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

Monthly Environmental Monitoring and Audit Report (No. 14) – January 2024

2024-02-14

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/91823/1029-VES
Date: 14 February 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.14) – January 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.14) – January 2024" dated 14 February 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-0083

By Email

14 February 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.14) – January 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.14) – January 2024" dated 14 February 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.14) – January 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

Document control						
Report title	Monthly Environmental Monitoring and Audit Report (No. 14) – January 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 February 2024	Submit to IEC	J Man	K.Chau		FL
1	14 February 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 14th Monthly EM&A Report presents the EM&A works conducted from 1 to 31 January 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	6 times	4, 10, 16, 22, 27 & 29 January 2024
-	Construction Noise Monitoring during normal weekdays at each monitoring station	5 times	4, 10, 16, 22 & 29 January 2024
-	Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	4 January 2024
-	Landfill Gas Monitoring during normal weekdays for Construction Works	26 times	2 to 6, 8 to 13, 15 to 20, 22 to 27, 29 to 31 January 2024
-	Joint Environmental Site Inspection	5 times	2, 8, 15, 22 & 29 January 2024
-	General Site Inspection by EPD-RNG	1 time	25 January 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 (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 14th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 01 to 31 January 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

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
Further Environmental Permit (FEP)	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	6 times	4, 10, 16, 22, 27 & 29 January 2024
-	Construction Noise Monitoring during normal weekdays at each monitoring station	5 times	4, 10, 16, 22 & 29 January 2024
-	Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	4 January 2024
-	Landfill Gas Monitoring during normal weekdays for Construction Works	26 times	2 to 6, 8 to 13, 15 to 20, 22 to 27, 29 to 31 January 2024
-	Joint Environmental Site Inspection	5 times	2, 8, 15, 22 & 29 January 2024
-	General Site Inspection by EPD-RNG	1 time	25 January 2024

Air Quality

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

Noise

5 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

26 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

5 weekly environmental site inspections were carried out during the reporting period. A joint environmental site inspection was carried out by the representatives of the Employer's Representative (ER), the Contractor, IEC and the ET on 15 January 2024. The Contractor has generally implemented part of the mitigation measures as recommended. One general 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
Jan 2024	33 (21 – 59)	50 (40 – 65)	58 (48 – 70)
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
Jan 2024	84 (70 – 112)	103 (84 – 119)	105 (80 – 119)
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
Jan 2024	62.2 (59.6 – 63.2)	54.0 (53.3 – 55.3)
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)	
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

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 4 January 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	7.5	>7.6	>7.7
DO in mg/L	7.7	<7.4	<4	7.8	<5	<4
Turbidity in NTU	6.0	>9.2	>9.5	18.5	>108.3	>108.9
Electrical Conductivity in µS/cm	93	---	---	225	---	---
SS in mg/L	8.2	>9.7	>11.4	14.7	>94.5	>94.7
Alkalinity in mg/L	16	---		56	---	
COD in mg/L	6			7		
BOD_5 in mg/L	<2			<2		
TOC in mg/L	<1			1		
Ammonia-nitrogen in mg/L	0.02			0.23		
TKN in mg/L	0.3			0.5		
Nitrate in mg/L	0.03			0.22		
Sulphate in mg/L	4			24		
Sulphite in mg/L	<2			<2		
Phosphorus in mg/L	0.0			<0.01		
Chloride in mg/L	6			15		
Sodium in µg/L	8060			8850		
Magnesium in µg/L	450			1600		
Calcium in µg/L	3130			27400		
Potassium in µg/L	400			3840		
Iron in µg/L	900			1920		
Nickel in µg/L	<1			5		
Zinc in µg/L	<10			18		
Manganese in µg/L	52			836		
Copper in µg/L	<1			2		
Lead in µg/L	<1			1		
Cadmium in µg/L	<2			<2		
Coliform Count in cfu/100mL	1400			12000		
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 125,010 tonnes of C&D materials was reused at alternative disposal ground (NENT Landfill) during the reporting period. A total of 5.59 tonnes of Yard waste (collected to Y-Park) was generated during the reporting period. A total of 71.13 tonnes of general refuse and A total of 753.78 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	2 Jan 2024	0	0	0	20.2
	3 Jan 2024	0	0	0	20.1
	4 Jan 2024	0	0	0	20.1
	5 Jan 2024	0	0	0	20.1
	6 Jan 2024	0	0	0	20.1
	8 Jan 2024	0	0	0	20.2
	9 Jan 2024	0	0	0	20.0
	10 Jan 2024	0	0	0	20.1
	11 Jan 2024	0	0	0	20.1
	12 Jan 2024	0	0	0	20.0
	13 Jan 2024	0	0	0	20.1
	15 Jan 2024	0	0	0	20.1
	16 Jan 2024	0	0	0	20.2
	17 Jan 2024	0	0	0	20.2
	18 Jan 2024	0	0	0	20.1
	19 Jan 2024	0	0	0	20.2
	20 Jan 2024	0	0	0	20.2
	22 Jan 2024	0	0	0	20.2
	23 Jan 2024	0	0	0	20.2
	24 Jan 2024	0	0	0	20.2
	25 Jan 2024	0	0	0	20.2
	26 Jan 2024	0	0	0	20.2
	27 Jan 2024	0	0	0	20.2
	29 Jan 2024	0	0	0	20.2
	30 Jan 2024	0	0	0	20.2
	31 Jan 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 02, 08, 15, 22 & 29 January 2024. A joint environmental site inspection was carried out by the representatives of the ER, the Contractor, IEC and the ET on 15 January 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:

02 January 2024

Observation(s):

- Unpaved main haul road was dry and fugitive dust was observed, especially at Portion E4. The Contractor was advised to provide enough water sprayers for short-term dust control to ensure that all unpaved roads are wetted and also implement other measurements like shotcrete to pave all main haul road for long term dust control.

08 January 2024

Observation(s):

- The unpaved main haul road at SBA was dry and fugitive dust was observed. The Contractor was advised to regularly water the unpaved main haul road to ensure it stays moist and to pave it for long-term dust control.

15 January 2024

Observation(s):

- Dusty material (Cement) at SBA without covered by impervious sheet properly or placed in an area sheltered on the top and the 3 side was observed. The Contractor was recommended that the loading, unloading or transfer, handing or storage of cement should be cover entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides to prevent dust suppression or sprayed with water to maintain the entire surface wet. They had also been recommended to provide training courses on dust control during the shotcrete process.

- The exposed slope surface at SBA without covered by impervious sheet properly was found. The Contractor was reminded that the exposed slope surface should be properly covered with impervious sheet.

- Damaged silt fence around the stockpile area at SBA was observed. The Contractor was advised to provide maintenance for the silt fence.

22 January 2024

Reminder(s):

- The Contractor was reminded to provide temporary slope surface protection for the exposed slope surface at Portion B2 before completing the concrete surface protection by February.

29 January 2024

Observation(s):

- Stockpiling of dusty material without covered by impervious sheet at SBA was found. The Contractor was recommended that dusty materials should be covered by impervious sheet to prevent dust dispersion.

- Insufficient silt fence around the soil stockpiling area at SBA was observed. The Contractor was advised to provide sufficient silt fence around the soil stockpiling area to prevent sediment from entering the system.

- The oil drum and chemical containers without chemical drip tray at Portion E4 was found. The Contractor was reminded to provide the sufficient drip tray for chemical storage to avoid chemical spillage and land contamination.

Reminder(s):

- The Contractor was reminded that activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA shall be carried out in a totally enclosed system or facility at Portion E4 to prevent dust dispersion.

- The Contractor was reminded to ensure that the door of the generator shall be closed while it is operating to reduce the noise produced.

11.1.4 One general 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
Jan 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 Five environmental site inspections were carried out in the reporting month. Recommendations on mitigation measures for Permit/ Licenses were given to the Contractor for remediating the deficiencies identified during the site inspections.

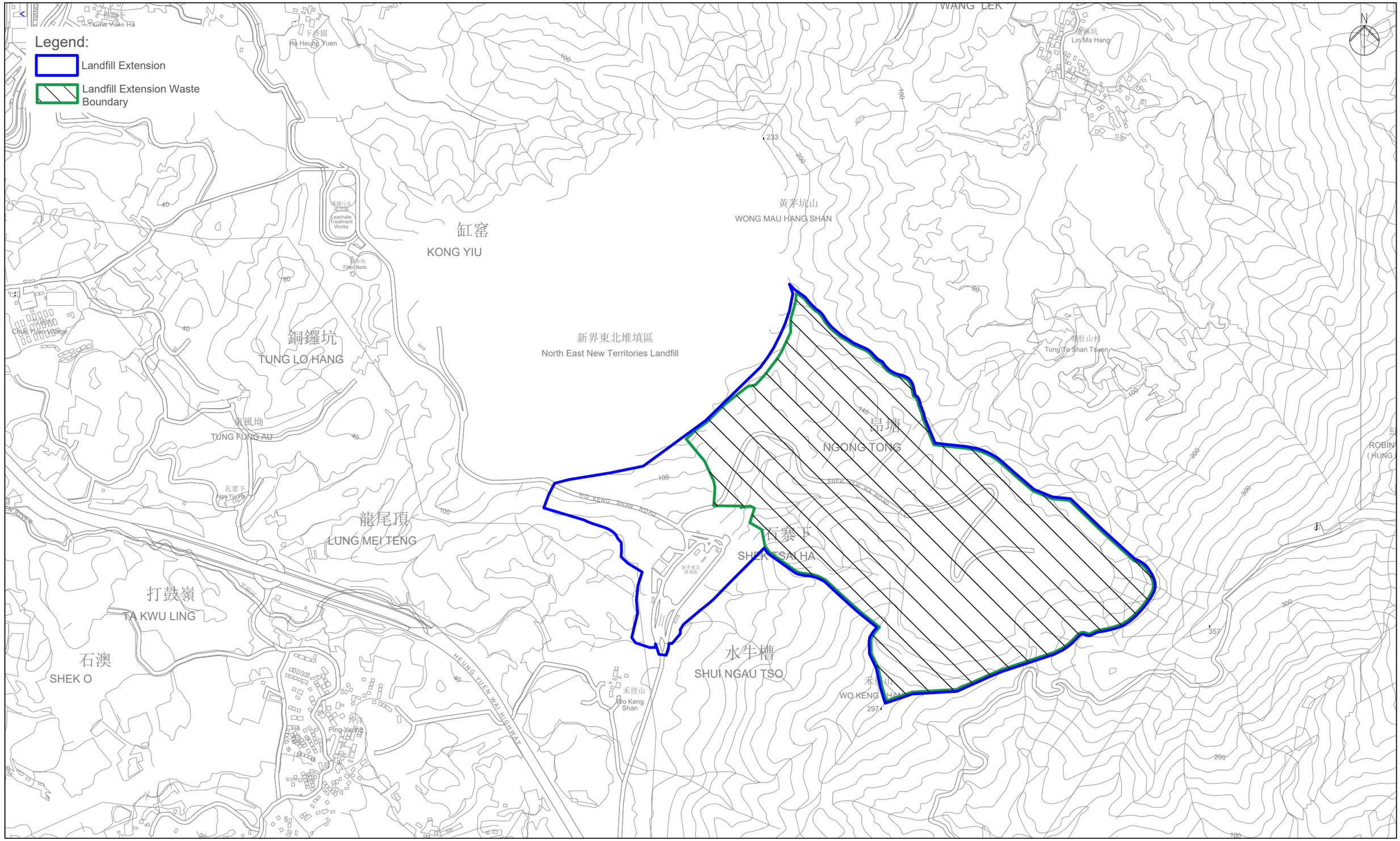
15.1.8 No complaint was recorded during the reporting period.

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.

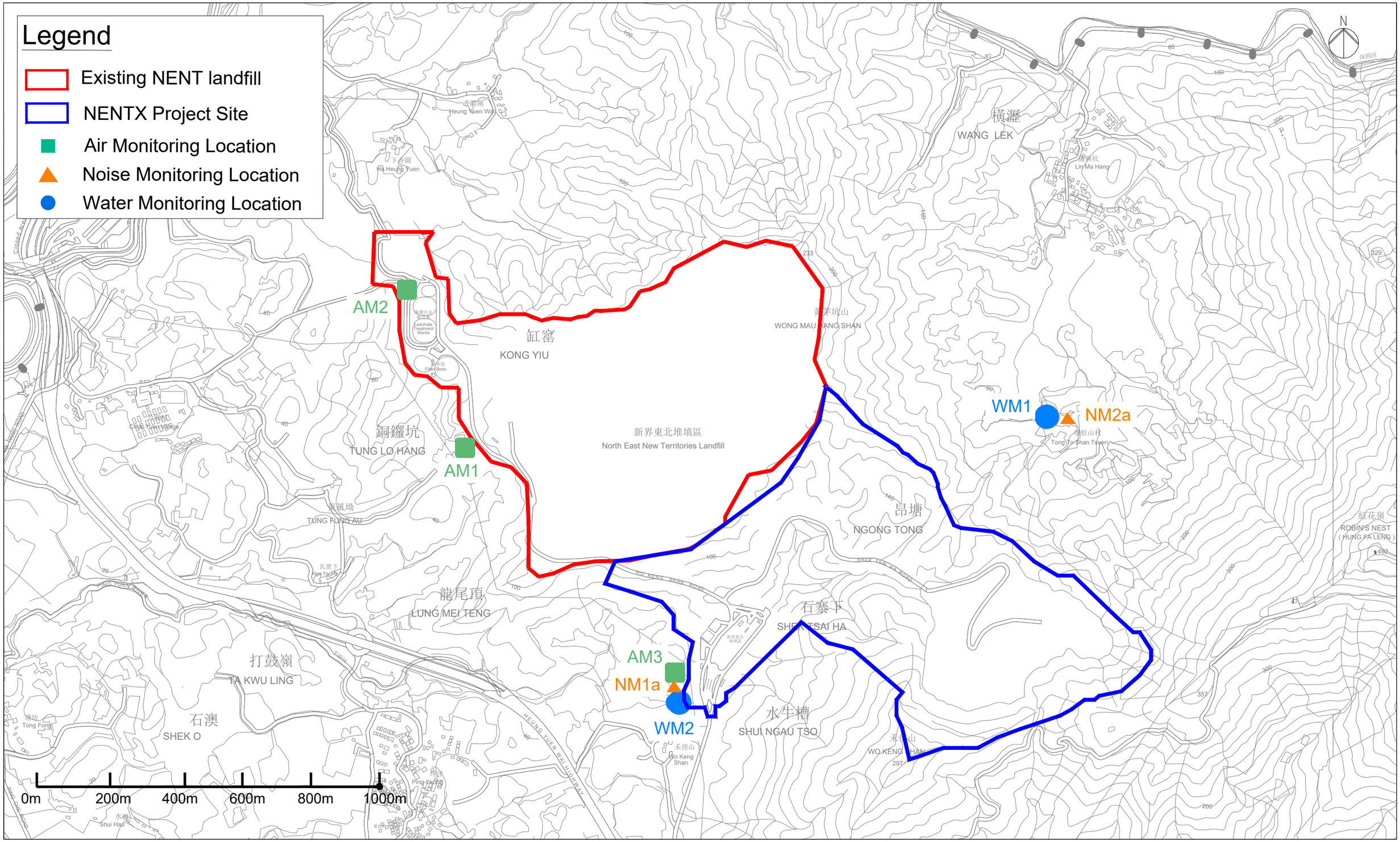
15.1.11 The ET will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Figure 1 Location of the Project Site



aurecon 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

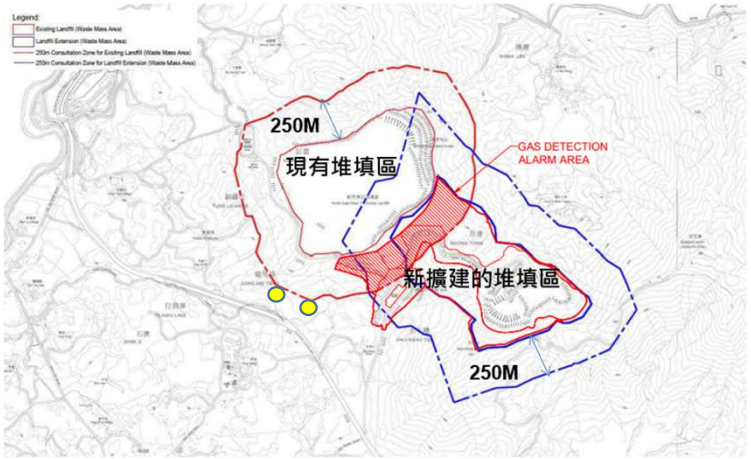


aurecon Aurecon Hong Kong Limited	North East New Territories (NENT) Landfill Extension Impact Monitoring Location	Figure 2

Figure 3 Landfill Gas Monitoring Locations

Gas Monitoring Point

Monitoring Frequency: 2 times per day



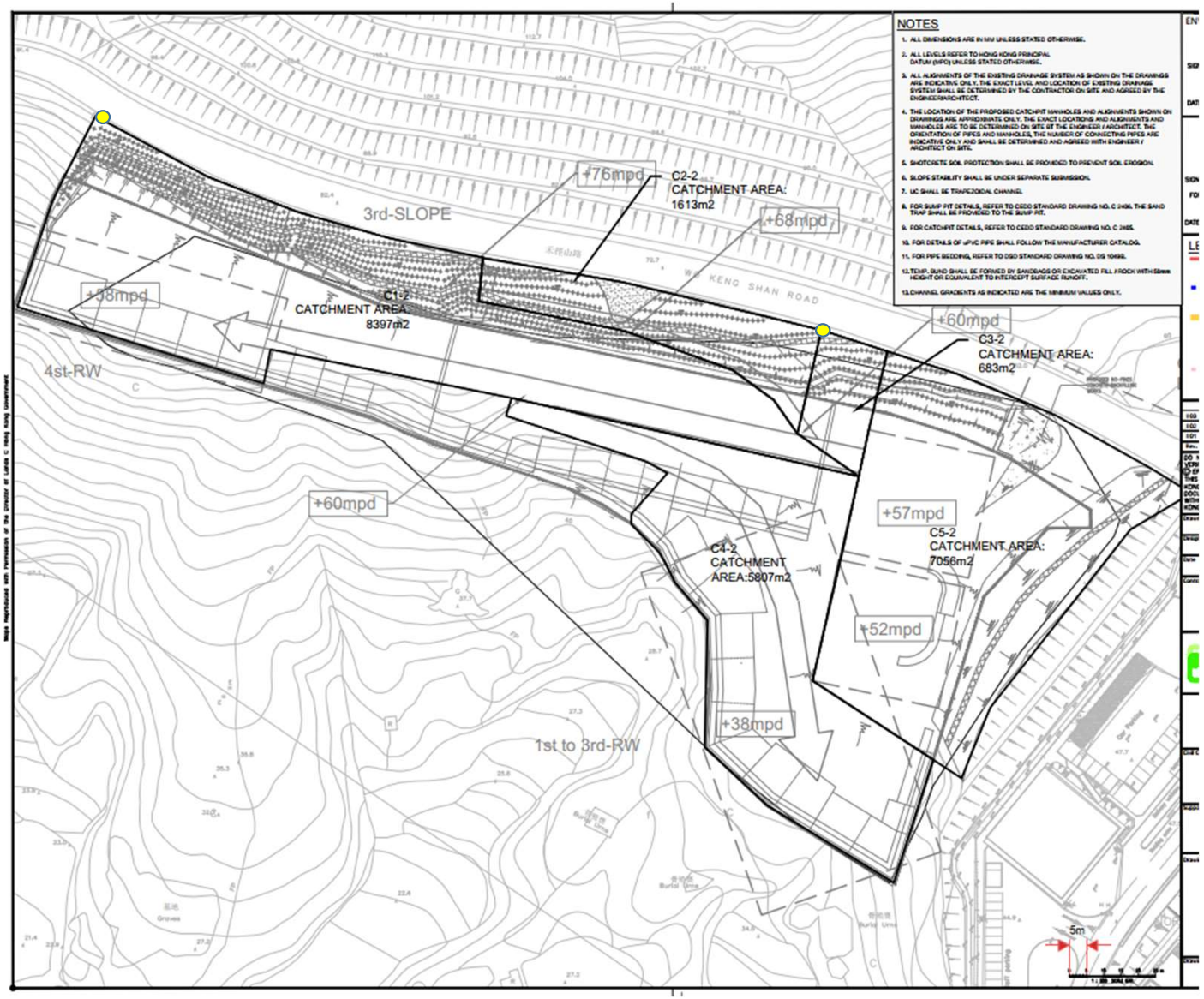
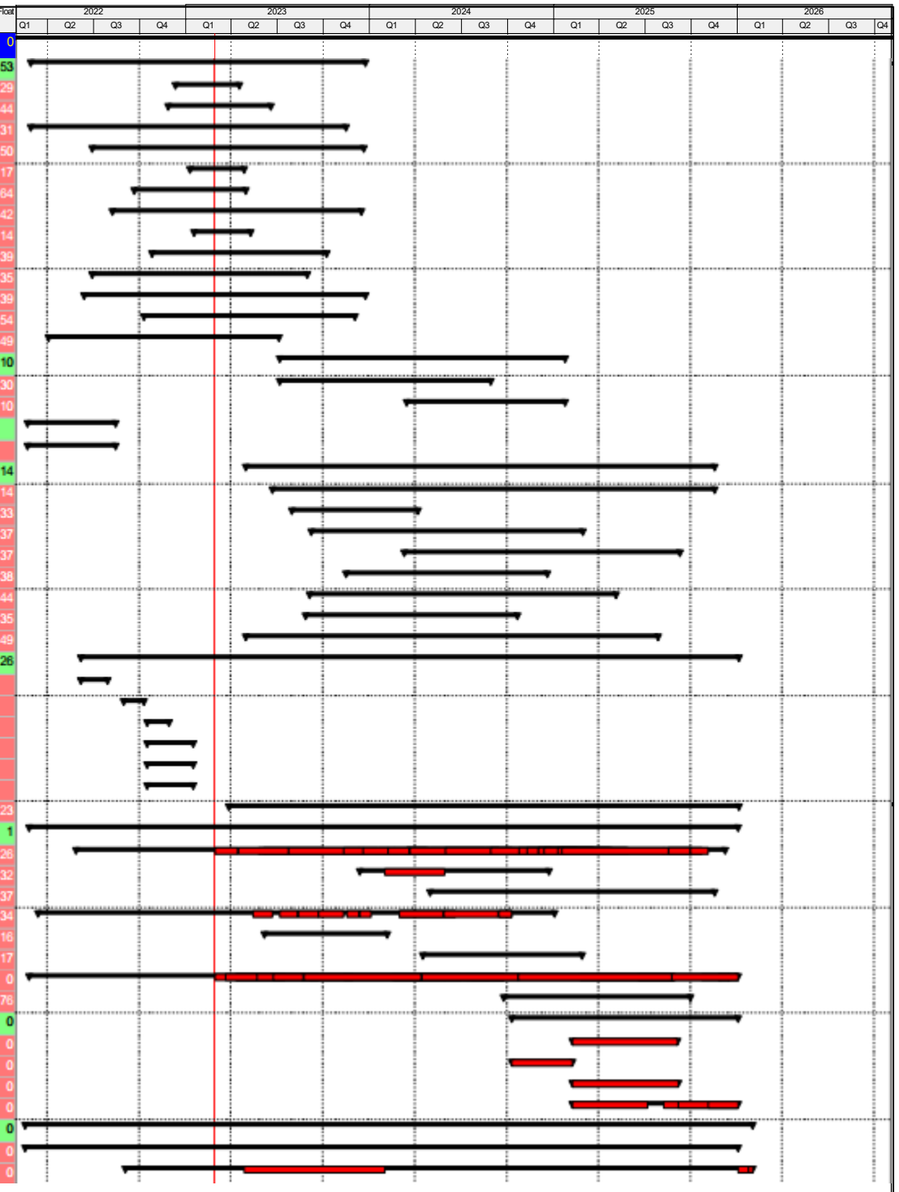


Figure 3 Landfill Gas Monitoring Locations

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)

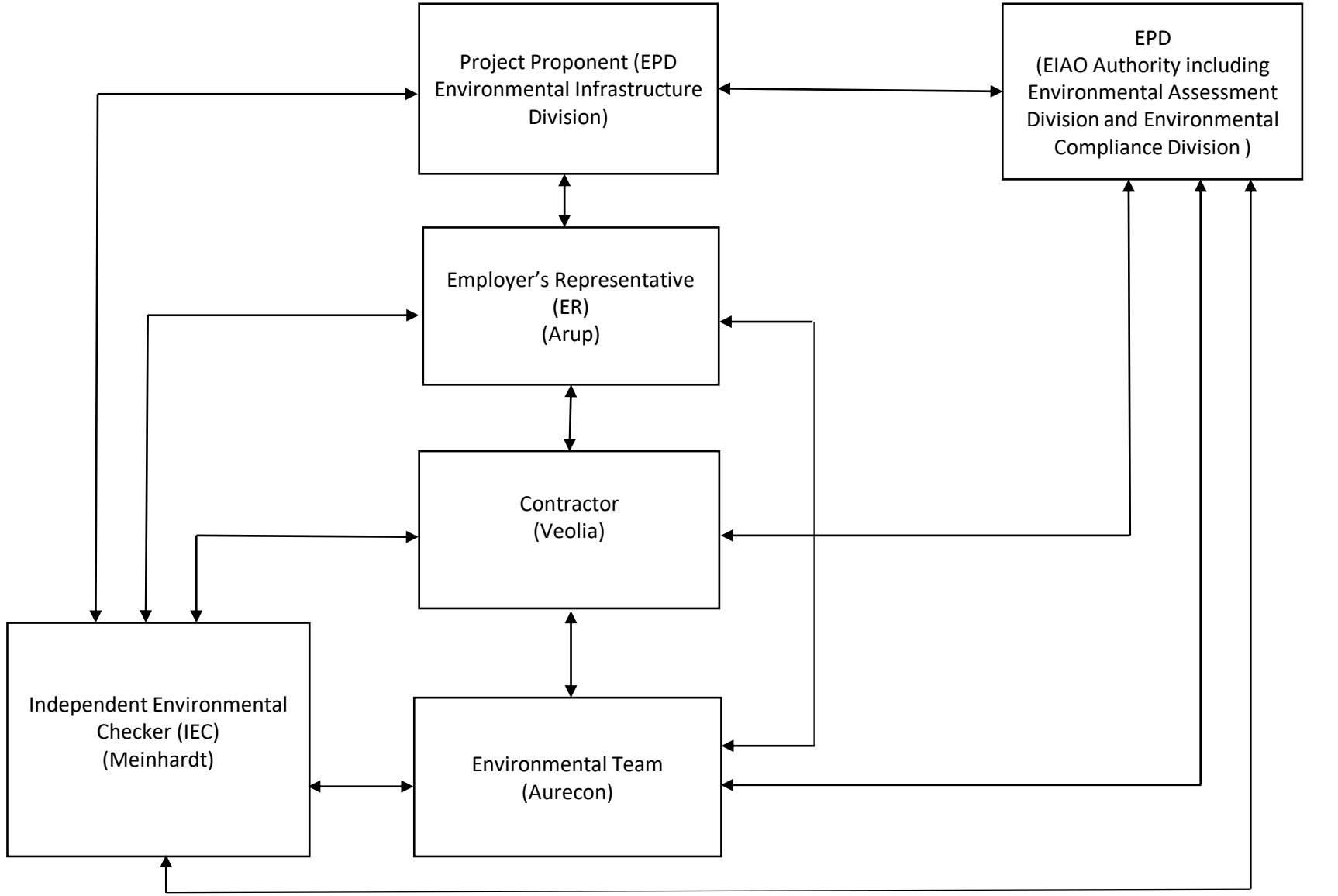
VEOLIA

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)

Appendix D Monitoring Schedule for Reporting Month & Next Month

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

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

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 (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.

Date: 20 December 2023

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

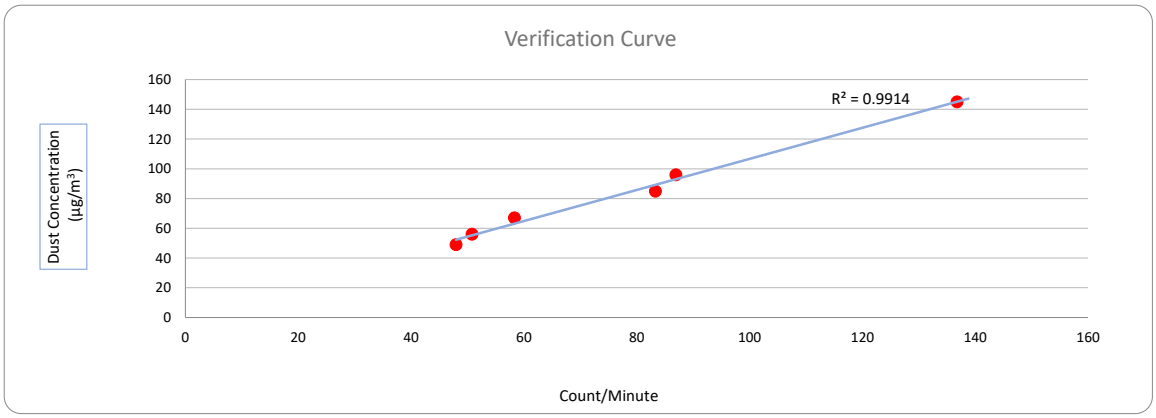
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

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

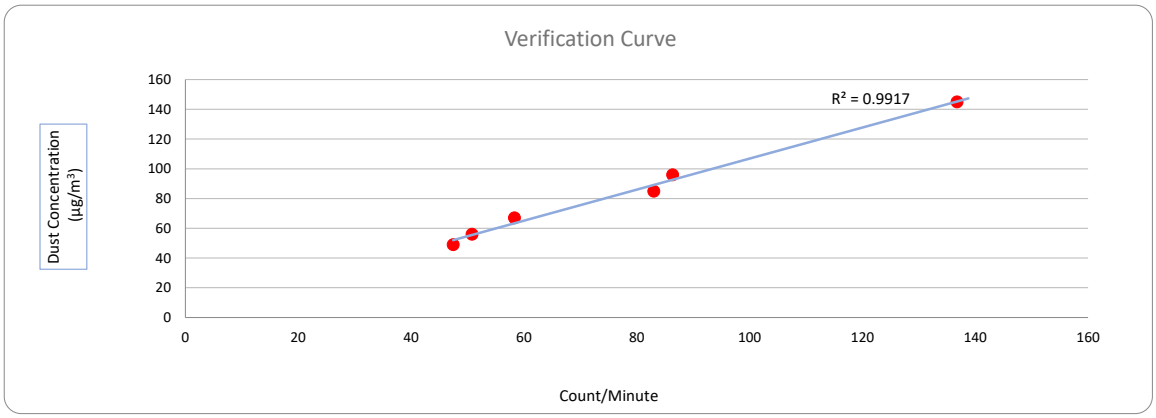
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

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

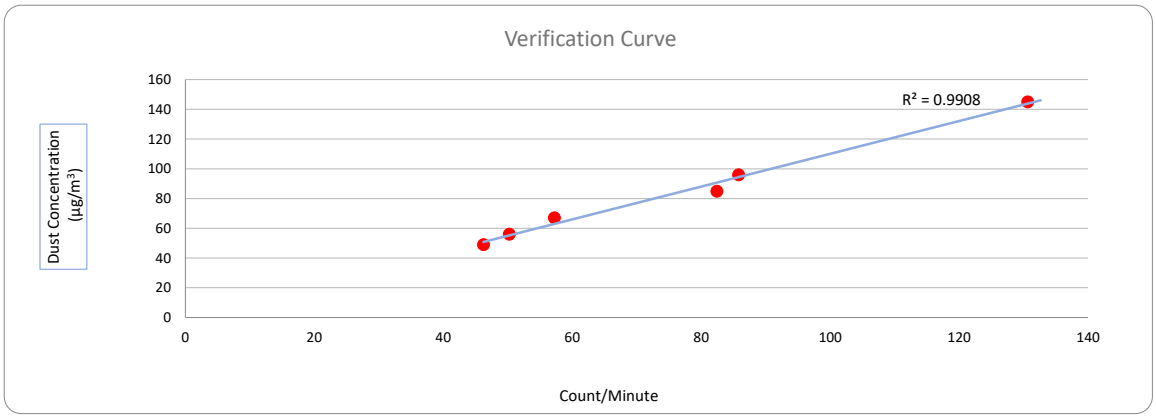
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

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

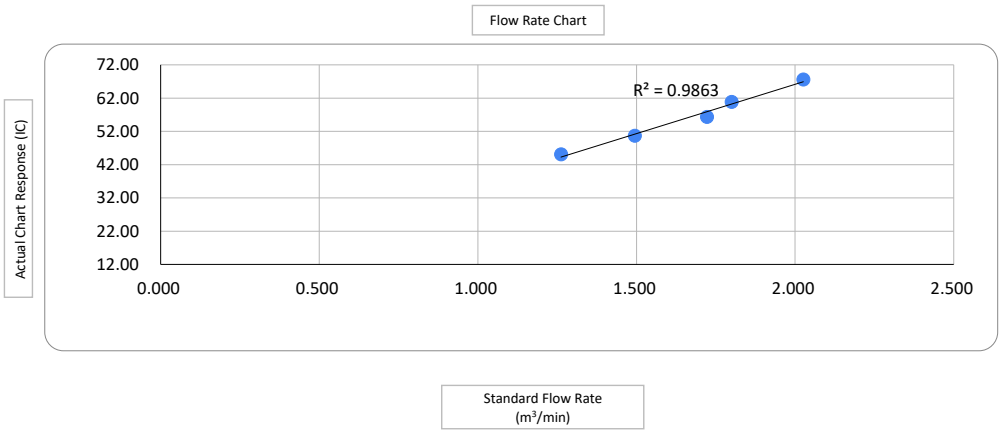
Calculations

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

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

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

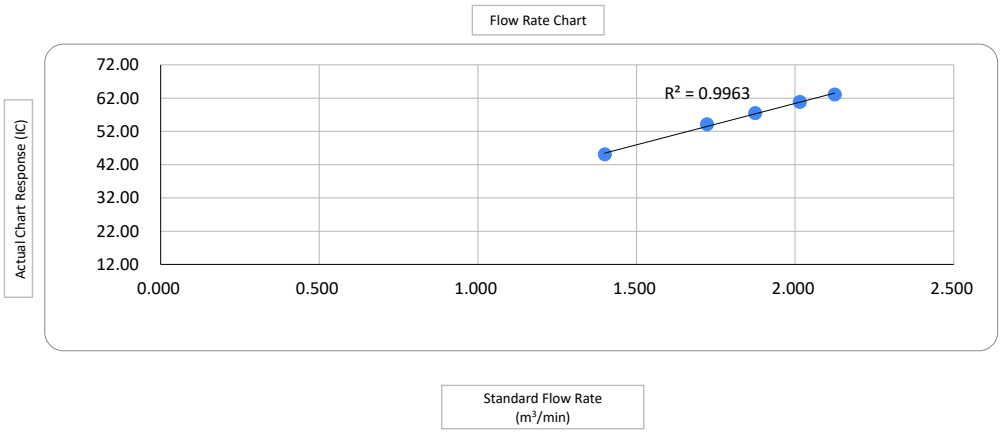
Calculations

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

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

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

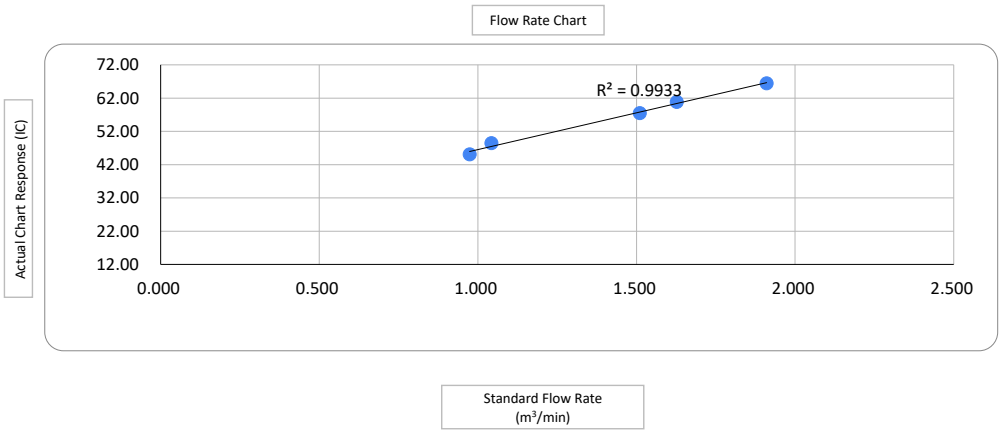
Calculations

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

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

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

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

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

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

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
4/1/2024	Sibata LD-5R	882106	1.0437	Fine	13:02	14:02	15:02	51	59	50	53	285	500
10/1/2024	Sibata LD-5R	942532	1.1020	Fine	13:05	14:05	15:05	21	26	24	24		
16/1/2024	Sibata LD-5R	882106	1.0437	Fine	9:18	10:18	11:18	29	33	28	30		
22/1/2024	Sibata LD-5R	882106	1.0437	Fine	13:03	14:03	15:03	34	39	32	35		
27/1/2024	Sibata LD-5R	882106	1.04370	Fine	8:12	9:12	10:12	26	27	24	26		
29/1/2024	Sibata LD-5R	882106	1.04370	Fine	13:10	14:10	15:10	30	31	29	30		
							Average	**33**					
							Max.	**59**					
							Min.	**21**					

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
4/1/2024	Sibata LD-5R	0Z4545	1.0451	Fine	13:30	14:30	15:30	61	65	60	62	279	500
10/1/2024	Sibata LD-5R	882106	1.0437	Fine	13:15	14:15	15:15	51	56	50	52		
16/1/2024	Sibata LD-5R	0Z4545	1.0451	Fine	9:02	10:02	11:02	41	44	41	42		
22/1/2024	Sibata LD-5R	942532	1.1020	Fine	13:16	14:16	15:16	41	43	40	41		
27/1/2024	Sibata LD-5R	0Z4545	1.04510	Fine	8:26	9:26	10:26	51	54	50	52		
29/1/2024	Sibata LD-5R	0Z4545	1.04510	Fine	13:31	14:31	15:31	52	54	51	52		
							Average	**50**					
							Max.	**65**					
							Min.	**40**					

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
4/1/2024	Sibata LD-5R	942532	1.1020	Fine	13:45	14:45	15:45	70	61	69	67	285	500
10/1/2024	Sibata LD-5R	0Z4545	1.0451	Fine	13:25	14:25	15:25	61	63	60	61		
16/1/2024	Sibata LD-5R	942532	1.1020	Fine	9:25	10:25	11:25	51	52	53	52		
22/1/2024	Sibata LD-5R	0Z4545	1.0451	Fine	13:26	14:26	15:26	49	50	48	49		
27/1/2024	Sibata LD-5R	942532	1.10200	Fine	8:40	9:40	10:40	56	60	59	58		
29/1/2024	Sibata LD-5R	942532	1.10200	Fine	13:21	14:21	15:21	62	59	60	60		
							Average	**58**					
							Max.	**70**					
							Min.	**48**					

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)
4/1/2024	Fine	20.8	1020.6	2386.04	2410.04	1440	37	1.06	1528	2.6844	2.7941	0.1097	72	164	260
10/1/2024	Fine	19.6	1019.3	2412.38	2436.38	1440	40	1.18	1706	2.7209	2.8859	0.1650	97		
16/1/2024	Fine	19.0	1021.3	2438.76	2462.76	1440	39	1.17	1684	2.7017	2.8896	0.1879	112		
22/1/2024	FIne	14.5	1025.9	2465.97	2489.97	1440	39	1.17	1682	2.6986	2.8272	0.1286	76		
27/1/2024	Fine	19.9	1021.3	2493.61	2517.61	1440	40	1.21	1739	2.7587	2.8805	0.1218	70		
29/1/2024	Fine	17.8	1020.9	2521.17	2545.17	1440	39	1.17	1688	2.6718	2.7988	0.1270	75		
												Average	**84**		
												Min	**70**		
												Max	**112**		

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)
4/1/2024	Fine	20.8	1020.6	1928.36	1952.36	1440	41	0.78	1119	2.6746	2.7979	0.1233	110	152	260
10/1/2024	Fine	19.6	1019.3	1954.89	1978.89	1440	41	0.76	1088	2.7209	2.8249	0.1040	96		
16/1/2024	Fine	19.0	1021.3	1981.03	2005.03	1440	40	0.72	1030	2.7069	2.8158	0.1089	106		
22/1/2024	Fine	14.5	1025.9	2008.57	2032.57	1440	40	0.76	1096	2.7227	2.8146	0.0919	84		
27/1/2024	Fine	19.9	1021.3	2036.25	2060.25	1440	42	0.80	1158	2.7611	2.8805	0.1194	103		
29/1/2024	Fine	17.8	1020.9	2064.23	2088.23	1440	39	0.70	1001	2.7611	2.8804	0.1193	119		
												Average	**103**		
												Min	**84**		
												Max	**119**		

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)
4/1/2024	Fine	20.8	1020.6	2931.94	2955.94	1440	42	1.19	1712	2.6807	2.8662	0.1855	108	163	260
10/1/2024	Fine	19.6	1019.3	2959.55	2983.55	1440	41	1.17	1689	2.7169	2.9059	0.1890	112		
16/1/2024	Fine	19.0	1021.3	2987.19	3011.19	1440	41	1.18	1695	2.6674	2.8346	0.1672	99		
22/1/2024	Fine	14.5	1025.9	3014.64	3038.64	1440	42	1.23	1770	2.7237	2.9352	0.2115	119		
27/1/2024	Fine	19.9	1021.3	3042.22	3066.22	1440	39	1.11	1593	2.7723	2.8991	0.1268	80		
29/1/2024	Fine	17.8	1020.9	3070.09	3094.09	1440	42	1.21	1748	2.7650	2.9563	0.1913	109		
												Average	**105**		
												Min	**80**		
												Max	**119**		

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
4/1/2024	Fine	2.1	14:06	14:36	57.6	61.2	62.6	63.9	64.1	65.2	63.0	58.6	63.2	64.1	64.9	65.4	66.3	56.1	60.3	60.2	60.3	61.2	64.1
10/1/2024	Fine	1.7	10:51	11:21	61.2	59.3	62.4	63.1	62.2	64.2	62.3	63.1	61.4	63.6	65.4	63.6	65.4	58.9	57.6	60.3	62.2	60.3	62.1
16/1/2024	Fine	1.7	8:15	8:45	62.9	63.2	62.6	63.2	64.5	62.4	63.2	63.6	64.2	64.6	64.2	65.5	64.1	61.2	62.1	62.3	61.4	62.2	61.4
22/1/2024	Fine	2.6	13:10	13:40	61.2	60.3	59.4	58.6	58.1	59.3	59.6	62.6	62.4	61.2	60.2	60.1	61.4	60.2	59.4	58.1	57.6	57.8	58.1
29/1/2024	Fine	1.2	13:06	13:36	60.2	61.3	61.9	62.6	62.1	61.9	61.7	62.6	63.2	63.9	64.5	63.6	63.6	58.2	59.2	59.3	60.2	60.4	60.3

Average	62.2
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
4/1/2024	Fine	2.6	11:30	12:00	51.2	52.4	51.4	52.5	54.3	56.1	53.4	53.2	54.1	53.2	54.1	55.4	57.2	50.2	51.5	50.3	50.9	52.1	53.2
10/1/2024	Fine	1.9	13:03	13:33	51.3	50.4	57.3	53.4	53.1	56.4	54.4	53.6	52.4	53.6	54.9	54.6	57.3	50.1	49.1	50.4	52.1	51.9	53.1
16/1/2024	Fine	1.9	14:00	14:30	51.2	52.3	52.4	53.4	54.2	55.2	53.3	53.2	53.6	53.6	54.6	56.3	56.4	50.2	51.2	51.4	51.6	52.2	53.2
22/1/2024	Fine	2.1	10:30	11:00	54.3	55.1	54.4	55.6	55.9	56.1	55.3	56.2	60.3	59.2	59.3	59.4	57.2	52.1	52.4	52.6	52.8	53.1	52.1
29/1/2024	Fine	1.7	10:00	10:30	54.2	53.6	53.2	52.6	53.1	54.1	53.5	56.4	55.4	55.6	54.5	56.2	55.6	52.1	51.6	51.2	50.2	51.6	51.2

Average	54.0
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
4-Jan-24	13:12	Sunny	0.3	0.1	17.5	7.7	<7.4	<4	7.5	>7.7	>7.8	6.0	>9.2	>9.5	8.2	>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
4-Jan-24	8:12	Sunny	0.20	0.2	19.2	7.8	<5	<4	7.5	>7.6	>7.7	18.5	>108.3	>108.9	14.7	>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

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

CERTIFICATE OF ANALYSIS

Client	: ACUMEN LABORATORY AND TESTING LIMITED	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 9
Contact	: HUNTINGTON HUI	Contact	: Richard Fung	Work Order	: HK2400778
Address	: UNIT D, 12/F, FORD GLORY PLAZA, NOS.37-39 WING HONG STREET, CHEUNG SHA WAN, KOWLOON, HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: Huntington.Hui@aurecongroup.com	E-mail	: richard.fung@alsglobal.com		
Telephone	: ----	Telephone	: +852 2610 1044		
Facsimile	: ----	Facsimile	: +852 2610 2021		
Project	: NENTX			Date Samples Received	: 04-Jan-2024
Order number	: ----	Quote number	: HKE/2751/2022_V3	Issue Date	: 18-Jan-2024
C-O-C number	: ----			No. of samples received	: 2
Site	:			No. of samples analysed	: 2

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

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

General Comments

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

Testing period is from 04-Jan-2024 to 16-Jan-2024.

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

Specific Comments for Work Order: HK2400778

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

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

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

Microbiological sample(s) was/ were collected in 250mL sterile plastic bottles containing sodium thiosulfate. Sample(s) arrived at the laboratory at 13:25.

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

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

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

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

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

Analytical Results

Sub-Matrix: **WATER**

Compound	CAS Number	LOR	Unit	Sample ID	WM1	WM2	----	----	----
				Sampling date / time	04-Jan-2024	04-Jan-2024	----	----	----
					HK2400778-001	HK2400778-002	-------	-------	-------
EA/ED: Physical and Aggregate Properties									
EA002: pH Value	----	0.1	pH Unit		6.6	7.3	----	----	----
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm		59	214	----	----	----
EA025: Suspended Solids (SS)	----	0.1	mg/L		8.2	14.7	----	----	----
ED037: Total Alkalinity as CaCO3	----	1	mg/L		16	56	----	----	----
ED/EK: Inorganic Nonmetallic Parameters									
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L		4	24	----	----	----
ED045K: Chloride	16887-00-6	0.5	mg/L		6	15	----	----	----
EK055K: Ammonia as N	7664-41-7	0.01	mg/L		0.02	0.23	----	----	----
EK058A: Nitrate as N	14797-55-8	0.01	mg/L		0.03	0.22	----	----	----
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.3	0.5	----	----	----
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L		0.01	<0.01	----	----	----
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L		<2	<2	----	----	----
EP: Aggregate Organics									
EP005: Total Organic Carbon	----	1	mg/L		<1	1	----	----	----
EP020: Oil & Grease	----	5	mg/L		<5	<5	----	----	----
EP026C: Chemical Oxygen Demand	----	5	mg/L		6	7	----	----	----
EP030: Biochemical Oxygen Demand	----	2	mg/L		<2	<2	----	----	----
EG: Metals and Major Cations - Total									
EG020: Cadmium	7440-43-9	0.2	µg/L		<0.2	<0.2	----	----	----
EG020: Copper	7440-50-8	1	µg/L		<1	2	----	----	----
EG020: Lead	7439-92-1	1	µg/L		<1	1	----	----	----
EG020: Manganese	7439-96-5	1	µg/L		52	836	----	----	----
EG020: Nickel	7440-02-0	1	µg/L		<1	5	----	----	----
EG020: Zinc	7440-66-6	10	µg/L		<10	18	----	----	----
EG032: Calcium	7440-70-2	50	µg/L		3130	27400	----	----	----
EG032: Iron	7439-89-6	10	µg/L		900	1920	----	----	----
EG032: Magnesium	7439-95-4	50	µg/L		450	1600	----	----	----
EG032: Potassium	7440-09-7	50	µg/L		400	3840	----	----	----
EG032: Sodium	7440-23-5	50	µg/L		8060	8850	----	----	----

Sub-Matrix: WATER			Sample ID	WM1	WM2	----	----	----
			Sampling date / time	04-Jan-2024	04-Jan-2024	----	----	----
Compound	CAS Number	LOR	Unit	HK2400778-001	HK2400778-002	-------	-------	-------
EM: Microbiological Testing								
EM002: E. coli	----	1	CFU/100mL	1100	8000	----	----	----
EM003: Total Coliforms	----	1	CFU/100mL	1400	12000	----	----	----

Laboratory Duplicate (DUP) Report

In the Laboratory Duplicate (DUP) report, RPD (%) of sample duplicate reporting "0.0" denotes that the difference between unrounded results of the sample and its duplicate analyses is less than the value of the limit of reporting of the specific testing. The RPD (%) meets the quality control requirement of the corresponding testing procedure.

Matrix: **WATER**

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 5529247)								
HK2400673-015	Anonymous	ED037: Total Alkalinity as CaCO3	----	1	mg/L	<1	<1	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5529250)								
HK2400550-001	Anonymous	EA002: pH Value	----	0.1	pH Unit	8.0	7.9	0.0
HK2400673-015	Anonymous	EA002: pH Value	----	0.1	pH Unit	5.5	5.6	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5529251)								
HK2400778-001	WM1	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	59	59	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5530150)								
HK2400586-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	26.8	26.2	2.3
HK2400778-002	WM2	EA025: Suspended Solids (SS)	----	0.5	mg/L	14.7	15.6	5.6
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5529312)								
HK2400778-001	WM1	EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	0.01	0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5529314)								
HK2400862-001	Anonymous	EK055K: Ammonia as N	7664-41-7	0.01	mg/L	24.5	24.4	0.2
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5531149)								
HK2400673-015	Anonymous	ED045K: Chloride	16887-00-6	1	mg/L	<1	<1	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5531150)								
HK2400673-015	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	<5	<5	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5536061)								
HK2400778-001	WM1	EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.3	0.2	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5541525)								
HK2400778-001	WM1	EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	0.0
EP: Aggregate Organics (QC Lot: 5535165)								
HK2400888-005	Anonymous	EP005: Total Organic Carbon	----	1	mg/L	<1	<1	0.0
EP: Aggregate Organics (QC Lot: 5535232)								
HK2400904-001	Anonymous	EP026C: Chemical Oxygen Demand	----	5	mg/L	<5	<5	0.0
EG: Metals and Major Cations - Total (QC Lot: 5529099)								
HK2400778-002	WM2	EG032: Iron	7439-89-6	10	µg/L	1920	1930	0.8
		EG032: Calcium	7440-70-2	50	µg/L	27400	27800	1.3

Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations - Total (QC Lot: 5529099) - Continued								
HK2400778-002	WM2	EG032: Magnesium	7439-95-4	50	µg/L	1600	1610	0.9
		EG032: Potassium	7440-09-7	50	µg/L	3840	3840	0.0
		EG032: Sodium	7440-23-5	50	µg/L	8850	8800	0.5
EG: Metals and Major Cations - Total (QC Lot: 5529100)								
HK2400778-002	WM2	EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	1	1	0.0
		EG020: Manganese	7439-96-5	1	µg/L	836	864	3.3
		EG020: Nickel	7440-02-0	1	µg/L	5	5	0.0
		EG020: Zinc	7440-66-6	10	µg/L	18	17	0.0

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

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)	
		LOR	Unit	Result		LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 5529247)											
ED037: Total Alkalinity as CaCO3	----	1	mg/L	<1	50 mg/L	104	----	95.0	105	----	----
				<1	2000 mg/L	100	----	95.0	105	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 5529251)											
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	<1	146.9 µS/cm	100	----	93.5	106	----	----
				<1	1412 µS/cm	98.0	----	94.3	105	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 5530150)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	10 mg/L	94.0	----	86.6	113	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5529312)											
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	96.5	----	92.4	106	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5529314)											
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	103	----	89.3	109	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5531149)											
ED045K: Chloride	16887-00-6	1	mg/L	<1	10 mg/L	97.1	----	88.2	108	----	----

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)	
		LOR	Unit	Result		LCS	DCS	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5531150)											
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	<1	5 mg/L	102	----	91.4	109	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5536061)											
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	0.5 mg/L	93.2	----	89.0	120	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5541525)											
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	----	----	----	----	----	----	----
EP: Aggregate Organics (QC Lot: 5527970)											
EP030: Biochemical Oxygen Demand	----	----	mg/L	----	198 mg/L	92.5	----	77.6	118	----	----
EP: Aggregate Organics (QC Lot: 5535165)											
EP005: Total Organic Carbon	----	1	mg/L	<1	5 mg/L	110	----	87.3	120	----	----
				<1	100 mg/L	104	----	88.8	120	----	----
EP: Aggregate Organics (QC Lot: 5535232)											
EP026C: Chemical Oxygen Demand	----	----	mg/L	----	25 mg/L	101	----	92.0	108	----	----
				----	250 mg/L	99.6	----	92.3	106	----	----
EP: Aggregate Organics (QC Lot: 5540325)											
EP020: Oil & Grease	----	2	mg/L	<2	20 mg/L	94.2	----	81.7	105	----	----
EG: Metals and Major Cations - Total (QC Lot: 5529099)											
EG032: Calcium	7440-70-2	50	µg/L	<50	2000 µg/L	99.2	----	85.0	115	----	----
EG032: Iron	7439-89-6	10	µg/L	<10	2000 µg/L	107	----	85.0	115	----	----
EG032: Magnesium	7439-95-4	50	µg/L	<50	2000 µg/L	105	----	85.0	115	----	----
EG032: Potassium	7440-09-7	50	µg/L	<50	2000 µg/L	96.6	----	85.0	115	----	----
EG032: Sodium	7440-23-5	50	µg/L	<50	2000 µg/L	109	----	85.0	115	----	----
EG: Metals and Major Cations - Total (QC Lot: 5529100)											
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	5 µg/L	104	----	85.0	109	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	50 µg/L	106	----	90.0	111	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	50 µg/L	104	----	89.0	111	----	----
EG020: Manganese	7439-96-5	1	µg/L	<1	50 µg/L	109	----	85.0	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	50 µg/L	94.8	----	87.0	110	----	----
EG020: Zinc	7440-66-6	10	µg/L	<10	50 µg/L	104	----	86.0	114	----	----

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

Matrix: **WATER**

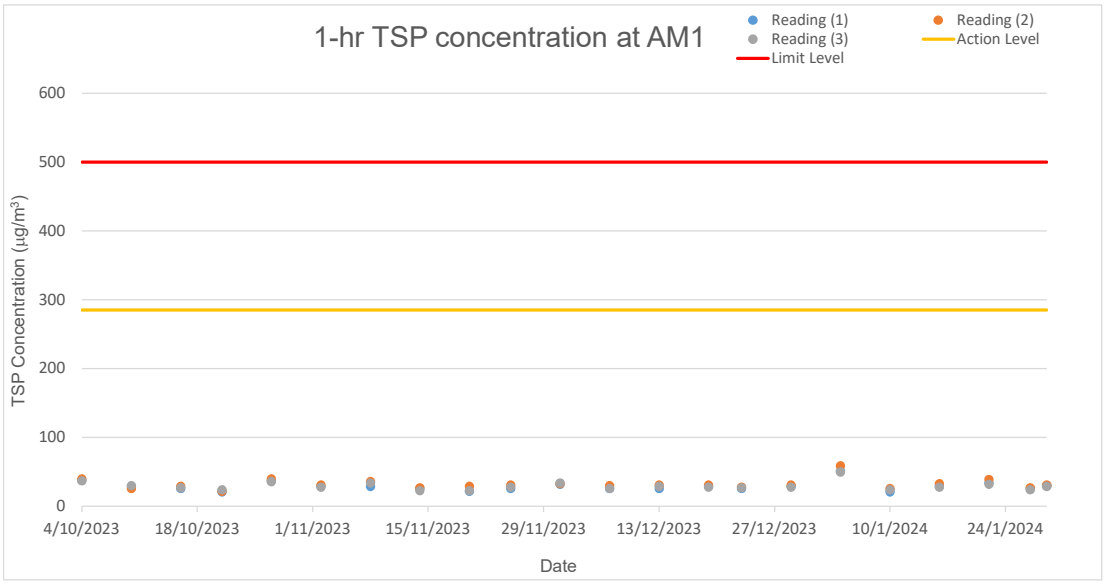
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5529312)										
HK2400778-001	WM1	EK071K: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	106	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5529314)										
HK2400862-001	Anonymous	EK055K: Ammonia as N	7664-41-7	50 mg/L	102	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5531149)										
HK2400673-015	Anonymous	ED045K: Chloride	16887-00-6	5 mg/L	86.8	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5531150)										
HK2400673-015	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric	----	5 mg/L	109	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5536061)										
HK2400778-001	WM1	EK061A: Total Kjeldahl Nitrogen as N	----	0.5 mg/L	78.8	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5535165)										
HK2400888-005	Anonymous	EP005: Total Organic Carbon	----	5 mg/L	106	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5535232)										
HK2400902-001	Anonymous	EP026C: Chemical Oxygen Demand	----	10 mg/L	100	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5529099)										
HK2400778-001	WM1	EG032: Calcium	7440-70-2	2000 µg/L	97.7	----	75.0	125	----	----
		EG032: Iron	7439-89-6	2000 µg/L	110	----	75.0	125	----	----
		EG032: Magnesium	7439-95-4	2000 µg/L	107	----	75.0	125	----	----
		EG032: Potassium	7440-09-7	2000 µg/L	96.7	----	75.0	125	----	----
		EG032: Sodium	7440-23-5	2000 µg/L	# Not Determined	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5529100)										
HK2400778-001	WM1	EG020: Cadmium	7440-43-9	5 µg/L	107	----	75.0	125	----	----
		EG020: Copper	7440-50-8	50 µg/L	97.0	----	75.0	125	----	----
		EG020: Lead	7439-92-1	50 µg/L	98.8	----	75.0	125	----	----
		EG020: Manganese	7439-96-5	50 µg/L	104	----	75.0	125	----	----

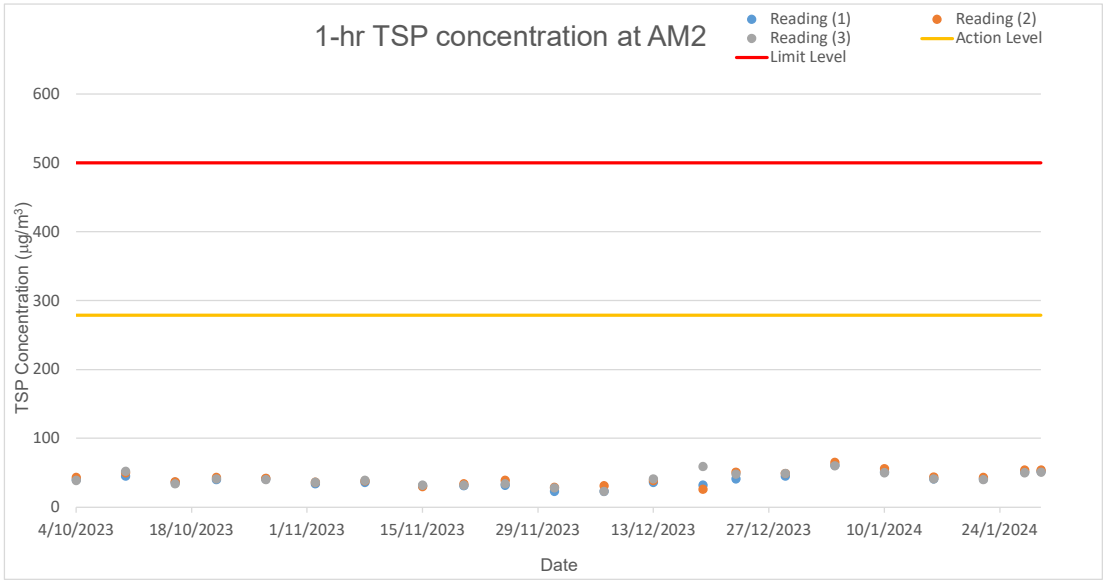
Matrix: **WATER**

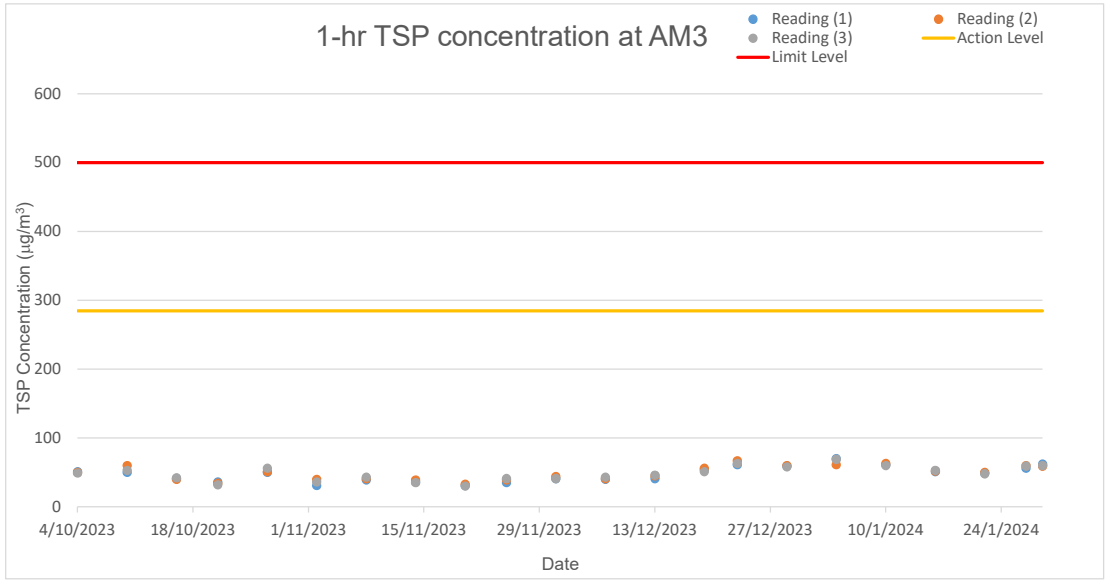
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations - Total (QC Lot: 5529100) - Continued										
HK2400778-001	WM1	**EG020: Nickel**	7440-02-0	50 µg/L	92.1	----	75.0	125	----	----
		EG020: Zinc	7440-66-6	50 µg/L	99.2	----	75.0	125	----	----

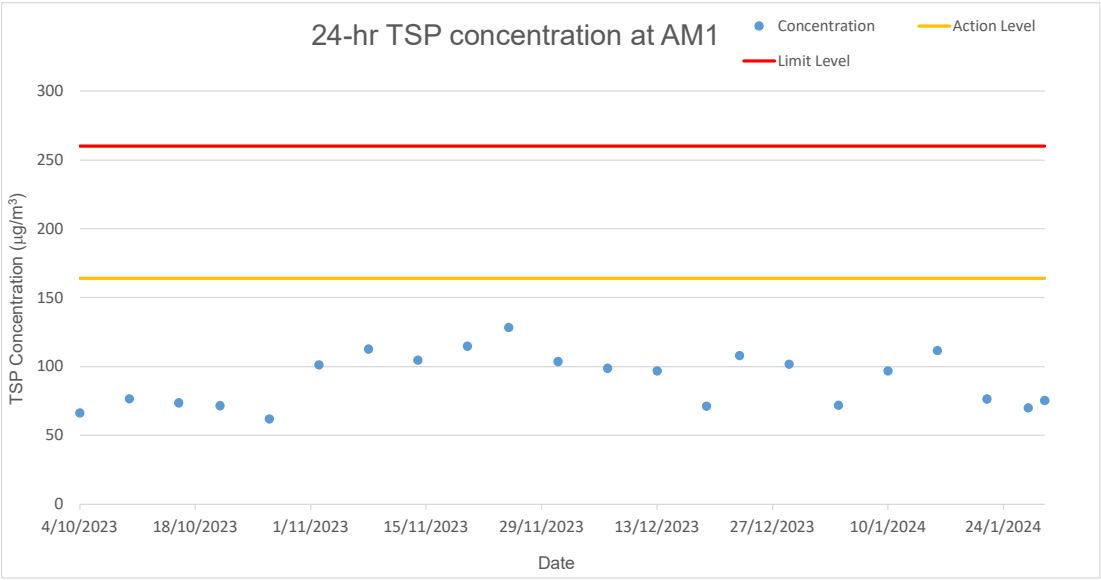
Appendix G Graphical Presentations

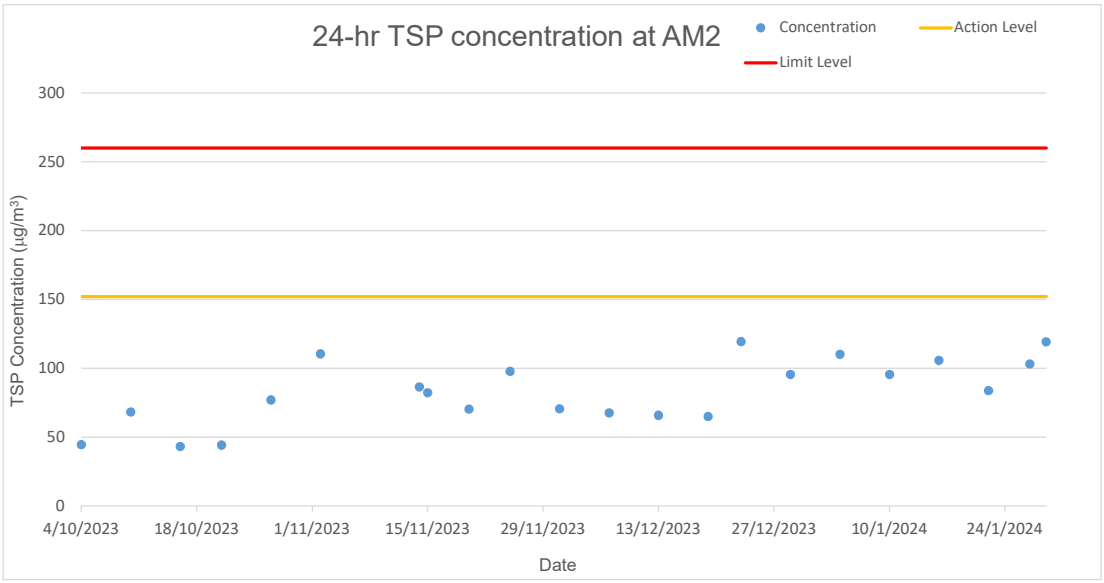
Air Quality

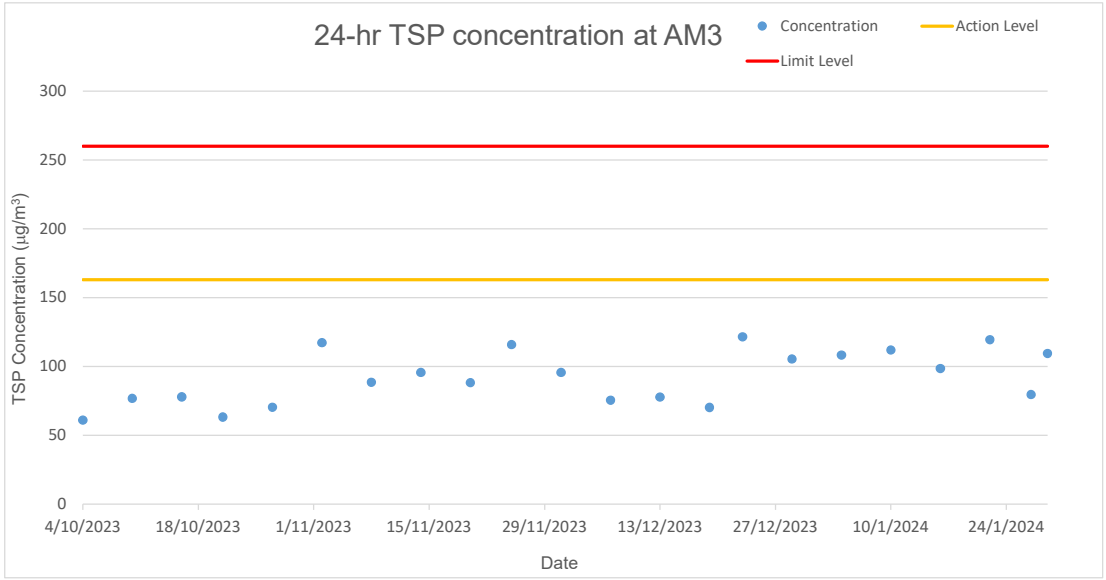

1-hr TSP concentration at AM1
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
4/10/2023
18/10/2023
1/11/2023
15/11/2023
29/11/2023
13/12/2023
27/12/2023
10/1/2024
24/1/2024
Date


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)
4/10/2023
18/10/2023
1/11/2023
15/11/2023
29/11/2023
13/12/2023
27/12/2023
10/1/2024
24/1/2024
Date

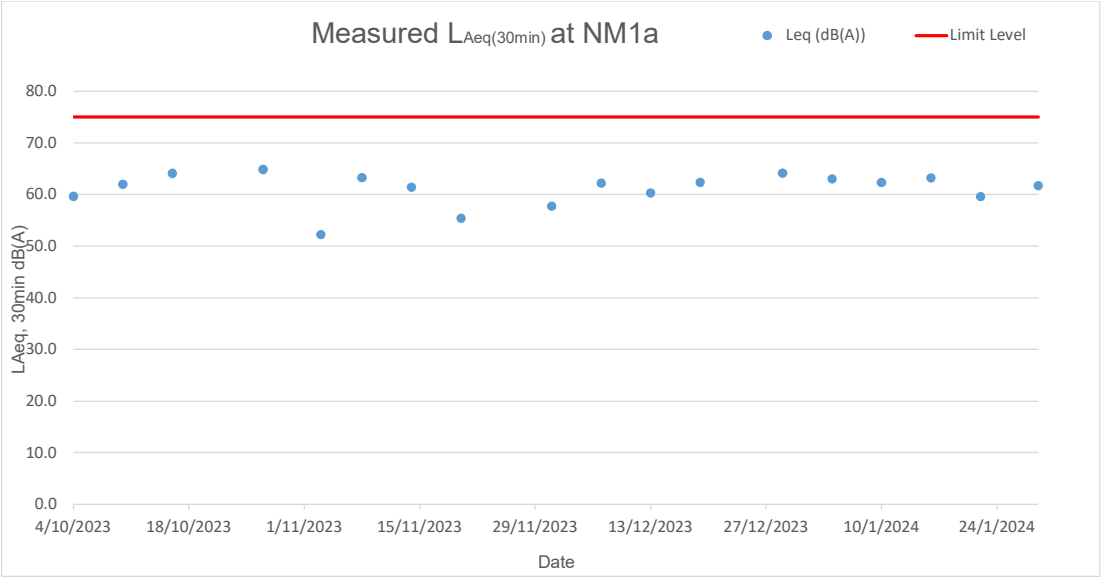

1-hr TSP concentration at AM3
Reading (1)
Reading (2)
Reading (3)
Action Level
Limit Level
600
500
400
300
200
100
0
TSP Concentration (µg/m³)
4/10/2023
18/10/2023
1/11/2023
15/11/2023
29/11/2023
13/12/2023
27/12/2023
10/1/2024
24/1/2024
Date

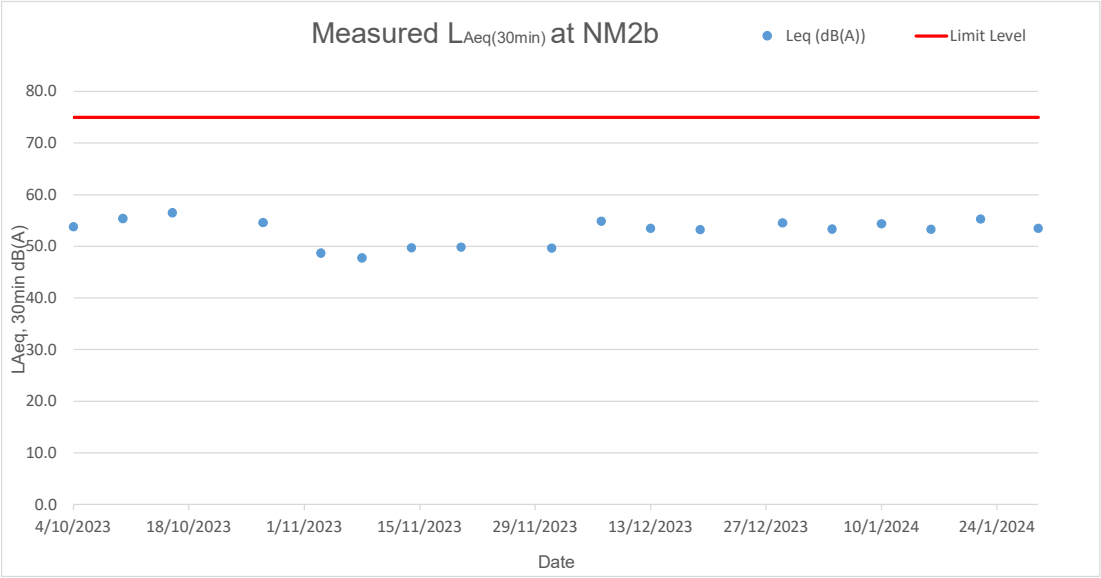

24-hr TSP concentration at AM1
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
300
250
200
150
100
50
0
4/10/2023
18/10/2023
1/11/2023
15/11/2023
29/11/2023
13/12/2023
27/12/2023
10/1/2024
24/1/2024
Date


24-hr TSP concentration at AM2
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
300
250
200
150
100
50
0
4/10/2023
18/10/2023
1/11/2023
15/11/2023
29/11/2023
13/12/2023
27/12/2023
10/1/2024
24/1/2024
Date


24-hr TSP concentration at AM3
Concentration
Action Level
Limit Level
TSP Concentration (μg/m³)
300
250
200
150
100
50
0
4/10/2023
18/10/2023
1/11/2023
15/11/2023
29/11/2023
13/12/2023
27/12/2023
10/1/2024
24/1/2024
Date

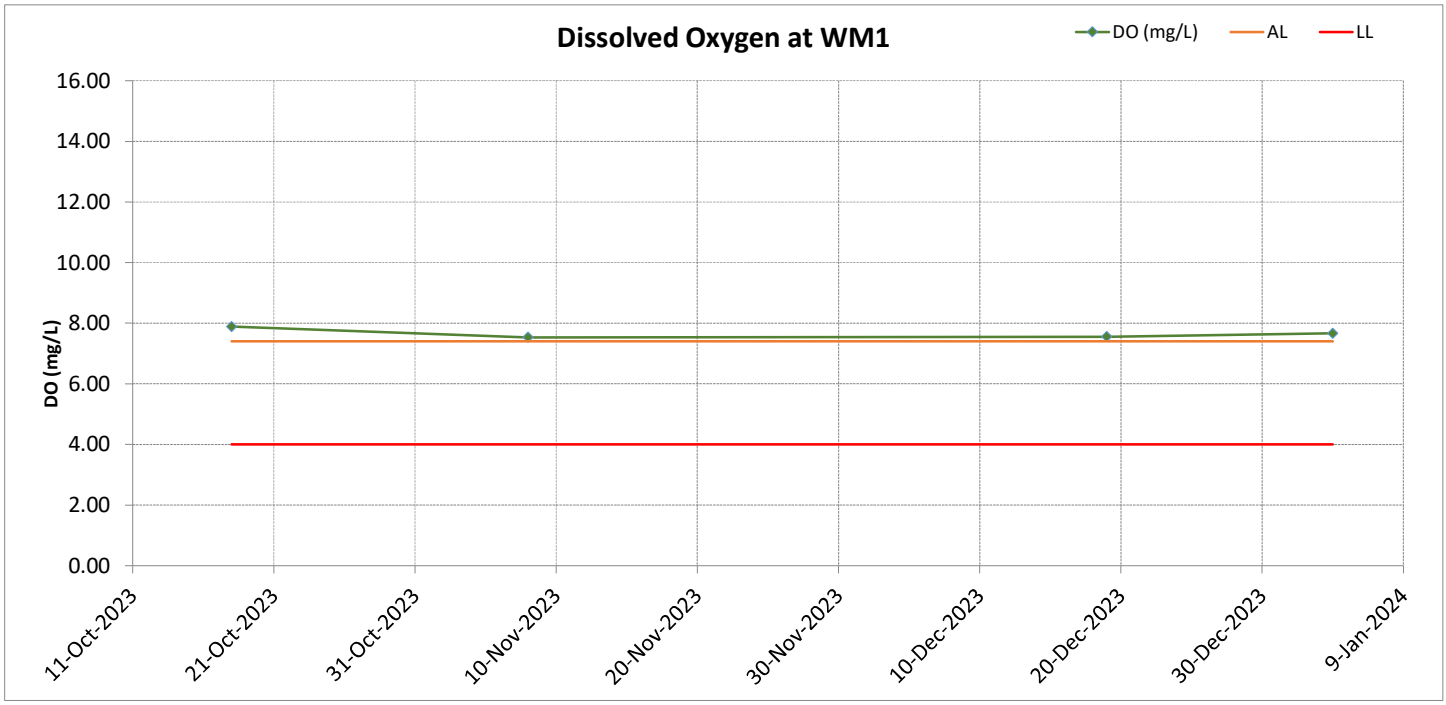
Noise

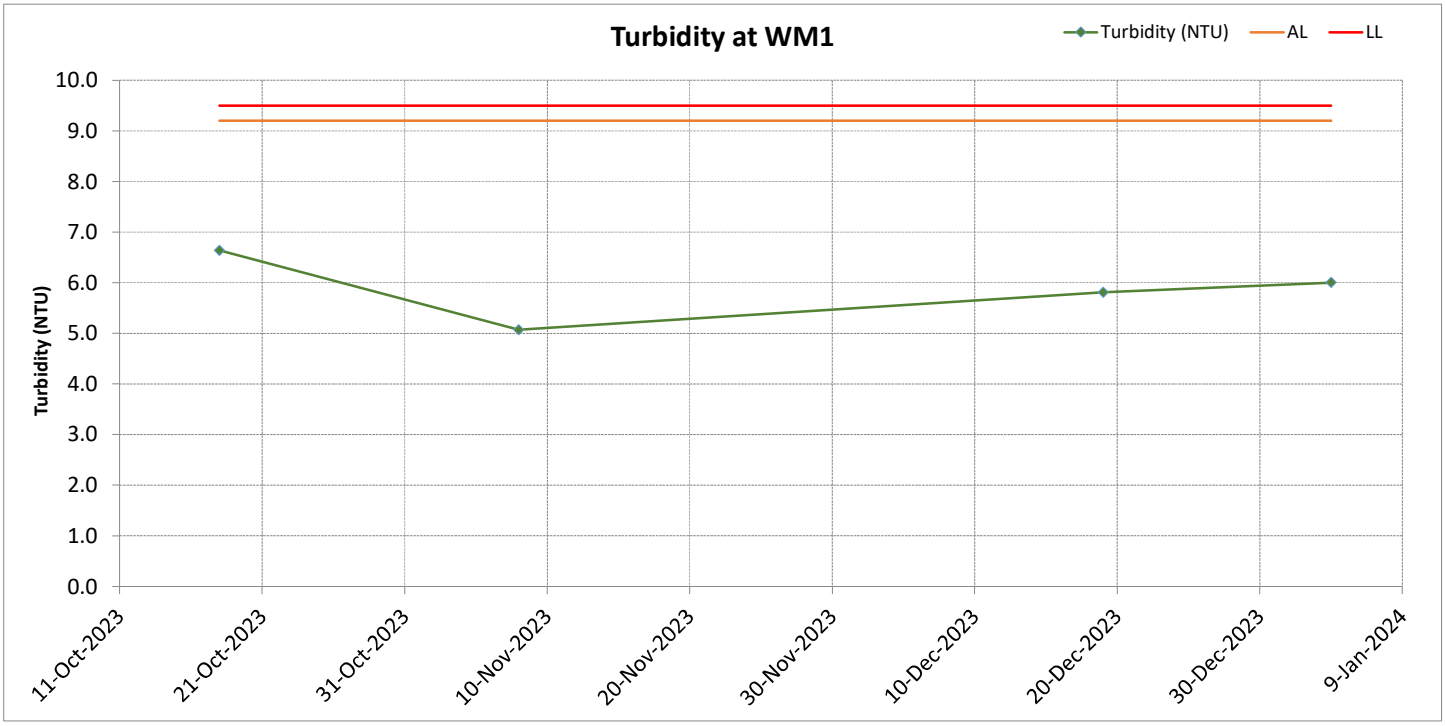

Measured LAeq(30min) at NM1a
Leq (dB(A))
Limit Level
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
LAeq, 30min dB(A)
4/10/2023
18/10/2023
1/11/2023
15/11/2023
29/11/2023
13/12/2023
27/12/2023
10/1/2024
24/1/2024
Date


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)
4/10/2023
18/10/2023
1/11/2023
15/11/2023
29/11/2023
13/12/2023
27/12/2023
10/1/2024
24/1/2024
Date

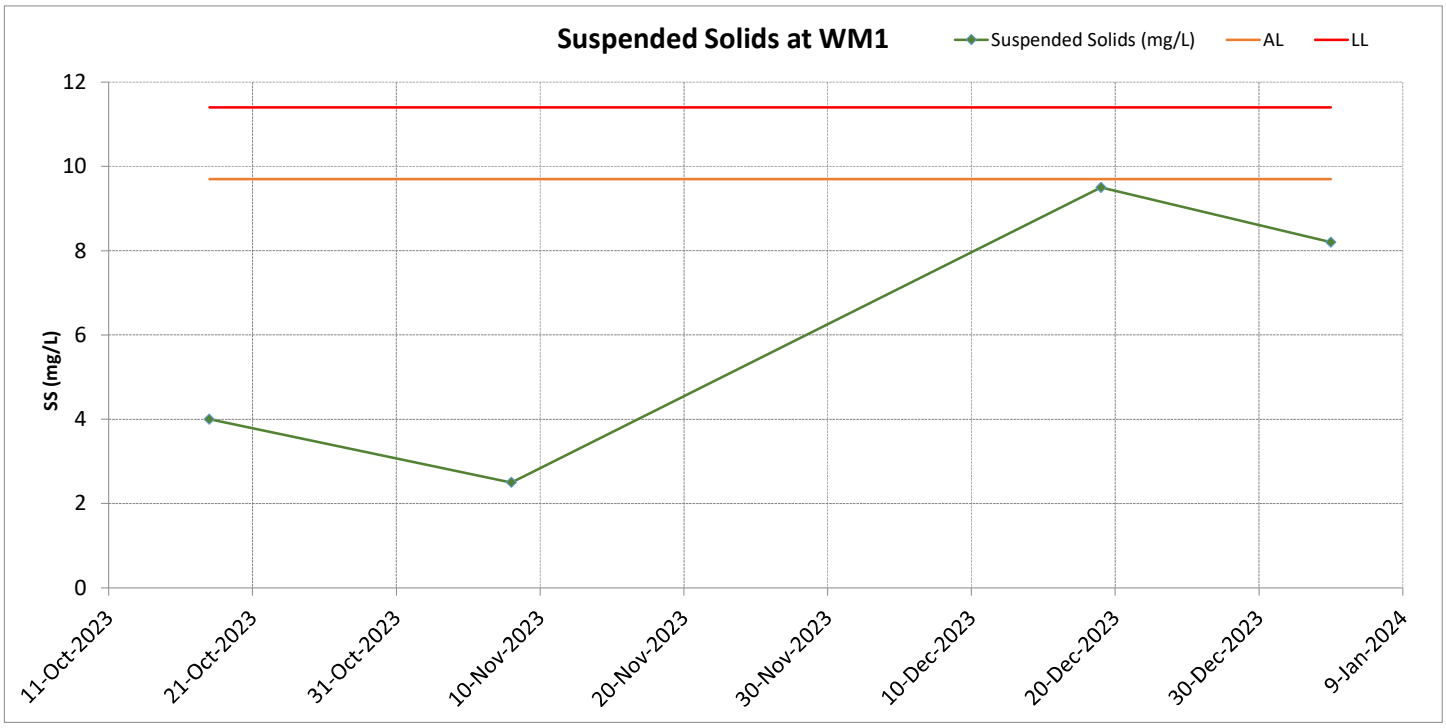
Water Quality

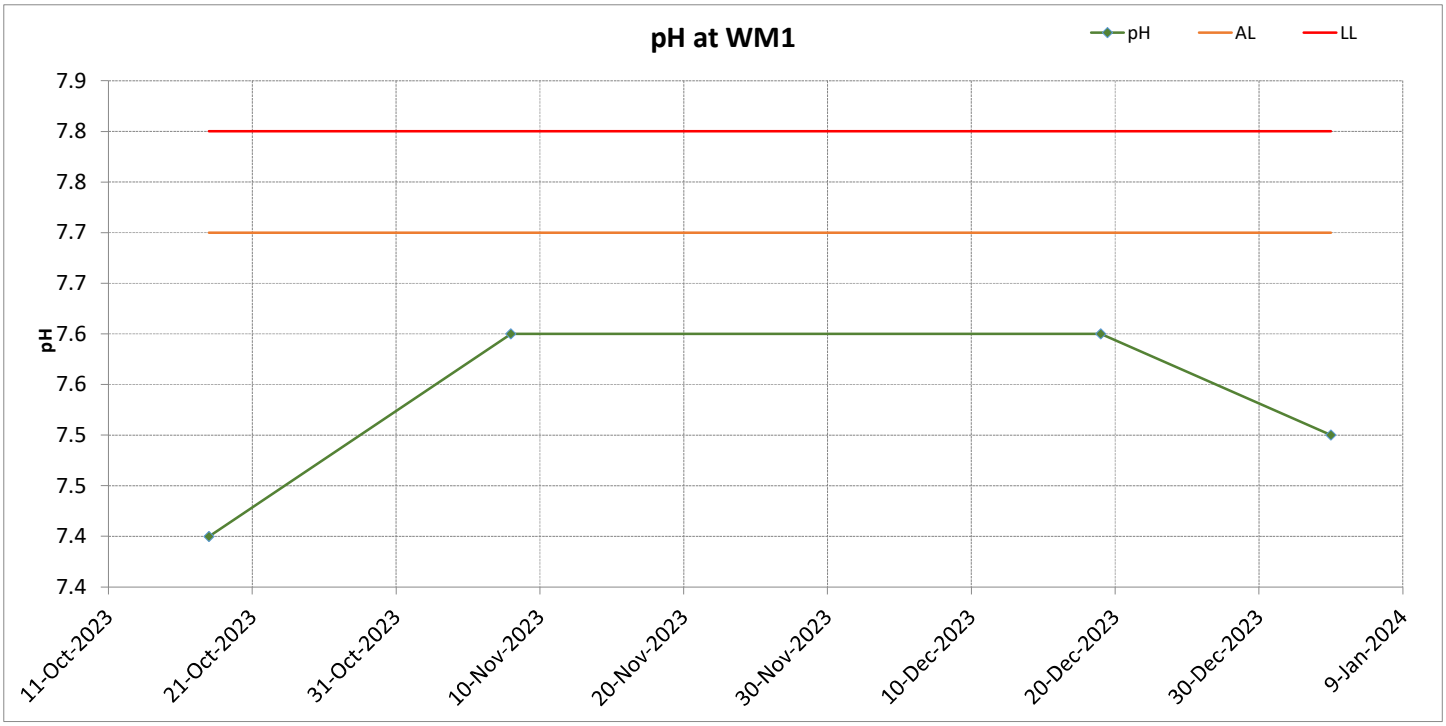
Surface Water Monitoring Results at WM1



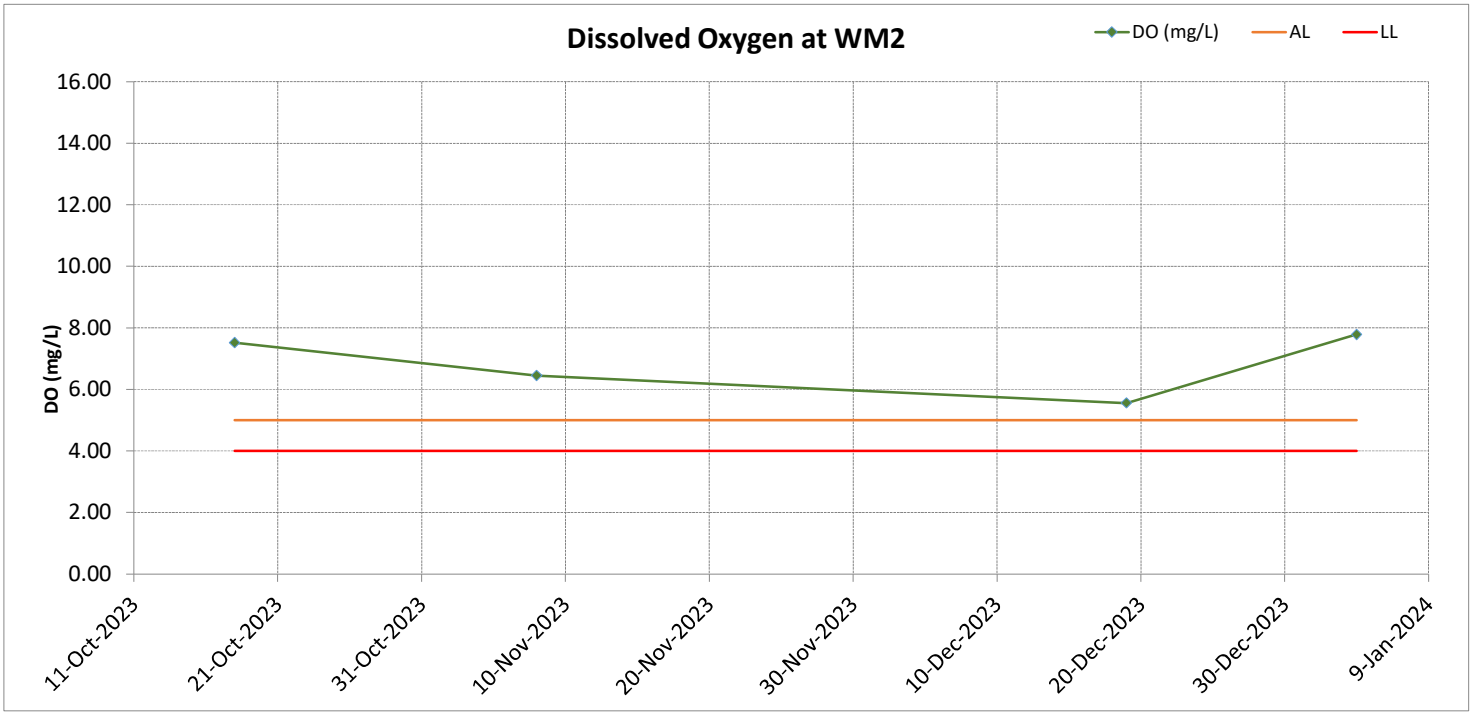


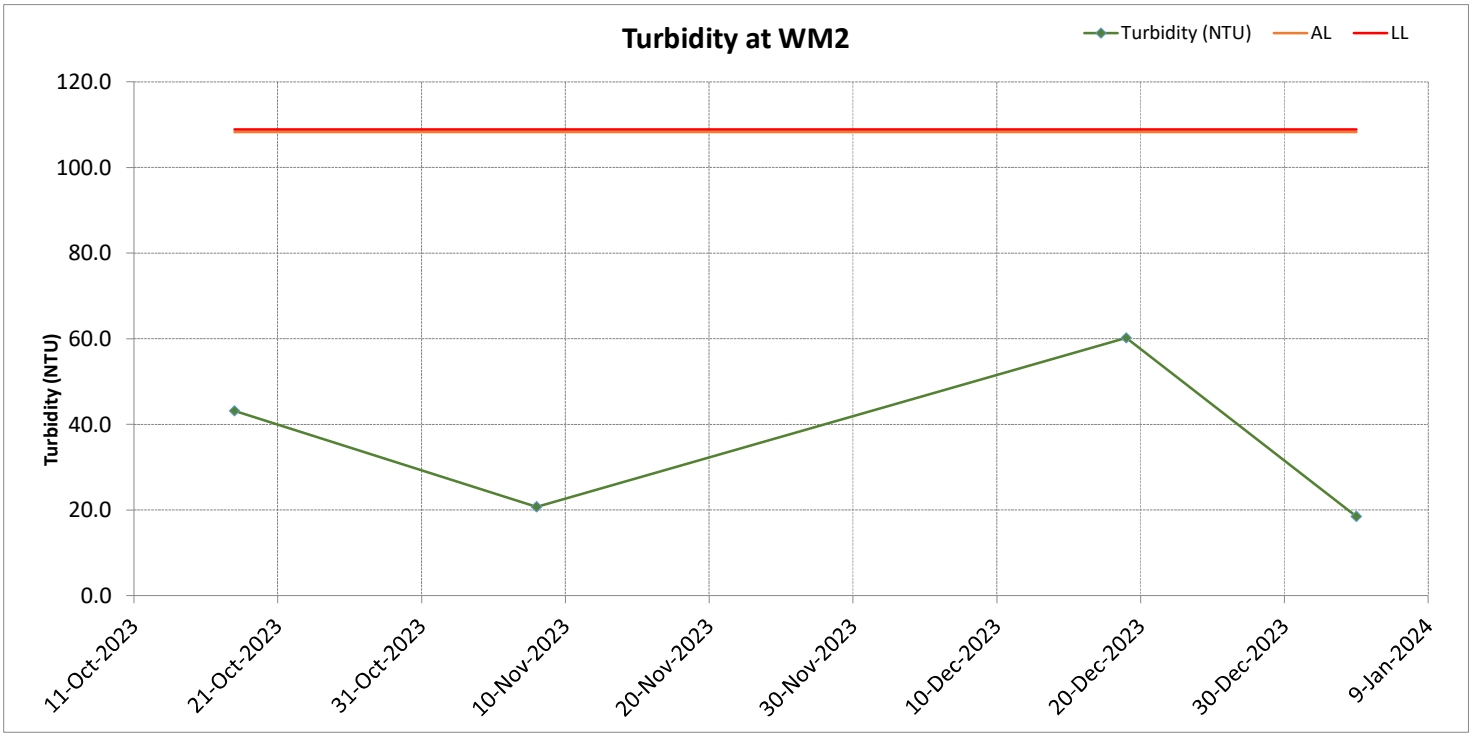
Surface Water Monitoring Results at WM1



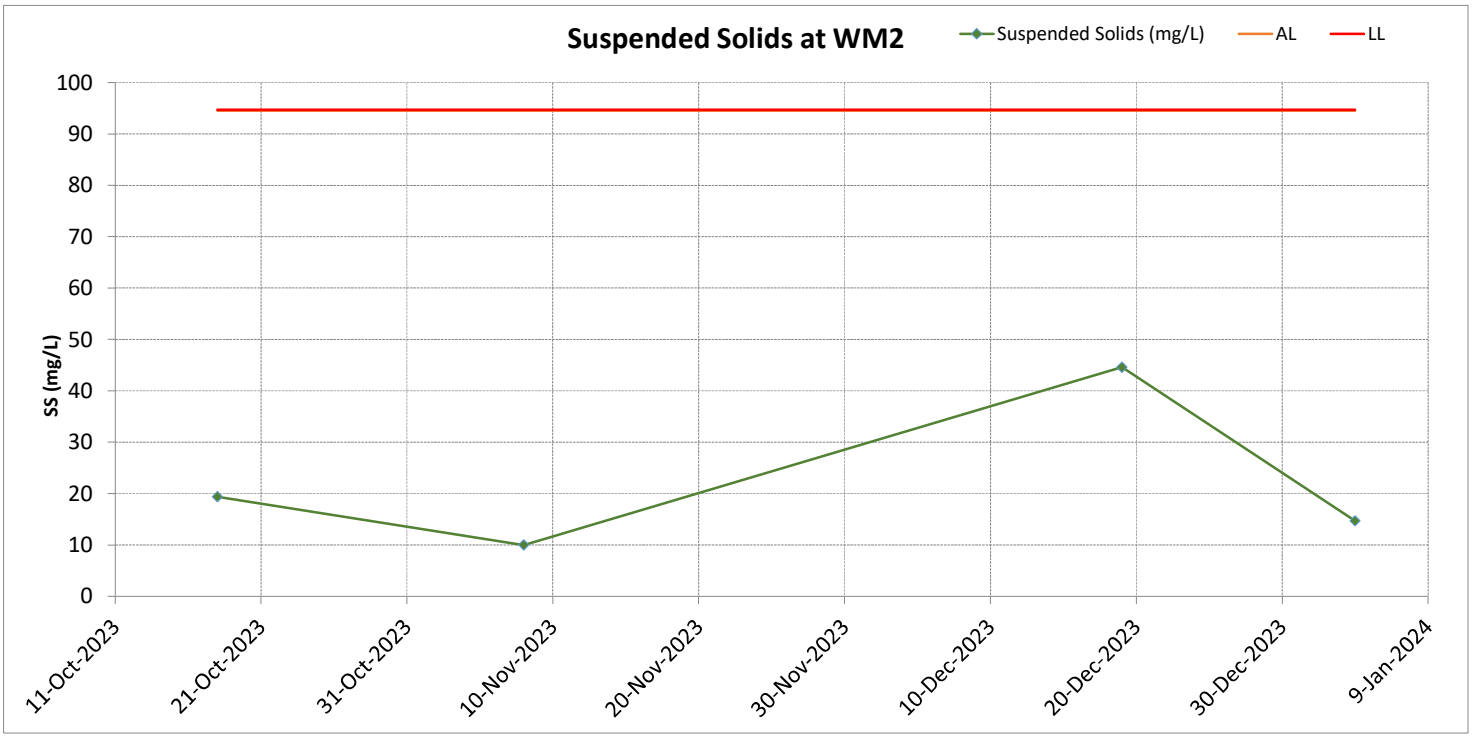


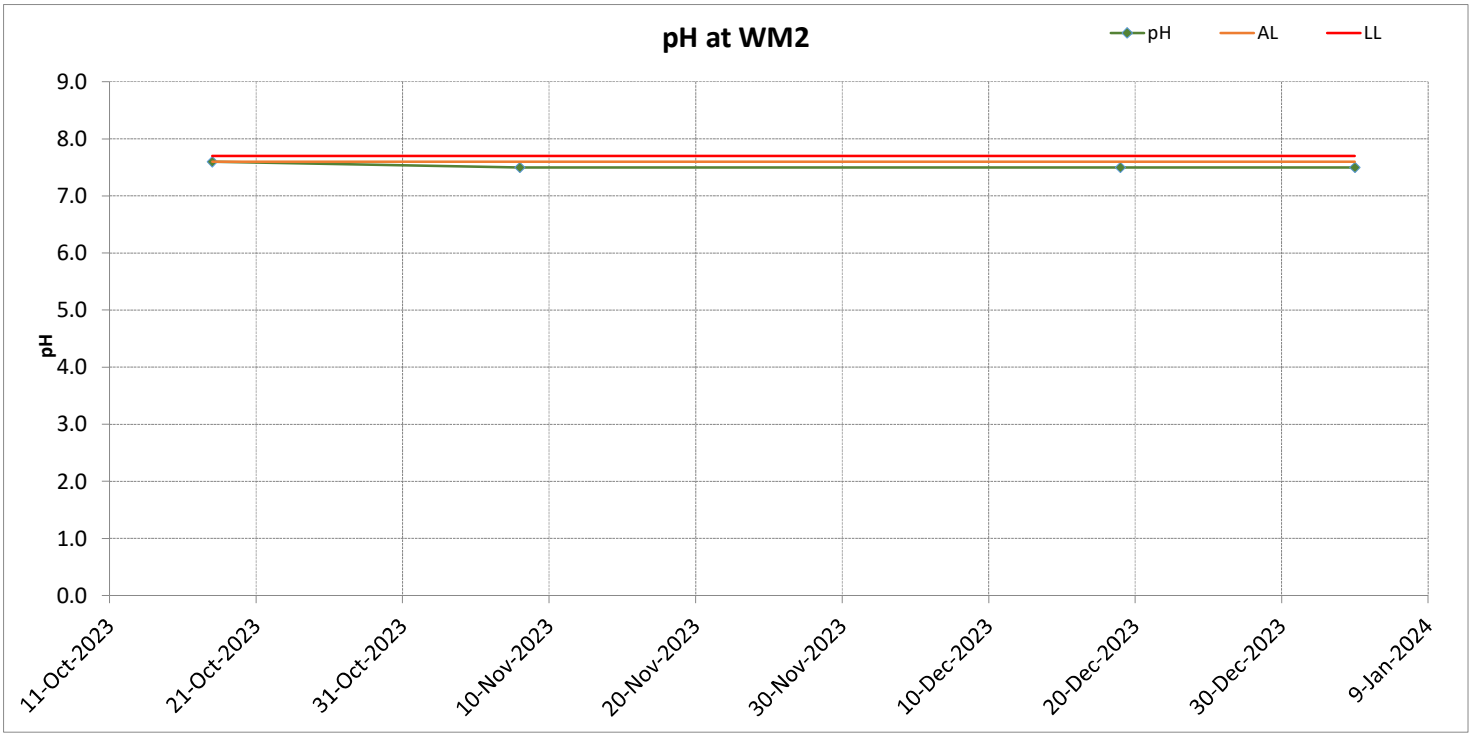
Surface Water Monitoring Results at WM2





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)
20240101_0003	2.4	40
20240101_0013	1.7	10
20240101_0023	0.2	342
20240101_0033	1.2	132
20240101_0043	0.2	86
20240101_0053	0.1	197
20240101_0103	7.7	111
20240101_0113	0.2	334
20240101_0123	0.1	333
20240101_0133	2.9	336
20240101_0143	3	45
20240101_0153	1.5	348
20240101_0203	0.1	314
20240101_0213	0.6	7
20240101_0223	0.2	138
20240101_0233	1.9	315
20240101_0243	0.1	8
20240101_0253	0.1	26
20240101_0303	0.1	72
20240101_0313	0.1	17
20240101_0323	1	17
20240101_0333	0.1	319
20240101_0343	0.1	53
20240101_0353	0.1	274
20240101_0403	0.1	78
20240101_0413	0.1	228
20240101_0423	0.1	71
20240101_0433	0.6	96
20240101_0443	0.3	54
20240101_0453	0.1	54
20240101_0503	0.1	64
20240101_0513	0.1	310
20240101_0523	0.2	26
20240101_0533	4.9	0
20240101_0543	0.1	108
20240101_0553	0.2	348
20240101_0603	1.6	355
20240101_0613	1	31
20240101_0623	0.1	101
20240101_0633	0.1	103
20240101_0643	0.1	110
20240101_0653	0.1	352
20240101_0703	0.1	33
20240101_0713	0.1	223
20240101_0723	0.1	76
20240101_0733	0.4	86
20240101_0743	0.1	135
20240101_0753	0.1	155
20240101_0803	0.8	150
20240101_0813	0.2	0
20240101_0823	0.1	330
20240101_0833	0.1	177
20240101_0843	0.1	346
20240101_0853	0.1	107
20240101_0903	0.2	47
20240101_0913	3.5	104
20240101_0923	0.3	105
20240101_0933	0.1	156
20240101_0943	0.3	163
20240101_0953	0.2	102
20240101_1003	0.1	142
20240101_1013	0.1	286
20240101_1023	1.1	153
20240101_1033	2.8	147
20240101_1043	1.5	109
20240101_1053	0.1	29
20240101_1103	1.1	5
20240101_1113	0.1	93
20240101_1123	0.1	46
20240101_1133	1.6	188
20240101_1143	0.4	124
20240101_1153	2.6	113

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240101_1203	0.8	118
20240101_1213	0.1	23
20240101_1223	1.5	180
20240101_1233	2.5	104
20240101_1243	0.8	289
20240101_1253	1.2	337
20240101_1303	4.2	125
20240101_1313	1.2	348
20240101_1323	0.1	122
20240101_1333	2.7	91
20240101_1343	0.8	114
20240101_1353	1.5	129
20240101_1403	0.1	17
20240101_1413	3.7	151
20240101_1423	0.6	123
20240101_1433	0.5	169
20240101_1443	0.1	204
20240101_1453	1.9	172
20240101_1503	4	187
20240101_1513	2.2	108
20240101_1523	0.3	191
20240101_1533	0.1	17
20240101_1543	1.8	53
20240101_1553	0.5	53
20240101_1603	1.6	85
20240101_1613	0.6	108
20240101_1623	2.9	163
20240101_1633	1.8	134
20240101_1643	0.6	112
20240101_1653	0.3	90
20240101_1703	1.5	38
20240101_1713	0.7	80
20240101_1723	0.1	136
20240101_1733	0.1	193
20240101_1743	1.9	162
20240101_1753	2.5	137
20240101_1803	1	78
20240101_1813	3.5	152
20240101_1823	0.1	242
20240101_1833	0.4	183
20240101_1843	0.1	142
20240101_1853	0.1	330
20240101_1903	0.1	33
20240101_1913	0.2	311
20240101_1923	3.2	5
20240101_1933	0.8	129
20240101_1943	0.1	30
20240101_1953	0.1	352
20240101_2003	0.1	80
20240101_2013	1.6	348
20240101_2023	0.1	261
20240101_2033	0.2	272
20240101_2043	0.1	77
20240101_2053	0.1	133
20240101_2103	0.1	339
20240101_2113	0.1	355
20240101_2123	0.8	49
20240101_2133	0.3	351
20240101_2143	0.1	319
20240101_2153	0.1	46
20240101_2203	0.5	122
20240101_2213	0.3	10
20240101_2223	0.1	281
20240101_2233	0.1	81
20240101_2243	1.5	188
20240101_2253	0.4	144
20240101_2303	1.5	343
20240101_2313	0.1	132
20240101_2323	0.3	301
20240101_2333	0.5	55
20240101_2343	0.1	37
20240101_2353	0.2	347

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240102_0003	0.6	22
20240102_0013	0.4	46
20240102_0023	0.1	8
20240102_0033	0.3	348
20240102_0043	0.1	300
20240102_0053	0.1	29
20240102_0103	0.1	208
20240102_0113	0.4	339
20240102_0123	0.8	349
20240102_0133	0.1	323
20240102_0143	0.2	2
20240102_0153	0.4	290
20240102_0203	0.7	331
20240102_0213	0.5	0
20240102_0223	0.5	253
20240102_0233	0.2	79
20240102_0243	0.3	28
20240102_0253	0.2	6
20240102_0303	0.2	10
20240102_0313	0.3	44
20240102_0323	0.2	352
20240102_0333	1.4	13
20240102_0343	0.7	117
20240102_0353	0.1	63
20240102_0403	2.1	106
20240102_0413	0.1	306
20240102_0423	0.1	3
20240102_0433	1.5	174
20240102_0443	0.1	186
20240102_0453	0.3	303
20240102_0503	0.2	57
20240102_0513	0.3	82
20240102_0523	0.2	344
20240102_0533	0.4	318
20240102_0543	0.1	344
20240102_0553	0.1	166
20240102_0603	0.1	185
20240102_0613	0.1	20
20240102_0623	0.1	113
20240102_0633	0.5	124
20240102_0643	0.1	113
20240102_0653	0.1	30
20240102_0703	1.8	150
20240102_0713	0.1	122
20240102_0723	0.1	7
20240102_0733	0.1	330
20240102_0743	0.1	286
20240102_0753	0.2	30
20240102_0803	0.1	60
20240102_0813	0.1	330
20240102_0823	0.9	333
20240102_0833	0.5	255
20240102_0843	0.2	50
20240102_0853	0.3	66
20240102_0903	0.1	31
20240102_0913	0.1	44
20240102_0923	0.1	344
20240102_0933	0.2	51
20240102_0943	0.1	284
20240102_0953	0.1	308
20240102_1003	0.8	100
20240102_1013	0.1	11
20240102_1023	0.1	13
20240102_1033	0.2	184
20240102_1043	0.7	62
20240102_1053	1.3	17
20240102_1103	0.1	310
20240102_1113	0.2	190
20240102_1123	0.4	76
20240102_1133	1.2	6
20240102_1143	0.1	185
20240102_1153	0.1	215

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240102_1203	0.1	86
20240102_1213	0.1	302
20240102_1223	1.3	56
20240102_1233	2	17
20240102_1243	1	64
20240102_1253	0.1	47
20240102_1303	0.1	71
20240102_1313	0.1	303
20240102_1323	0.8	139
20240102_1333	0.1	3
20240102_1343	2.6	12
20240102_1353	0.4	137
20240102_1403	1	150
20240102_1413	0.1	81
20240102_1423	1.3	173
20240102_1433	0.7	162
20240102_1443	2.4	84
20240102_1453	0.1	331
20240102_1503	0.7	355
20240102_1513	3.2	91
20240102_1523	0.4	146
20240102_1533	0.1	189
20240102_1543	0.1	266
20240102_1553	1.6	62
20240102_1603	0.1	85
20240102_1613	0.1	160
20240102_1623	0.2	214
20240102_1633	0.4	86
20240102_1643	0.1	161
20240102_1653	0.1	351
20240102_1703	1.6	96
20240102_1713	0.1	64
20240102_1723	0.1	95
20240102_1733	0.1	317
20240102_1743	0.5	58
20240102_1753	0.1	101
20240102_1803	0.1	38
20240102_1813	0.1	81
20240102_1823	0.2	106
20240102_1833	0.1	81
20240102_1843	2.7	49
20240102_1853	0.1	71
20240102_1903	1.1	108
20240102_1913	0.1	100
20240102_1923	0.2	66
20240102_1933	0.3	97
20240102_1943	0.2	46
20240102_1953	0.1	282
20240102_2003	0.1	131
20240102_2013	0.1	329
20240102_2023	0.1	302
20240102_2033	0.1	343
20240102_2043	0.1	9
20240102_2053	0.1	5
20240102_2103	0.1	48
20240102_2113	0.1	76
20240102_2123	0.1	70
20240102_2133	0.1	72
20240102_2143	0.1	44
20240102_2153	0.1	50
20240102_2203	0.1	63
20240102_2213	0.1	56
20240102_2223	0.1	107
20240102_2233	0.1	22
20240102_2243	0.1	54
20240102_2253	0.1	50
20240102_2303	0.1	139
20240102_2313	0.1	66
20240102_2323	0.1	29
20240102_2333	0.1	64
20240102_2343	0.1	68
20240102_2353	0.1	61

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240103_0003	0.1	71
20240103_0013	0.1	71
20240103_0023	0.1	116
20240103_0033	0.1	20
20240103_0043	0.1	77
20240103_0053	0.1	55
20240103_0103	0.1	42
20240103_0113	0.1	81
20240103_0123	0.1	139
20240103_0133	0.1	10
20240103_0143	0.1	219
20240103_0153	0.1	89
20240103_0203	0.1	325
20240103_0213	0.1	221
20240103_0223	0.1	194
20240103_0233	0.1	160
20240103_0243	0.1	259
20240103_0253	0.1	308
20240103_0303	0.1	110
20240103_0313	0.1	139
20240103_0323	0.1	160
20240103_0333	0.1	332
20240103_0343	0.1	144
20240103_0353	0.1	90
20240103_0403	0.1	340
20240103_0413	0.1	265
20240103_0423	0.1	18
20240103_0433	0.1	113
20240103_0443	0.1	58
20240103_0453	0.1	0
20240103_0503	0.1	204
20240103_0513	0.1	238
20240103_0523	0.1	83
20240103_0533	0.1	117
20240103_0543	0.1	62
20240103_0553	0.1	317
20240103_0603	0.1	319
20240103_0613	0.1	322
20240103_0623	0.1	355
20240103_0633	0.3	9
20240103_0643	0.2	334
20240103_0653	0.1	303
20240103_0703	0.1	80
20240103_0713	0.4	20
20240103_0723	0.1	35
20240103_0733	0.1	159
20240103_0743	0.1	6
20240103_0753	0.6	26
20240103_0803	0.1	332
20240103_0813	0.5	57
20240103_0823	0.1	167
20240103_0833	0.2	314
20240103_0843	0.1	291
20240103_0853	0.1	76
20240103_0903	0.1	78
20240103_0913	0.1	159
20240103_0923	0.2	215
20240103_0933	0.3	161
20240103_0943	1.3	8
20240103_0953	0.1	250
20240103_1003	0.1	239
20240103_1013	1.3	308
20240103_1023	0.2	22
20240103_1033	0.9	125
20240103_1043	2.3	321
20240103_1053	0.2	3
20240103_1103	0.4	327
20240103_1113	0.7	16
20240103_1123	0.1	53
20240103_1133	0.8	79
20240103_1143	1	96
20240103_1153	2.2	91

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240103_1203	3.1	70
20240103_1213	0.1	349
20240103_1223	0.3	184
20240103_1233	3.3	48
20240103_1243	1	45
20240103_1253	0.2	349
20240103_1303	6.3	248
20240103_1313	0.3	133
20240103_1323	2.4	81
20240103_1333	3.1	46
20240103_1343	1.5	71
20240103_1353	1.1	73
20240103_1403	2.3	95
20240103_1413	0.8	49
20240103_1423	0.1	105
20240103_1433	2.5	9
20240103_1443	1.4	152
20240103_1453	0.6	252
20240103_1503	0.1	242
20240103_1513	0.5	80
20240103_1523	1.7	115
20240103_1533	1.1	6
20240103_1543	0.4	261
20240103_1553	5.4	250
20240103_1603	0.2	335
20240103_1613	0.1	130
20240103_1623	0.4	55
20240103_1633	0.3	91
20240103_1643	0.5	6
20240103_1653	0.5	59
20240103_1703	0.2	19
20240103_1713	0.2	57
20240103_1723	0.7	54
20240103_1733	0.2	44
20240103_1743	0.1	99
20240103_1753	1.3	15
20240103_1803	0.3	19
20240103_1813	0.1	348
20240103_1823	0.1	89
20240103_1833	0.1	52
20240103_1843	0.8	309
20240103_1853	0.5	41
20240103_1903	3.9	309
20240103_1913	0.1	49
20240103_1923	0.1	332
20240103_1933	0.5	7
20240103_1943	0.2	331
20240103_1953	0.1	47
20240103_2003	0.1	32
20240103_2013	0.1	350
20240103_2023	0.1	91
20240103_2033	0.4	289
20240103_2043	2.3	335
20240103_2053	0.1	348
20240103_2103	0.1	102
20240103_2113	0.1	349
20240103_2123	0.1	111
20240103_2133	0.1	99
20240103_2143	0.1	2
20240103_2153	0.1	93
20240103_2203	0.6	334
20240103_2213	0.1	272
20240103_2223	0.1	313
20240103_2233	0.1	98
20240103_2243	0.2	265
20240103_2253	0.1	348
20240103_2303	0.1	323
20240103_2313	0.1	324
20240103_2323	0.1	134
20240103_2333	0.1	325
20240103_2343	0.1	143
20240103_2353	0.1	353

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240104_0003	0.1	81
20240104_0013	0.1	94
20240104_0023	0.1	325
20240104_0033	0.1	5
20240104_0043	0.1	153
20240104_0053	0.1	95
20240104_0103	0.1	74
20240104_0113	0.1	98
20240104_0123	0.1	156
20240104_0133	0.1	101
20240104_0143	0.1	98
20240104_0153	0.1	68
20240104_0203	0.1	110
20240104_0213	0.1	101
20240104_0223	0.1	64
20240104_0233	0.1	68
20240104_0243	0.1	77
20240104_0253	0.1	41
20240104_0303	0.1	75
20240104_0313	0.1	168
20240104_0323	0.1	172
20240104_0333	0.1	82
20240104_0343	0.1	48
20240104_0353	0.1	71
20240104_0403	0.1	117
20240104_0413	0.1	84
20240104_0423	0.1	86
20240104_0433	0.1	63
20240104_0443	0.1	65
20240104_0453	0.1	53
20240104_0503	0.1	95
20240104_0513	0.1	69
20240104_0523	0.1	85
20240104_0533	0.1	29
20240104_0543	0.1	123
20240104_0553	0.1	75
20240104_0603	0.1	71
20240104_0613	0.1	89
20240104_0623	0.1	101
20240104_0633	0.1	91
20240104_0643	0.1	65
20240104_0653	0.1	128
20240104_0703	0.1	113
20240104_0713	0.1	114
20240104_0723	0.1	134
20240104_0733	0.1	148
20240104_0743	0.1	140
20240104_0753	0.1	142
20240104_0803	0.1	16
20240104_0813	0.1	126
20240104_0823	0.1	151
20240104_0833	0.1	144
20240104_0843	0.1	139
20240104_0853	0.1	197
20240104_0903	0.2	142
20240104_0913	0.2	119
20240104_0923	0.1	96
20240104_0933	0.1	100
20240104_0943	0.1	222
20240104_0953	0.1	105
20240104_1003	0.1	350
20240104_1013	0.2	348
20240104_1023	0.1	351
20240104_1033	0.4	193
20240104_1043	1	38
20240104_1053	1.3	167
20240104_1103	1.1	4
20240104_1113	0.8	127
20240104_1123	0.2	129
20240104_1133	2.6	2
20240104_1143	0.4	18
20240104_1153	0.3	17

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240104_1203	3.7	63
20240104_1213	0.1	56
20240104_1223	1.2	71
20240104_1233	0.1	135
20240104_1243	0.1	73
20240104_1253	0.3	330
20240104_1303	0.4	187
20240104_1313	0.1	217
20240104_1323	0.1	69
20240104_1333	0.1	316
20240104_1343	1.1	147
20240104_1353	0.1	169
20240104_1403	1	198
20240104_1413	1.1	147
20240104_1423	0.1	343
20240104_1433	0.1	16
20240104_1443	0.3	128
20240104_1453	0.1	338
20240104_1503	2.1	221
20240104_1513	0.8	219
20240104_1523	0.3	46
20240104_1533	0.1	184
20240104_1543	0.1	326
20240104_1553	0.4	52
20240104_1603	0.1	85
20240104_1613	0.6	150
20240104_1623	1.8	88
20240104_1633	2.6	89
20240104_1643	0.1	164
20240104_1653	0.1	177
20240104_1703	0.4	127
20240104_1713	0.3	96
20240104_1723	0.2	76
20240104_1733	0.2	111
20240104_1743	0.1	104
20240104_1753	0.3	125
20240104_1803	0.1	74
20240104_1813	0.1	15
20240104_1823	0.3	47
20240104_1833	0.4	43
20240104_1843	0.1	307
20240104_1853	0.4	133
20240104_1903	0.3	29
20240104_1913	0.1	107
20240104_1923	0.1	99
20240104_1933	0.1	103
20240104_1943	0.1	142
20240104_1953	0.1	100
20240104_2003	0.1	62
20240104_2013	0.1	186
20240104_2023	0.1	96
20240104_2033	0.1	166
20240104_2043	0.1	106
20240104_2053	0.1	100
20240104_2103	0.1	148
20240104_2113	0.1	89
20240104_2123	0.1	62
20240104_2133	0.1	313
20240104_2143	0.1	3
20240104_2153	0.1	332
20240104_2203	0.1	98
20240104_2213	0.1	2
20240104_2223	0.4	177
20240104_2233	0.1	305
20240104_2243	1.2	327
20240104_2253	0.2	104
20240104_2303	0.3	291
20240104_2313	0.3	6
20240104_2323	0.1	336
20240104_2333	0.1	283
20240104_2343	1.1	40
20240104_2353	0.1	78

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240105_0003	0.3	347
20240105_0013	0.6	307
20240105_0023	0.2	228
20240105_0033	0.1	83
20240105_0043	0.1	266
20240105_0053	0.1	119
20240105_0103	0.1	116
20240105_0113	0.1	126
20240105_0123	0.1	221
20240105_0133	0.1	269
20240105_0143	0.1	185
20240105_0153	0.1	205
20240105_0203	0.1	168
20240105_0213	0.1	162
20240105_0223	0.1	8
20240105_0233	0.1	115
20240105_0243	0.1	131
20240105_0253	0.1	56
20240105_0303	0.1	162
20240105_0313	0.1	322
20240105_0323	0.1	130
20240105_0333	0.1	331
20240105_0343	0.1	102
20240105_0353	0.1	81
20240105_0403	0.1	162
20240105_0413	0.1	261
20240105_0423	0.1	349
20240105_0433	0.1	119
20240105_0443	0.1	346
20240105_0453	0.1	172
20240105_0503	0.1	150
20240105_0513	0.1	290
20240105_0523	0.1	22
20240105_0533	0.1	179
20240105_0543	0.1	109
20240105_0553	0.1	36
20240105_0603	0.1	170
20240105_0613	0.1	127
20240105_0623	0.1	97
20240105_0633	0.1	42
20240105_0643	0.1	114
20240105_0653	0.1	301
20240105_0703	0.1	105
20240105_0713	0.1	258
20240105_0723	0.1	76
20240105_0733	0.1	110
20240105_0743	0.1	100
20240105_0753	0.1	230
20240105_0803	0.1	26
20240105_0813	0.1	116
20240105_0823	0.1	187
20240105_0833	0.1	106
20240105_0843	0.1	117
20240105_0853	0.1	300
20240105_0903	0.1	68
20240105_0913	0.1	133
20240105_0923	0.1	307
20240105_0933	0.1	188
20240105_0943	0.1	170
20240105_0953	0.1	198
20240105_1003	0.1	134
20240105_1013	0.1	184
20240105_1023	0.2	271
20240105_1033	0.1	73
20240105_1043	0.1	100
20240105_1053	0.8	155
20240105_1103	0.1	4
20240105_1113	0.1	117
20240105_1123	0.1	154
20240105_1133	0.1	164
20240105_1143	0.1	31
20240105_1153	0.1	108

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240105_1203	0.1	122
20240105_1213	0.3	165
20240105_1223	1.8	126
20240105_1233	1.6	242
20240105_1243	0.1	129
20240105_1253	0.1	253
20240105_1303	0.1	314
20240105_1313	0.1	110
20240105_1323	2.9	133
20240105_1333	0.5	79
20240105_1343	0.1	52
20240105_1353	0.1	40
20240105_1403	0.1	23
20240105_1413	1.2	97
20240105_1423	0.5	58
20240105_1433	0.2	91
20240105_1443	2.3	162
20240105_1453	0.3	121
20240105_1503	1.8	109
20240105_1513	1.7	131
20240105_1523	0.2	67
20240105_1533	0.3	112
20240105_1543	0.1	98
20240105_1553	0.5	94
20240105_1603	0.1	265
20240105_1613	2.1	137
20240105_1623	0.3	112
20240105_1633	0.5	124
20240105_1643	2.1	83
20240105_1653	0.1	100
20240105_1703	0.1	103
20240105_1713	0.4	1
20240105_1723	0.8	54
20240105_1733	0.1	30
20240105_1743	0.2	62
20240105_1753	0.1	64
20240105_1803	0.1	353
20240105_1813	0.5	55
20240105_1823	0.1	7
20240105_1833	0.1	170
20240105_1843	0.1	329
20240105_1853	0.1	301
20240105_1903	0.1	281
20240105_1913	0.1	80
20240105_1923	0.1	62
20240105_1933	0.1	45
20240105_1943	0.1	58
20240105_1953	0.1	307
20240105_2003	0.1	96
20240105_2013	0.1	61
20240105_2023	0.1	68
20240105_2033	0.1	87
20240105_2043	0.1	272
20240105_2053	0.1	3
20240105_2103	0.1	11
20240105_2113	0.1	27
20240105_2123	0.1	14
20240105_2133	0.1	161
20240105_2143	0.1	348
20240105_2153	0.1	345
20240105_2203	0.1	212
20240105_2213	0.1	91
20240105_2223	0.1	102
20240105_2233	0.1	78
20240105_2243	0.1	71
20240105_2253	0.1	58
20240105_2303	0.1	57
20240105_2313	0.1	41
20240105_2323	0.1	45
20240105_2333	0.1	66
20240105_2343	0.1	33
20240105_2353	0.1	63

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240106_0003	0.1	47
20240106_0013	0.1	50
20240106_0023	0.1	135
20240106_0033	0.1	91
20240106_0043	0.1	58
20240106_0053	0.1	85
20240106_0103	0.1	54
20240106_0113	0.1	64
20240106_0123	0.1	63
20240106_0133	0.1	104
20240106_0143	0.1	36
20240106_0153	0.1	33
20240106_0203	0.1	133
20240106_0213	0.1	170
20240106_0223	0.1	61
20240106_0233	0.1	62
20240106_0243	0.1	40
20240106_0253	0.1	161
20240106_0303	0.1	53
20240106_0313	0.1	56
20240106_0323	0.1	62
20240106_0333	0.1	342
20240106_0343	0.1	66
20240106_0353	0.1	52
20240106_0403	0.1	60
20240106_0413	0.1	18
20240106_0423	0.1	81
20240106_0433	0.1	23
20240106_0443	0.1	158
20240106_0453	0.1	96
20240106_0503	0.1	87
20240106_0513	0.1	60
20240106_0523	0.1	76
20240106_0533	0.1	82
20240106_0543	0.1	64
20240106_0553	0.1	45
20240106_0603	0.1	42
20240106_0613	0.1	42
20240106_0623	0.1	68
20240106_0633	0.1	68
20240106_0643	0.1	62
20240106_0653	0.1	66
20240106_0703	0.1	66
20240106_0713	0.1	65
20240106_0723	0.1	54
20240106_0733	0.1	78
20240106_0743	0.1	179
20240106_0753	0.1	194
20240106_0803	0.1	144
20240106_0813	0.1	263
20240106_0823	0.1	101
20240106_0833	0.1	80
20240106_0843	0.1	158
20240106_0853	0.1	105
20240106_0903	0.1	73
20240106_0913	0.1	142
20240106_0923	0.1	119
20240106_0933	0.1	123
20240106_0943	0.6	143
20240106_0953	0.1	149
20240106_1003	0.1	146
20240106_1013	0.1	217
20240106_1023	0.1	145
20240106_1033	0.1	161
20240106_1043	0.2	171
20240106_1053	0.3	167
20240106_1103	1.2	137
20240106_1113	0.4	204
20240106_1123	0.3	157
20240106_1133	0.1	316
20240106_1143	0.2	207
20240106_1153	1.6	167

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240106_1203	0.2	177
20240106_1213	1.1	290
20240106_1223	0.1	231
20240106_1233	1.6	316
20240106_1243	0.1	133
20240106_1253	0.7	158
20240106_1303	2.6	175
20240106_1313	0.1	145
20240106_1323	0.1	279
20240106_1333	0.2	338
20240106_1343	0.1	288
20240106_1353	0.5	347
20240106_1403	0.1	148
20240106_1413	0.2	156
20240106_1423	0.1	92
20240106_1433	0.1	161
20240106_1443	1.5	166
20240106_1453	0.2	21
20240106_1503	0.1	266
20240106_1513	0.1	20
20240106_1523	0.3	161
20240106_1533	0.1	344
20240106_1543	0.1	46
20240106_1553	1	119
20240106_1603	0.2	118
20240106_1613	0.1	105
20240106_1623	0.1	341
20240106_1633	0.1	36
20240106_1643	0.1	33
20240106_1653	0.1	353
20240106_1703	0.1	186
20240106_1713	0.1	261
20240106_1723	0.8	142
20240106_1733	0.1	50
20240106_1743	0.1	95
20240106_1753	0.1	339
20240106_1803	0.1	34
20240106_1813	0.1	10
20240106_1823	0.1	57
20240106_1833	0.1	39
20240106_1843	0.1	13
20240106_1853	0.1	53
20240106_1903	0.1	36
20240106_1913	0.1	36
20240106_1923	0.1	17
20240106_1933	0.1	14
20240106_1943	0.1	9
20240106_1953	0.1	317
20240106_2003	0.1	300
20240106_2013	0.1	204
20240106_2023	0.1	148
20240106_2033	0.1	108
20240106_2043	0.1	354
20240106_2053	0.1	326
20240106_2103	0.1	17
20240106_2113	0.1	329
20240106_2123	0.1	17
20240106_2133	0.1	333
20240106_2143	0.1	29
20240106_2153	0.1	94
20240106_2203	0.1	355
20240106_2213	0.1	15
20240106_2223	0.1	28
20240106_2233	0.1	71
20240106_2243	0.1	255
20240106_2253	0.1	5
20240106_2303	0.1	346
20240106_2313	0.1	290
20240106_2323	0.1	46
20240106_2333	0.1	34
20240106_2343	0.1	43
20240106_2353	0.1	322

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240107_0003	0.1	44
20240107_0013	0.1	354
20240107_0023	0.1	56
20240107_0033	0.1	30
20240107_0043	0.1	3
20240107_0053	0.1	39
20240107_0103	0.1	62
20240107_0113	0.1	106
20240107_0123	0.1	81
20240107_0133	0.1	83
20240107_0143	0.1	142
20240107_0153	0.1	67
20240107_0203	0.1	69
20240107_0213	0.1	50
20240107_0223	0.1	26
20240107_0233	0.1	50
20240107_0243	0.1	133
20240107_0253	0.1	6
20240107_0303	0.1	340
20240107_0313	0.1	88
20240107_0323	0.1	24
20240107_0333	0.1	55
20240107_0343	0.1	118
20240107_0353	1.7	104
20240107_0403	0.3	107
20240107_0413	0.1	114
20240107_0423	0.2	32
20240107_0433	0.1	21
20240107_0443	0.1	344
20240107_0453	0.1	48
20240107_0503	0.8	83
20240107_0513	0.1	329
20240107_0523	0.1	104
20240107_0533	0.1	74
20240107_0543	0.1	58
20240107_0553	0.1	53
20240107_0603	0.1	45
20240107_0613	0.1	105
20240107_0623	0.1	57
20240107_0633	0.1	83
20240107_0643	0.1	95
20240107_0653	0.1	74
20240107_0703	0.1	72
20240107_0713	0.1	49
20240107_0723	0.1	73
20240107_0733	0.1	172
20240107_0743	0.1	45
20240107_0753	0.1	142
20240107_0803	0.1	125
20240107_0813	0.1	144
20240107_0823	0.1	135
20240107_0833	0.1	260
20240107_0843	0.1	21
20240107_0853	0.2	140
20240107_0903	0.1	121
20240107_0913	0.1	190
20240107_0923	0.1	255
20240107_0933	1.4	240
20240107_0943	0.1	355
20240107_0953	0.1	0
20240107_1003	0.1	61
20240107_1013	0.1	44
20240107_1023	4.8	123
20240107_1033	0.4	47
20240107_1043	4.7	324
20240107_1053	1.7	154
20240107_1103	0.3	228
20240107_1113	1.8	339
20240107_1123	0.8	211
20240107_1133	3.6	136
20240107_1143	0.1	346
20240107_1153	0.5	46

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240107_1203	0.9	153
20240107_1213	0.1	192
20240107_1223	2.9	92
20240107_1233	0.6	68
20240107_1243	0.7	286
20240107_1253	0.1	321
20240107_1303	0.1	60
20240107_1313	3.9	91
20240107_1323	0.3	75
20240107_1333	3.3	43
20240107_1343	1.8	128
20240107_1353	2.2	139
20240107_1403	0.1	345
20240107_1413	0.2	252
20240107_1423	0.2	54
20240107_1433	1.2	164
20240107_1443	0.4	61
20240107_1453	0.2	313
20240107_1503	0.2	3
20240107_1513	0.3	249
20240107_1523	0.2	43
20240107_1533	0.1	56
20240107_1543	0.1	164
20240107_1553	0.1	312
20240107_1603	0.5	81
20240107_1613	0.9	342
20240107_1623	1.6	337
20240107_1633	0.2	356
20240107_1643	1.6	6
20240107_1653	0.1	58
20240107_1703	0.1	79
20240107_1713	0.6	337
20240107_1723	0.2	69
20240107_1733	0.2	269
20240107_1743	3.2	108
20240107_1753	0.1	352
20240107_1803	0.1	3
20240107_1813	1.4	12
20240107_1823	2.4	79
20240107_1833	3.5	339
20240107_1843	0.1	135
20240107_1853	1	342
20240107_1903	0.1	352
20240107_1913	0.2	30
20240107_1923	0.3	34
20240107_1933	0.9	55
20240107_1943	3.7	164
20240107_1953	1.6	28
20240107_2003	0.1	50
20240107_2013	0.9	351
20240107_2023	2.7	70
20240107_2033	1.5	69
20240107_2043	2.7	301
20240107_2053	4.9	101
20240107_2103	0.1	35
20240107_2113	4.1	79
20240107_2123	5.2	58
20240107_2133	0.1	43
20240107_2143	0.1	187
20240107_2153	0.4	23
20240107_2203	0.5	41
20240107_2213	0.1	127
20240107_2223	0.1	53
20240107_2233	0.8	308
20240107_2243	2.8	42
20240107_2253	0.1	11
20240107_2303	1	158
20240107_2313	7.3	322
20240107_2323	0.9	220
20240107_2333	8.6	48
20240107_2343	0.1	37
20240107_2353	1.1	348

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240108_0003	0.9	145
20240108_0013	3.1	301
20240108_0023	10.7	48
20240108_0033	3.1	44
20240108_0043	7.3	15
20240108_0053	0.1	34
20240108_0103	2.3	24
20240108_0113	0.2	321
20240108_0123	0.1	233
20240108_0133	0.5	329
20240108_0143	0.9	89
20240108_0153	0.4	346
20240108_0203	0.8	132
20240108_0213	0.7	39
20240108_0223	0.3	68
20240108_0233	2.6	7
20240108_0243	0.1	154
20240108_0253	0.1	255
20240108_0303	0.2	326
20240108_0313	0.1	138
20240108_0323	0.1	2
20240108_0333	1.1	335
20240108_0343	0.1	307
20240108_0353	0.1	203
20240108_0403	0.2	297
20240108_0413	0.4	31
20240108_0423	0.1	243
20240108_0433	0.1	250
20240108_0443	0.1	110
20240108_0453	1.2	39
20240108_0503	0.1	321
20240108_0513	0.1	193
20240108_0523	1.4	47
20240108_0533	1.3	354
20240108_0543	5.4	313
20240108_0553	0.1	348
20240108_0603	1.7	353
20240108_0613	0.1	290
20240108_0623	7.4	353
20240108_0633	0.1	16
20240108_0643	0.4	338
20240108_0653	0.5	328
20240108_0703	0.6	28
20240108_0713	0.3	323
20240108_0723	0.2	345
20240108_0733	0.2	60
20240108_0743	0.1	302
20240108_0753	0.1	95
20240108_0803	0.1	136
20240108_0813	0.1	212
20240108_0823	0.1	14
20240108_0833	0.1	136
20240108_0843	1.4	180
20240108_0853	0.1	140
20240108_0903	0.3	218
20240108_0913	0.7	335
20240108_0923	0.5	343
20240108_0933	0.1	201
20240108_0943	0.9	141
20240108_0953	0.1	43
20240108_1003	0.3	75
20240108_1013	0.1	44
20240108_1023	0.4	49
20240108_1033	1.4	2
20240108_1043	0.1	124
20240108_1053	0.9	128
20240108_1103	0.4	75
20240108_1113	0.2	302
20240108_1123	2.9	143
20240108_1133	1.6	124
20240108_1143	3.9	242
20240108_1153	0.1	243

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240108_1203	0.1	166
20240108_1213	0.4	179
20240108_1223	0.3	264
20240108_1233	0.2	327
20240108_1243	0.1	19
20240108_1253	0.4	32
20240108_1303	0.5	345
20240108_1313	2.2	13
20240108_1323	1.4	155
20240108_1333	0.1	254
20240108_1343	0.6	101
20240108_1353	1.6	333
20240108_1403	0.1	137
20240108_1413	0.4	84
20240108_1423	0.1	37
20240108_1433	0.1	111
20240108_1443	0.2	70
20240108_1453	4.3	140
20240108_1503	0.2	61
20240108_1513	0.6	11
20240108_1523	0.5	95
20240108_1533	0.4	322
20240108_1543	0.1	55
20240108_1553	0.9	182
20240108_1603	0.6	328
20240108_1613	0.1	115
20240108_1623	0.1	49
20240108_1633	1.2	140
20240108_1643	0.6	100
20240108_1653	0.1	24
20240108_1703	5.1	111
20240108_1713	0.1	89
20240108_1723	0.1	19
20240108_1733	0.1	252
20240108_1743	0.2	342
20240108_1753	0.1	95
20240108_1803	0.1	294
20240108_1813	0.3	100
20240108_1823	1.8	135
20240108_1833	2.1	77
20240108_1843	0.1	68
20240108_1853	0.2	321
20240108_1903	0.1	38
20240108_1913	0.1	74
20240108_1923	0.1	339
20240108_1933	0.1	247
20240108_1943	0.9	117
20240108_1953	0.8	122
20240108_2003	0.2	151
20240108_2013	0.1	51
20240108_2023	0.3	128
20240108_2033	2.3	28
20240108_2043	0.3	325
20240108_2053	0.1	136
20240108_2103	0.1	188
20240108_2113	0.5	88
20240108_2123	0.1	232
20240108_2133	0.1	199
20240108_2143	0.1	276
20240108_2153	0.6	299
20240108_2203	0.1	259
20240108_2213	0.2	189
20240108_2223	0.1	36
20240108_2233	0.2	113
20240108_2243	0.1	145
20240108_2253	0.1	169
20240108_2303	0.2	346
20240108_2313	0.1	147
20240108_2323	0.1	293
20240108_2333	0.2	170
20240108_2343	0.1	83
20240108_2353	0.2	42

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240109_0003	0.1	343
20240109_0013	0.1	32
20240109_0023	0.1	282
20240109_0033	0.1	264
20240109_0043	0.1	316
20240109_0053	0.1	10
20240109_0103	0.1	353
20240109_0113	0.2	31
20240109_0123	0.1	353
20240109_0133	0.1	86
20240109_0143	0.1	144
20240109_0153	1.3	130
20240109_0203	3.3	129
20240109_0213	0.4	129
20240109_0223	0.2	215
20240109_0233	0.1	163
20240109_0243	0.1	18
20240109_0253	0.8	127
20240109_0303	0.1	49
20240109_0313	0.1	146
20240109_0323	0.7	164
20240109_0333	0.1	134
20240109_0343	0.1	211
20240109_0353	0.1	21
20240109_0403	0.1	112
20240109_0413	0.1	225
20240109_0423	0.1	258
20240109_0433	0.1	79
20240109_0443	0.1	141
20240109_0453	0.1	323
20240109_0503	0.1	3
20240109_0513	0.1	202
20240109_0523	0.1	238
20240109_0533	0.1	77
20240109_0543	0.1	38
20240109_0553	0.1	3
20240109_0603	0.1	319
20240109_0613	0.1	320
20240109_0623	0.1	79
20240109_0633	0.1	3
20240109_0643	0.1	195
20240109_0653	0.1	240
20240109_0703	0.1	151
20240109_0713	0.1	169
20240109_0723	0.1	39
20240109_0733	0.1	34
20240109_0743	0.1	148
20240109_0753	0.2	270
20240109_0803	0.1	83
20240109_0813	0.1	323
20240109_0823	0.1	122
20240109_0833	0.1	184
20240109_0843	0.1	86
20240109_0853	0.1	351
20240109_0903	0.3	98
20240109_0913	2.1	140
20240109_0923	0.2	83
20240109_0933	0.1	282
20240109_0943	0.1	209
20240109_0953	0.1	278
20240109_1003	0.1	72
20240109_1013	0.3	191
20240109_1023	0.5	215
20240109_1033	0.8	198
20240109_1043	0.1	125
20240109_1053	0.1	12
20240109_1103	0.1	149
20240109_1113	0.1	127
20240109_1123	0.3	132
20240109_1133	0.1	83
20240109_1143	0.8	119
20240109_1153	0.4	191

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240109_1203	0.6	277
20240109_1213	0.1	106
20240109_1223	1.3	109
20240109_1233	0.1	274
20240109_1243	1	108
20240109_1253	0.5	64
20240109_1303	0.1	240
20240109_1313	0.1	45
20240109_1323	0.1	204
20240109_1333	1.2	15
20240109_1343	0.9	167
20240109_1353	0.1	107
20240109_1403	0.1	223
20240109_1413	1.7	134
20240109_1423	0.2	208
20240109_1433	0.1	187
20240109_1443	0.3	78
20240109_1453	1.4	50
20240109_1503	0.1	149
20240109_1513	0.1	33
20240109_1523	0.5	110
20240109_1533	1	282
20240109_1543	0.4	154
20240109_1553	0.1	165
20240109_1603	0.1	161
20240109_1613	0.4	110
20240109_1623	0.1	44
20240109_1633	0.1	84
20240109_1643	0.1	103
20240109_1653	0.2	61
20240109_1703	0.1	39
20240109_1713	0.1	323
20240109_1723	0.1	94
20240109_1733	0.1	244
20240109_1743	0.1	146
20240109_1753	0.1	50
20240109_1803	0.1	328
20240109_1813	0.1	11
20240109_1823	0.1	81
20240109_1833	0.1	15
20240109_1843	0.1	105
20240109_1853	0.1	140
20240109_1903	0.1	90
20240109_1913	0.1	176
20240109_1923	0.1	123
20240109_1933	0.1	82
20240109_1943	0.1	22
20240109_1953	0.1	282
20240109_2003	0.1	128
20240109_2013	0.1	112
20240109_2023	0.1	105
20240109_2033	0.1	132
20240109_2043	0.1	86
20240109_2053	0.1	74
20240109_2103	0.1	329
20240109_2113	0.1	94
20240109_2123	0.1	116
20240109_2133	0.1	74
20240109_2143	0.1	334
20240109_2153	0.1	17
20240109_2203	0.1	140
20240109_2213	0.1	38
20240109_2223	0.1	6
20240109_2233	0.1	154
20240109_2243	0.1	147
20240109_2253	0.1	147
20240109_2303	0.1	59
20240109_2313	0.1	82
20240109_2323	0.1	107
20240109_2333	0.1	127
20240109_2343	0.1	110
20240109_2353	0.1	125

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240110_0003	0.1	0
20240110_0013	0.1	42
20240110_0023	0.1	63
20240110_0033	0.1	45
20240110_0043	0.1	328
20240110_0053	0.1	110
20240110_0103	0.1	44
20240110_0113	0.1	141
20240110_0123	0.1	94
20240110_0133	0.1	86
20240110_0143	0.1	95
20240110_0153	0.1	348
20240110_0203	0.1	344
20240110_0213	0.1	103
20240110_0223	0.1	113
20240110_0233	0.1	63
20240110_0243	0.1	47
20240110_0253	0.1	28
20240110_0303	0.1	83
20240110_0313	0.1	45
20240110_0323	0.1	62
20240110_0333	0.1	127
20240110_0343	0.1	52
20240110_0353	0.1	26
20240110_0403	0.1	89
20240110_0413	0.1	228
20240110_0423	0.1	350
20240110_0433	0.1	150
20240110_0443	0.1	86
20240110_0453	0.1	64
20240110_0503	0.4	312
20240110_0513	0.1	17
20240110_0523	0.1	60
20240110_0533	0.1	92
20240110_0543	0.1	5
20240110_0553	0.1	87
20240110_0603	0.1	28
20240110_0613	0.1	217
20240110_0623	0.1	327
20240110_0633	0.6	334
20240110_0643	0.4	333
20240110_0653	0.1	141
20240110_0703	0.1	311
20240110_0713	0.1	19
20240110_0723	0.1	110
20240110_0733	0.1	266
20240110_0743	0.1	166
20240110_0753	0.1	354
20240110_0803	0.1	99
20240110_0813	0.1	142
20240110_0823	0.1	174
20240110_0833	0.1	330
20240110_0843	0.1	214
20240110_0853	0.2	161
20240110_0903	0.1	121
20240110_0913	0.1	118
20240110_0923	0.2	100
20240110_0933	0.4	248
20240110_0943	0.1	126
20240110_0953	0.3	135
20240110_1003	2	158
20240110_1013	0.1	162
20240110_1023	0.2	177
20240110_1033	0.1	296
20240110_1043	0.1	273
20240110_1053	0.1	238
20240110_1103	2	15
20240110_1113	0.1	61
20240110_1123	0.1	97
20240110_1133	0.2	5
20240110_1143	0.4	106
20240110_1153	0.6	157

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240110_1203	2.9	298
20240110_1213	0.1	318
20240110_1223	2.7	100
20240110_1233	2.3	119
20240110_1243	0.1	101
20240110_1253	0.6	43
20240110_1303	0.1	3
20240110_1313	0.2	63
20240110_1323	1.8	46
20240110_1333	1.6	108
20240110_1343	1.4	27
20240110_1353	1.8	75
20240110_1403	0.1	62
20240110_1413	0.1	68
20240110_1423	1.5	87
20240110_1433	3.6	327
20240110_1443	0.6	128
20240110_1453	0.1	174
20240110_1503	0.8	77
20240110_1513	1	258
20240110_1523	2.3	54
20240110_1533	3.4	307
20240110_1543	1	26
20240110_1553	1.1	79
20240110_1603	0.7	99
20240110_1613	1	32
20240110_1623	0.1	318
20240110_1633	1.7	344
20240110_1643	0.1	54
20240110_1653	0.1	31
20240110_1703	0.1	48
20240110_1713	0.1	266
20240110_1723	0.1	324
20240110_1733	0.1	299
20240110_1743	0.1	99
20240110_1753	0.1	112
20240110_1803	0.1	104
20240110_1813	0.1	79
20240110_1823	0.1	0
20240110_1833	0.1	83
20240110_1843	0.1	46
20240110_1853	0.1	60
20240110_1903	0.1	10
20240110_1913	0.1	30
20240110_1923	0.1	327
20240110_1933	0.1	84
20240110_1943	0.1	352
20240110_1953	0.1	62
20240110_2003	0.1	349
20240110_2013	0.1	43
20240110_2023	0.1	10
20240110_2033	0.1	350
20240110_2043	0.1	334
20240110_2053	0.1	68
20240110_2103	0.1	135
20240110_2113	0.1	75
20240110_2123	0.1	53
20240110_2133	0.1	52
20240110_2143	0.1	59
20240110_2153	0.1	46
20240110_2203	0.1	56
20240110_2213	0.1	40
20240110_2223	0.1	43
20240110_2233	0.1	291
20240110_2243	0.1	77
20240110_2253	0.1	50
20240110_2303	0.1	56
20240110_2313	0.1	80
20240110_2323	0.1	45
20240110_2333	0.1	238
20240110_2343	0.1	44
20240110_2353	0.1	21

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240111_0003	0.1	77
20240111_0013	0.1	198
20240111_0023	0.1	279
20240111_0033	0.1	91
20240111_0043	0.1	52
20240111_0053	0.1	43
20240111_0103	0.1	62
20240111_0113	0.1	128
20240111_0123	0.1	51
20240111_0133	0.1	144
20240111_0143	0.1	136
20240111_0153	0.1	2
20240111_0203	0.1	96
20240111_0213	0.1	67
20240111_0223	0.1	347
20240111_0233	0.1	349
20240111_0243	0.1	257
20240111_0253	0.1	349
20240111_0303	0.1	36
20240111_0313	0.1	76
20240111_0323	0.1	114
20240111_0333	0.1	143
20240111_0343	0.1	82
20240111_0353	0.1	182
20240111_0403	0.1	55
20240111_0413	0.1	274
20240111_0423	0.1	294
20240111_0433	0.1	150
20240111_0443	0.1	216
20240111_0453	0.1	54
20240111_0503	0.1	161
20240111_0513	0.1	65
20240111_0523	0.1	40
20240111_0533	0.1	117
20240111_0543	0.1	181
20240111_0553	0.1	245
20240111_0603	0.1	133
20240111_0613	0.1	114
20240111_0623	0.1	92
20240111_0633	0.1	41
20240111_0643	0.1	73
20240111_0653	0.1	38
20240111_0703	0.1	144
20240111_0713	0.1	148
20240111_0723	0.1	86
20240111_0733	0.1	95
20240111_0743	0.1	76
20240111_0753	0.1	54
20240111_0803	0.1	130
20240111_0813	0.1	119
20240111_0823	0.1	157
20240111_0833	0.1	146
20240111_0843	0.1	123
20240111_0853	0.1	124
20240111_0903	0.1	147
20240111_0913	0.1	131
20240111_0923	0.2	150
20240111_0933	0.1	133
20240111_0943	0.1	278
20240111_0953	0.1	122
20240111_1003	0.1	120
20240111_1013	0.1	19
20240111_1023	0.3	157
20240111_1033	0.4	109
20240111_1043	0.2	28
20240111_1053	0.7	43
20240111_1103	0.2	211
20240111_1113	0.4	313
20240111_1123	0.1	48
20240111_1133	2.8	238
20240111_1143	0.2	27
20240111_1153	0.9	20

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240111_1203	0.1	126
20240111_1213	0.1	76
20240111_1223	0.2	124
20240111_1233	0.2	341
20240111_1243	0.1	310
20240111_1253	0.5	62
20240111_1303	0.1	85
20240111_1313	0.1	53
20240111_1323	0.4	183
20240111_1333	0.2	184
20240111_1343	0.8	64
20240111_1353	1.1	125
20240111_1403	2.9	60
20240111_1413	3	81
20240111_1423	1.7	110
20240111_1433	0.1	177
20240111_1443	0.4	95
20240111_1453	0.1	352
20240111_1503	0.1	77
20240111_1513	1.8	153
20240111_1523	0.1	77
20240111_1533	0.1	144
20240111_1543	0.5	191
20240111_1553	0.1	126
20240111_1603	0.1	87
20240111_1613	0.6	104
20240111_1623	0.1	232
20240111_1633	0.1	99
20240111_1643	1.1	118
20240111_1653	0.6	85
20240111_1703	1.7	89
20240111_1713	1.4	121
20240111_1723	0.6	95
20240111_1733	1.1	130
20240111_1743	0.3	117
20240111_1753	0.9	112
20240111_1803	0.8	138
20240111_1813	0.5	102
20240111_1823	0.1	156
20240111_1833	0.1	122
20240111_1843	0.3	16
20240111_1853	0.1	94
20240111_1903	0.1	11
20240111_1913	0.1	309
20240111_1923	0.1	108
20240111_1933	0.1	96
20240111_1943	0.4	164
20240111_1953	0.1	146
20240111_2003	0.1	112
20240111_2013	0.1	78
20240111_2023	0.1	117
20240111_2033	0.1	50
20240111_2043	0.1	174
20240111_2053	0.2	145
20240111_2103	0.1	121
20240111_2113	0.1	143
20240111_2123	0.1	10
20240111_2133	0.1	96
20240111_2143	0.1	60
20240111_2153	0.1	272
20240111_2203	0.1	263
20240111_2213	0.1	254
20240111_2223	0.3	5
20240111_2233	0.1	150
20240111_2243	0.3	135
20240111_2253	0.1	15
20240111_2303	0.1	250
20240111_2313	0.2	114
20240111_2323	0.4	89
20240111_2333	0.4	154
20240111_2343	0.2	55
20240111_2353	0.1	125

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240112_0003	0.1	113
20240112_0013	0.1	149
20240112_0023	0.1	229
20240112_0033	0.1	118
20240112_0043	0.1	51
20240112_0053	0.1	95
20240112_0103	0.1	177
20240112_0113	0.1	178
20240112_0123	0.1	100
20240112_0133	0.1	91
20240112_0143	0.1	141
20240112_0153	0.1	95
20240112_0203	0.1	162
20240112_0213	0.1	58
20240112_0223	0.1	201
20240112_0233	0.1	103
20240112_0243	0.1	69
20240112_0253	0.1	4
20240112_0303	0.1	68
20240112_0313	0.1	16
20240112_0323	0.1	112
20240112_0333	0.1	74
20240112_0343	0.1	69
20240112_0353	0.1	20
20240112_0403	0.1	83
20240112_0413	0.1	85
20240112_0423	0.1	69
20240112_0433	0.1	30
20240112_0443	0.1	3
20240112_0453	0.1	59
20240112_0503	0.1	76
20240112_0513	0.1	38
20240112_0523	0.1	95
20240112_0533	0.1	243
20240112_0543	0.2	95
20240112_0553	0.1	55
20240112_0603	0.2	39
20240112_0613	0.1	131
20240112_0623	0.1	148
20240112_0633	0.1	40
20240112_0643	0.1	347
20240112_0653	0.1	129
20240112_0703	0.1	164
20240112_0713	0.1	5
20240112_0723	1	98
20240112_0733	0.1	18
20240112_0743	0.1	13
20240112_0753	0.1	48
20240112_0803	0.1	129
20240112_0813	0.1	330
20240112_0823	0.1	33
20240112_0833	0.1	176
20240112_0843	0.1	101
20240112_0853	0.1	341
20240112_0903	0.1	137
20240112_0913	0.6	153
20240112_0923	0.2	85
20240112_0933	0.1	154
20240112_0943	0.1	156
20240112_0953	0.2	170
20240112_1003	0.1	45
20240112_1013	0.1	142
20240112_1023	0.1	296
20240112_1033	0.1	33
20240112_1043	1.3	127
20240112_1053	0.2	36
20240112_1103	2.5	124
20240112_1113	1.2	109
20240112_1123	0.4	49
20240112_1133	0.1	150
20240112_1143	0.1	21
20240112_1153	0.1	37

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240112_1203	0.3	52
20240112_1213	4.6	206
20240112_1223	0.3	191
20240112_1233	0.1	200
20240112_1243	0.1	193
20240112_1253	0.2	135
20240112_1303	0.8	116
20240112_1313	3.3	211
20240112_1323	0.7	197
20240112_1333	0.5	210
20240112_1343	0.4	195
20240112_1353	0.1	57
20240112_1403	0.1	201
20240112_1413	0.8	3
20240112_1423	1.2	104
20240112_1433	1.1	96
20240112_1443	1.3	131
20240112_1453	1.7	39
20240112_1503	0.1	63
20240112_1513	0.1	44
20240112_1523	0.1	178
20240112_1533	0.9	127
20240112_1543	0.1	323
20240112_1553	2.5	147
20240112_1603	0.4	114
20240112_1613	0.3	97
20240112_1623	0.1	46
20240112_1633	0.7	113
20240112_1643	0.1	140
20240112_1653	0.8	133
20240112_1703	0.5	116
20240112_1713	0.2	114
20240112_1723	1.5	128
20240112_1733	0.5	120
20240112_1743	1.4	83
20240112_1753	0.5	117
20240112_1803	0.1	130
20240112_1813	0.1	39
20240112_1823	0.1	31
20240112_1833	0.3	136
20240112_1843	0.2	122
20240112_1853	0.2	70
20240112_1903	0.1	138
20240112_1913	0.1	332
20240112_1923	0.1	73
20240112_1933	0.2	40
20240112_1943	0.1	78
20240112_1953	0.1	131
20240112_2003	0.1	112
20240112_2013	0.1	120
20240112_2023	0.1	136
20240112_2033	0.1	54
20240112_2043	0.1	75
20240112_2053	0.4	130
20240112_2103	0.1	343
20240112_2113	0.8	54
20240112_2123	0.2	96
20240112_2133	0.2	104
20240112_2143	0.1	93
20240112_2153	0.1	123
20240112_2203	0.1	64
20240112_2213	0.2	156
20240112_2223	0.1	104
20240112_2233	0.1	102
20240112_2243	0.1	23
20240112_2253	0.1	340
20240112_2303	0.1	83
20240112_2313	0.3	93
20240112_2323	0.1	88
20240112_2333	0.1	100
20240112_2343	0.1	58
20240112_2353	0.1	319

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240113_0003	0.1	93
20240113_0013	0.1	49
20240113_0023	0.1	11
20240113_0033	0.1	332
20240113_0043	0.1	286
20240113_0053	0.1	146
20240113_0103	0.1	97
20240113_0113	0.1	122
20240113_0123	0.1	285
20240113_0133	0.1	323
20240113_0143	0.1	95
20240113_0153	0.1	96
20240113_0203	0.1	69
20240113_0213	0.1	353
20240113_0223	0.1	353
20240113_0233	0.1	154
20240113_0243	0.1	154
20240113_0253	0.1	288
20240113_0303	0.1	38
20240113_0313	0.1	103
20240113_0323	0.1	36
20240113_0333	0.1	278
20240113_0343	0.1	135
20240113_0353	0.1	172
20240113_0403	0.1	317
20240113_0413	0.1	253
20240113_0423	0.1	110
20240113_0433	0.1	279
20240113_0443	0.1	138
20240113_0453	0.1	46
20240113_0503	0.1	118
20240113_0513	0.1	21
20240113_0523	0.1	98
20240113_0533	0.1	41
20240113_0543	0.1	99
20240113_0553	0.1	148
20240113_0603	0.1	226
20240113_0613	0.1	115
20240113_0623	0.1	27
20240113_0633	0.5	294
20240113_0643	0.1	310
20240113_0653	0.1	278
20240113_0703	0.1	215
20240113_0713	0.1	253
20240113_0723	0.1	179
20240113_0733	1.7	1
20240113_0743	0.1	121
20240113_0753	0.1	350
20240113_0803	0.1	115
20240113_0813	0.1	337
20240113_0823	0.1	258
20240113_0833	0.1	281
20240113_0843	0.1	224
20240113_0853	0.1	217
20240113_0903	0.1	275
20240113_0913	0.1	237
20240113_0923	0.1	133
20240113_0933	0.1	200
20240113_0943	0.6	144
20240113_0953	0.1	147
20240113_1003	0.1	36
20240113_1013	1	144
20240113_1023	0.1	198
20240113_1033	1.4	106
20240113_1043	0.2	239
20240113_1053	0.1	182
20240113_1103	0.2	272
20240113_1113	1.1	166
20240113_1123	0.2	97
20240113_1133	0.3	70
20240113_1143	0.6	2
20240113_1153	0.1	308

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240113_1203	0.4	291
20240113_1213	0.6	353
20240113_1223	0.1	348
20240113_1233	0.2	222
20240113_1243	3.1	8
20240113_1253	0.1	347
20240113_1303	0.1	99
20240113_1313	1.5	149
20240113_1323	0.1	88
20240113_1333	3.2	153
20240113_1343	0.8	129
20240113_1353	1.2	86
20240113_1403	0.1	312
20240113_1413	0.5	74
20240113_1423	0.8	91
20240113_1433	3.7	127
20240113_1443	0.1	130
20240113_1453	0.1	351
20240113_1503	0.1	70
20240113_1513	0.1	49
20240113_1523	0.6	59
20240113_1533	1.2	339
20240113_1543	0.1	207
20240113_1553	0.1	82
20240113_1603	0.1	60
20240113_1613	0.1	5
20240113_1623	0.1	36
20240113_1633	0.1	31
20240113_1643	0.1	279
20240113_1653	0.7	5
20240113_1703	0.5	102
20240113_1713	0.1	135
20240113_1723	0.1	5
20240113_1733	0.1	149
20240113_1743	0.1	91
20240113_1753	0.1	202
20240113_1803	0.1	124
20240113_1813	0.1	306
20240113_1823	0.1	125
20240113_1833	0.1	48
20240113_1843	0.1	73
20240113_1853	0.1	111
20240113_1903	0.1	353
20240113_1913	0.1	153
20240113_1923	0.1	335
20240113_1933	0.2	326
20240113_1943	0.1	151
20240113_1953	1.1	48
20240113_2003	0.1	116
20240113_2013	0.1	140
20240113_2023	0.1	300
20240113_2033	0.1	113
20240113_2043	0.1	93
20240113_2053	0.1	221
20240113_2103	0.1	14
20240113_2113	0.2	324
20240113_2123	0.1	185
20240113_2133	0.1	242
20240113_2143	0.1	49
20240113_2153	0.1	308
20240113_2203	0.1	110
20240113_2213	0.1	241
20240113_2223	0.1	266
20240113_2233	0.1	152
20240113_2243	0.1	193
20240113_2253	0.1	248
20240113_2303	0.1	147
20240113_2313	0.1	59
20240113_2323	0.1	52
20240113_2333	0.1	304
20240113_2343	0.1	96
20240113_2353	0.1	332

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240114_0003	1	125
20240114_0013	1	150
20240114_0023	0.1	143
20240114_0033	0.1	220
20240114_0043	0.1	55
20240114_0053	0.1	281
20240114_0103	0.1	122
20240114_0113	0.1	130
20240114_0123	0.1	246
20240114_0133	0.1	76
20240114_0143	0.1	224
20240114_0153	0.1	96
20240114_0203	0.1	87
20240114_0213	0.8	129
20240114_0223	0.1	187
20240114_0233	0.1	96
20240114_0243	0.1	134
20240114_0253	0.1	123
20240114_0303	0.8	104
20240114_0313	0.1	220
20240114_0323	0.1	295
20240114_0333	0.1	158
20240114_0343	0.1	140
20240114_0353	0.1	227
20240114_0403	0.1	222
20240114_0413	0.1	248
20240114_0423	0.1	163
20240114_0433	0.4	181
20240114_0443	0.2	224
20240114_0453	0.2	86
20240114_0503	0.1	171
20240114_0513	0.1	112
20240114_0523	0.1	286
20240114_0533	0.1	255
20240114_0543	0.1	186
20240114_0553	0.8	112
20240114_0603	0.2	138
20240114_0613	0.1	210
20240114_0623	0.1	129
20240114_0633	0.1	286
20240114_0643	0.1	26
20240114_0653	0.1	183
20240114_0703	0.1	114
20240114_0713	0.1	17
20240114_0723	0.2	220
20240114_0733	0.1	146
20240114_0743	0.1	274
20240114_0753	0.1	237
20240114_0803	0.1	100
20240114_0813	0.2	149
20240114_0823	0.1	144
20240114_0833	0.1	66
20240114_0843	0.1	224
20240114_0853	0.1	114
20240114_0903	0.1	144
20240114_0913	0.1	284
20240114_0923	0.1	150
20240114_0933	0.1	230
20240114_0943	0.1	65
20240114_0953	0.2	150
20240114_1003	0.1	164
20240114_1013	0.1	145
20240114_1023	0.1	296
20240114_1033	0.2	222
20240114_1043	1.9	42
20240114_1053	1	282
20240114_1103	0.1	40
20240114_1113	0.1	21
20240114_1123	1.9	43
20240114_1133	0.3	313
20240114_1143	0.5	339
20240114_1153	1	56

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240114_1203	1.6	47
20240114_1213	0.1	253
20240114_1223	0.1	183
20240114_1233	0.1	152
20240114_1243	0.1	159
20240114_1253	0.1	156
20240114_1303	0.5	251
20240114_1313	0.1	239
20240114_1323	0.1	74
20240114_1333	0.1	149
20240114_1343	2.4	133
20240114_1353	3.8	7
20240114_1403	0.1	64
20240114_1413	0.8	312
20240114_1423	0.2	39
20240114_1433	1.7	340
20240114_1443	0.4	143
20240114_1453	4.1	38
20240114_1503	0.9	338
20240114_1513	0.1	337
20240114_1523	0.1	52
20240114_1533	1.6	11
20240114_1543	0.3	349
20240114_1553	0.1	318
20240114_1603	0.4	27
20240114_1613	0.1	330
20240114_1623	1	46
20240114_1633	0.1	94
20240114_1643	0.4	30
20240114_1653	0.1	349
20240114_1703	0.1	63
20240114_1713	0.1	163
20240114_1723	0.3	100
20240114_1733	0.3	50
20240114_1743	0.1	327
20240114_1753	0.1	0
20240114_1803	0.1	58
20240114_1813	0.1	94
20240114_1823	0.1	78
20240114_1833	0.1	212
20240114_1843	0.1	128
20240114_1853	0.1	191
20240114_1903	0.1	304
20240114_1913	0.1	294
20240114_1923	0.1	99
20240114_1933	0.1	183
20240114_1943	0.1	149
20240114_1953	0.1	269
20240114_2003	0.1	253
20240114_2013	0.1	155
20240114_2023	0.1	97
20240114_2033	0.1	121
20240114_2043	0.1	125
20240114_2053	0.1	154
20240114_2103	0.1	76
20240114_2113	0.1	283
20240114_2123	0.1	320
20240114_2133	0.1	322
20240114_2143	0.1	53
20240114_2153	0.1	66
20240114_2203	0.1	62
20240114_2213	0.1	260
20240114_2223	0.1	82
20240114_2233	0.1	75
20240114_2243	0.1	44
20240114_2253	0.1	48
20240114_2303	0.1	22
20240114_2313	0.1	47
20240114_2323	0.1	45
20240114_2333	0.1	8
20240114_2343	0.1	117
20240114_2353	0.1	220

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240115_0003	0.1	46
20240115_0013	0.1	67
20240115_0023	0.1	65
20240115_0033	0.1	75
20240115_0043	0.1	52
20240115_0053	0.1	46
20240115_0103	0.1	56
20240115_0113	0.1	24
20240115_0123	0.1	61
20240115_0133	0.1	63
20240115_0143	0.1	64
20240115_0153	0.1	48
20240115_0203	0.1	78
20240115_0213	0.1	62
20240115_0223	0.1	98
20240115_0233	0.1	43
20240115_0243	0.1	32
20240115_0253	0.1	224
20240115_0303	0.1	224
20240115_0313	0.1	89
20240115_0323	0.1	62
20240115_0333	0.1	49
20240115_0343	0.1	57
20240115_0353	0.1	50
20240115_0403	0.1	79
20240115_0413	0.1	142
20240115_0423	0.1	84
20240115_0433	0.1	83
20240115_0443	0.1	163
20240115_0453	0.1	67
20240115_0503	0.1	59
20240115_0513	0.1	61
20240115_0523	0.1	40
20240115_0533	0.1	34
20240115_0543	0.1	54
20240115_0553	0.1	39
20240115_0603	0.1	74
20240115_0613	0.1	118
20240115_0623	0.1	69
20240115_0633	0.1	49
20240115_0643	0.1	68
20240115_0653	0.1	64
20240115_0703	0.1	41
20240115_0713	0.1	80
20240115_0723	0.1	354
20240115_0733	0.1	151
20240115_0743	0.1	96
20240115_0753	0.1	60
20240115_0803	0.1	347
20240115_0813	0.1	83
20240115_0823	0.1	27
20240115_0833	0.1	63
20240115_0843	0.1	186
20240115_0853	0.1	109
20240115_0903	0.1	138
20240115_0913	0.1	140
20240115_0923	0.1	105
20240115_0933	0.2	145
20240115_0943	0.1	124
20240115_0953	0.1	114
20240115_1003	0.1	143
20240115_1013	0.4	145
20240115_1023	0.1	153
20240115_1033	0.1	68
20240115_1043	0.1	76
20240115_1053	0.8	49
20240115_1103	1.9	326
20240115_1113	3.2	171
20240115_1123	1.1	12
20240115_1133	0.1	6
20240115_1143	2.2	11
20240115_1153	0.1	55

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240115_1203	0.8	18
20240115_1213	0.1	140
20240115_1223	1	170
20240115_1233	0.4	327
20240115_1243	0.2	107
20240115_1253	1.3	110
20240115_1303	0.1	105
20240115_1313	2.1	24
20240115_1323	2.8	48
20240115_1333	4.5	45
20240115_1343	2.1	98
20240115_1353	0.6	112
20240115_1403	0.1	310
20240115_1413	1.3	185
20240115_1423	0.4	9
20240115_1433	5.8	39
20240115_1443	0.2	7
20240115_1453	0.4	103
20240115_1503	0.9	13
20240115_1513	0.1	207
20240115_1523	0.4	337
20240115_1533	1.6	326
20240115_1543	1.7	355
20240115_1553	0.4	4
20240115_1603	0.5	327
20240115_1613	0.9	96
20240115_1623	2.3	11
20240115_1633	5.3	33
20240115_1643	0.7	115
20240115_1653	0.1	126
20240115_1703	1.4	123
20240115_1713	2.7	69
20240115_1723	2.9	326
20240115_1733	1.1	25
20240115_1743	4.2	122
20240115_1753	8.7	6
20240115_1803	4.3	340
20240115_1813	6.6	44
20240115_1823	0.4	154
20240115_1833	1.9	98
20240115_1843	0.3	283
20240115_1853	0.3	40
20240115_1903	2.8	339
20240115_1913	1.2	67
20240115_1923	0.4	342
20240115_1933	0.1	347
20240115_1943	1.6	114
20240115_1953	0.1	50
20240115_2003	0.6	7
20240115_2013	2.2	331
20240115_2023	2.2	84
20240115_2033	0.3	51
20240115_2043	0.1	24
20240115_2053	0.4	84
20240115_2103	0.9	5
20240115_2113	1.1	81
20240115_2123	3.7	29
20240115_2133	0.4	300
20240115_2143	3.9	16
20240115_2153	2.9	15
20240115_2203	1	63
20240115_2213	2.6	39
20240115_2223	0.3	5
20240115_2233	0.4	41
20240115_2243	7.1	81
20240115_2253	0.2	154
20240115_2303	4.7	58
20240115_2313	0.4	164
20240115_2323	0.8	100
20240115_2333	3.6	11
20240115_2343	0.3	194
20240115_2353	4.1	327

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240116_0003	0.8	69
20240116_0013	0.7	61
20240116_0023	0.9	81
20240116_0033	6.1	85
20240116_0043	14.2	353
20240116_0053	9.9	0
20240116_0103	2.1	48
20240116_0113	6.3	19
20240116_0123	6.6	3
20240116_0133	1.2	344
20240116_0143	8.3	13
20240116_0153	8.2	42
20240116_0203	4.9	19
20240116_0213	0.3	116
20240116_0223	5.4	52
20240116_0233	0.2	279
20240116_0243	4.5	99
20240116_0253	8.7	346
20240116_0303	0.1	351
20240116_0313	0.8	29
20240116_0323	6.6	13
20240116_0333	0.2	103
20240116_0343	0.1	180
20240116_0353	1.1	33
20240116_0403	0.3	279
20240116_0413	1.8	60
20240116_0423	0.5	35
20240116_0433	0.1	85
20240116_0443	0.1	104
20240116_0453	2.6	9
20240116_0503	0.3	264
20240116_0513	0.9	55
20240116_0523	0.4	74
20240116_0533	0.1	103
20240116_0543	0.2	321
20240116_0553	0.1	145
20240116_0603	0.1	176
20240116_0613	0.1	182
20240116_0623	2.7	6
20240116_0633	0.7	0
20240116_0643	1	167
20240116_0653	2.5	293
20240116_0703	0.1	260
20240116_0713	0.2	82
20240116_0723	0.1	321
20240116_0733	0.2	334
20240116_0743	0.4	329
20240116_0753	0.1	172
20240116_0803	0.3	50
20240116_0813	0.1	79
20240116_0823	1.4	349
20240116_0833	1.8	323
20240116_0843	0.2	286
20240116_0853	0.1	246
20240116_0903	0.1	88
20240116_0913	0.5	73
20240116_0923	0.1	347
20240116_0933	0.2	181
20240116_0943	0.6	160
20240116_0953	0.2	14
20240116_1003	0.2	338
20240116_1013	0.1	101
20240116_1023	0.3	245
20240116_1033	0.9	122
20240116_1043	0.1	338
20240116_1053	0.5	350
20240116_1103	0.2	182
20240116_1113	0.1	342
20240116_1123	0.4	33
20240116_1133	1.3	134
20240116_1143	0.1	33
20240116_1153	0.3	216

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240116_1203	0.2	156
20240116_1213	0.1	258
20240116_1223	1.4	69
20240116_1233	0.1	203
20240116_1243	1.2	122
20240116_1253	0.4	307
20240116_1303	0.4	86
20240116_1313	0.1	349
20240116_1323	0.7	188
20240116_1333	2	124
20240116_1343	0.1	83
20240116_1353	0.9	164
20240116_1403	0.1	305
20240116_1413	0.1	70
20240116_1423	0.1	211
20240116_1433	0.1	130
20240116_1443	0.1	87
20240116_1453	0.8	103
20240116_1503	0.3	47
20240116_1513	0.6	68
20240116_1523	1.7	38
20240116_1533	0.3	31
20240116_1543	1.4	106
20240116_1553	2.8	135
20240116_1603	0.3	106
20240116_1613	1	47
20240116_1623	1	17
20240116_1633	2.5	145
20240116_1643	4.5	100
20240116_1653	0.1	32
20240116_1703	5.1	113
20240116_1713	0.5	133
20240116_1723	0.2	186
20240116_1733	1.2	131
20240116_1743	0.4	63
20240116_1753	1	102
20240116_1803	0.5	166
20240116_1813	0.1	42
20240116_1823	0.1	61
20240116_1833	0.1	168
20240116_1843	0.1	330
20240116_1853	0.1	125
20240116_1903	0.1	315
20240116_1913	0.1	114
20240116_1923	0.1	105
20240116_1933	0.2	152
20240116_1943	0.1	15
20240116_1953	0.8	35
20240116_2003	0.1	139
20240116_2013	0.5	120
20240116_2023	0.1	18
20240116_2033	3.1	45
20240116_2043	0.2	345
20240116_2053	0.4	22
20240116_2103	0.2	355
20240116_2113	0.7	1
20240116_2123	0.3	31
20240116_2133	1.5	161
20240116_2143	0.4	173
20240116_2153	1.1	343
20240116_2203	0.1	233
20240116_2213	1.5	323
20240116_2223	0.2	40
20240116_2233	0.3	129
20240116_2243	1.7	12
20240116_2253	0.1	99
20240116_2303	0.1	9
20240116_2313	0.4	100
20240116_2323	0.1	98
20240116_2333	0.1	68
20240116_2343	0.1	32
20240116_2353	0.4	329

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240117_0003	0.1	83
20240117_0013	0.1	108
20240117_0023	0.5	102
20240117_0033	0.7	112
20240117_0043	0.8	297
20240117_0053	1.6	5
20240117_0103	0.3	68
20240117_0113	0.1	46
20240117_0123	0.1	140
20240117_0133	0.1	42
20240117_0143	0.1	132
20240117_0153	0.1	313
20240117_0203	0.1	38
20240117_0213	0.1	134
20240117_0223	0.1	104
20240117_0233	0.1	160
20240117_0243	0.1	133
20240117_0253	0.1	324
20240117_0303	0.1	100
20240117_0313	0.1	317
20240117_0323	0.1	111
20240117_0333	0.1	11
20240117_0343	0.1	57
20240117_0353	0.1	62
20240117_0403	0.1	70
20240117_0413	0.1	86
20240117_0423	0.1	39
20240117_0433	0.1	77
20240117_0443	0.1	51
20240117_0453	0.1	77
20240117_0503	0.1	55
20240117_0513	0.1	63
20240117_0523	0.8	348
20240117_0533	0.1	32
20240117_0543	0.1	344
20240117_0553	0.1	274
20240117_0603	0.1	80
20240117_0613	0.1	110
20240117_0623	0.1	24
20240117_0633	0.1	87
20240117_0643	0.1	137
20240117_0653	0.1	133
20240117_0703	0.1	20
20240117_0713	0.1	291
20240117_0723	0.2	175
20240117_0733	0.1	237
20240117_0743	0.1	1
20240117_0753	0.1	61
20240117_0803	0.2	99
20240117_0813	0.5	115
20240117_0823	0.3	298
20240117_0833	0.1	137
20240117_0843	0.1	117
20240117_0853	0.2	184
20240117_0903	0.1	161
20240117_0913	0.5	13
20240117_0923	1.3	75
20240117_0933	0.1	70
20240117_0943	0.4	147
20240117_0953	0.1	207
20240117_1003	0.1	337
20240117_1013	0.1	253
20240117_1023	0.1	268
20240117_1033	0.2	31
20240117_1043	0.1	35
20240117_1053	1.2	355
20240117_1103	0.7	88
20240117_1113	2.7	49
20240117_1123	1.3	42
20240117_1133	1.5	14
20240117_1143	0.1	161
20240117_1153	5.4	135

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240117_1203	0.2	302
20240117_1213	0.5	350
20240117_1223	0.1	50
20240117_1233	0.1	68
20240117_1243	0.1	82
20240117_1253	0.1	47
20240117_1303	0.1	231
20240117_1313	0.3	322
20240117_1323	0.1	10
20240117_1333	0.1	187
20240117_1343	1.8	311
20240117_1353	0.1	100
20240117_1403	0.1	122
20240117_1413	0.1	48
20240117_1423	0.1	124
20240117_1433	0.1	172
20240117_1443	0.1	96
20240117_1453	0.1	294
20240117_1503	0.3	340
20240117_1513	0.1	8
20240117_1523	0.8	180
20240117_1533	0.2	104
20240117_1543	0.1	100
20240117_1553	0.1	158
20240117_1603	0.5	155
20240117_1613	0.5	153
20240117_1623	0.2	142
20240117_1633	0.1	297
20240117_1643	0.1	131
20240117_1653	0.1	152
20240117_1703	0.1	134
20240117_1713	0.1	108
20240117_1723	0.2	117
20240117_1733	0.1	166
20240117_1743	0.1	203
20240117_1753	0.1	164
20240117_1803	0.1	142
20240117_1813	0.1	140
20240117_1823	0.2	254
20240117_1833	0.1	62
20240117_1843	0.1	3
20240117_1853	0.1	83
20240117_1903	0.1	83
20240117_1913	0.1	344
20240117_1923	0.1	94
20240117_1933	0.2	123
20240117_1943	0.1	184
20240117_1953	0.1	153
20240117_2003	0.1	136
20240117_2013	0.1	155
20240117_2023	0.1	45
20240117_2033	0.1	196
20240117_2043	0.1	152
20240117_2053	0.1	48
20240117_2103	0.1	150
20240117_2113	0.1	175
20240117_2123	0.1	313
20240117_2133	0.1	136
20240117_2143	0.1	149
20240117_2153	0.1	38
20240117_2203	0.1	66
20240117_2213	0.1	111
20240117_2223	0.1	53
20240117_2233	0.1	103
20240117_2243	0.1	141
20240117_2253	0.1	146
20240117_2303	0.1	268
20240117_2313	0.1	108
20240117_2323	0.1	144
20240117_2333	0.1	104
20240117_2343	0.1	36
20240117_2353	0.1	160

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240118_0003	0.1	21
20240118_0013	0.1	113
20240118_0023	0.1	37
20240118_0033	0.1	176
20240118_0043	0.1	144
20240118_0053	0.1	142
20240118_0103	0.1	349
20240118_0113	0.1	128
20240118_0123	0.1	187
20240118_0133	0.1	141
20240118_0143	0.1	142
20240118_0153	0.1	53
20240118_0203	0.1	251
20240118_0213	0.1	52
20240118_0223	0.1	111
20240118_0233	0.1	18
20240118_0243	0.1	11
20240118_0253	0.1	14
20240118_0303	0.1	294
20240118_0313	0.1	265
20240118_0323	0.1	136
20240118_0333	0.1	70
20240118_0343	0.1	30
20240118_0353	0.1	164
20240118_0403	0.1	137
20240118_0413	0.1	153
20240118_0423	0.1	46
20240118_0433	0.1	140
20240118_0443	0.1	99
20240118_0453	0.1	121
20240118_0503	0.1	140
20240118_0513	0.1	259
20240118_0523	0.1	110
20240118_0533	0.1	130
20240118_0543	0.1	67
20240118_0553	0.1	204
20240118_0603	0.1	95
20240118_0613	0.1	53
20240118_0623	0.3	9
20240118_0633	0.8	306
20240118_0643	0.1	175
20240118_0653	0.1	128
20240118_0703	0.1	288
20240118_0713	0.1	82
20240118_0723	0.1	32
20240118_0733	0.1	248
20240118_0743	0.1	137
20240118_0753	0.1	129
20240118_0803	0.1	103
20240118_0813	0.6	131
20240118_0823	0.9	126
20240118_0833	0.1	116
20240118_0843	0.1	157
20240118_0853	0.1	154
20240118_0903	0.1	180
20240118_0913	0.1	121
20240118_0923	0.1	87
20240118_0933	0.3	147
20240118_0943	0.1	60
20240118_0953	0.1	60
20240118_1003	1.1	54
20240118_1013	0.1	86
20240118_1023	0.1	49
20240118_1033	0.3	22
20240118_1043	0.1	147
20240118_1053	0.1	14
20240118_1103	1	9
20240118_1113	0.5	115
20240118_1123	0.3	29
20240118_1133	0.1	48
20240118_1143	1.5	72
20240118_1153	1.8	38

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240118_1203	0.2	339
20240118_1213	1.9	10
20240118_1223	2.7	353
20240118_1233	0.3	19
20240118_1243	0.4	0
20240118_1253	1.6	64
20240118_1303	0.1	123
20240118_1313	1	338
20240118_1323	0.1	142
20240118_1333	2.7	159
20240118_1343	1.6	169
20240118_1353	0.1	48
20240118_1403	0.1	341
20240118_1413	2.7	143
20240118_1423	0.4	353
20240118_1433	0.1	31
20240118_1443	0.1	24
20240118_1453	0.5	278
20240118_1503	0.1	307
20240118_1513	1	348
20240118_1523	2.4	271
20240118_1533	0.6	66
20240118_1543	0.6	312
20240118_1553	3	3
20240118_1603	0.3	354
20240118_1613	0.1	152
20240118_1623	0.1	263
20240118_1633	1.3	32
20240118_1643	0.1	107
20240118_1653	0.1	6
20240118_1703	0.1	354
20240118_1713	0.1	50
20240118_1723	0.4	135
20240118_1733	0.5	145
20240118_1743	0.2	127
20240118_1753	0.3	55
20240118_1803	0.1	35
20240118_1813	0.1	29
20240118_1823	0.1	33
20240118_1833	0.8	96
20240118_1843	0.1	120
20240118_1853	0.1	152
20240118_1903	1.5	118
20240118_1913	0.1	91
20240118_1923	2.7	167
20240118_1933	0.1	60
20240118_1943	1.3	116
20240118_1953	0.3	142
20240118_2003	0.1	134
20240118_2013	0.7	113
20240118_2023	0.9	144
20240118_2033	0.1	126
20240118_2043	0.1	69
20240118_2053	0.1	105
20240118_2103	0.1	106
20240118_2113	0.1	235
20240118_2123	0.1	27
20240118_2133	0.1	154
20240118_2143	0.1	121
20240118_2153	0.1	165
20240118_2203	0.1	347
20240118_2213	0.1	175
20240118_2223	0.1	97
20240118_2233	0.1	278
20240118_2243	0.1	14
20240118_2253	0.1	354
20240118_2303	0.1	45
20240118_2313	0.1	342
20240118_2323	0.1	41
20240118_2333	0.5	168
20240118_2343	0.2	53
20240118_2353	0.1	108

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240119_0003	0.1	288
20240119_0013	0.1	41
20240119_0023	0.1	38
20240119_0033	0.1	46
20240119_0043	0.1	332
20240119_0053	0.1	0
20240119_0103	0.1	53
20240119_0113	0.1	24
20240119_0123	0.1	47
20240119_0133	0.1	15
20240119_0143	0.1	157
20240119_0153	0.1	53
20240119_0203	0.1	82
20240119_0213	0.1	47
20240119_0223	0.1	50
20240119_0233	0.1	38
20240119_0243	0.1	89
20240119_0253	0.1	79
20240119_0303	0.1	24
20240119_0313	0.1	45
20240119_0323	0.1	82
20240119_0333	0.1	20
20240119_0343	0.1	98
20240119_0353	0.1	50
20240119_0403	0.1	59
20240119_0413	0.1	50
20240119_0423	0.1	352
20240119_0433	0.1	59
20240119_0443	0.1	58
20240119_0453	0.1	51
20240119_0503	0.1	41
20240119_0513	0.1	56
20240119_0523	0.1	61
20240119_0533	0.1	23
20240119_0543	0.1	49
20240119_0553	0.1	62
20240119_0603	0.1	106
20240119_0613	0.1	52
20240119_0623	0.1	39
20240119_0633	0.1	61
20240119_0643	0.1	47
20240119_0653	0.1	59
20240119_0703	0.1	20
20240119_0713	0.1	266
20240119_0723	0.1	74
20240119_0733	0.1	55
20240119_0743	0.1	86
20240119_0753	0.1	317
20240119_0803	0.1	14
20240119_0813	0.1	73
20240119_0823	0.1	85
20240119_0833	0.1	137
20240119_0843	0.1	141
20240119_0853	0.1	108
20240119_0903	0.2	136
20240119_0913	0.1	88
20240119_0923	0.1	104
20240119_0933	0.2	137
20240119_0943	0.5	113
20240119_0953	0.1	136
20240119_1003	2.3	52
20240119_1013	1.4	92
20240119_1023	2.9	124
20240119_1033	0.9	13
20240119_1043	0.2	84
20240119_1053	0.1	14
20240119_1103	1.2	330
20240119_1113	0.1	44
20240119_1123	2.3	124
20240119_1133	3.5	142
20240119_1143	1.1	151
20240119_1153	0.6	104

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240119_1203	1.7	12
20240119_1213	1	43
20240119_1223	1.4	324
20240119_1233	0.1	312
20240119_1243	0.1	328
20240119_1253	4	31
20240119_1303	0.1	209
20240119_1313	0.4	67
20240119_1323	0.4	199
20240119_1333	2.3	54
20240119_1343	0.6	7
20240119_1353	1.7	324
20240119_1403	0.3	272
20240119_1413	0.1	42
20240119_1423	0.1	6
20240119_1433	0.3	177
20240119_1443	0.2	97
20240119_1453	0.8	338
20240119_1503	0.3	185
20240119_1513	6.5	109
20240119_1523	1.9	81
20240119_1533	0.6	352
20240119_1543	1.1	107
20240119_1553	0.1	91
20240119_1603	2.7	61
20240119_1613	0.8	335
20240119_1623	2.6	163
20240119_1633	0.6	59
20240119_1643	0.8	7
20240119_1653	0.1	167
20240119_1703	0.1	18
20240119_1713	0.1	86
20240119_1723	0.4	176
20240119_1733	0.1	243
20240119_1743	0.9	227
20240119_1753	0.1	296
20240119_1803	0.1	292
20240119_1813	1.7	106
20240119_1823	0.1	168
20240119_1833	0.1	101
20240119_1843	1	27
20240119_1853	0.1	323
20240119_1903	0.2	265
20240119_1913	0.1	9
20240119_1923	1.4	30
20240119_1933	0.1	134
20240119_1943	0.1	340
20240119_1953	0.1	20
20240119_2003	0.1	341
20240119_2013	0.9	4
20240119_2023	0.1	7
20240119_2033	0.4	320
20240119_2043	0.1	139
20240119_2053	2.5	325
20240119_2103	0.1	82
20240119_2113	0.1	46
20240119_2123	0.1	319
20240119_2133	0.2	329
20240119_2143	0.1	300
20240119_2153	1	317
20240119_2203	0.1	95
20240119_2213	0.1	297
20240119_2223	0.1	340
20240119_2233	0.1	351
20240119_2243	0.1	29
20240119_2253	0.1	14
20240119_2303	0.1	334
20240119_2313	0.8	102
20240119_2323	0.3	276
20240119_2333	0.1	108
20240119_2343	0.1	311
20240119_2353	0.1	21

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240120_0003	1.4	301
20240120_0013	0.2	319
20240120_0023	0.1	296
20240120_0033	1.6	332
20240120_0043	2.4	338
20240120_0053	0.4	324
20240120_0103	0.1	239
20240120_0113	2.6	339
20240120_0123	2.8	335
20240120_0133	2.2	172
20240120_0143	0.6	332
20240120_0153	0.2	279
20240120_0203	0.2	338
20240120_0213	0.5	72
20240120_0223	0.4	352
20240120_0233	0.2	80
20240120_0243	1.2	125
20240120_0253	0.1	125
20240120_0303	0.1	303
20240120_0313	0.1	331
20240120_0323	0.1	94
20240120_0333	0.1	102
20240120_0343	0.1	145
20240120_0353	0.1	3
20240120_0403	0.1	344
20240120_0413	0.1	6
20240120_0423	0.1	56
20240120_0433	0.1	57
20240120_0443	0.1	101
20240120_0453	0.1	113
20240120_0503	0.1	62
20240120_0513	0.1	20
20240120_0523	0.1	352
20240120_0533	0.1	72
20240120_0543	0.1	14
20240120_0553	0.1	45
20240120_0603	0.1	3
20240120_0613	0.1	344
20240120_0623	0.1	83
20240120_0633	0.1	3
20240120_0643	0.1	64
20240120_0653	0.1	58
20240120_0703	0.1	70
20240120_0713	0.1	48
20240120_0723	0.1	22
20240120_0733	0.1	113
20240120_0743	0.1	99
20240120_0753	0.1	132
20240120_0803	0.1	120
20240120_0813	0.1	126
20240120_0823	0.1	107
20240120_0833	0.1	109
20240120_0843	0.1	125
20240120_0853	0.1	121
20240120_0903	0.1	117
20240120_0913	0.1	134
20240120_0923	0.1	116
20240120_0933	0.1	174
20240120_0943	0.1	248
20240120_0953	0.1	137
20240120_1003	0.1	90
20240120_1013	0.1	126
20240120_1023	0.1	127
20240120_1033	0.3	60
20240120_1043	0.1	39
20240120_1053	0.2	49
20240120_1103	0.1	324
20240120_1113	0.2	117
20240120_1123	2.4	127
20240120_1133	0.3	105
20240120_1143	0.1	38
20240120_1153	0.1	19

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240120_1203	1.4	280
20240120_1213	0.4	132
20240120_1223	0.1	185
20240120_1233	0.3	297
20240120_1243	0.1	187
20240120_1253	0.2	288
20240120_1303	0.8	252
20240120_1313	0.4	104
20240120_1323	0.1	332
20240120_1333	0.1	248
20240120_1343	0.5	264
20240120_1353	0.1	183
20240120_1403	0.2	191
20240120_1413	0.4	27
20240120_1423	0.4	98
20240120_1433	0.3	101
20240120_1443	1.1	108
20240120_1453	0.3	99
20240120_1503	1	309
20240120_1513	2.9	123
20240120_1523	0.1	206
20240120_1533	0.3	185
20240120_1543	1.2	164
20240120_1553	1.3	125
20240120_1603	0.4	83
20240120_1613	0.3	85
20240120_1623	0.4	114
20240120_1633	0.1	187
20240120_1643	0.1	78
20240120_1653	0.6	309
20240120_1703	0.6	327
20240120_1713	0.4	135
20240120_1723	0.4	118
20240120_1733	0.1	125
20240120_1743	1.2	94
20240120_1753	0.1	115
20240120_1803	0.2	129
20240120_1813	0.2	178
20240120_1823	0.1	207
20240120_1833	0.1	52
20240120_1843	0.3	118
20240120_1853	0.1	327
20240120_1903	0.1	135
20240120_1913	0.1	144
20240120_1923	0.1	325
20240120_1933	0.1	124
20240120_1943	0.1	348
20240120_1953	0.1	216
20240120_2003	0.1	109
20240120_2013	0.1	30
20240120_2023	0.1	65
20240120_2033	0.1	77
20240120_2043	0.1	77
20240120_2053	0.1	333
20240120_2103	0.1	122
20240120_2113	0.1	44
20240120_2123	0.1	87
20240120_2133	0.1	76
20240120_2143	0.1	42
20240120_2153	0.1	11
20240120_2203	0.3	304
20240120_2213	0.1	305
20240120_2223	0.3	320
20240120_2233	0.2	242
20240120_2243	0.1	291
20240120_2253	2.2	277
20240120_2303	0.1	354
20240120_2313	0.1	335
20240120_2323	0.1	259
20240120_2333	0.1	109
20240120_2343	0.1	105
20240120_2353	1.2	334

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240121_0003	0.3	339
20240121_0013	0.2	298
20240121_0023	0.3	79
20240121_0033	0.2	355
20240121_0043	1.1	314
20240121_0053	0.1	341
20240121_0103	0.3	327
20240121_0113	0.1	59
20240121_0123	0.1	35
20240121_0133	0.1	91
20240121_0143	0.1	350
20240121_0153	0.1	104
20240121_0203	0.1	152
20240121_0213	0.1	309
20240121_0223	0.1	224
20240121_0233	0.1	132
20240121_0243	0.1	48
20240121_0253	0.1	302
20240121_0303	0.1	325
20240121_0313	0.1	46
20240121_0323	0.1	167
20240121_0333	0.3	351
20240121_0343	0.1	107
20240121_0353	0.1	117
20240121_0403	0.1	148
20240121_0413	0.1	148
20240121_0423	0.1	138
20240121_0433	0.1	113
20240121_0443	0.1	90
20240121_0453	0.1	150
20240121_0503	0.1	90
20240121_0513	0.1	57
20240121_0523	0.1	128
20240121_0533	0.1	53
20240121_0543	0.1	145
20240121_0553	0.1	80
20240121_0603	0.1	125
20240121_0613	0.1	143
20240121_0623	0.1	103
20240121_0633	0.1	165
20240121_0643	0.1	98
20240121_0653	0.1	148
20240121_0703	0.1	148
20240121_0713	0.1	118
20240121_0723	0.1	56
20240121_0733	0.1	52
20240121_0743	0.1	91
20240121_0753	0.1	133
20240121_0803	0.1	141
20240121_0813	0.1	131
20240121_0823	0.1	169
20240121_0833	0.1	168
20240121_0843	0.1	206
20240121_0853	0.1	144
20240121_0903	0.2	148
20240121_0913	0.2	123
20240121_0923	0.2	123
20240121_0933	0.1	113
20240121_0943	0.1	19
20240121_0953	0.1	242
20240121_1003	0.1	136
20240121_1013	0.4	148
20240121_1023	0.1	292
20240121_1033	0.1	258
20240121_1043	0.1	50
20240121_1053	0.1	156
20240121_1103	0.1	11
20240121_1113	0.1	274
20240121_1123	0.1	195
20240121_1133	0.1	88
20240121_1143	0.5	260
20240121_1153	0.1	91

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240121_1203	0.1	255
20240121_1213	0.1	127
20240121_1223	0.2	100
20240121_1233	1.6	121
20240121_1243	0.2	190
20240121_1253	0.1	181
20240121_1303	0.1	28
20240121_1313	0.1	23
20240121_1323	0.1	185
20240121_1333	0.1	146
20240121_1343	0.1	35
20240121_1353	0.7	35
20240121_1403	0.9	65
20240121_1413	1	106
20240121_1423	0.1	20
20240121_1433	0.1	189
20240121_1443	0.1	291
20240121_1453	0.1	273
20240121_1503	1	75
20240121_1513	0.1	61
20240121_1523	0.1	68
20240121_1533	0.1	156
20240121_1543	0.4	321
20240121_1553	0.1	141
20240121_1603	0.1	70
20240121_1613	0.1	198
20240121_1623	0.1	95
20240121_1633	0.3	141
20240121_1643	0.1	117
20240121_1653	0.1	240
20240121_1703	0.1	39
20240121_1713	0.1	61
20240121_1723	0.1	99
20240121_1733	0.1	165
20240121_1743	0.1	305
20240121_1753	0.1	312
20240121_1803	0.1	138
20240121_1813	0.1	141
20240121_1823	0.1	68
20240121_1833	0.1	109
20240121_1843	0.1	108
20240121_1853	0.1	24
20240121_1903	0.4	71
20240121_1913	0.7	92
20240121_1923	0.2	121
20240121_1933	0.4	117
20240121_1943	0.2	50
20240121_1953	0.6	112
20240121_2003	0.3	115
20240121_2013	0.4	145
20240121_2023	0.4	129
20240121_2033	0.1	102
20240121_2043	0.1	112
20240121_2053	0.3	134
20240121_2103	0.1	126
20240121_2113	0.1	155
20240121_2123	0.1	159
20240121_2133	0.1	161
20240121_2143	0.2	25
20240121_2153	0.1	140
20240121_2203	0.1	98
20240121_2213	0.1	63
20240121_2223	0.1	351
20240121_2233	0.1	141
20240121_2243	0.1	104
20240121_2253	0.2	27
20240121_2303	0.1	96
20240121_2313	0.3	116
20240121_2323	0.2	23
20240121_2333	0.1	254
20240121_2343	0.1	139
20240121_2353	0.1	208

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240122_0003	0.1	212
20240122_0013	0.1	136
20240122_0023	0.1	81
20240122_0033	0.1	136
20240122_0043	0.1	241
20240122_0053	0.1	233
20240122_0103	0.1	273
20240122_0113	0.1	173
20240122_0123	0.1	152
20240122_0133	0.1	128
20240122_0143	0.1	88
20240122_0153	0.1	270
20240122_0203	0.1	150
20240122_0213	0.1	35
20240122_0223	0.1	102
20240122_0233	0.1	142
20240122_0243	0.1	161
20240122_0253	0.1	122
20240122_0303	0.1	269
20240122_0313	0.1	121
20240122_0323	0.1	101
20240122_0333	0.1	142
20240122_0343	0.2	97
20240122_0353	1.2	308
20240122_0403	0.2	11
20240122_0413	0.1	56
20240122_0423	0.8	348
20240122_0433	0.3	325
20240122_0443	0.4	27
20240122_0453	2.6	296
20240122_0503	0.5	353
20240122_0513	0.7	275
20240122_0523	0.1	45
20240122_0533	0.1	280
20240122_0543	0.1	90
20240122_0553	0.1	68
20240122_0603	0.1	277
20240122_0613	0.1	144
20240122_0623	0.1	153
20240122_0633	0.1	207
20240122_0643	0.1	151
20240122_0653	0.1	143
20240122_0703	0.1	108
20240122_0713	0.1	152
20240122_0723	0.1	133
20240122_0733	0.1	55
20240122_0743	0.2	166
20240122_0753	0.1	162
20240122_0803	0.1	41
20240122_0813	0.1	351
20240122_0823	0.1	283
20240122_0833	0.6	263
20240122_0843	0.1	218
20240122_0853	0.1	290
20240122_0903	0.2	87
20240122_0913	0.4	311
20240122_0923	0.2	287
20240122_0933	0.6	307
20240122_0943	1.1	12
20240122_0953	0.1	133
20240122_1003	1	281
20240122_1013	0.2	343
20240122_1023	0.1	21
20240122_1033	0.3	15
20240122_1043	0.1	89
20240122_1053	0.1	45
20240122_1103	0.1	334
20240122_1113	0.1	276
20240122_1123	0.1	349
20240122_1133	0.1	272
20240122_1143	0.5	50
20240122_1153	0.1	348

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240122_1203	0.3	75
20240122_1213	0.1	146
20240122_1223	0.6	299
20240122_1233	0.1	313
20240122_1243	0.6	354
20240122_1253	0.1	343
20240122_1303	2.9	95
20240122_1313	0.1	97
20240122_1323	1.2	335
20240122_1333	0.2	311
20240122_1343	1.4	50
20240122_1353	0.9	85
20240122_1403	0.4	282
20240122_1413	1.6	14
20240122_1423	0.4	19
20240122_1433	0.6	33
20240122_1443	0.1	325
20240122_1453	0.1	317
20240122_1503	2.1	316
20240122_1513	0.2	273
20240122_1523	0.1	298
20240122_1533	0.5	300
20240122_1543	0.2	331
20240122_1553	1.7	67
20240122_1603	0.9	303
20240122_1613	1.6	247
20240122_1623	0.1	321
20240122_1633	0.2	274
20240122_1643	0.1	342
20240122_1653	0.1	327
20240122_1703	0.5	294
20240122_1713	0.2	241
20240122_1723	0.6	89
20240122_1733	1.5	4
20240122_1743	0.1	348
20240122_1753	0.8	244
20240122_1803	0.1	89
20240122_1813	1.8	129
20240122_1823	0.1	157
20240122_1833	0.4	98
20240122_1843	2	346
20240122_1853	2.2	332
20240122_1903	0.1	249
20240122_1913	1	122
20240122_1923	0.8	166
20240122_1933	0.9	342
20240122_1943	2.9	347
20240122_1953	1.7	276
20240122_2003	0.2	283
20240122_2013	1.8	338
20240122_2023	0.1	242
20240122_2033	0.1	28
20240122_2043	0.1	97
20240122_2053	2.5	308
20240122_2103	5.6	315
20240122_2113	0.3	124
20240122_2123	0.1	133
20240122_2133	4.9	319
20240122_2143	0.1	232
20240122_2153	0.3	127
20240122_2203	0.1	64
20240122_2213	1.9	108
20240122_2223	1.2	306
20240122_2233	0.1	332
20240122_2243	0.6	321
20240122_2253	0.1	314
20240122_2303	0.4	40
20240122_2313	0.1	302
20240122_2323	1.4	34
20240122_2333	0.1	34
20240122_2343	0.3	241
20240122_2353	0.2	317

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240123_0003	0.1	256
20240123_0013	0.1	264
20240123_0023	0.1	30
20240123_0033	0.3	320
20240123_0043	0.1	116
20240123_0053	0.3	290
20240123_0103	2.5	347
20240123_0113	5.3	307
20240123_0123	0.2	109
20240123_0133	0.2	293
20240123_0143	0.2	318
20240123_0153	2.3	45
20240123_0203	0.1	262
20240123_0213	0.2	303
20240123_0223	1.7	317
20240123_0233	0.1	313
20240123_0243	0.2	303
20240123_0253	0.1	300
20240123_0303	0.1	307
20240123_0313	0.1	126
20240123_0323	0.5	16
20240123_0333	0.1	334
20240123_0343	1.3	338
20240123_0353	0.1	320
20240123_0403	0.4	349
20240123_0413	6.2	311
20240123_0423	1.1	92
20240123_0433	1.2	351
20240123_0443	0.1	117
20240123_0453	0.5	164
20240123_0503	0.3	326
20240123_0513	0.1	332
20240123_0523	0.1	273
20240123_0533	0.1	255
20240123_0543	0.1	346
20240123_0553	0.2	343
20240123_0603	0.3	264
20240123_0613	1.4	52
20240123_0623	0.1	88
20240123_0633	0.3	318
20240123_0643	0.1	34
20240123_0653	1.6	316
20240123_0703	0.4	293
20240123_0713	0.1	20
20240123_0723	0.3	351
20240123_0733	1.5	206
20240123_0743	0.3	284
20240123_0753	0.8	313
20240123_0803	0.2	267
20240123_0813	0.1	25
20240123_0823	3.4	332
20240123_0833	4.7	320
20240123_0843	0.9	321
20240123_0853	2.4	319
20240123_0903	0.5	323
20240123_0913	0.2	316
20240123_0923	0.8	16
20240123_0933	0.1	4
20240123_0943	0.1	297
20240123_0953	0.5	282
20240123_1003	0.1	289
20240123_1013	0.6	328
20240123_1023	0.1	54
20240123_1033	0.1	269
20240123_1043	0.1	25
20240123_1053	0.5	11
20240123_1103	0.1	25
20240123_1113	0.1	22
20240123_1123	0.3	302
20240123_1133	0.1	78
20240123_1143	0.2	286
20240123_1153	1.1	295

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240123_1203	3.2	321
20240123_1213	0.7	341
20240123_1223	0.6	89
20240123_1233	0.1	38
20240123_1243	0.1	105
20240123_1253	0.1	47
20240123_1303	0.2	10
20240123_1313	0.4	291
20240123_1323	0.6	124
20240123_1333	0.1	85
20240123_1343	0.3	106
20240123_1353	2.3	322
20240123_1403	0.4	62
20240123_1413	0.1	246
20240123_1423	2	48
20240123_1433	2.5	56
20240123_1443	0.7	295
20240123_1453	0.9	20
20240123_1503	0.2	338
20240123_1513	0.2	348
20240123_1523	0.1	64
20240123_1533	5.5	43
20240123_1543	0.1	288
20240123_1553	0.2	318
20240123_1603	0.1	316
20240123_1613	0.2	153
20240123_1623	0.1	258
20240123_1633	0.9	349
20240123_1643	2	347
20240123_1653	0.3	339
20240123_1703	0.3	319
20240123_1713	0.4	354
20240123_1723	2.3	312
20240123_1733	0.1	334
20240123_1743	0.1	254
20240123_1753	0.1	72
20240123_1803	0.7	286
20240123_1813	5.7	305
20240123_1823	0.8	178
20240123_1833	1.6	263
20240123_1843	5.3	316
20240123_1853	0.1	323
20240123_1903	0.1	324
20240123_1913	1.3	310
20240123_1923	0.1	249
20240123_1933	0.1	39
20240123_1943	0.1	99
20240123_1953	0.8	334
20240123_2003	0.1	318
20240123_2013	0.1	338
20240123_2023	0.1	337
20240123_2033	0.2	321
20240123_2043	0.1	55
20240123_2053	0.1	337
20240123_2103	0.8	322
20240123_2113	0.4	319
20240123_2123	0.1	184
20240123_2133	0.6	308
20240123_2143	0.1	57
20240123_2153	0.3	30
20240123_2203	0.1	162
20240123_2213	5	325
20240123_2223	0.1	48
20240123_2233	0.1	228
20240123_2243	0.1	4
20240123_2253	0.1	63
20240123_2303	2	80
20240123_2313	0.6	8
20240123_2323	0.1	327
20240123_2333	0.1	341
20240123_2343	0.1	36
20240123_2353	0.1	33

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240124_0003	3.3	341
20240124_0013	0.2	294
20240124_0023	1.3	53
20240124_0033	0.2	336
20240124_0043	0.6	4
20240124_0053	0.1	349
20240124_0103	0.1	23
20240124_0113	0.4	349
20240124_0123	1.3	344
20240124_0133	0.1	72
20240124_0143	0.3	193
20240124_0153	0.2	316
20240124_0203	0.1	351
20240124_0213	0.1	54
20240124_0223	0.7	331
20240124_0233	0.1	291
20240124_0243	0.3	115
20240124_0253	0.4	317
20240124_0303	0.3	340
20240124_0313	0.1	310
20240124_0323	1.1	308
20240124_0333	0.1	337
20240124_0343	0.1	182
20240124_0353	0.3	26
20240124_0403	1.3	16
20240124_0413	0.1	323
20240124_0423	0.1	342
20240124_0433	0.1	131
20240124_0443	0.2	94
20240124_0453	0.1	78
20240124_0503	0.1	286
20240124_0513	0.8	355
20240124_0523	0.2	297
20240124_0533	0.1	88
20240124_0543	0.1	283
20240124_0553	0.3	30
20240124_0603	0.1	355
20240124_0613	0.2	331
20240124_0623	0.2	349
20240124_0633	0.1	278
20240124_0643	0.1	324
20240124_0653	0.1	45
20240124_0703	0.1	342
20240124_0713	0.1	44
20240124_0723	0.1	213
20240124_0733	0.1	318
20240124_0743	0.1	205
20240124_0753	0.1	350
20240124_0803	0.1	97
20240124_0813	0.2	299
20240124_0823	0.2	341
20240124_0833	3.1	3
20240124_0843	0.5	301
20240124_0853	0.1	263
20240124_0903	2.7	347
20240124_0913	0.1	27
20240124_0923	0.5	110
20240124_0933	0.3	20
20240124_0943	0.1	10
20240124_0953	0.1	321
20240124_1003	0.2	38
20240124_1013	0.3	85
20240124_1023	0.1	64
20240124_1033	0.1	50
20240124_1043	0.3	138
20240124_1053	0.1	277
20240124_1103	0.2	92
20240124_1113	0.2	83
20240124_1123	0.1	328
20240124_1133	0.1	107
20240124_1143	0.2	48
20240124_1153	0.3	87

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240124_1203	0.3	59
20240124_1213	1	63
20240124_1223	0.1	50
20240124_1233	0.4	111
20240124_1243	0.2	103
20240124_1253	1.2	57
20240124_1303	0.5	272
20240124_1313	0.3	53
20240124_1323	0.1	97
20240124_1333	0.6	337
20240124_1343	0.1	119
20240124_1353	0.9	34
20240124_1403	0.5	44
20240124_1413	0.1	138
20240124_1423	0.5	147
20240124_1433	0.1	222
20240124_1443	0.1	285
20240124_1453	4.7	82
20240124_1503	0.1	133
20240124_1513	0.1	20
20240124_1523	1.9	6
20240124_1533	0.4	44
20240124_1543	0.2	305
20240124_1553	0.1	4
20240124_1603	0.9	299
20240124_1613	0.5	51
20240124_1623	0.1	93
20240124_1633	0.2	160
20240124_1643	0.2	35
20240124_1653	0.1	4
20240124_1703	0.1	319
20240124_1713	0.1	321
20240124_1723	0.1	122
20240124_1733	0.2	77
20240124_1743	0.1	111
20240124_1753	0.6	64
20240124_1803	0.1	331
20240124_1813	0.3	331
20240124_1823	0.1	286
20240124_1833	0.1	10
20240124_1843	0.2	295
20240124_1853	0.2	300
20240124_1903	0.1	39
20240124_1913	0.1	274
20240124_1923	0.1	91
20240124_1933	0.7	26
20240124_1943	0.9	306
20240124_1953	0.1	335
20240124_2003	0.1	10
20240124_2013	0.1	298
20240124_2023	0.3	321
20240124_2033	0.1	317
20240124_2043	0.2	288
20240124_2053	0.1	1
20240124_2103	0.1	342
20240124_2113	0.1	107
20240124_2123	0.1	322
20240124_2133	0.1	311
20240124_2143	0.2	306
20240124_2153	0.1	58
20240124_2203	0.4	323
20240124_2213	0.1	331
20240124_2223	0.4	1
20240124_2233	0.2	292
20240124_2243	0.1	272
20240124_2253	0.1	277
20240124_2303	0.1	323
20240124_2313	0.2	273
20240124_2323	0.1	62
20240124_2333	0.2	340
20240124_2343	0.2	346
20240124_2353	0.2	304

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240125_0003	0.1	91
20240125_0013	0.1	46
20240125_0023	0.1	0
20240125_0033	0.7	297
20240125_0043	0.1	343
20240125_0053	0.1	79
20240125_0103	0.1	49
20240125_0113	0.1	33
20240125_0123	0.1	308
20240125_0133	0.1	273
20240125_0143	0.1	120
20240125_0153	0.1	331
20240125_0203	0.1	21
20240125_0213	0.1	137
20240125_0223	0.1	228
20240125_0233	0.1	258
20240125_0243	0.1	130
20240125_0253	0.1	120
20240125_0303	0.2	76
20240125_0313	0.1	190
20240125_0323	0.1	315
20240125_0333	0.1	121
20240125_0343	0.1	140
20240125_0353	0.1	223
20240125_0403	0.1	114
20240125_0413	0.1	231
20240125_0423	0.1	144
20240125_0433	0.1	150
20240125_0443	0.1	130
20240125_0453	0.1	63
20240125_0503	0.1	13
20240125_0513	0.1	287
20240125_0523	0.1	350
20240125_0533	0.1	109
20240125_0543	0.1	354
20240125_0553	0.1	318
20240125_0603	0.1	156
20240125_0613	0.1	152
20240125_0623	0.1	146
20240125_0633	0.1	139
20240125_0643	0.1	158
20240125_0653	0.1	184
20240125_0703	0.1	74
20240125_0713	0.1	136
20240125_0723	0.1	133
20240125_0733	0.1	250
20240125_0743	0.1	137
20240125_0753	0.3	224
20240125_0803	0.4	133
20240125_0813	0.1	119
20240125_0823	0.1	66
20240125_0833	0.1	170
20240125_0843	0.1	85
20240125_0853	0.4	202
20240125_0903	0.1	170
20240125_0913	0.1	258
20240125_0923	0.1	138
20240125_0933	0.3	20
20240125_0943	0.1	268
20240125_0953	0.1	289
20240125_1003	0.1	122
20240125_1013	0.1	96
20240125_1023	0.2	111
20240125_1033	0.3	122
20240125_1043	0.1	252
20240125_1053	0.1	169
20240125_1103	0.9	183
20240125_1113	0.1	305
20240125_1123	0.1	346
20240125_1133	0.1	244
20240125_1143	0.3	146
20240125_1153	0.3	221

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240125_1203	0.1	353
20240125_1213	0.1	334
20240125_1223	0.1	267
20240125_1233	0.3	353
20240125_1243	0.1	163
20240125_1253	0.4	245
20240125_1303	0.8	246
20240125_1313	0.1	280
20240125_1323	0.1	238
20240125_1333	0.1	75
20240125_1343	0.1	2
20240125_1353	0.1	204
20240125_1403	0.8	290
20240125_1413	0.2	146
20240125_1423	0.1	272
20240125_1433	1.5	236
20240125_1443	0.2	132
20240125_1453	0.1	146
20240125_1503	0.1	119
20240125_1513	0.2	144
20240125_1523	0.1	112
20240125_1533	0.2	279
20240125_1543	0.4	84
20240125_1553	0.1	129
20240125_1603	0.6	40
20240125_1613	1.7	112
20240125_1623	0.1	33
20240125_1633	0.5	94
20240125_1643	0.1	53
20240125_1653	0.3	157
20240125_1703	0.3	113
20240125_1713	0.1	89
20240125_1723	0.3	134
20240125_1733	0.4	78
20240125_1743	0.3	84
20240125_1753	1.7	88
20240125_1803	0.1	87
20240125_1813	0.1	94
20240125_1823	0.4	89
20240125_1833	0.1	320
20240125_1843	0.1	242
20240125_1853	0.1	328
20240125_1903	0.1	74
20240125_1913	0.1	162
20240125_1923	0.1	283
20240125_1933	0.1	50
20240125_1943	0.1	3
20240125_1953	0.1	294
20240125_2003	0.1	23
20240125_2013	0.1	20
20240125_2023	0.1	35
20240125_2033	0.1	116
20240125_2043	0.1	152
20240125_2053	0.1	141
20240125_2103	0.1	106
20240125_2113	0.1	106
20240125_2123	0.1	32
20240125_2133	0.1	161
20240125_2143	0.1	159
20240125_2153	0.1	137
20240125_2203	0.1	175
20240125_2213	0.1	175
20240125_2223	0.1	136
20240125_2233	0.1	86
20240125_2243	0.1	69
20240125_2253	0.1	46
20240125_2303	0.1	89
20240125_2313	0.1	164
20240125_2323	0.1	132
20240125_2333	0.1	198
20240125_2343	0.1	89
20240125_2353	0.1	99

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240126_0003	0.1	74
20240126_0013	0.1	25
20240126_0023	0.1	311
20240126_0033	0.1	111
20240126_0043	0.1	7
20240126_0053	0.1	144
20240126_0103	0.1	120
20240126_0113	0.1	101
20240126_0123	0.1	63
20240126_0133	0.1	304
20240126_0143	0.1	83
20240126_0153	0.1	8
20240126_0203	0.1	321
20240126_0213	0.1	321
20240126_0223	0.1	142
20240126_0233	0.1	146
20240126_0243	0.1	68
20240126_0253	0.1	349
20240126_0303	0.1	133
20240126_0313	0.1	145
20240126_0323	0.1	147
20240126_0333	0.1	143
20240126_0343	0.1	153
20240126_0353	0.1	150
20240126_0403	0.1	143
20240126_0413	0.1	136
20240126_0423	0.1	118
20240126_0433	0.1	174
20240126_0443	0.1	115
20240126_0453	0.1	132
20240126_0503	0.1	94
20240126_0513	0.1	145
20240126_0523	0.1	127
20240126_0533	0.1	147
20240126_0543	0.1	62
20240126_0553	0.1	152
20240126_0603	0.1	50
20240126_0613	0.1	50
20240126_0623	0.1	248
20240126_0633	0.1	139
20240126_0643	0.1	83
20240126_0653	0.1	149
20240126_0703	0.1	77
20240126_0713	0.1	275
20240126_0723	0.3	151
20240126_0733	0.2	138
20240126_0743	0.1	42
20240126_0753	0.1	347
20240126_0803	0.1	220
20240126_0813	0.1	275
20240126_0823	0.1	263
20240126_0833	0.3	93
20240126_0843	0.1	126
20240126_0853	0.1	72
20240126_0903	0.1	322
20240126_0913	0.1	256
20240126_0923	0.1	194
20240126_0933	0.1	245
20240126_0943	0.1	297
20240126_0953	0.4	254
20240126_1003	0.2	91
20240126_1013	0.2	304
20240126_1023	0.1	275
20240126_1033	0.2	323
20240126_1043	0.2	314
20240126_1053	0.2	314
20240126_1103	0.3	329
20240126_1113	0.3	53
20240126_1123	0.3	308
20240126_1133	0.1	294
20240126_1143	0.1	274
20240126_1153	0.2	257

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240126_1203	0.1	90
20240126_1213	0.4	269
20240126_1223	0.4	169
20240126_1233	0.1	229
20240126_1243	0.1	309
20240126_1253	1	231
20240126_1303	0.1	135
20240126_1313	0.3	57
20240126_1323	0.1	217
20240126_1333	0.1	226
20240126_1343	0.1	188
20240126_1353	0.4	342
20240126_1403	0.1	77
20240126_1413	0.4	46
20240126_1423	0.2	39
20240126_1433	0.5	48
20240126_1443	0.8	114
20240126_1453	0.2	57
20240126_1503	0.1	68
20240126_1513	0.1	120
20240126_1523	1.5	129
20240126_1533	0.5	99
20240126_1543	0.1	329
20240126_1553	0.1	158
20240126_1603	0.2	133
20240126_1613	0.1	162
20240126_1623	0.1	342
20240126_1633	0.1	257
20240126_1643	0.1	319
20240126_1653	0.1	301
20240126_1703	0.1	109
20240126_1713	0.2	154
20240126_1723	0.1	45
20240126_1733	0.1	206
20240126_1743	0.1	5
20240126_1753	0.1	52
20240126_1803	0.4	12
20240126_1813	0.3	110
20240126_1823	0.1	99
20240126_1833	0.1	48
20240126_1843	0.1	58
20240126_1853	0.3	49
20240126_1903	0.1	91
20240126_1913	0.1	333
20240126_1923	0.1	299
20240126_1933	0.1	98
20240126_1943	0.1	114
20240126_1953	0.1	47
20240126_2003	0.1	288
20240126_2013	0.1	176
20240126_2023	0.1	263
20240126_2033	0.1	178
20240126_2043	0.1	96
20240126_2053	0.1	321
20240126_2103	0.1	249
20240126_2113	0.1	83
20240126_2123	0.1	127
20240126_2133	0.1	345
20240126_2143	0.1	272
20240126_2153	0.1	85
20240126_2203	0.1	76
20240126_2213	0.1	139
20240126_2223	0.1	142
20240126_2233	0.1	146
20240126_2243	0.1	317
20240126_2253	0.1	321
20240126_2303	0.9	329
20240126_2313	0.1	328
20240126_2323	0.1	106
20240126_2333	0.1	124
20240126_2343	0.1	109
20240126_2353	0.1	335

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240127_0003	0.1	243
20240127_0013	0.1	165
20240127_0023	0.1	14
20240127_0033	0.1	87
20240127_0043	0.1	256
20240127_0053	0.1	185
20240127_0103	0.1	95
20240127_0113	0.1	347
20240127_0123	0.1	254
20240127_0133	0.1	249
20240127_0143	0.1	279
20240127_0153	0.1	130
20240127_0203	0.1	83
20240127_0213	0.1	343
20240127_0223	0.1	346
20240127_0233	0.1	261
20240127_0243	0.1	315
20240127_0253	0.1	80
20240127_0303	0.1	103
20240127_0313	0.1	99
20240127_0323	0.1	83
20240127_0333	0.1	135
20240127_0343	0.1	115
20240127_0353	0.1	244
20240127_0403	0.1	304
20240127_0413	0.1	36
20240127_0423	0.1	56
20240127_0433	0.1	174
20240127_0443	0.1	249
20240127_0453	0.1	80
20240127_0503	0.1	355
20240127_0513	0.1	312
20240127_0523	0.1	143
20240127_0533	0.1	136
20240127_0543	0.1	100
20240127_0553	0.1	3
20240127_0603	0.1	186
20240127_0613	0.1	147
20240127_0623	0.1	83
20240127_0633	0.1	119
20240127_0643	0.1	348
20240127_0653	0.1	280
20240127_0703	0.1	13
20240127_0713	0.1	150
20240127_0723	0.1	250
20240127_0733	0.1	157
20240127_0743	0.1	216
20240127_0753	0.1	199
20240127_0803	0.1	331
20240127_0813	0.1	245
20240127_0823	0.1	154
20240127_0833	0.1	250
20240127_0843	0.1	216
20240127_0853	0.1	146
20240127_0903	0.1	257
20240127_0913	0.1	162
20240127_0923	0.2	147
20240127_0933	0.5	288
20240127_0943	0.1	282
20240127_0953	0.1	260
20240127_1003	0.1	136
20240127_1013	0.1	250
20240127_1023	0.4	50
20240127_1033	0.1	161
20240127_1043	0.1	284
20240127_1053	0.1	220
20240127_1103	0.1	83
20240127_1113	0.1	19
20240127_1123	0.1	121
20240127_1133	0.1	173
20240127_1143	1.3	151
20240127_1153	1.3	207

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240127_1203	0.1	59
20240127_1213	0.1	197
20240127_1223	0.5	294
20240127_1233	0.7	271
20240127_1243	0.1	54
20240127_1253	1.7	64
20240127_1303	0.2	172
20240127_1313	0.1	323
20240127_1323	0.1	157
20240127_1333	0.1	16
20240127_1343	0.1	352
20240127_1353	0.1	141
20240127_1403	0.1	129
20240127_1413	0.4	224
20240127_1423	0.4	154
20240127_1433	2.6	161
20240127_1443	1.6	89
20240127_1453	0.7	167
20240127_1503	0.2	180
20240127_1513	0.1	203
20240127_1523	0.2	113
20240127_1533	0.1	1
20240127_1543	0.5	353
20240127_1553	0.2	337
20240127_1603	0.1	59
20240127_1613	0.1	61
20240127_1623	0.1	122
20240127_1633	0.4	16
20240127_1643	0.2	106
20240127_1653	1.7	319
20240127_1703	0.1	253
20240127_1713	0.1	354
20240127_1723	1.2	327
20240127_1733	0.2	6
20240127_1743	0.4	9
20240127_1753	0.2	3
20240127_1803	0.2	335
20240127_1813	0.2	292
20240127_1823	0.2	274
20240127_1833	0.2	328
20240127_1843	0.1	335
20240127_1853	1.4	311
20240127_1903	0.1	291
20240127_1913	0.5	315
20240127_1923	0.2	299
20240127_1933	0.2	321
20240127_1943	0.2	344
20240127_1953	0.1	110
20240127_2003	0.1	138
20240127_2013	0.1	157
20240127_2023	0.1	125
20240127_2033	0.1	96
20240127_2043	0.1	94
20240127_2053	0.1	317
20240127_2103	0.1	292
20240127_2113	0.1	208
20240127_2123	0.1	121
20240127_2133	0.1	106
20240127_2143	0.1	234
20240127_2153	0.1	157
20240127_2203	0.1	239
20240127_2213	0.1	144
20240127_2223	0.1	77
20240127_2233	0.1	149
20240127_2243	0.1	289
20240127_2253	0.1	314
20240127_2303	0.1	243
20240127_2313	0.1	149
20240127_2323	0.1	343
20240127_2333	0.1	103
20240127_2343	0.1	111
20240127_2353	0.1	125

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240128_0003	0.2	290
20240128_0013	0.1	249
20240128_0023	0.1	140
20240128_0033	0.1	75
20240128_0043	0.1	249
20240128_0053	0.1	144
20240128_0103	0.1	224
20240128_0113	0.1	286
20240128_0123	0.1	156
20240128_0133	0.1	295
20240128_0143	0.1	126
20240128_0153	0.1	73
20240128_0203	0.1	43
20240128_0213	0.1	257
20240128_0223	0.1	279
20240128_0233	0.1	226
20240128_0243	0.1	156
20240128_0253	0.1	151
20240128_0303	0.1	140
20240128_0313	0.1	154
20240128_0323	0.1	252
20240128_0333	0.1	250
20240128_0343	0.1	69
20240128_0353	0.1	271
20240128_0403	0.1	169
20240128_0413	0.1	227
20240128_0423	0.1	137
20240128_0433	0.1	205
20240128_0443	0.1	265
20240128_0453	0.1	268
20240128_0503	0.1	283
20240128_0513	0.1	242
20240128_0523	0.1	242
20240128_0533	0.1	272
20240128_0543	0.1	102
20240128_0553	0.1	244
20240128_0603	0.1	241
20240128_0613	0.1	103
20240128_0623	0.1	262
20240128_0633	0.1	260
20240128_0643	0.1	253
20240128_0653	0.1	262
20240128_0703	0.1	247
20240128_0713	0.1	289
20240128_0723	0.1	256
20240128_0733	0.1	142
20240128_0743	0.1	119
20240128_0753	0.1	291
20240128_0803	0.1	180
20240128_0813	0.1	130
20240128_0823	0.1	135
20240128_0833	0.1	168
20240128_0843	0.1	124
20240128_0853	0.1	217
20240128_0903	0.1	247
20240128_0913	0.1	175
20240128_0923	0.1	141
20240128_0933	0.1	240
20240128_0943	0.1	139
20240128_0953	0.1	136
20240128_1003	0.1	127
20240128_1013	0.1	147
20240128_1023	0.1	141
20240128_1033	0.1	133
20240128_1043	0.1	126
20240128_1053	0.1	119
20240128_1103	0.1	156
20240128_1113	0.1	243
20240128_1123	0.1	274
20240128_1133	0.1	200
20240128_1143	0.2	130
20240128_1153	0.1	138

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240128_1203	0.1	166
20240128_1213	0.2	289
20240128_1223	0.1	50
20240128_1233	0.1	308
20240128_1243	0.1	44
20240128_1253	0.2	111
20240128_1303	0.2	74
20240128_1313	0.1	118
20240128_1323	0.1	30
20240128_1333	0.1	350
20240128_1343	0.1	79
20240128_1353	0.1	60
20240128_1403	0.2	272
20240128_1413	0.3	136
20240128_1423	0.2	151
20240128_1433	0.1	265
20240128_1443	0.2	281
20240128_1453	0.1	39
20240128_1503	0.1	120
20240128_1513	0.1	159
20240128_1523	0.1	20
20240128_1533	0.1	337
20240128_1543	0.1	233
20240128_1553	0.1	238
20240128_1603	0.1	253
20240128_1613	0.1	258
20240128_1623	0.1	15
20240128_1633	0.5	292
20240128_1643	0.1	268
20240128_1653	0.2	276
20240128_1703	0.1	349
20240128_1713	0.1	183
20240128_1723	0.1	32
20240128_1733	0.1	244
20240128_1743	0.1	21
20240128_1753	0.1	21
20240128_1803	0.1	165
20240128_1813	0.1	127
20240128_1823	0.1	87
20240128_1833	0.3	123
20240128_1843	0.1	76
20240128_1853	0.1	94
20240128_1903	0.1	353
20240128_1913	0.1	97
20240128_1923	0.1	151
20240128_1933	0.1	55
20240128_1943	0.1	131
20240128_1953	0.1	58
20240128_2003	0.1	138
20240128_2013	0.1	331
20240128_2023	0.1	144
20240128_2033	0.1	98
20240128_2043	0.1	137
20240128_2053	0.1	88
20240128_2103	0.1	93
20240128_2113	0.1	66
20240128_2123	0.1	180
20240128_2133	0.1	142
20240128_2143	0.1	146
20240128_2153	0.1	110
20240128_2203	0.1	181
20240128_2213	0.1	151
20240128_2223	0.1	54
20240128_2233	0.1	134
20240128_2243	0.1	144
20240128_2253	0.1	117
20240128_2303	0.1	125
20240128_2313	0.1	84
20240128_2323	0.1	144
20240128_2333	0.1	108
20240128_2343	0.1	125
20240128_2353	0.1	28

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240129_0003	0.1	72
20240129_0013	0.1	81
20240129_0023	0.1	69
20240129_0033	0.1	111
20240129_0043	0.1	121
20240129_0053	0.1	81
20240129_0103	0.1	122
20240129_0113	0.1	329
20240129_0123	0.1	18
20240129_0133	0.1	123
20240129_0143	0.1	92
20240129_0153	0.1	331
20240129_0203	0.1	134
20240129_0213	0.1	145
20240129_0223	0.1	81
20240129_0233	0.1	123
20240129_0243	0.1	141
20240129_0253	0.1	132
20240129_0303	0.1	110
20240129_0313	0.1	141
20240129_0323	0.1	103
20240129_0333	0.1	108
20240129_0343	0.1	109
20240129_0353	0.1	130
20240129_0403	0.1	172
20240129_0413	0.1	148
20240129_0423	0.1	150
20240129_0433	0.1	158
20240129_0443	0.1	49
20240129_0453	0.1	124
20240129_0503	0.1	204
20240129_0513	0.1	45
20240129_0523	0.1	77
20240129_0533	0.1	95
20240129_0543	0.1	171
20240129_0553	0.1	144
20240129_0603	0.1	91
20240129_0613	0.1	55
20240129_0623	0.1	107
20240129_0633	0.1	313
20240129_0643	0.1	119
20240129_0653	0.1	47
20240129_0703	0.3	81
20240129_0713	0.1	145
20240129_0723	0.1	96
20240129_0733	0.6	37
20240129_0743	0.1	162
20240129_0753	0.1	256
20240129_0803	0.1	172
20240129_0813	0.1	239
20240129_0823	0.1	319
20240129_0833	0.1	122
20240129_0843	0.2	296
20240129_0853	0.2	107
20240129_0903	0.1	294
20240129_0913	0.4	149
20240129_0923	0.1	313
20240129_0933	0.1	97
20240129_0943	0.1	145
20240129_0953	0.1	176
20240129_1003	0.1	255
20240129_1013	0.1	278
20240129_1023	0.2	281
20240129_1033	0.1	299
20240129_1043	0.1	349
20240129_1053	0.1	18
20240129_1103	0.1	77
20240129_1113	0.1	68
20240129_1123	0.3	124
20240129_1133	0.1	16
20240129_1143	0.1	19
20240129_1153	0.1	56

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240129_1203	0.1	43
20240129_1213	0.1	237
20240129_1223	0.1	248
20240129_1233	0.1	237
20240129_1243	0.1	91
20240129_1253	0.1	168
20240129_1303	0.1	51
20240129_1313	0.1	0
20240129_1323	0.1	332
20240129_1333	0.2	289
20240129_1343	0.1	302
20240129_1353	0.1	296
20240129_1403	0.3	76
20240129_1413	0.1	22
20240129_1423	0.1	297
20240129_1433	0.1	198
20240129_1443	0.1	76
20240129_1453	1.3	164
20240129_1503	0.3	138
20240129_1513	0.1	100
20240129_1523	0.3	174
20240129_1533	0.5	67
20240129_1543	1.4	133
20240129_1553	0.2	116
20240129_1603	0.1	166
20240129_1613	0.1	80
20240129_1623	0.2	59
20240129_1633	0.1	49
20240129_1643	0.1	115
20240129_1653	0.1	69
20240129_1703	0.1	159
20240129_1713	0.1	99
20240129_1723	0.1	22
20240129_1733	0.1	122
20240129_1743	0.1	9
20240129_1753	0.1	133
20240129_1803	0.1	132
20240129_1813	0.1	93
20240129_1823	0.1	122
20240129_1833	0.1	154
20240129_1843	0.1	125
20240129_1853	0.7	103
20240129_1903	0.1	114
20240129_1913	0.1	83
20240129_1923	0.1	66
20240129_1933	0.2	197
20240129_1943	0.1	209
20240129_1953	0.1	221
20240129_2003	0.1	216
20240129_2013	0.1	120
20240129_2023	0.1	283
20240129_2033	0.1	44
20240129_2043	0.1	145
20240129_2053	0.1	285
20240129_2103	0.1	49
20240129_2113	0.1	234
20240129_2123	0.1	102
20240129_2133	0.1	132
20240129_2143	0.1	145
20240129_2153	0.1	70
20240129_2203	0.1	116
20240129_2213	0.1	266
20240129_2223	0.1	124
20240129_2233	0.1	88
20240129_2243	0.1	127
20240129_2253	0.1	47
20240129_2303	0.1	349
20240129_2313	0.1	279
20240129_2323	0.2	147
20240129_2333	0.1	52
20240129_2343	0.1	25
20240129_2353	0.1	46

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240130_0003	0.1	186
20240130_0013	0.1	141
20240130_0023	0.1	118
20240130_0033	0.1	147
20240130_0043	0.1	285
20240130_0053	0.1	118
20240130_0103	0.1	20
20240130_0113	0.1	33
20240130_0123	0.4	148
20240130_0133	0.1	158
20240130_0143	0.1	352
20240130_0153	0.1	206
20240130_0203	0.1	215
20240130_0213	0.1	145
20240130_0223	0.1	102
20240130_0233	0.1	203
20240130_0243	0.1	19
20240130_0253	0.2	289
20240130_0303	0.2	45
20240130_0313	0.1	275
20240130_0323	0.1	239
20240130_0333	0.1	176
20240130_0343	0.2	160
20240130_0353	0.2	138
20240130_0403	0.1	94
20240130_0413	0.1	281
20240130_0423	0.1	309
20240130_0433	0.1	94
20240130_0443	0.1	217
20240130_0453	0.1	252
20240130_0503	0.2	152
20240130_0513	0.1	125
20240130_0523	0.1	172
20240130_0533	0.1	137
20240130_0543	0.1	244
20240130_0553	0.1	147
20240130_0603	0.1	151
20240130_0613	0.1	318
20240130_0623	0.1	143
20240130_0633	0.1	153
20240130_0643	0.1	5
20240130_0653	0.1	152
20240130_0703	0.1	146
20240130_0713	0.1	149
20240130_0723	0.1	165
20240130_0733	0.1	112
20240130_0743	0.9	103
20240130_0753	0.1	224
20240130_0803	0.1	79
20240130_0813	1.8	236
20240130_0823	0.1	209
20240130_0833	0.1	85
20240130_0843	0.1	251
20240130_0853	0.9	138
20240130_0903	0.2	64
20240130_0913	0.1	280
20240130_0923	0.2	122
20240130_0933	0.1	254
20240130_0943	0.6	83
20240130_0953	0.1	268
20240130_1003	0.1	352
20240130_1013	0.1	229
20240130_1023	0.7	103
20240130_1033	0.2	65
20240130_1043	0.4	152
20240130_1053	0.1	194
20240130_1103	0.2	13
20240130_1113	0.1	89
20240130_1123	0.1	13
20240130_1133	0.2	59
20240130_1143	0.1	4
20240130_1153	0.1	13

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240130_1203	0.3	44
20240130_1213	0.1	135
20240130_1223	0.1	133
20240130_1233	0.1	25
20240130_1243	0.5	149
20240130_1253	0.1	345
20240130_1303	0.4	146
20240130_1313	1.4	123
20240130_1323	0.1	271
20240130_1333	0.1	240
20240130_1343	0.5	145
20240130_1353	0.1	107
20240130_1403	1	67
20240130_1413	0.2	50
20240130_1423	0.5	241
20240130_1433	2	327
20240130_1443	1.9	130
20240130_1453	0.8	145
20240130_1503	0.5	139
20240130_1513	0.1	3
20240130_1523	0.1	9
20240130_1533	0.7	354
20240130_1543	0.1	242
20240130_1553	0.2	351
20240130_1603	0.2	315
20240130_1613	0.2	104
20240130_1623	1.6	111
20240130_1633	1.8	334
20240130_1643	0.1	80
20240130_1653	0.4	342
20240130_1703	0.3	155
20240130_1713	0.1	55
20240130_1723	0.1	198
20240130_1733	0.8	144
20240130_1743	0.1	226
20240130_1753	0.1	275
20240130_1803	0.2	156
20240130_1813	0.1	186
20240130_1823	0.2	143
20240130_1833	0.1	139
20240130_1843	0.1	80
20240130_1853	0.1	152
20240130_1903	0.1	137
20240130_1913	0.1	260
20240130_1923	0.1	259
20240130_1933	0.1	268
20240130_1943	0.1	146
20240130_1953	0.1	185
20240130_2003	0.1	285
20240130_2013	0.1	193
20240130_2023	0.1	150
20240130_2033	0.1	140
20240130_2043	1	109
20240130_2053	0.1	183
20240130_2103	0.1	254
20240130_2113	0.1	126
20240130_2123	0.1	159
20240130_2133	0.4	10
20240130_2143	0.1	332
20240130_2153	0.3	137
20240130_2203	0.1	325
20240130_2213	0.1	184
20240130_2223	0.1	154
20240130_2233	0.1	31
20240130_2243	0.1	313
20240130_2253	0.1	93
20240130_2303	0.1	323
20240130_2313	0.1	130
20240130_2323	0.1	87
20240130_2333	0.1	167
20240130_2343	0.1	149
20240130_2353	0.1	240

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240131_0003	0.1	83
20240131_0013	1	122
20240131_0023	0.8	102
20240131_0033	0.1	3
20240131_0043	0.1	276
20240131_0053	0.1	77
20240131_0103	0.1	59
20240131_0113	0.1	191
20240131_0123	0.6	140
20240131_0133	0.2	159
20240131_0143	0.1	43
20240131_0153	0.5	153
20240131_0203	0.6	122
20240131_0213	0.1	156
20240131_0223	0.1	229
20240131_0233	0.2	143
20240131_0243	0.1	208
20240131_0253	0.1	208
20240131_0303	0.1	332
20240131_0313	0.3	105
20240131_0323	0.1	139
20240131_0333	0.1	179
20240131_0343	0.1	169
20240131_0353	0.1	194
20240131_0403	0.1	243
20240131_0413	0.1	189
20240131_0423	0.1	64
20240131_0433	0.1	170
20240131_0443	0.1	67
20240131_0453	0.1	234
20240131_0503	0.1	337
20240131_0513	0.1	255
20240131_0523	0.1	284
20240131_0533	0.1	300
20240131_0543	0.1	249
20240131_0553	0.2	138
20240131_0603	0.1	273
20240131_0613	0.1	348
20240131_0623	0.1	62
20240131_0633	0.1	104
20240131_0643	0.1	11
20240131_0653	0.1	12
20240131_0703	0.1	177
20240131_0713	0.1	184
20240131_0723	0.1	106
20240131_0733	1.4	120
20240131_0743	2.8	27
20240131_0753	0.8	59
20240131_0803	0.3	27
20240131_0813	0.1	329
20240131_0823	0.1	300
20240131_0833	0.1	104
20240131_0843	0.1	140
20240131_0853	0.2	127
20240131_0903	0.6	104
20240131_0913	0.1	139
20240131_0923	0.4	109
20240131_0933	0.1	135
20240131_0943	0.7	15
20240131_0953	0.2	45
20240131_1003	0.1	30
20240131_1013	0.4	143
20240131_1023	0.1	231
20240131_1033	0.4	103
20240131_1043	2.2	124
20240131_1053	0.1	119
20240131_1103	2.3	157
20240131_1113	0.1	8
20240131_1123	0.1	336
20240131_1133	0.5	142
20240131_1143	0.1	176
20240131_1153	0.1	320

Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240131_1203	0.1	318
20240131_1213	1.8	122
20240131_1223	0.1	323
20240131_1233	0.9	23
20240131_1243	5.3	126
20240131_1253	0.6	175
20240131_1303	0.1	104
20240131_1313	0.1	76
20240131_1323	0.1	345
20240131_1333	0.3	47
20240131_1343	0.6	54
20240131_1353	0.2	46
20240131_1403	0.1	299
20240131_1413	0.2	105
20240131_1423	0.1	123
20240131_1433	0.1	173
20240131_1443	0.2	47
20240131_1453	0.1	6
20240131_1503	1.1	76
20240131_1513	0.3	62
20240131_1523	0.2	50
20240131_1533	0.5	130
20240131_1543	1.9	191
20240131_1553	0.1	47
20240131_1603	1	173
20240131_1613	2.4	110
20240131_1623	1.1	39
20240131_1633	0.2	98
20240131_1643	2.2	181
20240131_1653	0.1	17
20240131_1703	0.2	153
20240131_1713	0.1	277
20240131_1723	0.1	320
20240131_1733	0.2	60
20240131_1743	0.7	143
20240131_1753	0.2	343
20240131_1803	0.6	337
20240131_1813	0.3	316
20240131_1823	0.1	53
20240131_1833	0.3	216
20240131_1843	1.1	118
20240131_1853	0.1	225
20240131_1903	0.3	156
20240131_1913	0.8	154
20240131_1923	0.7	115
20240131_1933	0.1	302
20240131_1943	1	21
20240131_1953	0.1	105
20240131_2003	1.6	342
20240131_2013	0.1	348
20240131_2023	0.1	188
20240131_2033	0.2	132
20240131_2043	0.1	280
20240131_2053	0.1	112
20240131_2103	0.1	152
20240131_2113	0.1	168
20240131_2123	0.1	190
20240131_2133	0.6	350
20240131_2143	0.1	190
20240131_2153	0.1	40
20240131_2203	0.1	85
20240131_2213	0.3	119
20240131_2223	0.1	324
20240131_2233	0.6	307
20240131_2243	0.9	156
20240131_2253	0.1	164
20240131_2303	0.1	103
20240131_2313	0.1	127
20240131_2323	0.5	98
20240131_2333	0.1	39
20240131_2343	1.2	112
20240131_2353	1.1	128

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
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 - Part of the exposed slope surface at SBA was shotcreted.
2. 27 December 2023 Observation 1 – Sprinkling truck and sprayers were arranged and provided to prevent dust dispersion at Portion E4.
3. 27 December 2023 Observation 2 – Exposed slope surface at Portion E4 was covered by tarpaulin sheet.
4. 27 December 2023 Observation 3 – Dusty material at Portion E4 was removed.

Observation(s):

1. Unpaved main haul road is dry and fugitive is observed, especially at portion E4.

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

1. The contractor has been advised to provide enough water sprayers for short-term dust control to ensure that all unpaved roads are wetted and also implement other measurements like shotcrete to pave all main haul road for long term dust control.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Joan Lo	/	Matt Choy/Kristy Wong	Jackie Tam
Date:	2 January 2024	/	2 January 2024	2 January 2024

Follow up action for previous Site Inspection:

Waiting for contractor's input

Observation(s):

1. The unpaved main haul road at SBA is dry and fugitive is observed.

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

1. The contractor has been advised to regularly water the unpaved main haul road to ensure it stays moist and to pave it for long-term dust control.

	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:	8 January 2024	/	8 January 2024	8 January 2024

Follow up action for previous Site Inspection:

1. 27 December 2023 Observation 1 - Sprinkling truck and sprayers were arranged and provided to prevent dust dispersion at Portion E4.
2. 27 December 2023 Observation 2 - For long-term slope surface protection, the tentative commencement of shotcrete was scheduled on 15 February 2024.
3. 2 January 2024 Observation 1 - Sprayers and sprinkling truck were provided and arranged to minimize dust dispersion at Portion E4.
4. 8 January 2024 Observation 1 - Sprinkling truck was scheduled and provided to ensure that the unpaved main haul road at SBA was wetted to prevent dust dispersion.

Observation(s):

1. Dusty material (Cement) at SBA without covered by impervious sheet properly or placed in an area sheltered on the top and the 3 side is observed.
2. The exposed slope surface at SBA without covered by impervious sheet properly is found.
3. Damaged silt fence around the stockpile area at SBA is observed.

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

1. The contractor has been recommended that the loading, unloading or transfer, handing or storage of cement should be cover entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides to prevent dust suppression or sprayed with water to maintain the entire surface wet. They have also been recommended to provide training courses on dust control during the shotcrete process.
2. The contractor has been reminded that the exposed slope surface should be properly covered with impervious sheet.
3. The contractor has been advised to provide maintenance for the silt fence.

	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:	15 January 2024	15 January 2024	15 January 2024	15 January 2024

Follow up action for previous Site Inspection:

1. 15 January 2024 Observation 1 - The training course on dust control requirements for shotcreting workers was held.
2. 15 January 2024 Observation 2 - The exposed slope surface at SBA was shotcreted for long-term surface protection.
3. 15 January 2024 Observation 3 - The damaged silt fence at SBA was repaired.

Observation(s):

N/O

Reminder(s):

1. The contractor has been reminded to provide temporary slope surface protection for the exposed slope surface at portion B2 before completing the concrete surface protection by February.

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

N/A

	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:	22 January 2024	/	22 January 2024	22 January 2024

Follow up action for previous Site Inspection:

1. 15 January 2024 Observation 1 - The dusty material (Cement) was removed or covered properly by impervious sheeting.

Observation(s):

1. Stockpiling of dusty material without covered by impervious sheet at SBA is found.
2. Insufficient silt fence around the soil stockpiling area at SBA is observed.
3. The oil drum and chemical containers without chemical drip tray at Portion E4 is found.

Reminder(s):

1. The activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA shall be carried out in a totally enclosed system or facility at Portion E4 to prevent dust dispersion.
2. Ensure that the door of the generator is closed while it is operating to reduce the noise produced.

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

1. The contractor has been recommended that dusty materials should be covered by impervious sheet to prevent dust dispersion.
2. The contractor has been advised to provide sufficient silt fence around the soil stockpiling area to prevent sediment from entering the system.
3. The contractor has been reminded to provide the sufficient drip tray for chemical storage to avoid 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:	29 January 2024	/	29 January 2024	29 January 2024

Appendix L Environmental Mitigation Implementation Schedule (EMIS)

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)	(a) # (Refer to Appendix K 27 Dec 2023 Weekly Site Inspection Observation 2) The exposed slopes at Portion E4 were covered by impervious sheets in the short term, the shotcrete is conducted in progress, target to be completed before or on 15 Feb 2023.
		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) ✓
		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.					✓

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	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.	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) ✓ (c) ✓
		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.					(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) ✓
		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) ✓

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	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.	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) ✓ (c) ✓ (d) ✓
		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.					(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.

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