

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

Monthly Environmental
Monitoring and Audit Report
(No. 19) – Jun 2024

2024-07-12

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The Aurecon logo features a green square above the letter 'a' in the word 'aurecon', which is written in a bold, dark grey sans-serif font.

Ref: P521530-0000-REP-NN-0091

12 July 2024

By Email

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

Attn: Ms. Claudine Lee,

Dear Claudine,

Re: Contract No. EP/SP/77/15
Northeast New Territories Landfill Extension
Submission of Monthly Environmental Monitoring and Audit Report (No.19) – June 2024
r1

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.19) – June 2024 r1” dated 12 July 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

A handwritten signature in blue ink, appearing to read 'Fredrick Leong', is positioned above the printed name and title.

Fredrick Leong
Environmental Team Leader

Encl.

1. Monthly Environmental Monitoring and Audit Report (No.19) – June 2024 r1

cc.

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

Our Ref.: CL/91823/1377-VES
Date: 12 July 2024

By Email

Veolia Hong Kong Holding Limited
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Attn.: Mr. Colin Mitchell

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Dear Sir

Re: Contract No. EP/SP/77/15
North-East New Territories Landfill Extension (NENTX)
Monthly Environmental Monitoring and Audit Report (No.19) –
June 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.19) – June 2024" dated 12 July 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



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Document Control Record

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Document control							aurecon
Report title		Monthly Environmental Monitoring and Audit Report (No. 19) – June 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	8 July 2024	Submit to IEC	J Man	K.Chau		FL	
1	12 July 202	Submit to IEC	J Man	K.Chau		FL	
Current revision		1					

Approval			
Reviewer's signature		Approver's signature	
Name	Keith Chau	Name	Fredrick Leong
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Executive Summary

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

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

This 19th Monthly EM&A Report presents the EM&A works conducted from 1 to 30 June 2024 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during Report Period

The major construction works undertaken during the reporting period include:

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

Environmental Monitoring and Audit Progress

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

Items	Times	Date
- Air Quality Monitoring during normal weekdays at each monitoring station	5 times	6, 12, 18, 24 & 29 June 2024
- Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	6, 12, 18 & 24 June 2024
- Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	12 June 2024
- Landfill Gas Monitoring during normal weekdays for Construction Works	19 times	7 to 8, 11 to 15, 17 to 22, 24 to 29 June 2024
- Joint Environmental Site Inspection	4 times	3, 11, 17 & 24 June 2024

Environmental Exceedance

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

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

Environmental Non-Conformance/Complaint/Summons and Prosecution

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

Reporting Change

There was no reporting change in the reporting period.

Future Key Issues

Works to be undertaken in the next month include:

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

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

1 Introduction

1.1 Background

- 1.1.1 The North East New Territories Landfill Extension (the NENTX Project) is located adjacent to the existing North East New Territories (NENT) Landfill at Ta Kwu Ling. The extension site is located in a valley covering mainly the existing NENT Landfill Stockpile and Borrow Area that was formed to the east of the existing landfill as part of the original site development of the landfill, and layout plan shown in **Figure 1**.
- 1.1.2 The NENTX is a designated project. The Environmental Impact Assessment (EIA) Report (AEIAR-111/2007) and an Environmental Monitoring and Audit Manual were approved on 20 September 2007. The project is governed by an Environmental Permit (EP) (EP-292/2007) which was granted on 26 November 2007. A further of EP (FEP) was applied and the FEP (FEP-01/292/2007) was subsequently granted on 28 April 2022. Another further of EP (FEP-02/292/2007) was subsequently granted on 23 August 2023.
- 1.1.3 In accordance with the requirements specified in Section 2.7 to 2.11 and Section 12.3 of the approved Environmental Monitoring and Audit (EM&A) Manual and Environmental Permit and Further Environmental Permit (EP and FEP) Condition 3.3, Monthly EM&A report should be submitted to the Director of Environmental Protection (DEP), within 2 weeks after the end of the reporting month. The submissions shall be certified by the Environmental Team (ET) Leader and verified by the Independent Environmental Checker (IEC).
- 1.1.4 The construction phase and EM&A programme of the Project commenced on 1 December 2022.

1.2 Nature, Scale and Scope of the captioned Designated Project

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

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

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

1.3 Purpose of this Report

- 1.3.1 This is the 19th Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 01 to 30 June 2024.

1.4 Structure of the Report

- 1.4.1 The structure of the report is as follows:

Section 1 – Introduction

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

Section 2 – Project Information

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

Section 3 – Air Quality Monitoring

- Construction Dust

Section 4 – Noise Monitoring

Section 5 – Water Quality Monitoring

- Groundwater Monitoring
- Surface Water Monitoring

Section 6 – Waste Management

Section 7 – Landfill Gas Monitoring

Section 8 – Landscape and Visual

Section 9 – Cultural Heritage

Section 10 – Ecological Monitoring

Section 11 – Site Inspection and Audit

Section 12 – Environmental Non-Conformance

Section 13 – Implementation Status on Environmental Mitigation Measures

Section 14 – Future Key Issues

Section 15 – Conclusion

2 Project Information

2.1 Construction Activities

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

2.2 Project Organization & Management Structure

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

Table 2-1 Contact Information of Key Personnel

Party	Name	Contact Number
Contractor (Veolia Hong Kong Holding Ltd.)	Mr. Matt Choy	2902 5296
Independent Environmental Checker (IEC) (Meinhardt Infrastructure and Environment Ltd.)	Ms. Claudine Lee	2859 5409
Environmental Team Leader (ETL) (Aurecon Hong Kong Limited)	Mr. Fredrick Leong	3664 6888

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

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

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

FEP Condition	EP Condition	Submission / Measures	Status
2.1	2.3	Management Organization of Main Construction Companies	Submitted
2.2	2.4	Setting up of Community Liaison Group (CLG)	Community Liaison Group was set up.
2.3	2.5	Submission of EM&A Manual	Submitted
2.5	2.7	Submission of Vegetation Survey (Transplantation Proposal)	Submitted
2.6	2.8	Submission of translocation proposal	Submitted
2.7	2.9	Submission of Transplantation Report and Post-Transplantation Monitoring	Submitted
2.9	2.11	Submission of Detailed Landfill Gas Hazard Assessment Report	Submitted
2.10	2.12	Submission of Waste Management Plan	Submitted
3.2	3.2	Submission of Baseline Monitoring Report	Submitted
3.3	3.3	Submission of Monthly EM&A Report	Submitted

2.4 Status of Environmental Approval Document

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

Table 2-3 Summary of the Relevant Valid Permits, Licences, and/or Notifications on Environmental Protection

Permit / Licenses / Notification	Reference	Expiry Date	Remark
Environmental Permit (EP)	EP-292/2007	Throughout the Contract	Permit granted on 26 November 2007
Further Environmental Permit (FEP)	FEP-01/292/2007	Throughout the Contract	Permit granted on 28 April 2022
	FEP-02/292/2007	Throughout the Contract	Permit granted on 23 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
Construction Noise Permit	GW-RN0240-24	7 June 2024	Permit granted on 1 March 2024
Construction Noise Permit	GW-RN0702-24	18 September 2024	Permit granted on 17 June 2024
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 **Table 2-4**.

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

Items	Times	Date
- Air Quality Monitoring during normal weekdays at each monitoring station	5 times	6, 12, 18, 24 & 29 June 2024
- Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	6, 12, 18 & 24 June 2024
- Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	12 June 2024
- Landfill Gas Monitoring during normal weekdays for Construction Works	19 times	7 to 8, 11 to 15, 17 to 22, 24 to 29 June 2024
- Joint Environmental Site Inspection	4 times	3, 11, 17 & 24 June 2024

Air Quality

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

Noise

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

Groundwater

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

Surface Water Quality

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

Landfill Gas

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

Landscape and Visual

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

Cultural Heritage

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

Ecology

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

Environmental Site Inspection

4 weekly environmental site inspections were carried out during the reporting period. A joint environmental site inspection was carried out by the representatives of the Employer's Representative (ER), the Contractor, IEC and the ET on 17 June 2024. The Contractor has generally implemented part of the mitigation measures as recommended. No site inspection was conducted by Environmental Protection Department-Regional Office (North) (EPD-RNG) during the reporting period.

3 Air Quality Monitoring

3.1 Construction Dust

3.1.1 Monitoring Requirement

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

3.1.2 Monitoring Parameters, Frequency and Location

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

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

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

Table 3-1 Locations of Dust Monitoring Stations

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

Remarks:

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

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

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

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

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

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

3.1.3 Monitoring Equipment

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

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

Table 3-3 Dust Monitoring Equipment

Equipment	Model	Expiry Date	Monitoring Station
High Volume Sampler (HVS)	TE-5170X (S/N: 1105)	1 Jul 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-5025A (S/N: 3465)	15 Jan 2025	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, $\mu\text{g}/\text{m}^3$ (Range)		
	Dust Monitoring Station		
	AM1	AM2	AM3
June 2024	25 (19 – 36)	43 (38 – 52)	51 (40 – 61)
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/m ³ (Range)		
	Dust Monitoring Station		
	AM1	AM2	AM3
June 2024	90 (71 – 122)	107 (87 – 138)	109 (91 – 143)
Action Level	>164	>152	>163
Limit Level	>260		

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

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

Dust Monitoring Station		AM1		AM2		AM3	
Level Exceedance		Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level
Parameters		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	<ul style="list-style-type: none"> Identify source Prepare Notification of Exceedance Inform IEC and Contractor Repeat measurement to confirm findings Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below action level 	<ul style="list-style-type: none"> Verify the Notification of Exceedance Check monitoring data submitted by ET and Contractor's working methods Discuss with ET and Contractor on proposed remedial measures 	<ul style="list-style-type: none"> Rectify any unacceptable practice Amend working methods if appropriate
Exceedance for two or more consecutive samples	<ul style="list-style-type: none"> Identify source Prepare Notification of Exceedance Inform Contractor and IEC Repeat measurements to confirm findings Increase monitoring frequency to daily if exceedance is due to the Project and continue until the monitoring results reduce to below action level Discuss with IEC for remedial action required Ensure remedial measures are properly implemented Continue monitoring at daily intervals if exceedance is due to the Project If no exceedance for 3 consecutive days, cease additional monitoring 	<ul style="list-style-type: none"> Verify the Notification of Exceedance Check monitoring data submitted by ET and Contractor's working methods Discuss with ET and Contractor on proposed remedial measures Review with analysed results submitted by ET Review the proposed remedial measures by Contractor Supervise the implementation of remedial measures 	<ul style="list-style-type: none"> Submit proposals for remedial actions to IEC within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate

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

4 Noise Monitoring

4.1 Monitoring Requirement

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

4.2 Monitoring Locations, Parameters and Frequency

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

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

4.2.3 The detailed monitoring schedule is shown in **Appendix 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-13661-E0)	3 Sep 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
June 2024	60.5 (59.3 – 61.3)	57.5 (56.3 – 58.5)
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	<ul style="list-style-type: none"> • Identify source, investigate the causes of exceedance • Prepare Notification of Exceedance • Inform IEC and Contractor • Report the results of investigation to IEC, and Contractor • Discuss with Contractor and IEC for formulate remedial measures • Ensure remedial measures are properly implemented • Have additional monitoring if exceedance is due to the Project. If exceedance stops, cease additional monitoring 	<ul style="list-style-type: none"> • Verify the Notification of Exceedance • Review the analysed results submitted by ET • Discuss with ET, and Contractor on the potential remedial actions • Review the proposed remedial measures • Supervise the implementation of remedial measures 	<ul style="list-style-type: none"> • Submit noise mitigation proposals to IEC • Implement the agreed noise mitigation proposals
Exceedance of Limit Level	<ul style="list-style-type: none"> • Identify source, investigate the causes of exceedance • Prepare Notification of Exceedance • Inform IEC and Contractor • Repeat measurements to confirm findings • Discuss with Contractor and IEC for remedial measures • Ensure remedial measures are properly implemented • Assess effectiveness of Contractor's remedial actions and keep IEC and EPD informed of the results • Have additional monitoring if exceedance is due to the Project. If exceedance stops, cease additional monitoring 	<ul style="list-style-type: none"> • Verify the Notification of Exceedance • Review the analysed results submitted by ET • Discuss with ET, and Contractor on the potential remedial actions • Review the proposed remedial measures • Supervise the implementation of remedial measures 	<ul style="list-style-type: none"> • Take immediate action to avoid further exceedance • Submit proposals for remedial actions to IEC of notification • Implement the agreed proposals • Resubmit proposals if problem still not under control • Stop the relevant portion of works as determined by project proponent until the exceedance is abated.

5 Water Quality Monitoring

5.1 Groundwater Monitoring

5.1.1 Monitoring Requirement

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

5.2 Surface Water Monitoring

5.2.1 Monitoring Requirement

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

5.2.2 Monitoring Locations, Parameters and Frequency

5.2.2.1 Impact surface water monitoring was carried out 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	YSI ProDSS (S/N: 15M101091)	18 Jun 2024
Water Flow Meter	Global Water FP211 (S/N: 22K100859)	24 Jan 2025

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 NH ₃ G
TKN	0.4 mg/L	0.1 mg/L	APHA 4500Norg: D
Nitrate	0.5 mg/L	0.01 mg/L	APHA 4500 NO ₃ I
Sulphate	5 mg/L	1 mg/L	USEPA 375.4
Sulphite	2 mg/L	2 mg/L	APHA 4500 SO ₃ B
Phosphate	0.01 mg/L	0.01 mg/L	APHA 4500-P B & F
Chloride	0.5 mg/L	0.5 mg/L	USEPA 325.1
Sodium	50 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 12 June 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	6.5	>7.7	>7.8	7.1	>7.6	>7.7
DO in mg/L	8.2	<7.4	<4	8.7	<5	<4
Turbidity in NTU	4.2	>9.2	>9.5	8.6	>108.3	>108.9
Electrical Conductivity in μ S/cm	56	---	---	131	---	---
SS in mg/L	3.5	>9.7	>11.4	5.1	>94.5	>94.7
Alkalinity in mg/L	4	---	---	37	---	---
COD in mg/L	7			8		
BOD ₅ in mg/L	2.0			<2		
TOC in mg/L	4			3		
Ammonia-nitrogen in mg/L	0.12			0.07		
TKN in mg/L	1.0			0.5		
Nitrate in mg/L	0.04			0.29		
Sulphate in mg/L	9			26		
Sulphite in mg/L	<2			<2		
Phosphorus in mg/L	0.01			<0.01		
Chloride in mg/L	8			4		
Sodium in μ g/L	8400			4950		
Magnesium in μ g/L	460			1220		
Calcium in μ g/L	3000			20800		
Potassium in μ g/L	870			2200		
Iron in μ g/L	290			520		
Nickel in μ g/L	1.0			<1		
Zinc in μ g/L	32			75		
Manganese in μ g/L	26			308		
Copper in μ g/L	5.0			2		
Lead in μ g/L	1.0			<1		
Cadmium in μ g/L	<0.2			<0.2		
Coliform Count in cfu/100mL	6200			5000		
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	
Level Exceedance		Action Level	Limit Level	Action Level	Limit Level
Parameters					
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	<ul style="list-style-type: none"> • Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor • Check monitoring data, all plant, equipment and Contractor's working methods • Repeat measurement on next day of exceedance 	<ul style="list-style-type: none"> • Verify Notification of Exceedance • Check monitoring data and Contractor's working methods 	<ul style="list-style-type: none"> • Rectify unacceptable practice • Amend working methods if appropriate
Action level being exceeded by two or more consecutive sampling days	<ul style="list-style-type: none"> • Repeat in situ measurement to confirm findings • Identify source(s) of impact • Prepare Notification of Exceedance • Inform IEC and Contractor • Check monitoring data, all plant, equipment and Contractor's working methods • Discuss with Contractor and IEC for remedial measures • Ensure mitigation measures are implemented • Increase the monitoring frequency to daily until no exceedance of Action level • Repeat measurement on next day of exceedance 	<ul style="list-style-type: none"> • Verify Notification of Exceedance • Check monitoring data and Contractor's working method • Discuss with ET and Contractor on possible remedial actions • Review the proposed mitigation measures • Supervise the implementation of mitigation measures 	<ul style="list-style-type: none"> • Submit proposal of additional mitigation measures to IEC of notification • Implement the agreed mitigation measures • Amend proposal if appropriate

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

6 Waste Management

- 6.1.1 Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. Non-inert C&D materials were made up of general refuse, steels and paper/cardboard packaging materials. Steel materials generated from the Project were also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in **Appendix J**.
- 6.1.2 A total of 4,716.43 tonnes of C&D materials was reused in the project site. A total of 19,274 tonnes of C&D materials was reused at alternative disposal ground (NENT Landfill) during the reporting period. A total of 532.8 tonnes of C&D materials was imported fill during the reporting period. A total of 2.77 tonnes of Yard waste (collected to Y-Park) was generated during the reporting period. A total of 41.98 tonnes of general refuse and A total of 8.58 tonnes of non-recyclable yard waste was generated during the reporting period. The general refuse generated from the Project were disposed of at the NENT Landfill.
- 6.1.3 The recommended waste management mitigation measures from EIA report are listed as followed:
- Implement a trip-ticket system to ensure that the movement of C&D materials are properly documented and verified in accordance with DEVB TC(W) No. 6/2010.
 - Concrete and masonry should be used as general fill and steel reinforcement bars can be used by scrap steel mills.
 - Proper areas should be designated for waste segregation and storage wherever site conditions permit.
 - Maximise the use of reusable steel formwork to reduce the amount of C&D material.
 - Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement.
 - On-site sorting and segregation facility of all type of wastes is considered as one of the best practice in waste management and hence, should be implemented in all projects generating construction waste.
 - The sorted public fill and C&D waste should be properly reused.
 - Excavated slope, stockpiled material and bund walls should be covered by tarpaulin until used in order to prevent wind-blown dust during dry weather, and to reduce muddy runoff during wet weather.

7 Landfill Gas Monitoring

7.1 Monitoring Requirement during Construction

Monitoring for Construction Works

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

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

7.2 Monitoring Locations

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

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

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

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

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

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

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

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

Table 7-1 Locations of LFG Monitoring during Reporting Period

Monitoring Location	Type of works
Portion A +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 CO₂ at 0.5% is set for reference only, assuming no CO₂ emission from a particular location.

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

7.5 Monitoring Results

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

7.5.2 The LFG monitoring was conducted at Portion A +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	7 Jun 2024	0	0	0	20.1
	8 Jun 2024	0	0	0	20.1
	11 Jun 2024	0	0	0	20.1
	12 Jun 2024	0	0	0	20.0
	13 Jun 2024	0	0	0	20.1
	14 Jun 2024	0	0	0	20.2
	15 Jun 2024	0	0	0	20.1
	17 Jun 2024	0	0	0	20.1
	18 Jun 2024	0	0	0	20.1
	19 Jun 2024	0	0	0	20.1
	20 Jun 2024	0	0	0	20.1
	21 Jun 2024	0	0	0	20.1
	22 Jun 2024	0	0	0	20.1
	24 Jun 2024	0	0	0	20.1
	25 Jun 2024	0	0	0	20.1
	26 Jun 2024	0	0	0	20.0
	27 Jun 2024	0	0	0	20.1
28 Jun 2024	0	0	0	20.1	
29 Jun 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 CO₂ at 0.5% is set for reference only, assuming no CO₂ 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	
Level Exceedance		Action Level	Limit Level
Parameters			
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	1 st	24 Nov 2022
	2 nd	9 Dec 2022
	3 rd	21 Dec 2022
	4 th	13 Jan 2023
	5 th	26 Jan 2023
	6 th	8 Feb 2023
	7 th	24 Feb 2023
	8 th	20 Mar 2023
	9 th	21 Apr 2023
	10 th	12 May 2023
	11 th	16 Jun 2023
	12 th	18 Jul 2023
	13 th	11 Aug 2023
	14 th	15 Sep 2023
	15 th	13 Oct 2023
Post-translocation Monitoring	1 st (Aug 2022)	29 Aug 2022
	2 nd (Sep 2022)	28 Sep 2022
	3 rd (Oct 2022)	28 Oct 2022
	4 th (Nov 2022)	22 Nov 2022
	5 th (Dec 2022)	29 Dec 2022
	6 th (Jan 2023)	30 Jan 2023
	7 th (Feb 2023)	24 Feb 2023
	8 th (Mar 2023)	20 Mar 2023
	9 th (Apr 2023)	19 Apr 2023
	10 th (May 2023)	17 May 2023
	11 th (Jun 2023)	7 Jun 2023
	12 th (Jul 2023)	12 Jul 2023

11 Site Inspection and Audit

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

11.1.2 Weekly ET environmental site inspections were conducted in the reporting period on 03, 11, 17 & 24 June 2024. A joint environmental site inspection was carried out by the representatives of the ER, the Contractor, IEC and the ET on **17 June 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:

03 June 2024

Reminder(s):

- The Contractor was reminded that the precaution shall be taken with Appendix A2 of ProPECC PN 1/94 before, during and after rainstorm.

11 June 2024

Observation(s):

- The stockpiling of dusty materials without covering by impervious sheets properly was observed at SBA. The Contractor was advised that the stockpiling of dusty materials should be covered properly and entirely by impervious sheeting to prevent dust dispersion at SBA.
- The chemical containers without chemical drip tray were observed at Portion A. The Contractor was reminded that the chemical containers should be placed and stored in the chemical drip tray to prevent chemical leakage and land contamination at Portion A.

Reminder(s):

- The Contractor was reminded that the precautions should be taken in accordance with Appendix A2 of ProPECC PN 1/94, especially the wet-sep operation.

17 June 2024

Observation(s):

- The chemical container without chemical drip tray was observed at Portion A. The Contractor was reminded to provide chemical drip tray for placing chemical container to prevent chemical leakage and land contamination.

Reminder(s):

- The Contractor was reminded that the precaution shall be taken with Appendix A2 of ProPECC PN 1/94 before, during and after rainstorm.
- The Contractor was reminded that the efficient silt fence should be maintained regularly at SBA.

24 June 2024

Observation(s):

- A damaged chemical container and chemical containers without drip tray are found. The Contractor was advised that the chemical containers should be placed on the drip tray and the damaged chemical containers should be handled properly to avoid the potential contamination risk in the project site.

Reminder(s):

- The Contractor was reminded that the precaution shall be taken with Appendix A2 of ProPECC PN 1/94 before, during and after rainstorm.
- The Contractor was reminded that the frequency of water spraying should be increased under the sunny weather.
- The Contractor was reminded that the inspection and maintenance for slope protective layer should be enhanced to ensure the effectiveness of the slope surface protective layers.

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

12 Environmental Non-Conformance

12.1 Summary of Monitoring Exceedance

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

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

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

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

Dust Monitoring Station		AM1		AM2		AM3	
Level Exceedance		Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level
Parameters							
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)	
Level Exceedance		Action Level	Limit Level	Action Level	Limit Level
Parameters					
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	
Level Exceedance		Action Level	Limit Level	Action Level	Limit Level
Parameters					
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	
Level Exceedance		Action Level	Limit Level
Parameters			
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
June 2024	Complaint Date	-	-	-	-	-
	No. of Complaint	0	0	0	0	0
Reporting Period Total		0	0	0	0	0
Accumulate of project		1*	0	6(1* & 1#)	0	0

Remarks:

1. * equal to non-project related after the investigation.
2. # equal to the complaint under the investigation.

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

12.4 Summary of Environmental Summons and Successful Prosecution

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

13 Implementation Status on Environmental Mitigation Measures

13.1 General

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

14 Future Key Issues

14.1 Key Issues for the Coming Month

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

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

 - Construction of site buildings at Portion D

 - Site clearance at Portion A, B2/E1, E3-1 & E4

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

 - Site formation at Portion A & E3-1

 - Tree felling at Portion B2/E1, E3-1 & E4

 - Shotcreting (Permanent and Temporary)

 - Soil Nail Installation at Portion A, B2/E1 & E4

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

14.2 Monitoring Schedule for the Next Month

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

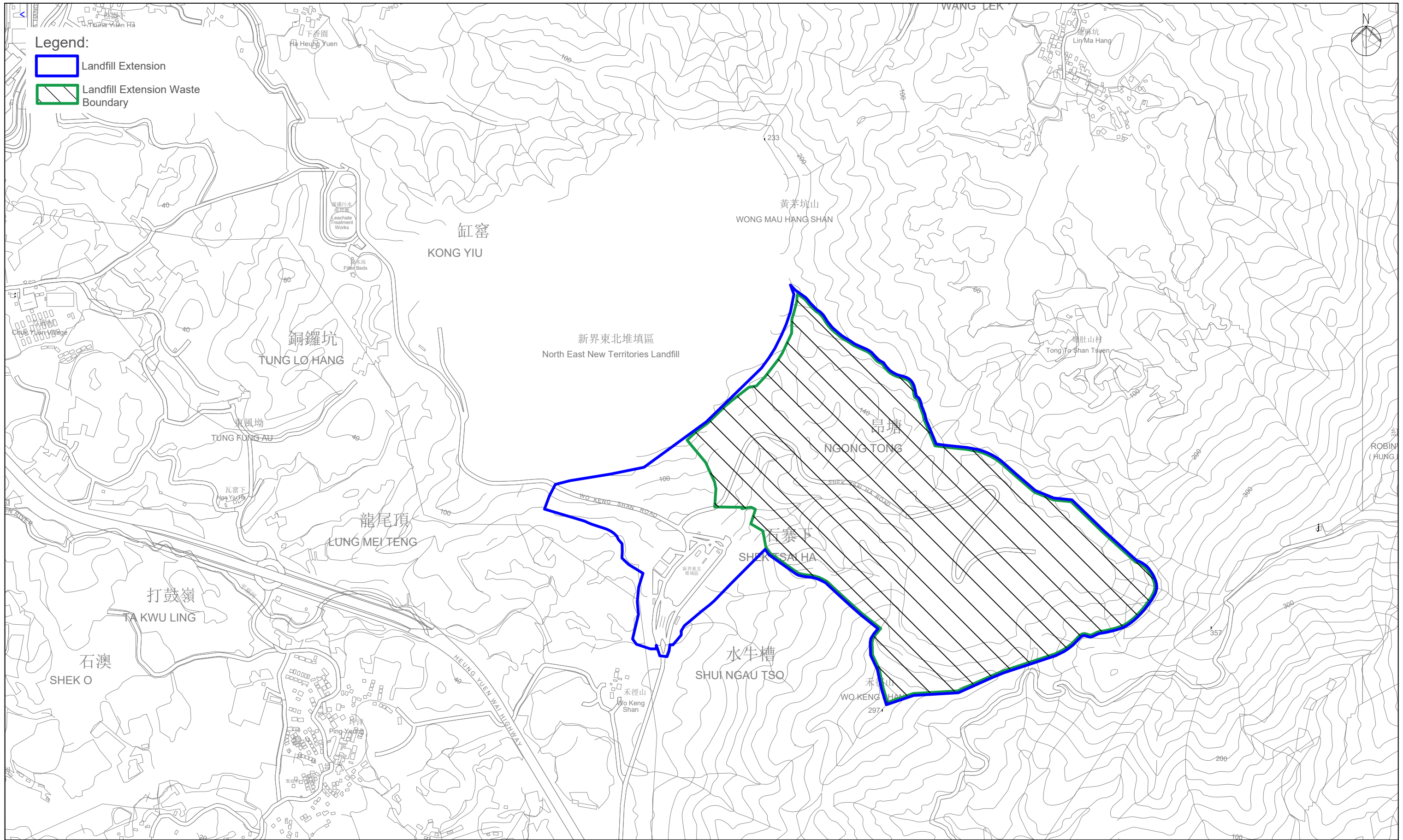
14.3 Construction Programme for the Next Month

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

15 Conclusion

- 15.1.1 1-hr & 24-hr TSP impact monitoring was carried out in the reporting month. No Action / Limit Level exceedance for 1-hr & 24-hr TSP impact monitoring was recorded during the period.
- 15.1.2 Construction noise monitoring was carried out in the reporting month. No Action / Limit Level exceedance at NM1a & NM2a was recorded during the period.
- 15.1.3 Site clearance of future landfilling area is in progress. The installation of groundwater monitoring boreholes will be installed after the site formation work of the landfilling area. The target commencement period of groundwater monitoring will be in 2026. No groundwater monitoring is required before the completion of site formation work of the landfilling area.
- 15.1.4 Surface Water Quality Monitoring was carried out in the reporting month. No Action / Limit Level exceedance of surface water quality was recorded during the reporting period.
- 15.1.5 Landfill Gas Monitoring was carried out in the reporting month. No exceedance of Action / Limit Levels of LFG was recorded during the reporting period.
- 15.1.6 In terms of cultural heritage, implementation of the mitigation measures such as permanent fencing to protect the boulder path and setting up warning notices during construction phase of the Project has been monitored through the regular site inspection/audit in the reporting period. All the mitigation measures are in order.
- 15.1.7 Four environmental site inspections were carried out in the reporting month. Recommendations on mitigation measures for Permit/ Licenses were given to the Contractor for remediating the deficiencies identified during the site inspections.
- 15.1.8 No complaint was recorded during the reporting period.
- 15.1.9 No non-compliance event was recorded during the reporting period.
- 15.1.10 No notification of summons and prosecution was received during the reporting period.
- 15.1.11 The ET will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Figure 1 Location of the Project Site








Legend:
Landfill Extension
Landfill Extension Waste Boundary

North-East New Territories (NENT) Landfill Extension
Location Plan of the Project Site

Figure 1.1

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

Legend

-  Existing NENT landfill
-  NENTX Project Site
-  Air Monitoring Location
-  Noise Monitoring Location
-  Water Monitoring Location

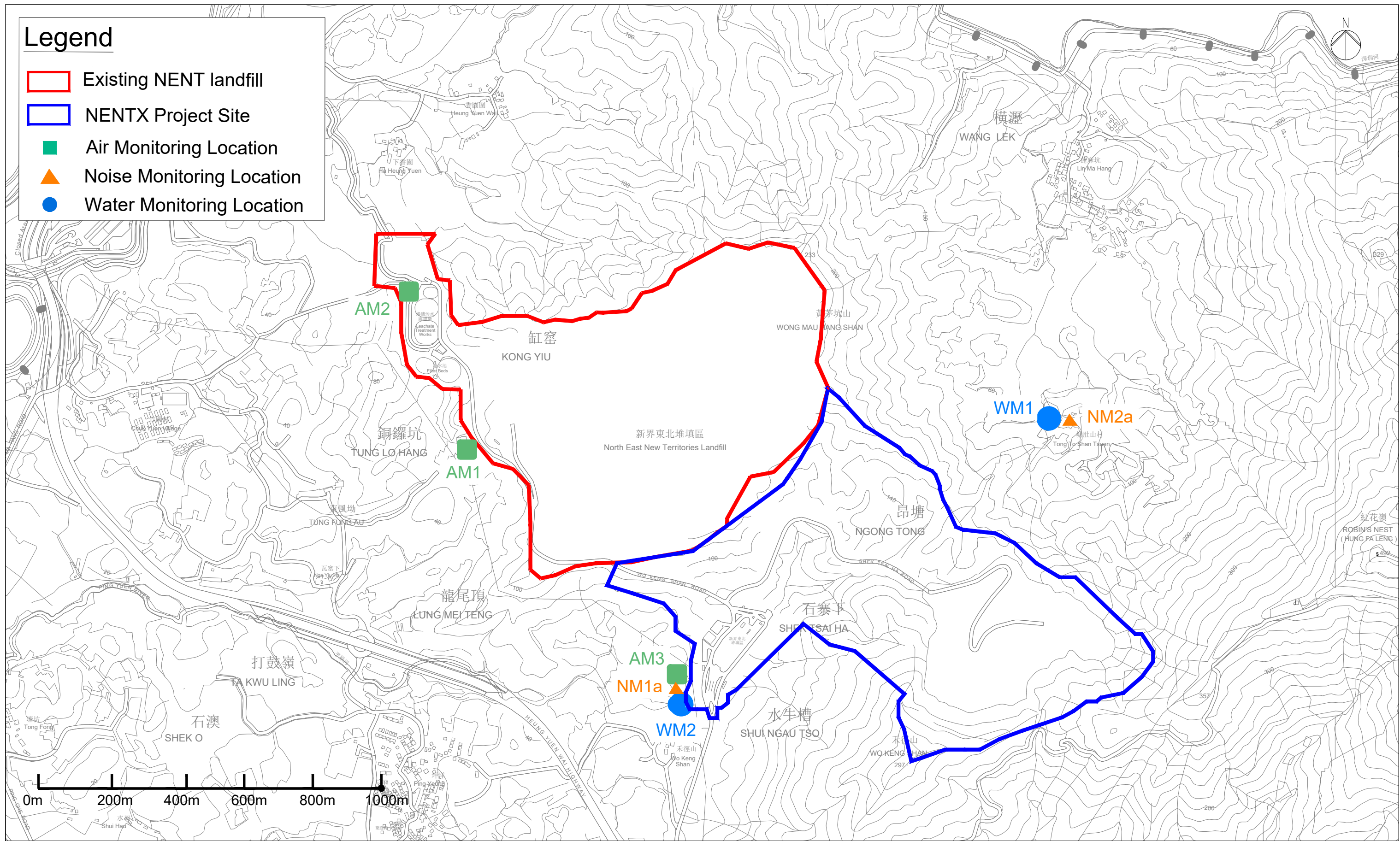


Figure 3 Landfill Gas Monitoring Locations

Gas Monitoring Point ●

Monitoring Frequency: 2 times per day

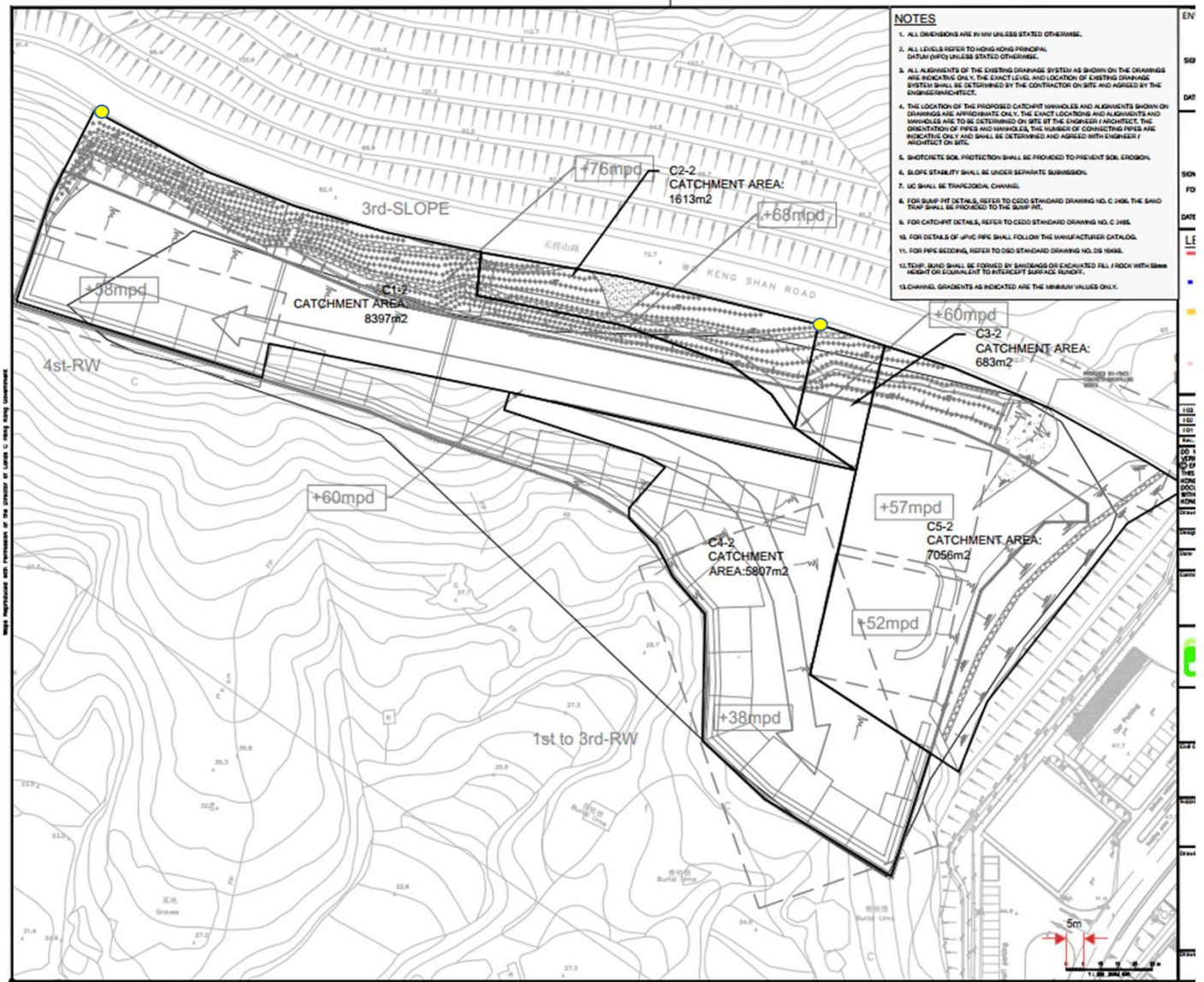
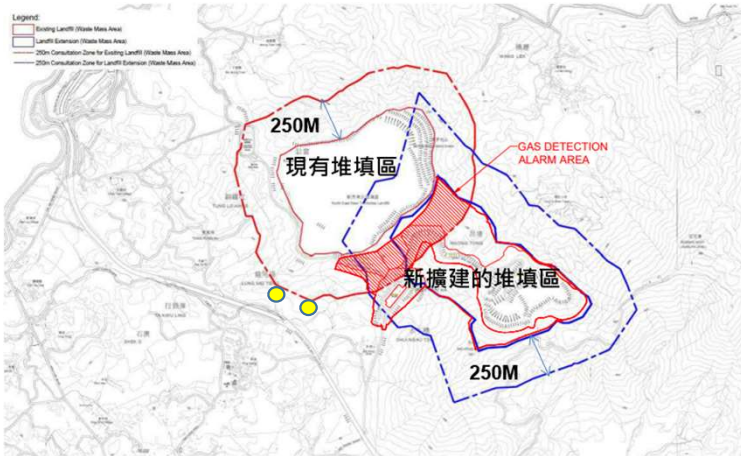


Figure 3 Landfill Gas Monitoring Locations

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	2022				2023				2024				2025				2026				
												Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
NENTX_Updated Baseline Programme (Rev.4)																																
DESIGN DEVELOPMENT																																
Portion A - Site Formation																																
Portion A & D Architectural Design																																
Portion A - Leachate Treatment Works & LFG Treatment Plant																																
Portion A - Process Building																																
Portion D Site Formation																																
Portion A and D Preliminary Utilities Arrangement																																
Site services detailed design for Portion A and D																																
Permanent Drainage - Portion A, C & D																																
Sewerage Management Plan - Portion A, C & D																																
Pavement Road and Traffic Design for Portion A & D																																
Accommodation Buildings (Portion D)																																
Existing Structures (Portion C)																																
Landfill Area																																
FS Submission and FSD Consent																																
Preliminary FS Submission																																
Process Building and Fire Services Building Detailed Design FS Submission																																
TECHNICAL SUBMISSION																																
Project Control Plan and Report																																
PROCUREMENT / FABRICATION / DELIVERY																																
General Material																																
LIFT																																
LTW - GFS and GRP Tanks																																
LTW - Lamella Settlers																																
LTW - Sludge Thickening																																
LTW - Ammonia Stripper																																
Process Building(Electrical equipments)																																
LFG Plant																																
EPD REQUIREMENT - GI WORKS																																
PORTION D																																
PORTION A																																
PORTION E3-1																																
PORTION E4																																
PORTION E3-1-A																																
PORTION E1																																
ENVIRONMENTAL MONITORING																																
CONSTRUCTION - INITIAL WORKS PHASE 1																																
PORTION A																																
SITEWIDE Underground UTILITIES (Portion A to Portion D)																																
Waste Reception Area (PORTION C) Construct by Others																																
PORTION D																																
PORTION D - Underground Drainage / UG Utilities and Pipe Laying Works																																
PORTION D - EVA Road Road Pavement Works																																
Landfill Area (Portion E3-1, E4, E1, B1-1 & B2)																																
Landscape Works (Landfill)																																
FS INSPECTION																																
Portion A - Readiness for FS Inspection (Process Building)																																
Portion D : Readiness for FS inspection																																
2nd Inspection																																
FS Inspection Certificate																																
STATUTORY SUBMISSION																																
Obtain Licences & Permits for Construction																																
Obtain Licences & Permits for Operation																																



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

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



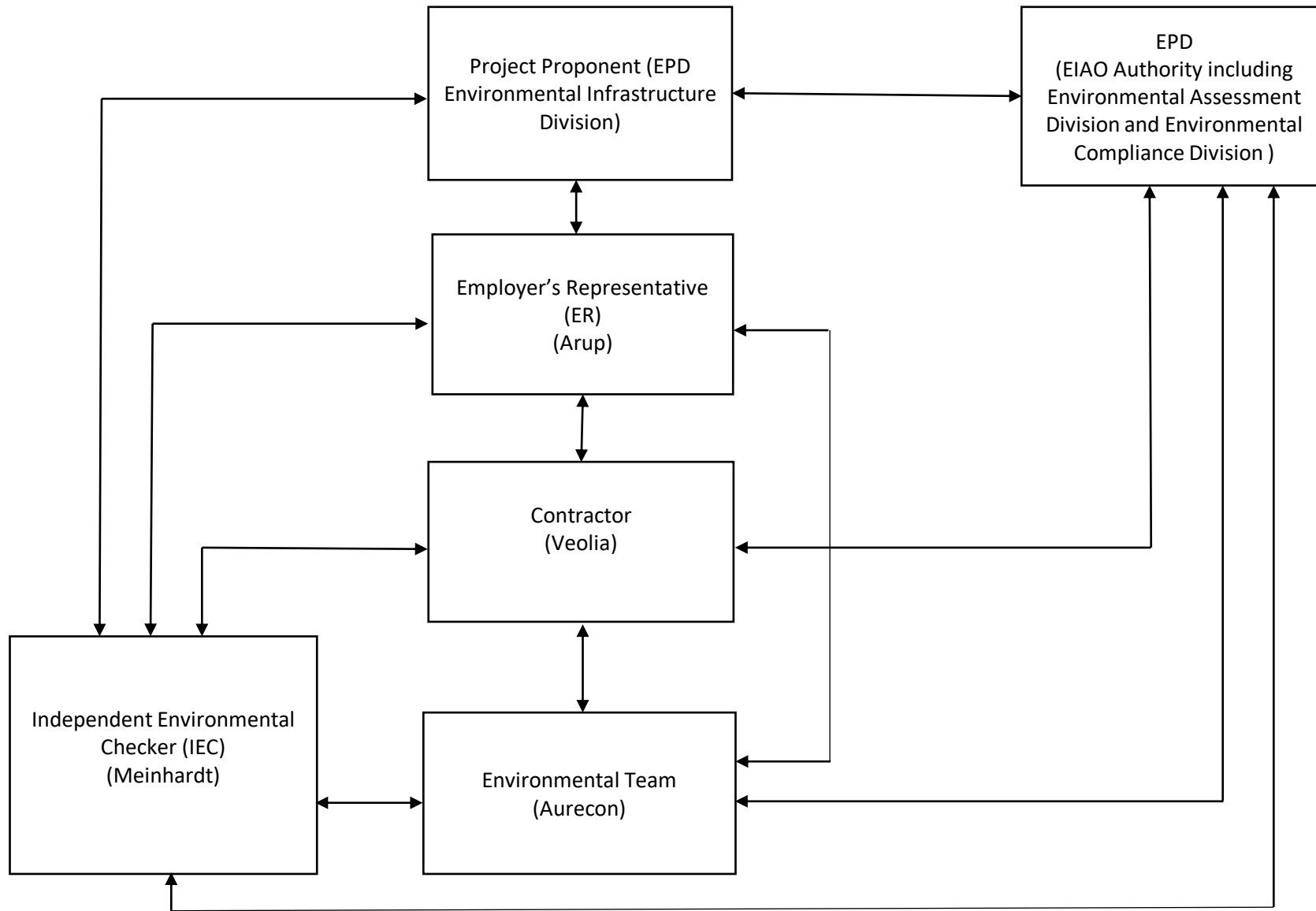
Date	Revision	Ch...	Appr...
22-Jun-22	GENERAL REVISION		
31-Mar-23	GENERAL REVISION		

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:

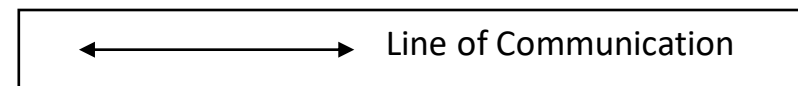
EPD - Environmental Protection Department

Arup – Ove Arup & Partners Limited

Veolia - Veolia Environmental Services Hong Kong Limited

Meinhardt - Meinhardt Infrastructure And Environment Limited

Aurecon - Aurecon Hong Kong Limited



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

FEP Condition	EP Condition	Submission / Measures	Status
2.8	2.10	Submission of Translocation Report and Post-Translocation Monitoring	<p>Translocation was carried out in July 2022</p> <p>Submission Date (27 December 2022)</p> <p>1st monitoring (29 Aug 2022)</p> <p>2nd monitoring (28 Sep 2022)</p> <p>3rd monitoring (28 Oct 2022)</p> <p>4th monitoring (22 Nov 2022)</p> <p>5th monitoring (29 Dec 2022)</p> <p>6th monitoring (30 Jan 2023)</p> <p>7th monitoring (24 Feb 2023)</p> <p>8th monitoring (20 Mar 2023)</p> <p>9th monitoring (19 Apr 2023)</p> <p>10th monitoring (17 May 2023)</p> <p>11th monitoring (7 Jun 2023)</p> <p>12th monitoring (12 Jul 2023)</p>
2.9	2.11	Submission of Detailed Landfill Gas Hazard Assessment Report	Submission Date (6 Oct 2022)
2.10	2.12	Submission of Waste Management Plan	Submission Date (30 December 2022)
3.2	3.2	Submission of Baseline Monitoring Report	Submission Date (30 Nov 2022)
3.3	3.3	Submission of Monthly EM&A Report	<p>1st report (Dec 2022)</p> <p>2nd report (Jan 2023)</p> <p>3rd report (Feb 2023)</p> <p>4th report (Mar 2023)</p> <p>5th report (Apr 2023)</p> <p>6th report (May 2023)</p> <p>7th report (Jun 2023)</p> <p>8th report (Jul 2023)</p> <p>9th report (Aug 2023)</p> <p>10th report (Sep 2023)</p> <p>11th report (Oct 2023)</p> <p>12th report (Nov 2023)</p> <p>13th report (Dec 2023)</p> <p>14th report (Jan 2024)</p> <p>15th report (Feb 2024)</p> <p>16th report (Mar 2024)</p> <p>17th report (Apr 2024)</p> <p>18th report (May 2024)</p> <p>19th report (Jun 2024)</p>

Appendix D Monitoring Schedule for Reporting Month & Next Month

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

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

Remark:

- The schedule is tentative only and would be subject to changes due to unforeseen circumstances.
- 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).
- Noise monitoring includes 30-minute construction noise monitoring at NM1a and NM2a (Ref.: Table 4.1 of the approved EM&A Manual).
- 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).
- Please arrange a Veolia staff to accompany our staff(s) to each locations for every monitoring.

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

7-2024

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

Remark:

- The schedule is tentative only and would be subject to changes due to unforeseen circumstances.
- 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).
- Noise monitoring includes 30-minute construction noise monitoring at NM1a and NM2a (Ref.: Table 4.1 of the approved EM&A Manual).
- 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).
- Please arrange a Veolia staff to accompany our staff(s) to each locations for every monitoring.

Appendix E Calibration Certificates

Air Quality

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

Information of Calibrated Equipment

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

Standard Equipment Information

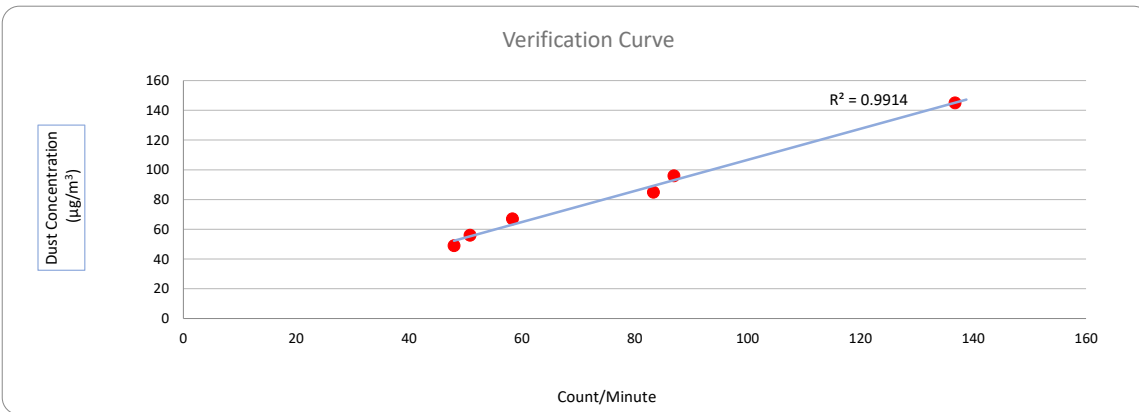
Verification Equipment Type:	<u>Tisch TSP HVS</u>	<u>Tisch HVS Calibrator</u>
Standard Equipment Model No.:	<u>TE-5170X</u>	<u>TE-5028A</u>
Equipment serial no.:	<u>1106</u>	<u>3702</u>
Last Calibration Date:	<u>04-Nov-23</u>	<u>31-Mar-23</u>
Next Calibration Date:	<u>04-Jan-24</u>	<u>30-Mar-24</u>


Equipment Verification Result

Verification Test No.	Date	Duration			Results from Calibrated Equipment		Results from Standard Equipment
		Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration ($\mu\text{g}/\text{m}^3$) 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:	<u>1.0451</u>	Intercept:	<u>2.1545</u>	*Correlation Coefficient, R:	<u>0.9957</u>
Verification Test Result:	<u>Strong Correlation. Results were accepted.</u>			* 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 Equipment

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 Reference No.:	RPT-23-HVS-0021				
Calibration Location:	AM2, location near the Leachate Treatment Works within the NENTX Landfill				

Standard Equipment Information

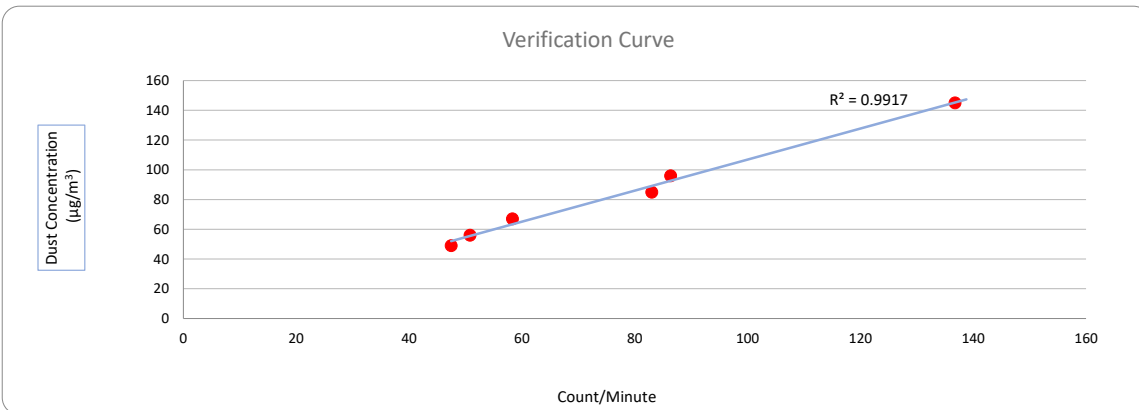
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24


Equipment Verification Result

Verification Test No.	Date	Duration			Results from Calibrated Equipment		Results from Standard Equipment
		Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration ($\mu\text{g}/\text{m}^3$) 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:	<u>1.0437</u>	Intercept:	<u>2.4993</u>	*Correlation Coefficient, R:	<u>0.9958</u>
Verification Test Result:	<u>Strong Correlation. Results were accepted.</u>			* 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 Equipment

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 Reference No.:	RPT-23-HVS-0022				
Calibration Location:	AM2, location near the Leachate Treatment Works within the NENTX Landfill				

Standard Equipment Information

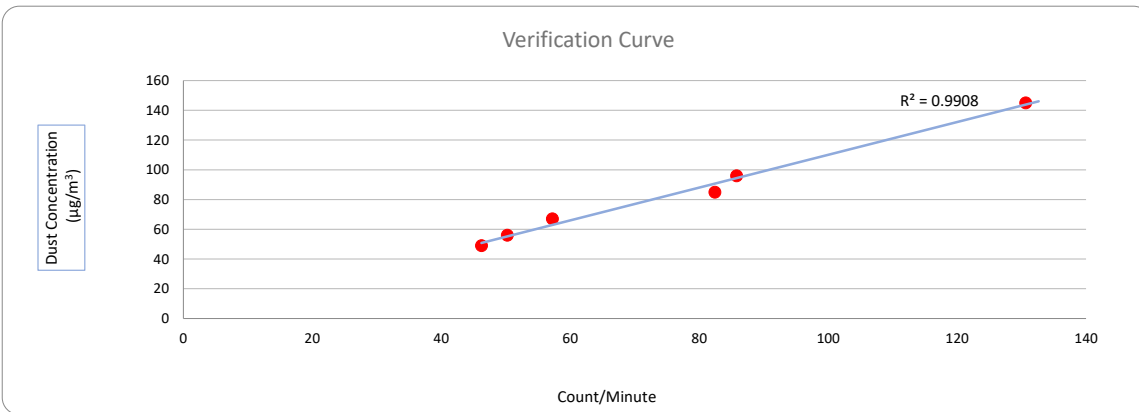
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

Equipment Verification Result

Verification Test No.	Date	Duration			Results from Calibrated Equipment		Results from Standard Equipment
		Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration ($\mu\text{g}/\text{m}^3$) 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 Tung Lo Hang	Site ID:	AM1	Date:	02-May-2024
Serial No:	1105	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	758.8	Actual Temperature during Calibration (T_a) (deg K):	298.7
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Calibration Orifice

Model:	TE-5025A	Slope (m_c):	2.06920
Serial No.:	3465	Intercept (b_c):	-0.02547
Calibration Due Date:	15-Jan-25	Corr. Coeff:	0.99999

Calibration Data

Plate or Test #	ΔH_2O (in)	Qa, X-Axis (m ³ /min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	11.00	1.612	59.0	58.88
13	8.00	1.377	55.0	54.89
10	6.00	1.194	50.0	49.90
7	4.20	1.001	44.0	43.91
5	2.30	0.744	40.0	39.92

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

$m = \underline{\underline{23.0035}}$ $b = \underline{\underline{22.2347}}$ Corr. Coeff = 0.9930

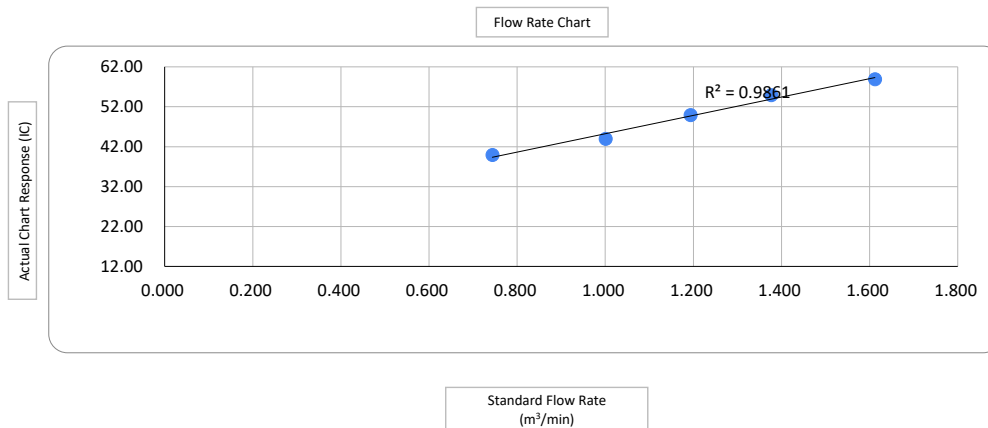
Calculations

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

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

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
 Environmental Team Leader

Date: 02-May-2024

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	Representative For Heung YuenWai	Site ID:	AM2	Date:	02-May-2024
Serial No:	1106	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	758.8	Actual Temperature during Calibration (T_a) (deg K):	298.7
---	-------	--	-------

Calibration Orifice

Model:	TE-5025A	Slope (m_c):	2.06920
Serial No.:	3465	Intercept (b_c):	-0.02547
Calibration Due Date:	15-Jan-25	Corr. Coeff:	0.99999

Calibration Data

Plate or Test #	ΔH_2O (in)	Qa, X-Axis (m ³ /min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	10.40	1.568	59.0	58.88
13	8.40	1.410	55.0	54.89
10	6.60	1.251	53.0	52.90
7	4.20	1.001	46.0	45.91
5	2.40	0.760	40.0	39.92

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

$m = \underline{\hspace{2cm} 23.3394 \hspace{2cm}}$
 $b = \underline{\hspace{2cm} 22.5412 \hspace{2cm}}$
 Corr. Coeff = $\underline{\hspace{2cm} 0.9960 \hspace{2cm}}$

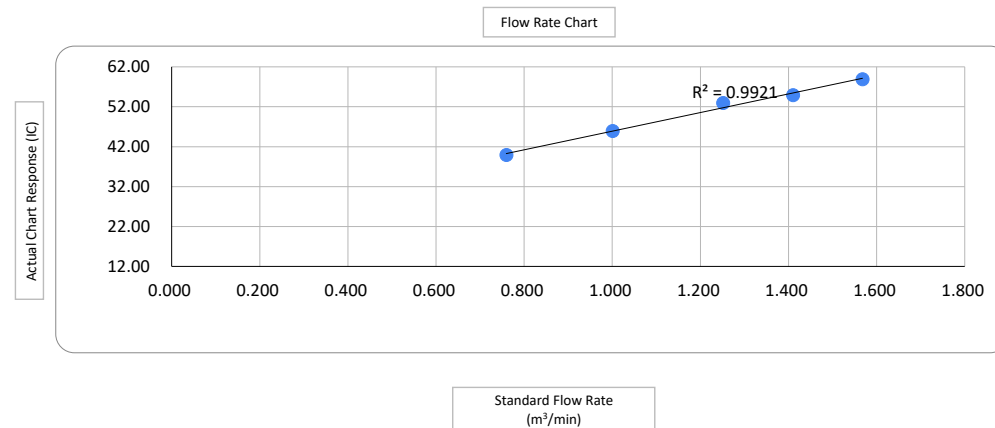
Calculations

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

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

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
 Environmental Team Leader

Date: 02-May-2024

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	Representative For Wo Keng Shan Tsuen	Site ID:	AM3	Date:	02-May-2024
Serial No:	1856	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P_a) (mm Hg):	758.8	Actual Temperature during Calibration (T_a) (deg K):	298.7
---	-------	--	-------

Calibration Orifice

Model:	TE-5025A	Slope (m_c):	2.06920
Serial No.:	3465	Intercept (b_c):	-0.02547
Calibration Due Date:	15-Jan-25	Corr. Coeff:	0.99999

Calibration Data

Plate or Test #	ΔH_2O (in)	Qa, X-Axis (m ³ /min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	10.00	1.538	60.0	59.88
13	8.60	1.427	56.0	55.89
10	6.20	1.213	52.0	51.90
7	4.00	0.977	45.0	44.91
5	2.30	0.744	40.0	39.92

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

$m = \underline{\hspace{2cm} 24.8731 \hspace{2cm}}$

 $b = \underline{\hspace{2cm} 21.1583 \hspace{2cm}}$

 Corr. Coeff = $\underline{\hspace{2cm} 0.9972 \hspace{2cm}}$

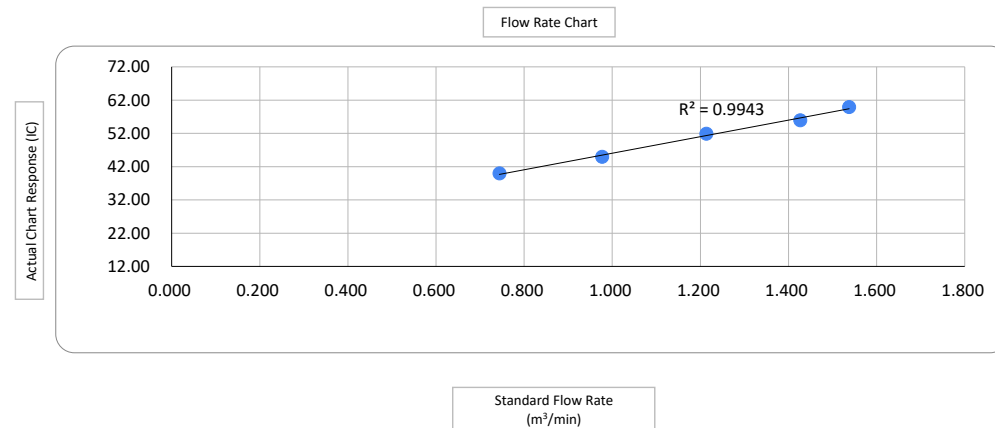
Calculations

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

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

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
 Environmental Team Leader

Date: 02-May-2024



Certificate of Calibration

Calibration Certification Information			
Cal. Date:	January 15, 2024	Rootsmeter S/N:	438320
Operator:	Jim Tisch	Ta:	294 °K
Calibration Model #:	TE-5025A	Pa:	755.9 mm Hg
		Calibrator S/N:	3465

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4350	3.3	2.00
2	3	4	1	1.0180	6.4	4.00
3	5	6	1	0.9090	8.0	5.00
4	7	8	1	0.8670	8.9	5.50
5	9	10	1	0.7150	12.9	8.00

Data Tabulation					
Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis)
1.0037	0.6995	1.4200	0.9956	0.6938	0.8820
0.9996	0.9819	2.0081	0.9915	0.9740	1.2473
0.9975	1.0973	2.2452	0.9894	1.0885	1.3945
0.9963	1.1491	2.3547	0.9882	1.1398	1.4626
0.9909	1.3859	2.8399	0.9829	1.3747	1.7639
QSTD	m=	2.06920	QA	m=	1.29570
	b=	-0.02547		b=	-0.01582
	r=	0.99999		r=	0.99999

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

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

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

Noise



Certificate of Calibration

for

Description: Sound Level Meter
Manufacturer: NTi Audio
Type No.: XL2 (Serial No.: A2A-13661-E0)
Microphone: ACO 7052 (Serial No.:84464)
Preamplifier: NTi Audio MA220 (M2211) (Serial No.:5287)

Submitted by:

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

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

- Within (31.5Hz – 8kHz)
- Outside

the allowable tolerance.


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

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

Date of receipt: 31 August 2023

Date of calibration: 04 September 2023

Date of NEXT calibration: 03 September 2024

Calibrated by: 
Calibration Technician

Certified by: 
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 04 September 2023



Certificate No.: APJ23-053-CC002

Page 1 of 4

1. Calibration Precaution:

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

2. Calibration Conditions:

Air Temperature: 23.6 °C
 Air Pressure: 1006 hPa
 Relative Humidity: 62.6 %

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	94.0	±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	94.0	Ref
			104		104.0	±0.3
			114		114.0	±0.3

Time Weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBA SPL	Fast	94	1000	94.0	Ref
		Slow			94.0	±0.3

Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dB	SPL	Fast	94	31.5	94.1	±2.0
					63	94.1	±1.5
					125	94.1	±1.5
					250	94.1	±1.4
					500	94.1	±1.4
					1000	94.0	Ref
					2000	93.9	±1.6
					4000	93.9	±1.6
				8000	94.7	+2.1; -3.1	

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA	SPL	Fast	94	31.5	54.7	-39.4±2.0
					63	68.2	-26.2±1.5
					125	78.0	-16.1±1.5
					250	85.5	-8.6±1.4
					500	90.8	-3.2±1.4
					1000	94.0	Ref
					2000	95.1	+1.2±1.6
					4000	94.9	+1.0±1.6
				8000	93.5	-1.1±2.1; -3.1	

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBC	SPL	Fast	94	31.5	91.2	-3.0±2.0
					63	93.5	-0.8±1.5
					125	94.0	-0.2±1.5
					250	94.1	-0.0±1.4
					500	94.1	-0.0±1.4
					1000	94.0	Ref
					2000	93.7	-0.2±1.6
					4000	93.2	-0.8±1.6
				8000	91.6	-3.0±2.1; -3.1	



5. Calibration Results Applied

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

Uncertainties of Applied Value:

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

The uncertainties are evaluated for a 95% confidence level.

Note:

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



Certificate 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



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.



AI

Calibration Certificate

Certificate No. **300737**

Page 1 of 2 Pages

Customer : Acuity Sustainability Consulting Limited

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

Order No. : Q30320

Date of receipt : 2-Feb-23

Item Tested

Description : Hot Wire Anemometer

Manufacturer : RS PRO

I.D. : ASCL-EQ-111

Model : RS-90

Serial No. : 210722208

Test Conditions

Date of Test : 13-Feb-23

Supply Voltage : --

Ambient Temperature : (23 ± 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:

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

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

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

Calibrated by : _____

James Yau

Approved by : _____

Steve Kwan

Date: 13-Feb-23

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. 300737

Page 2 of 2 Pages

Results :

1. Velocity

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

2. Temperature

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

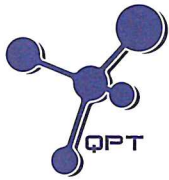
Remark : 1. UUT: Unit-Under-Test

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

3. Atmospheric Pressure: 1 002 hPa

----- END -----

Water Quality



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BD030061
Date of Issue : 19 March 2024
Page No. : 1 of 2

PART A - CUSTOMER INFORMATION

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

PART B - SAMPLE INFORMATION

Name of Equipment : YSI ProDSS Multi Parameters
 Manufacturer : YSI
 Serial Number : 15M101091
 Date of Received : 14 March 2024
 Date of Calibration : 18 March 2024
 Date of Next Calibration : 18 June 2024
 Request No. : D-BD030061

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

<u>Test Parameter</u>	<u>Reference Method</u>
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	3.98	-0.02	Satisfactory
7.42	7.41	-0.01	Satisfactory
10.01	9.86	-0.15	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
16.0	16.5	0.5	Satisfactory
24.0	23.1	-0.9	Satisfactory
35.5	35.1	-0.4	Satisfactory

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

(3) Salinity

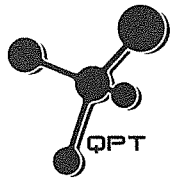
Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.38	-6.20	Satisfactory
20	18.65	-6.75	Satisfactory
30	29.05	-3.17	Satisfactory

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-BD030061
Date of Issue : 19 March 2024
Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
8.41	8.13	-0.28	Satisfactory
6.11	5.88	-0.23	Satisfactory
2.56	2.40	-0.16	Satisfactory
0.83	0.41	-0.42	Satisfactory

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

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.88	--	Satisfactory
10	10.88	8.8	Satisfactory
20	21.14	5.7	Satisfactory
100	106.45	6.5	Satisfactory
800	761.97	-4.8	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 ---



Calibration Certificate

Certificate No. **400718**

Page 1 of 2 Pages

Customer : Acumen Laboratory and Testing Limited

Address : Flat / RM D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Shan Wan, Kowloon, Hong Kong

Order No. : Q40331

Date of receipt : 24-Jan-24

Item Tested

Description : Flow Probe

Manufacturer : Global Water

Model : FP111

I.D. : --

Serial No. : 22K100859

Test Conditions

Date of Test : 25-Jan-24

Ambient Temperature : 15°C

Supply Voltage : --

Relative Humidity : 48%

Test Specifications

Calibration check.

Ref. Document/Procedure : V12

Test Results

All results were within the manufacturer's specification.

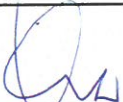
The results are shown in the attached page(s).

Main Test equipment used:

<u>Equipment No.</u>	<u>Description</u>	<u>Cert. No.</u>	<u>Traceable to</u>
S179	Std. Tape	301321	NIM-PRC
S136A	Stop Watch	303116	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 : 
Steve Kwan

Date: 26-Jan-24



Calibration Certificate

Certificate No. 400718

Page 2 of 2 Pages

Results :

Applied Value (m/s)	UUT Reading (m/s)	Mfr's Spec.
0.58	0.6	± 0.1 m/s

Remarks : 1. UUT : Unit-Under-Test

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

----- END -----

Landfill Gas

CERTIFICATION OF CALIBRATION



Date Of Calibration: 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.

CH₄, CO₂ 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

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

Calibration Instance:117 IGC Instance:117

Page 1 of 2 | LP015GIUKAS-2.5

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

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

Registered in England and Wales 1898734

CERTIFICATION OF CALIBRATION



Date Of Calibration: 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

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

Calibration Instance:117 IGC Instance:117

Page 2 of 2 | LP015GIUKAS-2.5

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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 ($\mu\text{g}/\text{m}^3$) at Location AM1

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
6/6/2024	Sibata LD-5R	882106	1.044	Fine	13:19	14:19	15:19	36	24	29	30	285	500
12/6/2024	Sibata LD-5R	882106	1.044	Fine	13:10	14:10	15:10	21	20	24	22		
18/6/2024	Sibata LD-5R	882106	1.044	Fine	13:10	14:10	15:10	29	30	28	29		
24/6/2024	Sibata LD-5R	882106	1.044	Fine	13:30	14:30	15:30	26	32	25	28		
29/6/2024	Sibata LD-5R	882106	1.044	Fine	13:00	14:00	15:00	19	19	20	19		
Average								25					
Max.								36					
Min.								19					

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

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
6/6/2024	Sibata LD-5R	942532	1.102	Fine	13:29	14:29	15:29	41	40	46	42	279	500
12/6/2024	Sibata LD-5R	942532	1.102	Fine	13:30	14:30	15:30	41	41	49	44		
18/6/2024	Sibata LD-5R	942532	1.102	Fine	13:19	14:19	15:19	50	52	50	51		
24/6/2024	Sibata LD-5R	0Z4545	1.102	Fine	13:38	14:38	15:38	41	40	42	41		
29/6/2024	Sibata LD-5R	0Z4545	1.102	Fine	13:10	14:10	15:10	41	39	38	39		
Average								43					
Max.								52					
Min.								38					

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

Date	Equipment Brand & Model	Equipment Serial No.	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
6/6/2024	Sibata LD-5R	0Z4545	1.045	Fine	13:36	14:36	15:36	50	56	52	53	285	500
12/6/2024	Sibata LD-5R	0Z4545	1.045	Fine	13:45	14:45	15:45	40	44	41	42		
18/6/2024	Sibata LD-5R	0Z4545	1.045	Fine	13:30	14:30	15:30	61	60	59	60		
24/6/2024	Sibata LD-5R	942532	1.045	Fine	13:51	14:51	15:51	50	51	53	51		
29/6/2024	Sibata LD-5R	942532	1.045	Fine	13:19	14:19	15:19	53	50	51	51		
Average								51					
Max.								61					
Min.								40					

The Summary of TSP 24-hour Concentration (µg/m³) 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
		(°C)	(hPa)	Initial	Final	(minutes)	(cfm)	(m ³ /min)	(m ³)	Initial	Final	(g)	(µg/m ³)	(µg/m ³)	(µg/m ³)
6/6/2024	Fine	26.1	1008.7	3174.19	3198.19	1440	40	0.76	1096	2.7292	2.8630	0.1338	122	164	260
12/6/2024	Fine	29.7	1004.7	3206.60	3230.60	1440	39	0.70	1013	2.7044	2.7766	0.0722	71		
18/6/2024	Fine	30.0	1005.8	3238.29	3262.29	1440	40	0.75	1073	2.7364	2.8184	0.0820	76		
24/6/2024	Fine	30.5	1008.3	3272.60	3296.60	1440	40	0.75	1077	2.7338	2.8247	0.0909	84		
29/6/2024	Fine	29.8	1007.1	3304.22	3328.22	1440	40	0.75	1077	2.7267	2.8310	0.1043	97		
												Average	90		
												Min	71		
												Max	122		

The Summary of 24-hour TSP Concentration (µg/m³) 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
		(°C)	(hPa)	Initial	Final	(minutes)	(cfm)	(m ³ /min)	(m ³)	Initial	Final	(g)	(µg/m ³)	(µg/m ³)	(µg/m ³)
6/6/2024	Fine	26.1	1008.7	2759.93	2783.93	1440	44	0.89	1276	2.7229	2.8995	0.1766	138	152	260
12/6/2024	Fine	29.7	1004.7	2790.73	2814.73	1440	40	0.72	1040	2.7410	2.8455	0.1045	100		
18/6/2024	Fine	30.0	1005.8	2824.07	2848.07	1440	41	0.76	1100	2.7108	2.8327	0.1219	111		
24/6/2024	Fine	30.5	1008.3	2857.93	2881.93	1440	45	0.94	1347	2.7497	2.8669	0.1172	87		
29/6/2024	Fine	29.8	1007.1	2889.06	2913.03	1438	44	0.89	1285	2.7304	2.8542	0.1238	96		
												Average	107		
												Min	87		
												Max	138		

The Summary of 24-hour TSP Concentration (µg/m³) 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
		(°C)	(hPa)	Initial	Final	(minutes)	(cfm)	(m ³ /min)	(m ³)	Initial	Final	(g)	(µg/m ³)	(µg/m ³)	(µg/m ³)
6/6/2024	Fine	26.1	1008.7	3737.26	3761.26	1440	40	0.75	1076	2.7235	2.8777	0.1542	143	163	260
12/6/2024	Fine	29.7	1004.7	3769.71	3793.71	1440	41	0.77	1113	2.7099	2.8165	0.1066	96		
18/6/2024	Fine	30.0	1005.8	3802.93	3826.93	1440	40	0.73	1055	2.6968	2.8084	0.1116	106		
24/6/2024	Fine	30.5	1008.3	3835.15	3859.15	1440	42	0.79	1144	2.7153	2.8199	0.1046	91		
29/6/2024	Fine	29.8	1007.1	3866.84	3890.84	1440	42	0.79	1144	2.7249	2.8510	0.1261	110		
												Average	109		
												Min	91		
												Max	143		

Remarks:

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

Noise

Impact Phase Construction Noise Monitoring Data at Location NM1a

Date	Weather	Wind speed	Start Time	End Time	L_{eq} (dB(A))							L_{10} (dB(A))						L_{90} (dB(A))						
		m/s			1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th	
6/06/2024	Fine	1.5	13:10	13:40	59.1	60.2	58.2	58.3	59.1	60.2	59.3	62.3	63.2	62.9	62.4	63.1	63.2	57.1	57.6	58.1	57.6	57.6	60.1	
12/06/2024	Fine	1.2	8:16	8:46	60.2	61.4	60.3	61.9	61.5	61.3	61.1	63.2	64.4	63.9	64.2	64.5	63.2	57.4	58.1	57.6	58.1	57.6	59.3	
18/06/2024	Fine	1.7	13:09	13:39	60.2	60.1	59.2	59.4	60.3	61.1	60.1	63.2	63.6	62.5	62.9	63.4	64.2	57.4	57.1	56.4	56.1	57.2	57.2	
24/06/2024	Fine	1.2	13:02	13:32	60.2	61.3	61.4	60.4	62.1	61.9	61.3	63.2	64.2	64.9	63.9	65.4	64.2	57.4	58.6	58.7	57.3	58.1	57.1	
											Average		60.5											
											Baseline Level		55.4											
											Action Level		When one valid documented complaint is received											
											Limit Level		75											

Impact Phase Construction Noise Monitoring Data at Location NM2a

Date	Weather	Wind speed	Start Time	End Time	L_{eq} (dB(A))							L_{10} (dB(A))						L_{90} (dB(A))						
		m/s			1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th	
6/06/2024	Fine	1.7	16:10	16:40	57.2	58.1	58.6	59.2	58.3	58.4	58.3	59.4	60.3	60.9	61.3	60.9	59.4	56.1	57.1	56.5	57.2	57.5	57.6	
12/06/2024	Fine	1.4	11:20	11:50	57.6	57.1	56.3	55.1	56.4	55.0	56.4	60.4	60.2	59.3	57.2	58.6	56.2	55.1	55.4	53.6	53.6	54.1	52.9	
18/06/2024	Fine	1.8	15:30	16:00	56.2	55.9	60.6	57.6	56.8	60.9	58.5	59.2	58.2	63.2	60.1	58.5	63.2	52.1	51.3	58.2	55.6	57.1	60.1	
24/06/2024	Fine	1.2	16:00	16:30	57.1	58.6	54.3	55.4	56.1	54.6	56.3	60.2	61.7	59.1	60.3	61.4	56.6	55.3	54.3	51.2	51.9	52.1	52.3	
											Average		57.5											
											Baseline Level		54.5											
											Action Level		When one valid documented complaint is received											
											Limit Level		75											

Water Quality

Monitoring Location: WM1

Date	Time	Weather	Water Depth (m)	Water Flow (L/s)	Water Temperature (°C)	DO (mg/L)			pH			Turbidity (NTU)			SS (mg/L)		
						Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level
12-Jun-24	11:43	Fine	0.07	0.2	24.8	8.2	<7.4	<4	6.5	>7.7	>7.8	4.2	>9.2	>9.5	3.5	>9.7	>11.4

Monitoring Location: WM2

Date	Time	Weather	Water Depth (m)	Water Flow (L/s)	Water Temperature (°C)	DO (mg/L)			pH			Turbidity (NTU)			SS (mg/L)		
						Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level
12-Jun-24	8:10	Fine	0.30	0.1	25.2	8.7	<5	<4	7.1	>7.6	>7.7	8.6	>108.3	>108.9	5.1	>94.5	>94.7

Remarks

1. Sample will be grabbed on surface when the water depth is less than 1m.
2. "TBC" equal to "To be confirm"
3. Orange Text equal to exceed Action Level
4. Red Text equal to exceed Limit Level






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	: HK2423491
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	: 12-Jun-2024
Order number	: ---	Quote	: HKE/2751/2022_V4	Issue Date	: 25-Jun-2024
		number			
C-O-C number	: ---			No. of samples received	: 2
Site	:			No. of samples analysed	: 2

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

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



General Comments

This report supersedes any previous report(s) with the same work order number. All pages of this report have been checked and approved for release. When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes. Testing period is from 12-Jun-2024 to 25-Jun-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: HK2423491

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 16:45.

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

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

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

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



Analytical Results

Sub-Matrix: WATER

				Sample ID	WM1	WM2	---	---	---
				Sampling date / time	12-Jun-2024	12-Jun-2024	---	---	---
Compound	CAS Number	LOR	Unit	HK2423491-001	HK2423491-002	-----	-----	-----	
EA/ED: Physical and Aggregate Properties									
EA025: Suspended Solids (SS)	----	0.1	mg/L	3.5	5.1	---	---	---	
ED037: Total Alkalinity as CaCO3	----	1	mg/L	4	37	---	---	---	
ED/EK: Inorganic Nonmetallic Parameters									
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	9	26	---	---	---	
ED045K: Chloride	16887-00-6	0.5	mg/L	8	4	---	---	---	
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	0.12	0.07	---	---	---	
EK058A: Nitrate as N	14797-55-8	0.01	mg/L	0.04	0.29	---	---	---	
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	1.0	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	4	3	---	---	---	
EP020: Oil & Grease	----	5	mg/L	<5	<5	---	---	---	
EP026C: Chemical Oxygen Demand	----	5	mg/L	7	8	---	---	---	
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	5	2	---	---	---	
EG020: Lead	7439-92-1	1	µg/L	1	<1	---	---	---	
EG020: Manganese	7439-96-5	1	µg/L	26	308	---	---	---	
EG020: Nickel	7440-02-0	1	µg/L	1	<1	---	---	---	
EG020: Zinc	7440-66-6	10	µg/L	32	75	---	---	---	
EG032: Calcium	7440-70-2	50	µg/L	3000	20800	---	---	---	
EG032: Iron	7439-89-6	10	µg/L	290	520	---	---	---	
EG032: Magnesium	7439-95-4	50	µg/L	460	1220	---	---	---	
EG032: Potassium	7440-09-7	50	µg/L	870	2200	---	---	---	
EG032: Sodium	7440-23-5	50	µg/L	8400	4950	---	---	---	
EM: Microbiological Testing									
EM002: E. coli	----	1	CFU/100mL	2600	1800	---	---	---	



Sub-Matrix: WATER				Sample ID	WM1	WM2	---	---	---
				Sampling date / time	12-Jun-2024	12-Jun-2024	---	---	---
Compound	CAS Number	LOR	Unit	HK2423491-001	HK2423491-002	-----	-----	-----	
EM: Microbiological Testing - Continued									
EM003: Total Coliforms	----	1	CFU/100mL	6200	5000	---	---	---	

----- END OF REPORT -----



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: 5856311)								
HK2423421-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	23.2	24.7	6.3
HK2423565-004	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.6	3.7	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 5865714)								
HK2424201-010	Anonymous	ED037: Total Alkalinity as CaCO3	----	1	mg/L	48	48	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5857750)								
HK2422436-001	Anonymous	EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5858352)								
HK2423301-001	Anonymous	EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5862116)								
HK2423491-002	WM2	ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	26	28	6.2
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5862117)								
HK2423491-002	WM2	ED045K: Chloride	16887-00-6	1	mg/L	4	5	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5867470)								
HK2424042-001	Anonymous	EK055K: Ammonia as N	7664-41-7	0.01	mg/L	11.0	10.0	9.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5875023)								
HK2423491-001	WM1	EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	1.0	1.0	0.0
EP: Aggregate Organics (QC Lot: 5873310)								
HK2423309-001	Anonymous	EP026C: Chemical Oxygen Demand	----	5	mg/L	<5	<5	0.0
EP: Aggregate Organics (QC Lot: 5873684)								
HK2423491-001	WM1	EP005: Total Organic Carbon	----	1	mg/L	4	5	0.0
EG: Metals and Major Cations - Total (QC Lot: 5857764)								
HK2423491-002	WM2	EG032: Iron	7439-89-6	10	µg/L	520	520	0.0
		EG032: Calcium	7440-70-2	50	µg/L	20800	20500	1.2
		EG032: Magnesium	7439-95-4	50	µg/L	1220	1200	1.3
		EG032: Potassium	7440-09-7	50	µg/L	2200	2170	1.0
		EG032: Sodium	7440-23-5	50	µg/L	4950	4900	0.9
EG: Metals and Major Cations - Total (QC Lot: 5857765)								
HK2423491-002	WM2	EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations - Total (QC Lot: 5857765) - Continued								
HK2423491-002	WM2	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	308	307	0.5
		EG020: Nickel	7440-02-0	1	µg/L	<1	<1	0.0
		EG020: Zinc	7440-66-6	10	µg/L	75	75	0.0

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

Matrix: WATER				Method Blank (MB) Report		Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 5856311)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	10 mg/L	104	----	84.9	114	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 5865714)											
ED037: Total Alkalinity as CaCO3	----	1	mg/L	<1	50 mg/L	101	----	95.0	105	----	----
				<1	2000 mg/L	99.7	----	95.0	105	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5857750)											
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	----	----	----	----	----	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5858352)											
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	96.4	----	92.4	106	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5862116)											
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	<1	5 mg/L	101	----	93.8	108	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5862117)											
ED045K: Chloride	16887-00-6	1	mg/L	<1	10 mg/L	98.6	----	88.2	108	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5867470)											
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.9	----	89.3	109	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5875023)											
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	0.5 mg/L	108	----	90.1	123	----	----
EP: Aggregate Organics (QC Lot: 5855696)											
EP030: Biochemical Oxygen Demand	----	----	mg/L	----	198 mg/L	88.5	----	77.6	118	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
		LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits(%)		RPD (%)	
Method: Compound	CAS Number					LCS	DCS	Low	High	Value	Control Limit
EP: Aggregate Organics (QC Lot: 5873310)											
EP026C: Chemical Oxygen Demand	----	----	mg/L	----	25 mg/L	102	----	92.0	108	----	----
				----	250 mg/L	98.5	----	92.3	106	----	----
EP: Aggregate Organics (QC Lot: 5873684)											
EP005: Total Organic Carbon	----	1	mg/L	<1	5 mg/L	106	----	81.7	124	----	----
				<1	100 mg/L	105	----	82.9	122	----	----
EP: Aggregate Organics (QC Lot: 5878692)											
EP020: Oil & Grease	----	2	mg/L	<2	20 mg/L	87.8	----	79.1	108	----	----
EG: Metals and Major Cations - Total (QC Lot: 5857764)											
EG032: Calcium	7440-70-2	50	µg/L	<50	2000 µg/L	104	----	85.0	115	----	----
EG032: Iron	7439-89-6	10	µg/L	<10	2000 µg/L	105	----	85.0	115	----	----
EG032: Magnesium	7439-95-4	50	µg/L	<50	2000 µg/L	106	----	85.0	115	----	----
EG032: Potassium	7440-09-7	50	µg/L	<50	2000 µg/L	103	----	85.0	115	----	----
EG032: Sodium	7440-23-5	50	µg/L	<50	2000 µg/L	104	----	85.0	115	----	----
EG: Metals and Major Cations - Total (QC Lot: 5857765)											
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	5 µg/L	97.1	----	85.0	109	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	50 µg/L	104	----	90.0	111	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	50 µg/L	99.1	----	89.0	111	----	----
EG020: Manganese	7439-96-5	1	µg/L	<1	50 µg/L	101	----	85.0	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	50 µg/L	102	----	87.0	110	----	----
EG020: Zinc	7440-66-6	10	µg/L	<10	50 µg/L	104	----	86.0	114	----	----



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

Matrix: WATER

					Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5858352)										
HK2423301-001	Anonymous	EK071K: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	98.4	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5862116)										
HK2423491-002	WM2	ED041K: Sulphate as SO4 - Turbidimetric	----	50 mg/L	75.0	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5862117)										
HK2423491-002	WM2	ED045K: Chloride	16887-00-6	5 mg/L	93.0	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5867470)										
HK2424042-001	Anonymous	EK055K: Ammonia as N	7664-41-7	50 mg/L	87.4	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5875023)										
HK2423491-001	WM1	EK061A: Total Kjeldahl Nitrogen as N	----	0.5 mg/L	101	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5873310)										
HK2423304-001	Anonymous	EP026C: Chemical Oxygen Demand	----	10 mg/L	101	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5873684)										
HK2423491-002	WM2	EP005: Total Organic Carbon	----	5 mg/L	101	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5857764)										
HK2423491-001	WM1	EG032: Calcium	7440-70-2	2000 µg/L	99.3	----	75.0	125	----	----
		EG032: Iron	7439-89-6	2000 µg/L	107	----	75.0	125	----	----
		EG032: Magnesium	7439-95-4	2000 µg/L	108	----	75.0	125	----	----
		EG032: Potassium	7440-09-7	2000 µg/L	107	----	75.0	125	----	----
		EG032: Sodium	7440-23-5	2000 µg/L	# Not Determined	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5857765)										
HK2423491-001	WM1	EG020: Cadmium	7440-43-9	5 µg/L	101	----	75.0	125	----	----
		EG020: Copper	7440-50-8	50 µg/L	110	----	75.0	125	----	----
		EG020: Lead	7439-92-1	50 µg/L	103	----	75.0	125	----	----
		EG020: Manganese	7439-96-5	50 µg/L	109	----	75.0	125	----	----



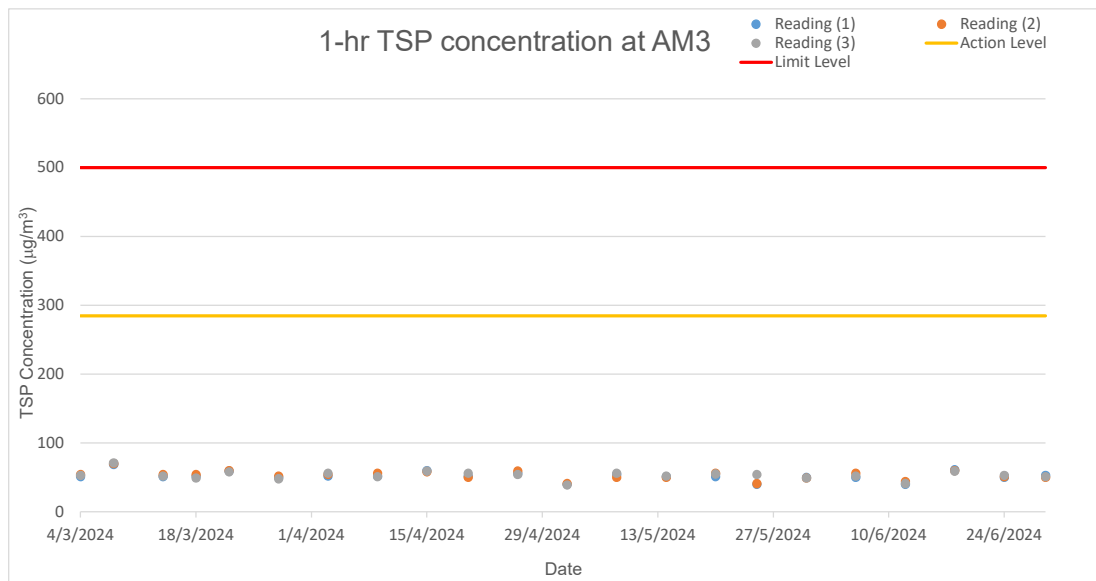
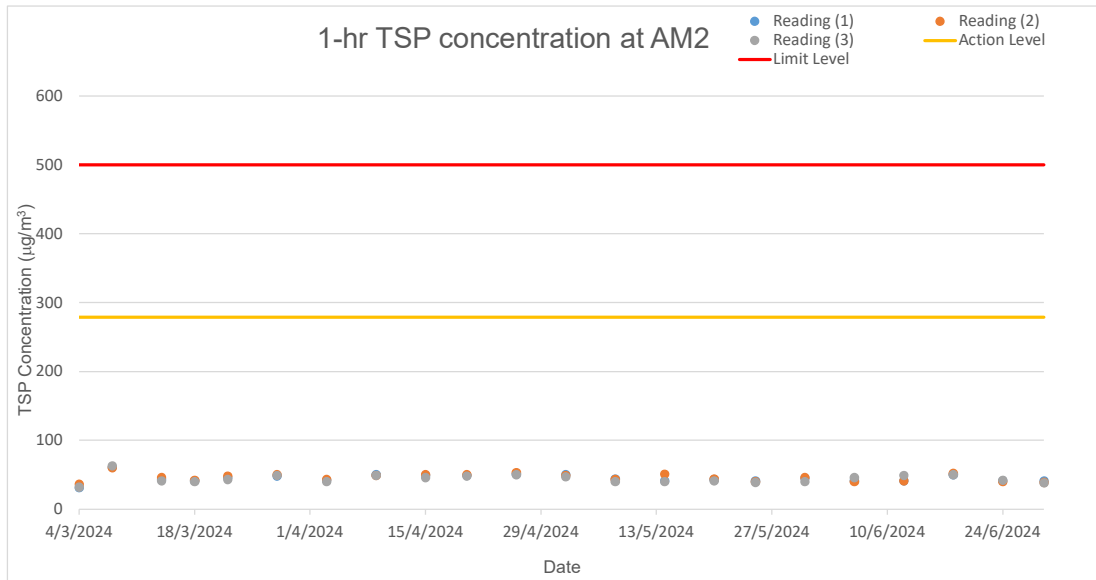
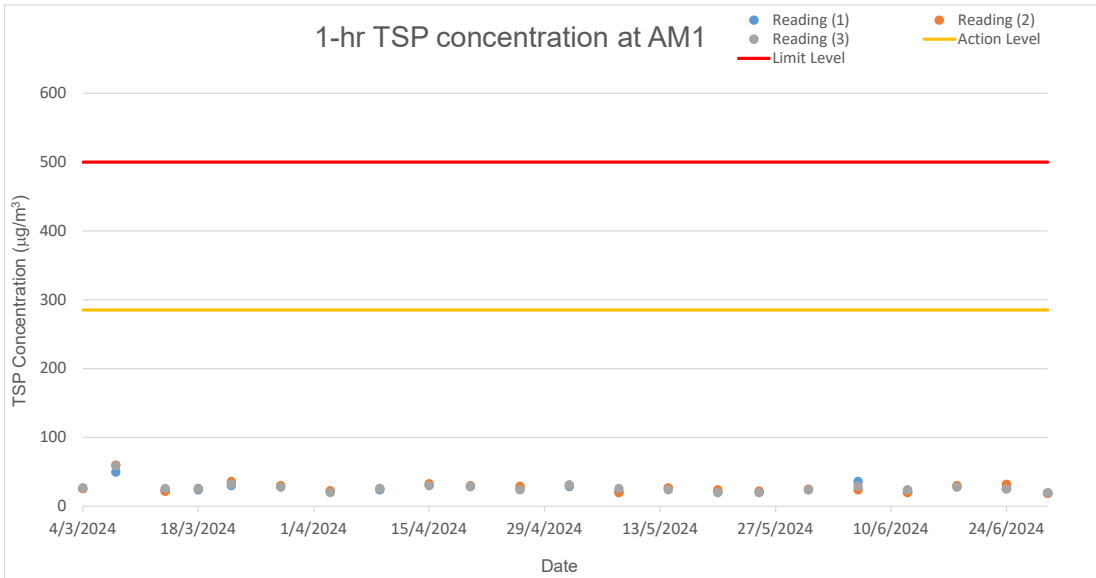
Matrix: WATER

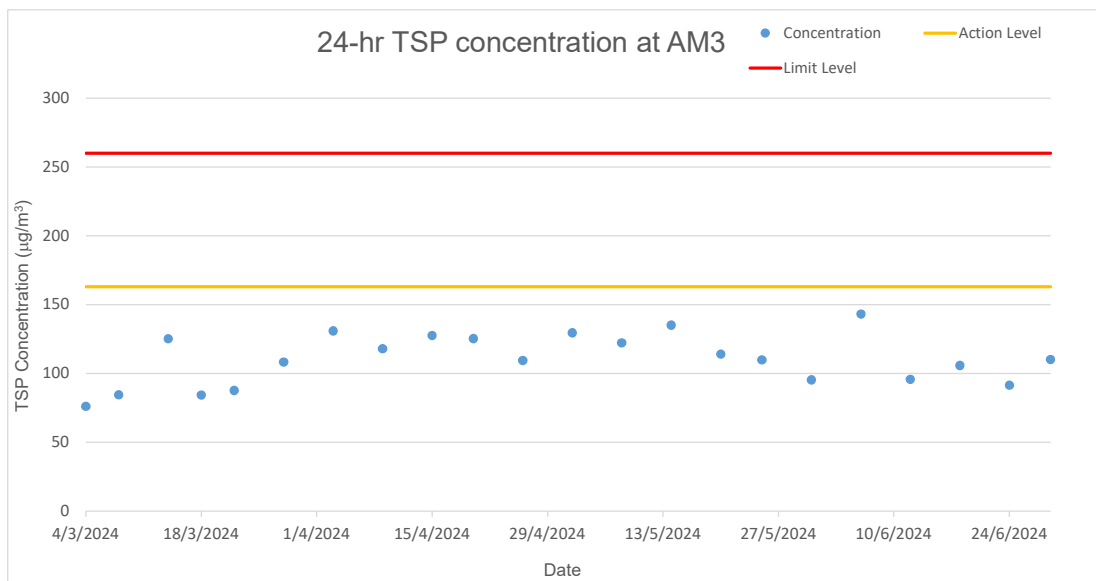
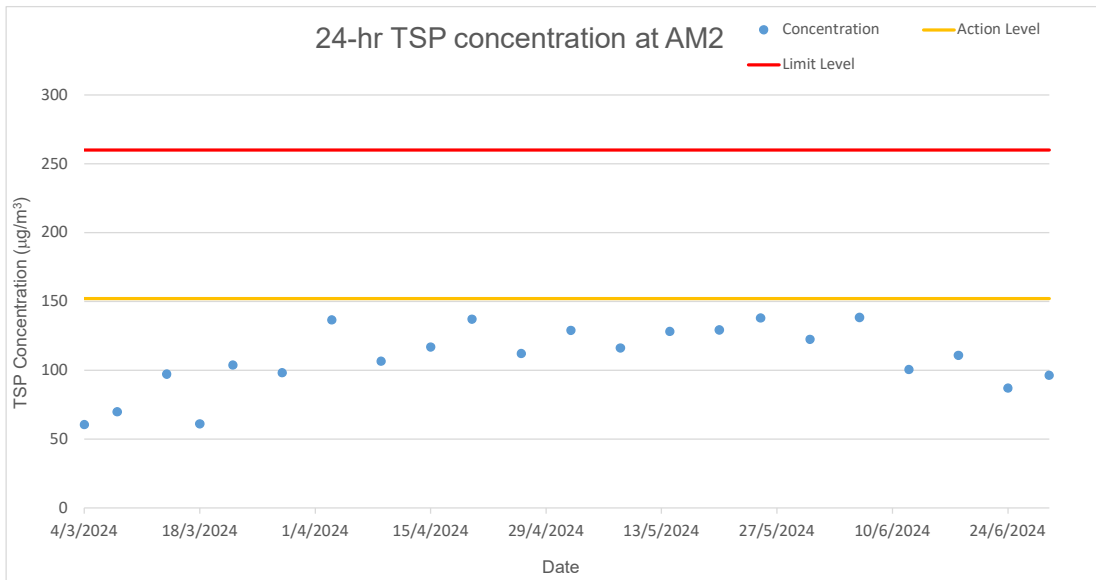
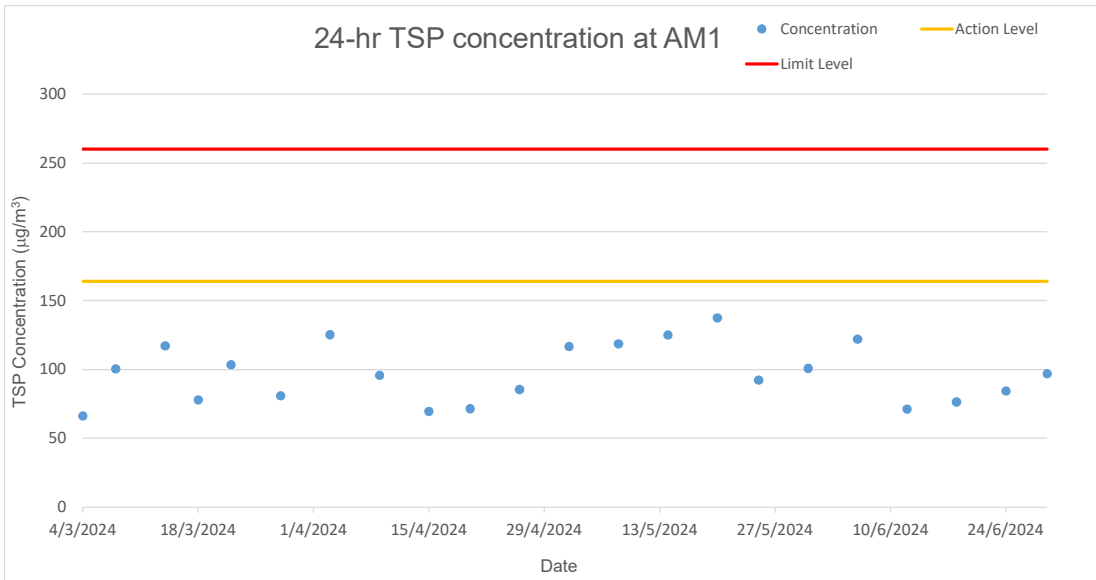
Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations - Total (QC Lot: 5857765) - Continued										
HK2423491-001	WM1	EG020: Nickel	7440-02-0	50 µg/L	106	----	75.0	125	----	----
		EG020: Zinc	7440-66-6	50 µg/L	109	----	75.0	125	----	----

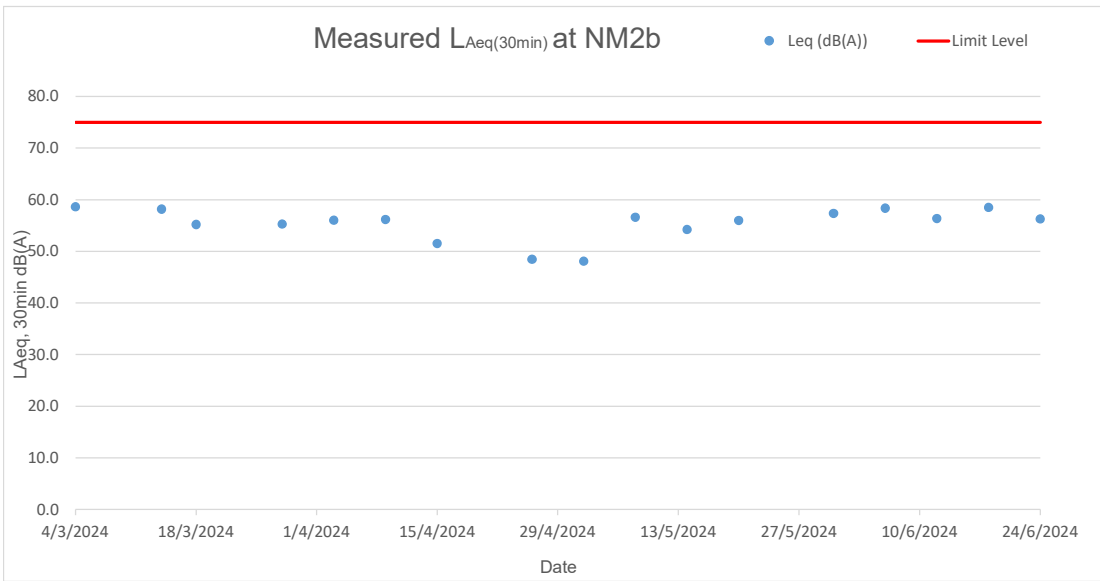
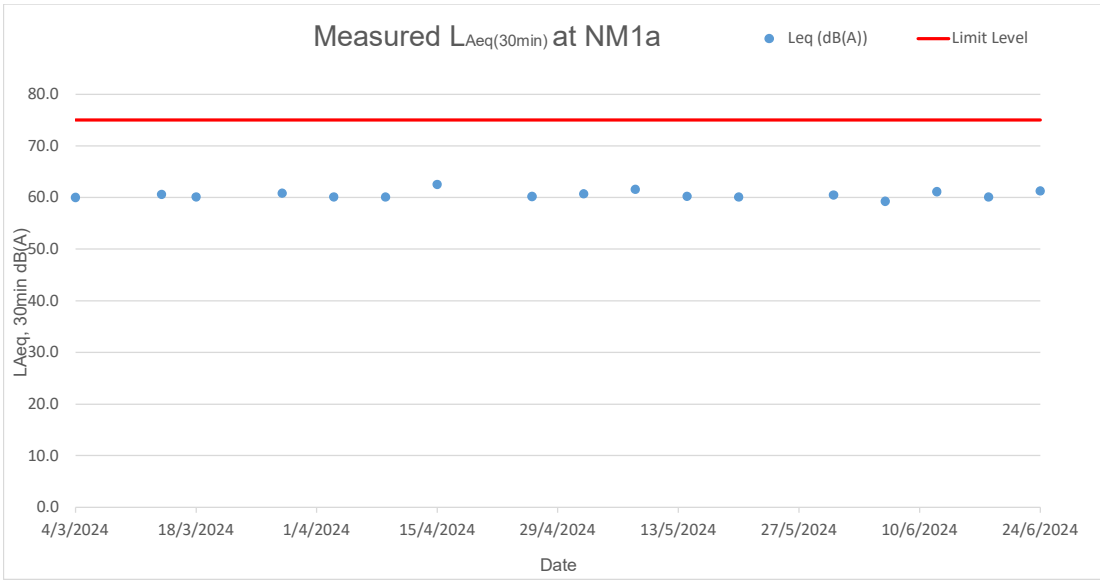
Appendix G Graphical Presentations

Air Quality



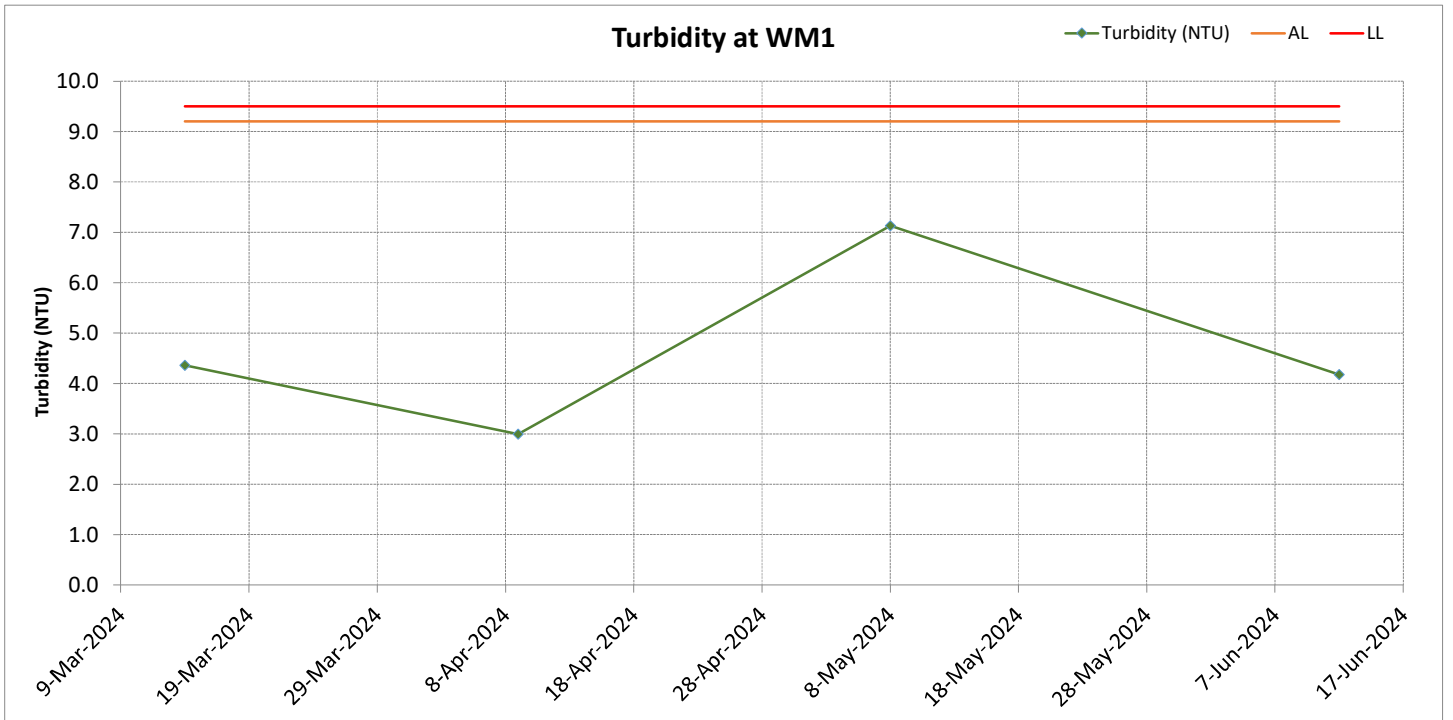
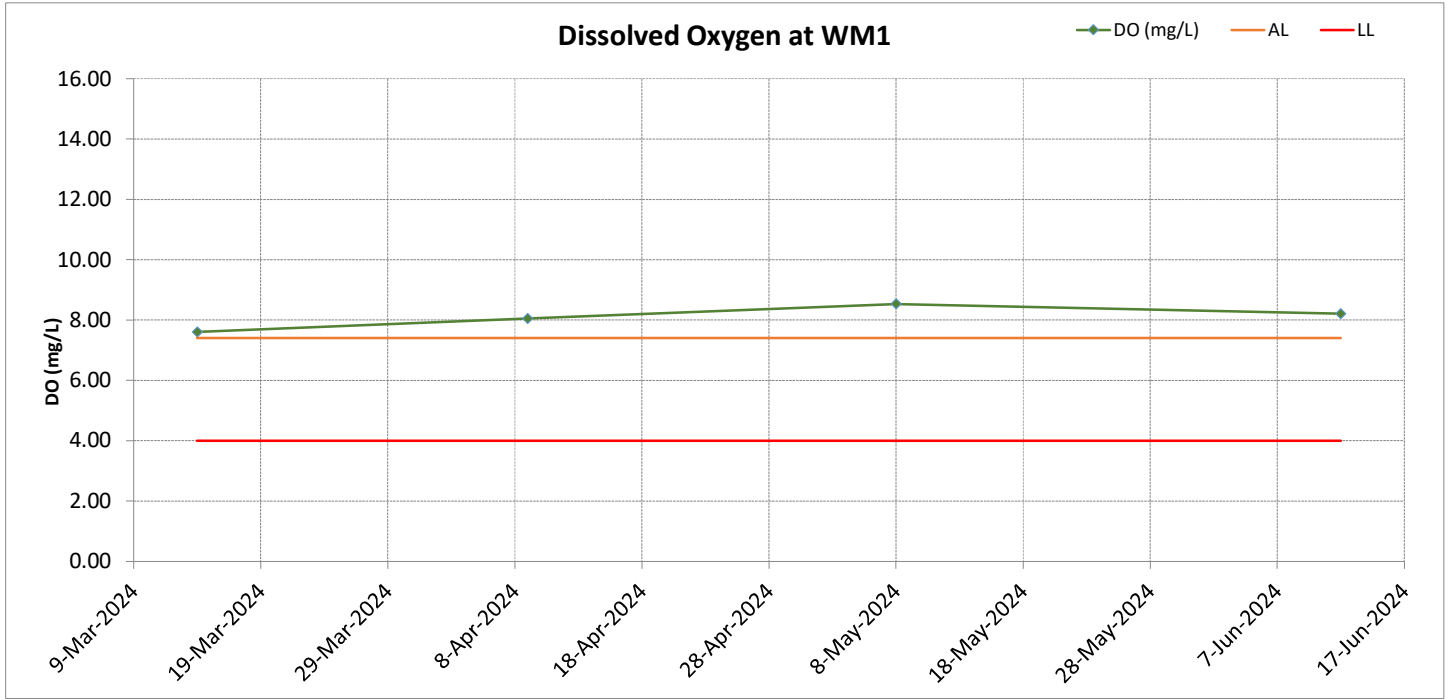


Noise

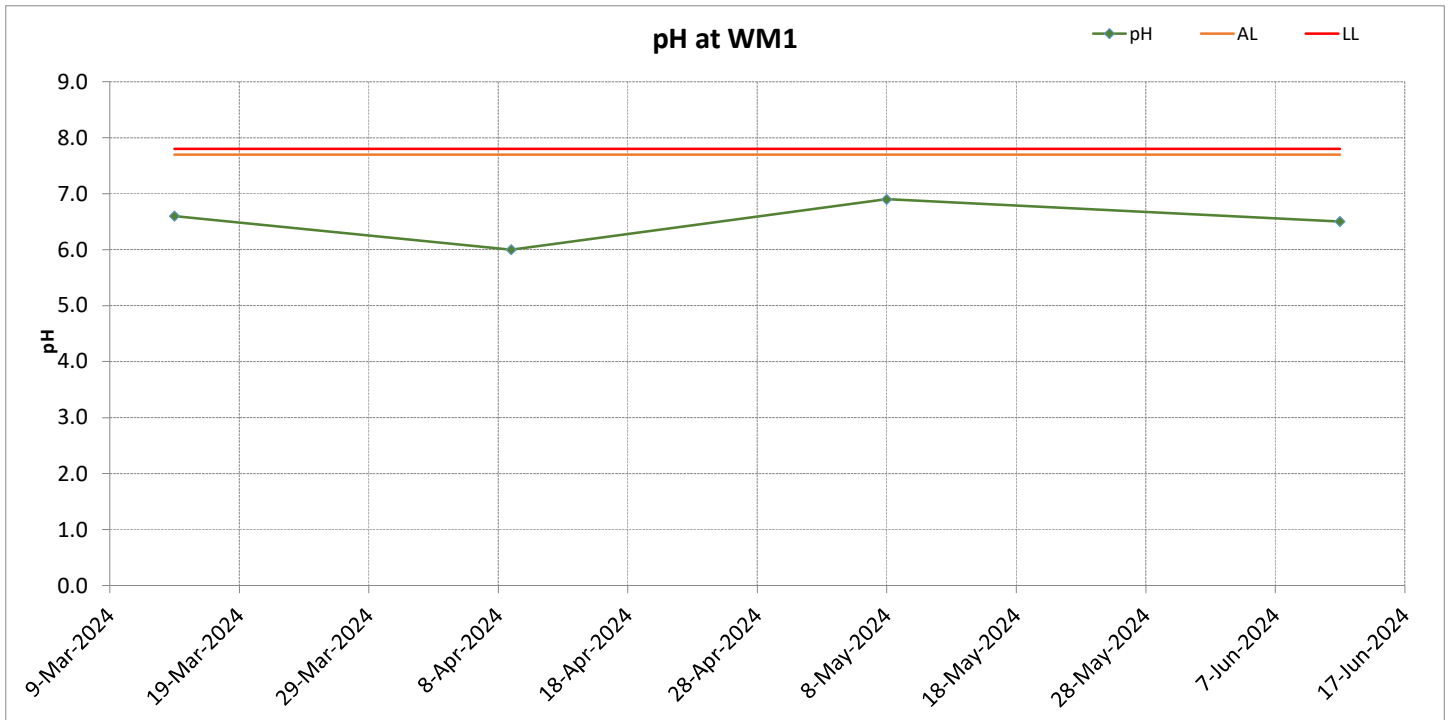
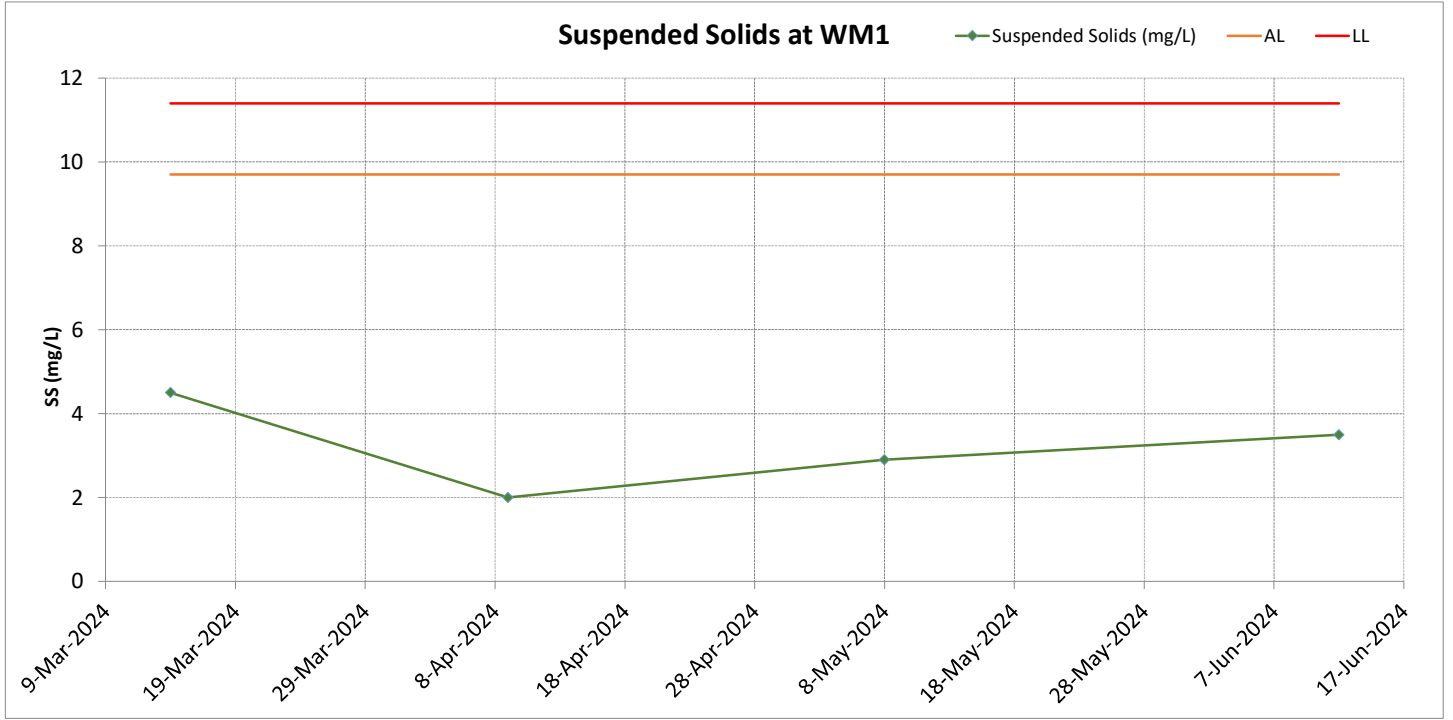


Water Quality

Surface Water Monitoring Results at WM1

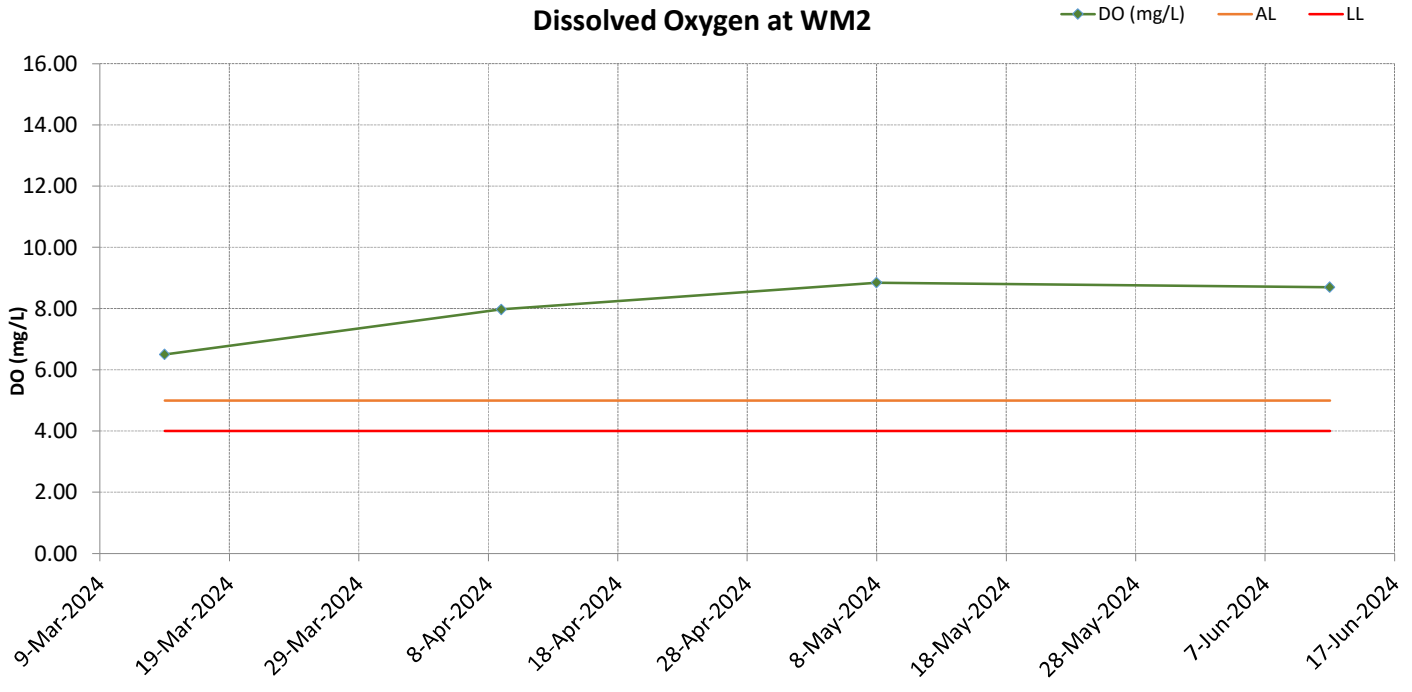


Surface Water Monitoring Results at WM1

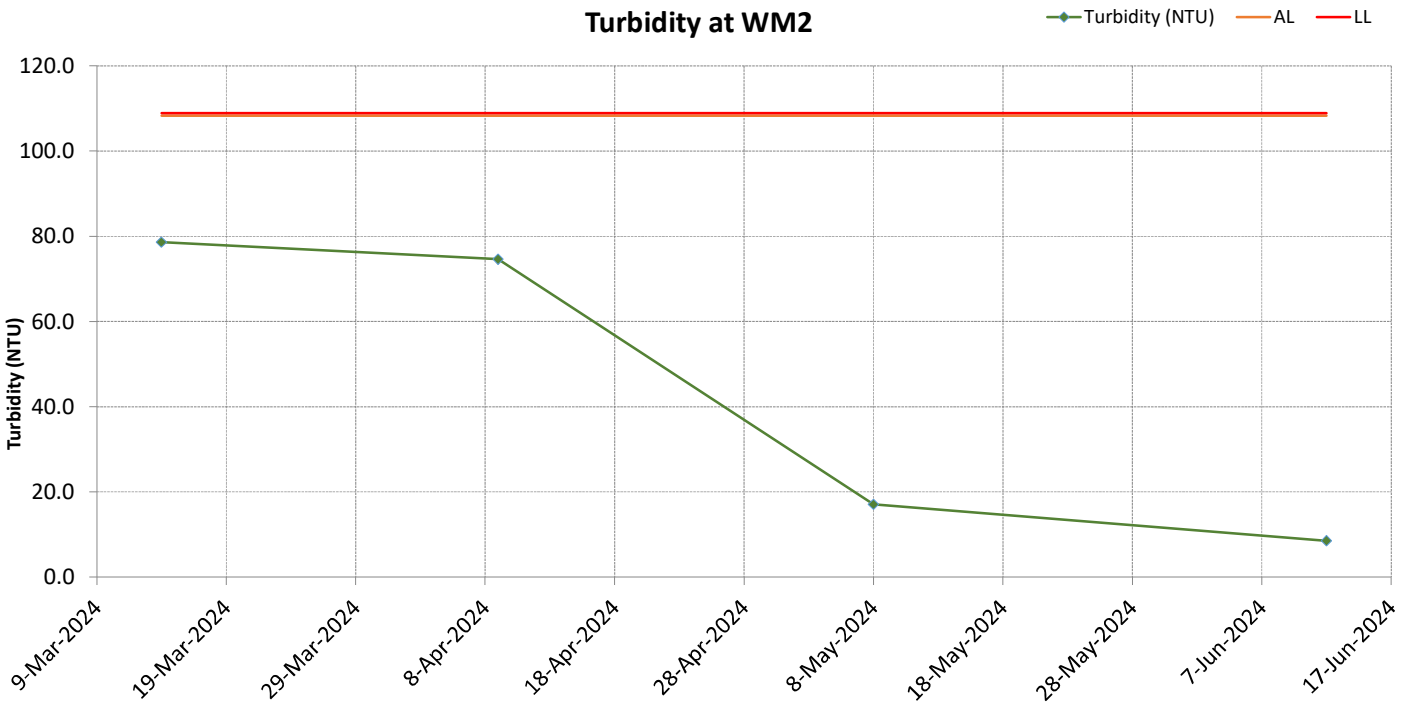


Surface Water Monitoring Results at WM2

Dissolved Oxygen at WM2

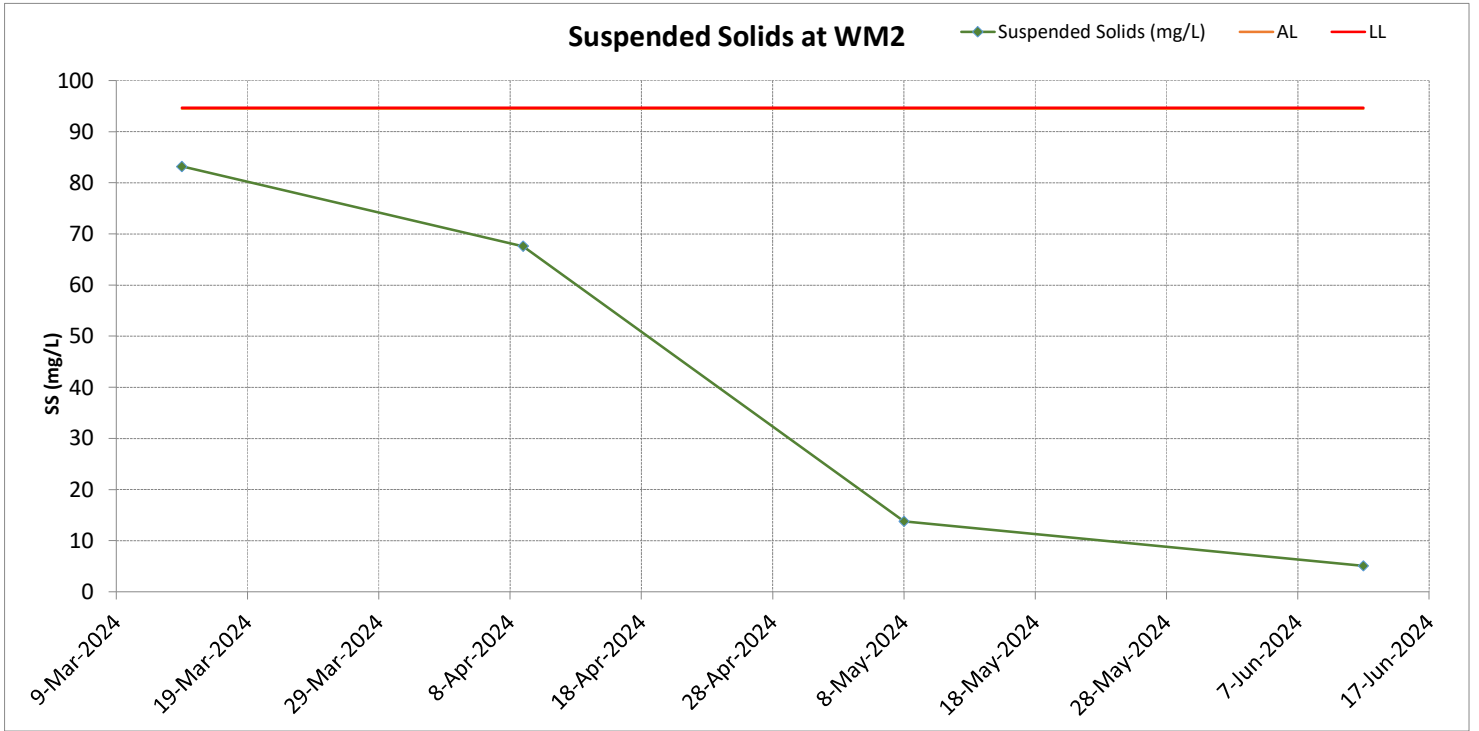


Turbidity at WM2

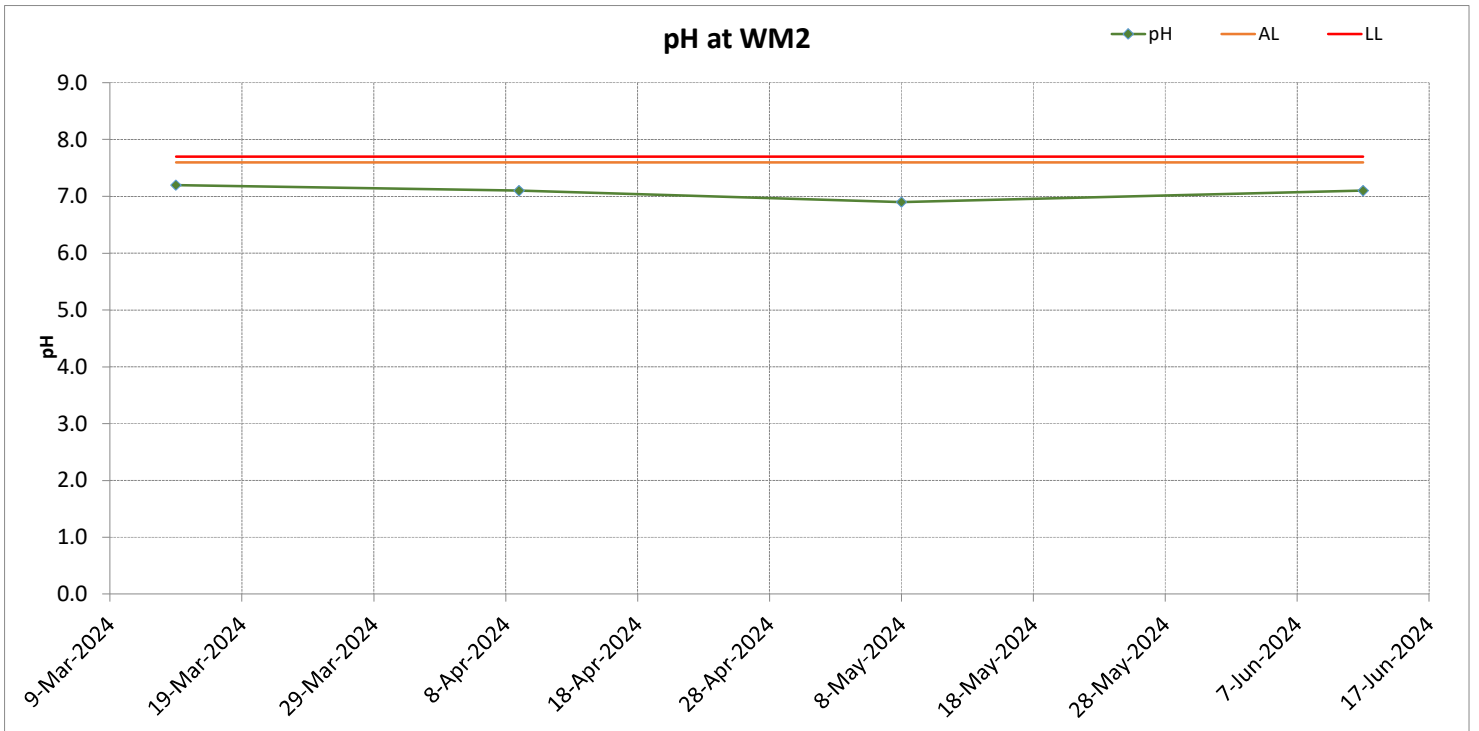


Surface Water Monitoring Results at WM2

Suspended Solids at WM2



pH 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 related
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

Appendix I Wind Data

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240601 0003	0.4	14
20240601 0013	0.1	92
20240601 0023	0.1	32
20240601 0033	0.1	302
20240601 0043	0.7	351
20240601 0053	4	42
20240601 0103	0.1	122
20240601 0113	0.4	263
20240601 0123	0.1	151
20240601 0133	0.1	311
20240601 0143	0.1	38
20240601 0153	0.3	293
20240601 0203	6.1	100
20240601 0213	0.3	154
20240601 0223	0.3	18
20240601 0233	2.1	325
20240601 0243	3.1	146
20240601 0253	0.3	329
20240601 0303	0.2	283
20240601 0313	0.1	326
20240601 0323	0.3	44
20240601 0333	0.4	10
20240601 0343	0.1	234
20240601 0353	0.1	294
20240601 0403	0.1	306
20240601 0413	0.2	150
20240601 0423	0.1	10
20240601 0433	0.1	339
20240601 0443	0.1	212
20240601 0453	0.1	286
20240601 0503	0.1	225
20240601 0513	0.1	140
20240601 0523	0.1	168
20240601 0533	0.1	253
20240601 0543	0.3	286
20240601 0553	1.3	279
20240601 0603	0.1	284
20240601 0613	0.1	120
20240601 0623	0.1	341
20240601 0633	0.1	86
20240601 0643	1.9	232
20240601 0653	0.1	173
20240601 0703	0.1	15
20240601 0713	0.5	136
20240601 0723	0.6	183
20240601 0733	0.2	150
20240601 0743	0.2	324
20240601 0753	0.8	257
20240601 0803	0.3	228
20240601 0813	0.3	297
20240601 0823	0.1	268
20240601 0833	0.3	228
20240601 0843	0.1	172
20240601 0853	0.1	217
20240601 0903	3.4	274
20240601 0913	0.1	144
20240601 0923	0.1	29
20240601 0933	0.1	189
20240601 0943	0.7	65
20240601 0953	0.1	296
20240601 1003	0.2	282
20240601 1013	0.5	241
20240601 1023	0.1	158
20240601 1033	0.1	294
20240601 1043	0.9	149
20240601 1053	0.3	184
20240601 1103	2.6	99
20240601 1113	0.1	196
20240601 1123	0.2	142
20240601 1133	0.1	27
20240601 1143	0.5	258
20240601 1153	0.2	152

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240601 1203	0.1	222
20240601 1213	0.1	69
20240601 1223	0.1	39
20240601 1233	0.1	221
20240601 1243	0.5	293
20240601 1253	0.7	113
20240601 1303	0.7	171
20240601 1313	0.1	153
20240601 1323	0.1	244
20240601 1333	0.9	279
20240601 1343	0.3	232
20240601 1353	0.4	265
20240601 1403	0.8	200
20240601 1413	0.7	121
20240601 1423	0.1	257
20240601 1433	0.1	276
20240601 1443	0.7	253
20240601 1453	1.1	206
20240601 1503	0.1	226
20240601 1513	0.1	259
20240601 1523	0.7	239
20240601 1533	0.1	234
20240601 1543	0.1	230
20240601 1553	0.1	241
20240601 1603	0.1	244
20240601 1613	0.1	241
20240601 1623	0.2	234
20240601 1633	0.1	185
20240601 1643	0.1	243
20240601 1653	0.1	236
20240601 1703	0.1	247
20240601 1713	0.1	151
20240601 1723	0.1	310
20240601 1733	0.1	206
20240601 1743	0.1	171
20240601 1753	0.1	235
20240601 1803	0.5	155
20240601 1813	0.1	232
20240601 1823	0.1	234
20240601 1833	0.2	252
20240601 1843	0.1	150
20240601 1853	0.1	214
20240601 1903	0.1	236
20240601 1913	0.1	250
20240601 1923	0.1	259
20240601 1933	0.1	188
20240601 1943	0.1	215
20240601 1953	0.1	324
20240601 2003	0.1	242
20240601 2013	0.1	154
20240601 2023	0.1	185
20240601 2033	0.8	206
20240601 2043	0.8	253
20240601 2053	0.1	218
20240601 2103	0.1	244
20240601 2113	0.1	198
20240601 2123	0.1	254
20240601 2133	0.1	241
20240601 2143	0.1	232
20240601 2153	0.1	256
20240601 2203	0.1	203
20240601 2213	0.1	262
20240601 2223	0.1	216
20240601 2233	0.1	247
20240601 2243	0.1	251
20240601 2253	0.1	255
20240601 2303	0.1	242
20240601 2313	0.1	242
20240601 2323	0.1	249
20240601 2333	0.1	163
20240601 2343	0.1	230
20240601 2353	0.1	230

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240602 0003	0.1	32
20240602 0013	0.1	257
20240602 0023	0.1	257
20240602 0033	0.1	257
20240602 0043	0.1	257
20240602 0053	0.1	257
20240602 0103	0.1	257
20240602 0113	0.1	257
20240602 0123	0.1	257
20240602 0133	0.1	257
20240602 0143	0.1	257
20240602 0153	0.1	257
20240602 0203	0.1	257
20240602 0213	0.1	257
20240602 0223	0.1	257
20240602 0233	0.1	257
20240602 0243	0.1	257
20240602 0253	0.1	257
20240602 0303	0.1	257
20240602 0313	0.1	257
20240602 0323	0.1	257
20240602 0333	0.1	257
20240602 0343	0.1	257
20240602 0353	0.1	257
20240602 0403	0.1	257
20240602 0413	0.1	257
20240602 0423	0.1	102
20240602 0433	0.1	151
20240602 0443	0.1	151
20240602 0453	0.1	151
20240602 0503	0.1	150
20240602 0513	0.1	150
20240602 0523	0.1	150
20240602 0533	0.1	127
20240602 0543	0.1	127
20240602 0553	0.1	127
20240602 0603	0.1	90
20240602 0613	0.1	90
20240602 0623	0.1	86
20240602 0633	0.1	4
20240602 0643	0.1	87
20240602 0653	0.1	87
20240602 0703	0.1	87
20240602 0713	0.1	151
20240602 0723	0.1	151
20240602 0733	0.1	150
20240602 0743	0.1	136
20240602 0753	0.1	147
20240602 0803	0.1	194
20240602 0813	0.1	189
20240602 0823	0.1	150
20240602 0833	0.1	230
20240602 0843	0.1	214
20240602 0853	0.1	208
20240602 0903	0.1	168
20240602 0913	0.1	147
20240602 0923	0.1	157
20240602 0933	0.1	271
20240602 0943	0.1	230
20240602 0953	0.1	190
20240602 1003	0.1	198
20240602 1013	0.1	226
20240602 1023	0.8	238
20240602 1033	0.1	216
20240602 1043	0.2	141
20240602 1053	0.1	265
20240602 1103	0.1	254
20240602 1113	0.3	249
20240602 1123	0.3	240
20240602 1133	0.1	292
20240602 1143	0.3	222
20240602 1153	0.1	146

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240602 1203	0.1	126
20240602 1213	0.1	219
20240602 1223	0.2	253
20240602 1233	0.7	220
20240602 1243	0.6	241
20240602 1253	0.3	143
20240602 1303	0.1	179
20240602 1313	0.1	255
20240602 1323	0.1	215
20240602 1333	1.7	154
20240602 1343	0.1	219
20240602 1353	0.4	232
20240602 1403	0.1	165
20240602 1413	0.1	230
20240602 1423	0.8	221
20240602 1433	0.1	233
20240602 1443	0.1	227
20240602 1453	0.1	6
20240602 1503	0.1	216
20240602 1513	0.5	129
20240602 1523	0.1	254
20240602 1533	0.1	171
20240602 1543	1	128
20240602 1553	0.1	157
20240602 1603	0.1	178
20240602 1613	0.1	207
20240602 1623	0.1	157
20240602 1633	0.1	166
20240602 1643	0.1	182
20240602 1653	0.1	203
20240602 1703	0.2	144
20240602 1713	0.1	134
20240602 1723	0.1	153
20240602 1733	0.1	213
20240602 1743	0.1	34
20240602 1753	0.1	305
20240602 1803	0.1	154
20240602 1813	0.1	170
20240602 1823	0.1	175
20240602 1833	0.1	166
20240602 1843	0.1	163
20240602 1853	0.1	139
20240602 1903	0.1	14
20240602 1913	0.1	39
20240602 1923	0.1	98
20240602 1933	0.1	46
20240602 1943	0.1	44
20240602 1953	0.1	34
20240602 2003	0.1	34
20240602 2013	0.1	35
20240602 2023	0.1	36
20240602 2033	0.1	57
20240602 2043	0.1	40
20240602 2053	0.1	320
20240602 2103	0.1	36
20240602 2113	0.1	36
20240602 2123	0.1	350
20240602 2133	0.1	51
20240602 2143	0.1	37
20240602 2153	0.1	46
20240602 2203	0.1	62
20240602 2213	0.1	62
20240602 2223	0.1	40
20240602 2233	0.1	40
20240602 2243	0.1	6
20240602 2253	0.1	53
20240602 2303	0.1	52
20240602 2313	0.1	52
20240602 2323	0.1	52
20240602 2333	0.1	52
20240602 2343	0.1	52
20240602 2353	0.1	72

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240603 0003	0.1	72
20240603 0013	0.1	72
20240603 0023	0.1	72
20240603 0033	0.1	58
20240603 0043	0.1	13
20240603 0053	0.1	36
20240603 0103	0.1	324
20240603 0113	0.1	166
20240603 0123	0.1	166
20240603 0133	0.1	166
20240603 0143	0.1	166
20240603 0153	0.1	311
20240603 0203	0.1	24
20240603 0213	0.1	346
20240603 0223	0.1	178
20240603 0233	0.1	179
20240603 0243	0.1	178
20240603 0253	0.1	179
20240603 0303	0.1	76
20240603 0313	0.1	76
20240603 0323	0.1	77
20240603 0333	0.1	104
20240603 0343	1.7	102
20240603 0353	0.6	75
20240603 0403	2.1	36
20240603 0413	7	55
20240603 0423	3.9	68
20240603 0433	0.5	33
20240603 0443	0.1	81
20240603 0453	0.2	60
20240603 0503	0.3	11
20240603 0513	1.5	101
20240603 0523	0.1	19
20240603 0533	1.9	119
20240603 0543	2.9	153
20240603 0553	0.1	37
20240603 0603	1.5	32
20240603 0613	1.8	278
20240603 0623	0.3	104
20240603 0633	5.1	49
20240603 0643	0.2	43
20240603 0653	0.2	20
20240603 0703	0.1	231
20240603 0713	1.5	68
20240603 0723	0.5	8
20240603 0733	0.1	7
20240603 0743	2.1	90
20240603 0753	2	122
20240603 0803	0.1	18
20240603 0813	2.4	122
20240603 0823	0.1	35
20240603 0833	0.3	57
20240603 0843	0.4	4
20240603 0853	0.1	219
20240603 0903	0.1	124
20240603 0913	0.2	2
20240603 0923	0.1	10
20240603 0933	0.1	32
20240603 0943	0.1	183
20240603 0953	0.2	115
20240603 1003	0.1	172
20240603 1013	0.1	119
20240603 1023	0.7	53
20240603 1033	0.5	113
20240603 1043	0.3	327
20240603 1053	0.6	40
20240603 1103	0.3	329
20240603 1113	0.7	316
20240603 1123	0.1	6
20240603 1133	0.1	17
20240603 1143	4.7	19
20240603 1153	0.3	35

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240603 1203	0.1	307
20240603 1213	0.1	305
20240603 1223	2.3	335
20240603 1233	1.8	157
20240603 1243	0.1	19
20240603 1253	1.7	2
20240603 1303	3.3	38
20240603 1313	0.1	287
20240603 1323	0.3	5
20240603 1333	0.6	90
20240603 1343	2.1	322
20240603 1353	2.3	306
20240603 1403	4.2	11
20240603 1413	0.6	316
20240603 1423	0.2	62
20240603 1433	0.1	113
20240603 1443	0.3	53
20240603 1453	3.6	4
20240603 1503	1.3	351
20240603 1513	0.1	66
20240603 1523	1.2	25
20240603 1533	0.6	71
20240603 1543	0.9	350
20240603 1553	0.7	56
20240603 1603	3.4	351
20240603 1613	0.1	342
20240603 1623	0.2	343
20240603 1633	2.1	2
20240603 1643	0.7	52
20240603 1653	2.4	276
20240603 1703	0.1	334
20240603 1713	0.1	331
20240603 1723	3.8	2
20240603 1733	0.7	92
20240603 1743	0.8	332
20240603 1753	0.1	317
20240603 1803	3.4	50
20240603 1813	1.4	319
20240603 1823	1	345
20240603 1833	0.1	343
20240603 1843	0.1	17
20240603 1853	0.2	31
20240603 1903	0.1	319
20240603 1913	0.6	0
20240603 1923	1.1	328
20240603 1933	0.8	314
20240603 1943	0.2	268
20240603 1953	0.1	211
20240603 2003	1.6	307
20240603 2013	0.3	74
20240603 2023	0.5	346
20240603 2033	5.3	24
20240603 2043	4.6	20
20240603 2053	5.2	26
20240603 2103	3.2	66
20240603 2113	5.6	52
20240603 2123	7.8	89
20240603 2133	8.3	59
20240603 2143	1.6	139
20240603 2153	2	77
20240603 2203	3.1	0
20240603 2213	0.5	166
20240603 2223	1.1	14
20240603 2233	0.9	31
20240603 2243	0.2	78
20240603 2253	0.2	85
20240603 2303	1.5	38
20240603 2313	4	50
20240603 2323	5.2	148
20240603 2333	2.3	21
20240603 2343	1.8	61
20240603 2353	0.6	51

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240604 0003	0.2	40
20240604 0013	3.3	2
20240604 0023	2.2	172
20240604 0033	1.3	129
20240604 0043	3.3	88
20240604 0053	1	127
20240604 0103	1.9	68
20240604 0113	0.6	127
20240604 0123	6.3	58
20240604 0133	5.2	65
20240604 0143	0.1	79
20240604 0153	0.9	164
20240604 0203	0.1	83
20240604 0213	0.1	73
20240604 0223	1.5	97
20240604 0233	1.7	76
20240604 0243	1.6	140
20240604 0253	1.5	41
20240604 0303	0.4	12
20240604 0313	4.3	123
20240604 0323	5.8	22
20240604 0333	2.1	126
20240604 0343	3.1	153
20240604 0353	1.3	111
20240604 0403	0.1	156
20240604 0413	1.8	33
20240604 0423	0.1	191
20240604 0433	0.3	327
20240604 0443	0.4	287
20240604 0453	0.1	303
20240604 0503	1.1	24
20240604 0513	0.7	33
20240604 0523	0.1	71
20240604 0533	3.3	60
20240604 0543	3.1	104
20240604 0553	1.4	119
20240604 0603	0.1	41
20240604 0613	1.9	70
20240604 0623	0.2	69
20240604 0633	5.8	118
20240604 0643	0.9	323
20240604 0653	3.3	152
20240604 0703	0.1	247
20240604 0713	0.5	255
20240604 0723	0.1	242
20240604 0733	0.1	165
20240604 0743	0.1	31
20240604 0753	1.9	90
20240604 0803	1.6	353
20240604 0813	1.1	259
20240604 0823	0.1	130
20240604 0833	1	35
20240604 0843	0.1	145
20240604 0853	0.1	29
20240604 0903	0.1	95
20240604 0913	0.6	353
20240604 0923	0.2	112
20240604 0933	1.7	33
20240604 0943	0.1	121
20240604 0953	0.1	15
20240604 1003	0.2	315
20240604 1013	1.9	332
20240604 1023	1.8	144
20240604 1033	3.3	30
20240604 1043	0.2	68
20240604 1053	2.4	338
20240604 1103	1.7	79
20240604 1113	1.4	324
20240604 1123	2.4	43
20240604 1133	0.1	141
20240604 1143	0.2	13
20240604 1153	0.8	59

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240604 1203	0.9	353
20240604 1213	0.2	22
20240604 1223	0.1	331
20240604 1233	0.2	69
20240604 1243	2.2	120
20240604 1253	1.4	38
20240604 1303	0.1	96
20240604 1313	0.2	25
20240604 1323	0.1	310
20240604 1333	0.1	57
20240604 1343	0.1	335
20240604 1353	0.1	84
20240604 1403	3.8	71
20240604 1413	0.4	65
20240604 1423	0.1	68
20240604 1433	0.1	110
20240604 1443	0.1	108
20240604 1453	2.1	61
20240604 1503	3.7	60
20240604 1513	0.1	8
20240604 1523	0.5	130
20240604 1533	0.2	354
20240604 1543	3	341
20240604 1553	0.2	144
20240604 1603	1.4	127
20240604 1613	0.3	96
20240604 1623	0.1	31
20240604 1633	0.8	343
20240604 1643	0.2	106
20240604 1653	1.8	19
20240604 1703	0.9	33
20240604 1713	0.2	72
20240604 1723	0.2	324
20240604 1733	0.1	336
20240604 1743	3.4	151
20240604 1753	1.4	4
20240604 1803	0.2	320
20240604 1813	1.2	37
20240604 1823	3.8	50
20240604 1833	0.4	344
20240604 1843	0.7	64
20240604 1853	0.7	18
20240604 1903	0.4	82
20240604 1913	0.9	122
20240604 1923	1.2	42
20240604 1933	0.2	319
20240604 1943	1.2	159
20240604 1953	1.1	355
20240604 2003	0.1	151
20240604 2013	0.7	269
20240604 2023	0.9	101
20240604 2033	0.2	9
20240604 2043	1.7	313
20240604 2053	5.4	77
20240604 2103	0.2	52
20240604 2113	0.9	345
20240604 2123	0.1	157
20240604 2133	4.9	143
20240604 2143	0.1	9
20240604 2153	0.1	5
20240604 2203	0.1	294
20240604 2213	0.2	334
20240604 2223	2.1	35
20240604 2233	0.5	27
20240604 2243	1	68
20240604 2253	0.1	48
20240604 2303	0.7	346
20240604 2313	0.1	89
20240604 2323	0.9	23
20240604 2333	0.1	352
20240604 2343	3.3	130
20240604 2353	0.2	346

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240605 0003	1.2	96
20240605 0013	0.6	49
20240605 0023	0.2	143
20240605 0033	0.2	78
20240605 0043	1	353
20240605 0053	0.1	186
20240605 0103	0.5	323
20240605 0113	0.1	20
20240605 0123	0.1	348
20240605 0133	1.1	68
20240605 0143	2	164
20240605 0153	1.2	16
20240605 0203	0.2	147
20240605 0213	0.2	349
20240605 0223	0.1	227
20240605 0233	0.1	180
20240605 0243	0.1	159
20240605 0253	0.4	81
20240605 0303	0.2	29
20240605 0313	0.2	32
20240605 0323	0.1	334
20240605 0333	0.2	207
20240605 0343	0.1	126
20240605 0353	0.1	122
20240605 0403	1.1	62
20240605 0413	0.6	102
20240605 0423	0.1	156
20240605 0433	1	104
20240605 0443	1.7	27
20240605 0453	0.1	135
20240605 0503	2.9	7
20240605 0513	0.1	306
20240605 0523	0.1	143
20240605 0533	0.5	164
20240605 0543	1.9	119
20240605 0553	1.5	329
20240605 0603	0.1	28
20240605 0613	0.1	83
20240605 0623	1	106
20240605 0633	0.3	70
20240605 0643	0.1	354
20240605 0653	0.1	52
20240605 0703	0.1	343
20240605 0713	0.1	150
20240605 0723	0.1	139
20240605 0733	3.8	52
20240605 0743	0.1	121
20240605 0753	0.1	4
20240605 0803	0.3	22
20240605 0813	0.1	327
20240605 0823	0.1	238
20240605 0833	0.5	349
20240605 0843	1.8	81
20240605 0853	1.6	9
20240605 0903	0.1	304
20240605 0913	1.4	21
20240605 0923	0.3	12
20240605 0933	0.1	40
20240605 0943	1.5	48
20240605 0953	0.5	10
20240605 1003	0.1	79
20240605 1013	1.2	68
20240605 1023	0.1	78
20240605 1033	0.2	343
20240605 1043	0.3	142
20240605 1053	0.1	224
20240605 1103	0.1	193
20240605 1113	0.1	311
20240605 1123	1.1	351
20240605 1133	0.1	16
20240605 1143	0.4	172
20240605 1153	2	238

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240605 1203	0.9	155
20240605 1213	0.1	36
20240605 1223	1.5	64
20240605 1233	0.1	3
20240605 1243	0.6	170
20240605 1253	0.1	298
20240605 1303	0.9	54
20240605 1313	0.4	254
20240605 1323	0.2	18
20240605 1333	0.1	178
20240605 1343	0.9	40
20240605 1353	1.7	79
20240605 1403	0.1	127
20240605 1413	1.2	125
20240605 1423	0.1	119
20240605 1433	0.1	148
20240605 1443	0.3	286
20240605 1453	0.1	235
20240605 1503	0.1	171
20240605 1513	0.4	324
20240605 1523	0.1	19
20240605 1533	0.1	98
20240605 1543	0.1	10
20240605 1553	0.1	186
20240605 1603	6.1	132
20240605 1613	0.1	91
20240605 1623	2.2	23
20240605 1633	0.1	228
20240605 1643	0.1	138
20240605 1653	0.1	28
20240605 1703	0.1	97
20240605 1713	0.3	117
20240605 1723	0.3	14
20240605 1733	0.1	351
20240605 1743	0.1	148
20240605 1753	0.1	195
20240605 1803	0.6	129
20240605 1813	1.8	171
20240605 1823	0.1	147
20240605 1833	0.1	143
20240605 1843	0.1	224
20240605 1853	0.2	325
20240605 1903	0.1	135
20240605 1913	0.1	138
20240605 1923	0.1	292
20240605 1933	0.1	205
20240605 1943	0.1	205
20240605 1953	0.1	161
20240605 2003	0.1	161
20240605 2013	0.1	161
20240605 2023	0.1	161
20240605 2033	0.1	48
20240605 2043	0.1	157
20240605 2053	0.1	245
20240605 2103	0.1	227
20240605 2113	0.1	10
20240605 2123	0.1	117
20240605 2133	0.1	117
20240605 2143	0.1	117
20240605 2153	0.1	140
20240605 2203	0.1	143
20240605 2213	0.1	95
20240605 2223	0.1	181
20240605 2233	0.1	307
20240605 2243	0.1	137
20240605 2253	0.1	155
20240605 2303	0.1	66
20240605 2313	0.1	47
20240605 2323	0.1	39
20240605 2333	0.1	256
20240605 2343	0.1	14
20240605 2353	0.1	96

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240606 0003	0.1	128
20240606 0013	3.1	120
20240606 0023	0.1	15
20240606 0033	0.1	118
20240606 0043	0.1	78
20240606 0053	0.4	169
20240606 0103	0.1	130
20240606 0113	0.3	89
20240606 0123	0.1	15
20240606 0133	0.1	48
20240606 0143	0.1	50
20240606 0153	0.1	44
20240606 0203	0.1	62
20240606 0213	0.1	105
20240606 0223	0.1	19
20240606 0233	0.1	48
20240606 0243	0.1	351
20240606 0253	0.1	5
20240606 0303	0.1	322
20240606 0313	0.1	114
20240606 0323	0.4	126
20240606 0333	0.1	53
20240606 0343	0.1	71
20240606 0353	0.1	150
20240606 0403	0.1	75
20240606 0413	0.1	109
20240606 0423	0.1	111
20240606 0433	0.1	143
20240606 0443	0.1	126
20240606 0453	0.1	126
20240606 0503	0.1	69
20240606 0513	0.1	164
20240606 0523	0.1	129
20240606 0533	0.1	91
20240606 0543	0.1	81
20240606 0553	0.1	129
20240606 0603	0.1	129
20240606 0613	0.1	129
20240606 0623	0.1	129
20240606 0633	0.1	57
20240606 0643	0.1	45
20240606 0653	0.1	20
20240606 0703	0.1	135
20240606 0713	0.1	122
20240606 0723	0.1	243
20240606 0733	0.1	243
20240606 0743	0.1	274
20240606 0753	0.1	274
20240606 0803	0.1	125
20240606 0813	0.1	146
20240606 0823	0.1	323
20240606 0833	0.1	48
20240606 0843	0.1	36
20240606 0853	0.1	98
20240606 0903	0.1	130
20240606 0913	0.1	84
20240606 0923	0.1	155
20240606 0933	0.1	256
20240606 0943	0.1	258
20240606 0953	0.1	256
20240606 1003	0.1	227
20240606 1013	0.1	281
20240606 1023	0.1	229
20240606 1033	0.1	243
20240606 1043	0.1	197
20240606 1053	0.1	309
20240606 1103	0.1	126
20240606 1113	0.1	237
20240606 1123	0.1	121
20240606 1133	0.1	271
20240606 1143	0.1	149
20240606 1153	0.1	125

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240606 1203	0.1	118
20240606 1213	0.1	98
20240606 1223	0.1	57
20240606 1233	0.1	327
20240606 1243	0.1	38
20240606 1253	0.1	352
20240606 1303	0.1	311
20240606 1313	0.1	54
20240606 1323	0.1	12
20240606 1333	0.1	343
20240606 1343	0.1	307
20240606 1353	0.1	114
20240606 1403	0.1	257
20240606 1413	0.1	173
20240606 1423	0.1	173
20240606 1433	0.1	210
20240606 1443	0.1	355
20240606 1453	0.1	201
20240606 1503	0.1	168
20240606 1513	0.1	246
20240606 1523	0.1	97
20240606 1533	0.1	353
20240606 1543	0.1	1
20240606 1553	0.1	345
20240606 1603	0.1	301
20240606 1613	0.1	267
20240606 1623	0.1	50
20240606 1633	0.1	49
20240606 1643	0.1	284
20240606 1653	0.1	33
20240606 1703	0.1	38
20240606 1713	0.1	37
20240606 1723	0.1	113
20240606 1733	0.1	138
20240606 1743	0.1	108
20240606 1753	0.1	119
20240606 1803	0.1	119
20240606 1813	0.1	16
20240606 1823	0.1	126
20240606 1833	0.1	126
20240606 1843	0.1	126
20240606 1853	0.1	126
20240606 1903	0.1	126
20240606 1913	0.1	57
20240606 1923	0.1	33
20240606 1933	0.1	69
20240606 1943	0.1	85
20240606 1953	0.1	38
20240606 2003	0.1	146
20240606 2013	0.1	116
20240606 2023	0.1	106
20240606 2033	0.1	55
20240606 2043	0.1	55
20240606 2053	0.1	140
20240606 2103	0.1	332
20240606 2113	0.1	248
20240606 2123	0.1	270
20240606 2133	0.1	264
20240606 2143	0.1	326
20240606 2153	0.1	49
20240606 2203	0.7	44
20240606 2213	0.1	27
20240606 2223	0.1	20
20240606 2233	0.1	63
20240606 2243	0.1	17
20240606 2253	0.1	21
20240606 2303	0.1	290
20240606 2313	0.1	73
20240606 2323	0.1	322
20240606 2333	0.1	45
20240606 2343	0.2	325
20240606 2353	0.1	46

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240607 0003	0.1	40
20240607 0013	0.1	41
20240607 0023	0.1	24
20240607 0033	0.1	61
20240607 0043	0.1	352
20240607 0053	0.1	26
20240607 0103	0.1	141
20240607 0113	0.1	118
20240607 0123	0.1	45
20240607 0133	0.1	232
20240607 0143	0.1	149
20240607 0153	0.1	351
20240607 0203	1.1	41
20240607 0213	0.1	144
20240607 0223	1.5	110
20240607 0233	0.2	34
20240607 0243	0.2	152
20240607 0253	0.1	88
20240607 0303	0.1	222
20240607 0313	0.1	318
20240607 0323	0.1	94
20240607 0333	0.1	113
20240607 0343	0.1	129
20240607 0353	0.1	141
20240607 0403	0.1	123
20240607 0413	0.1	42
20240607 0423	0.1	106
20240607 0433	0.4	60
20240607 0443	0.1	115
20240607 0453	0.1	67
20240607 0503	0.1	58
20240607 0513	0.1	76
20240607 0523	0.1	43
20240607 0533	0.1	107
20240607 0543	0.1	265
20240607 0553	0.9	36
20240607 0603	1.2	3
20240607 0613	0.3	106
20240607 0623	0.5	102
20240607 0633	0.9	42
20240607 0643	0.1	149
20240607 0653	0.7	315
20240607 0703	3.4	51
20240607 0713	0.4	67
20240607 0723	0.1	24
20240607 0733	1.1	26
20240607 0743	1.5	37
20240607 0753	0.2	9
20240607 0803	0.4	353
20240607 0813	0.1	26
20240607 0823	0.1	88
20240607 0833	0.1	19
20240607 0843	0.3	123
20240607 0853	0.1	126
20240607 0903	0.6	53
20240607 0913	0.2	78
20240607 0923	0.1	73
20240607 0933	0.1	49
20240607 0943	0.7	311
20240607 0953	0.1	10
20240607 1003	0.1	99
20240607 1013	0.1	127
20240607 1023	0.1	83
20240607 1033	0.1	35
20240607 1043	0.1	205
20240607 1053	0.1	351
20240607 1103	0.1	32
20240607 1113	0.1	16
20240607 1123	0.1	112
20240607 1133	0.1	102
20240607 1143	0.1	2
20240607 1153	0.1	202

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240607 1203	0.1	33
20240607 1213	0.2	70
20240607 1223	0.1	238
20240607 1233	2	8
20240607 1243	0.5	352
20240607 1253	0.8	41
20240607 1303	2.7	7
20240607 1313	0.2	333
20240607 1323	0.1	267
20240607 1333	4.5	52
20240607 1343	0.4	145
20240607 1353	0.1	89
20240607 1403	0.1	338
20240607 1413	0.1	50
20240607 1423	3.8	55
20240607 1433	1.2	330
20240607 1443	0.1	17
20240607 1453	1.4	54
20240607 1503	0.1	88
20240607 1513	0.1	193
20240607 1523	7.4	24
20240607 1533	0.1	94
20240607 1543	0.2	136
20240607 1553	0.4	66
20240607 1603	0.3	79
20240607 1613	0.8	36
20240607 1623	0.3	29
20240607 1633	0.1	303
20240607 1643	0.1	352
20240607 1653	1	22
20240607 1703	0.9	90
20240607 1713	0.8	13
20240607 1723	0.1	130
20240607 1733	0.1	141
20240607 1743	0.6	337
20240607 1753	0.1	212
20240607 1803	0.1	194
20240607 1813	1.8	64
20240607 1823	0.1	134
20240607 1833	0.1	305
20240607 1843	0.1	243
20240607 1853	0.1	127
20240607 1903	0.1	143
20240607 1913	0.1	329
20240607 1923	0.1	88
20240607 1933	0.1	134
20240607 1943	0.1	162
20240607 1953	0.1	124
20240607 2003	0.1	301
20240607 2013	0.1	120
20240607 2023	0.1	0
20240607 2033	0.1	13
20240607 2043	0.1	131
20240607 2053	0.1	163
20240607 2103	0.1	37
20240607 2113	0.1	40
20240607 2123	0.4	335
20240607 2133	0.3	160
20240607 2143	0.1	38
20240607 2153	0.1	126
20240607 2203	0.2	35
20240607 2213	0.1	336
20240607 2223	0.1	56
20240607 2233	0.1	168
20240607 2243	0.9	136
20240607 2253	0.1	202
20240607 2303	0.1	66
20240607 2313	0.9	46
20240607 2323	0.8	13
20240607 2333	0.1	83
20240607 2343	1	125
20240607 2353	0.1	196

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240608 0003	0.1	151
20240608 0013	3.9	64
20240608 0023	0.1	75
20240608 0033	0.1	168
20240608 0043	0.2	91
20240608 0053	0.1	85
20240608 0103	0.1	166
20240608 0113	1.9	59
20240608 0123	0.1	24
20240608 0133	0.1	108
20240608 0143	0.1	79
20240608 0153	0.2	84
20240608 0203	0.1	48
20240608 0213	0.1	195
20240608 0223	0.1	35
20240608 0233	0.1	200
20240608 0243	0.1	199
20240608 0253	0.1	290
20240608 0303	0.1	140
20240608 0313	1.1	54
20240608 0323	0.1	83
20240608 0333	0.1	111
20240608 0343	0.1	173
20240608 0353	0.1	165
20240608 0403	0.1	282
20240608 0413	0.1	158
20240608 0423	0.1	246
20240608 0433	0.1	144
20240608 0443	0.1	194
20240608 0453	0.1	112
20240608 0503	0.1	0
20240608 0513	0.1	142
20240608 0523	0.1	73
20240608 0533	0.1	109
20240608 0543	0.1	147
20240608 0553	0.2	20
20240608 0603	0.8	12
20240608 0613	0.1	111
20240608 0623	0.1	90
20240608 0633	0.2	61
20240608 0643	0.1	110
20240608 0653	0.1	69
20240608 0703	0.1	250
20240608 0713	0.1	136
20240608 0723	0.1	87
20240608 0733	2.1	342
20240608 0743	4.3	41
20240608 0753	0.1	83
20240608 0803	0.1	341
20240608 0813	0.1	9
20240608 0823	1.4	17
20240608 0833	0.1	134
20240608 0843	0.1	169
20240608 0853	2.7	38
20240608 0903	2.2	351
20240608 0913	0.7	7
20240608 0923	0.8	54
20240608 0933	1.2	11
20240608 0943	0.1	339
20240608 0953	0.1	74
20240608 1003	0.1	183
20240608 1013	3.2	147
20240608 1023	0.1	218
20240608 1033	0.1	174
20240608 1043	0.5	68
20240608 1053	0.4	61
20240608 1103	0.9	15
20240608 1113	0.6	16
20240608 1123	0.1	333
20240608 1133	0.4	0
20240608 1143	1.9	47
20240608 1153	0.1	115

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240608 1203	0.3	97
20240608 1213	0.1	110
20240608 1223	0.1	273
20240608 1233	0.1	203
20240608 1243	0.1	92
20240608 1253	0.1	340
20240608 1303	0.7	55
20240608 1313	2.6	133
20240608 1323	0.6	8
20240608 1333	0.1	47
20240608 1343	0.1	284
20240608 1353	1.5	125
20240608 1403	5.5	137
20240608 1413	0.5	19
20240608 1423	0.6	90
20240608 1433	0.1	28
20240608 1443	1.5	44
20240608 1453	0.5	117
20240608 1503	1.2	47
20240608 1513	0.5	109
20240608 1523	0.1	31
20240608 1533	0.1	262
20240608 1543	4.1	88
20240608 1553	6.4	167
20240608 1603	0.2	97
20240608 1613	0.1	98
20240608 1623	0.1	131
20240608 1633	1.3	55
20240608 1643	0.9	40
20240608 1653	5.6	57
20240608 1703	0.9	26
20240608 1713	0.1	59
20240608 1723	0.4	162
20240608 1733	0.1	160
20240608 1743	0.1	50
20240608 1753	0.4	12
20240608 1803	1.5	18
20240608 1813	4.1	39
20240608 1823	0.9	45
20240608 1833	0.1	70
20240608 1843	0.1	79
20240608 1853	0.1	19
20240608 1903	0.1	112
20240608 1913	0.1	44
20240608 1923	1.2	146
20240608 1933	0.1	160
20240608 1943	0.1	45
20240608 1953	0.1	328
20240608 2003	0.3	31
20240608 2013	0.8	297
20240608 2023	0.1	55
20240608 2033	0.1	103
20240608 2043	0.1	108
20240608 2053	1.3	19
20240608 2103	0.2	57
20240608 2113	0.1	102
20240608 2123	0.2	22
20240608 2133	0.1	12
20240608 2143	0.1	338
20240608 2153	0.1	9
20240608 2203	0.1	311
20240608 2213	0.1	1
20240608 2223	1.8	99
20240608 2233	0.1	153
20240608 2243	0.1	331
20240608 2253	0.1	27
20240608 2303	0.1	350
20240608 2313	0.2	88
20240608 2323	1.6	125
20240608 2333	0.3	344
20240608 2343	0.1	121
20240608 2353	0.1	278

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240609 0003	0.1	138
20240609 0013	4.8	94
20240609 0023	2.2	156
20240609 0033	0.1	167
20240609 0043	0.6	112
20240609 0053	0.2	90
20240609 0103	0.1	338
20240609 0113	0.1	161
20240609 0123	0.1	120
20240609 0133	0.1	80
20240609 0143	0.1	62
20240609 0153	0.1	53
20240609 0203	0.1	102
20240609 0213	0.1	125
20240609 0223	0.1	138
20240609 0233	0.1	151
20240609 0243	0.1	149
20240609 0253	0.1	110
20240609 0303	0.1	25
20240609 0313	0.1	109
20240609 0323	0.1	306
20240609 0333	0.3	71
20240609 0343	0.1	109
20240609 0353	0.1	93
20240609 0403	0.1	175
20240609 0413	0.9	132
20240609 0423	0.4	163
20240609 0433	0.4	148
20240609 0443	0.1	296
20240609 0453	0.1	2
20240609 0503	0.6	271
20240609 0513	0.1	35
20240609 0523	1.5	118
20240609 0533	0.1	127
20240609 0543	0.1	44
20240609 0553	0.1	109
20240609 0603	0.1	60
20240609 0613	0.1	147
20240609 0623	0.1	131
20240609 0633	0.1	97
20240609 0643	0.2	56
20240609 0653	0.1	136
20240609 0703	0.1	108
20240609 0713	0.1	301
20240609 0723	0.1	216
20240609 0733	0.1	166
20240609 0743	0.1	166
20240609 0753	0.1	166
20240609 0803	0.1	54
20240609 0813	0.1	195
20240609 0823	0.2	114
20240609 0833	0.1	247
20240609 0843	0.1	167
20240609 0853	0.1	57
20240609 0903	0.1	48
20240609 0913	0.1	58
20240609 0923	0.1	37
20240609 0933	0.1	321
20240609 0943	0.1	22
20240609 0953	0.1	11
20240609 1003	0.1	253
20240609 1013	0.1	116
20240609 1023	0.1	67
20240609 1033	0.1	262
20240609 1043	0.1	340
20240609 1053	0.1	330
20240609 1103	0.1	0
20240609 1113	0.1	34
20240609 1123	0.1	96
20240609 1133	0.1	44
20240609 1143	0.1	44
20240609 1153	0.1	47

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240609 1203	0.1	311
20240609 1213	0.1	311
20240609 1223	0.1	311
20240609 1233	0.1	108
20240609 1243	0.1	279
20240609 1253	0.1	279
20240609 1303	0.1	261
20240609 1313	0.1	261
20240609 1323	0.1	261
20240609 1333	0.1	276
20240609 1343	0.1	45
20240609 1353	0.1	41
20240609 1403	0.1	15
20240609 1413	0.2	119
20240609 1423	0.3	138
20240609 1433	0.1	277
20240609 1443	0.1	156
20240609 1453	1.8	143
20240609 1503	0.1	223
20240609 1513	0.1	61
20240609 1523	0.5	43
20240609 1533	0.1	163
20240609 1543	0.4	113
20240609 1553	0.1	252
20240609 1603	0.1	84
20240609 1613	2.2	136
20240609 1623	0.1	76
20240609 1633	0.1	75
20240609 1643	1.6	113
20240609 1653	0.1	347
20240609 1703	0.1	345
20240609 1713	0.5	122
20240609 1723	0.1	272
20240609 1733	2.2	348
20240609 1743	0.1	56
20240609 1753	0.1	260
20240609 1803	0.1	116
20240609 1813	0.1	112
20240609 1823	0.1	118
20240609 1833	0.1	142
20240609 1843	0.1	175
20240609 1853	0.1	142
20240609 1903	0.1	178
20240609 1913	0.1	107
20240609 1923	0.1	113
20240609 1933	0.1	97
20240609 1943	0.1	41
20240609 1953	0.1	140
20240609 2003	0.1	122
20240609 2013	0.1	239
20240609 2023	0.1	153
20240609 2033	0.2	126
20240609 2043	0.8	135
20240609 2053	0.1	131
20240609 2103	0.1	114
20240609 2113	0.1	161
20240609 2123	0.1	170
20240609 2133	0.1	120
20240609 2143	0.1	68
20240609 2153	0.2	42
20240609 2203	0.1	91
20240609 2213	2.5	142
20240609 2223	0.1	109
20240609 2233	0.2	102
20240609 2243	0.1	110
20240609 2253	0.1	119
20240609 2303	0.1	125
20240609 2313	0.1	115
20240609 2323	0.1	119
20240609 2333	0.1	131
20240609 2343	0.1	98
20240609 2353	0.1	347

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240610 0003	0.1	54
20240610 0013	0.1	92
20240610 0023	0.1	157
20240610 0033	0.8	147
20240610 0043	0.1	175
20240610 0053	0.1	174
20240610 0103	0.1	32
20240610 0113	0.1	297
20240610 0123	0.1	62
20240610 0133	0.1	99
20240610 0143	0.1	71
20240610 0153	0.2	141
20240610 0203	0.1	158
20240610 0213	0.1	112
20240610 0223	0.1	297
20240610 0233	0.1	112
20240610 0243	0.1	112
20240610 0253	0.1	111
20240610 0303	0.1	58
20240610 0313	0.1	106
20240610 0323	0.1	26
20240610 0333	0.1	131
20240610 0343	0.1	309
20240610 0353	0.1	71
20240610 0403	0.1	78
20240610 0413	0.1	232
20240610 0423	0.1	61
20240610 0433	0.6	124
20240610 0443	0.1	116
20240610 0453	0.1	107
20240610 0503	0.1	66
20240610 0513	0.1	49
20240610 0523	0.1	21
20240610 0533	0.1	116
20240610 0543	0.1	75
20240610 0553	0.1	94
20240610 0603	0.1	343
20240610 0613	0.1	55
20240610 0623	0.1	82
20240610 0633	0.1	97
20240610 0643	0.1	166
20240610 0653	0.1	74
20240610 0703	0.1	162
20240610 0713	0.1	127
20240610 0723	0.1	0
20240610 0733	0.1	17
20240610 0743	0.1	307
20240610 0753	0.1	90
20240610 0803	0.1	145
20240610 0813	0.1	200
20240610 0823	0.1	226
20240610 0833	0.1	248
20240610 0843	0.1	271
20240610 0853	0.1	173
20240610 0903	0.1	7
20240610 0913	0.3	245
20240610 0923	0.2	95
20240610 0933	0.1	186
20240610 0943	0.1	102
20240610 0953	0.2	312
20240610 1003	0.1	236
20240610 1013	1	17
20240610 1023	1	173
20240610 1033	0.1	290
20240610 1043	0.1	133
20240610 1053	0.3	322
20240610 1103	1.1	129
20240610 1113	0.1	123
20240610 1123	0.1	273
20240610 1133	0.1	23
20240610 1143	3.6	165
20240610 1153	0.1	41

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240610 1203	0.1	271
20240610 1213	0.6	210
20240610 1223	0.1	177
20240610 1233	0.1	229
20240610 1243	0.1	51
20240610 1253	0.1	281
20240610 1303	0.7	133
20240610 1313	0.1	151
20240610 1323	0.6	139
20240610 1333	0.1	242
20240610 1343	0.1	12
20240610 1353	0.1	133
20240610 1403	0.1	33
20240610 1413	0.1	246
20240610 1423	0.1	315
20240610 1433	0.1	332
20240610 1443	0.1	278
20240610 1453	0.1	88
20240610 1503	0.1	102
20240610 1513	0.4	163
20240610 1523	0.1	133
20240610 1533	0.1	134
20240610 1543	0.1	212
20240610 1553	0.1	150
20240610 1603	0.1	156
20240610 1613	0.1	139
20240610 1623	0.5	119
20240610 1633	0.1	315
20240610 1643	0.5	159
20240610 1653	0.3	123
20240610 1703	0.1	57
20240610 1713	0.2	150
20240610 1723	0.1	135
20240610 1733	0.1	192
20240610 1743	0.1	197
20240610 1753	0.1	280
20240610 1803	0.1	138
20240610 1813	0.1	57
20240610 1823	0.1	66
20240610 1833	0.1	109
20240610 1843	0.1	95
20240610 1853	0.1	38
20240610 1903	0.1	63
20240610 1913	0.1	97
20240610 1923	0.1	95
20240610 1933	0.1	139
20240610 1943	0.1	42
20240610 1953	0.1	159
20240610 2003	0.1	140
20240610 2013	0.1	51
20240610 2023	0.1	59
20240610 2033	0.1	149
20240610 2043	0.1	149
20240610 2053	0.1	149
20240610 2103	0.1	39
20240610 2113	0.1	44
20240610 2123	0.1	54
20240610 2133	0.1	124
20240610 2143	0.1	124
20240610 2153	0.1	132
20240610 2203	0.1	354
20240610 2213	0.1	142
20240610 2223	0.1	55
20240610 2233	0.1	75
20240610 2243	0.1	57
20240610 2253	0.1	37
20240610 2303	0.2	54
20240610 2313	0.1	100
20240610 2323	0.1	156
20240610 2333	0.1	90
20240610 2343	0.1	113
20240610 2353	0.1	123

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240611 0003	0.1	312
20240611 0013	0.1	138
20240611 0023	0.1	40
20240611 0033	0.1	106
20240611 0043	0.1	82
20240611 0053	0.1	173
20240611 0103	0.1	180
20240611 0113	0.1	104
20240611 0123	0.1	104
20240611 0133	0.1	36
20240611 0143	0.1	4
20240611 0153	0.1	9
20240611 0203	0.1	19
20240611 0213	0.1	39
20240611 0223	0.1	52
20240611 0233	0.1	123
20240611 0243	0.1	123
20240611 0253	0.1	123
20240611 0303	0.1	68
20240611 0313	0.1	24
20240611 0323	0.1	59
20240611 0333	0.1	146
20240611 0343	0.1	114
20240611 0353	0.1	38
20240611 0403	0.1	174
20240611 0413	0.1	42
20240611 0423	0.1	145
20240611 0433	0.1	67
20240611 0443	0.1	67
20240611 0453	0.1	67
20240611 0503	0.1	66
20240611 0513	0.1	49
20240611 0523	0.1	49
20240611 0533	0.1	49
20240611 0543	0.1	35
20240611 0553	0.1	86
20240611 0603	0.1	94
20240611 0613	0.1	94
20240611 0623	0.1	71
20240611 0633	0.1	71
20240611 0643	0.1	71
20240611 0653	0.1	2
20240611 0703	0.1	4
20240611 0713	0.1	80
20240611 0723	0.1	112
20240611 0733	0.1	152
20240611 0743	0.1	156
20240611 0753	0.1	14
20240611 0803	0.1	101
20240611 0813	0.1	34
20240611 0823	0.1	178
20240611 0833	0.1	160
20240611 0843	0.1	147
20240611 0853	0.1	136
20240611 0903	0.1	177
20240611 0913	0.1	165
20240611 0923	0.1	292
20240611 0933	0.1	231
20240611 0943	1.9	143
20240611 0953	0.1	222
20240611 1003	0.1	178
20240611 1013	0.1	313
20240611 1023	1.4	153
20240611 1033	0.1	185
20240611 1043	0.1	227
20240611 1053	0.1	185
20240611 1103	0.5	83
20240611 1113	0.1	233
20240611 1123	3.6	157
20240611 1133	0.1	223
20240611 1143	0.1	1
20240611 1153	0.2	148

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240611 1203	0.1	106
20240611 1213	0.8	132
20240611 1223	0.1	120
20240611 1233	0.1	245
20240611 1243	0.1	23
20240611 1253	0.6	143
20240611 1303	0.1	150
20240611 1313	0.1	27
20240611 1323	0.6	164
20240611 1333	0.1	134
20240611 1343	0.1	138
20240611 1353	0.2	250
20240611 1403	0.1	240
20240611 1413	0.2	248
20240611 1423	0.1	184
20240611 1433	0.1	78
20240611 1443	0.1	181
20240611 1453	0.1	177
20240611 1503	0.1	13
20240611 1513	0.1	220
20240611 1523	0.2	246
20240611 1533	0.1	187
20240611 1543	0.1	253
20240611 1553	0.1	195
20240611 1603	0.1	251
20240611 1613	0.1	238
20240611 1623	0.1	249
20240611 1633	0.1	120
20240611 1643	0.1	118
20240611 1653	0.1	110
20240611 1703	0.1	176
20240611 1713	0.1	157
20240611 1723	0.1	158
20240611 1733	0.1	126
20240611 1743	0.1	277
20240611 1753	0.1	175
20240611 1803	0.1	165
20240611 1813	0.1	165
20240611 1823	0.1	165
20240611 1833	0.1	151
20240611 1843	0.1	151
20240611 1853	0.1	151
20240611 1903	0.1	151
20240611 1913	0.1	151
20240611 1923	0.1	151
20240611 1933	0.1	140
20240611 1943	0.1	140
20240611 1953	0.1	80
20240611 2003	0.1	80
20240611 2013	0.1	80
20240611 2023	0.1	80
20240611 2033	0.1	80
20240611 2043	0.1	80
20240611 2053	0.1	80
20240611 2103	0.1	80
20240611 2113	0.1	80
20240611 2123	0.1	64
20240611 2133	0.1	64
20240611 2143	0.1	64
20240611 2153	0.1	64
20240611 2203	0.1	18
20240611 2213	0.1	18
20240611 2223	0.1	18
20240611 2233	0.1	18
20240611 2243	0.1	25
20240611 2253	0.1	25
20240611 2303	0.1	25
20240611 2313	0.1	25
20240611 2323	0.1	25
20240611 2333	0.1	25
20240611 2343	0.1	25
20240611 2353	0.1	25

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240612 0003	0.1	25
20240612 0013	0.1	25
20240612 0023	0.1	25
20240612 0033	0.1	25
20240612 0043	0.1	25
20240612 0053	0.1	25
20240612 0103	0.1	25
20240612 0113	0.1	25
20240612 0123	0.1	25
20240612 0133	0.1	29
20240612 0143	0.1	29
20240612 0153	0.1	29
20240612 0203	0.1	29
20240612 0213	0.1	29
20240612 0223	0.1	39
20240612 0233	0.1	39
20240612 0243	0.1	39
20240612 0253	0.1	39
20240612 0303	0.1	39
20240612 0313	0.1	39
20240612 0323	0.1	39
20240612 0333	0.1	39
20240612 0343	0.1	39
20240612 0353	0.1	39
20240612 0403	0.1	39
20240612 0413	0.1	39
20240612 0423	0.1	39
20240612 0433	0.1	39
20240612 0443	0.1	39
20240612 0453	0.1	44
20240612 0503	0.1	46
20240612 0513	0.1	46
20240612 0523	0.1	46
20240612 0533	0.1	46
20240612 0543	0.1	54
20240612 0553	0.1	54
20240612 0603	0.1	54
20240612 0613	0.1	54
20240612 0623	0.1	73
20240612 0633	0.1	73
20240612 0643	0.1	73
20240612 0653	0.1	73
20240612 0703	0.1	72
20240612 0713	0.1	72
20240612 0723	0.1	73
20240612 0733	0.1	131
20240612 0743	0.1	147
20240612 0753	0.1	195
20240612 0803	0.1	166
20240612 0813	0.1	10
20240612 0823	0.1	14
20240612 0833	0.1	122
20240612 0843	0.1	224
20240612 0853	0.1	156
20240612 0903	0.1	187
20240612 0913	0.1	224
20240612 0923	0.1	187
20240612 0933	0.5	151
20240612 0943	0.1	272
20240612 0953	0.1	221
20240612 1003	0.1	227
20240612 1013	0.3	217
20240612 1023	0.1	237
20240612 1033	0.1	242
20240612 1043	0.1	221
20240612 1053	0.1	155
20240612 1103	0.1	255
20240612 1113	0.1	202
20240612 1123	0.1	212
20240612 1133	0.2	239
20240612 1143	0.1	165
20240612 1153	0.1	268

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240612 1203	0.3	233
20240612 1213	1.8	182
20240612 1223	0.1	245
20240612 1233	0.6	165
20240612 1243	0.1	231
20240612 1253	0.3	120
20240612 1303	0.7	256
20240612 1313	0.1	218
20240612 1323	0.1	182
20240612 1333	0.4	286
20240612 1343	1.1	239
20240612 1353	0.1	160
20240612 1403	3	154
20240612 1413	0.6	146
20240612 1423	3.7	253
20240612 1433	0.1	279
20240612 1443	0.4	85
20240612 1453	0.1	235
20240612 1503	1.2	234
20240612 1513	0.1	231
20240612 1523	0.1	121
20240612 1533	0.3	223
20240612 1543	0.2	262
20240612 1553	0.1	276
20240612 1603	0.1	167
20240612 1613	0.1	248
20240612 1623	0.1	245
20240612 1633	0.1	229
20240612 1643	0.1	116
20240612 1653	0.1	175
20240612 1703	0.1	238
20240612 1713	0.1	152
20240612 1723	0.1	130
20240612 1733	0.1	108
20240612 1743	0.1	108
20240612 1753	0.1	108
20240612 1803	0.1	92
20240612 1813	0.1	48
20240612 1823	0.1	70
20240612 1833	0.1	70
20240612 1843	0.1	70
20240612 1853	0.1	70
20240612 1903	0.1	70
20240612 1913	0.1	70
20240612 1923	0.1	70
20240612 1933	0.1	70
20240612 1943	0.1	70
20240612 1953	0.1	70
20240612 2003	0.1	46
20240612 2013	0.1	46
20240612 2023	0.1	46
20240612 2033	0.1	46
20240612 2043	0.1	46
20240612 2053	0.1	46
20240612 2103	0.1	46
20240612 2113	0.1	49
20240612 2123	0.1	49
20240612 2133	0.1	49
20240612 2143	0.1	49
20240612 2153	0.1	49
20240612 2203	0.1	49
20240612 2213	0.1	49
20240612 2223	0.1	49
20240612 2233	0.1	49
20240612 2243	0.1	49
20240612 2253	0.1	49
20240612 2303	0.1	49
20240612 2313	0.1	49
20240612 2323	0.1	49
20240612 2333	0.1	49
20240612 2343	0.1	49
20240612 2353	0.1	49

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240613 0003	0.1	49
20240613 0013	0.1	49
20240613 0023	0.1	49
20240613 0033	0.1	49
20240613 0043	0.1	49
20240613 0053	0.1	49
20240613 0103	0.1	49
20240613 0113	0.1	49
20240613 0123	0.1	49
20240613 0133	0.1	49
20240613 0143	0.1	49
20240613 0153	0.1	49
20240613 0203	0.1	49
20240613 0213	0.1	49
20240613 0223	0.1	49
20240613 0233	0.1	49
20240613 0243	0.1	49
20240613 0253	0.1	49
20240613 0303	0.1	49
20240613 0313	0.1	49
20240613 0323	0.1	49
20240613 0333	0.1	49
20240613 0343	0.1	49
20240613 0353	0.1	49
20240613 0403	0.1	49
20240613 0413	0.1	49
20240613 0423	0.1	49
20240613 0433	0.1	49
20240613 0443	0.1	49
20240613 0453	0.1	49
20240613 0503	0.1	49
20240613 0513	0.1	49
20240613 0523	0.1	49
20240613 0533	0.1	348
20240613 0543	0.1	17
20240613 0553	0.1	17
20240613 0603	0.1	17
20240613 0613	0.1	17
20240613 0623	0.1	17
20240613 0633	0.1	17
20240613 0643	0.1	272
20240613 0653	0.1	92
20240613 0703	0.1	110
20240613 0713	0.1	109
20240613 0723	0.1	110
20240613 0733	0.1	110
20240613 0743	0.1	109
20240613 0753	0.1	111
20240613 0803	0.1	111
20240613 0813	0.1	111
20240613 0823	0.1	52
20240613 0833	0.1	311
20240613 0843	0.1	131
20240613 0853	0.1	148
20240613 0903	0.1	151
20240613 0913	0.1	130
20240613 0923	0.1	248
20240613 0933	0.1	225
20240613 0943	0.6	151
20240613 0953	0.1	245
20240613 1003	0.1	226
20240613 1013	0.5	241
20240613 1023	0.1	196
20240613 1033	0.1	211
20240613 1043	0.1	239
20240613 1053	0.1	197
20240613 1103	0.1	232
20240613 1113	0.1	212
20240613 1123	0.1	151
20240613 1133	0.1	136
20240613 1143	0.1	241
20240613 1153	0.1	307

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240613 1203	0.1	239
20240613 1213	0.2	156
20240613 1223	0.6	233
20240613 1233	0.8	162
20240613 1243	0.1	216
20240613 1253	0.1	105
20240613 1303	0.1	235
20240613 1313	0.1	174
20240613 1323	0.1	226
20240613 1333	1.4	237
20240613 1343	0.4	95
20240613 1353	0.1	235
20240613 1403	0.2	247
20240613 1413	0.1	197
20240613 1423	0.1	233
20240613 1433	0.1	274
20240613 1443	0.2	194
20240613 1453	0.1	224
20240613 1503	0.3	233
20240613 1513	0.1	170
20240613 1523	0.3	247
20240613 1533	0.1	205
20240613 1543	0.2	70
20240613 1553	0.1	267
20240613 1603	0.1	208
20240613 1613	0.1	233
20240613 1623	0.1	156
20240613 1633	0.1	233
20240613 1643	0.1	248
20240613 1653	0.1	244
20240613 1703	0.1	212
20240613 1713	0.1	265
20240613 1723	0.1	181
20240613 1733	0.1	247
20240613 1743	0.1	253
20240613 1753	0.1	226
20240613 1803	0.1	252
20240613 1813	0.1	112
20240613 1823	0.1	148
20240613 1833	0.1	120
20240613 1843	0.1	110
20240613 1853	0.1	12
20240613 1903	0.1	271
20240613 1913	0.1	119
20240613 1923	0.1	45
20240613 1933	0.1	92
20240613 1943	0.1	69
20240613 1953	0.1	342
20240613 2003	0.1	49
20240613 2013	0.1	98
20240613 2023	0.1	84
20240613 2033	0.1	27
20240613 2043	0.1	59
20240613 2053	0.1	59
20240613 2103	0.1	48
20240613 2113	0.1	55
20240613 2123	0.1	26
20240613 2133	0.1	50
20240613 2143	0.1	50
20240613 2153	0.1	53
20240613 2203	0.1	60
20240613 2213	0.1	60
20240613 2223	0.1	60
20240613 2233	0.1	53
20240613 2243	0.1	53
20240613 2253	0.1	53
20240613 2303	0.1	40
20240613 2313	0.1	320
20240613 2323	0.1	27
20240613 2333	0.1	51
20240613 2343	0.1	51
20240613 2353	0.1	63

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240614 0003	0.1	55
20240614 0013	0.1	56
20240614 0023	0.1	89
20240614 0033	0.1	86
20240614 0043	0.1	44
20240614 0053	0.1	19
20240614 0103	0.1	59
20240614 0113	0.1	39
20240614 0123	0.1	117
20240614 0133	0.1	136
20240614 0143	0.1	180
20240614 0153	0.1	150
20240614 0203	1.1	84
20240614 0213	0.2	168
20240614 0223	0.2	179
20240614 0233	0.1	211
20240614 0243	0.1	180
20240614 0253	0.1	137
20240614 0303	0.1	216
20240614 0313	0.1	159
20240614 0323	0.1	155
20240614 0333	0.1	197
20240614 0343	0.1	344
20240614 0353	0.1	112
20240614 0403	0.1	159
20240614 0413	0.1	86
20240614 0423	0.1	59
20240614 0433	0.1	59
20240614 0443	0.1	59
20240614 0453	0.1	59
20240614 0503	0.1	59
20240614 0513	0.1	59
20240614 0523	0.1	59
20240614 0533	0.1	35
20240614 0543	0.1	35
20240614 0553	0.1	35
20240614 0603	0.1	36
20240614 0613	0.1	36
20240614 0623	0.1	36
20240614 0633	0.1	36
20240614 0643	0.1	36
20240614 0653	0.1	339
20240614 0703	0.1	28
20240614 0713	0.1	28
20240614 0723	0.1	335
20240614 0733	0.1	28
20240614 0743	0.1	3
20240614 0753	0.1	3
20240614 0803	0.1	50
20240614 0813	0.1	50
20240614 0823	0.1	60
20240614 0833	0.1	98
20240614 0843	0.1	106
20240614 0853	0.1	133
20240614 0903	0.1	251
20240614 0913	0.1	85
20240614 0923	0.1	198
20240614 0933	0.3	108
20240614 0943	0.2	145
20240614 0953	0.1	143
20240614 1003	0.1	85
20240614 1013	0.1	354
20240614 1023	0.1	60
20240614 1033	0.1	60
20240614 1043	0.1	35
20240614 1053	0.1	41
20240614 1103	0.1	50
20240614 1113	0.1	346
20240614 1123	0.1	0
20240614 1133	0.1	141
20240614 1143	0.1	2
20240614 1153	0.1	5

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240614 1203	0.1	287
20240614 1213	0.1	329
20240614 1223	0.1	18
20240614 1233	0.1	209
20240614 1243	0.1	284
20240614 1253	0.1	18
20240614 1303	0.1	328
20240614 1313	0.1	136
20240614 1323	0.1	81
20240614 1333	0.1	307
20240614 1343	0.1	111
20240614 1353	0.1	28
20240614 1403	0.1	0
20240614 1413	0.1	330
20240614 1423	0.1	303
20240614 1433	0.1	99
20240614 1443	0.1	88
20240614 1453	0.1	146
20240614 1503	0.1	220
20240614 1513	0.1	225
20240614 1523	0.1	100
20240614 1533	0.1	287
20240614 1543	0.1	303
20240614 1553	0.1	304
20240614 1603	0.1	42
20240614 1613	0.1	246
20240614 1623	0.1	143
20240614 1633	0.1	172
20240614 1643	0.1	172
20240614 1653	0.1	172
20240614 1703	0.1	185
20240614 1713	0.1	113
20240614 1723	0.1	113
20240614 1733	0.1	113
20240614 1743	0.1	94
20240614 1753	0.1	94
20240614 1803	0.1	214
20240614 1813	0.1	322
20240614 1823	0.1	323
20240614 1833	0.1	59
20240614 1843	0.1	59
20240614 1853	0.1	59
20240614 1903	0.1	59
20240614 1913	0.1	59
20240614 1923	0.1	59
20240614 1933	0.1	52
20240614 1943	0.1	52
20240614 1953	0.1	52
20240614 2003	0.1	48
20240614 2013	0.1	49
20240614 2023	0.1	49
20240614 2033	0.1	49
20240614 2043	0.1	48
20240614 2053	0.1	49
20240614 2103	0.1	46
20240614 2113	0.1	53
20240614 2123	0.1	59
20240614 2133	0.1	37
20240614 2143	0.1	71
20240614 2153	0.1	157
20240614 2203	0.1	112
20240614 2213	0.1	331
20240614 2223	0.1	96
20240614 2233	0.1	308
20240614 2243	0.1	136
20240614 2253	0.1	65
20240614 2303	0.1	121
20240614 2313	0.1	121
20240614 2323	0.1	121
20240614 2333	0.1	119
20240614 2343	0.1	119
20240614 2353	0.1	77

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240615 0003	0.1	57
20240615 0013	0.1	57
20240615 0023	0.1	57
20240615 0033	0.1	70
20240615 0043	0.1	46
20240615 0053	0.1	62
20240615 0103	0.1	61
20240615 0113	0.1	319
20240615 0123	0.1	116
20240615 0133	0.3	72
20240615 0143	0.1	84
20240615 0153	0.1	92
20240615 0203	0.1	264
20240615 0213	0.1	24
20240615 0223	0.1	42
20240615 0233	0.1	42
20240615 0243	0.1	42
20240615 0253	0.1	42
20240615 0303	0.1	42
20240615 0313	0.1	56
20240615 0323	0.1	42
20240615 0333	0.1	22
20240615 0343	0.1	321
20240615 0353	0.1	90
20240615 0403	0.1	55
20240615 0413	0.1	334
20240615 0423	0.1	65
20240615 0433	0.1	24
20240615 0443	0.1	39
20240615 0453	0.1	40
20240615 0503	0.1	40
20240615 0513	0.1	40
20240615 0523	0.1	40
20240615 0533	0.1	44
20240615 0543	0.1	44
20240615 0553	0.1	3
20240615 0603	0.1	3
20240615 0613	0.1	326
20240615 0623	0.1	96
20240615 0633	0.1	282
20240615 0643	0.1	229
20240615 0653	1.7	220
20240615 0703	0.1	262
20240615 0713	0.1	276
20240615 0723	0.1	142
20240615 0733	0.1	44
20240615 0743	0.1	45
20240615 0753	0.1	43
20240615 0803	0.1	251
20240615 0813	0.1	111
20240615 0823	0.1	14
20240615 0833	0.1	14
20240615 0843	0.1	35
20240615 0853	0.1	353
20240615 0903	0.1	85
20240615 0913	0.1	50
20240615 0923	0.1	55
20240615 0933	0.1	3
20240615 0943	0.1	65
20240615 0953	0.1	66
20240615 1003	0.1	49
20240615 1013	0.1	335
20240615 1023	0.1	71
20240615 1033	0.1	37
20240615 1043	0.1	290
20240615 1053	0.1	137
20240615 1103	0.1	193
20240615 1113	0.1	327
20240615 1123	0.1	238
20240615 1133	0.1	263
20240615 1143	0.1	321
20240615 1153	0.1	242

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240615 1203	0.1	257
20240615 1213	0.1	126
20240615 1223	1.8	138
20240615 1233	0.1	321
20240615 1243	0.1	137
20240615 1253	0.4	163
20240615 1303	0.1	226
20240615 1313	0.7	211
20240615 1323	0.3	267
20240615 1333	0.1	289
20240615 1343	0.1	177
20240615 1353	0.1	92
20240615 1403	0.1	93
20240615 1413	0.1	38
20240615 1423	0.1	295
20240615 1433	0.2	34
20240615 1443	3.4	42
20240615 1453	0.1	108
20240615 1503	0.1	218
20240615 1513	0.1	34
20240615 1523	0.1	140
20240615 1533	0.1	142
20240615 1543	0.1	142
20240615 1553	0.1	56
20240615 1603	0.1	336
20240615 1613	0.1	73
20240615 1623	0.5	50
20240615 1633	0.3	33
20240615 1643	0.1	16
20240615 1653	0.1	35
20240615 1703	0.1	51
20240615 1713	0.1	260
20240615 1723	0.1	169
20240615 1733	0.5	214
20240615 1743	0.1	136
20240615 1753	0.1	311
20240615 1803	0.1	203
20240615 1813	1	142
20240615 1823	0.8	155
20240615 1833	0.1	58
20240615 1843	0.1	173
20240615 1853	0.1	235
20240615 1903	0.1	261
20240615 1913	0.1	195
20240615 1923	0.1	290
20240615 1933	0.1	43
20240615 1943	0.1	134
20240615 1953	0.1	41
20240615 2003	0.1	99
20240615 2013	0.1	106
20240615 2023	0.1	330
20240615 2033	0.1	120
20240615 2043	0.1	108
20240615 2053	0.1	105
20240615 2103	0.1	129
20240615 2113	0.1	129
20240615 2123	0.1	129
20240615 2133	0.1	84
20240615 2143	0.1	84
20240615 2153	0.1	84
20240615 2203	0.1	84
20240615 2213	0.1	84
20240615 2223	0.1	132
20240615 2233	0.1	132
20240615 2243	0.1	132
20240615 2253	0.1	132
20240615 2303	0.1	132
20240615 2313	0.1	132
20240615 2323	0.1	132
20240615 2333	0.1	132
20240615 2343	0.1	132
20240615 2353	0.1	132

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240616 0003	0.1	100
20240616 0013	0.1	113
20240616 0023	0.1	113
20240616 0033	0.1	113
20240616 0043	0.1	113
20240616 0053	0.1	113
20240616 0103	0.1	113
20240616 0113	0.1	113
20240616 0123	0.1	91
20240616 0133	0.1	91
20240616 0143	0.1	123
20240616 0153	0.1	70
20240616 0203	0.1	70
20240616 0213	0.1	70
20240616 0223	0.1	70
20240616 0233	0.1	336
20240616 0243	0.1	270
20240616 0253	0.1	134
20240616 0303	0.1	132
20240616 0313	0.1	279
20240616 0323	0.1	224
20240616 0333	0.1	156
20240616 0343	0.1	19
20240616 0353	0.1	225
20240616 0403	0.1	109
20240616 0413	0.1	64
20240616 0423	0.1	53
20240616 0433	0.1	166
20240616 0443	0.1	77
20240616 0453	0.1	335
20240616 0503	0.1	88
20240616 0513	0.1	187
20240616 0523	0.1	102
20240616 0533	0.1	67
20240616 0543	0.1	323
20240616 0553	0.1	20
20240616 0603	0.1	319
20240616 0613	0.1	43
20240616 0623	0.1	151
20240616 0633	0.1	261
20240616 0643	0.1	128
20240616 0653	0.1	336
20240616 0703	0.1	215
20240616 0713	0.1	135
20240616 0723	0.1	73
20240616 0733	0.1	91
20240616 0743	0.3	79
20240616 0753	0.1	75
20240616 0803	0.2	147
20240616 0813	0.1	105
20240616 0823	2.8	155
20240616 0833	0.5	113
20240616 0843	0.1	10
20240616 0853	0.1	131
20240616 0903	2.4	127
20240616 0913	0.1	57
20240616 0923	0.1	66
20240616 0933	0.1	220
20240616 0943	0.1	184
20240616 0953	0.1	123
20240616 1003	0.3	137
20240616 1013	0.1	272
20240616 1023	0.1	271
20240616 1033	0.1	80
20240616 1043	0.1	308
20240616 1053	1.7	155
20240616 1103	0.1	259
20240616 1113	0.1	291
20240616 1123	0.1	241
20240616 1133	0.1	259
20240616 1143	0.1	259
20240616 1153	0.7	276

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240616 1203	0.1	197
20240616 1213	0.5	244
20240616 1223	1	114
20240616 1233	0.1	195
20240616 1243	0.2	244
20240616 1253	0.1	154
20240616 1303	0.1	174
20240616 1313	0.1	172
20240616 1323	0.1	158
20240616 1333	0.1	255
20240616 1343	0.1	237
20240616 1353	0.1	40
20240616 1403	0.1	219
20240616 1413	0.1	204
20240616 1423	0.1	26
20240616 1433	1.8	144
20240616 1443	0.8	132
20240616 1453	0.1	207
20240616 1503	0.1	198
20240616 1513	0.2	45
20240616 1523	0.1	332
20240616 1533	0.1	239
20240616 1543	0.1	230
20240616 1553	0.1	103
20240616 1603	0.1	258
20240616 1613	1.7	229
20240616 1623	0.1	227
20240616 1633	0.1	238
20240616 1643	0.1	159
20240616 1653	0.1	282
20240616 1703	0.1	242
20240616 1713	0.1	246
20240616 1723	0.1	235
20240616 1733	0.1	140
20240616 1743	0.1	147
20240616 1753	0.1	226
20240616 1803	0.1	227
20240616 1813	0.1	341
20240616 1823	0.1	104
20240616 1833	0.1	104
20240616 1843	0.1	104
20240616 1853	0.1	104
20240616 1903	0.1	104
20240616 1913	0.1	104
20240616 1923	0.1	104
20240616 1933	0.1	104
20240616 1943	0.1	149
20240616 1953	0.1	200
20240616 2003	0.1	171
20240616 2013	0.1	105
20240616 2023	0.1	67
20240616 2033	0.1	67
20240616 2043	0.1	67
20240616 2053	0.1	67
20240616 2103	0.1	67
20240616 2113	0.1	67
20240616 2123	0.1	67
20240616 2133	0.1	67
20240616 2143	0.1	67
20240616 2153	0.1	67
20240616 2203	0.1	64
20240616 2213	0.1	34
20240616 2223	0.1	15
20240616 2233	0.1	15
20240616 2243	0.1	15
20240616 2253	0.1	36
20240616 2303	0.1	137
20240616 2313	0.1	146
20240616 2323	0.1	59
20240616 2333	0.1	121
20240616 2343	0.1	120
20240616 2353	0.1	64

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240617 0003	0.1	39
20240617 0013	0.1	37
20240617 0023	0.1	37
20240617 0033	0.1	37
20240617 0043	0.1	4
20240617 0053	0.1	99
20240617 0103	0.1	135
20240617 0113	0.1	235
20240617 0123	0.1	160
20240617 0133	0.1	110
20240617 0143	0.1	152
20240617 0153	0.1	151
20240617 0203	0.1	106
20240617 0213	0.1	249
20240617 0223	0.1	173
20240617 0233	0.1	304
20240617 0243	0.1	166
20240617 0253	0.1	140
20240617 0303	0.1	87
20240617 0313	0.1	161
20240617 0323	0.1	132
20240617 0333	0.1	115
20240617 0343	0.1	167
20240617 0353	0.1	77
20240617 0403	0.1	84
20240617 0413	0.1	51
20240617 0423	0.1	115
20240617 0433	0.1	140
20240617 0443	0.1	95
20240617 0453	0.1	95
20240617 0503	0.1	74
20240617 0513	0.1	74
20240617 0523	0.1	74
20240617 0533	0.1	61
20240617 0543	0.1	49
20240617 0553	0.1	46
20240617 0603	0.1	47
20240617 0613	0.1	46
20240617 0623	0.1	46
20240617 0633	0.1	46
20240617 0643	0.1	46
20240617 0653	0.1	46
20240617 0703	0.1	73
20240617 0713	0.1	81
20240617 0723	0.1	80
20240617 0733	0.1	80
20240617 0743	0.1	85
20240617 0753	0.1	154
20240617 0803	0.1	145
20240617 0813	0.1	127
20240617 0823	0.1	144
20240617 0833	0.1	177
20240617 0843	0.1	59
20240617 0853	0.1	136
20240617 0903	0.1	165
20240617 0913	0.1	169
20240617 0923	0.1	146
20240617 0933	0.1	164
20240617 0943	0.1	202
20240617 0953	0.1	219
20240617 1003	0.1	44
20240617 1013	0.1	172
20240617 1023	0.2	150
20240617 1033	0.1	174
20240617 1043	0.1	212
20240617 1053	0.1	63
20240617 1103	0.4	238
20240617 1113	0.2	220
20240617 1123	0.3	208
20240617 1133	0.1	225
20240617 1143	0.1	205
20240617 1153	0.2	133

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240617 1203	0.1	200
20240617 1213	0.1	249
20240617 1223	3.6	277
20240617 1233	3.6	124
20240617 1243	0.1	196
20240617 1253	0.4	219
20240617 1303	0.1	143
20240617 1313	0.1	65
20240617 1323	0.2	56
20240617 1333	0.2	132
20240617 1343	0.1	146
20240617 1353	0.1	228
20240617 1403	0.1	167
20240617 1413	0.3	108
20240617 1423	0.1	176
20240617 1433	0.1	269
20240617 1443	0.1	219
20240617 1453	0.1	226
20240617 1503	0.1	240
20240617 1513	0.1	116
20240617 1523	1.2	128
20240617 1533	0.1	221
20240617 1543	2.2	231
20240617 1553	0.6	235
20240617 1603	0.1	144
20240617 1613	0.1	216
20240617 1623	0.1	222
20240617 1633	1.1	156
20240617 1643	0.1	143
20240617 1653	0.1	134
20240617 1703	0.1	150
20240617 1713	0.1	97
20240617 1723	1.1	125
20240617 1733	0.1	119
20240617 1743	0.1	92
20240617 1753	2.5	101
20240617 1803	0.1	288
20240617 1813	0.1	186
20240617 1823	0.1	53
20240617 1833	0.1	118
20240617 1843	0.1	123
20240617 1853	0.1	126
20240617 1903	0.1	104
20240617 1913	0.1	93
20240617 1923	0.1	109
20240617 1933	0.1	72
20240617 1943	0.1	251
20240617 1953	0.1	182
20240617 2003	0.1	186
20240617 2013	0.1	315
20240617 2023	0.1	50
20240617 2033	0.1	201
20240617 2043	0.1	154
20240617 2053	0.1	290
20240617 2103	0.1	237
20240617 2113	0.1	249
20240617 2123	0.1	57
20240617 2133	0.1	36
20240617 2143	0.1	332
20240617 2153	0.1	268
20240617 2203	0.3	259
20240617 2213	0.1	70
20240617 2223	0.1	94
20240617 2233	0.1	295
20240617 2243	0.1	268
20240617 2253	0.1	95
20240617 2303	0.1	126
20240617 2313	0.1	113
20240617 2323	0.1	75
20240617 2333	0.1	59
20240617 2343	0.1	104
20240617 2353	0.1	143

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240618 0003	0.1	204
20240618 0013	0.1	105
20240618 0023	0.1	78
20240618 0033	0.1	4
20240618 0043	0.1	124
20240618 0053	0.1	135
20240618 0103	0.1	109
20240618 0113	0.1	252
20240618 0123	0.1	124
20240618 0133	0.1	354
20240618 0143	0.1	153
20240618 0153	0.1	146
20240618 0203	0.1	138
20240618 0213	0.1	69
20240618 0223	0.1	49
20240618 0233	0.1	260
20240618 0243	0.1	232
20240618 0253	0.1	10
20240618 0303	0.1	22
20240618 0313	0.1	42
20240618 0323	0.1	42
20240618 0333	0.1	54
20240618 0343	0.1	53
20240618 0353	0.1	59
20240618 0403	0.1	145
20240618 0413	0.1	79
20240618 0423	0.1	56
20240618 0433	0.1	8
20240618 0443	0.1	29
20240618 0453	0.1	33
20240618 0503	0.1	40
20240618 0513	0.1	40
20240618 0523	0.1	40
20240618 0533	0.1	40
20240618 0543	0.1	40
20240618 0553	0.1	40
20240618 0603	0.1	40
20240618 0613	0.1	43
20240618 0623	0.1	98
20240618 0633	0.1	71
20240618 0643	0.1	157
20240618 0653	0.4	142
20240618 0703	0.1	123
20240618 0713	0.1	98
20240618 0723	0.5	99
20240618 0733	0.1	191
20240618 0743	0.1	25
20240618 0753	0.1	259
20240618 0803	0.1	169
20240618 0813	0.1	136
20240618 0823	0.1	253
20240618 0833	0.1	56
20240618 0843	0.1	239
20240618 0853	0.1	136
20240618 0903	0.1	345
20240618 0913	0.1	26
20240618 0923	0.1	150
20240618 0933	0.1	325
20240618 0943	0.1	190
20240618 0953	0.1	161
20240618 1003	0.1	239
20240618 1013	0.1	259
20240618 1023	0.1	120
20240618 1033	0.1	317
20240618 1043	0.1	236
20240618 1053	1.1	234
20240618 1103	0.1	200
20240618 1113	0.3	270
20240618 1123	0.1	177
20240618 1133	0.1	199
20240618 1143	0.1	242
20240618 1153	0.1	210

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240618 1203	0.1	176
20240618 1213	0.2	197
20240618 1223	0.3	120
20240618 1233	0.6	219
20240618 1243	0.4	229
20240618 1253	0.2	180
20240618 1303	1.3	146
20240618 1313	0.7	245
20240618 1323	1.8	143
20240618 1333	0.2	162
20240618 1343	0.1	138
20240618 1353	0.1	244
20240618 1403	0.3	35
20240618 1413	0.1	258
20240618 1423	0.1	117
20240618 1433	0.1	92
20240618 1443	0.1	240
20240618 1453	0.1	246
20240618 1503	0.1	252
20240618 1513	0.1	166
20240618 1523	0.1	219
20240618 1533	0.1	196
20240618 1543	0.1	235
20240618 1553	0.1	217
20240618 1603	0.1	163
20240618 1613	0.9	239
20240618 1623	0.1	233
20240618 1633	0.1	248
20240618 1643	0.1	204
20240618 1653	0.1	239
20240618 1703	0.1	220
20240618 1713	0.1	158
20240618 1723	0.1	234
20240618 1733	0.1	335
20240618 1743	0.1	128
20240618 1753	0.1	137
20240618 1803	0.1	124
20240618 1813	0.1	113
20240618 1823	0.1	158
20240618 1833	0.1	168
20240618 1843	0.1	81
20240618 1853	0.1	93
20240618 1903	0.1	132
20240618 1913	0.1	77
20240618 1923	0.1	108
20240618 1933	0.1	52
20240618 1943	0.1	97
20240618 1953	0.1	83
20240618 2003	0.1	94
20240618 2013	0.1	128
20240618 2023	0.1	138
20240618 2033	0.1	76
20240618 2043	0.1	124
20240618 2053	0.1	61
20240618 2103	0.1	345
20240618 2113	0.1	103
20240618 2123	0.1	97
20240618 2133	0.1	71
20240618 2143	0.1	72
20240618 2153	0.1	66
20240618 2203	0.1	51
20240618 2213	0.1	59
20240618 2223	0.1	66
20240618 2233	0.1	110
20240618 2243	0.1	93
20240618 2253	0.3	153
20240618 2303	0.1	50
20240618 2313	0.1	297
20240618 2323	0.1	152
20240618 2333	0.1	118
20240618 2343	0.1	327
20240618 2353	0.3	70

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240619 0003	0.1	115
20240619 0013	0.1	319
20240619 0023	0.1	36
20240619 0033	0.1	47
20240619 0043	0.1	53
20240619 0053	0.1	53
20240619 0103	0.1	58
20240619 0113	0.1	59
20240619 0123	0.2	36
20240619 0133	0.1	59
20240619 0143	0.1	67
20240619 0153	0.1	62
20240619 0203	0.1	172
20240619 0213	0.1	57
20240619 0223	0.1	47
20240619 0233	0.1	350
20240619 0243	0.1	39
20240619 0253	0.1	97
20240619 0303	0.1	0
20240619 0313	0.1	58
20240619 0323	0.1	325
20240619 0333	0.1	59
20240619 0343	0.1	66
20240619 0353	0.1	70
20240619 0403	0.1	102
20240619 0413	0.1	136
20240619 0423	0.1	96
20240619 0433	0.1	93
20240619 0443	0.1	93
20240619 0453	0.1	61
20240619 0503	0.1	61
20240619 0513	0.1	141
20240619 0523	0.1	141
20240619 0533	0.1	69
20240619 0543	0.1	69
20240619 0553	0.1	69
20240619 0603	0.1	322
20240619 0613	0.1	150
20240619 0623	0.1	329
20240619 0633	0.1	136
20240619 0643	0.1	141
20240619 0653	0.5	123
20240619 0703	0.1	112
20240619 0713	0.3	164
20240619 0723	0.1	136
20240619 0733	0.1	35
20240619 0743	0.1	206
20240619 0753	0.7	165
20240619 0803	0.1	149
20240619 0813	0.4	135
20240619 0823	0.1	165
20240619 0833	0.1	170
20240619 0843	0.1	148
20240619 0853	0.1	117
20240619 0903	0.1	127
20240619 0913	0.1	163
20240619 0923	0.1	133
20240619 0933	0.1	333
20240619 0943	0.1	85
20240619 0953	0.5	103
20240619 1003	0.1	130
20240619 1013	0.1	166
20240619 1023	0.1	251
20240619 1033	0.1	206
20240619 1043	1.6	316
20240619 1053	2.2	136
20240619 1103	0.1	277
20240619 1113	1.4	119
20240619 1123	0.1	247
20240619 1133	0.1	251
20240619 1143	0.9	180
20240619 1153	1.2	227

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240619 1203	1.6	227
20240619 1213	1.3	110
20240619 1223	1.3	92
20240619 1233	0.3	223
20240619 1243	0.1	127
20240619 1253	0.4	250
20240619 1303	0.1	218
20240619 1313	0.6	249
20240619 1323	0.1	226
20240619 1333	0.1	156
20240619 1343	0.1	334
20240619 1353	0.1	146
20240619 1403	0.1	251
20240619 1413	0.1	144
20240619 1423	0.1	225
20240619 1433	0.1	113
20240619 1443	0.1	215
20240619 1453	0.1	117
20240619 1503	0.3	205
20240619 1513	0.4	83
20240619 1523	0.3	129
20240619 1533	1.2	126
20240619 1543	0.6	247
20240619 1553	0.4	205
20240619 1603	0.3	170
20240619 1613	0.1	176
20240619 1623	0.1	143
20240619 1633	0.1	177
20240619 1643	0.1	98
20240619 1653	0.1	126
20240619 1703	0.1	134
20240619 1713	0.1	124
20240619 1723	0.1	137
20240619 1733	0.1	73
20240619 1743	0.3	95
20240619 1753	0.2	126
20240619 1803	0.1	135
20240619 1813	0.1	352
20240619 1823	0.2	127
20240619 1833	0.1	14
20240619 1843	0.2	103
20240619 1853	1.4	128
20240619 1903	0.1	112
20240619 1913	0.1	134
20240619 1923	0.1	332
20240619 1933	0.1	182
20240619 1943	0.1	310
20240619 1953	0.1	111
20240619 2003	0.4	118
20240619 2013	0.1	86
20240619 2023	0.1	69
20240619 2033	0.1	54
20240619 2043	0.1	59
20240619 2053	0.1	97
20240619 2103	0.1	40
20240619 2113	0.1	52
20240619 2123	0.1	147
20240619 2133	0.1	128
20240619 2143	0.1	158
20240619 2153	0.1	83
20240619 2203	0.1	141
20240619 2213	0.1	262
20240619 2223	0.2	305
20240619 2233	0.1	105
20240619 2243	0.1	119
20240619 2253	0.1	109
20240619 2303	0.1	63
20240619 2313	0.2	153
20240619 2323	0.1	49
20240619 2333	0.1	118
20240619 2343	0.1	116
20240619 2353	0.1	154

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240620 0003	0.1	57
20240620 0013	0.1	54
20240620 0023	0.1	199
20240620 0033	0.1	105
20240620 0043	0.1	181
20240620 0053	0.1	85
20240620 0103	0.1	139
20240620 0113	0.1	73
20240620 0123	0.1	60
20240620 0133	0.1	63
20240620 0143	0.1	17
20240620 0153	0.1	62
20240620 0203	0.1	59
20240620 0213	0.1	53
20240620 0223	0.1	53
20240620 0233	0.1	73
20240620 0243	0.1	76
20240620 0253	0.1	71
20240620 0303	0.1	86
20240620 0313	0.1	63
20240620 0323	0.1	63
20240620 0333	0.1	161
20240620 0343	0.1	350
20240620 0353	0.1	120
20240620 0403	0.1	120
20240620 0413	0.1	120
20240620 0423	0.1	110
20240620 0433	0.1	71
20240620 0443	0.1	71
20240620 0453	0.1	144
20240620 0503	0.1	120
20240620 0513	0.1	66
20240620 0523	0.1	138
20240620 0533	0.1	66
20240620 0543	0.1	65
20240620 0553	0.1	61
20240620 0603	0.1	118
20240620 0613	0.1	48
20240620 0623	0.1	49
20240620 0633	0.1	49
20240620 0643	0.1	49
20240620 0653	0.1	49
20240620 0703	0.1	49
20240620 0713	0.1	130
20240620 0723	0.1	346
20240620 0733	0.1	142
20240620 0743	2.5	107
20240620 0753	0.1	52
20240620 0803	0.1	294
20240620 0813	0.1	126
20240620 0823	0.1	313
20240620 0833	0.1	217
20240620 0843	0.1	244
20240620 0853	0.6	128
20240620 0903	0.1	189
20240620 0913	0.3	264
20240620 0923	0.1	149
20240620 0933	0.1	313
20240620 0943	0.2	126
20240620 0953	0.1	111
20240620 1003	0.5	13
20240620 1013	0.1	344
20240620 1023	0.1	174
20240620 1033	0.3	346
20240620 1043	1.6	106
20240620 1053	0.5	309
20240620 1103	1	2
20240620 1113	0.1	286
20240620 1123	0.1	110
20240620 1133	0.8	337
20240620 1143	0.1	346
20240620 1153	0.1	291

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240620 1203	0.1	305
20240620 1213	0.1	231
20240620 1223	0.1	64
20240620 1233	0.2	222
20240620 1243	0.1	301
20240620 1253	0.1	233
20240620 1303	0.2	306
20240620 1313	0.2	57
20240620 1323	0.1	172
20240620 1333	0.1	51
20240620 1343	0.1	265
20240620 1353	0.2	249
20240620 1403	0.1	240
20240620 1413	0.1	243
20240620 1423	0.1	227
20240620 1433	0.1	286
20240620 1443	0.1	121
20240620 1453	0.1	23
20240620 1503	0.1	123
20240620 1513	0.1	345
20240620 1523	0.1	331
20240620 1533	0.1	61
20240620 1543	0.1	181
20240620 1553	0.1	121
20240620 1603	0.1	313
20240620 1613	0.1	242
20240620 1623	0.3	175
20240620 1633	0.1	247
20240620 1643	0.1	21
20240620 1653	0.1	270
20240620 1703	0.6	133
20240620 1713	0.1	67
20240620 1723	0.4	347
20240620 1733	0.1	7
20240620 1743	0.6	136
20240620 1753	0.2	124
20240620 1803	0.8	57
20240620 1813	0.1	134
20240620 1823	0.1	11
20240620 1833	0.1	40
20240620 1843	0.1	52
20240620 1853	0.1	219
20240620 1903	0.1	70
20240620 1913	1.4	104
20240620 1923	0.1	106
20240620 1933	0.1	235
20240620 1943	0.1	351
20240620 1953	0.9	152
20240620 2003	0.1	31
20240620 2013	0.1	0
20240620 2023	0.1	99
20240620 2033	0.1	228
20240620 2043	0.2	295
20240620 2053	0.1	151
20240620 2103	0.1	52
20240620 2113	0.1	238
20240620 2123	1.7	101
20240620 2133	1.2	322
20240620 2143	0.1	339
20240620 2153	0.1	13
20240620 2203	0.1	342
20240620 2213	0.1	117
20240620 2223	0.1	112
20240620 2233	0.1	345
20240620 2243	0.1	122
20240620 2253	0.1	351
20240620 2303	0.1	110
20240620 2313	0.1	108
20240620 2323	0.1	49
20240620 2333	0.1	2
20240620 2343	0.1	306
20240620 2353	1	355

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240621 0003	0.1	346
20240621 0013	0.1	336
20240621 0023	0.1	345
20240621 0033	0.6	297
20240621 0043	0.1	38
20240621 0053	0.1	104
20240621 0103	0.1	155
20240621 0113	0.1	10
20240621 0123	0.1	68
20240621 0133	0.1	271
20240621 0143	0.1	150
20240621 0153	0.1	151
20240621 0203	0.1	143
20240621 0213	0.1	54
20240621 0223	0.1	56
20240621 0233	0.1	56
20240621 0243	0.1	56
20240621 0253	0.1	26
20240621 0303	0.1	26
20240621 0313	0.1	26
20240621 0323	0.1	26
20240621 0333	0.1	63
20240621 0343	0.1	51
20240621 0353	0.1	52
20240621 0403	0.1	52
20240621 0413	0.1	104
20240621 0423	0.1	104
20240621 0433	0.1	104
20240621 0443	0.1	104
20240621 0453	0.1	104
20240621 0503	0.1	80
20240621 0513	0.1	55
20240621 0523	0.1	42
20240621 0533	0.1	41
20240621 0543	0.1	85
20240621 0553	0.1	66
20240621 0603	0.1	343
20240621 0613	0.1	25
20240621 0623	0.1	118
20240621 0633	0.1	66
20240621 0643	0.1	112
20240621 0653	0.1	112
20240621 0703	0.1	112
20240621 0713	0.1	135
20240621 0723	0.1	158
20240621 0733	0.1	138
20240621 0743	0.1	82
20240621 0753	0.6	138
20240621 0803	0.1	42
20240621 0813	0.1	340
20240621 0823	0.1	114
20240621 0833	0.6	128
20240621 0843	0.1	187
20240621 0853	0.9	146
20240621 0903	0.1	300
20240621 0913	0.1	243
20240621 0923	0.1	157
20240621 0933	0.1	243
20240621 0943	0.1	146
20240621 0953	0.1	26
20240621 1003	0.2	127
20240621 1013	1	13
20240621 1023	0.5	349
20240621 1033	0.1	11
20240621 1043	0.2	73
20240621 1053	1.1	264
20240621 1103	0.1	123
20240621 1113	0.6	2
20240621 1123	1	24
20240621 1133	0.1	88
20240621 1143	0.1	80
20240621 1153	1	334

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240621 1203	0.1	333
20240621 1213	1.3	7
20240621 1223	0.4	162
20240621 1233	2.6	353
20240621 1243	0.1	96
20240621 1253	1.3	90
20240621 1303	0.8	321
20240621 1313	0.2	178
20240621 1323	0.4	229
20240621 1333	0.8	247
20240621 1343	0.4	132
20240621 1353	0.4	253
20240621 1403	0.8	239
20240621 1413	0.1	205
20240621 1423	0.1	169
20240621 1433	0.1	269
20240621 1443	0.6	159
20240621 1453	0.6	211
20240621 1503	0.2	231
20240621 1513	1.3	145
20240621 1523	0.1	203
20240621 1533	0.1	231
20240621 1543	1	76
20240621 1553	0.2	238
20240621 1603	0.3	207
20240621 1613	0.1	135
20240621 1623	0.5	160
20240621 1633	0.1	190
20240621 1643	0.1	232
20240621 1653	0.1	53
20240621 1703	0.1	258
20240621 1713	0.1	178
20240621 1723	0.1	241
20240621 1733	0.2	119
20240621 1743	0.1	51
20240621 1753	0.3	169
20240621 1803	0.1	127
20240621 1813	0.1	138
20240621 1823	0.1	116
20240621 1833	0.1	132
20240621 1843	0.1	108
20240621 1853	0.1	139
20240621 1903	0.1	117
20240621 1913	0.1	96
20240621 1923	0.1	80
20240621 1933	0.1	155
20240621 1943	0.3	100
20240621 1953	0.1	38
20240621 2003	0.1	74
20240621 2013	0.1	41
20240621 2023	0.1	67
20240621 2033	0.5	95
20240621 2043	0.1	152
20240621 2053	0.3	294
20240621 2103	0.1	149
20240621 2113	0.1	323
20240621 2123	0.1	131
20240621 2133	0.1	130
20240621 2143	1.1	60
20240621 2153	1.2	306
20240621 2203	0.1	298
20240621 2213	0.1	316
20240621 2223	0.1	225
20240621 2233	0.1	102
20240621 2243	0.2	28
20240621 2253	0.1	230
20240621 2303	0.1	164
20240621 2313	0.5	277
20240621 2323	0.1	288
20240621 2333	0.1	108
20240621 2343	0.1	38
20240621 2353	0.2	115

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240622 0003	0.8	336
20240622 0013	0.1	67
20240622 0023	0.5	92
20240622 0033	0.1	76
20240622 0043	0.1	4
20240622 0053	0.1	310
20240622 0103	0.1	298
20240622 0113	0.3	352
20240622 0123	0.1	342
20240622 0133	0.1	49
20240622 0143	0.1	30
20240622 0153	0.1	259
20240622 0203	0.1	331
20240622 0213	0.1	98
20240622 0223	0.1	35
20240622 0233	0.1	144
20240622 0243	0.1	79
20240622 0253	0.1	308
20240622 0303	0.1	35
20240622 0313	0.1	294
20240622 0323	0.1	48
20240622 0333	0.1	228
20240622 0343	0.1	33
20240622 0353	0.1	59
20240622 0403	0.1	27
20240622 0413	0.1	82
20240622 0423	0.1	50
20240622 0433	0.1	22
20240622 0443	0.1	240
20240622 0453	0.1	103
20240622 0503	0.1	47
20240622 0513	0.1	50
20240622 0523	0.1	58
20240622 0533	0.1	50
20240622 0543	0.2	108
20240622 0553	0.1	352
20240622 0603	0.1	160
20240622 0613	0.1	326
20240622 0623	0.1	319
20240622 0633	0.1	15
20240622 0643	0.1	113
20240622 0653	0.1	141
20240622 0703	1.3	144
20240622 0713	0.1	307
20240622 0723	0.1	143
20240622 0733	0.1	278
20240622 0743	0.1	22
20240622 0753	0.1	63
20240622 0803	0.1	2
20240622 0813	0.1	281
20240622 0823	0.1	261
20240622 0833	1.6	277
20240622 0843	0.2	284
20240622 0853	0.1	330
20240622 0903	0.4	47
20240622 0913	0.1	116
20240622 0923	0.1	20
20240622 0933	0.1	141
20240622 0943	1	37
20240622 0953	0.1	22
20240622 1003	0.1	214
20240622 1013	1.7	68
20240622 1023	0.1	121
20240622 1033	0.1	66
20240622 1043	0.3	336
20240622 1053	3.3	68
20240622 1103	0.4	4
20240622 1113	1.3	151
20240622 1123	0.8	17
20240622 1133	2.1	150
20240622 1143	0.1	209
20240622 1153	0.1	302

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240622 1203	0.3	256
20240622 1213	0.1	240
20240622 1223	0.1	113
20240622 1233	0.1	237
20240622 1243	0.1	243
20240622 1253	0.2	253
20240622 1303	1	95
20240622 1313	0.1	133
20240622 1323	0.1	142
20240622 1333	0.1	186
20240622 1343	0.8	147
20240622 1353	0.2	54
20240622 1403	0.1	228
20240622 1413	0.3	219
20240622 1423	0.3	150
20240622 1433	0.1	210
20240622 1443	0.1	237
20240622 1453	0.1	250
20240622 1503	0.1	-1
20240622 1513	0.7	293
20240622 1523	0.1	67
20240622 1533	4	15
20240622 1543	0.6	189
20240622 1553	0.1	233
20240622 1603	0.3	23
20240622 1613	0.1	336
20240622 1623	0.1	193
20240622 1633	1.6	21
20240622 1643	0.1	115
20240622 1653	0.2	306
20240622 1703	0.3	323
20240622 1713	1	46
20240622 1723	0.4	9
20240622 1733	3.3	324
20240622 1743	1.5	315
20240622 1753	0.1	305
20240622 1803	0.5	306
20240622 1813	1.3	162
20240622 1823	0.1	102
20240622 1833	0.1	14
20240622 1843	0.9	280
20240622 1853	0.1	156
20240622 1903	0.1	119
20240622 1913	0.1	75
20240622 1923	0.2	136
20240622 1933	0.1	297
20240622 1943	0.2	320
20240622 1953	0.1	244
20240622 2003	1.8	3
20240622 2013	0.1	110
20240622 2023	0.1	84
20240622 2033	0.1	82
20240622 2043	0.4	110
20240622 2053	0.1	147
20240622 2103	0.2	52
20240622 2113	0.1	293
20240622 2123	0.1	250
20240622 2133	0.2	101
20240622 2143	0.1	88
20240622 2153	0.1	51
20240622 2203	0.1	24
20240622 2213	1.4	323
20240622 2223	0.1	67
20240622 2233	0.1	341
20240622 2243	0.1	98
20240622 2253	0.1	308
20240622 2303	0.1	332
20240622 2313	0.8	140
20240622 2323	0.1	274
20240622 2333	0.2	316
20240622 2343	0.1	45
20240622 2353	0.1	13

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240623 0003	1	6
20240623 0013	0.1	290
20240623 0023	0.1	150
20240623 0033	0.1	151
20240623 0043	0.1	297
20240623 0053	0.1	314
20240623 0103	0.1	281
20240623 0113	0.4	298
20240623 0123	0.8	22
20240623 0133	0.3	197
20240623 0143	0.1	93
20240623 0153	0.1	241
20240623 0203	0.1	111
20240623 0213	0.1	111
20240623 0223	0.1	96
20240623 0233	0.3	113
20240623 0243	0.1	120
20240623 0253	0.1	225
20240623 0303	0.1	17
20240623 0313	0.2	113
20240623 0323	0.1	74
20240623 0333	0.1	75
20240623 0343	0.1	71
20240623 0353	0.1	50
20240623 0403	0.1	65
20240623 0413	0.1	4
20240623 0423	0.1	323
20240623 0433	0.1	61
20240623 0443	0.1	78
20240623 0453	0.3	110
20240623 0503	0.1	343
20240623 0513	0.1	105
20240623 0523	0.1	312
20240623 0533	0.5	132
20240623 0543	0.1	97
20240623 0553	0.1	134
20240623 0603	0.1	146
20240623 0613	0.1	63
20240623 0623	0.1	88
20240623 0633	0.1	50
20240623 0643	0.1	99
20240623 0653	0.1	76
20240623 0703	0.1	336
20240623 0713	0.1	280
20240623 0723	0.1	137
20240623 0733	0.1	324
20240623 0743	0.1	107
20240623 0753	0.1	100
20240623 0803	0.1	102
20240623 0813	0.1	102
20240623 0823	0.1	127
20240623 0833	0.1	155
20240623 0843	0.1	7
20240623 0853	0.7	143
20240623 0903	0.1	155
20240623 0913	0.7	140
20240623 0923	0.1	41
20240623 0933	0.1	192
20240623 0943	0.1	351
20240623 0953	0.1	306
20240623 1003	0.1	219
20240623 1013	0.1	181
20240623 1023	0.5	336
20240623 1033	0.1	220
20240623 1043	0.1	86
20240623 1053	0.1	298
20240623 1103	0.1	221
20240623 1113	0.1	197
20240623 1123	0.2	320
20240623 1133	0.1	127
20240623 1143	0.1	165
20240623 1153	1.1	79

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240623 1203	0.1	260
20240623 1213	0.1	234
20240623 1223	0.3	1
20240623 1233	1	58
20240623 1243	1.2	136
20240623 1253	0.4	121
20240623 1303	4	165
20240623 1313	0.1	328
20240623 1323	0.1	249
20240623 1333	0.1	137
20240623 1343	0.2	77
20240623 1353	0.1	205
20240623 1403	0.6	31
20240623 1413	0.1	10
20240623 1423	0.1	149
20240623 1433	1	335
20240623 1443	0.1	335
20240623 1453	0.1	352
20240623 1503	0.1	7
20240623 1513	1.9	43
20240623 1523	1	74
20240623 1533	0.8	51
20240623 1543	0.3	81
20240623 1553	1.4	328
20240623 1603	4	41
20240623 1613	1.3	51
20240623 1623	2.3	103
20240623 1633	0.1	239
20240623 1643	0.2	277
20240623 1653	0.2	334
20240623 1703	2.2	137
20240623 1713	0.3	121
20240623 1723	0.1	280
20240623 1733	0.2	2
20240623 1743	0.1	94
20240623 1753	1.4	76
20240623 1803	0.9	8
20240623 1813	0.5	346
20240623 1823	0.1	75
20240623 1833	0.2	299
20240623 1843	0.1	40
20240623 1853	0.1	53
20240623 1903	1	114
20240623 1913	0.2	103
20240623 1923	0.9	257
20240623 1933	0.2	32
20240623 1943	0.1	218
20240623 1953	0.1	138
20240623 2003	0.1	73
20240623 2013	0.1	91
20240623 2023	0.1	100
20240623 2033	0.1	113
20240623 2043	1	143
20240623 2053	0.1	110
20240623 2103	0.1	124
20240623 2113	0.1	68
20240623 2123	0.1	39
20240623 2133	0.1	231
20240623 2143	0.1	107
20240623 2153	0.1	96
20240623 2203	0.1	80
20240623 2213	0.1	53
20240623 2223	0.1	26
20240623 2233	0.1	329
20240623 2243	0.2	129
20240623 2253	0.5	5
20240623 2303	0.1	2
20240623 2313	0.1	139
20240623 2323	0.1	211
20240623 2333	0.1	68
20240623 2343	0.1	340
20240623 2353	0.1	71

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240624 0003	0.1	174
20240624 0013	1.3	322
20240624 0023	0.1	150
20240624 0033	0.1	3
20240624 0043	0.1	57
20240624 0053	0.1	26
20240624 0103	0.1	127
20240624 0113	0.1	129
20240624 0123	0.1	229
20240624 0133	0.1	120
20240624 0143	0.1	2
20240624 0153	0.4	340
20240624 0203	0.1	128
20240624 0213	0.2	344
20240624 0223	0.1	312
20240624 0233	0.1	257
20240624 0243	0.1	271
20240624 0253	0.1	230
20240624 0303	0.1	310
20240624 0313	0.6	104
20240624 0323	0.5	114
20240624 0333	0.1	32
20240624 0343	0.4	53
20240624 0353	0.1	323
20240624 0403	0.1	9
20240624 0413	0.1	108
20240624 0423	0.1	87
20240624 0433	0.1	141
20240624 0443	0.1	159
20240624 0453	0.1	172
20240624 0503	0.6	112
20240624 0513	0.1	200
20240624 0523	0.1	87
20240624 0533	0.2	95
20240624 0543	0.2	136
20240624 0553	0.1	64
20240624 0603	0.1	263
20240624 0613	0.2	120
20240624 0623	0.1	282
20240624 0633	1	132
20240624 0643	0.1	256
20240624 0653	0.1	347
20240624 0703	0.1	198
20240624 0713	0.3	122
20240624 0723	0.1	323
20240624 0733	0.1	39
20240624 0743	0.1	318
20240624 0753	0.1	102
20240624 0803	0.1	152
20240624 0813	0.1	148
20240624 0823	0.1	52
20240624 0833	1.1	57
20240624 0843	0.1	226
20240624 0853	0.1	167
20240624 0903	0.2	347
20240624 0913	0.3	233
20240624 0923	0.1	210
20240624 0933	0.1	336
20240624 0943	0.1	22
20240624 0953	0.1	332
20240624 1003	0.1	109
20240624 1013	1.6	44
20240624 1023	0.1	182
20240624 1033	0.1	160
20240624 1043	1	51
20240624 1053	0.9	336
20240624 1103	1.9	11
20240624 1113	1.7	46
20240624 1123	0.3	322
20240624 1133	2.6	129
20240624 1143	0.1	281
20240624 1153	0.1	231

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240624 1203	0.1	239
20240624 1213	0.1	228
20240624 1223	0.1	338
20240624 1233	1.2	145
20240624 1243	0.2	225
20240624 1253	0.1	161
20240624 1303	1.4	117
20240624 1313	0.2	240
20240624 1323	0.1	342
20240624 1333	0.1	179
20240624 1343	0.1	145
20240624 1353	0.1	108
20240624 1403	1.6	121
20240624 1413	0.1	247
20240624 1423	0.1	58
20240624 1433	0.1	230
20240624 1443	0.1	221
20240624 1453	0.1	85
20240624 1503	2.2	149
20240624 1513	0.1	97
20240624 1523	0.7	331
20240624 1533	0.1	73
20240624 1543	0.1	76
20240624 1553	0.1	224
20240624 1603	0.1	16
20240624 1613	0.1	182
20240624 1623	0.8	294
20240624 1633	0.9	232
20240624 1643	4.5	25
20240624 1653	0.5	245
20240624 1703	0.1	46
20240624 1713	0.1	31
20240624 1723	1.3	343
20240624 1733	1.9	11
20240624 1743	0.9	83
20240624 1753	0.6	312
20240624 1803	1.7	20
20240624 1813	0.1	226
20240624 1823	0.1	354
20240624 1833	2.4	118
20240624 1843	0.6	329
20240624 1853	0.1	347
20240624 1903	0.1	79
20240624 1913	0.1	20
20240624 1923	0.1	164
20240624 1933	0.1	144
20240624 1943	0.1	288
20240624 1953	0.1	129
20240624 2003	0.1	291
20240624 2013	0.1	41
20240624 2023	0.1	225
20240624 2033	0.1	351
20240624 2043	0.1	55
20240624 2053	0.1	120
20240624 2103	0.1	101
20240624 2113	0.1	154
20240624 2123	0.1	152
20240624 2133	0.1	95
20240624 2143	0.1	191
20240624 2153	0.1	83
20240624 2203	0.1	92
20240624 2213	0.1	12
20240624 2223	0.1	246
20240624 2233	0.1	43
20240624 2243	0.1	55
20240624 2253	0.1	39
20240624 2303	0.1	318
20240624 2313	0.1	337
20240624 2323	0.5	303
20240624 2333	1.2	326
20240624 2343	0.1	67
20240624 2353	0.1	211

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240625 0003	0.3	36
20240625 0013	0.1	98
20240625 0023	0.1	328
20240625 0033	0.1	86
20240625 0043	0.1	166
20240625 0053	0.1	57
20240625 0103	0.1	167
20240625 0113	0.9	155
20240625 0123	0.2	42
20240625 0133	0.1	46
20240625 0143	0.1	295
20240625 0153	0.1	101
20240625 0203	0.5	106
20240625 0213	0.1	104
20240625 0223	0.1	180
20240625 0233	0.1	135
20240625 0243	0.1	318
20240625 0253	0.1	144
20240625 0303	0.1	134
20240625 0313	0.1	114
20240625 0323	0.1	35
20240625 0333	0.1	43
20240625 0343	0.1	84
20240625 0353	0.1	52
20240625 0403	0.1	58
20240625 0413	0.1	92
20240625 0423	0.1	74
20240625 0433	0.1	58
20240625 0443	0.1	95
20240625 0453	0.1	324
20240625 0503	1	3
20240625 0513	0.3	270
20240625 0523	0.1	157
20240625 0533	0.1	11
20240625 0543	0.1	5
20240625 0553	0.1	157
20240625 0603	0.1	299
20240625 0613	0.1	256
20240625 0623	0.1	140
20240625 0633	0.1	136
20240625 0643	0.1	65
20240625 0653	0.1	145
20240625 0703	0.1	22
20240625 0713	0.1	136
20240625 0723	0.1	65
20240625 0733	0.1	44
20240625 0743	0.1	129
20240625 0753	0.1	137
20240625 0803	0.1	29
20240625 0813	0.1	22
20240625 0823	0.1	87
20240625 0833	0.1	301
20240625 0843	0.1	302
20240625 0853	0.6	337
20240625 0903	0.8	75
20240625 0913	0.1	29
20240625 0923	0.2	77
20240625 0933	0.2	5
20240625 0943	0.1	99
20240625 0953	1	295
20240625 1003	0.1	193
20240625 1013	0.1	262
20240625 1023	0.6	123
20240625 1033	0.2	246
20240625 1043	0.2	262
20240625 1053	0.3	124
20240625 1103	0.1	238
20240625 1113	0.1	155
20240625 1123	0.1	243
20240625 1133	0.1	77
20240625 1143	0.1	80
20240625 1153	0.1	177

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240625 1203	0.2	193
20240625 1213	0.1	141
20240625 1223	0.1	223
20240625 1233	0.3	128
20240625 1243	0.6	262
20240625 1253	0.1	60
20240625 1303	1.3	114
20240625 1313	0.1	211
20240625 1323	0.1	320
20240625 1333	0.1	268
20240625 1343	0.1	308
20240625 1353	0.1	158
20240625 1403	0.1	256
20240625 1413	0.1	234
20240625 1423	0.1	40
20240625 1433	0.1	227
20240625 1443	0.1	143
20240625 1453	0.1	80
20240625 1503	0.9	131
20240625 1513	0.2	144
20240625 1523	0.1	122
20240625 1533	0.1	85
20240625 1543	0.1	131
20240625 1553	0.1	95
20240625 1603	0.1	102
20240625 1613	0.1	109
20240625 1623	0.1	126
20240625 1633	0.1	101
20240625 1643	1.2	67
20240625 1653	0.3	127
20240625 1703	0.1	74
20240625 1713	0.1	104
20240625 1723	0.1	129
20240625 1733	0.4	68
20240625 1743	0.1	73
20240625 1753	0.3	45
20240625 1803	0.1	206
20240625 1813	0.1	83
20240625 1823	0.9	112
20240625 1833	0.1	63
20240625 1843	0.1	69
20240625 1853	0.1	70
20240625 1903	0.2	114
20240625 1913	0.8	114
20240625 1923	0.1	100
20240625 1933	0.1	97
20240625 1943	0.1	167
20240625 1953	0.1	142
20240625 2003	0.1	114
20240625 2013	0.7	134
20240625 2023	0.1	135
20240625 2033	0.1	71
20240625 2043	0.1	63
20240625 2053	2.4	247
20240625 2103	1.1	25
20240625 2113	1.6	52
20240625 2123	0.2	77
20240625 2133	0.1	64
20240625 2143	0.1	165
20240625 2153	0.1	146
20240625 2203	0.1	71
20240625 2213	0.1	66
20240625 2223	0.1	94
20240625 2233	0.1	260
20240625 2243	0.1	333
20240625 2253	0.1	79
20240625 2303	0.1	40
20240625 2313	0.1	249
20240625 2323	0.1	135
20240625 2333	0.1	121
20240625 2343	0.1	42
20240625 2353	0.1	186

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240626 0003	0.7	116
20240626 0013	0.2	104
20240626 0023	0.1	92
20240626 0033	0.1	65
20240626 0043	0.1	92
20240626 0053	0.1	92
20240626 0103	0.1	99
20240626 0113	0.1	154
20240626 0123	0.1	124
20240626 0133	0.1	55
20240626 0143	0.1	90
20240626 0153	0.1	57
20240626 0203	0.1	43
20240626 0213	0.1	287
20240626 0223	0.1	133
20240626 0233	0.1	58
20240626 0243	0.1	30
20240626 0253	0.1	307
20240626 0303	0.1	79
20240626 0313	0.1	58
20240626 0323	0.1	60
20240626 0333	0.1	60
20240626 0343	0.1	56
20240626 0353	0.1	87
20240626 0403	0.1	223
20240626 0413	0.1	56
20240626 0423	0.1	55
20240626 0433	0.1	56
20240626 0443	0.1	56
20240626 0453	0.1	55
20240626 0503	0.1	178
20240626 0513	0.1	320
20240626 0523	0.1	64
20240626 0533	0.1	66
20240626 0543	0.1	66
20240626 0553	0.1	348
20240626 0603	0.1	348
20240626 0613	0.1	148
20240626 0623	0.1	105
20240626 0633	0.1	118
20240626 0643	0.1	86
20240626 0653	0.6	119
20240626 0703	0.1	181
20240626 0713	1.1	348
20240626 0723	0.1	116
20240626 0733	0.1	51
20240626 0743	0.1	62
20240626 0753	0.1	354
20240626 0803	0.1	281
20240626 0813	0.8	42
20240626 0823	0.1	36
20240626 0833	0.5	26
20240626 0843	0.1	80
20240626 0853	0.5	5
20240626 0903	0.6	89
20240626 0913	0.1	240
20240626 0923	0.1	61
20240626 0933	1.2	95
20240626 0943	0.7	22
20240626 0953	0.9	341
20240626 1003	0.1	213
20240626 1013	0.6	348
20240626 1023	0.5	145
20240626 1033	0.8	73
20240626 1043	0.1	73
20240626 1053	0.1	109
20240626 1103	0.1	52
20240626 1113	0.2	77
20240626 1123	1.7	350
20240626 1133	2.4	351
20240626 1143	1.8	164
20240626 1153	1.2	58

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240626 1203	2.7	19
20240626 1213	0.1	230
20240626 1223	0.7	163
20240626 1233	0.7	61
20240626 1243	0.6	4
20240626 1253	5	90
20240626 1303	1.5	6
20240626 1313	4	75
20240626 1323	0.4	327
20240626 1333	0.1	34
20240626 1343	1.6	26
20240626 1353	0.1	35
20240626 1403	1.5	31
20240626 1413	0.7	18
20240626 1423	0.2	289
20240626 1433	1.8	349
20240626 1443	2.2	322
20240626 1453	1.7	11
20240626 1503	0.8	242
20240626 1513	1.4	306
20240626 1523	0.3	341
20240626 1533	0.9	282
20240626 1543	0.7	269
20240626 1553	0.2	3
20240626 1603	0.8	89
20240626 1613	0.2	199
20240626 1623	2.3	23
20240626 1633	0.1	341
20240626 1643	0.4	343
20240626 1653	2	351
20240626 1703	2.5	335
20240626 1713	0.1	303
20240626 1723	0.2	58
20240626 1733	0.2	68
20240626 1743	0.4	37
20240626 1753	0.7	40
20240626 1803	0.2	121
20240626 1813	0.1	44
20240626 1823	1	131
20240626 1833	0.1	328
20240626 1843	0.1	291
20240626 1853	0.1	124
20240626 1903	0.1	22
20240626 1913	1.4	130
20240626 1923	0.3	343
20240626 1933	0.1	117
20240626 1943	0.1	25
20240626 1953	0.1	51
20240626 2003	0.2	108
20240626 2013	1.5	119
20240626 2023	0.1	288
20240626 2033	0.1	180
20240626 2043	0.1	181
20240626 2053	0.1	151
20240626 2103	0.1	74
20240626 2113	0.1	83
20240626 2123	0.1	149
20240626 2133	0.2	151
20240626 2143	0.1	270
20240626 2153	0.1	260
20240626 2203	0.1	156
20240626 2213	0.1	327
20240626 2223	0.1	125
20240626 2233	0.1	145
20240626 2243	0.1	83
20240626 2253	0.1	81
20240626 2303	0.1	57
20240626 2313	0.1	57
20240626 2323	0.1	53
20240626 2333	0.1	65
20240626 2343	0.1	114
20240626 2353	0.1	16

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240627 0003	0.1	141
20240627 0013	0.1	70
20240627 0023	0.1	284
20240627 0033	0.1	70
20240627 0043	0.1	310
20240627 0053	0.1	99
20240627 0103	0.1	105
20240627 0113	0.1	32
20240627 0123	0.1	49
20240627 0133	0.1	340
20240627 0143	0.1	79
20240627 0153	0.1	79
20240627 0203	0.1	73
20240627 0213	0.1	86
20240627 0223	0.1	110
20240627 0233	0.1	86
20240627 0243	0.1	138
20240627 0253	0.1	66
20240627 0303	0.1	67
20240627 0313	0.1	84
20240627 0323	0.1	40
20240627 0333	0.1	132
20240627 0343	0.1	172
20240627 0353	0.1	177
20240627 0403	0.1	140
20240627 0413	0.1	122
20240627 0423	0.1	114
20240627 0433	0.2	137
20240627 0443	0.1	114
20240627 0453	0.8	129
20240627 0503	0.1	80
20240627 0513	0.1	89
20240627 0523	0.4	313
20240627 0533	0.1	123
20240627 0543	1.2	48
20240627 0553	0.1	147
20240627 0603	1.9	28
20240627 0613	0.1	176
20240627 0623	0.1	54
20240627 0633	0.3	144
20240627 0643	0.1	138
20240627 0653	0.1	347
20240627 0703	1.3	113
20240627 0713	0.1	54
20240627 0723	0.5	310
20240627 0733	0.1	128
20240627 0743	0.1	172
20240627 0753	0.1	7
20240627 0803	0.2	273
20240627 0813	0.1	343
20240627 0823	0.1	111
20240627 0833	0.4	353
20240627 0843	0.1	196
20240627 0853	0.9	324
20240627 0903	1.2	59
20240627 0913	0.1	271
20240627 0923	0.5	268
20240627 0933	0.6	337
20240627 0943	0.3	72
20240627 0953	1.2	14
20240627 1003	0.4	23
20240627 1013	1	53
20240627 1023	0.1	120
20240627 1033	0.5	351
20240627 1043	0.6	58
20240627 1053	2.1	13
20240627 1103	0.3	88
20240627 1113	0.2	166
20240627 1123	2.9	313
20240627 1133	1	20
20240627 1143	0.1	139
20240627 1153	0.1	354

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240627 1203	0.1	199
20240627 1213	1.2	346
20240627 1223	0.1	222
20240627 1233	0.1	34
20240627 1243	1.4	343
20240627 1253	0.2	348
20240627 1303	2.6	40
20240627 1313	2.3	25
20240627 1323	0.1	3
20240627 1333	0.8	57
20240627 1343	0.1	244
20240627 1353	3.2	20
20240627 1403	2.3	49
20240627 1413	0.3	162
20240627 1423	1	18
20240627 1433	0.5	336
20240627 1443	0.1	352
20240627 1453	2.6	28
20240627 1503	0.6	74
20240627 1513	0.1	29
20240627 1523	0.2	297
20240627 1533	0.3	141
20240627 1543	1.7	170
20240627 1553	1.4	110
20240627 1603	0.6	178
20240627 1613	0.1	102
20240627 1623	0.3	38
20240627 1633	0.9	141
20240627 1643	2.4	181
20240627 1653	0.1	208
20240627 1703	0.7	50
20240627 1713	0.1	58
20240627 1723	1.2	63
20240627 1733	0.5	38
20240627 1743	0.8	34
20240627 1753	1.5	21
20240627 1803	1.4	29
20240627 1813	2.2	48
20240627 1823	0.7	14
20240627 1833	0.1	36
20240627 1843	0.1	341
20240627 1853	0.1	333
20240627 1903	0.1	197
20240627 1913	0.1	168
20240627 1923	0.9	122
20240627 1933	0.1	173
20240627 1943	0.2	130
20240627 1953	1.9	348
20240627 2003	0.1	19
20240627 2013	0.2	347
20240627 2023	0.1	346
20240627 2033	0.1	309
20240627 2043	0.1	328
20240627 2053	2.8	30
20240627 2103	0.1	155
20240627 2113	0.9	54
20240627 2123	0.5	318
20240627 2133	0.2	84
20240627 2143	0.1	206
20240627 2153	0.1	75
20240627 2203	0.1	100
20240627 2213	0.1	21
20240627 2223	0.5	60
20240627 2233	0.1	14
20240627 2243	0.1	348
20240627 2253	2.1	135
20240627 2303	0.1	98
20240627 2313	0.1	137
20240627 2323	0.2	117
20240627 2333	0.2	22
20240627 2343	1.2	319
20240627 2353	0.1	276

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240628 0003	0.1	91
20240628 0013	0.3	148
20240628 0023	0.1	202
20240628 0033	0.1	44
20240628 0043	0.1	178
20240628 0053	0.1	88
20240628 0103	0.1	36
20240628 0113	0.9	127
20240628 0123	0.1	158
20240628 0133	0.1	280
20240628 0143	0.1	92
20240628 0153	0.1	339
20240628 0203	0.1	41
20240628 0213	0.1	68
20240628 0223	0.1	68
20240628 0233	0.1	96
20240628 0243	0.1	348
20240628 0253	0.1	260
20240628 0303	0.1	54
20240628 0313	0.1	25
20240628 0323	0.1	60
20240628 0333	0.1	22
20240628 0343	0.1	77
20240628 0353	0.1	34
20240628 0403	0.1	47
20240628 0413	0.1	51
20240628 0423	0.1	112
20240628 0433	0.1	50
20240628 0443	0.1	86
20240628 0453	0.1	102
20240628 0503	0.1	63
20240628 0513	0.1	52
20240628 0523	0.1	315
20240628 0533	0.1	76
20240628 0543	0.1	64
20240628 0553	0.1	60
20240628 0603	0.1	137
20240628 0613	0.1	91
20240628 0623	0.1	91
20240628 0633	0.1	86
20240628 0643	0.1	91
20240628 0653	0.1	136
20240628 0703	0.1	53
20240628 0713	0.1	308
20240628 0723	0.1	245
20240628 0733	0.1	131
20240628 0743	0.1	220
20240628 0753	0.1	339
20240628 0803	0.1	292
20240628 0813	0.5	150
20240628 0823	0.1	76
20240628 0833	0.8	166
20240628 0843	0.2	348
20240628 0853	0.6	322
20240628 0903	2.3	135
20240628 0913	1.1	338
20240628 0923	0.1	44
20240628 0933	0.4	346
20240628 0943	0.1	338
20240628 0953	0.3	143
20240628 1003	0.1	136
20240628 1013	0.1	129
20240628 1023	0.1	276
20240628 1033	2.6	95
20240628 1043	0.5	171
20240628 1053	1.3	80
20240628 1103	0.4	32
20240628 1113	2.9	141
20240628 1123	0.3	141
20240628 1133	0.1	240
20240628 1143	0.1	349
20240628 1153	0.3	45

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240628 1203	0.1	143
20240628 1213	0.6	225
20240628 1223	1.7	153
20240628 1233	0.1	40
20240628 1243	0.1	44
20240628 1253	0.1	199
20240628 1303	1.2	194
20240628 1313	0.1	258
20240628 1323	0.1	160
20240628 1333	0.2	255
20240628 1343	0.1	157
20240628 1353	0.2	147
20240628 1403	0.1	190
20240628 1413	0.1	176
20240628 1423	0.3	254
20240628 1433	0.1	224
20240628 1443	1	163
20240628 1453	0.8	143
20240628 1503	0.9	89
20240628 1513	0.5	121
20240628 1523	0.1	303
20240628 1533	0.1	222
20240628 1543	0.1	274
20240628 1553	0.1	219
20240628 1603	0.1	306
20240628 1613	0.1	156
20240628 1623	0.1	73
20240628 1633	0.4	107
20240628 1643	2.3	157
20240628 1653	0.2	168
20240628 1703	0.1	221
20240628 1713	0.3	136
20240628 1723	0.1	125
20240628 1733	0.1	107
20240628 1743	0.1	276
20240628 1753	0.7	128
20240628 1803	0.1	306
20240628 1813	0.1	146
20240628 1823	0.1	118
20240628 1833	0.1	156
20240628 1843	0.1	354
20240628 1853	0.1	189
20240628 1903	0.1	80
20240628 1913	0.1	105
20240628 1923	0.1	141
20240628 1933	0.1	111
20240628 1943	0.5	116
20240628 1953	0.1	53
20240628 2003	0.5	111
20240628 2013	0.1	147
20240628 2023	1	112
20240628 2033	0.1	102
20240628 2043	0.1	116
20240628 2053	0.1	76
20240628 2103	0.1	124
20240628 2113	0.1	38
20240628 2123	0.1	302
20240628 2133	0.1	110
20240628 2143	0.2	172
20240628 2153	0.1	144
20240628 2203	0.2	163
20240628 2213	0.1	319
20240628 2223	2.4	134
20240628 2233	0.1	350
20240628 2243	0.2	95
20240628 2253	0.2	274
20240628 2303	0.1	89
20240628 2313	0.3	104
20240628 2323	0.2	121
20240628 2333	0.1	42
20240628 2343	0.1	296
20240628 2353	0.1	124

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240629 0003	0.1	307
20240629 0013	0.1	79
20240629 0023	0.1	290
20240629 0033	0.1	307
20240629 0043	0.1	65
20240629 0053	0.1	65
20240629 0103	0.1	80
20240629 0113	0.1	151
20240629 0123	0.1	92
20240629 0133	0.1	76
20240629 0143	0.1	58
20240629 0153	0.1	21
20240629 0203	0.1	72
20240629 0213	0.1	91
20240629 0223	0.1	67
20240629 0233	0.1	109
20240629 0243	0.1	75
20240629 0253	0.1	108
20240629 0303	0.1	61
20240629 0313	0.1	69
20240629 0323	0.1	82
20240629 0333	0.1	113
20240629 0343	0.1	106
20240629 0353	0.1	50
20240629 0403	0.1	147
20240629 0413	0.1	130
20240629 0423	0.1	98
20240629 0433	0.1	225
20240629 0443	0.1	177
20240629 0453	0.1	53
20240629 0503	0.6	45
20240629 0513	0.1	33
20240629 0523	0.1	42
20240629 0533	0.1	38
20240629 0543	0.1	207
20240629 0553	0.1	29
20240629 0603	0.1	150
20240629 0613	0.1	94
20240629 0623	0.1	61
20240629 0633	0.1	90
20240629 0643	0.1	91
20240629 0653	0.1	128
20240629 0703	0.1	13
20240629 0713	0.1	105
20240629 0723	0.1	348
20240629 0733	0.1	15
20240629 0743	0.1	145
20240629 0753	0.1	205
20240629 0803	0.1	156
20240629 0813	0.1	224
20240629 0823	0.1	152
20240629 0833	0.1	74
20240629 0843	0.1	94
20240629 0853	0.1	85
20240629 0903	0.1	329
20240629 0913	0.1	272
20240629 0923	0.2	130
20240629 0933	0.1	170
20240629 0943	0.1	127
20240629 0953	0.1	320
20240629 1003	0.1	219
20240629 1013	0.1	163
20240629 1023	0.1	179
20240629 1033	0.7	288
20240629 1043	0.1	230
20240629 1053	0.1	215
20240629 1103	0.1	338
20240629 1113	0.1	163
20240629 1123	0.1	152
20240629 1133	0.1	147
20240629 1143	0.1	188
20240629 1153	0.1	163

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240629 1203	0.1	234
20240629 1213	0.1	177
20240629 1223	0.1	145
20240629 1233	0.1	245
20240629 1243	0.1	226
20240629 1253	0.2	151
20240629 1303	0.1	263
20240629 1313	0.7	177
20240629 1323	1	253
20240629 1333	2.8	243
20240629 1343	0.5	113
20240629 1353	0.4	124
20240629 1403	1.8	186
20240629 1413	0.1	326
20240629 1423	0.1	236
20240629 1433	0.1	165
20240629 1443	0.1	159
20240629 1453	0.1	343
20240629 1503	0.1	274
20240629 1513	0.1	206
20240629 1523	0.1	158
20240629 1533	0.1	133
20240629 1543	0.1	316
20240629 1553	0.1	62
20240629 1603	0.1	23
20240629 1613	0.1	38
20240629 1623	0.1	137
20240629 1633	0.1	57
20240629 1643	0.1	169
20240629 1653	0.1	26
20240629 1703	0.1	142
20240629 1713	0.1	14
20240629 1723	0.1	134
20240629 1733	0.1	164
20240629 1743	0.1	175
20240629 1753	0.1	279
20240629 1803	0.1	140
20240629 1813	0.1	186
20240629 1823	0.1	117
20240629 1833	0.9	168
20240629 1843	0.1	198
20240629 1853	0.1	109
20240629 1903	0.1	83
20240629 1913	0.1	99
20240629 1923	0.1	50
20240629 1933	0.1	113
20240629 1943	0.1	84
20240629 1953	0.1	201
20240629 2003	0.1	4
20240629 2013	0.1	294
20240629 2023	0.1	189
20240629 2033	0.1	132
20240629 2043	0.1	212
20240629 2053	0.1	262
20240629 2103	0.1	68
20240629 2113	0.1	44
20240629 2123	0.1	348
20240629 2133	0.1	9
20240629 2143	0.1	73
20240629 2153	0.1	148
20240629 2203	0.1	19
20240629 2213	0.3	188
20240629 2223	0.1	156
20240629 2233	0.1	112
20240629 2243	0.1	108
20240629 2253	0.1	346
20240629 2303	0.1	62
20240629 2313	0.1	59
20240629 2323	0.1	25
20240629 2333	0.1	45
20240629 2343	0.1	45
20240629 2353	0.1	66

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240630 0003	0.1	75
20240630 0013	0.1	57
20240630 0023	0.1	95
20240630 0033	0.1	118
20240630 0043	0.1	243
20240630 0053	0.1	146
20240630 0103	0.1	92
20240630 0113	0.1	145
20240630 0123	0.1	119
20240630 0133	0.1	143
20240630 0143	0.1	119
20240630 0153	0.1	250
20240630 0203	0.1	209
20240630 0213	0.1	217
20240630 0223	0.1	326
20240630 0233	0.1	34
20240630 0243	0.1	112
20240630 0253	0.1	44
20240630 0303	0.1	112
20240630 0313	0.1	309
20240630 0323	0.1	56
20240630 0333	0.1	56
20240630 0343	0.1	289
20240630 0353	0.1	74
20240630 0403	0.1	60
20240630 0413	0.1	50
20240630 0423	0.1	47
20240630 0433	0.1	82
20240630 0443	0.1	287
20240630 0453	0.1	141
20240630 0503	0.1	87
20240630 0513	0.1	256
20240630 0523	0.1	20
20240630 0533	0.1	51
20240630 0543	0.1	59
20240630 0553	0.1	336
20240630 0603	0.1	43
20240630 0613	0.1	35
20240630 0623	0.1	48
20240630 0633	0.1	43
20240630 0643	0.1	30
20240630 0653	0.1	304
20240630 0703	0.1	57
20240630 0713	0.1	49
20240630 0723	0.1	277
20240630 0733	0.1	11
20240630 0743	0.1	343
20240630 0753	0.1	315
20240630 0803	0.1	132
20240630 0813	0.1	253
20240630 0823	0.1	159
20240630 0833	0.1	174
20240630 0843	0.1	125
20240630 0853	0.1	125
20240630 0903	0.3	150
20240630 0913	0.1	227
20240630 0923	0.1	237
20240630 0933	0.1	246
20240630 0943	0.1	244
20240630 0953	0.1	181
20240630 1003	0.1	244
20240630 1013	0.1	239
20240630 1023	0.1	96
20240630 1033	0.1	340
20240630 1043	0.1	250
20240630 1053	0.1	35
20240630 1103	0.1	225
20240630 1113	0.1	77
20240630 1123	0.4	242
20240630 1133	0.2	227
20240630 1143	0.1	245
20240630 1153	0.1	209

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240630 1203	0.1	242
20240630 1213	0.1	293
20240630 1223	0.1	211
20240630 1233	0.2	129
20240630 1243	0.2	226
20240630 1253	0.5	245
20240630 1303	0.1	132
20240630 1313	0.9	263
20240630 1323	0.1	112
20240630 1333	0.1	246
20240630 1343	0.1	295
20240630 1353	0.1	212
20240630 1403	0.2	251
20240630 1413	0.1	222
20240630 1423	0.2	96
20240630 1433	0.4	107
20240630 1443	0.1	48
20240630 1453	0.1	153
20240630 1503	0.9	312
20240630 1513	0.1	165
20240630 1523	0.6	250
20240630 1533	0.1	229
20240630 1543	0.1	128
20240630 1553	0.1	238
20240630 1603	2.1	152
20240630 1613	0.1	276
20240630 1623	0.1	252
20240630 1633	0.1	194
20240630 1643	0.1	267
20240630 1653	0.1	252
20240630 1703	0.1	135
20240630 1713	0.1	204
20240630 1723	0.1	212
20240630 1733	0.1	146
20240630 1743	0.1	249
20240630 1753	0.1	211
20240630 1803	0.1	176
20240630 1813	0.1	83
20240630 1823	0.1	100
20240630 1833	0.1	196
20240630 1843	0.1	245
20240630 1853	0.1	144
20240630 1903	0.1	68
20240630 1913	0.1	96
20240630 1923	0.1	81
20240630 1933	0.1	197
20240630 1943	0.1	46
20240630 1953	0.1	10
20240630 2003	0.1	147
20240630 2013	0.1	45
20240630 2023	0.1	178
20240630 2033	0.1	326
20240630 2043	0.1	142
20240630 2053	0.1	36
20240630 2103	0.1	135
20240630 2113	0.1	60
20240630 2123	0.1	89
20240630 2133	0.1	85
20240630 2143	0.1	76
20240630 2153	0.1	284
20240630 2203	0.1	45
20240630 2213	0.1	134
20240630 2223	0.1	353
20240630 2233	0.1	103
20240630 2243	0.1	278
20240630 2253	0.1	200
20240630 2303	0.1	55
20240630 2313	0.1	46
20240630 2323	0.1	60
20240630 2333	0.1	58
20240630 2343	0.1	46
20240630 2353	0.1	58

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 '000L)	(in tonne)	(in tonne)
Dec-22	84.77	0	0	0	0	0	0	0	0	11.49	0	7.53	65.75
Jan-23	24.51	0	0	0	0	0	0	0	0	0	0	24.51	0
Feb-23	506.45	0	0	0	0	0	0	0	0	3.16	0	5.85	497.44
Mar-23	9,581.15	0	0	9,187	0	0	0	0	0	3.69	0	6.96	383.5
Apr-23	18,532.07	0	0	18,466	0	0	0	0	0	1.97	0	5.81	58.29
May-23	28,889.61	0	0	28,473	0	0	0	0	0	0	0	7.45	409.16
Jun-23	11,574.89	0	0	11,211	0	0	0	0	0	2.38	0	14.69	346.82
Jul-23	50,595.49	0	0	50,307	0	0	0	0	0	0	0	25.54	262.95
Aug-23	63,178.52	0	0	63,076	0	0	0	0	0	0	0	30.77	71.75
Sep-23	42,709.75	0	0	42,676	0	0	0	0	0	0	0	33.38	0
Oct-23	55,551.68	0	0	55,405	0	0	0	0	0	2.56	0	28.05	116.07
Nov-23	76,127.24	0	0	73,352	0	2629.37	0	0	0	0	0	35.13	110.74
Dec-23	63,389.25	0	0	57,681	0	5296.17	0	0	0	2.48	0	34.26	375.34
Jan-24	125,840.50	0	0	125,010	0	0	0	0	0	5.59	0	71.13	753.78
Feb-24	108,176.42	0	0	106,218	0	1771.16	0	0	0	0	0	53.76	133.17
Mar-24	70,683.04	0	0	68,989	0	1324.13	0	0	0	3.26	0	108.43	258.01
Apr-24	77,385.12	0	0	75,092	0	1883.87	0	0	0	0	0	112.54	296.71
May-24	45,429.31	0	1396.88	42,809	0	1022.68	0	0	0	0	0	90.72	110.1
Jun-24	24,576.63	0	4716.43	19,274	0	532.8	0	0	0	2.77	0	41.98	8.58
Total	725,445.34	0.00	0.00	710,052	0.00	11,020.83	0.00	0.00	0.00	36.58	0.00	493.25	3,842.77

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. 27 May 2024 Observation 1 – Sprinkling truck was provided for dust suppression at Portion E3-1A.
2. 27 May 2024 Observation 2 – NRMM label was affixed on the generator at Portion B2-E1
3. 27 May 2024 Observation 3 – The enclosed rubbish bin was provided at Portion E4 for general waste collection.
4. 27 May 2024 Observation 4 – The chemical container was removed at Portion B2-E1.

Observation(s):




Nil

Reminder(s)

1. The Contractor has been reminded that the precautions should be taken in accordance with Appendix A2 of ProPECC PN 1/94, especially the wet-sep operation.

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

Nil

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Joan Lo	/	Matt Choy/ Kristy Wong / Kyrie Wong	Sylvia Ho/ Jackie Tam/ Marus Tam
Date:	03 June 2024	03 June 2024	03 June 2024	03 June 2024

Follow up action for previous Site Inspection:

Nil

Observation(s):




1. The stockpiling of dusty materials without covering by impervious sheets properly is observed at SBA.
2. The chemical containers without chemical drip tray are observed at Portion A.

Reminder(s)

1. The Contractor has been reminded that the precautions should be taken in accordance with Appendix A2 of ProPECC PN 1/94, especially the wet-sep operation.

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

1. The Contractor has been advised that the stockpiling of dusty materials should be covered properly and entirely by impervious sheeting to prevent dust dispersion at SBA.
2. The Contractor has been reminded that the chemical containers should be placed and stored in the chemical drip tray to prevent chemical leakage and land contamination at Portion A.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Joan Lo	/	Matt Choy/Kristy Wong/ Kyrie Wong	Sylvia Ho/ Jackie Tam/ Marus Tam
Date:	11 June 2024	/	11 June 2024	11 June 2024

Follow up action for previous Site Inspection:

1. 11 June 2024 Observation 1 – The stockpiling of dusty materials was covered by impervious sheet properly at SBA.
2. 11 June 2024 Observation 2 – The chemical drip tray was provided for chemical storage at Portion A.

Observation(s):

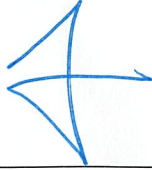



1. The chemical container without chemical drip tray is observed at Portion A.

Reminder(s)

1. The Contractor has been reminded that the precautions should be taken in accordance with Appendix A2 of ProPECC PN 1/94.
2. The Contractor has been reminded that the efficient silt fence should be maintained regularly at SBA.

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

1. The Contractor has been reminded to provide chemical drip tray for placing chemical container to prevent chemical leakage and land contamination.

	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/ Kyrie Wong	Sylvia Ho/ Jackie Tam/ Marus Tam
Date:	17 June 2024	17 June 2024	17 June 2024	17 June 2024

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




1. A damaged chemical container and chemical containers without drip tray are found at Portion A.

Reminder(s)

1. The Contractor has been reminded that the precautions should be taken in accordance with Appendix A2 of ProPECC PN 1/94.
2. The Contractor has been reminded that the frequency of water spraying should be increased under the sunny weather.
3. The Contractor has been reminded that the inspection and maintenance for slope protective layer should be enhanced to ensure the effectiveness of the slope surface protective layers.

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

1. The Contractor has been advised that the chemical containers should be placed on the drip tray and the damaged chemical containers should be handled properly to avoid the potential contamination risk in the project site.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Jason Man	/	Matt Choy/Kristy Wong/ Kyrie Wong	Sylvia Ho/ Jackie Tam/ Marus Tam
Date:	24 June 2024		24 June 2024	24 June 2024

Appendix L Environmental Mitigation Implementation Schedule (EMIS)

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

EIA Ref.	EM&A Log Ref.	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Air Quality								
S3.8.1	S3.1.8	B7 – B36	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation.	Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria.	Contractor	Entire NENT Landfill Extension site	To control the dust impact to within the criteria of EIA Report (Register No. AEIAR-111/2007)	✓
		B4, B15 & B18	<ul style="list-style-type: none"> Dust emission from construction vehicle movement is confined within the worksites area. 					✓
		B11 – B12	<ul style="list-style-type: none"> 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
		-	<ul style="list-style-type: none"> 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 office 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> <ul style="list-style-type: none"> (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) ✓
		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) ✓
		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.					(b) ✓
		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.					(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.

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

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Construction Runoff (Cont'd)								
S5.8.1	S5.2.1	D5	<ul style="list-style-type: none"> (a) The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows, and (b) all traffic areas and access roads protected by coarse stone ballast. An additional advantage accruing from the use of crushed stone is the positive traction gained during prolonged periods of inclement weather and the reduction of surface sheet flows. 	Control construction runoff and erosion from site surface, drainage channel, stockpiles, wheel washing facilities, etc to minimize water quality during construction stage	Contractor	Entire Construction site	ProPECC PN 1/94 DSD Technical Circular TC01/2017 Water Pollution Control Ordinance	(a) ✓ (b) ✓
		D6	<ul style="list-style-type: none"> (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	<ul style="list-style-type: none"> (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	<ul style="list-style-type: none"> Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50 m³ should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. 					✓
		D9	<ul style="list-style-type: none"> (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	<ul style="list-style-type: none"> Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes. 					✓
		D11	<ul style="list-style-type: none"> (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 silty water to public roads and drains. 					(a) ✓ (b) ✓ (c) ✓ (d) ✓ (e) ✓
		D12	<ul style="list-style-type: none"> (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	<ul style="list-style-type: none"> Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts. Requirements for solid waste management are detailed in Section 6 of this Report. 					✓
		D14	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> To prevent pollution risks arising from works area (waste reception area) and haul roads, intercepting bund or barrier along the roadside should be constructed. 					✓
		D19	<p><u>Sewage Effluent from Workforce</u></p> <ul style="list-style-type: none"> (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) ✓
		D20	<ul style="list-style-type: none"> 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. 					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.

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

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Construction Runoff (Cont'd)								
S5.8.1	S5.2.1	D19	<u>Sewage Effluent from Workforce</u> <ul style="list-style-type: none"> (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. 	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	(a) ✓ (b) ✓
		D20	<ul style="list-style-type: none"> 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. 					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> <ul style="list-style-type: none"> (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> <p>a. Preserve Natural Vegetation This Best Management Practices will involve preserving natural vegetation to the greatest extent possible during the construction process. and after construction where appropriate. Maintaining natural vegetation is the most effective and inexpensive form of erosion prevention control.</p>	Erosion control	Contractor	Drainage system	ProPECC PN 1/94 Water Pollution Control Ordinance	✓
		-	<p>b. Provision of Buffer Zone A buffer zone consists of an undisturbed area or strip of natural vegetation or an established suitable planting adjacent to a disturbed area that reduces erosion and runoff. The rooted vegetation holds soils acts as a wind break and filters runoff that may leave the site.</p>					✓
		-	<p>c. Seeding (Temporary/Permanent) A well-established vegetative cover is one of the most effective methods of reducing erosion. Vegetation should be established on construction sites as the slopes are finished, rather than waiting until all the grading is complete. Besides, Hydroseeding will be applied on the surface of stockpiled soil and on temporary soil covers for inactive tipping areas to prevent soil erosion during rainy season.</p>					✓
		-	<p>d. Ground Cover Ground Cover is a protective layer of straw or other suitable material applied to the soil surface. Straw mulch and/or hydromulch are also used in conjunction with seeding of critical areas for the establishment of temporary or permanent vegetation. Ground cover provides immediate temporary protection from erosion. Mulch also enhances plant establishment by conserving moisture, holding fertilizer, seed, and topsoil in place, and moderating soil temperatures.</p>					To be implemented
		-	<p>e. Hydraulic Application Hydraulic application is a mechanical method of applying erosion control materials to bare soil in order to establish erosion-resistant vegetation on disturbed areas and critical slopes. By using hydraulic equipment, soil amendments, mulch, tackifying agents, Bonded Fiber Matrix (BFM) and liquid co-polymers can be uniformly broadcast, as homogenous slurry, onto the soil. These erosion and dust control materials can often be applied in one operation.</p>					To be implemented
		-	<p>f. Sod Establishes permanent turf for immediate erosion protection and stabilizes drainageways.</p>					✓
		-	<p>g. Matting There are numerous erosion control products available that can be described in various ways, such as matting, blankets, fabric and nets. These products are referred as matting. A wide range of materials and combination of materials are used to produce matting including, but not limited to: straw, jute, wood fiber, coir (coconut fiber), plastic netting, and Bonded Fiber Matrix. The selection of matting materials for a site can make a significant difference in the effectiveness of the Best Management Practices.</p>					✓

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.

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

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Erosion Control Measures (Cont'd)								
S5.8.2	S5.2.2		h. Plastic Sheetting Plastic Sheetting 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	<ul style="list-style-type: none"> (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	<ul style="list-style-type: none"> (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) ✓					
	-	<ul style="list-style-type: none"> 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					
	-	<ul style="list-style-type: none"> 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> <ul style="list-style-type: none"> 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	✓
		-	<ul style="list-style-type: none"> 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. 					✓
		-	<ul style="list-style-type: none"> Appropriate waste management should be implemented in accordance with the ETWB TC(W) No. 19/2005. 					✓
		E4	<ul style="list-style-type: none"> (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	<ul style="list-style-type: none"> Careful design, planning and good site management to minimise over-ordering and waste materials such as concrete, mortars and cement grouts. (a)(b) The design of formwork should maximise the use of standard wooden panels so that high reuse levels can be achieved. (c) Alternatives such as steel formwork or plastic fencing should be considered to increase the potential for reuse. 					(a) ✓ (b) ✓ (c) ✓
		E6	<ul style="list-style-type: none"> (a) The Contractor should recycle as much as possible the C&D waste on-site through proper waste segregation on-site. (b) Concrete and masonry should be used as general fill and steel reinforcement bars can be used by scrap steel mills. (c) Proper areas should be designated for waste segregation and storage wherever site conditions permit. (d) Maximise the use of reusable steel formwork to reduce the amount of C&D material. 					(a) ✓ (b) ✓ (c) ✓ (d) ✓

Remarks:

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

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Waste Management (Cont'd)								
S6	WM1	E7	<ul style="list-style-type: none"> (a) Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement. On-site sorting and segregation facility of all type of wastes is considered as one of the best practice in waste management and hence, should be implemented in all projects generating construction waste. (b) The sorted public fill and C&D waste should be properly reused. 	Good site practice to minimise C&D waste generation and reuse/recycle all C&D on-site as far as possible	Contractor	Entire construction site	Waste Disposal Ordinance ETWB TC(W) No. 19/2005 DEVB TC(W) No. 6/2010	(a) ✓ (b) ✓
		E8	<ul style="list-style-type: none"> (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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concepts. 					✓
		E12	<ul style="list-style-type: none"> Regular cleaning and maintenance programme systems, sumps and oil interceptors. 					✓
		E13	<ul style="list-style-type: none"> (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
			<ul style="list-style-type: none"> 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	<p><u>Chemical Waste</u></p> <ul style="list-style-type: none"> 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	✓
		-	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> (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	<ul style="list-style-type: none"> 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
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North East New Territories (NENT) Landfill Extension
Environmental Mitigation Implementation Schedule (EMIS) Construction Phase

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Waste Management (Cont'd)								
S6	WM3	E1	General Refuse • 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 be 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) F&IU (Confined Spaces) Regulations Code of Practice on Safety and Health at Work in Confined Spaces	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.					✓
	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.					✓
	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.

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

EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
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	✓
	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.				Code of Practice on Safety and Health at Work in Confined Spaces	(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	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	✓
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 provide initiation on permanent landscape and visual mitigation measures			DEVB TC(W) No. 6/2011 - Maintenance of Man-made Slopes and Emergency Repair on Stability of Land	To be implemented during operation phase
S8	LV3	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:

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- @ (Which measure) Alternative measure was made by the contractor.

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

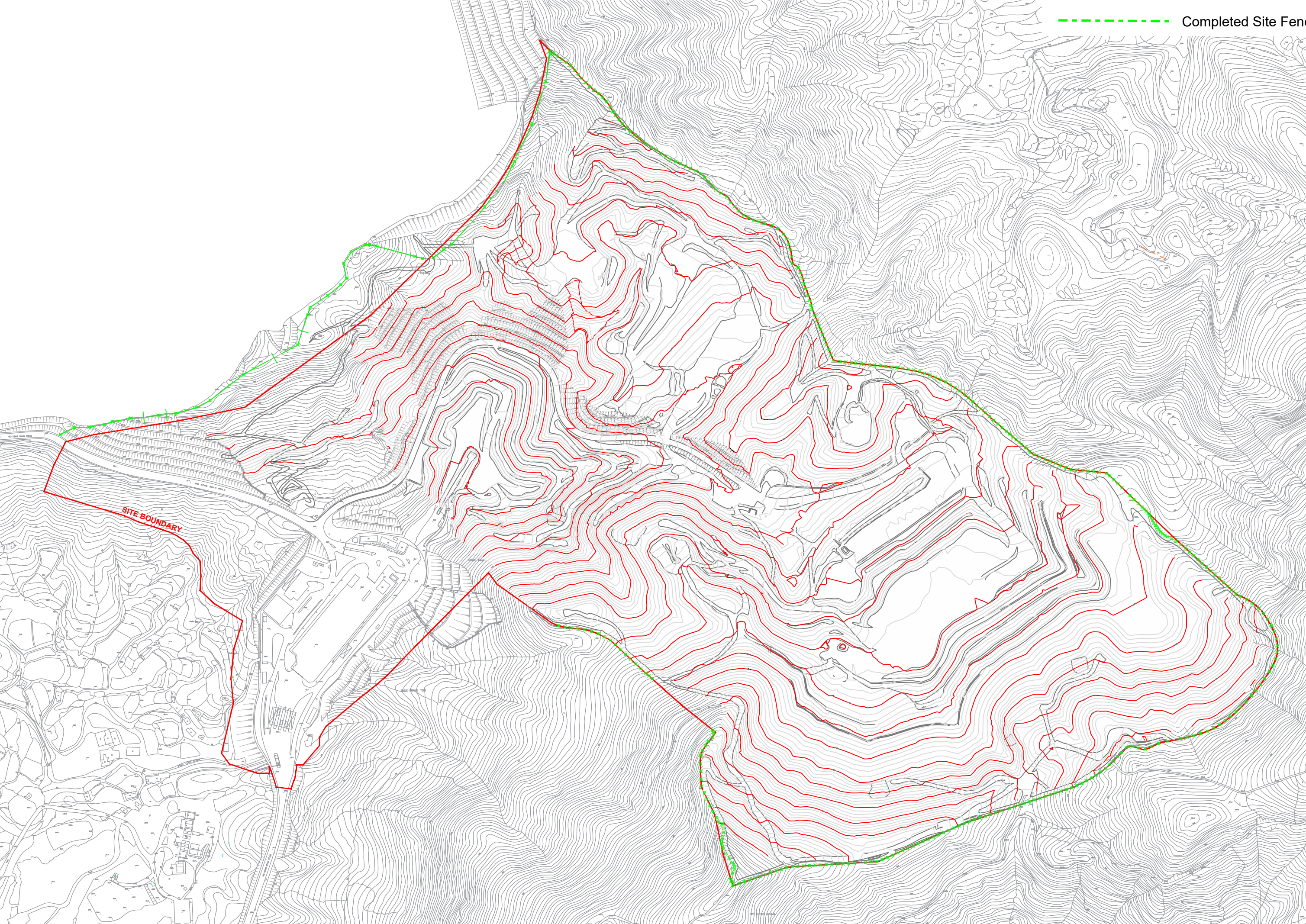
EIA Ref.	EM&A Log Ref	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement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



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 at 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
C007_20240509	9 May 2024	EPD-RNG	ET	Water Quality	13 May 2024	It was noted from EPD-RNG's email to the ET on 9 May 2024 that EPD received a memo from DSD/Mainland North regarding the incident of muddy water observed in Ping Yuen River, at the downstream of NENTX, on 23 April 2024. The related investigation results will be presented when the investigation was finished.	TBC

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	6(1* & 1#)	0	6(1* & 1#)
Waste Management	0	0	0
Total	7(2* & 1#)	0	7(2* & 1#)

Remarks:

1. * Equal to non-project related
2. # Equal to the complaint under the investigation.

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