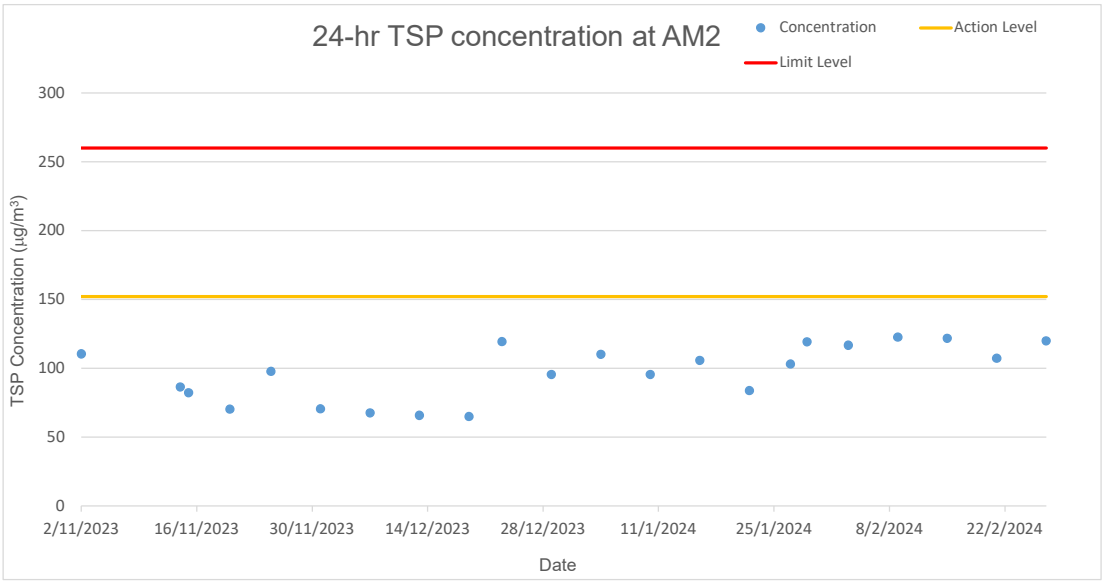
Air Quality

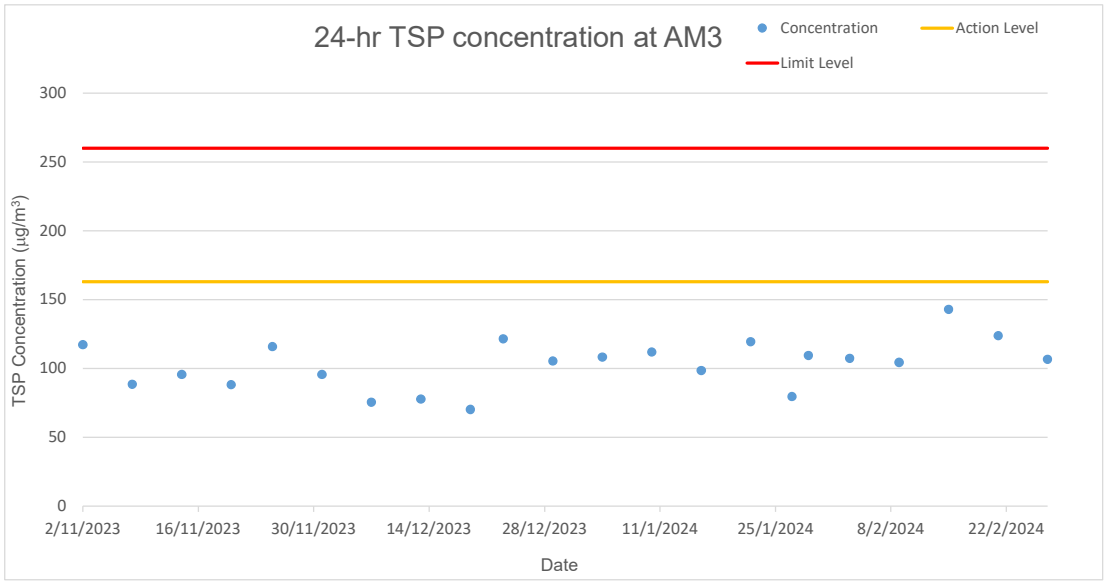

1-hr TSP concentration at AM1
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
2/11/2023
16/11/2023
30/11/2023
14/12/2023
28/12/2023
11/1/2024
25/1/2024
8/2/2024
22/2/2024
Date


1-hr TSP concentration at AM2
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
2/11/2023
16/11/2023
30/11/2023
14/12/2023
28/12/2023
11/1/2024
25/1/2024
8/2/2024
22/2/2024
Date

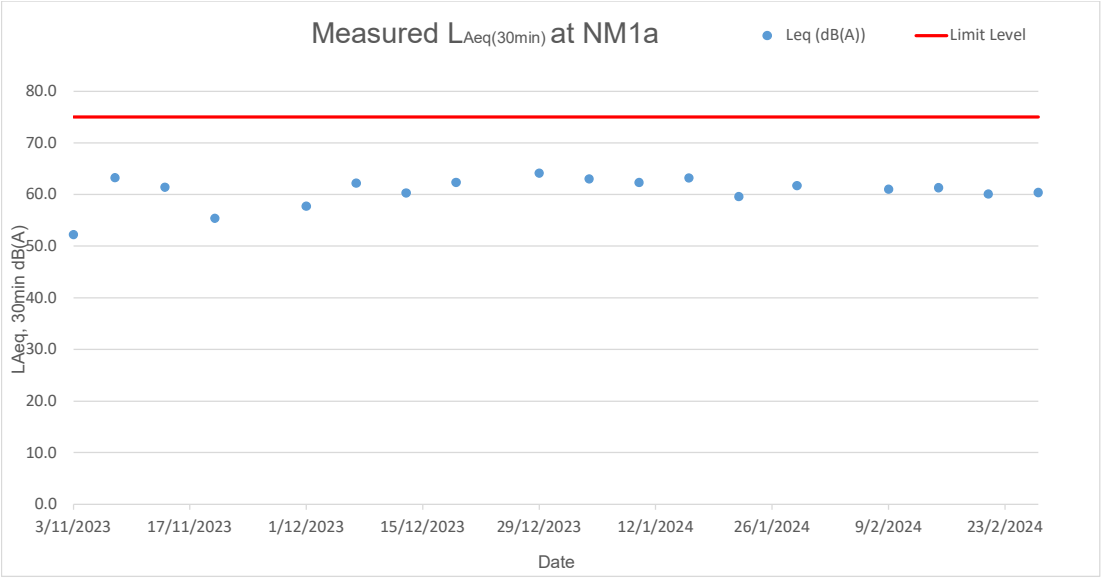

1-hr TSP concentration at AM3
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
2/11/2023
16/11/2023
30/11/2023
14/12/2023
28/12/2023
11/1/2024
25/1/2024
8/2/2024
22/2/2024
Date

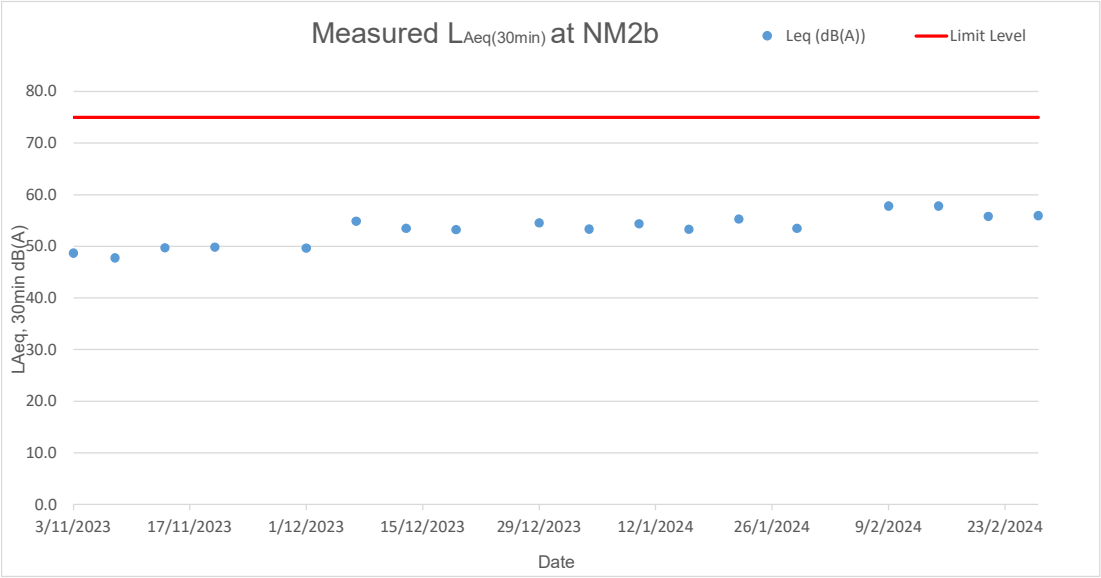

24-hr TSP concentration at AM1
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
300
250
200
150
100
50
0
2/11/2023
16/11/2023
30/11/2023
14/12/2023
28/12/2023
11/1/2024
25/1/2024
8/2/2024
22/2/2024
Date


24-hr TSP concentration at AM2
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
300
250
200
150
100
50
0
2/11/2023
16/11/2023
30/11/2023
14/12/2023
28/12/2023
11/1/2024
25/1/2024
8/2/2024
22/2/2024
Date


24-hr TSP concentration at AM3
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
300
250
200
150
100
50
0
2/11/2023
16/11/2023
30/11/2023
14/12/2023
28/12/2023
11/1/2024
25/1/2024
8/2/2024
22/2/2024
Date

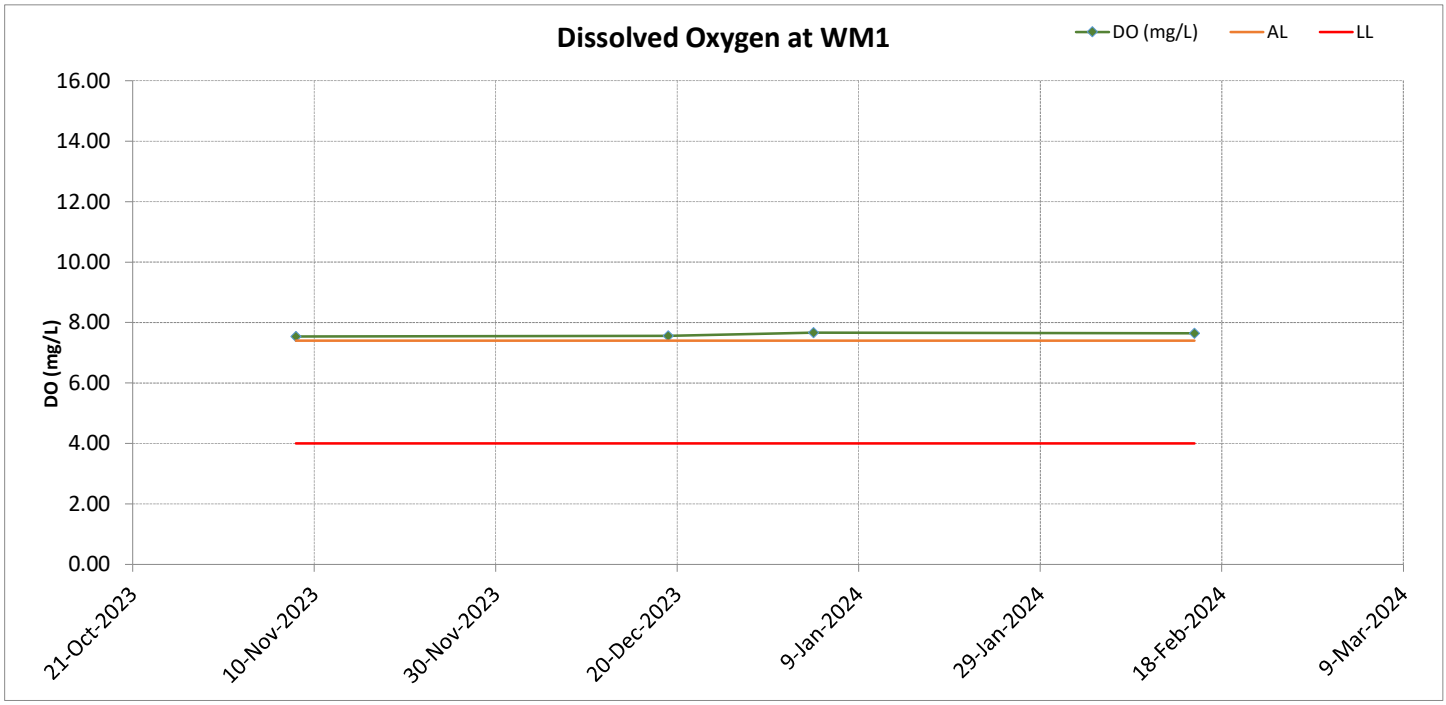
Noise

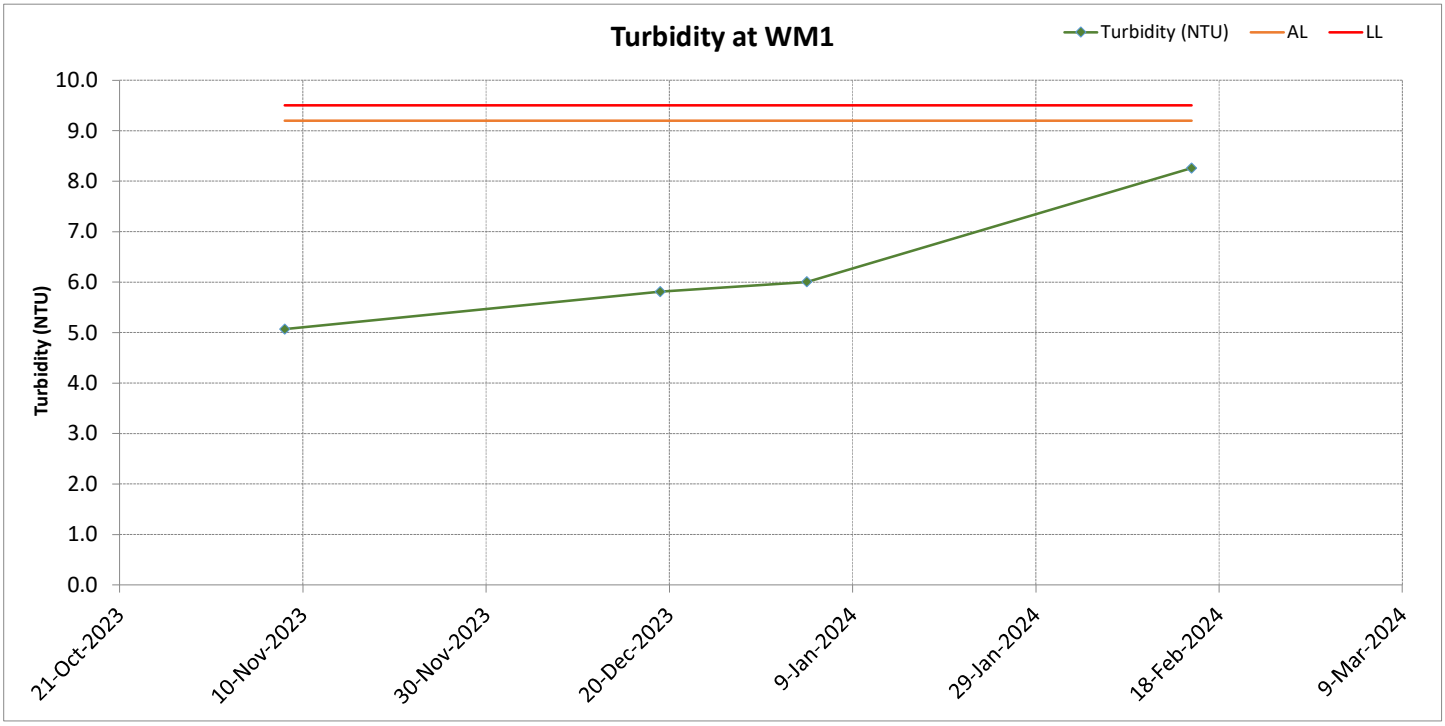

Measured LAeq(30min) at NM1a
Leq (dB(A))
Limit Level
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
LAeq, 30min dB(A)
3/11/2023
17/11/2023
1/12/2023
15/12/2023
29/12/2023
12/1/2024
26/1/2024
9/2/2024
23/2/2024
Date


Measured LAeq(30min) at NM2b
Leq (dB(A))
Limit Level
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
LAeq, 30min dB(A)
3/11/2023
17/11/2023
1/12/2023
15/12/2023
29/12/2023
12/1/2024
26/1/2024
9/2/2024
23/2/2024
Date

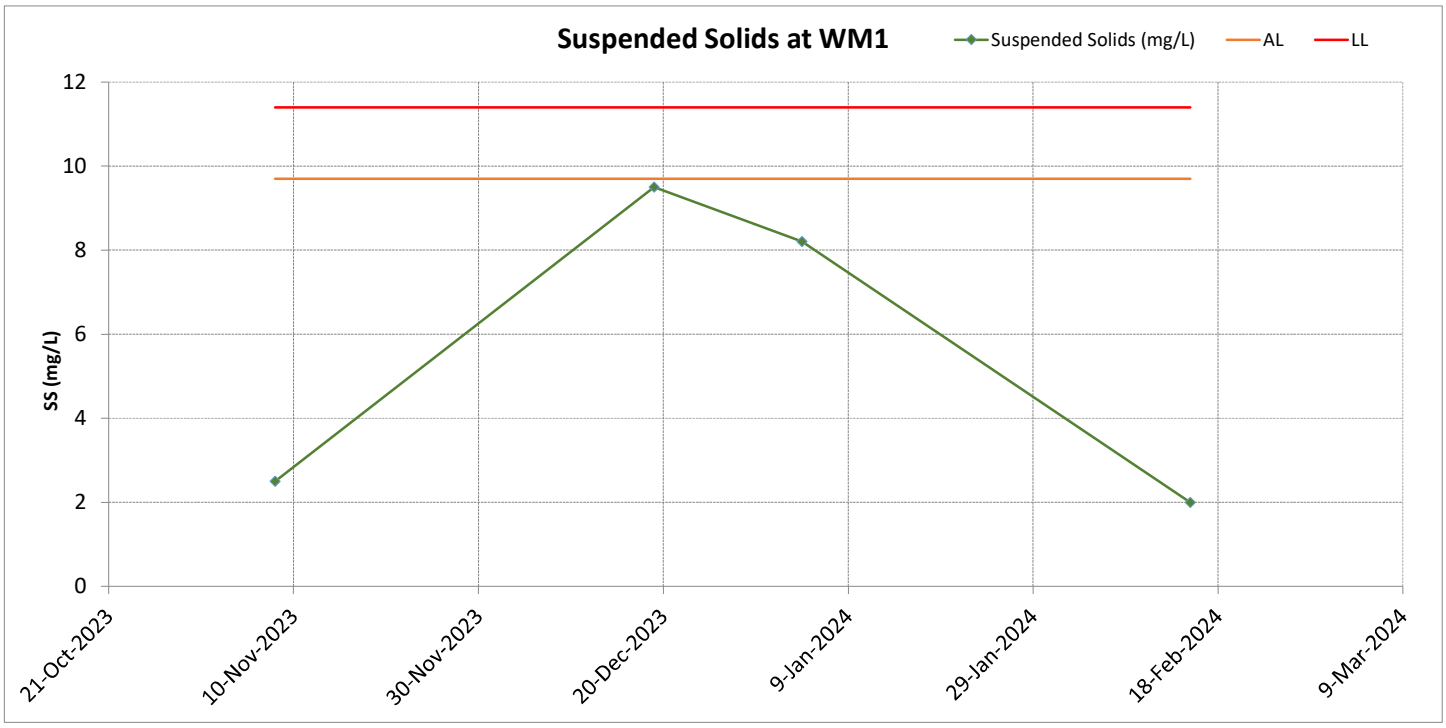
Water Quality

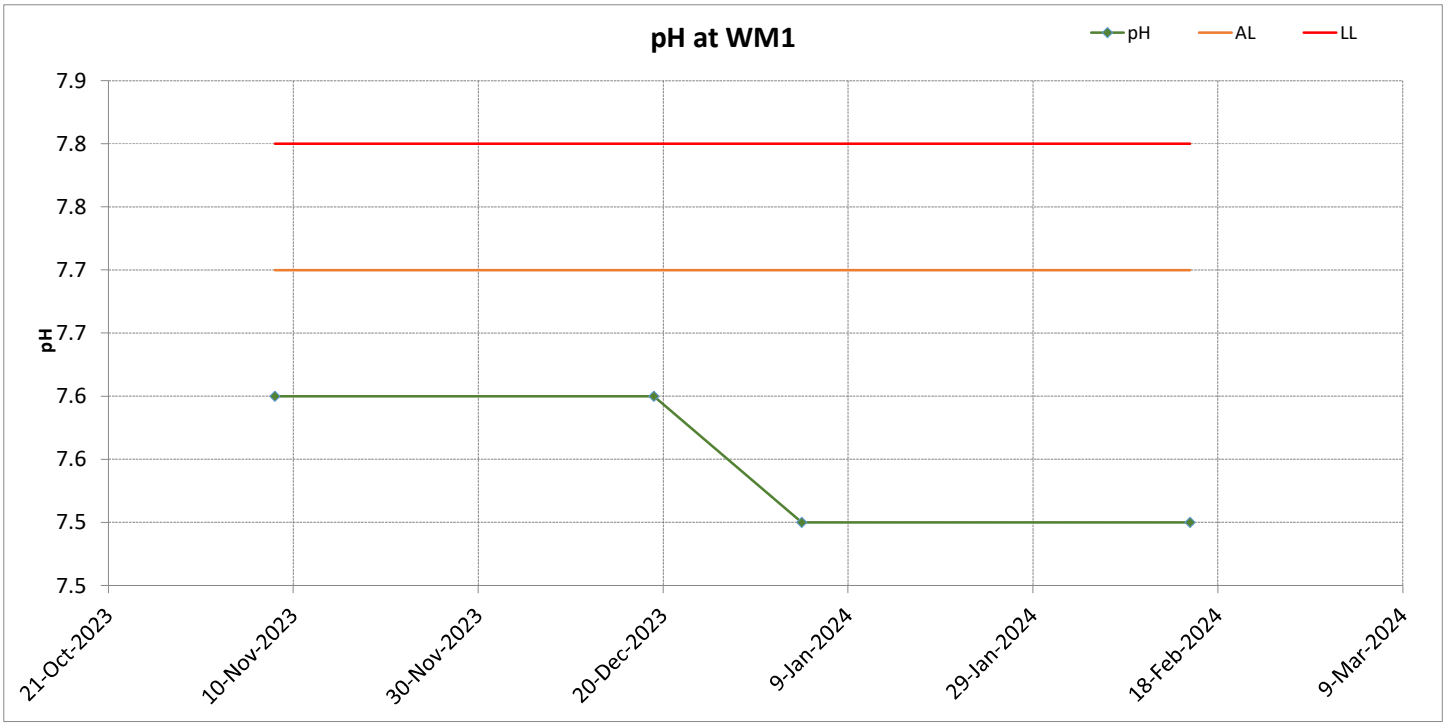
Surface Water Monitoring Results at WM1



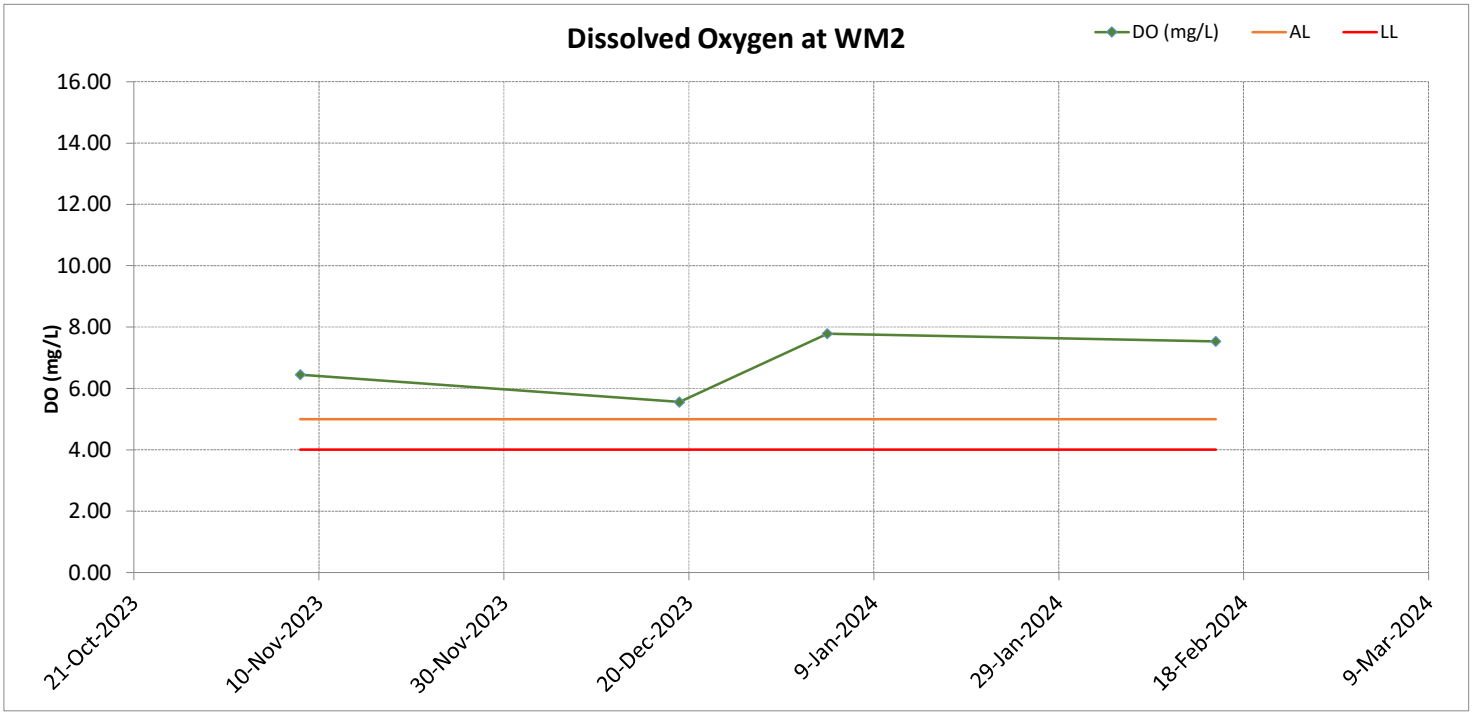


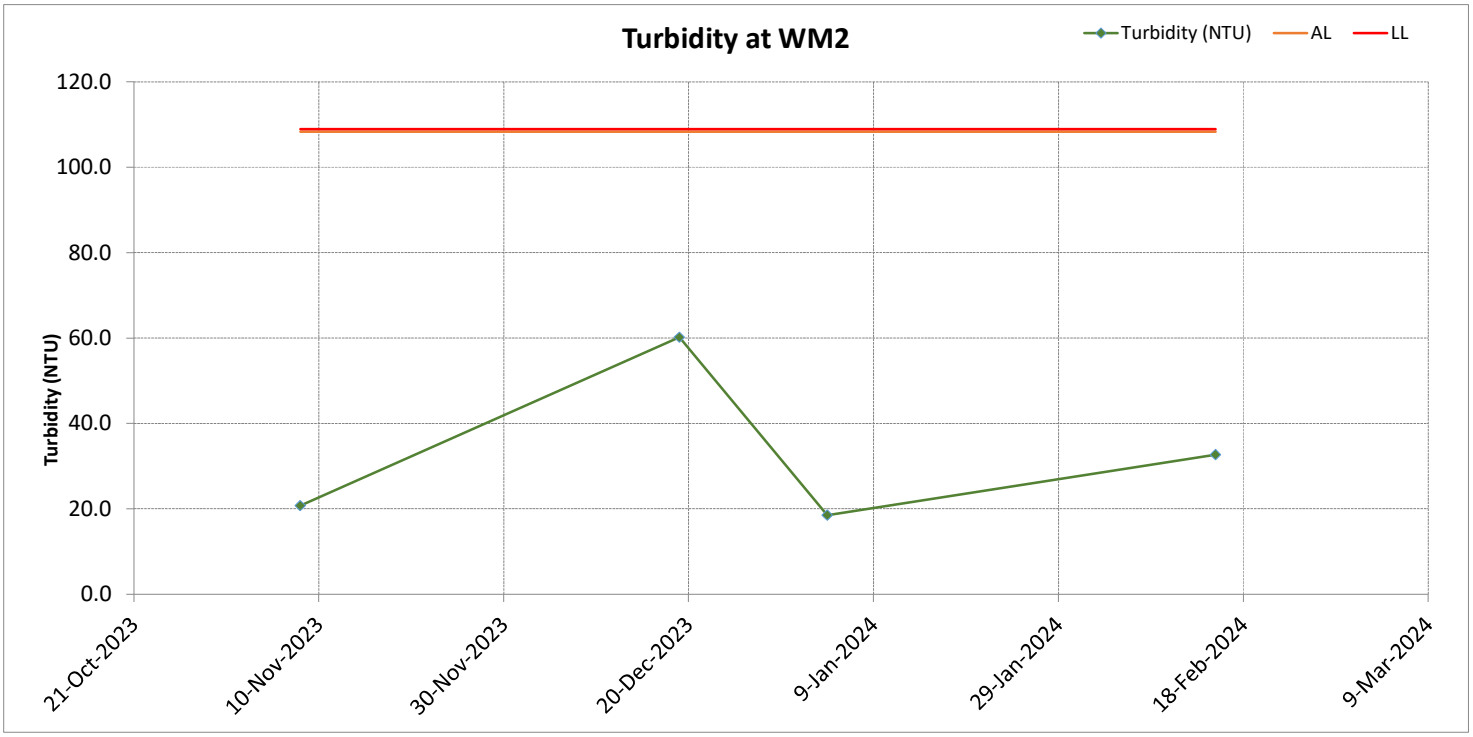
Surface Water Monitoring Results at WM1



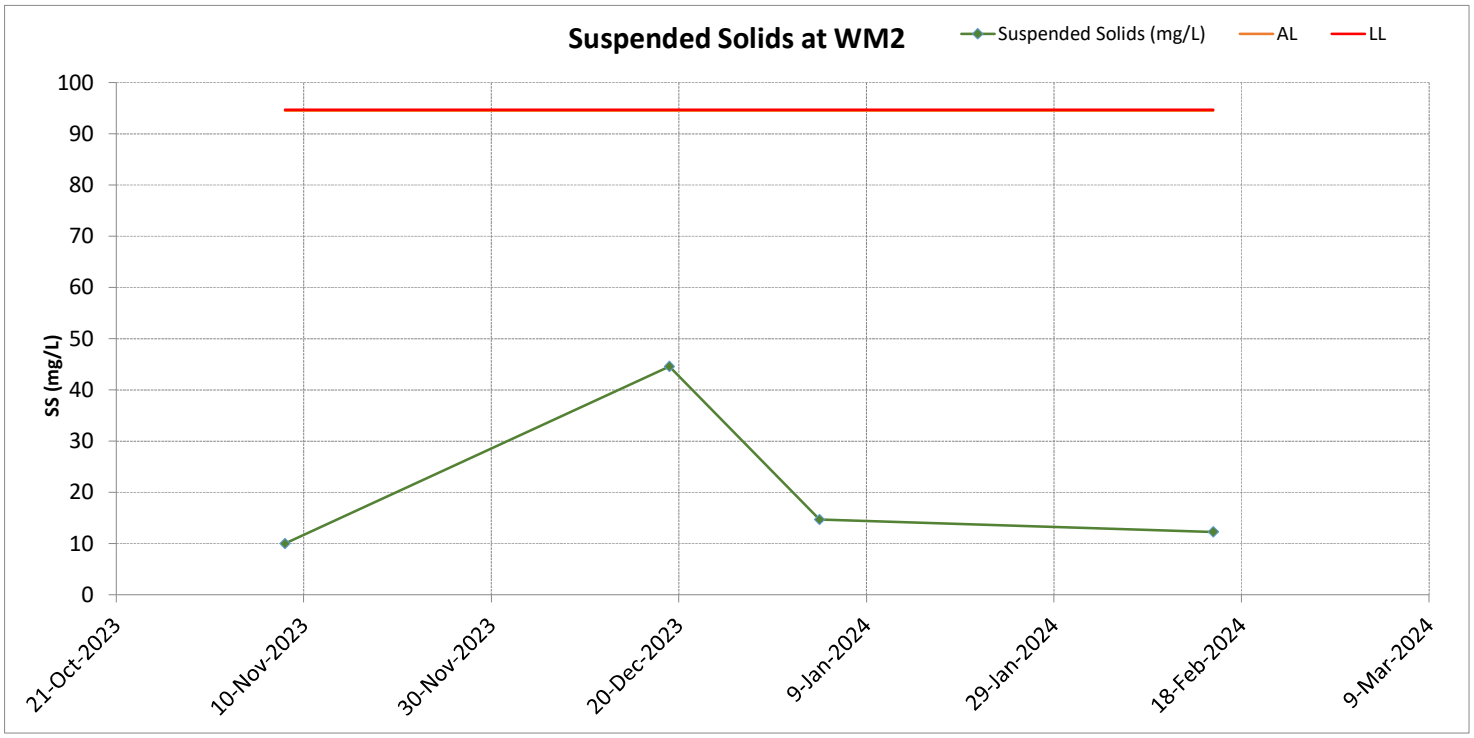


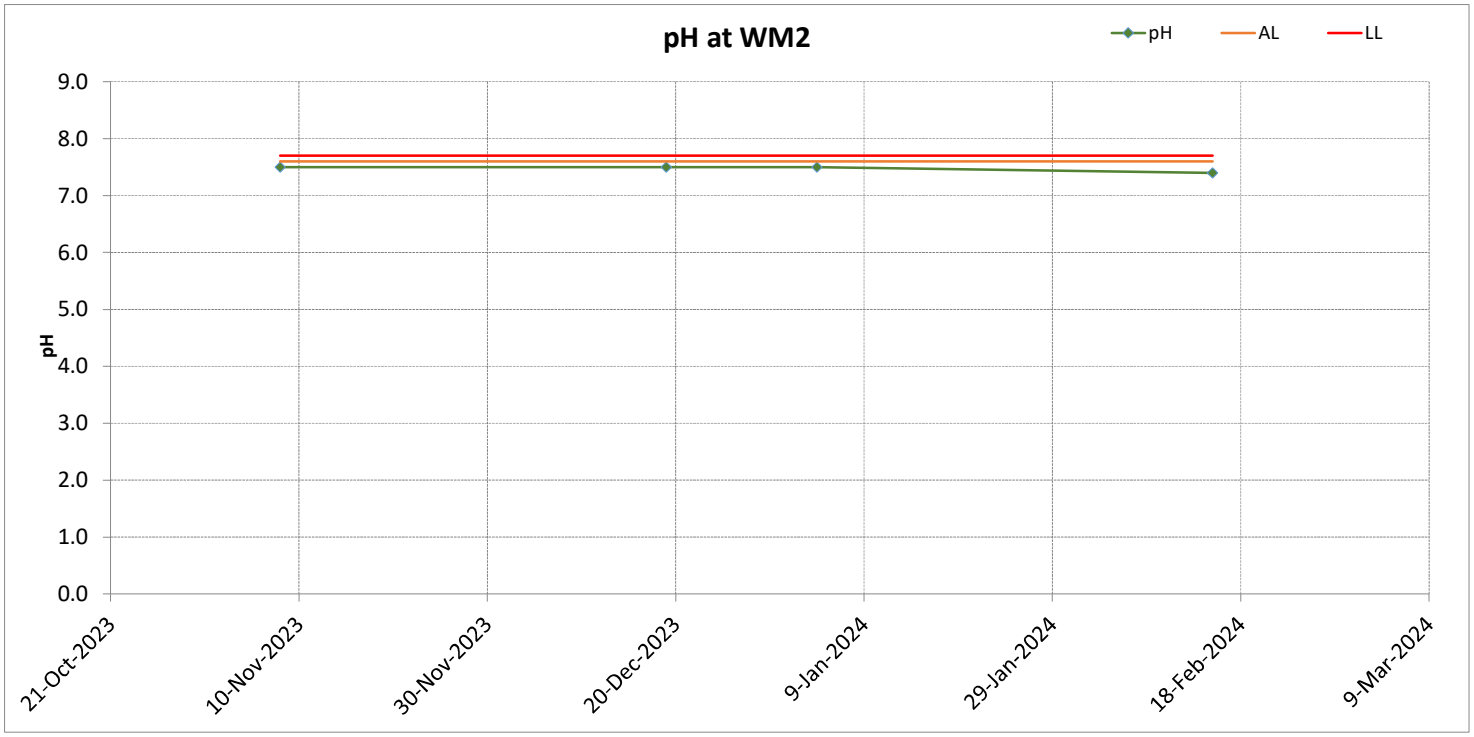
Surface Water Monitoring Results at WM2





Surface Water Monitoring Results at WM2





Appendix H Notification of Environmental Quality Limits Exceedance

Notification of Environmental Quality Limits Exceedance

Air Quality Monitoring - Construction Dust

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

Noise Monitoring

Noise Monitoring Station	Level Exceedance	LAeq (30mins) Exceedance Count			
		Reporting period		Accumulate project to date	
		Project related	Non-project related	Project related	Non-project related
NM1a	Action	0	0	0	0
	Limit	0	0	0	0
NM2a	Action	0	0	0	0
	Limit	0	0	0	0

Notification of Environmental Quality Limits Exceedance

Surface Water Monitoring

Surface Water Quality Monitoring Station	Level Exceedance	Exceedance Count															
		Reporting period								Accumulate project to date							
		Project related				Non-project replated				Project related				Non-project replated			
		DO	pH	Turb	SS	DO	pH	Turb	SS	DO	pH	Turb	SS	DO	pH	Turb	SS
WM1	Action	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WM2	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

Remarks:

1. “DO” equal to Dissolved Oxygen
2. “Turb” equal to Turbidity
3. “SS” equal to Suspended Solids

Landfill Gas (LFG) Monitoring

LFG Monitoring Station	Level Exceedance	Exceedance Count											
		Reporting period						Accumulate project to date					
		Project related			Non-project replated			Project related			Non-project replated		
		CH_4	CO_2	O_2	CH_4	CO_2	O_2	CH_4	CO_2	O_2	CH_4	CO_2	O_2
Portion A +50 mpD to +70 mpD Platform	Action	0	0	0	0	0	0	0	0	0	0	0	0
	Limit	0	0	0	0	0	0	0	0	0	0	0	0

Appendix I Wind Data

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240201_0003	0.4	326
20240201_0013	0.2	334
20240201_0023	0.1	3
20240201_0033	0.7	333
20240201_0043	1.4	293
20240201_0053	0.2	137
20240201_0103	0.3	322
20240201_0113	0.1	348
20240201_0123	0.1	77
20240201_0133	0.3	116
20240201_0143	0.1	346
20240201_0153	0.1	299
20240201_0203	0.1	281
20240201_0213	0.1	73
20240201_0223	0.1	30
20240201_0233	0.1	168
20240201_0243	0.1	156
20240201_0253	0.1	131
20240201_0303	0.1	150
20240201_0313	0.1	259
20240201_0323	0.1	137
20240201_0333	0.1	340
20240201_0343	0.1	103
20240201_0353	0.1	287
20240201_0403	0.1	113
20240201_0413	0.1	117
20240201_0423	0.1	148
20240201_0433	0.1	166
20240201_0443	0.1	78
20240201_0453	0.1	186
20240201_0503	0.1	176
20240201_0513	0.1	36
20240201_0523	0.1	299
20240201_0533	0.1	284
20240201_0543	0.1	228
20240201_0553	0.1	136
20240201_0603	0.1	155
20240201_0613	0.1	90
20240201_0623	0.1	118
20240201_0633	0.1	155
20240201_0643	0.1	20
20240201_0653	0.2	68
20240201_0703	0.1	154
20240201_0713	0.1	223
20240201_0723	0.4	164
20240201_0733	0.1	18
20240201_0743	0.1	245
20240201_0753	0.8	129
20240201_0803	0.2	160
20240201_0813	0.5	112
20240201_0823	0.1	144
20240201_0833	0.1	253
20240201_0843	0.1	237
20240201_0853	0.1	261
20240201_0903	0.1	347
20240201_0913	0.1	37
20240201_0923	0.1	199
20240201_0933	0.1	252
20240201_0943	0.2	37
20240201_0953	0.2	98
20240201_1003	0.1	17
20240201_1013	0.1	284
20240201_1023	0.2	64
20240201_1033	0.2	160
20240201_1043	0.9	167
20240201_1053	0.1	83
20240201_1103	0.4	3
20240201_1113	0.8	352
20240201_1123	0.1	126
20240201_1133	0.2	183
20240201_1143	0.7	5
20240201_1153	0.1	187

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240201_1203	0.1	11
20240201_1213	1.3	73
20240201_1223	0.1	175
20240201_1233	2.2	165
20240201_1243	1.1	154
20240201_1253	1	331
20240201_1303	0.1	82
20240201_1313	0.3	290
20240201_1323	1	120
20240201_1333	1.2	50
20240201_1343	1.5	351
20240201_1353	4.3	110
20240201_1403	0.1	130
20240201_1413	0.8	91
20240201_1423	0.1	221
20240201_1433	0.6	70
20240201_1443	0.4	91
20240201_1453	1.8	22
20240201_1503	0.3	67
20240201_1513	0.1	353
20240201_1523	0.3	24
20240201_1533	0.1	8
20240201_1543	1.1	46
20240201_1553	0.2	331
20240201_1603	0.1	94
20240201_1613	0.6	59
20240201_1623	1.4	305
20240201_1633	0.1	299
20240201_1643	0.4	35
20240201_1653	0.4	92
20240201_1703	0.2	146
20240201_1713	0.1	145
20240201_1723	0.2	213
20240201_1733	0.1	142
20240201_1743	0.1	167
20240201_1753	0.4	133
20240201_1803	0.1	124
20240201_1813	0.3	121
20240201_1823	0.1	138
20240201_1833	0.1	186
20240201_1843	0.5	145
20240201_1853	0.4	171
20240201_1903	0.1	106
20240201_1913	0.3	90
20240201_1923	0.4	100
20240201_1933	0.2	107
20240201_1943	0.1	125
20240201_1953	0.1	94
20240201_2003	0.1	119
20240201_2013	0.1	8
20240201_2023	0.2	105
20240201_2033	0.1	98
20240201_2043	0.1	136
20240201_2053	0.1	306
20240201_2103	0.1	56
20240201_2113	0.1	15
20240201_2123	0.2	201
20240201_2133	0.1	327
20240201_2143	0.1	271
20240201_2153	0.1	150
20240201_2203	0.1	145
20240201_2213	0.1	348
20240201_2223	0.3	115
20240201_2233	0.1	279
20240201_2243	0.1	318
20240201_2253	0.1	124
20240201_2303	0.1	201
20240201_2313	0.1	287
20240201_2323	0.1	101
20240201_2333	0.1	51
20240201_2343	0.1	144
20240201_2353	0.1	259

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240202_0003	0.2	155
20240202_0013	0.1	241
20240202_0023	0.1	119
20240202_0033	0.1	32
20240202_0043	0.1	156
20240202_0053	0.1	147
20240202_0103	0.1	296
20240202_0113	0.1	104
20240202_0123	0.1	58
20240202_0133	0.1	264
20240202_0143	0.1	158
20240202_0153	0.1	69
20240202_0203	0.1	128
20240202_0213	0.1	20
20240202_0223	0.1	58
20240202_0233	0.1	346
20240202_0243	0.1	147
20240202_0253	0.1	109
20240202_0303	0.1	221
20240202_0313	0.1	142
20240202_0323	0.1	272
20240202_0333	0.1	149
20240202_0343	0.1	112
20240202_0353	0.1	280
20240202_0403	0.1	109
20240202_0413	0.1	12
20240202_0423	0.1	130
20240202_0433	0.1	139
20240202_0443	0.1	85
20240202_0453	0.1	32
20240202_0503	0.1	33
20240202_0513	0.1	311
20240202_0523	0.1	311
20240202_0533	0.1	148
20240202_0543	0.1	148
20240202_0553	0.1	47
20240202_0603	0.1	332
20240202_0613	0.1	75
20240202_0623	0.1	75
20240202_0633	0.1	339
20240202_0643	0.1	340
20240202_0653	0.1	18
20240202_0703	0.1	18
20240202_0713	0.1	254
20240202_0723	0.1	198
20240202_0733	0.1	182
20240202_0743	0.1	164
20240202_0753	0.1	163
20240202_0803	0.1	135
20240202_0813	0.1	147
20240202_0823	0.1	138
20240202_0833	0.1	146
20240202_0843	0.1	112
20240202_0853	0.1	100
20240202_0903	0.2	95
20240202_0913	0.1	305
20240202_0923	0.1	348
20240202_0933	0.2	56
20240202_0943	0.2	114
20240202_0953	1.4	259
20240202_1003	0.3	132
20240202_1013	0.1	84
20240202_1023	0.5	15
20240202_1033	0.1	136
20240202_1043	2.7	75
20240202_1053	0.1	127
20240202_1103	0.1	83
20240202_1113	1.8	126
20240202_1123	2	92
20240202_1133	1.8	318
20240202_1143	0.7	25
20240202_1153	0.1	12

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240202_1203	0.1	196
20240202_1213	0.2	284
20240202_1223	0.1	42
20240202_1233	0.1	348
20240202_1243	2.8	148
20240202_1253	0.1	320
20240202_1303	0.1	346
20240202_1313	1.2	284
20240202_1323	2.6	18
20240202_1333	0.6	354
20240202_1343	0.9	254
20240202_1353	0.1	59
20240202_1403	0.2	173
20240202_1413	0.7	97
20240202_1423	0.7	63
20240202_1433	0.2	17
20240202_1443	0.7	283
20240202_1453	5.7	17
20240202_1503	4.4	18
20240202_1513	2	64
20240202_1523	0.9	341
20240202_1533	0.4	21
20240202_1543	0.1	86
20240202_1553	1.7	65
20240202_1603	0.3	63
20240202_1613	0.1	172
20240202_1623	0.8	7
20240202_1633	0.9	267
20240202_1643	0.2	129
20240202_1653	0.7	12
20240202_1703	1.5	141
20240202_1713	0.2	350
20240202_1723	0.5	274
20240202_1733	3.8	78
20240202_1743	2.1	160
20240202_1753	2	12
20240202_1803	0.1	93
20240202_1813	0.2	70
20240202_1823	0.8	114
20240202_1833	1.9	333
20240202_1843	0.3	40
20240202_1853	0.4	77
20240202_1903	0.1	61
20240202_1913	0.3	245
20240202_1923	1.2	50
20240202_1933	0.2	79
20240202_1943	0.5	143
20240202_1953	0.7	321
20240202_2003	0.1	286
20240202_2013	0.9	55
20240202_2023	2.1	343
20240202_2033	0.4	345
20240202_2043	0.6	62
20240202_2053	1.3	45
20240202_2103	0.1	347
20240202_2113	3.8	132
20240202_2123	0.1	71
20240202_2133	0.3	147
20240202_2143	2.6	32
20240202_2153	2.5	346
20240202_2203	3.9	140
20240202_2213	0.5	337
20240202_2223	1.1	310
20240202_2233	0.7	30
20240202_2243	1.6	161
20240202_2253	0.1	342
20240202_2303	1.8	106
20240202_2313	3.4	149
20240202_2323	1.2	25
20240202_2333	1	13
20240202_2343	0.8	342
20240202_2353	0.3	94

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240203_0003	0.2	318
20240203_0013	0.1	131
20240203_0023	1.5	32
20240203_0033	0.1	333
20240203_0043	0.1	294
20240203_0053	0.6	55
20240203_0103	0.4	319
20240203_0113	0.7	58
20240203_0123	1	307
20240203_0133	0.1	125
20240203_0143	0.1	91
20240203_0153	0.1	140
20240203_0203	0.3	102
20240203_0213	4.4	171
20240203_0223	0.1	64
20240203_0233	0.1	344
20240203_0243	0.1	169
20240203_0253	0.3	351
20240203_0303	0.6	84
20240203_0313	0.1	168
20240203_0323	4.4	153
20240203_0333	1.6	287
20240203_0343	0.1	164
20240203_0353	0.1	50
20240203_0403	0.1	121
20240203_0413	0.2	28
20240203_0423	0.1	121
20240203_0433	0.1	149
20240203_0443	0.1	289
20240203_0453	0.1	167
20240203_0503	0.1	185
20240203_0513	0.1	260
20240203_0523	0.2	88
20240203_0533	0.6	135
20240203_0543	0.1	115
20240203_0553	0.1	159
20240203_0603	0.1	68
20240203_0613	0.2	353
20240203_0623	0.1	163
20240203_0633	0.1	354
20240203_0643	0.4	85
20240203_0653	3.5	121
20240203_0703	0.3	119
20240203_0713	0.1	229
20240203_0723	0.5	101
20240203_0733	0.1	22
20240203_0743	0.1	316
20240203_0753	1.2	3
20240203_0803	0.7	334
20240203_0813	0.1	314
20240203_0823	0.1	34
20240203_0833	0.1	37
20240203_0843	0.1	161
20240203_0853	0.1	251
20240203_0903	0.1	203
20240203_0913	0.6	99
20240203_0923	0.2	150
20240203_0933	0.4	110
20240203_0943	0.1	236
20240203_0953	0.1	48
20240203_1003	0.1	319
20240203_1013	0.3	42
20240203_1023	0.3	29
20240203_1033	0.4	16
20240203_1043	0.2	263
20240203_1053	0.1	36
20240203_1103	0.4	141
20240203_1113	1	103
20240203_1123	0.6	124
20240203_1133	0.1	231
20240203_1143	0.5	0
20240203_1153	0.9	102

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240203_1203	0.5	144
20240203_1213	1	113
20240203_1223	0.1	78
20240203_1233	0.1	13
20240203_1243	0.1	3
20240203_1253	0.1	258
20240203_1303	0.9	87
20240203_1313	0.5	117
20240203_1323	0.4	146
20240203_1333	0.1	209
20240203_1343	0.7	21
20240203_1353	0.2	80
20240203_1403	1.3	355
20240203_1413	0.1	155
20240203_1423	5.8	158
20240203_1433	0.4	168
20240203_1443	0.4	348
20240203_1453	0.1	39
20240203_1503	1.6	27
20240203_1513	0.6	56
20240203_1523	0.1	148
20240203_1533	1.4	146
20240203_1543	0.2	73
20240203_1553	1.9	153
20240203_1603	0.4	86
20240203_1613	0.1	69
20240203_1623	0.1	258
20240203_1633	0.2	189
20240203_1643	0.9	106
20240203_1653	1.4	155
20240203_1703	0.1	161
20240203_1713	1.3	86
20240203_1723	0.1	221
20240203_1733	0.1	29
20240203_1743	0.6	94
20240203_1753	0.1	40
20240203_1803	0.5	104
20240203_1813	0.1	79
20240203_1823	0.1	165
20240203_1833	0.8	91
20240203_1843	0.2	153
20240203_1853	0.1	269
20240203_1903	0.1	108
20240203_1913	0.1	202
20240203_1923	0.4	100
20240203_1933	3.7	131
20240203_1943	0.1	220
20240203_1953	1.2	181
20240203_2003	0.7	111
20240203_2013	1.5	85
20240203_2023	0.1	89
20240203_2033	0.2	176
20240203_2043	0.2	93
20240203_2053	0.1	347
20240203_2103	0.2	156
20240203_2113	0.1	211
20240203_2123	0.1	179
20240203_2133	0.2	89
20240203_2143	0.4	105
20240203_2153	0.1	317
20240203_2203	0.1	235
20240203_2213	1.2	112
20240203_2223	0.2	137
20240203_2233	0.1	106
20240203_2243	0.3	135
20240203_2253	0.2	48
20240203_2303	0.4	172
20240203_2313	0.1	65
20240203_2323	0.1	118
20240203_2333	0.1	165
20240203_2343	0.1	126
20240203_2353	0.1	340

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240204_0003	0.1	291
20240204_0013	0.1	4
20240204_0023	0.5	113
20240204_0033	0.1	56
20240204_0043	1.4	337
20240204_0053	0.1	128
20240204_0103	0.6	53
20240204_0113	1.9	100
20240204_0123	0.1	29
20240204_0133	0.1	221
20240204_0143	0.1	275
20240204_0153	0.1	63
20240204_0203	0.6	120
20240204_0213	0.1	138
20240204_0223	0.3	138
20240204_0233	0.3	339
20240204_0243	0.1	353
20240204_0253	0.1	140
20240204_0303	0.1	130
20240204_0313	0.1	182
20240204_0323	0.1	137
20240204_0333	0.1	18
20240204_0343	0.1	189
20240204_0353	0.1	138
20240204_0403	0.1	64
20240204_0413	0.1	167
20240204_0423	0.1	127
20240204_0433	0.1	143
20240204_0443	0.1	155
20240204_0453	0.1	304
20240204_0503	0.1	40
20240204_0513	0.2	105
20240204_0523	2.9	110
20240204_0533	1.5	110
20240204_0543	0.3	318
20240204_0553	1.5	80
20240204_0603	0.8	41
20240204_0613	0.2	14
20240204_0623	0.1	344
20240204_0633	1.5	340
20240204_0643	0.4	83
20240204_0653	0.1	46
20240204_0703	0.6	21
20240204_0713	0.2	23
20240204_0723	0.6	18
20240204_0733	1.3	354
20240204_0743	2.4	333
20240204_0753	0.5	178
20240204_0803	0.1	331
20240204_0813	0.4	350
20240204_0823	0.3	339
20240204_0833	0.2	98
20240204_0843	4	35
20240204_0853	0.1	59
20240204_0903	0.1	274
20240204_0913	1	121
20240204_0923	0.2	15
20240204_0933	0.1	144
20240204_0943	0.1	172
20240204_0953	1.8	12
20240204_1003	0.1	27
20240204_1013	0.2	111
20240204_1023	0.1	19
20240204_1033	0.8	353
20240204_1043	0.4	18
20240204_1053	0.1	352
20240204_1103	0.4	137
20240204_1113	0.2	336
20240204_1123	0.5	339
20240204_1133	0.1	2
20240204_1143	0.2	132
20240204_1153	0.3	54

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240204_1203	0.4	138
20240204_1213	1.8	55
20240204_1223	0.2	164
20240204_1233	0.7	141
20240204_1243	0.1	326
20240204_1253	5	176
20240204_1303	0.1	260
20240204_1313	0.8	153
20240204_1323	0.1	72
20240204_1333	0.5	145
20240204_1343	0.7	135
20240204_1353	0.1	33
20240204_1403	0.7	132
20240204_1413	0.1	355
20240204_1423	0.3	66
20240204_1433	0.1	49
20240204_1443	0.8	271
20240204_1453	0.2	49
20240204_1503	5	90
20240204_1513	0.3	104
20240204_1523	0.6	142
20240204_1533	0.5	83
20240204_1543	0.1	312
20240204_1553	0.6	327
20240204_1603	1.7	135
20240204_1613	1.6	146
20240204_1623	0.9	166
20240204_1633	0.6	136
20240204_1643	0.1	79
20240204_1653	0.6	181
20240204_1703	0.3	120
20240204_1713	1	139
20240204_1723	1.2	98
20240204_1733	0.1	327
20240204_1743	0.2	223
20240204_1753	1.4	117
20240204_1803	0.1	341
20240204_1813	0.1	171
20240204_1823	0.1	118
20240204_1833	0.1	148
20240204_1843	0.1	13
20240204_1853	1.1	120
20240204_1903	0.6	112
20240204_1913	0.1	213
20240204_1923	0.1	102
20240204_1933	0.1	217
20240204_1943	0.4	114
20240204_1953	0.1	311
20240204_2003	0.5	49
20240204_2013	0.1	67
20240204_2023	0.5	93
20240204_2033	0.1	155
20240204_2043	0.1	80
20240204_2053	0.3	98
20240204_2103	0.4	84
20240204_2113	3.1	113
20240204_2123	1.1	306
20240204_2133	0.1	52
20240204_2143	0.1	184
20240204_2153	0.1	120
20240204_2203	0.1	180
20240204_2213	0.1	258
20240204_2223	0.1	129
20240204_2233	0.1	305
20240204_2243	0.1	108
20240204_2253	0.1	261
20240204_2303	1.1	114
20240204_2313	0.1	104
20240204_2323	0.1	138
20240204_2333	0.1	336
20240204_2343	0.1	171
20240204_2353	0.1	123

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240205_0003	0.1	76
20240205_0013	0.1	108
20240205_0023	0.1	108
20240205_0033	0.1	290
20240205_0043	0.1	290
20240205_0053	0.1	49
20240205_0103	0.1	346
20240205_0113	0.1	346
20240205_0123	0.1	334
20240205_0133	0.1	297
20240205_0143	0.1	248
20240205_0153	0.1	247
20240205_0203	0.1	122
20240205_0213	0.1	122
20240205_0223	0.1	36
20240205_0233	0.1	36
20240205_0243	0.1	345
20240205_0253	0.1	291
20240205_0303	0.1	332
20240205_0313	0.1	23
20240205_0323	0.1	0
20240205_0333	0.1	16
20240205_0343	0.1	25
20240205_0353	0.1	191
20240205_0403	0.1	143
20240205_0413	0.1	192
20240205_0423	0.1	111
20240205_0433	0.1	45
20240205_0443	0.1	102
20240205_0453	0.1	21
20240205_0503	0.1	48
20240205_0513	0.1	93
20240205_0523	0.2	121
20240205_0533	0.1	82
20240205_0543	0.1	135
20240205_0553	0.1	103
20240205_0603	0.1	15
20240205_0613	0.1	14
20240205_0623	0.1	123
20240205_0633	0.1	165
20240205_0643	0.1	292
20240205_0653	0.1	129
20240205_0703	0.1	153
20240205_0713	0.1	151
20240205_0723	0.1	132
20240205_0733	0.1	92
20240205_0743	0.1	304
20240205_0753	0.1	326
20240205_0803	0.1	131
20240205_0813	0.1	249
20240205_0823	0.1	292
20240205_0833	0.1	130
20240205_0843	0.1	232
20240205_0853	0.1	326
20240205_0903	0.1	243
20240205_0913	0.2	147
20240205_0923	0.1	208
20240205_0933	6.8	138
20240205_0943	3	148
20240205_0953	0.8	96
20240205_1003	0.1	199
20240205_1013	0.3	58
20240205_1023	1.2	104
20240205_1033	0.1	131
20240205_1043	0.1	150
20240205_1053	1.2	15
20240205_1103	0.1	38
20240205_1113	0.2	51
20240205_1123	0.1	293
20240205_1133	0.1	341
20240205_1143	0.1	86
20240205_1153	0.1	314

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240205_1203	0.1	162
20240205_1213	0.1	215
20240205_1223	0.1	119
20240205_1233	0.1	206
20240205_1243	0.6	83
20240205_1253	0.2	93
20240205_1303	0.1	170
20240205_1313	0.3	256
20240205_1323	0.1	291
20240205_1333	0.1	255
20240205_1343	0.1	134
20240205_1353	0.1	233
20240205_1403	0.1	160
20240205_1413	0.1	43
20240205_1423	0.3	319
20240205_1433	0.1	56
20240205_1443	0.1	76
20240205_1453	1.2	21
20240205_1503	0.6	20
20240205_1513	1.6	59
20240205_1523	2.8	110
20240205_1533	0.5	115
20240205_1543	0.2	340
20240205_1553	0.1	24
20240205_1603	0.2	337
20240205_1613	0.1	10
20240205_1623	0.1	187
20240205_1633	0.1	83
20240205_1643	2.7	88
20240205_1653	0.4	121
20240205_1703	0.5	35
20240205_1713	0.1	74
20240205_1723	0.9	350
20240205_1733	1.2	54
20240205_1743	0.1	259
20240205_1753	0.1	12
20240205_1803	0.1	314
20240205_1813	0.8	115
20240205_1823	3.9	338
20240205_1833	0.8	47
20240205_1843	1.1	330
20240205_1853	2.9	303
20240205_1903	1.4	2
20240205_1913	0.3	117
20240205_1923	0.6	42
20240205_1933	0.1	339
20240205_1943	0.1	37
20240205_1953	1.1	30
20240205_2003	0.2	189
20240205_2013	0.1	97
20240205_2023	0.1	316
20240205_2033	0.1	17
20240205_2043	0.1	301
20240205_2053	0.4	306
20240205_2103	0.1	294
20240205_2113	0.2	21
20240205_2123	0.1	342
20240205_2133	0.1	249
20240205_2143	0.2	29
20240205_2153	0.8	65
20240205_2203	0.1	111
20240205_2213	0.1	339
20240205_2223	1.1	307
20240205_2233	1	45
20240205_2243	0.2	103
20240205_2253	0.2	333
20240205_2303	0.2	228
20240205_2313	1.3	156
20240205_2323	0.1	49
20240205_2333	0.1	350
20240205_2343	1	332
20240205_2353	2.5	106

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240206_0003	1.3	36
20240206_0013	0.1	169
20240206_0023	0.2	29
20240206_0033	0.9	121
20240206_0043	0.1	136
20240206_0053	0.1	43
20240206_0103	0.9	169
20240206_0113	1.1	140
20240206_0123	3.4	44
20240206_0133	0.2	284
20240206_0143	0.1	57
20240206_0153	0.2	28
20240206_0203	0.2	325
20240206_0213	0.6	329
20240206_0223	0.2	14
20240206_0233	0.2	260
20240206_0243	0.1	288
20240206_0253	1.7	11
20240206_0303	1.8	10
20240206_0313	0.2	1
20240206_0323	3.8	336
20240206_0333	0.5	308
20240206_0343	0.6	343
20240206_0353	0.2	332
20240206_0403	0.1	122
20240206_0413	0.8	350
20240206_0423	0.7	50
20240206_0433	0.2	335
20240206_0443	0.1	225
20240206_0453	3.7	14
20240206_0503	1.6	334
20240206_0513	3.9	351
20240206_0523	0.7	326
20240206_0533	0.1	144
20240206_0543	0.1	243
20240206_0553	0.1	10
20240206_0603	0.1	133
20240206_0613	0.1	156
20240206_0623	0.1	118
20240206_0633	2.3	31
20240206_0643	0.3	67
20240206_0653	0.1	92
20240206_0703	1	330
20240206_0713	4.4	14
20240206_0723	0.2	70
20240206_0733	2.4	101
20240206_0743	1.2	11
20240206_0753	0.2	329
20240206_0803	6.1	145
20240206_0813	0.2	224
20240206_0823	2.3	120
20240206_0833	0.5	268
20240206_0843	0.8	50
20240206_0853	2.1	135
20240206_0903	0.1	298
20240206_0913	1.6	25
20240206_0923	0.6	78
20240206_0933	4	114
20240206_0943	0.1	127
20240206_0953	2.7	208
20240206_1003	0.1	300
20240206_1013	0.1	101
20240206_1023	0.5	238
20240206_1033	0.1	178
20240206_1043	0.2	351
20240206_1053	0.2	150
20240206_1103	0.8	143
20240206_1113	0.9	164
20240206_1123	0.1	132
20240206_1133	0.1	154
20240206_1143	0.9	45
20240206_1153	3.3	147

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240206_1203	0.4	4
20240206_1213	0.1	153
20240206_1223	0.6	353
20240206_1233	2.1	117
20240206_1243	0.6	302
20240206_1253	0.1	271
20240206_1303	1.6	329
20240206_1313	3.2	41
20240206_1323	1.1	41
20240206_1333	0.6	63
20240206_1343	0.1	353
20240206_1353	3.8	354
20240206_1403	0.8	317
20240206_1413	1.4	292
20240206_1423	0.4	31
20240206_1433	1.8	311
20240206_1443	2.3	26
20240206_1453	1.2	322
20240206_1503	2.2	304
20240206_1513	0.7	322
20240206_1523	1.2	245
20240206_1533	2.5	341
20240206_1543	2.4	329
20240206_1553	4.7	344
20240206_1603	2.1	337
20240206_1613	0.2	44
20240206_1623	0.2	279
20240206_1633	1.5	338
20240206_1643	0.4	59
20240206_1653	0.3	107
20240206_1703	1.3	346
20240206_1713	0.9	143
20240206_1723	3.2	116
20240206_1733	0.1	99
20240206_1743	0.6	243
20240206_1753	0.1	135
20240206_1803	0.1	142
20240206_1813	0.1	91
20240206_1823	0.2	44
20240206_1833	0.3	11
20240206_1843	0.1	127
20240206_1853	0.1	156
20240206_1903	0.1	183
20240206_1913	1.2	337
20240206_1923	2.1	348
20240206_1933	0.1	337
20240206_1943	0.1	78
20240206_1953	0.4	61
20240206_2003	0.2	311
20240206_2013	0.1	263
20240206_2023	0.1	299
20240206_2033	0.1	161
20240206_2043	0.1	129
20240206_2053	0.1	109
20240206_2103	0.1	145
20240206_2113	0.1	85
20240206_2123	0.1	306
20240206_2133	0.1	108
20240206_2143	0.2	150
20240206_2153	0.1	162
20240206_2203	0.2	123
20240206_2213	0.1	158
20240206_2223	0.1	141
20240206_2233	0.2	140
20240206_2243	0.2	329
20240206_2253	0.1	35
20240206_2303	0.2	158
20240206_2313	0.1	38
20240206_2323	0.1	102
20240206_2333	0.1	269
20240206_2343	0.1	312
20240206_2353	0.1	74

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240207_0003	0.1	19
20240207_0013	0.2	353
20240207_0023	0.4	20
20240207_0033	0.2	48
20240207_0043	0.1	32
20240207_0053	0.1	167
20240207_0103	1	44
20240207_0113	0.1	52
20240207_0123	0.1	104
20240207_0133	0.1	134
20240207_0143	0.1	35
20240207_0153	0.1	0
20240207_0203	0.1	209
20240207_0213	0.1	316
20240207_0223	0.1	126
20240207_0233	0.1	130
20240207_0243	0.2	111
20240207_0253	0.2	15
20240207_0303	0.1	18
20240207_0313	0.7	318
20240207_0323	0.1	28
20240207_0333	0.1	173
20240207_0343	0.2	163
20240207_0353	0.3	118
20240207_0403	0.1	247
20240207_0413	0.6	141
20240207_0423	0.1	145
20240207_0433	0.1	282
20240207_0443	0.1	70
20240207_0453	0.1	129
20240207_0503	0.1	186
20240207_0513	0.1	154
20240207_0523	0.1	277
20240207_0533	0.1	292
20240207_0543	0.1	242
20240207_0553	0.1	327
20240207_0603	0.1	329
20240207_0613	0.1	276
20240207_0623	0.3	141
20240207_0633	0.1	146
20240207_0643	0.1	353
20240207_0653	0.1	119
20240207_0703	0.1	285
20240207_0713	0.1	312
20240207_0723	0.1	144
20240207_0733	0.1	98
20240207_0743	0.1	155
20240207_0753	0.1	146
20240207_0803	0.1	290
20240207_0813	0.1	121
20240207_0823	0.8	116
20240207_0833	0.2	353
20240207_0843	0.5	338
20240207_0853	0.1	323
20240207_0903	0.1	84
20240207_0913	0.1	49
20240207_0923	0.1	111
20240207_0933	0.1	167
20240207_0943	0.1	126
20240207_0953	0.1	227
20240207_1003	0.1	222
20240207_1013	0.1	167
20240207_1023	0.1	161
20240207_1033	0.1	153
20240207_1043	0.1	277
20240207_1053	0.1	195
20240207_1103	0.1	277
20240207_1113	0.1	317
20240207_1123	0.3	306
20240207_1133	0.1	126
20240207_1143	0.1	228
20240207_1153	0.1	53

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240207_1203	0.1	9
20240207_1213	0.4	146
20240207_1223	0.1	52
20240207_1233	0.1	182
20240207_1243	0.2	260
20240207_1253	0.1	141
20240207_1303	0.8	133
20240207_1313	0.1	158
20240207_1323	0.1	134
20240207_1333	0.2	142
20240207_1343	0.9	72
20240207_1353	0.1	137
20240207_1403	0.1	86
20240207_1413	0.5	128
20240207_1423	0.3	66
20240207_1433	0.2	130
20240207_1443	0.5	247
20240207_1453	0.1	0
20240207_1503	1	161
20240207_1513	0.1	251
20240207_1523	0.2	141
20240207_1533	0.2	144
20240207_1543	0.1	162
20240207_1553	0.1	130
20240207_1603	0.1	143
20240207_1613	0.1	176
20240207_1623	0.1	119
20240207_1633	0.1	113
20240207_1643	0.1	163
20240207_1653	0.1	272
20240207_1703	0.1	289
20240207_1713	0.1	187
20240207_1723	0.1	133
20240207_1733	0.1	129
20240207_1743	0.1	229
20240207_1753	0.1	303
20240207_1803	0.1	157
20240207_1813	0.1	140
20240207_1823	0.1	198
20240207_1833	0.1	132
20240207_1843	0.1	143
20240207_1853	0.3	127
20240207_1903	0.1	121
20240207_1913	0.1	153
20240207_1923	0.1	203
20240207_1933	0.1	131
20240207_1943	0.1	63
20240207_1953	0.1	163
20240207_2003	0.1	73
20240207_2013	0.1	269
20240207_2023	0.1	304
20240207_2033	0.3	294
20240207_2043	0.1	331
20240207_2053	0.1	102
20240207_2103	0.1	309
20240207_2113	0.1	255
20240207_2123	0.1	137
20240207_2133	0.1	137
20240207_2143	0.1	258
20240207_2153	0.1	188
20240207_2203	0.1	308
20240207_2213	0.1	178
20240207_2223	0.1	138
20240207_2233	0.1	273
20240207_2243	0.9	20
20240207_2253	0.1	131
20240207_2303	0.1	35
20240207_2313	0.1	276
20240207_2323	0.1	169
20240207_2333	0.1	34
20240207_2343	0.1	328
20240207_2353	0.1	39

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240208_0003	0.1	266
20240208_0013	0.1	333
20240208_0023	0.2	274
20240208_0033	0.2	147
20240208_0043	0.1	103
20240208_0053	0.1	246
20240208_0103	0.1	84
20240208_0113	0.1	149
20240208_0123	0.1	106
20240208_0133	0.1	123
20240208_0143	0.1	259
20240208_0153	0.1	275
20240208_0203	0.1	308
20240208_0213	0.1	286
20240208_0223	0.1	252
20240208_0233	0.1	221
20240208_0243	0.1	121
20240208_0253	0.1	126
20240208_0303	0.1	74
20240208_0313	0.1	134
20240208_0323	0.1	271
20240208_0333	0.1	281
20240208_0343	0.1	138
20240208_0353	0.1	244
20240208_0403	0.1	185
20240208_0413	0.1	205
20240208_0423	0.1	129
20240208_0433	0.1	162
20240208_0443	0.1	314
20240208_0453	0.1	102
20240208_0503	0.3	89
20240208_0513	0.1	314
20240208_0523	0.1	156
20240208_0533	0.1	252
20240208_0543	0.1	146
20240208_0553	0.1	246
20240208_0603	0.1	325
20240208_0613	0.1	168
20240208_0623	0.1	311
20240208_0633	0.1	241
20240208_0643	0.1	147
20240208_0653	0.1	234
20240208_0703	0.1	106
20240208_0713	0.1	276
20240208_0723	0.1	109
20240208_0733	0.1	56
20240208_0743	0.1	110
20240208_0753	0.1	139
20240208_0803	0.1	147
20240208_0813	0.1	91
20240208_0823	0.1	140
20240208_0833	0.1	134
20240208_0843	0.1	122
20240208_0853	0.1	144
20240208_0903	0.1	133
20240208_0913	0.1	140
20240208_0923	0.1	242
20240208_0933	0.1	152
20240208_0943	0.1	127
20240208_0953	0.1	120
20240208_1003	0.1	145
20240208_1013	0.1	147
20240208_1023	0.1	243
20240208_1033	0.1	176
20240208_1043	0.1	141
20240208_1053	0.1	146
20240208_1103	0.1	292
20240208_1113	0.1	117
20240208_1123	0.1	107
20240208_1133	0.1	224
20240208_1143	0.1	247
20240208_1153	0.1	26

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240208_1203	0.1	142
20240208_1213	0.1	117
20240208_1223	0.1	102
20240208_1233	0.2	328
20240208_1243	0.1	172
20240208_1253	0.1	265
20240208_1303	0.3	316
20240208_1313	0.1	199
20240208_1323	0.1	212
20240208_1333	0.5	68
20240208_1343	0.1	329
20240208_1353	0.1	26
20240208_1403	0.1	328
20240208_1413	0.1	302
20240208_1423	0.1	123
20240208_1433	0.1	110
20240208_1443	0.1	49
20240208_1453	0.1	350
20240208_1503	0.1	69
20240208_1513	0.2	26
20240208_1523	0.1	339
20240208_1533	0.6	334
20240208_1543	0.1	340
20240208_1553	1	31
20240208_1603	0.1	282
20240208_1613	0.1	133
20240208_1623	0.1	1
20240208_1633	0.1	10
20240208_1643	0.1	349
20240208_1653	0.1	336
20240208_1703	0.1	257
20240208_1713	0.1	232
20240208_1723	0.1	334
20240208_1733	0.1	267
20240208_1743	0.1	15
20240208_1753	1.5	286
20240208_1803	0.1	79
20240208_1813	0.1	259
20240208_1823	0.1	60
20240208_1833	0.1	200
20240208_1843	0.1	312
20240208_1853	0.1	235
20240208_1903	0.1	112
20240208_1913	0.1	250
20240208_1923	0.1	234
20240208_1933	0.1	189
20240208_1943	0.1	150
20240208_1953	0.1	2
20240208_2003	0.1	139
20240208_2013	0.1	148
20240208_2023	0.1	204
20240208_2033	0.1	139
20240208_2043	0.1	349
20240208_2053	0.1	48
20240208_2103	0.7	301
20240208_2113	0.1	60
20240208_2123	0.6	4
20240208_2133	0.2	311
20240208_2143	0.1	289
20240208_2153	5.1	10
20240208_2203	0.1	51
20240208_2213	0.1	314
20240208_2223	0.1	165
20240208_2233	0.1	178
20240208_2243	0.1	127
20240208_2253	0.1	282
20240208_2303	0.1	14
20240208_2313	0.1	279
20240208_2323	0.1	253
20240208_2333	0.1	141
20240208_2343	0.1	131
20240208_2353	0.1	185

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240209_0003	0.1	121
20240209_0013	0.1	182
20240209_0023	0.1	34
20240209_0033	0.1	17
20240209_0043	0.1	101
20240209_0053	0.1	244
20240209_0103	0.1	147
20240209_0113	0.1	66
20240209_0123	0.1	123
20240209_0133	0.1	338
20240209_0143	0.1	114
20240209_0153	0.1	245
20240209_0203	0.1	250
20240209_0213	0.1	148
20240209_0223	0.1	134
20240209_0233	0.1	246
20240209_0243	0.1	143
20240209_0253	0.1	294
20240209_0303	0.1	144
20240209_0313	0.1	11
20240209_0323	0.1	296
20240209_0333	0.1	136
20240209_0343	0.1	163
20240209_0353	0.1	255
20240209_0403	0.1	154
20240209_0413	0.1	124
20240209_0423	0.1	264
20240209_0433	0.1	257
20240209_0443	0.1	121
20240209_0453	0.1	173
20240209_0503	0.1	273
20240209_0513	0.1	138
20240209_0523	0.1	282
20240209_0533	0.1	220
20240209_0543	0.1	257
20240209_0553	0.1	339
20240209_0603	0.1	121
20240209_0613	0.1	271
20240209_0623	0.1	150
20240209_0633	0.1	238
20240209_0643	0.1	277
20240209_0653	0.1	275
20240209_0703	0.1	303
20240209_0713	0.1	303
20240209_0723	0.1	256
20240209_0733	0.1	148
20240209_0743	0.1	254
20240209_0753	0.1	234
20240209_0803	0.1	239
20240209_0813	0.1	242
20240209_0823	0.1	209
20240209_0833	0.1	99
20240209_0843	0.1	240
20240209_0853	0.1	232
20240209_0903	0.1	219
20240209_0913	0.1	147
20240209_0923	0.1	167
20240209_0933	0.1	153
20240209_0943	0.1	174
20240209_0953	0.1	233
20240209_1003	0.1	160
20240209_1013	0.1	95
20240209_1023	0.1	200
20240209_1033	0.1	207
20240209_1043	0.1	231
20240209_1053	0.2	240
20240209_1103	0.1	270
20240209_1113	0.1	285
20240209_1123	0.1	135
20240209_1133	0.1	151
20240209_1143	0.1	141
20240209_1153	0.2	134

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240209_1203	0.1	291
20240209_1213	0.1	231
20240209_1223	0.2	114
20240209_1233	0.1	114
20240209_1243	0.2	129
20240209_1253	0.1	11
20240209_1303	0.1	109
20240209_1313	0.3	137
20240209_1323	0.1	150
20240209_1333	0.1	228
20240209_1343	0.2	41
20240209_1353	0.1	250
20240209_1403	0.1	346
20240209_1413	0.1	64
20240209_1423	0.3	116
20240209_1433	0.1	220
20240209_1443	1.1	37
20240209_1453	1	111
20240209_1503	0.3	127
20240209_1513	0.1	124
20240209_1523	0.1	86
20240209_1533	0.1	104
20240209_1543	0.1	60
20240209_1553	0.1	122
20240209_1603	2.8	25
20240209_1613	0.1	81
20240209_1623	0.2	51
20240209_1633	0.1	89
20240209_1643	0.5	44
20240209_1653	0.1	137
20240209_1703	0.1	140
20240209_1713	0.1	83
20240209_1723	0.1	50
20240209_1733	1.6	301
20240209_1743	0.1	54
20240209_1753	0.1	267
20240209_1803	0.1	18
20240209_1813	0.1	314
20240209_1823	0.1	85
20240209_1833	0.1	321
20240209_1843	0.1	146
20240209_1853	0.1	62
20240209_1903	0.1	24
20240209_1913	0.1	116
20240209_1923	0.1	312
20240209_1933	0.1	132
20240209_1943	0.1	241
20240209_1953	0.1	143
20240209_2003	0.1	326
20240209_2013	0.1	111
20240209_2023	0.1	183
20240209_2033	0.1	142
20240209_2043	0.1	297
20240209_2053	0.1	190
20240209_2103	0.1	256
20240209_2113	1.1	143
20240209_2123	0.1	332
20240209_2133	0.1	88
20240209_2143	0.1	279
20240209_2153	0.1	132
20240209_2203	0.1	39
20240209_2213	0.1	220
20240209_2223	0.1	304
20240209_2233	0.1	258
20240209_2243	0.1	325
20240209_2253	0.4	348
20240209_2303	0.1	288
20240209_2313	0.2	339
20240209_2323	0.1	97
20240209_2333	0.1	83
20240209_2343	0.1	336
20240209_2353	0.1	153

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240210_0003	0.1	0
20240210_0013	0.1	65
20240210_0023	0.1	148
20240210_0033	0.1	135
20240210_0043	0.1	165
20240210_0053	0.1	290
20240210_0103	0.1	126
20240210_0113	0.4	141
20240210_0123	0.9	314
20240210_0133	0.1	341
20240210_0143	0.1	302
20240210_0153	0.1	138
20240210_0203	0.1	47
20240210_0213	0.1	150
20240210_0223	0.1	285
20240210_0233	0.1	292
20240210_0243	0.3	6
20240210_0253	0.1	69
20240210_0303	0.1	192
20240210_0313	0.1	223
20240210_0323	0.2	349
20240210_0333	0.1	31
20240210_0343	0.1	276
20240210_0353	0.1	250
20240210_0403	0.1	81
20240210_0413	0.1	343
20240210_0423	0.1	104
20240210_0433	0.1	114
20240210_0443	0.1	72
20240210_0453	0.1	138
20240210_0503	0.1	243
20240210_0513	0.1	126
20240210_0523	0.1	63
20240210_0533	0.1	161
20240210_0543	0.1	132
20240210_0553	0.1	138
20240210_0603	0.1	102
20240210_0613	0.1	128
20240210_0623	0.1	115
20240210_0633	0.1	350
20240210_0643	0.1	107
20240210_0653	0.1	218
20240210_0703	0.1	147
20240210_0713	0.1	251
20240210_0723	0.1	157
20240210_0733	0.1	265
20240210_0743	0.1	163
20240210_0753	0.1	123
20240210_0803	0.1	118
20240210_0813	0.1	118
20240210_0823	0.1	84
20240210_0833	0.1	298
20240210_0843	0.1	273
20240210_0853	0.1	223
20240210_0903	0.1	42
20240210_0913	0.1	318
20240210_0923	0.1	292
20240210_0933	0.1	54
20240210_0943	0.1	42
20240210_0953	0.1	147
20240210_1003	0.1	138
20240210_1013	0.1	104
20240210_1023	0.4	348
20240210_1033	0.1	293
20240210_1043	0.1	309
20240210_1053	0.1	73
20240210_1103	0.1	307
20240210_1113	0.1	264
20240210_1123	0.1	241
20240210_1133	0.2	262
20240210_1143	0.1	147
20240210_1153	0.6	93

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240210_1203	0.3	137
20240210_1213	0.4	111
20240210_1223	0.1	239
20240210_1233	0.1	109
20240210_1243	0.1	289
20240210_1253	0.1	176
20240210_1303	0.3	244
20240210_1313	0.2	251
20240210_1323	0.1	347
20240210_1333	0.4	34
20240210_1343	1	10
20240210_1353	0.2	3
20240210_1403	0.1	308
20240210_1413	0.1	10
20240210_1423	0.1	175
20240210_1433	0.2	44
20240210_1443	0.1	60
20240210_1453	0.1	262
20240210_1503	0.1	171
20240210_1513	0.1	92
20240210_1523	0.1	118
20240210_1533	0.1	128
20240210_1543	0.1	332
20240210_1553	0.9	87
20240210_1603	0.1	97
20240210_1613	2.9	131
20240210_1623	1.1	106
20240210_1633	1.1	108
20240210_1643	0.2	64
20240210_1653	1.3	120
20240210_1703	0.1	63
20240210_1713	0.2	19
20240210_1723	0.6	165
20240210_1733	0.1	89
20240210_1743	0.1	120
20240210_1753	0.1	46
20240210_1803	0.1	192
20240210_1813	0.1	96
20240210_1823	0.1	10
20240210_1833	0.1	351
20240210_1843	0.1	350
20240210_1853	0.1	21
20240210_1903	0.1	341
20240210_1913	0.1	56
20240210_1923	0.1	311
20240210_1933	0.1	343
20240210_1943	0.1	0
20240210_1953	0.1	13
20240210_2003	0.1	15
20240210_2013	0.1	58
20240210_2023	0.1	9
20240210_2033	0.1	48
20240210_2043	0.1	8
20240210_2053	0.1	154
20240210_2103	0.1	54
20240210_2113	0.1	66
20240210_2123	0.1	60
20240210_2133	0.1	50
20240210_2143	0.1	59
20240210_2153	0.1	42
20240210_2203	0.1	9
20240210_2213	0.1	60
20240210_2223	0.1	59
20240210_2233	0.1	8
20240210_2243	0.1	9
20240210_2253	0.1	143
20240210_2303	0.1	156
20240210_2313	0.1	60
20240210_2323	0.1	96
20240210_2333	0.1	58
20240210_2343	0.1	58
20240210_2353	0.1	13

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240211_0003	0.1	74
20240211_0013	0.1	58
20240211_0023	0.1	119
20240211_0033	0.1	127
20240211_0043	0.1	68
20240211_0053	0.1	44
20240211_0103	0.1	35
20240211_0113	0.1	59
20240211_0123	0.1	55
20240211_0133	0.1	55
20240211_0143	0.1	87
20240211_0153	0.1	66
20240211_0203	0.1	94
20240211_0213	0.1	52
20240211_0223	0.1	34
20240211_0233	0.1	35
20240211_0243	0.1	31
20240211_0253	0.1	49
20240211_0303	0.1	55
20240211_0313	0.1	81
20240211_0323	0.1	59
20240211_0333	0.1	38
20240211_0343	0.1	57
20240211_0353	0.1	60
20240211_0403	0.1	46
20240211_0413	0.1	107
20240211_0423	0.1	40
20240211_0433	0.1	30
20240211_0443	0.1	63
20240211_0453	0.1	2
20240211_0503	0.1	22
20240211_0513	0.1	110
20240211_0523	0.1	55
20240211_0533	0.1	55
20240211_0543	0.1	67
20240211_0553	0.1	67
20240211_0603	0.1	95
20240211_0613	0.1	72
20240211_0623	0.1	23
20240211_0633	0.1	103
20240211_0643	0.1	97
20240211_0653	0.1	186
20240211_0703	0.1	172
20240211_0713	0.1	41
20240211_0723	0.1	35
20240211_0733	0.1	53
20240211_0743	0.1	60
20240211_0753	0.1	60
20240211_0803	0.1	84
20240211_0813	0.1	110
20240211_0823	0.1	134
20240211_0833	0.1	124
20240211_0843	0.1	106
20240211_0853	0.1	93
20240211_0903	0.1	136
20240211_0913	0.1	133
20240211_0923	0.1	175
20240211_0933	0.1	168
20240211_0943	0.1	52
20240211_0953	0.1	130
20240211_1003	0.4	147
20240211_1013	0.1	155
20240211_1023	0.1	81
20240211_1033	0.1	148
20240211_1043	0.1	101
20240211_1053	0.1	333
20240211_1103	0.1	131
20240211_1113	0.1	100
20240211_1123	2.1	141
20240211_1133	0.8	39
20240211_1143	2.1	317
20240211_1153	1.2	47

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240211_1203	3.2	306
20240211_1213	0.5	340
20240211_1223	1.4	85
20240211_1233	1.3	40
20240211_1243	0.1	133
20240211_1253	0.6	50
20240211_1303	0.2	273
20240211_1313	0.1	319
20240211_1323	3.2	87
20240211_1333	0.5	5
20240211_1343	0.1	268
20240211_1353	0.1	321
20240211_1403	0.2	107
20240211_1413	0.1	149
20240211_1423	1.7	96
20240211_1433	0.1	38
20240211_1443	2.1	343
20240211_1453	1.3	96
20240211_1503	1.1	23
20240211_1513	1	101
20240211_1523	1.8	8
20240211_1533	1.9	76
20240211_1543	1.3	58
20240211_1553	0.9	26
20240211_1603	0.5	26
20240211_1613	0.7	344
20240211_1623	0.3	344
20240211_1633	0.2	34
20240211_1643	3.4	74
20240211_1653	0.2	111
20240211_1703	0.1	246
20240211_1713	0.9	63
20240211_1723	1.1	36
20240211_1733	0.2	27
20240211_1743	1.7	63
20240211_1753	0.3	48
20240211_1803	0.2	23
20240211_1813	0.1	281
20240211_1823	0.4	65
20240211_1833	0.1	310
20240211_1843	0.1	201
20240211_1853	0.2	240
20240211_1903	0.1	260
20240211_1913	0.3	276
20240211_1923	0.4	275
20240211_1933	0.3	212
20240211_1943	0.2	100
20240211_1953	0.3	201
20240211_2003	0.1	251
20240211_2013	0.1	240
20240211_2023	0.4	292
20240211_2033	0.2	272
20240211_2043	0.1	96
20240211_2053	0.1	346
20240211_2103	0.1	84
20240211_2113	0.1	162
20240211_2123	0.2	329
20240211_2133	0.1	322
20240211_2143	0.2	335
20240211_2153	0.1	39
20240211_2203	0.5	328
20240211_2213	0.2	50
20240211_2223	0.1	266
20240211_2233	0.1	111
20240211_2243	0.1	219
20240211_2253	0.1	96
20240211_2303	0.1	56
20240211_2313	0.8	96
20240211_2323	0.2	136
20240211_2333	0.4	126
20240211_2343	0.1	124
20240211_2353	0.8	123

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240212_0003	1.5	121
20240212_0013	0.7	142
20240212_0023	0.2	124
20240212_0033	0.1	110
20240212_0043	0.1	116
20240212_0053	0.1	120
20240212_0103	0.4	65
20240212_0113	0.1	64
20240212_0123	0.1	160
20240212_0133	0.3	149
20240212_0143	0.4	121
20240212_0153	0.6	137
20240212_0203	0.1	246
20240212_0213	0.1	215
20240212_0223	0.1	235
20240212_0233	0.1	217
20240212_0243	0.1	70
20240212_0253	0.1	132
20240212_0303	0.1	57
20240212_0313	0.1	179
20240212_0323	0.9	269
20240212_0333	0.1	113
20240212_0343	0.1	116
20240212_0353	0.1	328
20240212_0403	0.1	190
20240212_0413	0.4	129
20240212_0423	0.1	310
20240212_0433	0.3	151
20240212_0443	0.1	177
20240212_0453	0.1	256
20240212_0503	0.1	323
20240212_0513	0.8	322
20240212_0523	0.1	121
20240212_0533	0.1	20
20240212_0543	0.4	137
20240212_0553	1	334
20240212_0603	0.2	38
20240212_0613	0.4	70
20240212_0623	0.1	205
20240212_0633	0.3	64
20240212_0643	0.1	173
20240212_0653	0.1	159
20240212_0703	2.1	56
20240212_0713	0.2	53
20240212_0723	0.1	97
20240212_0733	0.1	150
20240212_0743	0.5	124
20240212_0753	0.3	347
20240212_0803	0.4	30
20240212_0813	0.8	13
20240212_0823	0.2	26
20240212_0833	1.2	52
20240212_0843	7.3	29
20240212_0853	2.2	170
20240212_0903	1.3	273
20240212_0913	0.5	45
20240212_0923	0.3	137
20240212_0933	0.5	52
20240212_0943	0.8	120
20240212_0953	3.5	349
20240212_1003	0.3	285
20240212_1013	3.7	131
20240212_1023	2	112
20240212_1033	6	39
20240212_1043	2.8	313
20240212_1053	1.3	53
20240212_1103	0.6	45
20240212_1113	0.6	24
20240212_1123	0.7	11
20240212_1133	2.2	72
20240212_1143	0.5	343
20240212_1153	1.1	323

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240212_1203	0.1	317
20240212_1213	1	60
20240212_1223	4.8	139
20240212_1233	0.1	49
20240212_1243	1.5	343
20240212_1253	1	40
20240212_1303	1	294
20240212_1313	0.1	262
20240212_1323	0.1	148
20240212_1333	1.4	356
20240212_1343	2.7	16
20240212_1353	0.1	221
20240212_1403	0.7	118
20240212_1413	1.3	164
20240212_1423	0.1	165
20240212_1433	0.1	323
20240212_1443	0.1	340
20240212_1453	0.5	19
20240212_1503	0.2	54
20240212_1513	0.2	13
20240212_1523	1.5	26
20240212_1533	0.8	37
20240212_1543	0.5	2
20240212_1553	0.1	51
20240212_1603	1.3	48
20240212_1613	1.7	129
20240212_1623	0.1	257
20240212_1633	0.1	79
20240212_1643	0.1	67
20240212_1653	0.1	185
20240212_1703	0.1	42
20240212_1713	0.1	102
20240212_1723	0.1	333
20240212_1733	0.1	319
20240212_1743	0.6	88
20240212_1753	0.2	74
20240212_1803	0.2	29
20240212_1813	0.3	114
20240212_1823	0.1	179
20240212_1833	0.2	63
20240212_1843	0.1	122
20240212_1853	0.1	109
20240212_1903	0.1	202
20240212_1913	0.8	94
20240212_1923	0.4	74
20240212_1933	1.5	158
20240212_1943	0.3	344
20240212_1953	1.4	339
20240212_2003	0.2	321
20240212_2013	0.2	346
20240212_2023	1.1	123
20240212_2033	0.6	153
20240212_2043	1.5	144
20240212_2053	0.2	114
20240212_2103	0.1	132
20240212_2113	0.1	19
20240212_2123	0.1	132
20240212_2133	0.5	179
20240212_2143	0.8	117
20240212_2153	0.5	121
20240212_2203	0.1	71
20240212_2213	0.1	252
20240212_2223	0.1	186
20240212_2233	1.4	138
20240212_2243	0.7	43
20240212_2253	0.1	69
20240212_2303	0.1	46
20240212_2313	0.2	21
20240212_2323	0.1	194
20240212_2333	0.1	89
20240212_2343	0.1	77
20240212_2353	0.1	125

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240213_0003	0.1	304
20240213_0013	0.2	339
20240213_0023	0.1	178
20240213_0033	0.1	2
20240213_0043	0.1	197
20240213_0053	0.1	330
20240213_0103	0.1	6
20240213_0113	0.1	142
20240213_0123	0.3	134
20240213_0133	0.1	128
20240213_0143	0.1	110
20240213_0153	0.1	208
20240213_0203	0.1	171
20240213_0213	0.1	12
20240213_0223	0.1	234
20240213_0233	0.2	127
20240213_0243	0.1	163
20240213_0253	0.2	147
20240213_0303	0.1	66
20240213_0313	0.1	149
20240213_0323	0.2	127
20240213_0333	0.1	138
20240213_0343	0.1	352
20240213_0353	0.2	146
20240213_0403	0.1	102
20240213_0413	0.1	2
20240213_0423	0.1	147
20240213_0433	0.2	105
20240213_0443	0.1	129
20240213_0453	0.1	141
20240213_0503	0.1	168
20240213_0513	0.1	173
20240213_0523	0.1	350
20240213_0533	0.3	154
20240213_0543	0.1	134
20240213_0553	0.1	151
20240213_0603	0.1	144
20240213_0613	0.1	92
20240213_0623	0.1	37
20240213_0633	0.1	48
20240213_0643	0.1	5
20240213_0653	0.1	231
20240213_0703	0.1	117
20240213_0713	0.1	242
20240213_0723	0.1	260
20240213_0733	0.1	112
20240213_0743	0.1	137
20240213_0753	0.1	152
20240213_0803	0.1	75
20240213_0813	0.1	130
20240213_0823	0.1	157
20240213_0833	0.1	188
20240213_0843	0.1	115
20240213_0853	0.1	44
20240213_0903	0.1	84
20240213_0913	0.1	197
20240213_0923	0.3	54
20240213_0933	0.1	307
20240213_0943	0.5	55
20240213_0953	0.4	71
20240213_1003	0.1	340
20240213_1013	0.1	58
20240213_1023	0.6	7
20240213_1033	2.4	37
20240213_1043	0.2	50
20240213_1053	0.3	331
20240213_1103	0.3	60
20240213_1113	0.5	332
20240213_1123	0.1	304
20240213_1133	0.9	8
20240213_1143	0.2	54
20240213_1153	1.7	2

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240213_1203	1.8	353
20240213_1213	1.6	343
20240213_1223	0.1	303
20240213_1233	0.1	107
20240213_1243	0.6	86
20240213_1253	0.2	41
20240213_1303	0.1	61
20240213_1313	0.2	77
20240213_1323	0.6	326
20240213_1333	3.2	321
20240213_1343	0.9	162
20240213_1353	1.3	78
20240213_1403	1.3	32
20240213_1413	0.4	49
20240213_1423	0.2	56
20240213_1433	0.6	352
20240213_1443	0.1	138
20240213_1453	0.2	47
20240213_1503	0.1	310
20240213_1513	0.1	284
20240213_1523	1.7	91
20240213_1533	1.5	50
20240213_1543	1.2	19
20240213_1553	0.1	298
20240213_1603	0.1	0
20240213_1613	0.5	39
20240213_1623	0.4	66
20240213_1633	0.3	15
20240213_1643	0.1	29
20240213_1653	0.4	41
20240213_1703	0.1	313
20240213_1713	0.1	13
20240213_1723	1.3	54
20240213_1733	0.1	325
20240213_1743	0.1	222
20240213_1753	1	139
20240213_1803	0.2	46
20240213_1813	0.1	300
20240213_1823	1	89
20240213_1833	0.3	105
20240213_1843	1.2	120
20240213_1853	0.4	115
20240213_1903	0.1	114
20240213_1913	0.1	78
20240213_1923	0.1	140
20240213_1933	0.2	136
20240213_1943	0.1	243
20240213_1953	0.1	111
20240213_2003	0.1	58
20240213_2013	0.1	129
20240213_2023	3.7	143
20240213_2033	0.1	139
20240213_2043	1.4	88
20240213_2053	0.2	90
20240213_2103	0.1	349
20240213_2113	0.9	119
20240213_2123	1.5	154
20240213_2133	0.1	20
20240213_2143	0.1	120
20240213_2153	0.1	160
20240213_2203	0.2	101
20240213_2213	0.2	51
20240213_2223	0.1	137
20240213_2233	0.1	288
20240213_2243	0.2	139
20240213_2253	0.1	148
20240213_2303	0.1	48
20240213_2313	0.1	9
20240213_2323	0.1	199
20240213_2333	0.1	94
20240213_2343	0.1	293
20240213_2353	0.1	161

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240214_0003	0.1	181
20240214_0013	0.1	62
20240214_0023	0.1	208
20240214_0033	0.1	341
20240214_0043	0.4	163
20240214_0053	0.1	233
20240214_0103	0.1	201
20240214_0113	0.1	319
20240214_0123	0.1	42
20240214_0133	0.1	71
20240214_0143	0.1	83
20240214_0153	0.1	154
20240214_0203	0.1	338
20240214_0213	0.1	225
20240214_0223	0.1	336
20240214_0233	0.1	51
20240214_0243	0.1	110
20240214_0253	0.1	281
20240214_0303	0.1	75
20240214_0313	0.1	51
20240214_0323	0.1	143
20240214_0333	0.1	34
20240214_0343	0.1	59
20240214_0353	0.1	65
20240214_0403	0.1	19
20240214_0413	0.1	33
20240214_0423	0.1	116
20240214_0433	0.1	61
20240214_0443	0.1	58
20240214_0453	0.1	64
20240214_0503	0.1	77
20240214_0513	0.1	56
20240214_0523	0.1	263
20240214_0533	0.1	79
20240214_0543	0.1	95
20240214_0553	0.1	95
20240214_0603	0.1	48
20240214_0613	0.1	32
20240214_0623	0.1	326
20240214_0633	0.1	308
20240214_0643	0.1	66
20240214_0653	0.1	88
20240214_0703	0.1	321
20240214_0713	0.1	126
20240214_0723	0.1	337
20240214_0733	0.1	351
20240214_0743	0.1	101
20240214_0753	0.1	45
20240214_0803	0.1	116
20240214_0813	0.1	94
20240214_0823	0.1	104
20240214_0833	0.1	141
20240214_0843	0.1	142
20240214_0853	0.2	141
20240214_0903	0.3	139
20240214_0913	0.2	109
20240214_0923	0.1	115
20240214_0933	0.1	139
20240214_0943	0.2	345
20240214_0953	0.1	146
20240214_1003	2.1	127
20240214_1013	0.2	347
20240214_1023	1.1	66
20240214_1033	0.5	45
20240214_1043	0.1	130
20240214_1053	0.1	312
20240214_1103	0.2	85
20240214_1113	0.1	20
20240214_1123	0.5	344
20240214_1133	0.1	126
20240214_1143	0.1	194
20240214_1153	0.1	116

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240214_1203	1.1	121
20240214_1213	1.2	10
20240214_1223	2.6	45
20240214_1233	1.7	0
20240214_1243	0.9	47
20240214_1253	1	35
20240214_1303	1.3	344
20240214_1313	0.1	83
20240214_1323	0.1	223
20240214_1333	0.1	181
20240214_1343	0.2	91
20240214_1353	0.1	116
20240214_1403	1.8	90
20240214_1413	0.2	111
20240214_1423	1.7	318
20240214_1433	1	142
20240214_1443	1.5	3
20240214_1453	0.5	36
20240214_1503	8.4	354
20240214_1513	0.4	116
20240214_1523	2.5	27
20240214_1533	0.4	325
20240214_1543	3.5	300
20240214_1553	0.2	157
20240214_1603	0.1	65
20240214_1613	0.6	326
20240214_1623	0.4	64
20240214_1633	0.5	45
20240214_1643	0.3	66
20240214_1653	0.1	4
20240214_1703	0.6	308
20240214_1713	1.7	37
20240214_1723	0.1	267
20240214_1733	0.4	41
20240214_1743	1.1	47
20240214_1753	0.1	85
20240214_1803	1.1	105
20240214_1813	0.3	141
20240214_1823	0.2	132
20240214_1833	0.1	102
20240214_1843	0.1	159
20240214_1853	0.1	103
20240214_1903	0.6	118
20240214_1913	0.3	132
20240214_1923	0.1	96
20240214_1933	0.6	131
20240214_1943	0.1	99
20240214_1953	0.1	106
20240214_2003	0.2	127
20240214_2013	0.1	117
20240214_2023	0.2	151
20240214_2033	0.7	28
20240214_2043	0.2	92
20240214_2053	0.1	104
20240214_2103	0.2	68
20240214_2113	0.1	56
20240214_2123	0.2	79
20240214_2133	1.3	84
20240214_2143	0.4	43
20240214_2153	0.6	140
20240214_2203	0.8	107
20240214_2213	0.4	69
20240214_2223	0.4	109
20240214_2233	0.7	132
20240214_2243	0.9	63
20240214_2253	0.3	100
20240214_2303	0.1	115
20240214_2313	0.1	127
20240214_2323	0.1	9
20240214_2333	0.1	129
20240214_2343	0.1	174
20240214_2353	0.5	102

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240215_0003	0.2	89
20240215_0013	0.1	151
20240215_0023	0.3	218
20240215_0033	0.1	86
20240215_0043	0.1	130
20240215_0053	0.1	269
20240215_0103	0.1	35
20240215_0113	0.1	41
20240215_0123	0.1	58
20240215_0133	0.1	70
20240215_0143	0.1	17
20240215_0153	0.1	81
20240215_0203	0.1	78
20240215_0213	0.1	188
20240215_0223	0.1	70
20240215_0233	0.1	9
20240215_0243	0.1	91
20240215_0253	0.1	271
20240215_0303	0.1	225
20240215_0313	0.1	114
20240215_0323	0.1	1
20240215_0333	0.1	274
20240215_0343	0.1	265
20240215_0353	0.1	17
20240215_0403	0.1	167
20240215_0413	0.1	146
20240215_0423	0.1	9
20240215_0433	0.1	269
20240215_0443	0.1	255
20240215_0453	0.1	287
20240215_0503	0.1	280
20240215_0513	0.1	65
20240215_0523	0.1	353
20240215_0533	0.1	120
20240215_0543	0.1	102
20240215_0553	0.1	99
20240215_0603	0.1	10
20240215_0613	0.1	160
20240215_0623	0.1	104
20240215_0633	0.1	67
20240215_0643	0.1	34
20240215_0653	0.1	67
20240215_0703	0.1	43
20240215_0713	0.1	65
20240215_0723	0.1	53
20240215_0733	0.1	184
20240215_0743	0.1	244
20240215_0753	0.1	204
20240215_0803	0.1	146
20240215_0813	0.1	136
20240215_0823	0.1	145
20240215_0833	0.1	143
20240215_0843	0.1	130
20240215_0853	0.1	130
20240215_0903	0.1	145
20240215_0913	0.1	147
20240215_0923	0.2	148
20240215_0933	0.1	161
20240215_0943	0.4	137
20240215_0953	0.1	75
20240215_1003	0.1	195
20240215_1013	1.2	225
20240215_1023	0.1	190
20240215_1033	0.3	51
20240215_1043	0.3	147
20240215_1053	0.1	304
20240215_1103	0.1	337
20240215_1113	0.1	21
20240215_1123	0.1	351
20240215_1133	0.4	258
20240215_1143	0.1	195
20240215_1153	0.1	161

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240215_1203	0.6	287
20240215_1213	0.2	39
20240215_1223	1	251
20240215_1233	1.3	141
20240215_1243	0.1	38
20240215_1253	1.9	293
20240215_1303	0.1	145
20240215_1313	0.1	237
20240215_1323	0.9	253
20240215_1333	0.1	88
20240215_1343	1.1	82
20240215_1353	0.8	256
20240215_1403	0.1	284
20240215_1413	1.1	258
20240215_1423	0.3	155
20240215_1433	0.1	25
20240215_1443	0.2	159
20240215_1453	2	56
20240215_1503	0.5	210
20240215_1513	0.1	119
20240215_1523	0.1	227
20240215_1533	1.2	150
20240215_1543	0.1	133
20240215_1553	0.1	151
20240215_1603	0.1	127
20240215_1613	1.6	140
20240215_1623	0.1	294
20240215_1633	0.1	202
20240215_1643	0.1	252
20240215_1653	0.1	194
20240215_1703	0.2	107
20240215_1713	0.1	133
20240215_1723	0.1	88
20240215_1733	0.1	241
20240215_1743	0.1	137
20240215_1753	0.1	123
20240215_1803	0.1	143
20240215_1813	0.1	100
20240215_1823	0.1	45
20240215_1833	0.1	40
20240215_1843	0.1	41
20240215_1853	0.1	55
20240215_1903	0.1	62
20240215_1913	0.1	63
20240215_1923	0.1	49
20240215_1933	0.1	27
20240215_1943	0.1	43
20240215_1953	0.1	45
20240215_2003	0.1	57
20240215_2013	0.1	55
20240215_2023	0.1	52
20240215_2033	0.1	36
20240215_2043	0.1	63
20240215_2053	0.1	299
20240215_2103	0.1	39
20240215_2113	0.1	58
20240215_2123	0.1	45
20240215_2133	0.1	38
20240215_2143	0.1	54
20240215_2153	0.1	66
20240215_2203	0.1	48
20240215_2213	0.1	59
20240215_2223	0.1	59
20240215_2233	0.1	59
20240215_2243	0.1	60
20240215_2253	0.1	60
20240215_2303	0.1	71
20240215_2313	0.1	77
20240215_2323	0.1	59
20240215_2333	0.1	56
20240215_2343	0.1	59
20240215_2353	0.1	47

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240216_0003	0.1	34
20240216_0013	0.1	47
20240216_0023	0.1	39
20240216_0033	0.1	50
20240216_0043	0.1	50
20240216_0053	0.1	60
20240216_0103	0.1	56
20240216_0113	0.1	44
20240216_0123	0.1	50
20240216_0133	0.1	56
20240216_0143	0.1	56
20240216_0153	0.1	67
20240216_0203	0.1	62
20240216_0213	0.1	54
20240216_0223	0.1	49
20240216_0233	0.1	94
20240216_0243	0.1	54
20240216_0253	0.1	65
20240216_0303	0.1	35
20240216_0313	0.1	256
20240216_0323	0.1	289
20240216_0333	0.1	282
20240216_0343	0.1	98
20240216_0353	0.1	70
20240216_0403	0.1	75
20240216_0413	0.1	0
20240216_0423	0.1	329
20240216_0433	0.1	61
20240216_0443	0.1	45
20240216_0453	0.3	142
20240216_0503	0.1	240
20240216_0513	0.1	274
20240216_0523	0.1	82
20240216_0533	0.1	227
20240216_0543	0.4	331
20240216_0553	0.2	281
20240216_0603	0.1	293
20240216_0613	0.1	21
20240216_0623	0.1	44
20240216_0633	0.1	28
20240216_0643	0.1	161
20240216_0653	0.1	129
20240216_0703	0.1	55
20240216_0713	0.1	72
20240216_0723	0.1	100
20240216_0733	0.1	36
20240216_0743	0.1	162
20240216_0753	0.1	145
20240216_0803	0.1	121
20240216_0813	0.1	118
20240216_0823	0.1	105
20240216_0833	0.1	130
20240216_0843	0.1	119
20240216_0853	0.1	115
20240216_0903	0.3	258
20240216_0913	0.5	104
20240216_0923	0.2	102
20240216_0933	0.1	354
20240216_0943	0.7	143
20240216_0953	0.1	184
20240216_1003	0.8	59
20240216_1013	0.5	24
20240216_1023	0.3	134
20240216_1033	0.3	43
20240216_1043	2	62
20240216_1053	4.7	237
20240216_1103	1.5	96
20240216_1113	0.8	349
20240216_1123	0.4	0
20240216_1133	2.4	169
20240216_1143	0.5	40
20240216_1153	0.1	201

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240216_1203	0.5	215
20240216_1213	4.1	140
20240216_1223	4.3	140
20240216_1233	1.3	129
20240216_1243	1.6	326
20240216_1253	1.2	56
20240216_1303	0.5	35
20240216_1313	0.2	106
20240216_1323	3.6	8
20240216_1333	8	157
20240216_1343	0.1	108
20240216_1353	2.5	28
20240216_1403	1.1	84
20240216_1413	2.4	349
20240216_1423	0.1	42
20240216_1433	4.4	130
20240216_1443	1.1	26
20240216_1453	2.6	79
20240216_1503	0.3	130
20240216_1513	1.4	255
20240216_1523	0.8	85
20240216_1533	1.1	284
20240216_1543	0.4	137
20240216_1553	0.1	168
20240216_1603	0.4	72
20240216_1613	2.1	161
20240216_1623	1	352
20240216_1633	1.8	11
20240216_1643	3.1	293
20240216_1653	4.7	298
20240216_1703	3.2	336
20240216_1713	0.5	29
20240216_1723	2.8	347
20240216_1733	1.3	42
20240216_1743	0.2	201
20240216_1753	0.2	24
20240216_1803	0.3	82
20240216_1813	0.5	97
20240216_1823	0.1	238
20240216_1833	1.8	154
20240216_1843	0.1	119
20240216_1853	0.1	35
20240216_1903	0.5	156
20240216_1913	0.2	291
20240216_1923	0.3	61
20240216_1933	0.1	353
20240216_1943	0.2	34
20240216_1953	1.1	312
20240216_2003	0.7	95
20240216_2013	1.7	13
20240216_2023	0.2	162
20240216_2033	0.2	84
20240216_2043	0.1	196
20240216_2053	0.8	108
20240216_2103	0.6	3
20240216_2113	2.7	40
20240216_2123	0.1	15
20240216_2133	0.9	112
20240216_2143	0.1	67
20240216_2153	1.3	6
20240216_2203	0.1	271
20240216_2213	0.4	48
20240216_2223	0.1	120
20240216_2233	0.1	318
20240216_2243	0.3	198
20240216_2253	0.1	330
20240216_2303	0.3	353
20240216_2313	0.2	290
20240216_2323	0.1	305
20240216_2333	0.1	307
20240216_2343	0.8	321
20240216_2353	0.1	20

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240217_0003	0.1	126
20240217_0013	1.3	318
20240217_0023	0.1	236
20240217_0033	0.3	19
20240217_0043	0.3	84
20240217_0053	1.1	102
20240217_0103	0.1	322
20240217_0113	0.1	7
20240217_0123	0.2	107
20240217_0133	0.1	2
20240217_0143	0.2	260
20240217_0153	0.3	344
20240217_0203	0.9	121
20240217_0213	0.1	337
20240217_0223	0.5	217
20240217_0233	5.9	95
20240217_0243	0.3	96
20240217_0253	0.1	223
20240217_0303	1.8	310
20240217_0313	0.1	158
20240217_0323	0.7	7
20240217_0333	0.6	50
20240217_0343	3.1	352
20240217_0353	0.1	285
20240217_0403	3	291
20240217_0413	1.3	149
20240217_0423	0.4	267
20240217_0433	0.2	344
20240217_0443	0.3	279
20240217_0453	0.3	255
20240217_0503	1	274
20240217_0513	0.1	299
20240217_0523	0.2	185
20240217_0533	0.1	295
20240217_0543	0.1	174
20240217_0553	0.1	277
20240217_0603	0.1	23
20240217_0613	0.1	49
20240217_0623	0.1	265
20240217_0633	0.1	327
20240217_0643	0.1	237
20240217_0653	0.1	41
20240217_0703	0.2	354
20240217_0713	0.1	33
20240217_0723	0.3	351
20240217_0733	0.8	337
20240217_0743	0.4	330
20240217_0753	0.1	305
20240217_0803	0.4	327
20240217_0813	2.1	82
20240217_0823	0.7	10
20240217_0833	0.8	64
20240217_0843	0.1	204
20240217_0853	0.1	292
20240217_0903	0.2	351
20240217_0913	0.9	0
20240217_0923	0.9	99
20240217_0933	2.2	339
20240217_0943	3	339
20240217_0953	0.3	90
20240217_1003	1.5	8
20240217_1013	0.4	41
20240217_1023	1	27
20240217_1033	1.4	132
20240217_1043	3.3	115
20240217_1053	0.1	109
20240217_1103	0.7	354
20240217_1113	0.9	94
20240217_1123	1.5	284
20240217_1133	0.5	29
20240217_1143	0.3	158
20240217_1153	0.1	107

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240217_1203	1.1	343
20240217_1213	0.2	161
20240217_1223	3.2	27
20240217_1233	1.5	171
20240217_1243	2.8	151
20240217_1253	0.3	11
20240217_1303	0.1	13
20240217_1313	1.4	151
20240217_1323	2.5	165
20240217_1333	2.1	354
20240217_1343	0.3	74
20240217_1353	0.1	327
20240217_1403	0.1	109
20240217_1413	2	349
20240217_1423	0.1	40
20240217_1433	0.3	162
20240217_1443	0.7	64
20240217_1453	0.6	18
20240217_1503	0.7	25
20240217_1513	0.9	334
20240217_1523	0.1	83
20240217_1533	0.1	123
20240217_1543	0.1	264
20240217_1553	0.1	180
20240217_1603	1.1	20
20240217_1613	0.5	37
20240217_1623	0.6	182
20240217_1633	0.7	284
20240217_1643	0.2	218
20240217_1653	0.2	147
20240217_1703	0.2	134
20240217_1713	0.2	62
20240217_1723	0.1	157
20240217_1733	1.8	67
20240217_1743	1.8	347
20240217_1753	1.1	320
20240217_1803	1.2	90
20240217_1813	2.9	322
20240217_1823	0.3	323
20240217_1833	0.1	12
20240217_1843	1.4	12
20240217_1853	0.6	346
20240217_1903	0.2	60
20240217_1913	0.2	62
20240217_1923	0.2	119
20240217_1933	0.1	161
20240217_1943	0.1	204
20240217_1953	0.1	268
20240217_2003	0.1	135
20240217_2013	0.1	163
20240217_2023	0.3	327
20240217_2033	0.1	180
20240217_2043	0.1	311
20240217_2053	1.9	339
20240217_2103	0.5	136
20240217_2113	0.1	254
20240217_2123	0.1	104
20240217_2133	0.2	333
20240217_2143	0.8	296
20240217_2153	0.1	349
20240217_2203	0.2	205
20240217_2213	0.1	320
20240217_2223	1	327
20240217_2233	0.4	150
20240217_2243	0.3	107
20240217_2253	0.1	116
20240217_2303	0.1	293
20240217_2313	0.1	14
20240217_2323	0.4	62
20240217_2333	0.1	47
20240217_2343	0.4	47
20240217_2353	0.1	102

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240218_0003	0.2	41
20240218_0013	0.2	120
20240218_0023	0.1	126
20240218_0033	0.1	192
20240218_0043	0.1	337
20240218_0053	0.1	271
20240218_0103	0.1	134
20240218_0113	0.1	97
20240218_0123	0.1	207
20240218_0133	0.1	198
20240218_0143	0.1	31
20240218_0153	0.1	115
20240218_0203	0.1	22
20240218_0213	0.1	76
20240218_0223	0.1	111
20240218_0233	0.2	50
20240218_0243	0.5	122
20240218_0253	0.2	77
20240218_0303	0.2	2
20240218_0313	0.1	180
20240218_0323	0.1	86
20240218_0333	0.1	167
20240218_0343	0.1	102
20240218_0353	0.1	346
20240218_0403	0.4	270
20240218_0413	0.1	52
20240218_0423	0.1	114
20240218_0433	0.1	106
20240218_0443	0.1	17
20240218_0453	0.1	142
20240218_0503	1.2	106
20240218_0513	1.3	21
20240218_0523	0.1	271
20240218_0533	1.1	269
20240218_0543	0.1	135
20240218_0553	0.1	134
20240218_0603	0.2	323
20240218_0613	0.1	121
20240218_0623	0.2	49
20240218_0633	0.1	109
20240218_0643	0.1	125
20240218_0653	0.2	63
20240218_0703	0.2	116
20240218_0713	0.1	71
20240218_0723	0.1	59
20240218_0733	0.1	173
20240218_0743	0.1	84
20240218_0753	0.1	202
20240218_0803	1.4	119
20240218_0813	0.1	202
20240218_0823	0.1	261
20240218_0833	0.1	95
20240218_0843	0.2	312
20240218_0853	0.1	334
20240218_0903	0.1	59
20240218_0913	1	321
20240218_0923	1.3	331
20240218_0933	0.1	326
20240218_0943	0.1	324
20240218_0953	2.7	127
20240218_1003	0.9	302
20240218_1013	0.1	25
20240218_1023	1	18
20240218_1033	0.2	64
20240218_1043	0.4	351
20240218_1053	0.3	31
20240218_1103	0.8	286
20240218_1113	1.3	331
20240218_1123	0.1	235
20240218_1133	1.7	305
20240218_1143	5	312
20240218_1153	1.9	348

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240218_1203	0.6	33
20240218_1213	0.3	343
20240218_1223	0.2	237
20240218_1233	0.3	53
20240218_1243	4.3	309
20240218_1253	0.5	42
20240218_1303	2.8	301
20240218_1313	1.1	53
20240218_1323	0.2	105
20240218_1333	0.9	56
20240218_1343	0.5	32
20240218_1353	0.3	5
20240218_1403	0.1	282
20240218_1413	1.8	66
20240218_1423	0.1	276
20240218_1433	0.3	332
20240218_1443	0.4	349
20240218_1453	1.5	12
20240218_1503	0.4	43
20240218_1513	1.1	1
20240218_1523	0.8	83
20240218_1533	0.8	51
20240218_1543	0.3	10
20240218_1553	0.2	315
20240218_1603	1.2	131
20240218_1613	2.9	35
20240218_1623	1.3	27
20240218_1633	0.3	322
20240218_1643	0.2	60
20240218_1653	0.1	14
20240218_1703	1.9	326
20240218_1713	0.7	288
20240218_1723	1.5	46
20240218_1733	0.4	228
20240218_1743	0.4	291
20240218_1753	0.2	70
20240218_1803	0.6	95
20240218_1813	0.1	312
20240218_1823	0.1	347
20240218_1833	0.5	255
20240218_1843	0.2	332
20240218_1853	0.1	55
20240218_1903	0.2	134
20240218_1913	0.1	123
20240218_1923	0.1	164
20240218_1933	0.4	181
20240218_1943	0.1	70
20240218_1953	0.1	59
20240218_2003	0.1	24
20240218_2013	0.1	261
20240218_2023	0.1	325
20240218_2033	0.4	113
20240218_2043	0.1	119
20240218_2053	2.1	112
20240218_2103	0.1	152
20240218_2113	0.1	110
20240218_2123	0.1	145
20240218_2133	0.1	91
20240218_2143	0.1	113
20240218_2153	0.1	133
20240218_2203	0.1	230
20240218_2213	0.1	167
20240218_2223	0.4	122
20240218_2233	0.3	109
20240218_2243	0.6	102
20240218_2253	0.1	115
20240218_2303	0.1	29
20240218_2313	0.1	98
20240218_2323	0.1	43
20240218_2333	0.1	30
20240218_2343	0.1	61
20240218_2353	0.1	83

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240219_0003	0.1	157
20240219_0013	0.1	55
20240219_0023	0.1	71
20240219_0033	0.1	72
20240219_0043	0.1	184
20240219_0053	0.1	36
20240219_0103	0.1	116
20240219_0113	0.1	60
20240219_0123	0.1	87
20240219_0133	0.1	257
20240219_0143	0.1	137
20240219_0153	0.1	19
20240219_0203	0.1	352
20240219_0213	0.1	73
20240219_0223	0.1	89
20240219_0233	0.1	89
20240219_0243	0.1	52
20240219_0253	0.1	81
20240219_0303	0.1	114
20240219_0313	0.1	78
20240219_0323	0.1	150
20240219_0333	0.1	85
20240219_0343	0.1	55
20240219_0353	0.1	80
20240219_0403	0.1	343
20240219_0413	0.1	312
20240219_0423	0.1	154
20240219_0433	0.1	333
20240219_0443	0.2	92
20240219_0453	0.2	54
20240219_0503	1.6	106
20240219_0513	0.7	75
20240219_0523	0.2	122
20240219_0533	0.1	70
20240219_0543	0.1	12
20240219_0553	0.1	99
20240219_0603	0.8	126
20240219_0613	0.1	191
20240219_0623	0.1	95
20240219_0633	2.6	82
20240219_0643	0.1	58
20240219_0653	1	68
20240219_0703	0.1	174
20240219_0713	0.4	15
20240219_0723	0.1	73
20240219_0733	0.1	234
20240219_0743	0.5	343
20240219_0753	0.1	175
20240219_0803	0.3	108
20240219_0813	0.1	249
20240219_0823	0.1	200
20240219_0833	0.2	40
20240219_0843	0.3	127
20240219_0853	0.5	160
20240219_0903	0.1	103
20240219_0913	0.2	105
20240219_0923	0.1	67
20240219_0933	0.1	354
20240219_0943	0.1	142
20240219_0953	0.1	154
20240219_1003	0.2	305
20240219_1013	0.1	115
20240219_1023	0.1	77
20240219_1033	0.1	264
20240219_1043	0.2	221
20240219_1053	0.1	156
20240219_1103	0.2	34
20240219_1113	0.1	196
20240219_1123	0.2	79
20240219_1133	2.4	123
20240219_1143	1.7	117
20240219_1153	0.7	120

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240219_1203	0.5	25
20240219_1213	0.5	94
20240219_1223	0.1	64
20240219_1233	0.1	52
20240219_1243	0.2	282
20240219_1253	0.1	218
20240219_1303	0.1	155
20240219_1313	0.1	112
20240219_1323	0.4	329
20240219_1333	0.1	134
20240219_1343	1.8	42
20240219_1353	1.1	111
20240219_1403	1.7	166
20240219_1413	0.1	119
20240219_1423	0.1	271
20240219_1433	0.2	268
20240219_1443	0.2	127
20240219_1453	2.6	118
20240219_1503	0.1	0
20240219_1513	0.1	101
20240219_1523	0.1	123
20240219_1533	2.3	111
20240219_1543	0.1	304
20240219_1553	0.1	31
20240219_1603	0.2	139
20240219_1613	0.5	24
20240219_1623	0.4	337
20240219_1633	0.1	329
20240219_1643	0.3	164
20240219_1653	0.6	64
20240219_1703	0.1	175
20240219_1713	0.9	202
20240219_1723	0.4	50
20240219_1733	0.4	66
20240219_1743	2.4	69
20240219_1753	0.5	265
20240219_1803	1.4	49
20240219_1813	0.2	99
20240219_1823	0.4	173
20240219_1833	0.1	48
20240219_1843	0.2	32
20240219_1853	0.2	78
20240219_1903	0.1	352
20240219_1913	0.1	121
20240219_1923	0.1	112
20240219_1933	0.2	118
20240219_1943	0.3	148
20240219_1953	0.1	341
20240219_2003	0.8	37
20240219_2013	0.4	148
20240219_2023	0.4	112
20240219_2033	0.2	11
20240219_2043	0.1	303
20240219_2053	0.1	343
20240219_2103	0.1	186
20240219_2113	0.1	353
20240219_2123	0.2	105
20240219_2133	0.2	142
20240219_2143	0.1	325
20240219_2153	0.1	42
20240219_2203	0.1	143
20240219_2213	0.8	331
20240219_2223	0.1	62
20240219_2233	0.2	41
20240219_2243	0.1	49
20240219_2253	0.1	76
20240219_2303	0.6	347
20240219_2313	0.1	28
20240219_2323	0.8	97
20240219_2333	0.1	9
20240219_2343	0.1	5
20240219_2353	0.1	327

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240220_0003	0.1	21
20240220_0013	0.3	330
20240220_0023	1.1	99
20240220_0033	0.3	254
20240220_0043	0.1	340
20240220_0053	0.3	96
20240220_0103	3.1	146
20240220_0113	0.6	77
20240220_0123	0.1	60
20240220_0133	0.3	5
20240220_0143	0.1	226
20240220_0153	0.1	47
20240220_0203	0.1	33
20240220_0213	0.1	294
20240220_0223	0.1	274
20240220_0233	0.3	127
20240220_0243	0.1	61
20240220_0253	1.1	66
20240220_0303	1.7	103
20240220_0313	1	73
20240220_0323	0.3	70
20240220_0333	0.6	117
20240220_0343	0.1	148
20240220_0353	1.3	122
20240220_0403	0.1	109
20240220_0413	0.1	75
20240220_0423	0.1	347
20240220_0433	0.1	40
20240220_0443	0.1	331
20240220_0453	0.1	297
20240220_0503	0.3	159
20240220_0513	1.6	174
20240220_0523	0.2	220
20240220_0533	0.1	235
20240220_0543	0.1	100
20240220_0553	0.2	337
20240220_0603	2.1	319
20240220_0613	0.1	273
20240220_0623	0.1	6
20240220_0633	0.1	135
20240220_0643	0.1	87
20240220_0653	0.1	114
20240220_0703	0.1	79
20240220_0713	0.1	55
20240220_0723	0.1	300
20240220_0733	0.1	74
20240220_0743	0.2	354
20240220_0753	0.1	162
20240220_0803	0.1	183
20240220_0813	0.2	237
20240220_0823	0.1	156
20240220_0833	0.3	322
20240220_0843	0.1	258
20240220_0853	2	318
20240220_0903	0.3	72
20240220_0913	0.6	123
20240220_0923	0.8	298
20240220_0933	1	55
20240220_0943	0.2	25
20240220_0953	1.1	342
20240220_1003	0.1	115
20240220_1013	0.2	124
20240220_1023	2.8	30
20240220_1033	1	46
20240220_1043	0.2	283
20240220_1053	2.2	54
20240220_1103	0.1	61
20240220_1113	1.6	314
20240220_1123	1	306
20240220_1133	1.9	45
20240220_1143	2.6	44
20240220_1153	0.7	352

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240220_1203	1.2	330
20240220_1213	0.3	88
20240220_1223	2.1	22
20240220_1233	7.2	330
20240220_1243	0.5	30
20240220_1253	0.4	264
20240220_1303	0.9	329
20240220_1313	0.9	316
20240220_1323	1.5	339
20240220_1333	1.2	291
20240220_1343	0.9	50
20240220_1353	1.3	41
20240220_1403	1.5	308
20240220_1413	0.1	155
20240220_1423	2.5	1
20240220_1433	1.5	142
20240220_1443	0.1	55
20240220_1453	0.7	318
20240220_1503	0.1	285
20240220_1513	0.9	42
20240220_1523	0.3	54
20240220_1533	0.1	62
20240220_1543	0.5	157
20240220_1553	0.2	329
20240220_1603	0.2	84
20240220_1613	0.1	93
20240220_1623	1.4	42
20240220_1633	1.1	99
20240220_1643	0.9	56
20240220_1653	0.3	108
20240220_1703	0.7	6
20240220_1713	0.8	84
20240220_1723	1.2	99
20240220_1733	0.1	198
20240220_1743	0.3	338
20240220_1753	0.3	70
20240220_1803	0.1	65
20240220_1813	0.1	214
20240220_1823	0.1	212
20240220_1833	1.2	119
20240220_1843	0.1	82
20240220_1853	0.4	73
20240220_1903	0.1	292
20240220_1913	0.1	127
20240220_1923	0.1	188
20240220_1933	0.1	352
20240220_1943	0.3	142
20240220_1953	0.3	268
20240220_2003	0.1	213
20240220_2013	0.9	11
20240220_2023	0.1	96
20240220_2033	0.4	103
20240220_2043	0.1	2
20240220_2053	0.1	79
20240220_2103	0.1	137
20240220_2113	0.1	165
20240220_2123	0.2	266
20240220_2133	0.1	284
20240220_2143	0.1	285
20240220_2153	0.1	74
20240220_2203	0.1	7
20240220_2213	0.3	91
20240220_2223	0.6	24
20240220_2233	0.1	7
20240220_2243	0.1	32
20240220_2253	0.1	35
20240220_2303	0.3	41
20240220_2313	0.1	40
20240220_2323	0.1	294
20240220_2333	0.4	163
20240220_2343	0.1	252
20240220_2353	0.1	186

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240221_0003	0.2	98
20240221_0013	0.1	89
20240221_0023	0.1	153
20240221_0033	1.4	102
20240221_0043	0.1	40
20240221_0053	3	51
20240221_0103	0.4	342
20240221_0113	0.2	66
20240221_0123	0.1	146
20240221_0133	0.1	289
20240221_0143	1	116
20240221_0153	0.1	50
20240221_0203	0.1	51
20240221_0213	0.1	50
20240221_0223	0.1	90
20240221_0233	0.1	145
20240221_0243	0.1	51
20240221_0253	0.1	110
20240221_0303	0.1	87
20240221_0313	0.1	233
20240221_0323	0.1	147
20240221_0333	0.1	267
20240221_0343	0.1	331
20240221_0353	0.1	136
20240221_0403	0.1	54
20240221_0413	0.1	70
20240221_0423	0.1	45
20240221_0433	0.1	41
20240221_0443	0.1	48
20240221_0453	0.1	57
20240221_0503	0.1	57
20240221_0513	0.1	31
20240221_0523	0.1	31
20240221_0533	0.1	29
20240221_0543	0.1	106
20240221_0553	0.1	121
20240221_0603	0.1	55
20240221_0613	0.1	37
20240221_0623	0.1	152
20240221_0633	0.1	129
20240221_0643	0.7	104
20240221_0653	0.1	40
20240221_0703	2.7	156
20240221_0713	1.6	148
20240221_0723	0.1	181
20240221_0733	0.1	331
20240221_0743	0.1	81
20240221_0753	0.1	80
20240221_0803	0.1	105
20240221_0813	0.2	312
20240221_0823	0.1	111
20240221_0833	0.1	318
20240221_0843	0.1	74
20240221_0853	0.2	279
20240221_0903	0.1	56
20240221_0913	0.8	285
20240221_0923	0.2	165
20240221_0933	0.6	47
20240221_0943	2.2	63
20240221_0953	0.8	287
20240221_1003	0.1	332
20240221_1013	1.1	103
20240221_1023	3.2	144
20240221_1033	0.4	25
20240221_1043	5.9	117
20240221_1053	1.6	349
20240221_1103	2.5	233
20240221_1113	0.7	172
20240221_1123	0.5	53
20240221_1133	0.2	89
20240221_1143	0.1	69
20240221_1153	0.1	299

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240221_1203	1.3	333
20240221_1213	0.1	18
20240221_1223	1.1	3
20240221_1233	0.3	64
20240221_1243	0.8	41
20240221_1253	1.2	24
20240221_1303	0.3	28
20240221_1313	0.1	63
20240221_1323	2.4	26
20240221_1333	0.7	182
20240221_1343	1.3	80
20240221_1353	0.7	12
20240221_1403	0.6	81
20240221_1413	1.6	9
20240221_1423	0.9	86
20240221_1433	0.1	49
20240221_1443	0.1	16
20240221_1453	1.3	124
20240221_1503	0.3	329
20240221_1513	7.6	2
20240221_1523	0.1	217
20240221_1533	0.1	221
20240221_1543	1.3	111
20240221_1553	1.9	96
20240221_1603	0.8	38
20240221_1613	0.8	318
20240221_1623	2.1	12
20240221_1633	0.7	50
20240221_1643	0.5	31
20240221_1653	0.8	119
20240221_1703	0.2	104
20240221_1713	0.1	343
20240221_1723	0.3	61
20240221_1733	0.2	17
20240221_1743	0.3	314
20240221_1753	3	121
20240221_1803	0.1	44
20240221_1813	0.1	79
20240221_1823	0.4	131
20240221_1833	0.1	124
20240221_1843	0.1	120
20240221_1853	1.4	121
20240221_1903	2.4	116
20240221_1913	0.8	57
20240221_1923	0.1	69
20240221_1933	0.1	178
20240221_1943	0.2	24
20240221_1953	0.5	345
20240221_2003	0.2	100
20240221_2013	0.3	141
20240221_2023	0.1	123
20240221_2033	0.3	107
20240221_2043	0.1	78
20240221_2053	0.1	116
20240221_2103	0.1	99
20240221_2113	0.1	75
20240221_2123	0.1	70
20240221_2133	0.1	100
20240221_2143	0.1	119
20240221_2153	0.1	63
20240221_2203	0.1	93
20240221_2213	0.2	48
20240221_2223	0.2	70
20240221_2233	0.1	49
20240221_2243	0.1	83
20240221_2253	0.1	127
20240221_2303	0.1	92
20240221_2313	0.1	83
20240221_2323	0.1	123
20240221_2333	0.1	64
20240221_2343	0.1	48
20240221_2353	0.1	59

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240222_0003	0.2	64
20240222_0013	0.1	100
20240222_0023	0.1	95
20240222_0033	0.1	37
20240222_0043	0.1	131
20240222_0053	0.1	140
20240222_0103	0.1	111
20240222_0113	0.1	120
20240222_0123	0.1	59
20240222_0133	0.1	51
20240222_0143	0.1	102
20240222_0153	0.1	70
20240222_0203	0.1	74
20240222_0213	0.1	53
20240222_0223	0.1	2
20240222_0233	0.1	141
20240222_0243	0.1	60
20240222_0253	0.1	165
20240222_0303	0.1	239
20240222_0313	0.1	40
20240222_0323	0.1	169
20240222_0333	0.1	129
20240222_0343	0.1	135
20240222_0353	0.1	156
20240222_0403	0.1	153
20240222_0413	0.1	144
20240222_0423	0.1	34
20240222_0433	0.1	140
20240222_0443	0.1	285
20240222_0453	0.1	45
20240222_0503	0.1	68
20240222_0513	0.1	304
20240222_0523	0.4	55
20240222_0533	0.1	61
20240222_0543	0.1	62
20240222_0553	0.5	38
20240222_0603	0.2	88
20240222_0613	0.1	53
20240222_0623	0.1	85
20240222_0633	0.1	54
20240222_0643	0.1	30
20240222_0653	0.8	79
20240222_0703	0.3	132
20240222_0713	0.3	21
20240222_0723	0.1	84
20240222_0733	0.1	199
20240222_0743	0.1	95
20240222_0753	0.1	158
20240222_0803	0.1	14
20240222_0813	0.1	69
20240222_0823	0.1	303
20240222_0833	0.3	23
20240222_0843	0.1	190
20240222_0853	0.1	61
20240222_0903	0.1	57
20240222_0913	0.1	288
20240222_0923	0.4	32
20240222_0933	0.6	47
20240222_0943	0.8	26
20240222_0953	0.3	72
20240222_1003	0.8	69
20240222_1013	0.1	100
20240222_1023	0.1	71
20240222_1033	0.4	319
20240222_1043	0.6	313
20240222_1053	0.1	111
20240222_1103	0.6	156
20240222_1113	0.1	187
20240222_1123	1.1	35
20240222_1133	0.1	75
20240222_1143	0.1	0
20240222_1153	1	28

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240222_1203	0.6	171
20240222_1213	1.5	12
20240222_1223	0.6	124
20240222_1233	0.1	186
20240222_1243	0.1	101
20240222_1253	2.4	144
20240222_1303	3.2	145
20240222_1313	1.3	39
20240222_1323	1.5	157
20240222_1333	0.2	83
20240222_1343	1.5	129
20240222_1353	2.9	69
20240222_1403	1.7	71
20240222_1413	3.4	14
20240222_1423	0.1	138
20240222_1433	3.5	160
20240222_1443	0.6	334
20240222_1453	2.6	12
20240222_1503	0.1	203
20240222_1513	0.1	164
20240222_1523	0.8	37
20240222_1533	0.1	150
20240222_1543	1.4	19
20240222_1553	0.1	96
20240222_1603	1.9	111
20240222_1613	1.2	21
20240222_1623	0.1	22
20240222_1633	0.3	89
20240222_1643	1.9	157
20240222_1653	4.1	128
20240222_1703	0.1	250
20240222_1713	2.3	107
20240222_1723	1.4	85
20240222_1733	0.3	72
20240222_1743	0.6	197
20240222_1753	0.7	354
20240222_1803	0.4	155
20240222_1813	0.2	180
20240222_1823	0.1	71
20240222_1833	0.2	129
20240222_1843	0.1	113
20240222_1853	0.3	135
20240222_1903	0.5	89
20240222_1913	0.1	146
20240222_1923	0.1	16
20240222_1933	0.3	35
20240222_1943	0.2	34
20240222_1953	1	97
20240222_2003	0.1	102
20240222_2013	0.1	337
20240222_2023	1	9
20240222_2033	1.7	94
20240222_2043	1.5	40
20240222_2053	1.3	354
20240222_2103	0.1	181
20240222_2113	0.1	135
20240222_2123	0.1	350
20240222_2133	0.2	314
20240222_2143	0.2	104
20240222_2153	0.2	296
20240222_2203	0.3	334
20240222_2213	0.1	56
20240222_2223	0.1	206
20240222_2233	0.8	302
20240222_2243	0.1	300
20240222_2253	0.1	18
20240222_2303	0.1	147
20240222_2313	0.5	272
20240222_2323	0.1	300
20240222_2333	0.1	79
20240222_2343	0.1	332
20240222_2353	0.3	21

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240223_0003	1.2	323
20240223_0013	0.1	138
20240223_0023	0.1	292
20240223_0033	0.1	151
20240223_0043	0.1	18
20240223_0053	0.1	316
20240223_0103	0.1	29
20240223_0113	0.4	304
20240223_0123	0.9	59
20240223_0133	0.3	37
20240223_0143	0.1	349
20240223_0153	0.5	65
20240223_0203	0.3	17
20240223_0213	0.1	12
20240223_0223	0.1	36
20240223_0233	3.1	6
20240223_0243	0.2	69
20240223_0253	0.1	353
20240223_0303	0.1	153
20240223_0313	0.1	230
20240223_0323	0.1	289
20240223_0333	0.1	126
20240223_0343	0.1	134
20240223_0353	0.1	264
20240223_0403	0.1	165
20240223_0413	0.1	155
20240223_0423	0.1	153
20240223_0433	0.1	242
20240223_0443	0.1	112
20240223_0453	0.1	114
20240223_0503	0.1	265
20240223_0513	0.1	176
20240223_0523	0.1	144
20240223_0533	0.1	95
20240223_0543	0.1	140
20240223_0553	0.1	151
20240223_0603	0.1	169
20240223_0613	0.1	147
20240223_0623	0.1	137
20240223_0633	0.1	161
20240223_0643	0.1	151
20240223_0653	0.1	160
20240223_0703	0.1	141
20240223_0713	0.3	157
20240223_0723	0.1	148
20240223_0733	0.1	135
20240223_0743	0.5	138
20240223_0753	0.1	94
20240223_0803	0.1	337
20240223_0813	0.1	9
20240223_0823	0.1	66
20240223_0833	0.1	337
20240223_0843	0.1	345
20240223_0853	0.1	26
20240223_0903	0.1	10
20240223_0913	0.2	355
20240223_0923	0.1	3
20240223_0933	0.1	25
20240223_0943	0.1	116
20240223_0953	0.1	136
20240223_1003	0.1	281
20240223_1013	0.1	274
20240223_1023	0.3	261
20240223_1033	0.3	314
20240223_1043	0.4	289
20240223_1053	0.2	17
20240223_1103	0.1	302
20240223_1113	0.1	262
20240223_1123	0.2	192
20240223_1133	0.1	260
20240223_1143	0.1	50
20240223_1153	0.1	309

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240223_1203	0.1	275
20240223_1213	0.1	240
20240223_1223	0.3	54
20240223_1233	0.2	338
20240223_1243	0.1	342
20240223_1253	0.1	226
20240223_1303	0.1	54
20240223_1313	0.1	290
20240223_1323	0.2	0
20240223_1333	0.1	301
20240223_1343	0.1	91
20240223_1353	0.1	16
20240223_1403	1.2	330
20240223_1413	0.2	331
20240223_1423	1.3	26
20240223_1433	0.1	132
20240223_1443	0.1	112
20240223_1453	0.1	316
20240223_1503	0.1	243
20240223_1513	0.1	250
20240223_1523	0.1	210
20240223_1533	0.1	327
20240223_1543	0.1	273
20240223_1553	0.1	203
20240223_1603	0.1	260
20240223_1613	0.1	205
20240223_1623	0.1	304
20240223_1633	0.1	232
20240223_1643	0.1	229
20240223_1653	0.1	177
20240223_1703	0.1	150
20240223_1713	0.1	248
20240223_1723	0.1	330
20240223_1733	0.1	140
20240223_1743	0.1	139
20240223_1753	0.1	242
20240223_1803	0.1	114
20240223_1813	0.1	141
20240223_1823	0.1	103
20240223_1833	0.1	141
20240223_1843	0.1	80
20240223_1853	0.1	130
20240223_1903	0.1	128
20240223_1913	0.1	150
20240223_1923	0.1	140
20240223_1933	0.1	102
20240223_1943	0.1	122
20240223_1953	0.1	157
20240223_2003	0.1	295
20240223_2013	0.1	155
20240223_2023	0.1	344
20240223_2033	0.1	303
20240223_2043	0.1	51
20240223_2053	0.1	328
20240223_2103	0.1	139
20240223_2113	0.1	110
20240223_2123	0.1	152
20240223_2133	0.1	139
20240223_2143	0.1	23
20240223_2153	0.1	15
20240223_2203	0.9	326
20240223_2213	0.8	351
20240223_2223	0.2	317
20240223_2233	0.1	331
20240223_2243	0.1	332
20240223_2253	0.1	41
20240223_2303	0.3	326
20240223_2313	0.2	347
20240223_2323	0.5	33
20240223_2333	0.1	74
20240223_2343	1	337
20240223_2353	0.9	333

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240224_0003	0.1	270
20240224_0013	0.3	305
20240224_0023	0.1	79
20240224_0033	0.1	40
20240224_0043	1.6	303
20240224_0053	0.3	341
20240224_0103	0.1	20
20240224_0113	0.1	21
20240224_0123	0.1	308
20240224_0133	0.1	25
20240224_0143	0.5	47
20240224_0153	0.1	183
20240224_0203	0.2	330
20240224_0213	0.1	82
20240224_0223	0.2	8
20240224_0233	0.4	9
20240224_0243	0.2	299
20240224_0253	0.1	125
20240224_0303	0.1	121
20240224_0313	0.5	161
20240224_0323	0.1	138
20240224_0333	0.1	251
20240224_0343	0.1	137
20240224_0353	0.1	265
20240224_0403	0.1	137
20240224_0413	0.1	113
20240224_0423	0.1	122
20240224_0433	0.1	155
20240224_0443	0.1	283
20240224_0453	0.1	271
20240224_0503	0.1	174
20240224_0513	0.1	17
20240224_0523	0.1	252
20240224_0533	0.1	78
20240224_0543	0.1	29
20240224_0553	0.1	109
20240224_0603	0.1	133
20240224_0613	0.1	236
20240224_0623	0.1	256
20240224_0633	0.1	333
20240224_0643	0.1	249
20240224_0653	0.1	119
20240224_0703	0.1	140
20240224_0713	0.1	147
20240224_0723	0.1	184
20240224_0733	0.1	234
20240224_0743	0.1	233
20240224_0753	0.1	182
20240224_0803	0.1	338
20240224_0813	0.1	31
20240224_0823	0.1	224
20240224_0833	0.1	348
20240224_0843	0.2	290
20240224_0853	0.1	255
20240224_0903	0.1	156
20240224_0913	0.1	143
20240224_0923	0.1	247
20240224_0933	0.1	254
20240224_0943	0.1	283
20240224_0953	0.1	159
20240224_1003	0.3	251
20240224_1013	0.3	272
20240224_1023	0.3	287
20240224_1033	0.3	212
20240224_1043	0.3	297
20240224_1053	0.1	196
20240224_1103	0.1	97
20240224_1113	0.1	281
20240224_1123	0.2	290
20240224_1133	1.2	283
20240224_1143	0.2	257
20240224_1153	0.3	262

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240224_1203	0.1	156
20240224_1213	0.3	335
20240224_1223	0.1	259
20240224_1233	0.1	38
20240224_1243	0.1	257
20240224_1253	0.2	198
20240224_1303	0.4	230
20240224_1313	0.1	104
20240224_1323	0.4	152
20240224_1333	0.1	234
20240224_1343	0.1	315
20240224_1353	0.3	268
20240224_1403	0.1	97
20240224_1413	0.1	80
20240224_1423	0.1	144
20240224_1433	0.1	344
20240224_1443	0.3	59
20240224_1453	0.3	70
20240224_1503	0.4	42
20240224_1513	0.5	62
20240224_1523	0.1	185
20240224_1533	0.1	331
20240224_1543	0.1	250
20240224_1553	0.1	107
20240224_1603	0.1	86
20240224_1613	0.1	257
20240224_1623	0.1	104
20240224_1633	0.3	31
20240224_1643	0.8	2
20240224_1653	0.5	32
20240224_1703	0.1	354
20240224_1713	1.2	336
20240224_1723	0.7	80
20240224_1733	0.1	120
20240224_1743	1	100
20240224_1753	0.1	121
20240224_1803	0.3	321
20240224_1813	0.1	157
20240224_1823	0.2	298
20240224_1833	0.5	46
20240224_1843	0.1	116
20240224_1853	2.1	168
20240224_1903	0.2	225
20240224_1913	0.4	141
20240224_1923	0.9	93
20240224_1933	0.6	89
20240224_1943	0.5	24
20240224_1953	0.1	156
20240224_2003	3.7	317
20240224_2013	0.6	300
20240224_2023	1.9	299
20240224_2033	0.1	83
20240224_2043	0.1	181
20240224_2053	0.3	48
20240224_2103	0.1	307
20240224_2113	0.1	14
20240224_2123	0.2	105
20240224_2133	0.1	151
20240224_2143	0.1	159
20240224_2153	0.1	192
20240224_2203	0.1	324
20240224_2213	0.1	144
20240224_2223	0.1	108
20240224_2233	0.1	342
20240224_2243	0.2	112
20240224_2253	0.1	116
20240224_2303	0.1	119
20240224_2313	0.1	127
20240224_2323	0.1	145
20240224_2333	1.4	151
20240224_2343	0.5	139
20240224_2353	0.1	154

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240225_0003	0.1	296
20240225_0013	0.1	170
20240225_0023	0.1	99
20240225_0033	0.2	112
20240225_0043	0.1	237
20240225_0053	0.1	251
20240225_0103	0.1	279
20240225_0113	0.1	240
20240225_0123	0.1	233
20240225_0133	0.1	335
20240225_0143	0.1	249
20240225_0153	0.2	27
20240225_0203	0.7	131
20240225_0213	0.1	137
20240225_0223	1.1	139
20240225_0233	0.2	150
20240225_0243	0.1	96
20240225_0253	0.1	273
20240225_0303	0.1	67
20240225_0313	0.1	255
20240225_0323	1.1	117
20240225_0333	0.2	102
20240225_0343	0.5	142
20240225_0353	0.5	4
20240225_0403	0.5	72
20240225_0413	0.1	205
20240225_0423	0.1	126
20240225_0433	0.1	277
20240225_0443	0.1	19
20240225_0453	0.9	325
20240225_0503	0.6	333
20240225_0513	1	81
20240225_0523	0.9	318
20240225_0533	1.1	287
20240225_0543	0.1	39
20240225_0553	0.1	284
20240225_0603	0.1	219
20240225_0613	0.1	164
20240225_0623	0.1	242
20240225_0633	0.1	278
20240225_0643	0.1	241
20240225_0653	0.1	354
20240225_0703	0.1	170
20240225_0713	0.1	242
20240225_0723	0.2	292
20240225_0733	0.1	70
20240225_0743	0.1	193
20240225_0753	0.1	140
20240225_0803	0.1	136
20240225_0813	0.1	187
20240225_0823	0.1	202
20240225_0833	0.1	15
20240225_0843	0.3	275
20240225_0853	0.1	238
20240225_0903	0.2	237
20240225_0913	0.1	176
20240225_0923	0.1	242
20240225_0933	0.1	232
20240225_0943	0.1	243
20240225_0953	0.1	129
20240225_1003	0.2	252
20240225_1013	0.1	319
20240225_1023	0.1	152
20240225_1033	0.1	217
20240225_1043	0.1	267
20240225_1053	0.2	217
20240225_1103	0.1	262
20240225_1113	0.2	275
20240225_1123	0.3	250
20240225_1133	0.2	318
20240225_1143	0.1	230
20240225_1153	0.1	207

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240225_1203	0.2	110
20240225_1213	0.1	42
20240225_1223	0.4	120
20240225_1233	0.1	325
20240225_1243	0.2	127
20240225_1253	0.1	100
20240225_1303	0.1	137
20240225_1313	0.1	214
20240225_1323	0.4	138
20240225_1333	0.2	106
20240225_1343	0.1	103
20240225_1353	0.1	82
20240225_1403	0.6	136
20240225_1413	0.1	172
20240225_1423	1.7	158
20240225_1433	0.1	200
20240225_1443	0.8	97
20240225_1453	0.5	197
20240225_1503	0.9	34
20240225_1513	0.1	40
20240225_1523	1.2	76
20240225_1533	0.7	103
20240225_1543	0.5	99
20240225_1553	0.7	131
20240225_1603	0.1	69
20240225_1613	0.1	315
20240225_1623	0.1	114
20240225_1633	0.1	17
20240225_1643	0.1	268
20240225_1653	0.1	18
20240225_1703	0.1	133
20240225_1713	0.1	69
20240225_1723	0.1	330
20240225_1733	1	266
20240225_1743	0.3	307
20240225_1753	0.3	313
20240225_1803	0.1	31
20240225_1813	0.1	348
20240225_1823	0.1	315
20240225_1833	0.2	297
20240225_1843	0.2	333
20240225_1853	0.1	72
20240225_1903	0.1	147
20240225_1913	0.1	88
20240225_1923	0.1	131
20240225_1933	0.1	146
20240225_1943	0.1	145
20240225_1953	0.1	119
20240225_2003	0.1	63
20240225_2013	0.1	143
20240225_2023	0.1	126
20240225_2033	0.1	128
20240225_2043	0.1	74
20240225_2053	0.1	164
20240225_2103	0.1	148
20240225_2113	0.1	104
20240225_2123	0.1	86
20240225_2133	0.1	144
20240225_2143	0.1	128
20240225_2153	0.1	340
20240225_2203	0.1	43
20240225_2213	0.1	47
20240225_2223	0.1	142
20240225_2233	0.1	261
20240225_2243	0.1	150
20240225_2253	0.1	154
20240225_2303	0.1	115
20240225_2313	0.1	138
20240225_2323	0.3	143
20240225_2333	0.1	153
20240225_2343	0.1	148
20240225_2353	0.1	155

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240226_0003	0.1	134
20240226_0013	0.2	124
20240226_0023	0.3	133
20240226_0033	0.1	138
20240226_0043	0.1	140
20240226_0053	0.1	148
20240226_0103	0.1	159
20240226_0113	0.1	104
20240226_0123	0.1	132
20240226_0133	0.1	296
20240226_0143	0.1	262
20240226_0153	0.1	286
20240226_0203	0.1	232
20240226_0213	0.1	259
20240226_0223	0.1	312
20240226_0233	0.1	120
20240226_0243	0.1	231
20240226_0253	0.1	130
20240226_0303	0.1	209
20240226_0313	0.1	254
20240226_0323	0.1	245
20240226_0333	0.1	262
20240226_0343	0.1	338
20240226_0353	0.1	265
20240226_0403	0.1	322
20240226_0413	0.1	254
20240226_0423	0.2	84
20240226_0433	0.2	27
20240226_0443	0.1	93
20240226_0453	0.1	114
20240226_0503	0.1	342
20240226_0513	0.1	120
20240226_0523	0.1	73
20240226_0533	0.1	269
20240226_0543	0.1	252
20240226_0553	0.1	32
20240226_0603	0.1	51
20240226_0613	0.1	337
20240226_0623	0.1	279
20240226_0633	0.1	134
20240226_0643	0.1	263
20240226_0653	0.1	58
20240226_0703	0.2	23
20240226_0713	0.1	323
20240226_0723	0.1	222
20240226_0733	0.1	86
20240226_0743	0.1	285
20240226_0753	0.1	270
20240226_0803	0.1	238
20240226_0813	0.1	231
20240226_0823	0.2	265
20240226_0833	0.1	254
20240226_0843	0.1	41
20240226_0853	0.1	270
20240226_0903	0.1	285
20240226_0913	0.1	131
20240226_0923	0.1	252
20240226_0933	0.1	225
20240226_0943	0.1	222
20240226_0953	0.1	90
20240226_1003	0.3	253
20240226_1013	0.1	318
20240226_1023	0.2	258
20240226_1033	0.1	242
20240226_1043	0.1	117
20240226_1053	0.1	299
20240226_1103	0.1	297
20240226_1113	0.1	117
20240226_1123	0.1	141
20240226_1133	0.1	147
20240226_1143	1.7	100
20240226_1153	0.1	337

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240226_1203	0.5	279
20240226_1213	0.5	12
20240226_1223	0.1	293
20240226_1233	0.1	143
20240226_1243	0.1	53
20240226_1253	0.1	260
20240226_1303	0.1	131
20240226_1313	0.1	90
20240226_1323	2.3	113
20240226_1333	0.1	354
20240226_1343	0.3	335
20240226_1353	0.5	68
20240226_1403	1.1	50
20240226_1413	0.4	38
20240226_1423	0.1	26
20240226_1433	0.1	304
20240226_1443	0.3	172
20240226_1453	0.4	351
20240226_1503	0.9	146
20240226_1513	0.7	135
20240226_1523	0.1	250
20240226_1533	1.3	76
20240226_1543	0.1	50
20240226_1553	1.1	354
20240226_1603	1.1	21
20240226_1613	0.1	279
20240226_1623	2.5	81
20240226_1633	0.3	147
20240226_1643	0.5	19
20240226_1653	0.9	181
20240226_1703	0.2	107
20240226_1713	0.1	28
20240226_1723	0.1	119
20240226_1733	0.1	70
20240226_1743	0.1	171
20240226_1753	0.4	105
20240226_1803	0.2	140
20240226_1813	0.2	166
20240226_1823	0.1	131
20240226_1833	0.1	230
20240226_1843	0.1	166
20240226_1853	0.1	287
20240226_1903	0.1	262
20240226_1913	0.1	342
20240226_1923	0.1	107
20240226_1933	0.1	147
20240226_1943	0.1	149
20240226_1953	0.1	151
20240226_2003	0.1	141
20240226_2013	0.1	148
20240226_2023	0.1	148
20240226_2033	0.1	147
20240226_2043	0.1	171
20240226_2053	0.1	155
20240226_2103	0.1	149
20240226_2113	0.1	207
20240226_2123	0.1	326
20240226_2133	0.1	218
20240226_2143	0.1	214
20240226_2153	0.1	250
20240226_2203	0.1	203
20240226_2213	0.1	135
20240226_2223	0.1	238
20240226_2233	0.1	140
20240226_2243	0.1	150
20240226_2253	0.1	249
20240226_2303	0.1	206
20240226_2313	0.2	156
20240226_2323	0.6	123
20240226_2333	0.4	125
20240226_2343	0.1	187
20240226_2353	0.4	150

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240227_0003	0.2	158
20240227_0013	0.1	173
20240227_0023	0.8	110
20240227_0033	0.6	110
20240227_0043	0.2	51
20240227_0053	0.7	42
20240227_0103	0.1	97
20240227_0113	0.1	132
20240227_0123	0.1	74
20240227_0133	0.1	282
20240227_0143	0.5	313
20240227_0153	0.1	46
20240227_0203	0.1	347
20240227_0213	0.2	325
20240227_0223	1	305
20240227_0233	1.3	329
20240227_0243	0.1	26
20240227_0253	0.1	81
20240227_0303	0.1	322
20240227_0313	0.1	44
20240227_0323	0.4	341
20240227_0333	0.1	262
20240227_0343	0.2	317
20240227_0353	0.1	317
20240227_0403	0.1	296
20240227_0413	0.2	329
20240227_0423	0.1	15
20240227_0433	0.2	340
20240227_0443	0.1	123
20240227_0453	0.1	132
20240227_0503	0.1	148
20240227_0513	0.1	101
20240227_0523	0.1	216
20240227_0533	0.1	255
20240227_0543	0.1	289
20240227_0553	0.1	55
20240227_0603	0.1	38
20240227_0613	0.1	153
20240227_0623	0.1	249
20240227_0633	0.1	314
20240227_0643	0.2	286
20240227_0653	0.1	327
20240227_0703	0.1	351
20240227_0713	0.1	17
20240227_0723	0.1	320
20240227_0733	0.1	153
20240227_0743	0.1	107
20240227_0753	0.3	328
20240227_0803	0.1	310
20240227_0813	0.1	301
20240227_0823	0.1	259
20240227_0833	0.1	328
20240227_0843	0.1	251
20240227_0853	0.1	342
20240227_0903	0.1	269
20240227_0913	0.3	247
20240227_0923	0.1	270
20240227_0933	0.1	81
20240227_0943	0.5	237
20240227_0953	0.1	260
20240227_1003	0.2	242
20240227_1013	0.1	191
20240227_1023	0.1	110
20240227_1033	0.1	221
20240227_1043	1.8	299
20240227_1053	0.4	280
20240227_1103	0.1	196
20240227_1113	0.4	239
20240227_1123	0.1	288
20240227_1133	0.2	184
20240227_1143	2.7	276
20240227_1153	0.4	151

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240227_1203	0.1	86
20240227_1213	0.6	318
20240227_1223	0.1	124
20240227_1233	0.3	266
20240227_1243	0.1	236
20240227_1253	0.1	101
20240227_1303	0.4	253
20240227_1313	0.1	339
20240227_1323	0.1	319
20240227_1333	0.2	115
20240227_1343	0.1	236
20240227_1353	0.4	298
20240227_1403	0.3	221
20240227_1413	0.1	219
20240227_1423	1.9	113
20240227_1433	0.1	326
20240227_1443	0.6	97
20240227_1453	0.1	138
20240227_1503	0.1	131
20240227_1513	0.4	92
20240227_1523	0.1	139
20240227_1533	1.5	137
20240227_1543	0.3	165
20240227_1553	0.1	157
20240227_1603	0.1	58
20240227_1613	0.1	121
20240227_1623	0.9	312
20240227_1633	0.1	252
20240227_1643	0.1	4
20240227_1653	0.7	100
20240227_1703	0.3	129
20240227_1713	0.1	35
20240227_1723	0.1	137
20240227_1733	0.4	97
20240227_1743	0.4	20
20240227_1753	0.2	114
20240227_1803	0.8	159
20240227_1813	0.5	134
20240227_1823	0.1	3
20240227_1833	0.1	60
20240227_1843	0.1	144
20240227_1853	0.2	93
20240227_1903	0.1	185
20240227_1913	1.3	145
20240227_1923	0.3	137
20240227_1933	0.2	344
20240227_1943	1	28
20240227_1953	0.1	46
20240227_2003	0.1	185
20240227_2013	0.1	300
20240227_2023	0.1	107
20240227_2033	0.1	144
20240227_2043	0.1	307
20240227_2053	0.1	82
20240227_2103	0.1	182
20240227_2113	0.1	160
20240227_2123	0.1	350
20240227_2133	0.1	305
20240227_2143	0.1	63
20240227_2153	0.4	177
20240227_2203	0.1	242
20240227_2213	0.1	301
20240227_2223	0.1	313
20240227_2233	0.1	266
20240227_2243	0.8	45
20240227_2253	0.1	8
20240227_2303	0.1	76
20240227_2313	0.1	301
20240227_2323	0.2	56
20240227_2333	0.1	319
20240227_2343	0.1	150
20240227_2353	0.1	155

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240228_0003	0.1	88
20240228_0013	0.2	152
20240228_0023	0.1	100
20240228_0033	0.1	263
20240228_0043	0.1	256
20240228_0053	0.1	288
20240228_0103	0.5	8
20240228_0113	0.3	13
20240228_0123	0.5	75
20240228_0133	0.1	63
20240228_0143	0.1	24
20240228_0153	0.1	96
20240228_0203	0.1	211
20240228_0213	0.3	217
20240228_0223	0.5	68
20240228_0233	0.1	147
20240228_0243	0.1	110
20240228_0253	0.1	63
20240228_0303	0.2	44
20240228_0313	0.1	355
20240228_0323	0.1	184
20240228_0333	0.1	43
20240228_0343	0.2	71
20240228_0353	0.1	135
20240228_0403	0.1	343
20240228_0413	0.1	57
20240228_0423	0.1	8
20240228_0433	0.1	72
20240228_0443	0.2	9
20240228_0453	2.6	59
20240228_0503	0.1	150
20240228_0513	0.3	333
20240228_0523	0.2	295
20240228_0533	0.3	169
20240228_0543	0.1	81
20240228_0553	0.2	305
20240228_0603	0.4	339
20240228_0613	0.2	301
20240228_0623	0.1	164
20240228_0633	0.1	39
20240228_0643	1.3	11
20240228_0653	0.1	219
20240228_0703	0.7	297
20240228_0713	0.2	302
20240228_0723	0.3	163
20240228_0733	0.1	298
20240228_0743	4	311
20240228_0753	0.2	70
20240228_0803	0.1	334
20240228_0813	2.1	165
20240228_0823	0.3	51
20240228_0833	0.4	349
20240228_0843	0.6	14
20240228_0853	0.8	329
20240228_0903	0.9	5
20240228_0913	0.1	344
20240228_0923	0.8	328
20240228_0933	0.8	326
20240228_0943	1.9	266
20240228_0953	0.4	36
20240228_1003	0.4	333
20240228_1013	0.1	310
20240228_1023	0.1	168
20240228_1033	3.3	15
20240228_1043	1.1	26
20240228_1053	0.1	246
20240228_1103	1.7	160
20240228_1113	0.1	102
20240228_1123	0.3	225
20240228_1133	2.2	332
20240228_1143	1.6	64
20240228_1153	0.6	303

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240228_1203	0.3	199
20240228_1213	0.1	339
20240228_1223	2.7	144
20240228_1233	0.1	350
20240228_1243	2.8	176
20240228_1253	0.3	52
20240228_1303	1.1	333
20240228_1313	0.1	327
20240228_1323	2.5	312
20240228_1333	0.5	125
20240228_1343	2.6	190
20240228_1353	0.3	13
20240228_1403	0.4	307
20240228_1413	0.1	240
20240228_1423	0.1	219
20240228_1433	3.1	339
20240228_1443	0.1	324
20240228_1453	2.2	270
20240228_1503	0.8	331
20240228_1513	0.1	83
20240228_1523	0.1	180
20240228_1533	0.8	74
20240228_1543	0.7	323
20240228_1553	2.5	353
20240228_1603	0.2	76
20240228_1613	0.1	73
20240228_1623	0.1	90
20240228_1633	0.4	116
20240228_1643	0.1	224
20240228_1653	0.1	25
20240228_1703	0.3	118
20240228_1713	0.1	196
20240228_1723	0.1	126
20240228_1733	0.2	60
20240228_1743	0.1	320
20240228_1753	0.1	304
20240228_1803	0.1	119
20240228_1813	0.2	158
20240228_1823	0.1	144
20240228_1833	0.1	147
20240228_1843	0.1	210
20240228_1853	0.1	240
20240228_1903	0.1	267
20240228_1913	0.1	129
20240228_1923	0.1	145
20240228_1933	0.2	64
20240228_1943	0.1	133
20240228_1953	0.1	121
20240228_2003	0.1	164
20240228_2013	0.1	127
20240228_2023	0.1	60
20240228_2033	0.1	149
20240228_2043	0.1	255
20240228_2053	0.1	155
20240228_2103	0.1	226
20240228_2113	0.1	269
20240228_2123	0.1	136
20240228_2133	0.1	44
20240228_2143	0.1	142
20240228_2153	0.1	299
20240228_2203	0.1	197
20240228_2213	0.1	145
20240228_2223	0.1	141
20240228_2233	0.1	211
20240228_2243	0.1	269
20240228_2253	0.1	111
20240228_2303	0.1	99
20240228_2313	0.1	103
20240228_2323	0.1	145
20240228_2333	0.1	154
20240228_2343	0.1	138
20240228_2353	0.1	156

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240229_0003	0.3	354
20240229_0013	0.1	59
20240229_0023	0.1	111
20240229_0033	0.1	55
20240229_0043	0.1	152
20240229_0053	0.1	112
20240229_0103	0.1	149
20240229_0113	0.1	143
20240229_0123	0.1	130
20240229_0133	0.1	138
20240229_0143	0.1	46
20240229_0153	0.1	0
20240229_0203	0.1	143
20240229_0213	0.1	133
20240229_0223	0.1	133
20240229_0233	0.1	228
20240229_0243	0.1	145
20240229_0253	0.1	131
20240229_0303	0.1	88
20240229_0313	0.1	46
20240229_0323	0.1	132
20240229_0333	0.1	146
20240229_0343	0.1	144
20240229_0353	0.1	282
20240229_0403	0.1	165
20240229_0413	0.1	124
20240229_0423	0.1	256
20240229_0433	0.1	142
20240229_0443	0.1	354
20240229_0453	0.1	87
20240229_0503	0.1	309
20240229_0513	0.1	110
20240229_0523	0.1	304
20240229_0533	0.1	244
20240229_0543	0.1	74
20240229_0553	0.1	221
20240229_0603	0.1	10
20240229_0613	0.1	246
20240229_0623	0.7	55
20240229_0633	0.1	91
20240229_0643	0.1	280
20240229_0653	0.1	254
20240229_0703	0.1	94
20240229_0713	0.1	190
20240229_0723	0.2	332
20240229_0733	0.1	162
20240229_0743	0.1	295
20240229_0753	0.1	198
20240229_0803	0.1	12
20240229_0813	0.1	94
20240229_0823	0.2	37
20240229_0833	0.4	348
20240229_0843	1.5	332
20240229_0853	0.2	330
20240229_0903	3	102
20240229_0913	0.1	4
20240229_0923	0.1	351
20240229_0933	0.1	5
20240229_0943	0.1	126
20240229_0953	0.1	353
20240229_1003	0.1	122
20240229_1013	2.3	125
20240229_1023	0.6	117
20240229_1033	0.1	142
20240229_1043	0.1	318
20240229_1053	1	143
20240229_1103	0.1	251
20240229_1113	0.1	256
20240229_1123	0.5	144
20240229_1133	0.1	159
20240229_1143	0.1	150
20240229_1153	0.6	248

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240229_1203	0.1	324
20240229_1213	0.1	227
20240229_1223	0.2	295
20240229_1233	0.1	226
20240229_1243	0.1	229
20240229_1253	0.1	197
20240229_1303	0.1	327
20240229_1313	0.2	139
20240229_1323	0.1	204
20240229_1333	0.1	216
20240229_1343	0.1	144
20240229_1353	0.3	177
20240229_1403	0.1	310
20240229_1413	0.1	268
20240229_1423	0.1	237
20240229_1433	0.1	248
20240229_1443	0.1	149
20240229_1453	0.1	134
20240229_1503	0.2	160
20240229_1513	0.1	349
20240229_1523	0.3	110
20240229_1533	1.4	93
20240229_1543	0.2	81
20240229_1553	1.1	112
20240229_1603	0.2	93
20240229_1613	1.3	36
20240229_1623	0.2	32
20240229_1633	2.8	95
20240229_1643	0.7	175
20240229_1653	0.1	150
20240229_1703	0.1	66
20240229_1713	0.9	39
20240229_1723	0.2	81
20240229_1733	0.6	64
20240229_1743	0.1	27
20240229_1753	0.2	56
20240229_1803	0.1	314
20240229_1813	0.1	45
20240229_1823	0.1	135
20240229_1833	0.1	275
20240229_1843	0.3	22
20240229_1853	0.1	125
20240229_1903	0.1	253
20240229_1913	0.1	53
20240229_1923	0.2	139
20240229_1933	0.1	248
20240229_1943	0.1	321
20240229_1953	0.1	263
20240229_2003	0.1	199
20240229_2013	0.8	154
20240229_2023	0.9	96
20240229_2033	0.1	273
20240229_2043	0.2	299
20240229_2053	0.6	328
20240229_2103	0.6	136
20240229_2113	0.2	263
20240229_2123	1.5	8
20240229_2133	3.2	307
20240229_2143	0.1	109
20240229_2153	0.1	318
20240229_2203	0.1	99
20240229_2213	0.2	312
20240229_2223	0.1	121
20240229_2233	0.1	65
20240229_2243	2	294
20240229_2253	0.1	309
20240229_2303	1.4	301
20240229_2313	0.3	309
20240229_2323	2.2	24
20240229_2333	0.1	107
20240229_2343	0.7	258
20240229_2353	0.1	263

Appendix J Waste Flow Table

Waste Flow Table

Month	Total Quantity Generated	Total Quantities of Inert C&D Materials to be Generated from the Contract					Total Quantities of Recyclables Generation				Total Quantities of C&D Materials to be Generated from the Contract		
		Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / Cardboard Packaging	Plastics	Yard Waste (to Y-Park)	Chemical Waste	General Refuse	Others, e.g. non-recyclable yard waste
	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in '000L)	(in tonne)	(in tonne)
Dec-22	84.77	0	0	0	0	0	0	0	0	11.49	0	7.53	65.75
Jan-23	24.51	0	0	0	0	0	0	0	0	0	0	24.51	0
Feb-23	506.45	0	0	0	0	0	0	0	0	3.16	0	5.85	497.44
Mar-23	9,581.15	0	0	9,187	0	0	0	0	0	3.69	0	6.96	383.5
Apr-23	18,532.07	0	0	18,466	0	0	0	0	0	1.97	0	5.81	58.29
May-23	28,889.61	0	0	28,473	0	0	0	0	0	0	0	7.45	409.16
Jun-23	11,574.89	0	0	11,211	0	0	0	0	0	2.38	0	14.69	346.82
Jul-23	50,595.49	0	0	50,307	0	0	0	0	0	0	0	25.54	262.95
Aug-23	63,178.52	0	0	63,076	0	0	0	0	0	0	0	30.77	71.75
Sep-23	42,709.75	0	0	42,676	0	0	0	0	0	0	0	33.38	0
Oct-23	55,551.68	0	0	55,405	0	0	0	0	0	2.56	0	28.05	116.07
Nov-23	76,127.24	0	0	73,352	0	2629.37	0	0	0	0	0	35.13	110.74
Dec-23	63,389.25	0	0	57,681	0	5296.17	0	0	0	2.48	0	34.26	375.34
Jan-24	125,840.50	0	0	125,010	0	0	0	0	0	5.59	0	71.13	753.78
Feb-24	108,176.42	0	0	106,218	0	1771.16	0	0	0	0	0	53.76	133.17
Total	546,585.88	0.00	0.00	534,844.37	0.00	7,925.54	0.00	0.00	0.00	33.32	0.00	331.06	3,451.59

Note:

1. The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
2. Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

Appendix K Joint Environmental Site Inspection Records

Follow up action for previous Site Inspection:

1. 18 December 2023 Observation 2 – The installation of silt fence at SBA was completed.
2. 29 January 2024 Observation 1 – Stockpiling of dusty material was covered by impervious sheet at SBA.
3. 29 January 2024 Observation 2 – The installation of silt fence at SBA was completed.

Observation(s):

1. The exposed slope area at Portion B2 without covered by impervious sheet is observed.
2. The accumulation of C&D materials at Portion D is observed.
3. The chemical containers at portion D shall be stored and placed in the drip tray.

Reminder(s):

1. General waste shall be collected into the enclosed rubbish bins.

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

1. The contractor has been advised to cover the exposed slope area by impervious sheet for short-term slope protection, and shotcrete for long-term slope protection.
2. The contractor has been reminded to provide enough waste skip for waste storage to avoid waste accumulation.
3. The contractor has been recommended to provide sufficient chemical drip tray for chemical storage to prevent chemical spillage.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Joan Lo	/	Matt Choy/Kristy Wong	Sylvia Ho
Date:	5 February 2024	/	5 February 2024	5 February 2024

Follow up action for previous Site Inspection:

1. 29 January 2024 Observation 3 – The chemical drip tray was provided at Portion E4 for chemical storage.
2. 5 February 2024 Observation 2 - The accumulated C&D materials at Portion D were removed.
3. 5 February 2024 Observation 3 – The chemical drip tray was provided at Portion D for chemical storage.

Observation(s):

1. The main haul road is dry and fugitive dust is observed at Portion E4 and SBA.

Reminder(s):

1. The stockpiling of dusty material shall be covered by impervious sheet.

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

1. The contractor has been reminded to increase the frequency of watering to ensure that the surface of assess road is wetted and to prevent dust dispersion.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Joan Lo	/	Matt Choy/Kristy Wong	Sylvia Ho
Date:	15 February 2024	/	15 February 2024	15 February 2024

Follow up action for previous Site Inspection:

Waiting for contractor' input.

Observation(s):

1. The chemical containers without stored and placed on the drip tray at portion D and E3-1 is observed.

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

1. The contractor has been advised to provide enough drip tray at portion D and E3-1 for chemical storage to prevent chemical spillage.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:				
Name:	Joan Lo	Echo Hung	Matt Choy/Kristy Wong	Sylvia Ho
Date:	19 February 2024	19 February 2024	19 February 2024	19 February 2024

Follow up action for previous Site Inspection:

1. 19 Feb 2024 Observation 1 – The chemical containers at Portion D and E3-1 were removed.

Observation(s):

1. Unpaved main haul road is dusty and fugitive dust is observed at Portion SBA and Portion E4.
2. The accumulation of deposited silt and grit is observed at Portion A.
3. Oil stain is found in the work area at Portion D and Portion A.
4. The accumulation of general waste and C&D waste is observed at Portion A.
5. The chemical containers at Portion A shall be stored and placed properly.

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

1. The contractor has been advised to increase the frequency of watering to ensure that the unpaved haul road surface is wetted and prevent dust dispersion.
2. The contractor has been recommended to clean up and remove the deposited silt and grit regularly to prevent silt accumulation.
3. The contractor has been reminded to clean up the oil stain immediately and dispose of it as chemical waste. Also, the impervious sheet should be provided during using and placing chemicals.
4. The contractor has been recommended to provide sufficient enclosed bins for general waste disposal and waste skip for C&D waste disposal to separate and dispose the general and construction wastes.
5. The contractor has been advised to provide drip tray for chemical storage to prevent chemical spillage and land contamination.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Joan Lo	/	Matt Choy/Kristy Wong	Sylvia Ho
Date:	26 February 2024	/	26 February 2024	26 February 2024

Appendix L 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.	Weekly Site Inspection Item	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	B7 – B36	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation.	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 criteria of EIA Report (Register No. AEIAR-111/2007)	✓
		B4, B15 & B18	• Dust emission from construction vehicle movement is confined within the worksites area.					✓
		B11 – B12	• Watering facilities will be provided at every designated vehicular exit point.					✓ Vehicle washing facilities provided at vehicular exit point in Portion A, B1-2, D, E3-1 & E4
		-	• Good site practice is recommended during construction phase.					✓
Construction Noise								
S4	S4.9	C1	1) Use of good site practices to limit noise emissions by considering the following: (a) Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;	Control construction airborne noise by means of good site practices	Contractor	Entire construction site	Noise Control Ordinance	✓
		C2	(b) 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;					✓
		C3	(c) Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs;					✓
		C4	(d) Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works;					N/A
		C5	(e) Mobile plant should be sited as far away from NSRs as possible and practicable;					✓
		C6	(f) Material stockpiles, mobile container site officer and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.					✓
S4	S4.9	C11 – C13	2) Select “Quiet plants” which comply with the BS 5228 Part 1 or TM standards.	Reduce the noise levels of plant items	Contractor	Entire construction site	Noise Control Ordinance & its TM Annex 5, TM-EIA	✓
Construction Runoff								
S5.8.1	S5.2.1	D1	<u>Construction on Site Runoff</u> • (a) 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. (b) 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.	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	(a) The perimeter cut-off drains are establishing in progress (Completion: 98%) (b) # (Refer to Appendix K 26 Feb 2024 Weekly Site Inspection Observation 2)
		D2	• (a) The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. (b) Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/sediment trap. (c) The sediment/silt traps should be incorporated in the permanent drainage channels to enhance deposition rates.					(a) N/A (b) ✓ (c) ✓
		D3	• 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.					✓
		D4	• (a) Construction works should be programmed to minimize surface excavation works during the rainy seasons (April to September). (b) 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. (c) 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.					(a) ✓ (b) ✓ (c) ✓

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	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	D5	• (a) The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows, and (b) 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.	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 DSD Technical Circular TC01/2017 Water Pollution Control Ordinance	(a) ✓ (b) N/A
		D6	• (a) All drainage facilities and erosion and sediment control structures should be regularly inspected and (b) maintained to ensure proper and efficient operation at all times and particularly following rainstorms. (c) Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas.					(a) ✓ (b) ✓ (c) # (Refer to Appendix K 26 Feb 2024 Weekly Site Inspection Observation 2)
		D7	• (a) 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. (b) Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.					(a) ✓ (b) ✓
		D8	• Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50 m^3 should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.					(c) ✓
		D9	• (a) Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as (b) to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.					(a) ✓ (b) ✓
		D10	• Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silly surface runoff during storm events, especially for areas located near steep slopes.					(c) ✓
		D11	• (a) 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. (b) An adequately designed and sited wheel washing bay should be provided at every construction site exit. (c) Wash-water should have sand and silt settled out and removed at least on a weekly basis (d) to ensure the continued efficiency of the process. (e) The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silly water to public roads and drains.					(a) ✓ (b) ✓ (c) ✓ (d) ✓ (e) ✓
		D12	• (a) Oil interceptors should be provided in the site drainage system downstream of any oil/fuel pollution sources. (b) 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. (c) A bypass should be provided for the oil interceptors to prevent flushing during heavy rain.					(a) N/A (b) N/A (c) N/A
		D13	• 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.					✓
		D14	• 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.					✓
		D15	• To prevent pollution risks arising from works area (waste reception area) and haul roads, intercepting bund or barrier along the roadside should be constructed.					N/A
		D19	<u>Sewage Effluent from Workforce</u> • (a) Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. (b) A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.					(a) ✓ (b) ✓

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	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	D20	• 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.	Control sewage effluent arising from the sanitary facilities provided for the on-site construction workforce	Contractor	On-site sanitary facilities	ProPECC PN 1/94 DSD Technical Circular TC01/2017 Water Pollution Control Ordinance Waste Disposal Ordinance	N/A
		-	• 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.					✓
S5.8.1	S5.2.1	D21	<u>Accidental Spillage of Chemical</u> • (a) Any service workshop and maintenance facilities shall be located within a bunded area, and sumps and oil interceptors shall be provided. (b) 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	(a) N/A (b) N/A
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.	Erosion control	Contractor	Drainage system	ProPECC PN 1/94 Water Pollution Control Ordinance	✓
		-	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.					To be implemented
		-	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.					To be implemented
			f. Sod Establishes permanent turf for immediate erosion protection and stabilizes rainageways.					✓
			g. Matting There are numerous erosion control products available that can be described in various ways, such as matting, blankets, fabric and nets. These products are referred as matting. A wide range of materials and combination of materials are used to produce matting including, but not limited to: straw, jute, wood fiber, coir (coconut fiber), plastic netting, and Bonded Fiber Matrix. The selection of matting materials for a site can make a significant difference in the effectiveness of the Best Management Practices.					✓

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	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 (Cont'd)								
S5.8.2	S5.2.2		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.	Erosion control	Contractor	Drainage system	ProPECC PN 1/94 Water Pollution Control Ordinance	✓
		-	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.					✓
Surface Water Drainage System								
S5.8.2	S5.2.2	D22	• (a) Temporary surface water drainage system will be provided to manage runoff during construction and operation. (b) This system will consist of channels as constructed around the perimeter of the site area. (c) This system will collect surface water from the areas of higher elevations to those of lower elevations and ultimately to the point of discharge. (d) Erosion will therefore be minimised.	Surface Water Management/ Control run off	Contractor	Surface water system Construction	Water Pollution Control Ordinance TM-water	(a) ✓ (b) ✓ (c) ✓ (d) ✓
		D23	• (a) 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. (b) Regular cleaning will be carried out to prevent blockage of the passage of water flow in silt fence.					(a) ✓ (b) ✓
		-	• 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.					N/A
		-	• 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.					N/A
Waste Management								
S6	WM1	-	<u>C&D Materials</u> • Implement proper waste management measures during construction phase as stipulated in the Environmental Management Plan (EMP) in accordance with the ETWB TC(W) No. 19/2005 Environmental Management in Construction Sites.	Good site practice to minimise C&D waste generation and reuse/recycle all C&D on-site as far as possible	Contractor	Entire construction site	Waste Disposal Ordinance ETWB TC(W) No. 19/2005 DEVB TC(W) No. 6/2010	✓
		-	• Implement a trip-ticket system to ensure that the movement of C&D materials are properly documented and verified in accordance with DEVB TC(W) No. 6/2010. Copies/counterfoils from trip-tickets (with quantities of C&D Materials off-site) should be kept for record purposes.					✓
		-	• Appropriate waste management should be implemented in accordance with the ETWB TC(W) No. 19/2005.					✓
		E4	• (a) 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. (b) The contract specifications should specify no excavated materials should be removed from the landfill extension site, but should be fully reused.					(a) ✓ (b) ✓
		E5	• Careful design, planning and good site management to minimise over-ordering and waste materials such as concrete, mortars and cement grouts. (a)(b) The design of formwork should maximise the use of standard wooden panels so that high reuse levels can be achieved. (c) Alternatives such as steel formwork or plastic fencing should be considered to increase the potential for reuse.					(a) ✓ (b) ✓ (c) ✓
		E6	• (a) The Contractor should recycle as much as possible the C&D waste on-site through proper waste segregation on-site. (b) Concrete and masonry should be used as general fill and steel reinforcement bars can be used by scrap steel mills. (c) Proper areas should be designated for waste segregation and storage wherever site conditions permit. (d) Maximise the use of reusable steel formwork to reduce the amount of C&D material.					(a) ✓ (b) ✓ (c) ✓ (d) ✓

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	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 (Cont'd)								
S6	WM1	E7	• (a) 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. (b) The sorted public fill and C&D waste should be properly reused.	Good site practice to minimise C&D waste generation and reuse/recycle all C&D on-site as far as possible	Contractor	Entire construction site	Waste Disposal Ordinance ETWB TC(W) No. 19/2005 DEVB TC(W) No. 6/2010	(a) ✓ (b) ✓
		E8	• (a) 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. (b)(c) Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers					(a) ✓ (b) ✓ (c) ✓
		E9	• 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.					✓
		E10	• 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.					✓
		E11	• Training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concepts.					✓
		E12	• Regular cleaning and maintenance programme systems, sumps and oil interceptors.					✓
		E13	• (a) 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. (b)(c) Proper storage and site practices should be implemented to minimise the potential for damage or contamination of construction materials.					(a) ✓ (b) ✓ (c) N/A
			• 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.					✓
S6	WM2	E16 – E23	<u>Chemical Waste</u> • Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.	Ensure proper disposal of chemical waste generated on-site to minimise the associated hazards on human health and environment	Contractor	Entire construction site	Waste Disposal (Chemical Waste) General Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	✓
		-	• 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					✓
		E17 & E18	• 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.					✓
		E19	• (a) The storage area for chemical wastes should be clearly labelled and used solely for storage of chemical waste, (b) 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, (c)(d) whichever is the greatest, having adequate ventilation, being covered to prevent rainfall entering, and being arranged so that incompatible materials are adequately separated.					(a) ✓ (b) N/A (c) N/A (d) N/A
		E20	• Chemical waste should be collected by licensed waste collectors and disposed of at licensed facility, e.g. Chemical Waste Treatment Centre.					✓

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	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 (Cont'd)								
S6	WM3	E1	<u>General Refuse</u> • General refuse generated on-site should be properly stored in enclosed bins or compaction units separately from construction and chemical wastes.	Minimise generation of general refuse to avoid odour, pest and visual nuisance	Contractor	Entire construction site	Waste Disposal Ordinance	✓
		E2	• (a) 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. (b)(c)(d) Regular collection should be arranged by an approved waste collector in purpose-built vehicles that minimise environmental impacts during transportation					(a) ✓ (b) ✓ (c) ✓ (d) ✓
		-	• Reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimise odour, pest and litter impacts. Burning of refuse on construction sites is prohibited by law.					✓
		-	• Aluminium cans should be separated from general waste stream and collected by recyclers. Proper collection bins should be provided on- site to facilitate the waste sorting.					✓
		-	• Office waste paper should recycled if the volume warrant collection by recyclers. Participation in community waste paper recycling programme should be considered by the Contractor, including waste paper, aluminium cans, plastic bottles, waste batteries, etc.					✓
LFG								
Within NENT Landfill Extension								
S7	LFG1	F1	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)	N/A
	LFG2	F2	Prominent safety warning signs should be erected on-site to alert all personnel and visitors of LFG hazards during excavation works.					✓
	LFG3	F3	No smoking or burning should be permitted on-site.				F&IU (Confined Spaces) Regulations	✓
	LFG4	F4	Prominent 'No smoking' and 'No Naked Flames' signs should be erected on-site.					✓
	LFG5	F5	No worker should be allowed to work alone at any time in excavated trenches or confined areas on-site.				Code of Practice on Safety and Health at Work in Confined Spaces	✓
	LFG6	F6	Adequate fire fighting equipment should be provided on-site.					✓
	LFG7	F7	Construction equipment should be equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors.					✓
	LFG8	F8	Electrical motors and extension cords should be explosion-proof and intrinsically safe for use on-site.					✓
	LFG9	F9	'Permit to Work' system should be implemented.					✓
	LFG10	F10	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.					✓
	LFG11	F11	(a) For piping assembly or conduit construction, all valves and seals should be closed immediately after installation to avoid accumulation and migration of LFG. (b) If installation of large diameter pipes (diameter >600mm) is required, the pipe ends should be sealed on one side during installation. (c) Forced ventilation is required prior to operation of installed pipeline. (d) Forced ventilation should also be required for works inside trenches deeper than 1m.					(a) N/A (b) N/A (c) N/A (d) N/A
	LFG12	F12	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.					✓
	LFG13	F13	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.					✓
	LFG14	F14	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.					✓
	LFG15	F15	(a) 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. (b) 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.					(a) N/A (b) N/A

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	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 (Cont'd)								
Within NENT Landfill Extension								
S7	LFG16	F16	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%	To minimise the risk of LFG hazards to personnel in construction site	Contractor	Entire construction site	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97) F&IU (Confined Spaces) Regulations Code of Practice on Safety and Health at Work in Confined Spaces	✓
	LFG17	F17	(a) 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. (b) Routine monitoring should be carried out in all excavations, manholes, created by temporary storage of building materials on-site. (c) All measurements in excavations should be made with monitoring tube located not more than 10mm from exposed ground surface.					(a) N/A (b) N/A (c) N/A
	LFG18	F18	For excavations deeper than 1m, measurements should be conducted: • At ground surface before excavation commences; • Immediately before any worker enters the excavation; • At the beginning of each working day for entire period the excavation remains open; and Periodically throughout the working day whilst workers are in excavation.					✓
	LFG19	F19	For excavations between 300mm and 1m, measurements should be conducted: • Directly after excavation has been completed; and Periodic all whilst excavation remains open.					✓
	LFG20	F20	For excavations less than 300mm, monitoring may be omitted at the discretion of Safety Officer or appropriately qualified person.					✓
Landscape and Visual Phases								
S8	LV1	G4	<u>Advanced screening tree planting</u> • Early planting using fast growing trees and tall shrubs at strategic locations within site to block major view corridors to the site from the VSRs, and to locally screen haul roads, excavation works and site preparation works. • Roadside planter and shrub planting design in front of Cheung Shan Temple.	To minimise the impact on existing vegetation retained by personnel in construction To provide initiation on permanent landscape and visual mitigation measures	Contractor	Entire construction site	DEVB TC(W) No. 4/2020 - Tree Preservation DEVB TC(W)) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features DEVB TC(W) No. 6/2011 - Maintenance of Man-made Slopes and Emergency Repair on Stability of Land	✓
S8	LV2	G5	<u>Boundary Green Belt planting</u> Considerable planting belts proposed around the site perimeter and the construction of temporary soil bunds will screen the landfill operations to a certain degree. Fast growing and fire resistant plant species will be used.					To be implemented during operation phase
S8	LV3	G6	<u>Temporary landscape treatment as green surface cover</u> For certain areas where landfilling operations would have to be suspended temporarily for periods of years, simple temporary landscape treatment such as hydroseeding should be considered. During construction and operational phases, grass hydroseeding or synthetic covering material of green colour should also be used as a temporary slope cover if applicable.					✓
S8	LV4	G7	<u>Existing tree preservation</u> Transplant existing trees and vegetation, which are identified as ecologically significant in Ecological Impact Assessment and as rare tree species recorded in the tree survey, under circumstances where technically feasible. For all affected trees, the principle of avoidance of tree felling and tree transplanting of tree before felling should apply whenever possible. A tree felling application should be submitted to DEVB-GLTMS and be approved before any trees are felled or transplanted.					✓

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Ecology								
General Protection Measures:								
S10	E1	-	Restriction of construction activities to the work areas that would be clearly demarcated.	To minimise environmental impacts and therefore potential ecological impacts within and near the construction site	Contractor	Entire construction site	Practice Note for Professional Persons (ProPECC), Construction Site Drainage (PN1/94) Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes, EPD (1992) ETWB TC(W)) No. 33/2002 Management of Construction and Demolition Material Including Rock DEVB TC(W) No. 6/2010 Trip Ticket System for Disposal of Construction and Demolition Materials ETWB TC(W)No.19/2005 Environmental Management on Construction Sites	✓
	E2	-	Reinstatement of the work areas immediately after completion of the works.					✓
	E3	-	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme.					✓
	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.					✓
	E5	-	Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs.					✓
	E6	-	Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works.					N/A
	E7	-	Mobile plant should be sited as far away from NSRs as possible and practicable.					✓
	E8	-	Material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.					✓
	E9	-	Use of “quiet” plant and working methods.					✓
	E10	-	Construction phase mitigation measures in the Practice Note for Professional Persons on Construction Site Drainage.					✓
	E11	-	Design and set up of the temporary on-site drainage system will be undertaken by the contractor prior to the commencement of construction.					✓
	E12	-	Design and incorporation of silt/sediment traps in the permanent drainage channels to enhance deposition rates and regular removal of reposited silt and grit.					✓
	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.					✓
	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.					✓
	E15	-	Provision of oil interceptors in the drainage system downstream of any oil/fuel pollution sources					N/A

Remarks:

✓	Compliance of mitigation measure
*	Recommendation was made during site audit but improved/rectified by the contractor
#	Recommendation was made during site audit but not yet improved/rectified by the contractor.
N/A	Not Applicable at this stage were conducted in the reporting period.
@ (Which measure)	Alternative measure was made by the contractor.

Appendix M Mitigation Measures of Cultural Landscape Features

Completed Site Fencing

SITE BOUNDARY

Appendix N Cumulative Complaint / Enquiry Log, Summaries of Complaints and Enquiries

Environmental Complaints Log

Complaint Ref. No.	Date of Complaint Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
C001_20221220	21 Dec 2022	Veolia (Contractor)	ET	Air Quality (Construction Dust)	5, 12 & 19 Dec 2022	It was noted from Veolia's email to the ET on 20 December 2022 that Veolia received complaint lodged regarding presenting much dusty materials at roundabout at Wo Keng Shan Road & dusty flying problem at Kowloon-bound traffic at Lung Shan Tunnel. No dusty materials and wastes were transported out from the NENTX site during the complaint period. During the regular weekly site inspection on 5, 12 & 19 December 2022, it was observed that the wheel washing facilities with high-pressure water jets have been provided at all site exits of NENTX and cleaned all vehicles before allowing them to leave the construction site to ensure that no mud or debris would be brought to the public area. All site vehicles of NENTX are also required to go through the auto wheel washing facility, which is managed by the operator of the NENT landfill, before entering the public area. The road section between the washing facilities and the exit point was paved with concrete, or bituminous materials were implemented in all site entrances. No mud generated from vehicles under the NENTX project after exiting the site entrance was observed. In conclusion, there is no direct evidence showing that the complaint is likely related to the NENTX project.	5 Jan 2023
C002_20230614	14 Jun 2023	EPD-RNG	ET	Water Quality	16, 21 Jun, 24, 25 Jul & 2 Aug 2023	It was noted from EPD-RNG's email to the ET on 14 Jun 2023 that EPD received complaint lodged regarding the muddy water was observed at Lin MA Hang International Bridge. In summary of the investigation, the pollutant water appeared crimson colour with bubbles ay the LMH-OP01 (Monitoring Point from EPD). The colour and pattern of pollutant water is different from the runoff at surface WQM monitoring location WM1. Hence, the project is not the major source causing the pollutant water. To minimise the potential impact of the project, the enhancement of mitigation measures at north boundary were advised to implement by contractor. The related rectified actions had been conducted by the contractor.	29 Jun & 21 Aug 2023

Complaint Ref. No.	Date of Complaint Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
C003_20230615	15 Jun 2023	EPD-RNG	ET	Water Quality	16, 19, 21 Jun, 18 Jul 2023	It was noted from EPD-RNG's email to the ET on 15 June 2023 that EPD received information regarding the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Location from EPD). In summary of the investigation, the muddy water caused from multi-potential sources while the runoff from the box culvert under the Wo Keng Shan Road is the major source including runoff from Existing channel near Portion E3-1, discharge water from the silt removal facilities at Portion E3-1 of the project, runoff from branch near the entrance of Portion E3-1, runoff from weighting plaza of NENT Landfill & natural stream near Wo Keng Shan & Shui Ngau Tso etc.. Hence, the project is a part of factor causing the high turbidity muddy water. To minimise the potential impact of construction runoff from the project, the further mitigation measures and enhancement of the temporary surface water drainage system were advised to implement by contractor. The related rectified actions had been conducted by the contractor.	15 Jun, 21 Aug 2023
C004_20230803	3 Aug 2023	EPD-RNG	ET	Water Quality	18 Jul 2023	It was noted from EPD-RNG's email to the ET on 3 Aug 2023 that EPD received information regarding the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Location from EPD). In summary of the investigation, the muddy water caused from multi-potential sources while the runoff from the box culvert under the Wo Keng Shan Road is the major source including runoff from Existing channel near Portion E3-1, discharge water from the silt removal facilities at Portion E3-1 of the project, runoff from branch near the entrance of Portion E3-1, runoff from weighting plaza of NENT Landfill & natural stream near Wo Keng Shan & Shui Ngau Tso etc.. Hence, the project is a part of factor causing the high turbidity muddy water. To minimise the potential impact of construction runoff from the project, the further mitigation measures and enhancement of the temporary surface water drainage system were advised to implement by contractor. The related rectified actions had been conducted by the contractor.	14 Aug 2023

Complaint Ref. No.	Date of Complaint Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
C005_20230818	18 Aug 2023	EPD-RNG	ET	Water Quality	18 Sep 2023	It was noted from EPD-RNG's email to the ET on 18 August 2023 that EPD received information regarding the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Location from EPD) on 14 August 2023. In summary of the investigation, the complaint is project related. It viewed that muddy water arising from wheel washing water from the site entrance at Portion E4 & Runoff from Existing Channel near Portion E3-1 & discharge water from the silt removal facilities at Portion E3-1 eventually flows into the box culvert under Wo Keng Shan Road, WM2 and ultimately to GR3. The related rectified actions had been conducted by the contractor.	13 October 2023
C006_20230914	14 Sep 2023	EPD-RNG	ET	Water Quality	18 Sep 2023	It was noted from EPD-RNG's email to the ET on 14 September 2023 that EPD received information regarding the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Location from EPD) on 11 September 2023. In summary of the investigation, the complaint is project related. It viewed that muddy water arising from wheel washing water from the site entrance at Portion E4 & Runoff from Existing Channel near Portion E3-1 & discharge water from the silt removal facilities at Portion E3-1 eventually flows into the box culvert under Wo Keng Shan Road, WM2 and ultimately to GR3. The related rectified actions had been conducted by the contractor.	13 October 2023

Remarks:

1. "ET" equal to "Environmental Team"
2. "EPD-RNG" equal to "Environmental Protection Department-Regional Office (North)"
3. "TBC" equal to "To Be Confirm"

Environmental Enquiries Log

Enquiry Ref. No.	Date of Enquiry Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
NA	NA	NA	NA	NA	NA	NA	NA

Remarks:

1. "ET" equal to "Environmental Team"
2. "EPD-RNG" equal to "Environmental Protection Department-Regional Office (North)"
3. "NA" equal to "Not Applicable"

Cumulative Statistics on Complaints

Aspects	Cumulative No. Brought Forward	No. of Complaints during reporting period	Cumulative Project-to-Date
Air Quality	1*	0	1*
Noise	0	0	0
Water Quality	5(1*)	0	5(1*)
Waste Management	0	0	0
Total	6(2*)	0	6(2*)

Remarks:

1. * Equal to non-project related

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

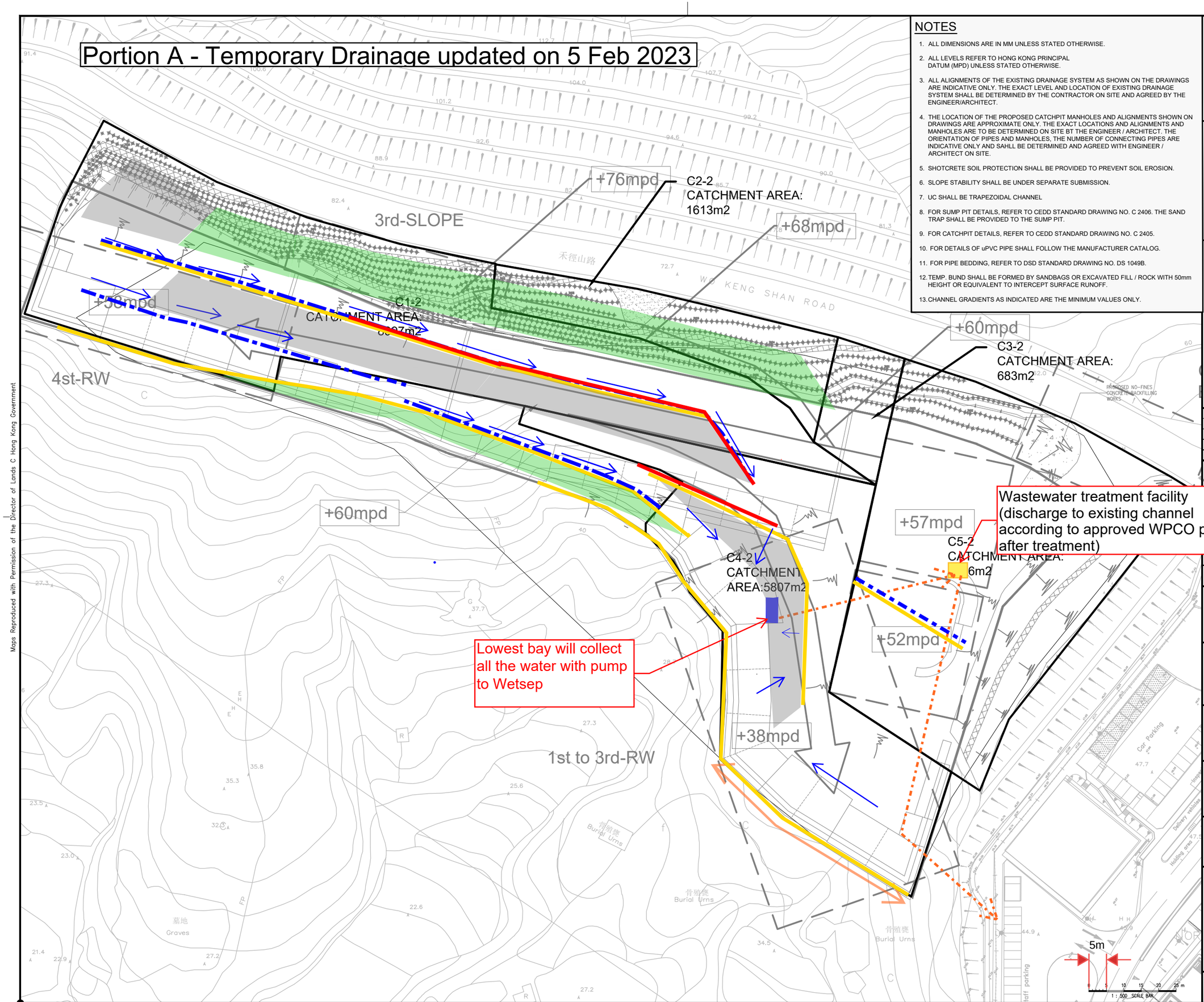
F: +852 3664 6999

E: hongkong@aurecongroup.com

aurecon

Bringing ideas to life

Portion A - Temporary Drainage updated on 5 Feb 2023



NOTES

1. ALL DIMENSIONS ARE IN MM UNLESS STATED OTHERWISE.
2. ALL LEVELS REFER TO HONG KONG PRINCIPAL DATUM (MPD) UNLESS STATED OTHERWISE.
3. ALL ALIGNMENTS OF THE EXISTING DRAINAGE SYSTEM AS SHOWN ON THE DRAWINGS ARE INDICATIVE ONLY. THE EXACT LEVEL AND LOCATION OF EXISTING DRAINAGE SYSTEM SHALL BE DETERMINED BY THE CONTRACTOR ON SITE AND AGREED BY THE ENGINEER/ARCHITECT.
4. THE LOCATION OF THE PROPOSED CATCHPIT MANHOLES AND ALIGNMENTS SHOWN ON DRAWINGS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS AND ALIGNMENTS AND MANHOLES ARE TO BE DETERMINED ON SITE BT THE ENGINEER / ARCHITECT. THE ORIENTATION OF PIPES AND MANHOLES, THE NUMBER OF CONNECTING PIPES ARE INDICATIVE ONLY AND SAHLL BE DETERMINED AND AGREED WITH ENGINEER / ARCHITECT ON SITE.
5. SHOTCRETE SOIL PROTECTION SHALL BE PROVIDED TO PREVENT SOIL EROSION.
6. SLOPE STABILITY SHALL BE UNDER SEPARATE SUBMISSION.
7. UC SHALL BE TRAPEZOIDAL CHANNEL
8. FOR SUMP PIT DETAILS, REFER TO CEDD STANDARD DRAWING NO. C 2406. THE SAND TRAP SHALL BE PROVIDED TO THE SUMP PIT.
9. FOR CATCHPIT DETAILS, REFER TO CEDD STANDARD DRAWING NO. C 2405.
10. FOR DETAILS OF uPVC PIPE SHALL FOLLOW THE MANUFACTURER CATALOG.
11. FOR PIPE BEDDING, REFER TO DSD STANDARD DRAWING NO. DS 1049B.
12. TEMP. BUND SHALL BE FORMED BY SANDBAGS OR EXCAVATED FILL / ROCK WITH 50mm HEIGHT OR EQUIVALENT TO INTERCEPT SURFACE RUNOFF.
13. CHANNEL GRADIENTS AS INDICATED ARE THE MINIMUM VALUES ONLY.

ENVIRONMENTAL PROTECTION DEPARTMENT

SIGNED: _____
( )
FOR ENVIRONMENTAL PROTECTION DEPARTMENT

DATE: _____

MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD
VERIFICATION BY INDEPENDENT CONSULTANTS

SIGNED: _____
( )
FOR MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD

DATE: _____

LEGEND

- Finished Temporary Drainage
- Proposed Temporary Drainage
- Finished Temporary Bund
- Slope Surface Protection (Visual mitigation)
- Slope Surface Protection (Cement slurry)
- Pumping route

Rev.	Description	By	Date	Approved
I 03	THIRD SUBMISSION ISSUED	JT	JAN 2023	DSJS
I 02	SECOND SUBMISSION ISSUED	CC	NOV 2022	DSJS
I 01	FIRST SUBMISSION ISSUED	CC	JUN 2022	DSJS

T	Check TL
TL	Approved DSJS
Date 19 JAN 2023	Scale 1:500 @ A3

Contract

CONTRACT EP/SP/77/15
NORTH EAST NEW TERRITORIES
LANDFILL EXTENSION (NENTX)

Environmental Protection Department
The Government of the Hong Kong Special Administrative Region

VEOLIA

Civil Contractor

Paul Y. Engineering 保華建業

Supported by

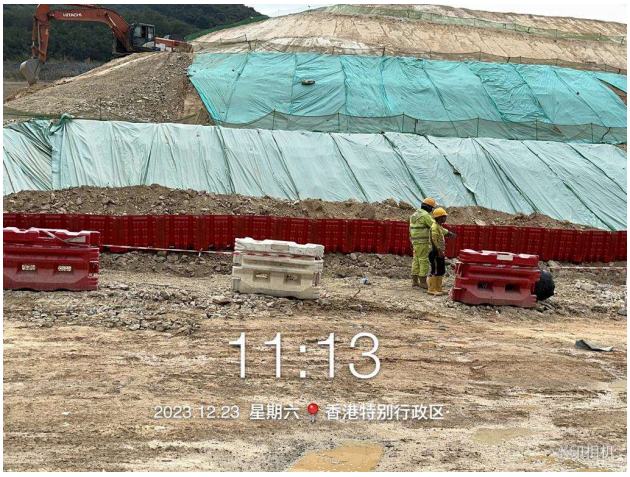
ATKINS
Member of the SNC-Lavalin Group

Drawing Title

PORTION A TEMPORARY DRAINAGE CATCHMENT PLAN - STAGE 2

Drawing No.	Rev.
NENTX-ATKI-DW-C-A-182	I 03

PART I Follow-up status of the previous site inspection

Observation and Recommendation	**Follow-up status**
18 December 2023 Observation 2  Insufficient silt fence around the stockpile area at SBA is observed. The contractor has been advised to provide and maintain sufficient silt fence around the stockpile area in each layer, ensuring that each layer effectively prevents sediment from entering the surface water drainage system.	  Temporary silt fence was provided at SBA. **02/01/2024** 

08/01/2024

15/01/2024

Part of the exposed slope surface at SBA was shotcreted.

The installation of silt fence at SBA was completed.

Observation and Recommendation	**Follow-up status**
29 January 2024 Observation 1  Stockpiling of dusty material without covered by impervious sheet at SBA is found. The contractor has been recommended that dusty materials should be covered by impervious sheet to prevent dust dispersion.	 Stockpiling of dusty material was covered by impervious sheet at SBA.
29 January 2024 Observation 2  Insufficient silt fence around the soil stockpiling area at SBA is observed. The contractor has been advised to provide sufficient silt fence around the soil stockpiling area to prevent sediment from entering the system.	 The installation of silt fence at SBA was completed.

Observation and Recommendation	**Follow-up status**
29 January 2024 Observation 3  The oil drum and chemical containers without chemical drip tray at Portion E4 is found. The contractor has been reminded to provide the sufficient drip tray for chemical storage to avoid chemical spillage and land contamination.	Waiting for contractor' input

PART II Observation and recommendation identified during the environmental site inspection

Observation and Recommendation	Follow-up status
 The exposed slope area at Portion B2 without covered by impervious sheet is observed. The contractor has been advised to cover the exposed slope area by impervious sheet for short-term slope protection, and shotcrete for long-term slope protection.	
 The accumulation of C&D materials at Portion D is observed. The contractor has been reminded to provide enough waste skip for waste storage to avoid waste accumulation.	

Observation and Recommendation	Follow-up status
 The chemical containers at portion D shall be stored and placed in the drip tray. The contractor has been recommended to provide sufficient chemical drip tray for chemical storage to prevent chemical spillage.	

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

Slope protection at Portion E4	TSWDS at Portion A
	
TSWDS at Portion A	TSWDS at Portion A
	
Branch from Portion A	Box culvert near WM2
	

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

Sedimentation Basin at Portion B1	Existing Channel at Portion E3-1
	
Temporary drainage system at Portion E3-1	
	

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

Silt Fence with temporary ditch at SBA	Silt Fence with temporary ditch at SBA
	
Sedimentation Basin at Portion B1	
	

Status as of 6 Feb 2024 (rev. 15)

Legend

- Gate
- Underground pipe
- Works Area
- Sediment Basin
- WetSep
- Existing Drainage system
- Proposed Drainage system
- Wheel Washing Facilities
- Existing Catchpit
- Treated Water Flow

Proposed enhancement works (in progress)

Update mitigation measures from last update (completed)

Ongoing measures

Channel enhancement works ongoing, channel base shotcrete completed

Rock bund

Sedimentation Basin

Rock bund

Sedimentation Basin

Sedimentation Tank

Sedimentation Tank

WetSep

WetSep

Sedimentation Tank

Sedimentation Basin

Buffer zone at existing drainge

WetSep

E3

Sedimentation Tank

WetSep

1200dia twin pipe

Sedimentation Basin

Cut off drain

Rock bund

Wetsep

Wetsep

Treated Water Discharge

Sedimentation Tank

WetSep

Wetsep

Sedimentation Tank

ST3 (26.8m x 10.6m x 4m) (in progress)

Sedimentation Tank

Exisitng Culvert

Water Point Station - for Water Truck Filling (In place)

Sedimentation Tank

WetSep

SBA

Stockpile

Sedimentation Basin

Stockpile Soil

塘肚山村
Tong To Shan Tsuen

昂塘
Ngong Tong

SHEK TSAI HA ROAD

Shek Tsai Ha

NORTH EAST NEW TERRITORIES LANDFILL

水牛槽
SHUI NGAU TSO

平原河
PING YUEN RIVER

Portion A - Dust Control Layout Plan 22 Nov 2023 (Rev.5)

Construction of new wheel washing facility completed

Installed sprinkler along main entrance haul road

Manual watering

Manual watering

1st to 3rd-RW

PM Level Sensor (in trial)

3rd-SLOPE

4st-RW

+76m

+58mpd

C1-2
CATCHMENT AREA:
8397m2

C4-2
CATCHMENT
AREA:5807m2

+57mpd

C5-2
CA
70
AREA:

+52mpd

+38mpd

NOTES

1. ALL DIMENSIONS ARE IN MM UNLESS STATED OTHERWISE.
2. ALL LEVELS REFER TO HONG KONG PRINCIPAL DATUM (MPD) UNLESS STATED OTHERWISE.
3. ALL ALIGNMENTS OF THE EXISTING DRAINAGE SYSTEM AS SHOWN ON THE DRAWINGS ARE INDICATIVE ONLY. THE EXACT LEVEL AND LOCATION OF EXISTING DRAINAGE SYSTEM SHALL BE DETERMINED BY THE CONTRACTOR ON SITE AND AGREED BY THE ENGINEER/AR
4. THE LOCATION DRAWINGS AR MANHOLES AR ORIENTATION INDICATIVE ON ARCHITECT O
5. SHOTCRETE S
6. SLOPE STABIL
7. UC SHALL BE T
8. FOR SUMP PIT TRAP SHALL B
9. FOR CATCHPI
10. FOR DETAILS
11. FOR PIPE BE
12. TEMP. BUND S HEIGHT OR EC
13. CHANNEL GRA

ENVIRONMENTAL PROTECTION DEPARTMENT

SIGNED: _____
( )
FOR ENVIRONMENTAL PROTECTION DEPARTMENT

DATE: _____

MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD
VERIFICATION BY INDEPENDENT CONSULTANTS

SIGNED: _____
( )
FOR MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD

DATE: _____

LEGEND

Sprinkler alignment

Rev.	Description	By	Date	Approved
I 03	THIRD SUBMISSION ISSUED	JT	JAN 2023	DSJS
I 02	SECOND SUBMISSION ISSUED	CC	NOV 2022	DSJS
I 01	FIRST SUBMISSION ISSUED	CC	JUN 2022	DSJS

Drawn	Check
JT	TL
Design	Approved
TL	DSJS
Date	Scale
19 JAN 2023	1:500 @ A3

Contract

CONTRACT EP/SP/77/15
NORTH EAST NEW TERRITORIES
LANDFILL EXTENSION (NENTX)

Environmental Protection Department
The Government of the Hong Kong Special Administrative Region

VEOLIA

Civil Contractor

Paul Y. Engineering 業

Supported by

ATKINS
Member of the SNC-Lavalin Group

Drawing Title

Portion A
Dust Control Layout Plan

Drawing No.	Rev.
NENTX-ATKI-DW-C-A-182	I 03

Dust Control Layout for Landfilling Area December 2023 (rev.4)

Routing of water truck

Sprinkler

Water truck routing
(Frequency depends on weather; approx. 6 times per day)

Dust control sprinklers all installed along the Haul Road

Hard paving of haul road

Mist Cannon
(using recycle water)

Set up of sprinklers completed.
Recycle water system set up for manual spraying completed.

Wheel Washing Facility (SBA)
(2" pump standby for cleaning)
(Cleaning frequency depends on usage and site situation; approx. once per week)

Set up of sprinklers completed

Damaged sprinkler will be reinstall after slope surface reinstate.

Wheel Washing Facility (E3)
(2" pump standby for cleaning)
(Cleaning frequency depends on usage and site situation; approx. once per week)

Mist Cannon

Set up of sprinklers scheduled completed for main haul road

昌塘
Ngong Tong

石寨下
Shek Tsai Ha

水牛槽
SHUI NGAU TSO

平原河
PING YUEN RIVER