



Our Ref: JC/MC/KW/N74978/24/tt  
Your Ref: -

13 April 2024

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

Attn: Ms. Trista Lau

Dear Sirs,

Contract No. EP/SP/77/15  
North-East New Territories Landfill Extension (NENTX)  
**NENTX – Submission of Monthly EM&A Report (No. 16) - March 2024**

In accordance with Condition 3.3 of the EP-292/2007 and FEP-02/292/2007 for the North East New Territories (NENT) Landfill Extension Project (the Project), we are now submitting 2 hard copies and one electronic copy (in CD-ROM format) of the Monthly EM&A Report (No. 16) - March 2024 for the construction stage dated 14 March 2024 together with ET's certification letter and IEC's verification for your perusal.

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

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

  
Billy Lo  
Deputy Project Manager

Encl.

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

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

Monthly Environmental  
Monitoring and Audit Report  
(No. 16) – March 2024

2024-04-11



Our Ref.: CL/91823/1162-VES  
Date: 12 April 2024

**By Email**

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

Attn.: Mr. Colin Mitchell

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

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

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

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

Dear Sir

Re: Contract No. EP/SP/77/15  
North-East New Territories Landfill Extension (NENTX)  
Monthly Environmental Monitoring and Audit Report (No.16) –  
March 2024

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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.16) – March 2024" dated 11 April 2024.

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

Yours faithfully  
MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD



Claudine Lee  
Independent Environmental Checker

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

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

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-0087

12 April 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.15) – February**  
**2024 r2**

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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.16) – March 2024 r1” dated 11 April 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.16) – March 2024 r1

cc.

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

# Document Control Record

Document prepared by:

**Aurecon Hong Kong Limited**

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

T +852 3664 6888

F +852 3664 6999



E [hongkong@aurecongroup.com](mailto:hongkong@aurecongroup.com)

W aurecongroup.com

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

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## Executive Summary

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

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

This 16<sup>th</sup> Monthly EM&A Report presents the EM&A works conducted from 1 to 31 March 2024 in accordance with the EM&A Manual.

### Summary of Construction Works undertaken during Report Period

The major construction works undertaken during the reporting period include:

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

### Environmental Monitoring and Audit Progress

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

Items	Times	Date
- Air Quality Monitoring during normal weekdays at each monitoring station	6 times	4, 8, 14, 18, 22 & 28 March 2024
- Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	4, 14, 18 & 28 March 2024
- Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	14 March 2024
- Landfill Gas Monitoring during normal weekdays for Construction Works	24 times	1 to 2, 4 to 9, 11 to 16, 18 to 23, 25 to 28 March 2024
- Joint Environmental Site Inspection	4 times	4, 11, 18 & 25 March 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"> <li>i. Site formation and preparation;</li> <li>ii. Installation of liner system;</li> <li>iii. Installation of leachate collection, treatment and disposal facilities;</li> <li>iv. Installation of gas collection, utilization and management facilities;</li> <li>v. Utilities provisions and drainage diversion;</li> <li>vi. Landfilling operation;</li> <li>vii. Restoration and aftercare in subsequent stages; and</li> <li>viii. Measures to mitigate environmental impacts as well as environmental monitoring and auditing to be implemented.</li> </ol>

## **1.3 Purpose of this Report**

- 1.3.1 This is the 16<sup>th</sup> Monthly EM&A Report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 01 to 31 March 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
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	6 times	4, 8, 14, 18, 22 & 28 March 2024
- Construction Noise Monitoring during normal weekdays at each monitoring station	4 times	4, 14, 18 & 28 March 2024
- Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	14 March 2024
- Landfill Gas Monitoring during normal weekdays for Construction Works	24 times	1 to 2, 4 to 9, 11 to 16, 18 to 23, 25 to 28 March 2024
- Joint Environmental Site Inspection	4 times	4, 11, 18 & 25 March 2024

### Air Quality

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

### Noise

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

24 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 18 March 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)	27 Apr 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
Mar 2024	32 (22 – 60)	46 (31 – 63)	56 (48 – 71)
<b>Action Level</b>	<b>&gt;285</b>	<b>&gt;279</b>	<b>&gt;285</b>
<b>Limit Level</b>	<b>&gt;500</b>		

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

Month	Average 24-hr TSP Concentration, µg/m <sup>3</sup> (Range)		
	Dust Monitoring Station		
	AM1	AM2	AM3
Mar 2024	91 (66 – 117)	82 (60 – 104)	94 (76 – 125)
<b>Action Level</b>	<b>&gt;164</b>	<b>&gt;152</b>	<b>&gt;163</b>
<b>Limit Level</b>	<b>&gt;260</b>		

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

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

## 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 <sub>Aeq</sub> (30mins) average of 6 consecutive L <sub>eq</sub> (5min); L10 (5min) & L90 (5min)	Once a week during normal construction working hour (0700-1900 Monday to Saturday)

### 4.3 Monitoring Equipment

- 4.3.1 Integrating Sound Level Meters (SLMs) was used for noise impact monitoring. The SLM complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications shall be used for carrying out noise monitoring. The accuracy of the SLM was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements shall be accepted as valid only if the calibration level from prior to and after the noise measurement agrees to within 1.0dB.
- 4.3.2 A portable wind speed meter was used for measuring wind speeds in m/s.
- 4.3.3 **Table 4-3** summarises the equipment that have been used in the impact noise monitoring programme. The calibration certificates are shown in **Appendix E**.

**Table 4-3 Noise Monitoring Equipment**

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

### 4.4 Monitoring Methodology

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



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

#### Calibration & Maintenance

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

### 4.5 Monitoring Results

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

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

Month	Average Leq, 30min, dB(A) (Range)	
	Noise Monitoring Station	
	NM1a	NM2a
Mar 2024	60.4 (60.0 – 60.8)	57.1 (55.2 – 58.6)
<b>Action Level</b>	<b>When one documented complaint is received</b>	
<b>Limit Level</b>	<b>&gt;75dB(A)</b>	

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

## 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 <sub>5</sub> , 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: 22K100858)	26 Mar 2024

### 5.2.4 Summary of Surface Water Quality Monitoring Procedure

#### Operational/ Analytical Procedures

5.2.4.1 In general, water samples were collected from within 500 mm of the water surface. Water was collected by a small clean open-mouthed bucket with the lip pointing upstream. Usually, water was then transferred to the sample bottles until they were filled to the top with no remaining air space before the lid was securely screwed on. For samples that were preserved with acid or alkalis prior to transport to the laboratory, the samples bottles were filled to the level specified by the analytical laboratory.

5.2.4.2 Analyses shall be carried out in accordance with methods described in ASTM or APHA - AWWA-WEF Standard.

#### Laboratory Analytical Methods

5.2.4.3 The testing of parameters presented in **Table 5-4** for all stations was conducted by ALS Technichem (HK) Pty Ltd. (HOKLAS Registration No. 066). Comprehensive quality assurance and control procedures were in place in order to ensure quality and consistency in results. The detection limits are provided in **Table 5-4**.

**Table 5-4 Surface Water Monitoring Detection Limits and Limit of Reporting**

Parameters	Detection Limit (in EM&A Manual)	Limit of Reporting	Method Reference
pH	0.1	0.1	APHA 4500 H+ B
Electrical conductivity	1 mS/cm	1 mS/cm	APHA 2510 B
Alkalinity	1 mg/L	1 mg/L	APHA 2320 B
COD	10 mg/L	5 mg/L	APHA 5220 C
BOD <sub>5</sub>	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 <sub>3</sub> 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 <sub>3</sub> I
Sulphate	5 mg/L	1 mg/L	USEPA 375.4
Sulphite	2 mg/L	2 mg/L	APHA 4500 SO <sub>3</sub> 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 14 March 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	6.6	>7.7	>7.8	7.2	>7.6	>7.7
DO in mg/L	7.6	<7.4	<4	6.5	<5	<4
Turbidity in NTU	4.4	>9.2	>9.5	78.6	>108.3	>108.9
Electrical Conductivity in $\mu\text{S}/\text{cm}$	121	---	---	615	---	---
SS in mg/L	4.5	>9.7	>11.4	83.2	>94.5	>94.7
Alkalinity in mg/L	8	---	---	62	---	---
COD in mg/L	<5			9		
BOD <sub>5</sub> in mg/L	<2			2.0		
TOC in mg/L	3			4		
Ammonia-nitrogen in mg/L	0.04			0.03		
TKN in mg/L	0.2			0.9		
Nitrate in mg/L	0.02			0.30		
Sulphate in mg/L	11			10		
Sulphite in mg/L	<2			<2		
Phosphorus in mg/L	<0.01			<0.01		
Chloride in mg/L	7			14		
Sodium in $\mu\text{g}/\text{L}$	8540			9010		
Magnesium in $\mu\text{g}/\text{L}$	520			1350		
Calcium in $\mu\text{g}/\text{L}$	3580			20000		
Potassium in $\mu\text{g}/\text{L}$	360			4020		
Iron in $\mu\text{g}/\text{L}$	680			7340		
Nickel in $\mu\text{g}/\text{L}$	<1			3		
Zinc in $\mu\text{g}/\text{L}$	<10			36		
Manganese in $\mu\text{g}/\text{L}$	89			2290		
Copper in $\mu\text{g}/\text{L}$	<1			4		
Lead in $\mu\text{g}/\text{L}$	<1			5		
Cadmium in $\mu\text{g}/\text{L}$	<0.2			<0.2		
Coliform Count in cfu/100mL	28			4200		
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"> <li>• Repeat in situ measurement to confirm findings</li> <li>• Identify source(s) of impact</li> <li>• Prepare Notification of Exceedance</li> <li>• Inform IEC and Contractor</li> <li>• Check monitoring data, all plant, equipment and Contractor's working methods</li> <li>• Repeat measurement on next day of exceedance</li> </ul>	<ul style="list-style-type: none"> <li>• Verify Notification of Exceedance</li> <li>• Check monitoring data and Contractor's working methods</li> </ul>	<ul style="list-style-type: none"> <li>• Rectify unacceptable practice</li> <li>• Amend working methods if appropriate</li> </ul>
Action level being exceeded by two or more consecutive sampling days	<ul style="list-style-type: none"> <li>• Repeat in situ measurement to confirm findings</li> <li>• Identify source(s) of impact</li> <li>• Prepare Notification of Exceedance</li> <li>• Inform IEC and Contractor</li> <li>• Check monitoring data, all plant, equipment and Contractor's working methods</li> <li>• Discuss with Contractor and IEC for remedial measures</li> <li>• Ensure mitigation measures are implemented</li> <li>• Increase the monitoring frequency to daily until no exceedance of Action level</li> <li>• Repeat measurement on next day of exceedance</li> </ul>	<ul style="list-style-type: none"> <li>• Verify Notification of Exceedance</li> <li>• Check monitoring data and Contractor's working method</li> <li>• Discuss with ET and Contractor on possible remedial actions</li> <li>• Review the proposed mitigation measures</li> <li>• Supervise the implementation of mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>• Submit proposal of additional mitigation measures to IEC of notification</li> <li>• Implement the agreed mitigation measures</li> <li>• Amend proposal if appropriate</li> </ul>

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

## 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 68,989 tonnes of C&D materials was reused at alternative disposal ground (NENT Landfill) during the reporting period. A total of 1,324.13 tonnes of C&D materials was imported fill during the reporting period. A total of 3.26 tonnes of Yard waste (collected to Y-Park) was generated during the reporting period. A total of 108.43 tonnes of general refuse and A total of 258.01 tonnes of non-recyclable yard waste was generated during the reporting period. The general refuse generated from the Project were disposed of at the NENT Landfill.
- 6.1.3 The recommended waste management mitigation measures from EIA report are listed as followed:
- Implement a trip-ticket system to ensure that the movement of C&D materials are properly documented and verified in accordance with DEVB TC(W) No. 6/2010.
  - Concrete and masonry should be used as general fill and steel reinforcement bars can be used by scrap steel mills.
  - Proper areas should be designated for waste segregation and storage wherever site conditions permit.
  - Maximise the use of reusable steel formwork to reduce the amount of C&D material.
  - Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement.
  - On-site sorting and segregation facility of all type of wastes is considered as one of the best practice in waste management and hence, should be implemented in all projects generating construction waste.
  - The sorted public fill and C&D waste should be properly reused.
  - Excavated slope, stockpiled material and bund walls should be covered by tarpaulin until used in order to prevent wind-blown dust during dry weather, and to reduce muddy runoff during wet weather.

## 7 Landfill Gas Monitoring

### 7.1 Monitoring Requirement during Construction

#### **Monitoring for Construction Works**

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

- CH<sub>4</sub>: >10% Lower Explosion Limit (LEL);
- CO<sub>2</sub>: >0.5%; and
- O<sub>2</sub>: <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 <sub>4</sub> , CO <sub>2</sub> & O <sub>2</sub>	Gas Analyser	GEM5000 (S/N: G505207)	30 Aug 2024

**Table 7-3 Landfill Gas Monitoring Detection Limits**

Parameters	Detection Limit
CH <sub>4</sub>	1% LEL
O <sub>2</sub>	0.1%
CO <sub>2</sub>	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 <sub>2</sub> )	Action Level <19% O <sub>2</sub>	Ventilate trench/void to restore O <sub>2</sub> to >19%
	Limit Level <18% O <sub>2</sub>	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore O <sub>2</sub> to >19%
Methane (CH <sub>4</sub> )	Action Level >10% LEL *	Prohibit hot works Increase ventilation to restore CH <sub>4</sub> to <10% LEL
	Limit Level >20% LEL *	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore CH <sub>4</sub> to <10% LEL
Carbon dioxide (CO <sub>2</sub> )	Action Level** >0.5%** CO <sub>2</sub>	Ventilate to restore CO <sub>2</sub> to <0.5%
	Limit Level >1.5% CO <sub>2</sub>	Stop works Evacuate personnel / prohibit entry Increase ventilation to restore CO <sub>2</sub> to <0.5%

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

\*\* This Action Level of CO<sub>2</sub> at 0.5% is set for reference only, assuming no CO<sub>2</sub> emission from a particular location.

Depending on the baseline CO<sub>2</sub> 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 <sub>4</sub> in %	LEL in %/v	CO <sub>2</sub> in %	O <sub>2</sub> in %	
		Average Monitoring Results				
Portion A +50 mpD to 70 mpD Platform	1 Mar 2024	0	0	0	20.1	
	2 Mar 2024	0	0	0	20.2	
	4 Mar 2024	0	0	0	20.2	
	5 Mar 2024	0	0	0	20.1	
	6 Mar 2024	0	0	0	20.1	
	7 Mar 2024	0	0	0	20.2	
	8 Mar 2024	0	0	0	20.1	
	9 Mar 2024	0	0	0	20.1	
	11 Mar 2024	0	0	0	20.1	
	12 Mar 2024	0	0	0	20.2	
	13 Mar 2024	0	0	0	20.1	
	14 Mar 2024	0	0	0	20.2	
	15 Mar 2024	0	0	0	20.1	
	16 Mar 2024	0	0	0	20.2	
	18 Mar 2024	0	0	0	20.2	
	19 Mar 2024	0	0	0	20.1	
	20 Mar 2024	0	0	0	20.2	
	21 Mar 2024	0	0	0	20.1	
	22 Mar 2024	0	0	0	20.1	
	23 Mar 2024	0	0	0	20.1	
	25 Mar 2024	0	0	0	20.1	
	26 Mar 2024	0	0	0	20.1	
	27 Mar 2024	0	0	0	20.1	
	28 Mar 2024	0	0	0	20.2	
	<b>Action Level</b>		>10% LEL	---	>0.5%** CO <sub>2</sub>	<19%
	<b>Limit Level</b>		>20% LEL	---	>1.5% CO <sub>2</sub>	<18%

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

\*\* This Limit Level of CO<sub>2</sub> at 0.5% is set for reference only, assuming no CO<sub>2</sub> 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 <sub>4</sub>	Exceedance Date	-	-
	Exceedance Count	0	0
CO <sub>2</sub>	Exceedance Date	-	-
	Exceedance Count	0	0
O <sub>2</sub>	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 <sup>st</sup>	24 Nov 2022
	2 <sup>nd</sup>	9 Dec 2022
	3 <sup>rd</sup>	21 Dec 2022
	4 <sup>th</sup>	13 Jan 2023
	5 <sup>th</sup>	26 Jan 2023
	6 <sup>th</sup>	8 Feb 2023
	7 <sup>th</sup>	24 Feb 2023
	8 <sup>th</sup>	20 Mar 2023
	9 <sup>th</sup>	21 Apr 2023
	10 <sup>th</sup>	12 May 2023
	11 <sup>th</sup>	16 Jun 2023
	12 <sup>th</sup>	18 Jul 2023
	13 <sup>th</sup>	11 Aug 2023
	14 <sup>th</sup>	15 Sep 2023
	15 <sup>th</sup>	13 Oct 2023
Post-translocation Monitoring	1 <sup>st</sup> (Aug 2022)	29 Aug 2022
	2 <sup>nd</sup> (Sep 2022)	28 Sep 2022
	3 <sup>rd</sup> (Oct 2022)	28 Oct 2022
	4 <sup>th</sup> (Nov 2022)	22 Nov 2022
	5 <sup>th</sup> (Dec 2022)	29 Dec 2022
	6 <sup>th</sup> (Jan 2023)	30 Jan 2023
	7 <sup>th</sup> (Feb 2023)	24 Feb 2023
	8 <sup>th</sup> (Mar 2023)	20 Mar 2023
	9 <sup>th</sup> (Apr 2023)	19 Apr 2023
	10 <sup>th</sup> (May 2023)	17 May 2023
	11 <sup>th</sup> (Jun 2023)	7 Jun 2023
	12 <sup>th</sup> (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 04, 11, 18 & 25 March 2024. A joint environmental site inspection was carried out by the representatives of the ER, the Contractor, IEC and the ET on 18 March 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:

### 04 March 2024

#### Observation(s):

- More than 20 bags of cement or dry PFA and activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA without covered by impervious sheet or placed in an area sheltered on the top and 3 sides were observed at SBA. The Contractor was advised that every stock of more than 20 bags of cement or dry PFA, and activities involving bulk cement or dry PFH, should be covered by impervious sheeting or placed in an area sheltered on the top and three sides.
- The exposed earth slope at Portion B1-2 shall be covered by impervious sheet for short-term slope protection and shotcrete within 6 months after last construction activities. The Contractor was recommended to provide impervious sheet for portion B1-2 slope protection to prevent dust dispersion.
- The general waste and food waste at portion D shall be disposed into enclosed rubbish bins. The Contractor was reminded to provide an enclosed rubbish bins for waste disposal to ensure the site clean tidy.
- The chemical containers at portion B1-2 and oil drum at SBA shall be placed at the chemical drip tray. The Contractor was advised to provide chemical drip tray for chemical storage to prevent chemical spillage.

#### 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 March 2024

#### Observation(s):

- The stagnant water was observed at Portion A and D. The Contractor was advised to install efficient channels at Portion A and D to properly direct stormwater to silt removal facility.
- The exposed slope surface without covered by impervious sheet temporarily at Portion B2 was observed. The Contractor was reminded that the exposed slope surface should be covered by impervious sheet temporarily and shotcreted for long-term slope protection at Portion B2.

- The accumulation of waste was observed at Portion D. The Contractor was recommended to increase waste disposal frequently if necessary to avoid waste accumulation.
- The chemical container at Portion B2 shall be placed on the drip tray. The Contractor was reminded to provide the chemical drip tray for chemical storage to prevent chemical spillage.

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.

18 March 2024

Observation(s):

- The accumulation of deposited silt and grit was observed at Portion A. The Contractor was recommended to install an efficient channel at Portion A to properly direct stormwater to silt removal facility and clean up the deposited silt and grit regularly.
- The general waste and C&D waste at Portion A shall be disposed and stored in enclosed bins and waste skip properly. The Contractor was reminded to increase the capacity and the number of enclosed bins and waste skips at Portion A for waste storage and disposal and clean up the accumulation of general waste and C&D waste regularly.
- The oil drum and chemical containers at Portion A shall be placed in the chemical drip tray with labelling. The Contractor was advised to provide enough chemical drip tray for chemical storage and label them in English and Chinese to recognize chemical container.

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.

25 March 2024

Observation(s):

- NRMM label shall be fixed on the generator and excavator at Portion E3-1A. The Contractor was reminded to display NRMM label on the generator and excavator at Portion E3-1A.
- Unpaved main haul road at Portion E3-1A and E4 shall be wetted by water spraying. The Contractor was advised to increase the frequency of watering to ensure that the surface of the unpaved haul road is wetted and to prevent dust dispersion.
- General waste (e.g. food waste) shall be collected in enclosed bin at Portion E3-1A. The Contractor was recommended to provide sufficient enclosed bin at Portion E3-1A for general waste collection and storage.

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.

11.1.4 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 <sub>eq</sub> (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 <sub>4</sub>	Exceedance Date	-	-
	Exceedance Count	0	0
CO <sub>2</sub>	Exceedance Date	-	-
	Exceedance Count	0	0
O <sub>2</sub>	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
Mar 2024	Complaint Date	-	-	-	-	-
	No. of Complaint	0	0	0	0	0
Reporting Period Total		0	0	0	0	0
Accumulate of project		1*	0	5(1*)	0	0

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

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

## 12.4 Summary of Environmental Summons and Successful Prosecution

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

## 13 Implementation Status on Environmental Mitigation Measures

### 13.1 General

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

## 14 Future Key Issues

### 14.1 Key Issues for the Coming Month

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

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

---

  - Construction of site buildings at Portion D

---

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

---

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

---

  - Site formation at Portion A & E3-1

---

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

---

  - Shotcreting (Permanent and Temporary)

---

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

---

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

### 14.2 Monitoring Schedule for the Next Month

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

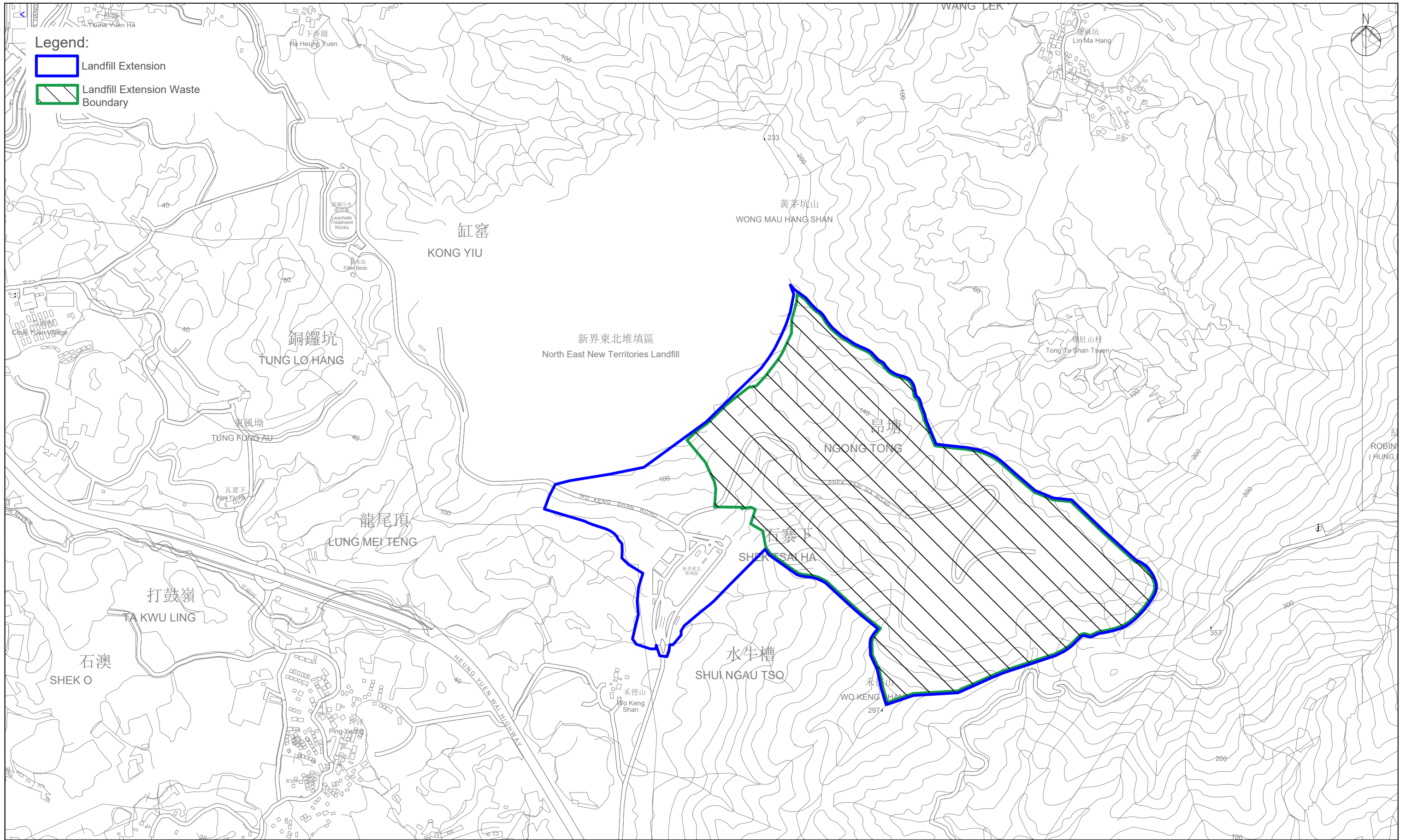
### 14.3 Construction Programme for the Next Month

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

## 15 Conclusion

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

## Figure 1 Location of the Project Site



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





## Figure 3 Landfill Gas Monitoring Locations



Gas Monitoring Point ●

Monitoring Frequency: 2 times per day

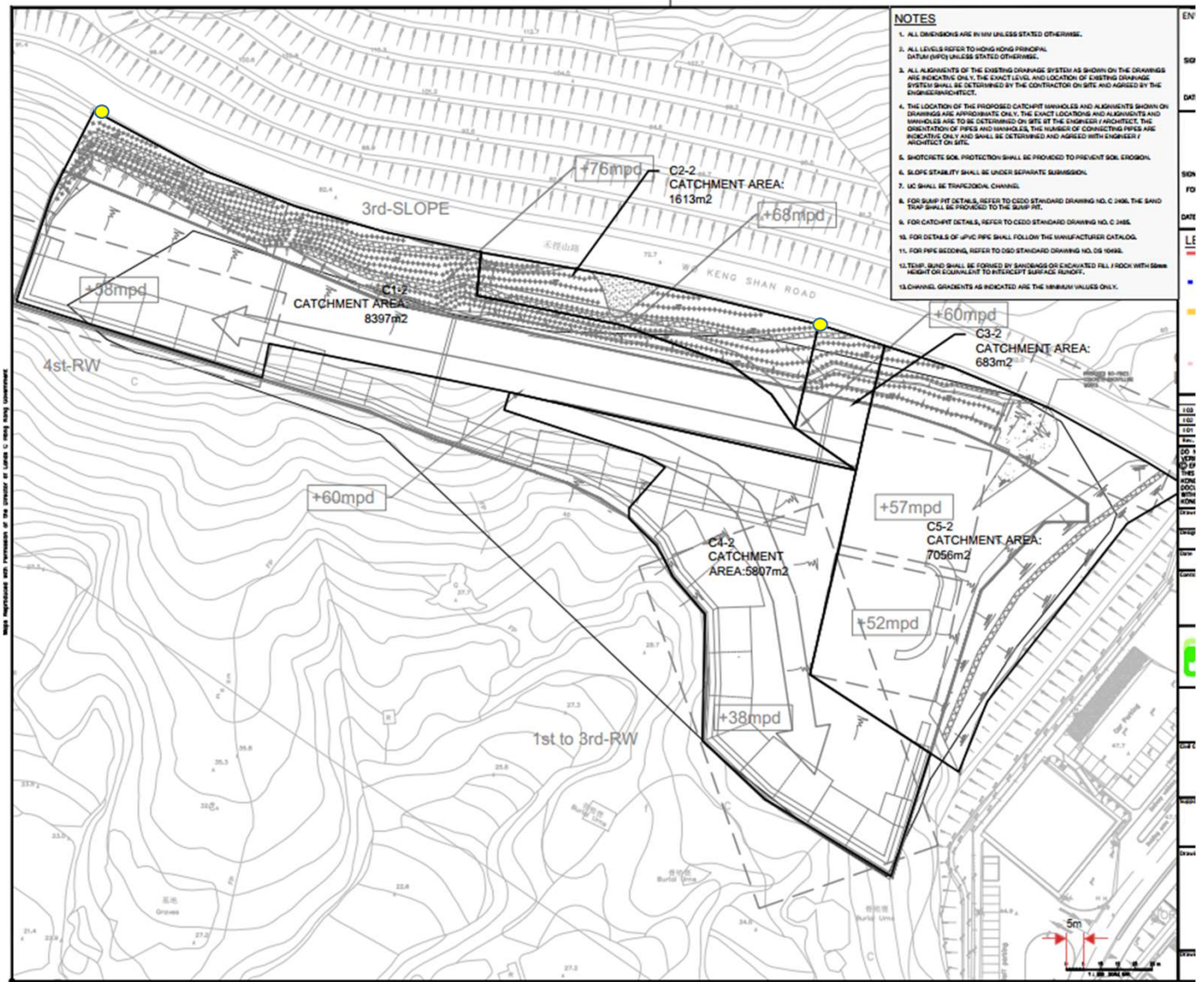
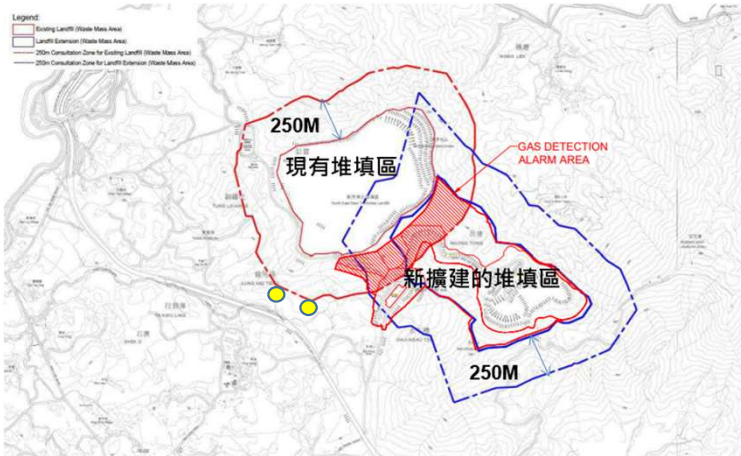


Figure 3 Landfill Gas Monitoring Locations

# 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					
<b>NENTX_Updated Baseline Programme (Rev.4)</b>																																				
<b>DESIGN DEVELOPMENT</b>																																				
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																																				
<b>FS Submission and FSD Consent</b>																																				
Preliminary FS Submission																																				
Process Building and Fire Services Building Detailed Design FS Submission																																				
<b>TECHNICAL SUBMISSION</b>																																				
Project Control Plan and Report																																				
<b>PROCUREMENT / FABRICATION / DELIVERY</b>																																				
General Material																																				
LIFT																																				
LTW - GFS and GRP Tanks																																				
LTW - Lamella Settlers																																				
LTW - Sludge Thickening																																				
LTW - Ammonia Stripper																																				
Process Building(Electrical equipments)																																				
LFG Plant																																				
<b>EPD REQUIREMENT - GI WORKS</b>																																				
PORTION D																																				
PORTION A																																				
PORTION E3-1																																				
PORTION E4																																				
PORTION E3-1-A																																				
PORTION E1																																				
ENVIRONMENTAL MONITORING																																				
<b>CONSTRUCTION - INITIAL WORKS PHASE 1</b>																																				
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)																																				
<b>FS INSPECTION</b>																																				
Portion A - Readiness for FS Inspection (Process Building)																																				
Portion D : Readiness for FS inspection																																				
2nd Inspection																																				
FS Inspection Certificate																																				
<b>STATUTORY SUBMISSION</b>																																				
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)**



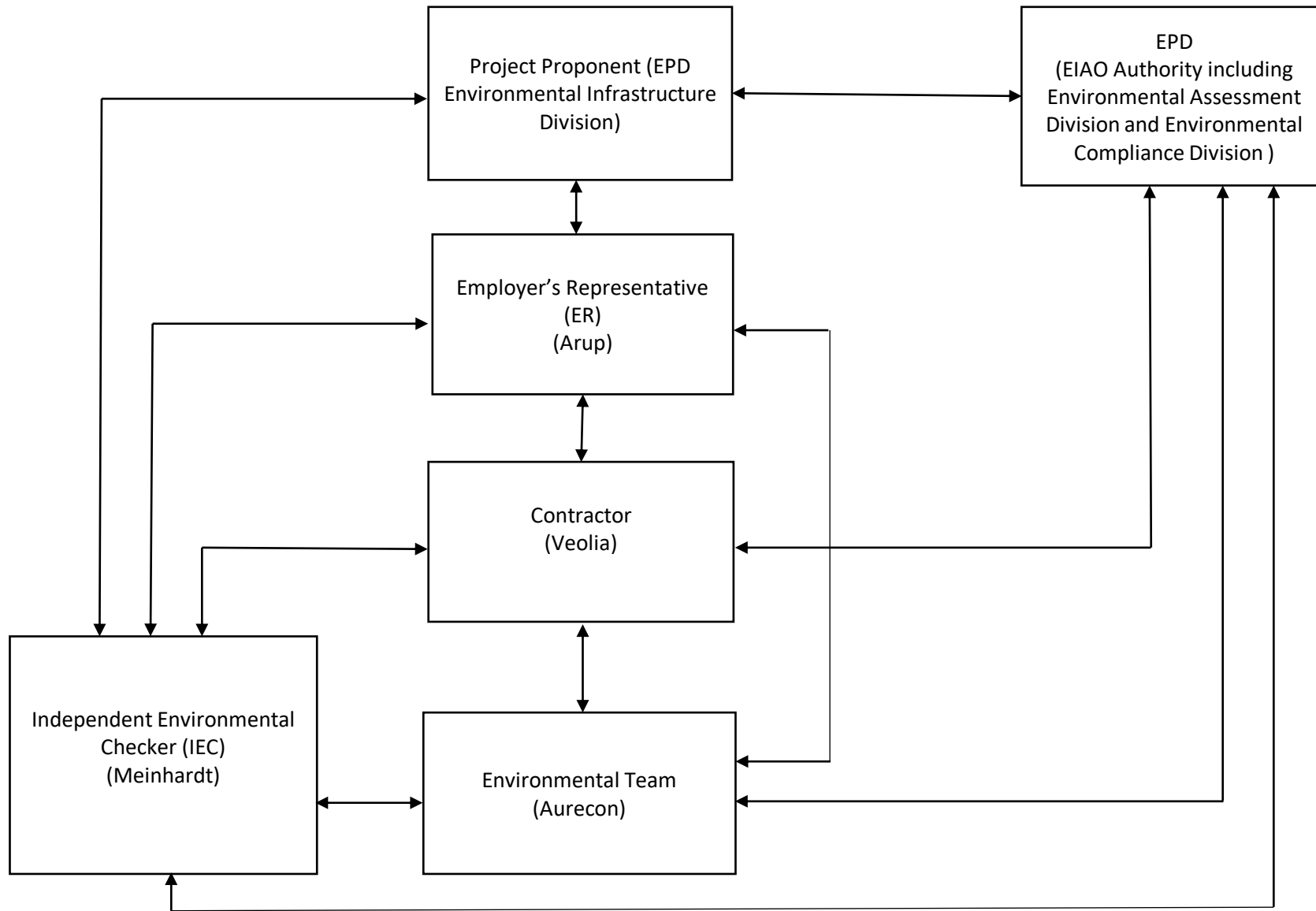
Date	Revision	Ch...	Appr...
22-Jun-22	GENERAL REVISION		
31-Mar-23	GENERAL REVISION		

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:

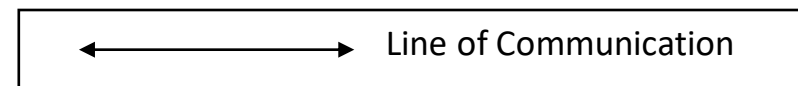
EPD - Environmental Protection Department

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 <sup>st</sup> 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 <sup>st</sup> monitoring (24 Nov 2022) 2 <sup>nd</sup> monitoring (9 Dec 2022) 3 <sup>rd</sup> monitoring (21 Dec 2022) 4 <sup>th</sup> monitoring (13 Jan 2023) 5 <sup>th</sup> monitoring (26 Jan 2023) 6 <sup>th</sup> monitoring (8 Feb 2023) 7 <sup>th</sup> monitoring (24 Feb 2023) 8 <sup>th</sup> monitoring (20 Mar 2023) 9 <sup>th</sup> monitoring (21 Apr 2023) 10 <sup>th</sup> monitoring (12 May 2023) 11 <sup>th</sup> monitoring (16 Jun 2023) 12 <sup>th</sup> monitoring (18 Jul 2023) 13 <sup>th</sup> monitoring (11 Aug 2023) 14 <sup>th</sup> monitoring (15 Sep 2023) 15 <sup>th</sup> 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>1<sup>st</sup> monitoring (29 Aug 2022)</p> <p>2<sup>nd</sup> monitoring (28 Sep 2022)</p> <p>3<sup>rd</sup> monitoring (28 Oct 2022)</p> <p>4<sup>th</sup> monitoring (22 Nov 2022)</p> <p>5<sup>th</sup> monitoring (29 Dec 2022)</p> <p>6<sup>th</sup> monitoring (30 Jan 2023)</p> <p>7<sup>th</sup> monitoring (24 Feb 2023)</p> <p>8<sup>th</sup> monitoring (20 Mar 2023)</p> <p>9<sup>th</sup> monitoring (19 Apr 2023)</p> <p>10<sup>th</sup> monitoring (17 May 2023)</p> <p>11<sup>th</sup> monitoring (7 Jun 2023)</p> <p>12<sup>th</sup> 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>1<sup>st</sup> report (Dec 2022)</p> <p>2<sup>nd</sup> report (Jan 2023)</p> <p>3<sup>rd</sup> report (Feb 2023)</p> <p>4<sup>th</sup> report (Mar 2023)</p> <p>5<sup>th</sup> report (Apr 2023)</p> <p>6<sup>th</sup> report (May 2023)</p> <p>7<sup>th</sup> report (Jun 2023)</p> <p>8<sup>th</sup> report (Jul 2023)</p> <p>9<sup>th</sup> report (Aug 2023)</p> <p>10<sup>th</sup> report (Sep 2023)</p> <p>11<sup>th</sup> report (Oct 2023)</p> <p>12<sup>th</sup> report (Nov 2023)</p> <p>13<sup>th</sup> report (Dec 2023)</p> <p>14<sup>th</sup> report (Jan 2024)</p> <p>15<sup>th</sup> report (Feb 2024)</p> <p>16<sup>th</sup> report (Mar 2024)</p>

## Appendix D Monitoring Schedule for Reporting Month & Next Month

**Impact Monitoring Schedule for NENT Landfill Extension (March 2024) (version 3.0)**

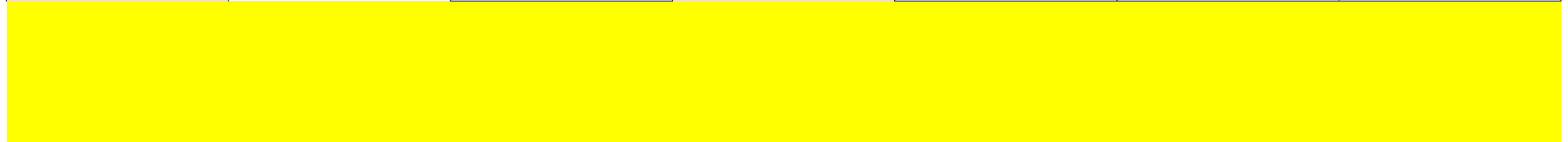
3-2024						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
		Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a			1	2
3	4 Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	5	6	7	8 Air quality monitoring at AM1, AM2 and AM3	9
10	11	12	13	14 Air quality monitoring at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

**Remark:**

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

**Impact Monitoring Schedule for NENT Landfill Extension (April 2024) (version 1.0)**

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



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

## 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**

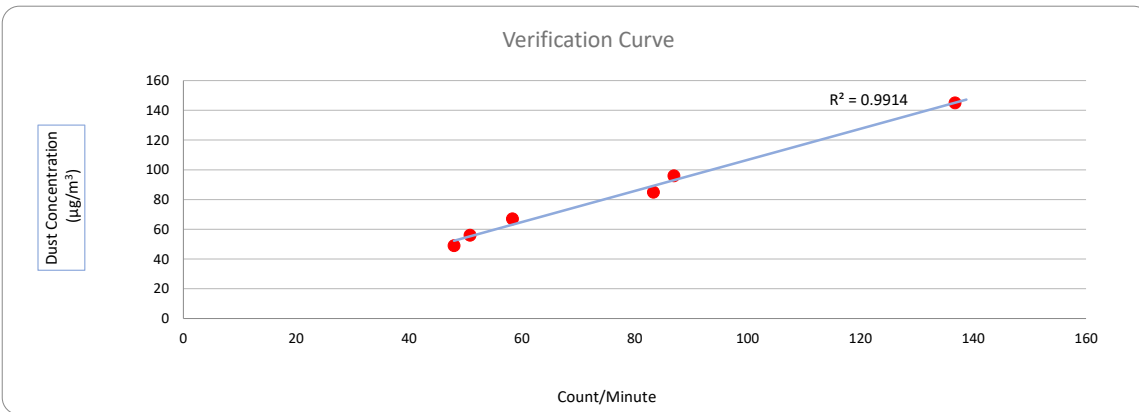
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24


**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	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:	<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>882106</u>				
Our Report Reference No.:	<u>RPT-23-HVS-0021</u>				
Calibration Location:	<u>AM2, location near the Leachate Treatment Works within the NENTX Landfill</u>				

**Standard Equipment Information**

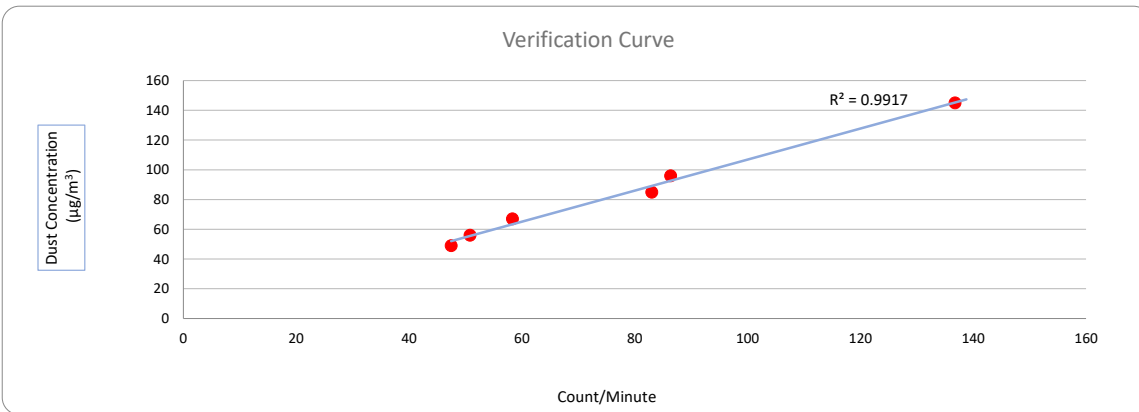
Verification Equipment Type:	<u>Tisch TSP HVS</u>	<u>Tisch HVS Calibrator</u>
Standard Equipment Model No.:	<u>TE-5170X</u>	<u>TE-5028A</u>
Equipment serial no.:	<u>1106</u>	<u>3702</u>
Last Calibration Date:	<u>04-Nov-23</u>	<u>31-Mar-23</u>
Next Calibration Date:	<u>04-Jan-24</u>	<u>30-Mar-24</u>


**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	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:	<b>28-Nov-23</b>	to	<b>30-Nov-23</b>	Next Verification Test Date:	<b>27-Nov-24</b>
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**

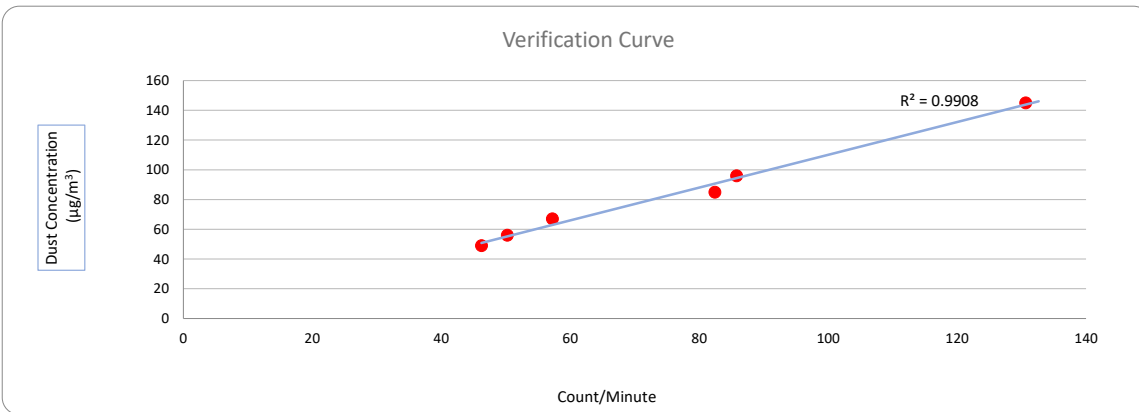
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

**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:	<b><u>1.1020</u></b>	Intercept:	<b><u>-0.1223</u></b>	*Correlation Coefficient, R:	<b><u>0.9954</u></b>
Verification Test Result:	<b><u>Strong Correlation. Results were accepted.</u></b>			* 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:	28-Feb-2024
Serial No:	1105	Model:	TE-5170X	Operator:	Andy Li

### Ambient Condition

Actual Pressure during Calibration ( $P_a$ ) (mm Hg):	764.2	Actual Temperature during Calibration ( $T_a$ ) (deg K):	293.6
---	-------	--	-------

### 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 #	$\Delta H_2O$ (in)	Qa, X-Axis (m <sup>3</sup> /min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	10.00	1.556	58.0	58.59
13	7.80	1.376	54.0	54.55
10	6.00	1.208	50.0	50.51
7	4.00	0.989	44.0	44.45
5	2.60	0.800	40.0	40.41

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

$m = \underline{\underline{24.4794}}$                        $b = \underline{\underline{20.6782}}$                       Corr. Coeff =  $\underline{\underline{0.9992}}$

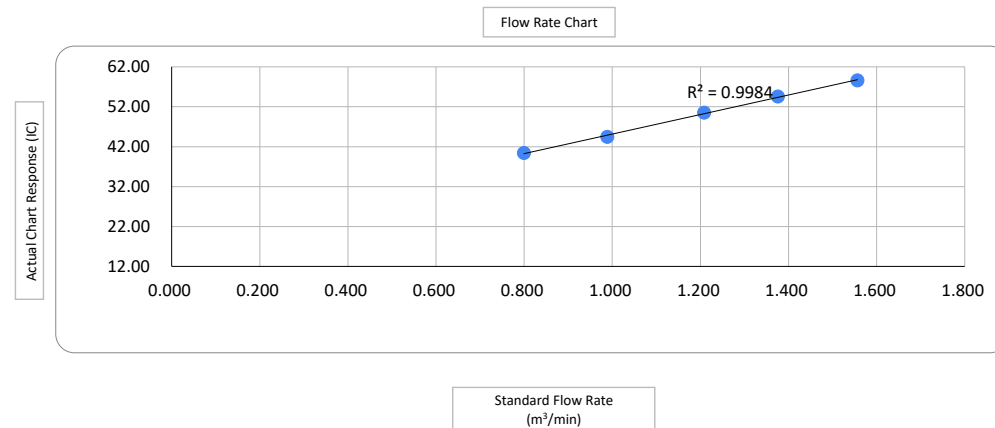
#### Calculations

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

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

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: 28-Feb-2024

## HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

### Site Information

Location:	Representative For Heung YuenWai	Site ID:	AM2	Date:	28-Feb-2024
Serial No:	1106	Model:	TE-5170X	Operator:	Andy Li

### Ambient Condition

Actual Pressure during Calibration ( $P_a$ ) (mm Hg):	764.2	Actual Temperature during Calibration ( $T_a$ ) (deg K):	293.6
---	-------	--	-------

### Calibration Orifice

Model:	TE-5025A	Slope ( $m_c$ ):	2.06920
Serial No.:	3465	Intercept ( $b_c$ ):	-0.02547
Calibration Due Date:	15-Jan-24	Corr. Coeff:	0.99999

### Calibration Data

Plate or Test #	$\Delta H_2O$ (in)	Qa, X-Axis (m <sup>3</sup> /min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	10.40	1.587	60.0	60.61
13	8.40	1.427	56.0	56.57
10	6.80	1.285	54.0	54.55
7	4.40	1.036	46.0	46.47
5	2.60	0.800	40.0	40.41

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

$m =$  25.9494

$b =$  19.8817

Corr. Coeff= 0.9959

#### 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

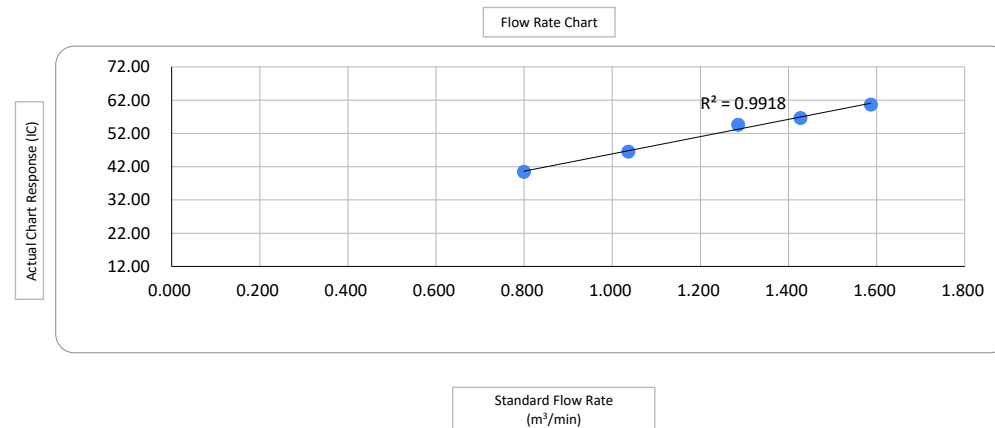
$b$  = sampler intercept

$T_{Std}$  = 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: 28-Feb-2024

## HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

### Site Information

Location:	Representative For Wo Keng Shan Tsuen	Site ID:	AM3	Date:	28-Feb-2024
Serial No:	1856	Model:	TE-5170X	Operator:	Andy Li

### Ambient Condition

Actual Pressure during Calibration ( $P_a$ ) (mm Hg):	764.2	Actual Temperature during Calibration ( $T_a$ ) (deg K):	293.6
---	-------	--	-------

### 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 #	$\Delta H_2O$ (in)	Qa, X-Axis (m <sup>3</sup> /min)	I, CFM (chart)	IC, Y-Axis (corrected)
18	11.20	1.646	64.0	64.66
13	8.80	1.461	60.0	60.61
10	6.40	1.247	53.0	53.54
7	4.60	1.059	46.0	46.47
5	2.80	0.829	40.0	40.41

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

$m = \underline{\hspace{2cm} 30.7773 \hspace{2cm}}$ 
                         
  $b = \underline{\hspace{2cm} 14.7102 \hspace{2cm}}$ 
                         
 Corr. Coeff =  $\underline{\hspace{2cm} 0.9970 \hspace{2cm}}$

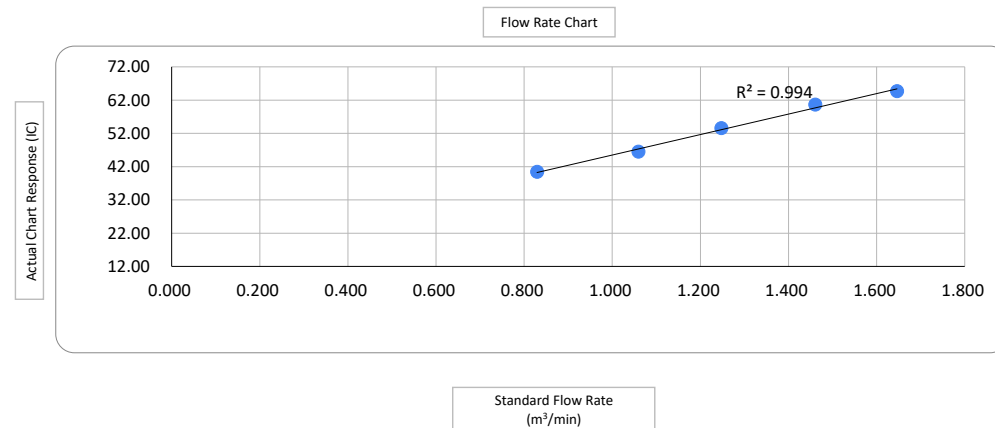
#### Calculations

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

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

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: 28-Feb-2024



# Certificate of Calibration

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

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)	$\sqrt{\Delta H (Ta/Pa)}$ (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
<b>QSTD</b>	<b>m=</b>	<b>2.06920</b>	<b>QA</b>	<b>m=</b>	<b>1.29570</b>
	<b>b=</b>	<b>-0.02547</b>		<b>b=</b>	<b>-0.01582</b>
	<b>r=</b>	<b>0.99999</b>		<b>r=</b>	<b>0.99999</b>

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

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-09696-E0)  
**Microphone:** ACO 7052 (Serial No.:68914)  
**Preamplifier:** NTi Audio MA220 (Serial No.:10390)

**Submitted by:**

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

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

- Within (31.5Hz – 4kHz)  
 Outside

the allowable tolerance.

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

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

**Date of receipt:** 30 March 2023

**Date of calibration:** 04 April 2023

**Date of NEXT calibration:** 03 April 2024

**Calibrated by:** \_\_\_\_\_  
Calibration Technician

**Certified by:** \_\_\_\_\_  
Mr. Ng Yan Wa  
Laboratory Manager

**Date of issue:** 04 April 2023

**Certificate No.:** APJ22-164-CC002



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

**3. Calibration Equipment:**

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

**4. Calibration Results**

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)				Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA SPL	Fast	94	1000	94.1	±0.4	

Linearity

Setting of Unit-under-test (UUT)				Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA SPL	Fast	94	1000	94.1	Ref	
			104		104.1	±0.3	
			114		114.1	±0.3	

Time Weighting

Setting of Unit-under-test (UUT)				Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
30-130	dBA SPL	Fast	94	1000	94.1	Ref	
		Slow			94.1	±0.3	

Certificate No.: APJ22-164-CC002



Page 2 of 4

Frequency Response

Linear Response

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

A-weighting

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

C-weighting

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



Certificate No.: APJ22-164-CC002

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### 5. Calibration Results Applied

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

Uncertainties of Applied Value:

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

The uncertainties are evaluated for a 95% confidence level.

Note:

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

# 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

This Certificate is issued by:  
Hong Kong Calibration Ltd.

**Date:** 13-Feb-23

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

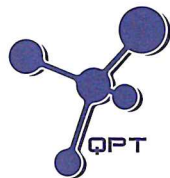
2. Uncertainty : ± (0.9 % + 0.16 m/s) for Velocity, ± 0.1 °C for Temperature, for a confidence probability of not less than 95 %.

3. Atmospheric Pressure: 1 002 hPa

----- END -----



# Water Quality



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. : 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 <sup>+</sup> 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)

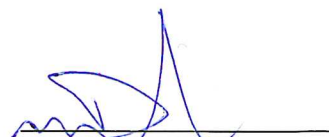
#### (3) Salinity

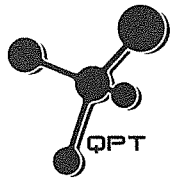
Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.38	-6.20	Satisfactory
20	18.65	-6.75	Satisfactory
30	29.05	-3.17	Satisfactory

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  $\pm 0.5$  ( 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  $\pm 10.0$  ( % )

### 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. **300745**

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 :** Global Flow Probe

**Manufacturer :** Global Water

**Model :** FP111

**I.D. :** --

**Serial No. :** 22K100858

## Test Conditions

**Date of Test :** 27-Mar-23

**Ambient Temperature :** 20°C

**Supply Voltage :** --

**Relative Humidity :** 75%

## Test Specifications

Calibration check.

Ref. Document/Procedure : V12

## Test Results

All results were within the manufacturer's specification.

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

Main Test equipment used:

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

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

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

**Calibrated by :**   
Kin Wong

**Approved by :**   
Alan Chu

**Date:** 27-Mar-23



# Calibration Certificate

Certificate No. 300745

Page 2 of 2 Pages

Results :

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

Remarks : 1. UUT : Unit-Under-Test

2. Uncertainty :  $\pm 1$  %, 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 <sub>4</sub> )		
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 <sub>2</sub> )		
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 <sub>2</sub> )		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
20.2	20.3	0.25

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

All concentrations are molar.

CH<sub>4</sub>, CO<sub>2</sub> readings recorded at : 33.2 °C ± 2.5 °C

O<sub>2</sub> 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](http://www.qedenv.com) +44 (0) 333 800 0088 [sales@qedenv.co.uk](mailto: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

[www.qedenv.com](http://www.qedenv.com) +44 (0) 333 800 0088 [sales@qedenv.co.uk](mailto:sales@qedenv.co.uk)

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

Registered in England and Wales 1898734



## Appendix F Monitoring Results

# Air Quality

**1-hour TSP Concentration ( $\mu\text{g}/\text{m}^3$ ) 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
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
4/3/2024	Sibata LD-5R	882106	1.044	Fine	13:12	14:12	15:12	26	26	27	26	285	500
8/3/2024	Sibata LD-5R	942532	1.102	Fine	8:32	9:32	10:32	50	60	59	56		
14/3/2024	Sibata LD-5R	942532	1.102	Fine	14:04	15:04	16:04	23	22	26	24		
18/3/2024	Sibata LD-5R	882106	1.044	Fine	13:00	14:00	15:00	24	26	26	25		
22/3/2024	Sibata LD-5R	942532	1.102	Fine	8:12	9:12	10:12	30	36	32	33		
28/3/2024	Sibata LD-5R	882106	1.044	Fine	13:08	14:08	15:08	29	30	28	29		
<b>Average</b>								<b>32</b>					
<b>Max.</b>								<b>60</b>					
<b>Min.</b>								<b>22</b>					

**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
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
4/3/2024	Sibata LD-5R	0Z4545	1.045	Fine	13:30	14:30	15:30	31	36	32	33	279	500
8/3/2024	Sibata LD-5R	882106	1.044	Fine	8:57	9:57	10:57	61	60	63	61		
14/3/2024	Sibata LD-5R	882106	1.044	Fine	14:18	15:18	16:18	43	46	41	43		
18/3/2024	Sibata LD-5R	942532	1.102	Fine	13:15	14:15	15:15	41	42	40	41		
22/3/2024	Sibata LD-5R	882106	1.044	Fine	8:30	9:30	10:30	46	48	43	46		
28/3/2024	Sibata LD-5R	0Z4545	1.045	Fine	13:16	14:16	15:16	48	50	49	49		
<b>Average</b>								<b>46</b>					
<b>Max.</b>								<b>63</b>					
<b>Min.</b>								<b>31</b>					

**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
								$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
4/3/2024	Sibata LD-5R	942532	1.102	Fine	13:40	14:40	15:40	51	54	53	53	285	500
8/3/2024	Sibata LD-5R	0Z4545	1.045	Fine	8:40	9:40	10:40	69	70	71	70		
14/3/2024	Sibata LD-5R	0Z4545	1.045	Fine	14:24	15:24	16:24	51	54	52	52		
18/3/2024	Sibata LD-5R	0Z4545	1.045	Fine	13:24	14:24	15:24	52	54	49	52		
22/3/2024	Sibata LD-5R	0Z4545	1.045	Fine	9:00	10:00	11:00	59	60	58	59		
28/3/2024	Sibata LD-5R	942532	1.102	Fine	13:29	14:29	15:29	50	52	48	50		
<b>Average</b>								<b>56</b>					
<b>Max.</b>								<b>71</b>					
<b>Min.</b>								<b>48</b>					

The Summary of TSP 24-hour Concentration (µg/m<sup>3</sup>) 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 <sup>3</sup> /min)	(m <sup>3</sup> )	Initial	Final	(g)	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )
4/3/2024	Fine	22.0	1010.6	2683.82	2707.82	1440	40	0.79	1142	2.7458	2.8215	0.0757	66	164	260
8/3/2024	Fine	17.7	1019.1	2709.95	2733.95	1440	39	0.78	1120	2.7332	2.8456	0.1124	100		
14/3/2024	Fine	21.8	1022.2	2737.09	2761.09	1440	40	0.81	1170	2.6593	2.7963	0.1370	117		
18/3/2024	Fine	20.0	1021.9	2765.60	2789.60	1440	40	0.82	1177	2.6590	2.7508	0.0918	78		
22/3/2024	Fine	22.8	1016.4	2792.83	2816.83	1440	36	0.64	916	2.6869	2.7816	0.0947	103		
28/3/2024	Fine	25.1	1013.9	2819.94	2843.94	1440	36	0.63	902	2.6740	2.7469	0.0729	81		
												Average	91		
												Min	66		
												Max	117		

The Summary of 24-hour TSP Concentration (µg/m<sup>3</sup>) 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 <sup>3</sup> /min)	(m <sup>3</sup> )	Initial	Final	(g)	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )
4/3/2024	Fine	22.0	1010.6	2234.77	2258.77	1440	44	0.93	1344	2.7361	2.8174	0.0813	60	152	260
8/3/2024	Fine	17.7	1019.1	2264.11	2288.11	1440	44	0.97	1401	2.7319	2.8297	0.0978	70		
14/3/2024	Fine	21.8	1022.2	2291.12	2315.12	1440	44	0.93	1345	2.6519	2.7826	0.1307	97		
18/3/2024	Fine	20.0	1021.9	2317.36	2341.36	1440	39	0.74	1070	2.6638	2.7291	0.0653	61		
22/3/2024	Fine	22.8	1016.4	2344.53	2368.53	1440	43	0.88	1271	2.6939	2.8258	0.1319	104		
28/3/2024	Fine	25.1	1013.9	2371.61	2395.61	1440	42	0.85	1228	2.6698	2.7904	0.1206	98		
												Average	82		
												Min	60		
												Max	104		

The Summary of 24-hour TSP Concentration (µg/m<sup>3</sup>) 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 <sup>3</sup> /min)	(m <sup>3</sup> )	Initial	Final	(g)	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )	(µg/m <sup>3</sup> )
4/3/2024	Fine	22.0	1010.6	3232.74	3256.74	1440	42	0.89	1282	2.7337	2.8312	0.0975	76	163	260
8/3/2024	Fine	17.7	1019.1	3240.62	3264.62	1440	42	0.91	1313	2.6624	2.7734	0.1110	85		
14/3/2024	Fine	21.8	1022.2	3267.74	3291.73	1439	41	0.87	1257	2.6642	2.8215	0.1573	125		
18/3/2024	Fine	20.0	1021.9	3294.14	3318.14	1440	39	0.79	1144	2.6336	2.7301	0.0965	84		
22/3/2024	Fine	22.8	1016.4	3321.01	3345.01	1440	41	0.86	1243	2.6862	2.7951	0.1089	88		
28/3/2024	Fine	25.1	1013.9	3348.25	3372.25	1440	41	0.85	1231	2.6804	2.8138	0.1334	108		
												Average	94		
												Min	76		
												Max	125		

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

# Noise

**Impact Phase Construction Noise Monitoring Data at Location NM1a**

Date	Weather	Wind speed	Start Time	End Time	$L_{eq}$ (dB(A))							$L_{10}$ (dB(A))						$L_{90}$ (dB(A))					
		m/s			1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th
4/3/2024	Fine	1.3	9:00	9:30	61.2	60.3	59.6	60.4	59.9	58.2	60.0	62.4	61.4	60.4	61.5	60.6	60.4	60.2	59.4	58.4	59.6	58.2	57.2
14/3/2024	Fine	1.6	13:10	13:40	61.7	62.1	60.3	59.4	60.2	59.1	60.6	63.6	64.2	62.4	61.3	62.6	61.4	59.2	60.3	58.3	57.6	58.4	57.1
18/3/2024	Fine	1.7	9:10	9:40	60.2	59.6	61.2	60.2	59.3	60.1	60.1	63.2	62.4	64.2	63.6	62.5	63.4	57.6	56.6	58.9	57.3	57.3	57.9
28/3/2024	Fine	1.6	13:08	13:38	59.3	60.4	61.2	61.9	60.4	61.4	60.8	62.6	64.1	65.2	65.6	63.2	64.4	55.3	56.4	57.2	57.9	57.3	58.1
<b>Average</b>											60.4												
<b>Baseline Level</b>											55.4												
<b>Action Level</b>											When one valid documented complaint is received												
<b>Limit Level</b>											75												

**Impact Phase Construction Noise Monitoring Data at Location NM2a**

Date	Weather	Wind speed	Start Time	End Time	$L_{eq}$ (dB(A))							$L_{10}$ (dB(A))						$L_{90}$ (dB(A))					
		m/s			1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th
4/3/2024	Fine	1.4	15:12	15:42	58.1	57.6	57.9	58.6	59.1	59.9	58.6	60.3	59.7	59.4	60.4	61.4	60.3	56.2	55.6	55.1	56.4	58.2	58.4
14/3/2024	Fine	1.7	15:16	15:46	57.6	55.6	56.5	58.4	60.2	59.2	58.2	60.3	58.5	59.6	61.3	63.2	62.6	54.2	55.2	53.1	55.6	57.6	56.3
18/3/2024	Fine	2.1	14:01	14:31	54.3	55.6	54.6	56.3	55.6	54.4	55.2	57.4	58.3	57.6	59.2	55.9	57.3	52.1	53.2	52.4	53.2	52.9	53.1
28/3/2024	Fine	1.9	15:00	15:30	54.5	56.5	54.3	55.4	55.9	54.6	55.3	56.1	59.6	56.2	58.4	58.9	56.0	52.6	54.3	53.0	52.1	51.9	52.6
<b>Average</b>											57.1												
<b>Baseline Level</b>											54.5												
<b>Action Level</b>											When one valid documented complaint is received												
<b>Limit Level</b>											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
14-Mar-24	10:13	Sunny	0.07	2.1	16.6	7.6	<7.4	<4	6.6	>7.7	>7.8	4.4	>9.2	>9.5	4.5	>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
14-Mar-24	8:10	Sunny	0.07	2.1	20.3	6.5	<5	<4	7.2	>7.6	>7.7	78.6	>108.3	>108.9	83.2	>94.5	>94.7

Remarks

1. Sample will be grabbed on surface when the water depth is less than 1m.
2. "TBC" equal to "To be confirm"
3. 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	: HK2410256
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	: 14-Mar-2024
Order number	: ---	Quote number	: HKE/2751/2022_V3	Issue Date	: 28-Mar-2024
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 14-Mar-2024 to 28-Mar-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: HK2410256

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 ambient condition.

Microbiological sample(s) was/ were collected in 250mL sterile plastic bottles containing sodium thiosulfate. Sample(s) arrived at the laboratory at 15:25.

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

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

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

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

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



### Analytical Results

Sub-Matrix: WATER

				Sample ID	WM 1	WM 2			
				Sampling date / time	14-Mar-2024	14-Mar-2024	---	---	---
Compound	CAS Number	LOR	Unit		HK2410256-001	HK2410256-002	-----	-----	-----
<b>EA/ED: Physical and Aggregate Properties</b>									
EA002: pH Value	----	0.1	pH Unit		6.5	6.9	---	---	---
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm		71	197	---	---	---
EA025: Suspended Solids (SS)	----	0.1	mg/L		4.5	83.2	---	---	---
ED037: Total Alkalinity as CaCO3	----	1	mg/L		8	62	---	---	---
<b>ED/EK: Inorganic Nonmetallic Parameters</b>									
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L		11	10	---	---	---
ED045K: Chloride	16887-00-6	0.5	mg/L		7	14	---	---	---
EK055K: Ammonia as N	7664-41-7	0.01	mg/L		0.04	0.03	---	---	---
EK058A: Nitrate as N	14797-55-8	0.01	mg/L		0.02	0.30	---	---	---
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.2	0.9	---	---	---
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	---	---	---
<b>EP: Aggregate Organics</b>									
EP005: Total Organic Carbon	----	1	mg/L		3	4	---	---	---
EP020: Oil & Grease	----	5	mg/L		<5	<5	---	---	---
EP026C: Chemical Oxygen Demand	----	5	mg/L		<5	9	---	---	---
EP030: Biochemical Oxygen Demand	----	2	mg/L		<2	2	---	---	---
<b>EG: Metals and Major Cations - Total</b>									
EG020: Cadmium	7440-43-9	0.2	µg/L		<0.2	<0.2	---	---	---
EG020: Copper	7440-50-8	1	µg/L		<1	4	---	---	---
EG020: Lead	7439-92-1	1	µg/L		<1	5	---	---	---
EG020: Manganese	7439-96-5	1	µg/L		89	2290	---	---	---
EG020: Nickel	7440-02-0	1	µg/L		<1	3	---	---	---
EG020: Zinc	7440-66-6	10	µg/L		<10	36	---	---	---
EG032: Calcium	7440-70-2	50	µg/L		3580	20000	---	---	---
EG032: Iron	7439-89-6	10	µg/L		680	7340	---	---	---
EG032: Magnesium	7439-95-4	50	µg/L		520	1350	---	---	---
EG032: Potassium	7440-09-7	50	µg/L		360	4020	---	---	---
EG032: Sodium	7440-23-5	50	µg/L		8540	9010	---	---	---



Sub-Matrix: WATER				Sample ID	WM 1	WM 2	---	---	---
				Sampling date / time	14-Mar-2024	14-Mar-2024	---	---	---
Compound	CAS Number	LOR	Unit	HK2410256-001	HK2410256-002	-----	-----	-----	
<b>EM: Microbiological Testing</b>									
EM002: E. coli	----	1	CFU/100mL	25	3300	---	---	---	
EM003: Total Coliforms	----	1	CFU/100mL	28	4200	---	---	---	



### 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 (%)
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5663595)</b>								
HK2410260-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	69.9	71.1	1.7
HK2410260-006	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.5	5.8	6.2
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5666986)</b>								
HK2409966-039	Anonymous	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	44300	44000	0.5
HK2410456-006	Anonymous	EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	<1	<1	0.0
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5666987)</b>								
HK2409966-039	Anonymous	EA002: pH Value	----	0.1	pH Unit	7.9	7.9	0.0
HK2410456-001	Anonymous	EA002: pH Value	----	0.1	pH Unit	8.4	8.4	0.0
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5671617)</b>								
HK2410501-001	Anonymous	ED037: Total Alkalinity as CaCO3	----	1	mg/L	32	32	0.0
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5665134)</b>								
HK2410206-001	Anonymous	EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	0.12	0.12	0.0
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5671707)</b>								
HK2410718-008	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	<1	<1	0.0
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5671708)</b>								
HK2410718-008	Anonymous	ED045K: Chloride	16887-00-6	1	mg/L	<1	<1	0.0
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5672809)</b>								
HK2410206-001	Anonymous	EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	0.0
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5674859)</b>								
HK2410836-001	Anonymous	EK055K: Ammonia as N	7664-41-7	0.01	mg/L	26.9	26.9	0.2
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5688679)</b>								
HK2410256-001	WM 1	EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.2	0.2	0.0
<b>EP: Aggregate Organics (QC Lot: 5680545)</b>								
HK2410392-002	Anonymous	EP026C: Chemical Oxygen Demand	----	5	mg/L	7	7	0.0
<b>EP: Aggregate Organics (QC Lot: 5686309)</b>								
HK2409966-005	Anonymous	EP005: Total Organic Carbon	----	1	mg/L	<5	<5	0.0
<b>EG: Metals and Major Cations - Total (QC Lot: 5664952)</b>								
HK2410000-002	Anonymous	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 (%)
<b>EG: Metals and Major Cations - Total (QC Lot: 5664952) - Continued</b>								
HK2410000-002	Anonymous	EG020: Copper	7440-50-8	1	µg/L	9	8	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Manganese	7439-96-5	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	10	µg/L	<10	<10	0.0
<b>EG: Metals and Major Cations - Total (QC Lot: 5664957)</b>								
HK2410256-002	WM 2	EG032: Iron	7439-89-6	10	µg/L	7340	7750	5.4
		EG032: Calcium	7440-70-2	50	µg/L	20000	20300	1.4
		EG032: Magnesium	7439-95-4	50	µg/L	1350	1380	2.4
		EG032: Potassium	7440-09-7	50	µg/L	4020	4140	2.9
		EG032: Sodium	7440-23-5	50	µg/L	9010	9130	1.3

**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
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5663595)</b>											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	10 mg/L	98.0	----	84.9	114	----	----
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5666986)</b>											
EA010: Electrical Conductivity @ 25°C	----	1	µS/cm	<1	146.9 µS/cm	96.2	----	93.5	106	----	----
				<1	1412 µS/cm	95.7	----	94.3	105	----	----
<b>EA/ED: Physical and Aggregate Properties (QC Lot: 5671617)</b>											
ED037: Total Alkalinity as CaCO3	----	1	mg/L	<1	50 mg/L	102	----	95.0	105	----	----
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5665134)</b>											
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	103	----	92.4	106	----	----
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5671707)</b>											
ED041K: Sulphate as SO4 - Turbidimetric	----	1	mg/L	<1	5 mg/L	105	----	93.8	108	----	----
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5671708)</b>											
ED045K: Chloride	16887-00-6	1	mg/L	<1	10 mg/L	100.0	----	88.2	108	----	----



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 (%)		
						LCS	DCS	Low	High	Value	Control Limit	
Method: Compound	CAS Number											
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5672809)</b>												
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	----	----	----	----	----	----	----	
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5674859)</b>												
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	98.5	----	89.3	109	----	----	
<b>ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5688679)</b>												
EK061A: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	0.5 mg/L	103	----	90.1	123	----	----	
<b>EP: Aggregate Organics (QC Lot: 5663696)</b>												
EP030: Biochemical Oxygen Demand	----	----	mg/L	----	198 mg/L	99.8	----	77.6	118	----	----	
<b>EP: Aggregate Organics (QC Lot: 5677533)</b>												
EP020: Oil & Grease	----	2	mg/L	<2	20 mg/L	90.4	----	79.1	108	----	----	
<b>EP: Aggregate Organics (QC Lot: 5680545)</b>												
EP026C: Chemical Oxygen Demand	----	----	mg/L	----	25 mg/L	101	----	92.0	108	----	----	
					250 mg/L	100	----	92.3	106	----	----	
<b>EP: Aggregate Organics (QC Lot: 5686309)</b>												
EP005: Total Organic Carbon	----	1	mg/L	<1	5 mg/L	111	----	81.7	124	----	----	
				<1	100 mg/L	105	----	82.9	122	----	----	
<b>EG: Metals and Major Cations - Total (QC Lot: 5664952)</b>												
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	5 µg/L	94.3	----	85.0	109	----	----	
EG020: Copper	7440-50-8	1	µg/L	<1	50 µg/L	103	----	90.0	111	----	----	
EG020: Lead	7439-92-1	1	µg/L	<1	50 µg/L	98.2	----	89.0	111	----	----	
EG020: Manganese	7439-96-5	1	µg/L	<1	50 µg/L	100	----	85.0	115	----	----	
EG020: Nickel	7440-02-0	1	µg/L	<1	50 µg/L	101	----	87.0	110	----	----	
EG020: Zinc	7440-66-6	10	µg/L	<10	50 µg/L	102	----	86.0	114	----	----	
<b>EG: Metals and Major Cations - Total (QC Lot: 5664957)</b>												
EG032: Calcium	7440-70-2	50	µg/L	<50	2000 µg/L	98.6	----	85.0	115	----	----	
EG032: Iron	7439-89-6	10	µg/L	<10	2000 µg/L	102	----	85.0	115	----	----	
EG032: Magnesium	7439-95-4	50	µg/L	<50	2000 µg/L	101	----	85.0	115	----	----	
EG032: Potassium	7440-09-7	50	µg/L	<50	2000 µg/L	99.6	----	85.0	115	----	----	
EG032: Sodium	7440-23-5	50	µg/L	<50	2000 µg/L	103	----	85.0	115	----	----	



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

Matrix: WATER					Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5665134)										
HK2410206-001	Anonymous	EK071K: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	101	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5671707)										
HK2410718-008	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric	----	5 mg/L	112	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5671708)										
HK2410718-008	Anonymous	ED045K: Chloride	16887-00-6	5 mg/L	88.1	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5674859)										
HK2410836-001	Anonymous	EK055K: Ammonia as N	7664-41-7	50 mg/L	88.0	----	75.0	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 5688679)										
HK2410256-001	WM 1	EK061A: Total Kjeldahl Nitrogen as N	----	0.5 mg/L	92.5	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5680545)										
HK2410549-003	Anonymous	EP026C: Chemical Oxygen Demand	----	10 mg/L	101	----	75.0	125	----	----
EP: Aggregate Organics (QC Lot: 5686309)										
HK2409966-002	Anonymous	EP005: Total Organic Carbon	----	25 mg/L	109	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5664952)										
HK2410000-001	Anonymous	EG020: Cadmium	7440-43-9	5 µg/L	97.8	----	75.0	125	----	----
		EG020: Copper	7440-50-8	50 µg/L	104	----	75.0	125	----	----
		EG020: Lead	7439-92-1	50 µg/L	99.0	----	75.0	125	----	----
		EG020: Manganese	7439-96-5	50 µg/L	102	----	75.0	125	----	----
		EG020: Nickel	7440-02-0	50 µg/L	97.5	----	75.0	125	----	----
		EG020: Zinc	7440-66-6	50 µg/L	101	----	75.0	125	----	----
EG: Metals and Major Cations - Total (QC Lot: 5664957)										
HK2410256-001	WM 1	EG032: Calcium	7440-70-2	2000 µg/L	87.4	----	75.0	125	----	----
		EG032: Iron	7439-89-6	2000 µg/L	118	----	75.0	125	----	----
		EG032: Magnesium	7439-95-4	2000 µg/L	98.9	----	75.0	125	----	----
		EG032: Potassium	7440-09-7	2000 µg/L	99.0	----	75.0	125	----	----





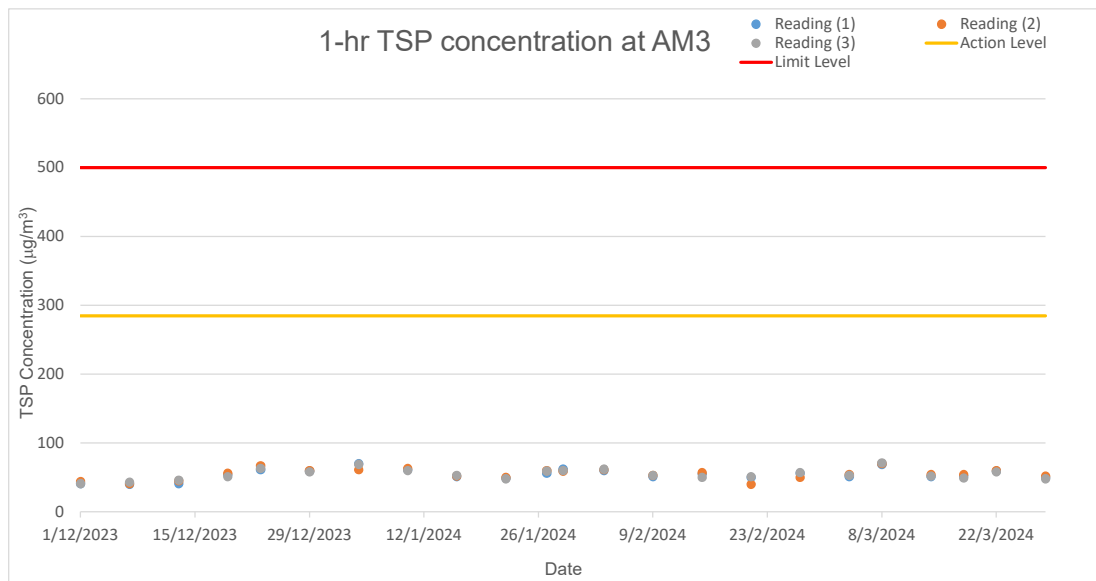
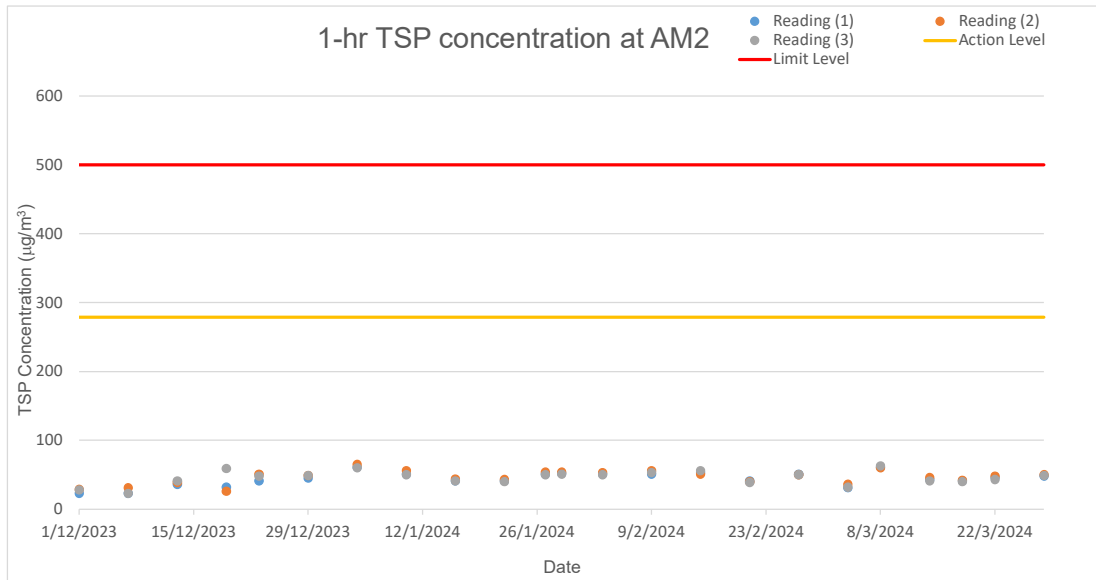
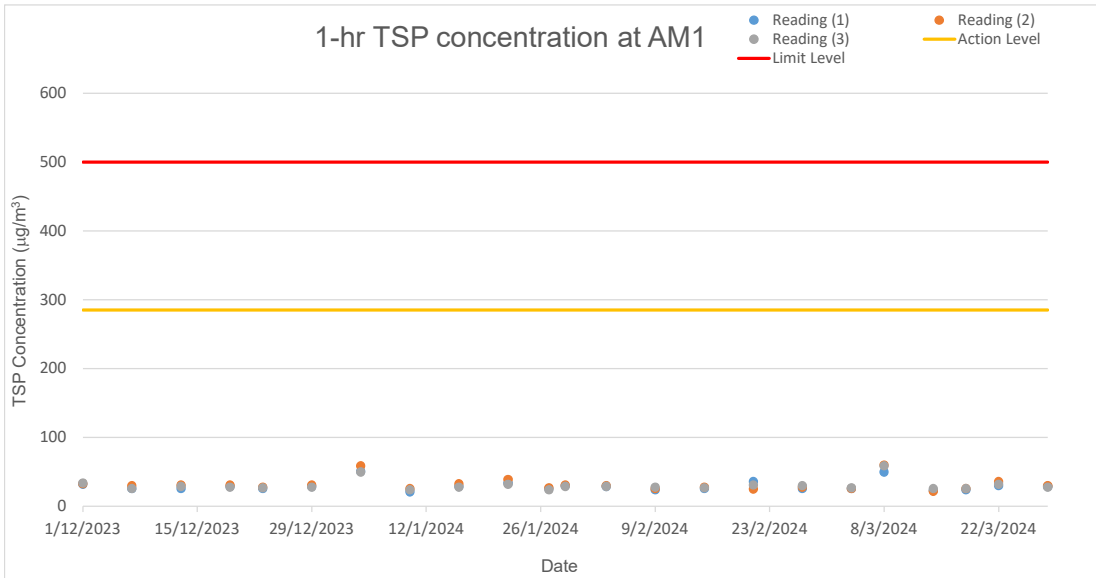
Matrix: WATER

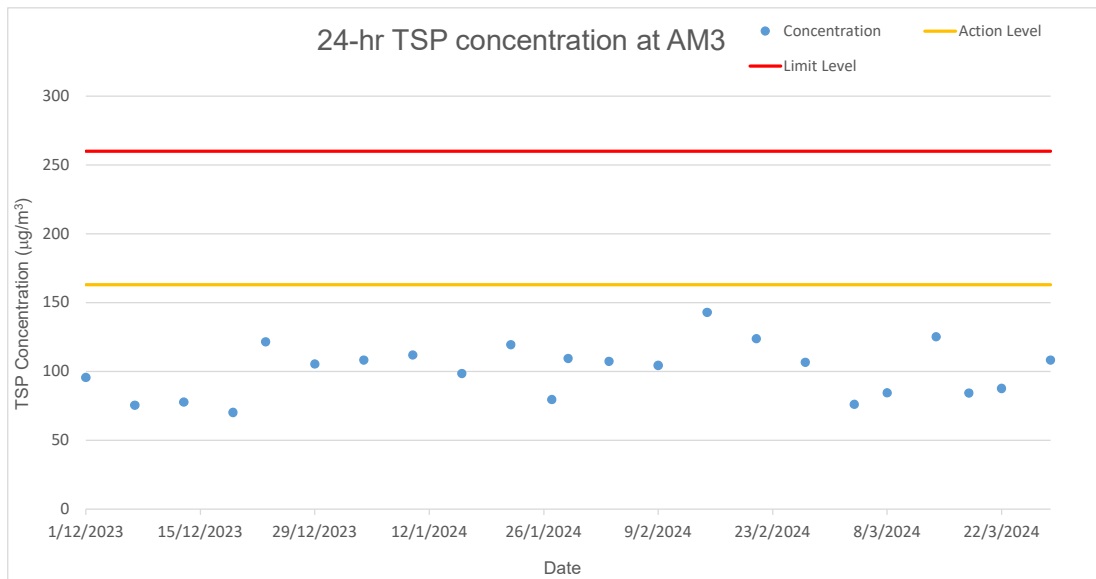
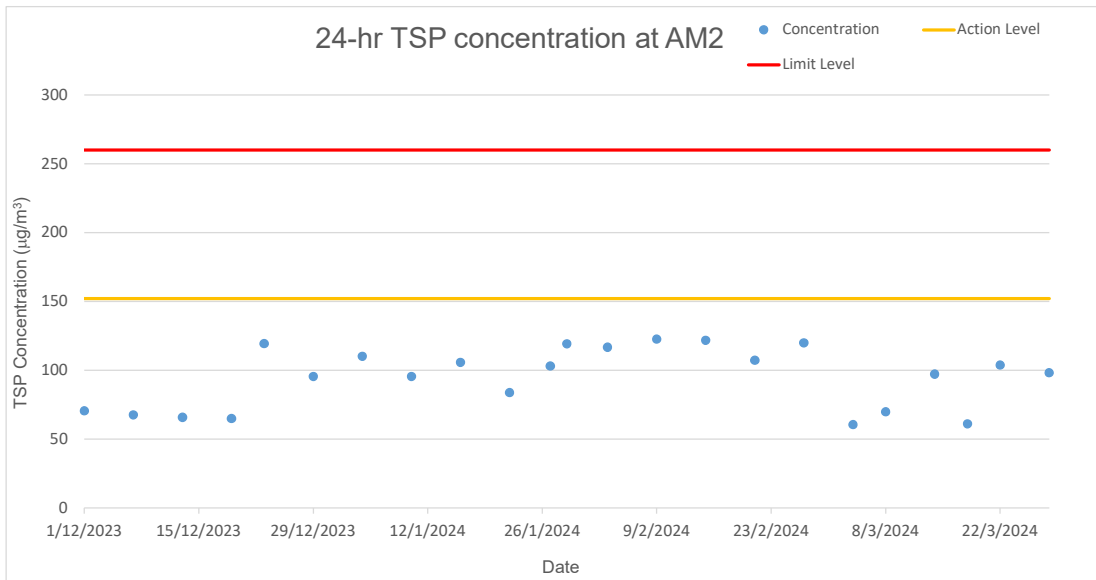
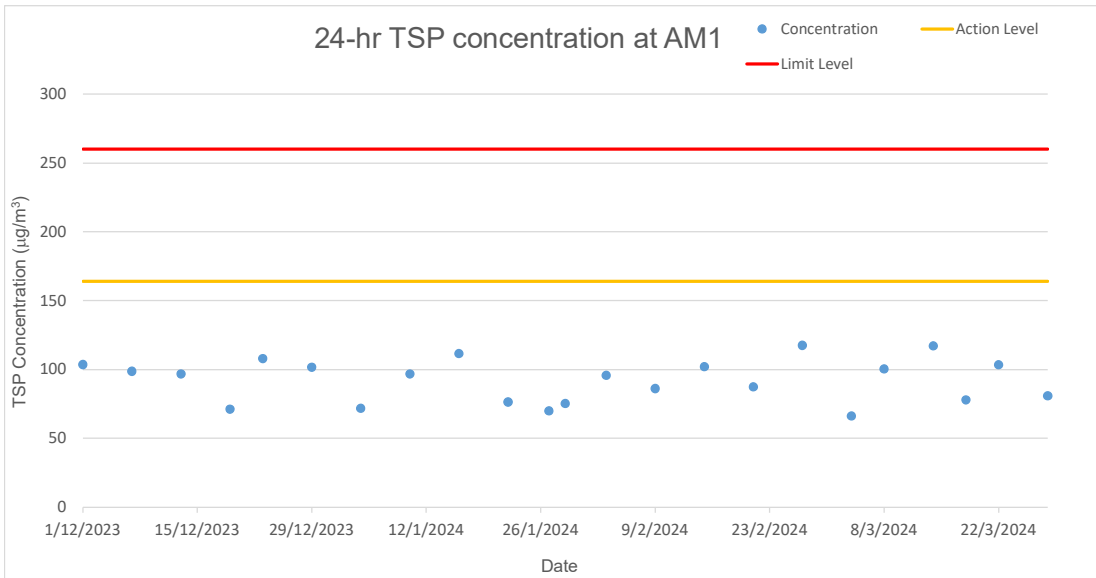
*Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report*

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
<b>EG: Metals and Major Cations - Total (QC Lot: 5664957) - Continued</b>										
HK2410256-001	WM 1	EG032: Sodium	7440-23-5	2000 µg/L	# Not Determined	----	75.0	125	----	----

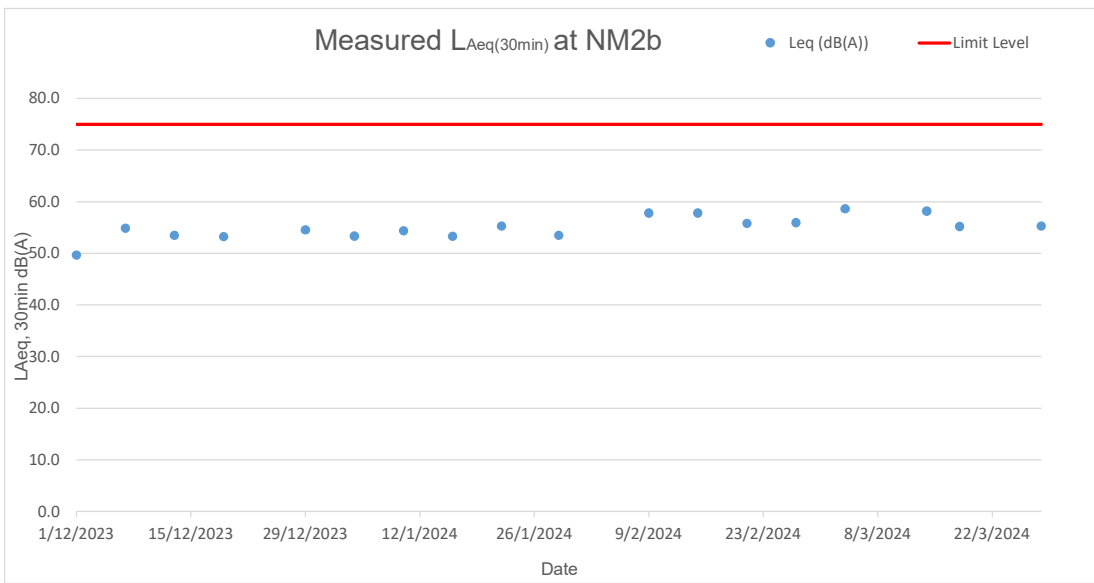
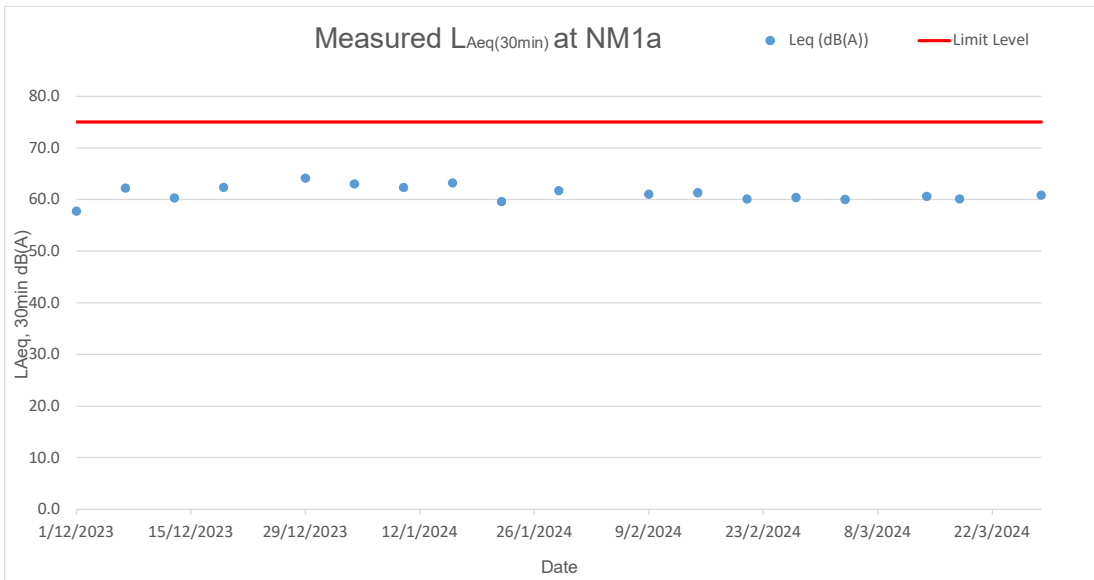
## Appendix G Graphical Presentations

# Air Quality





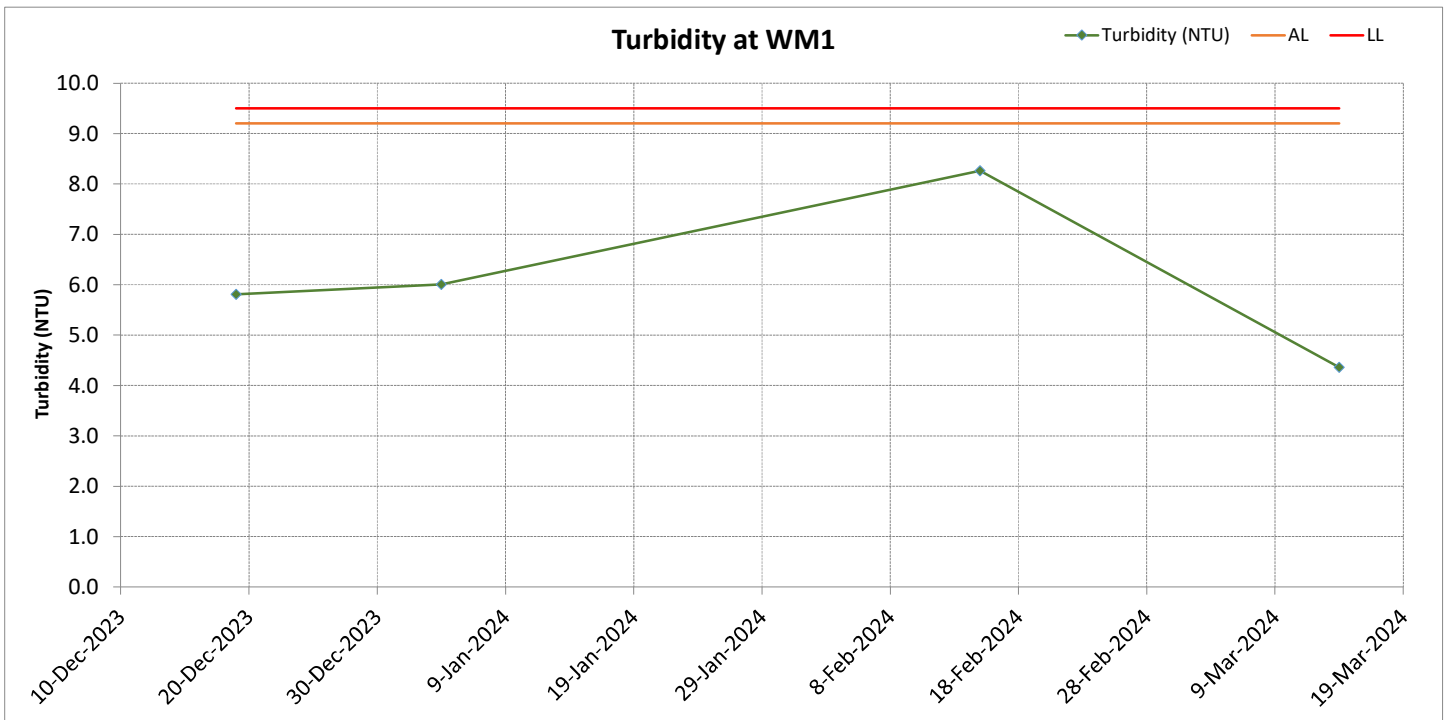
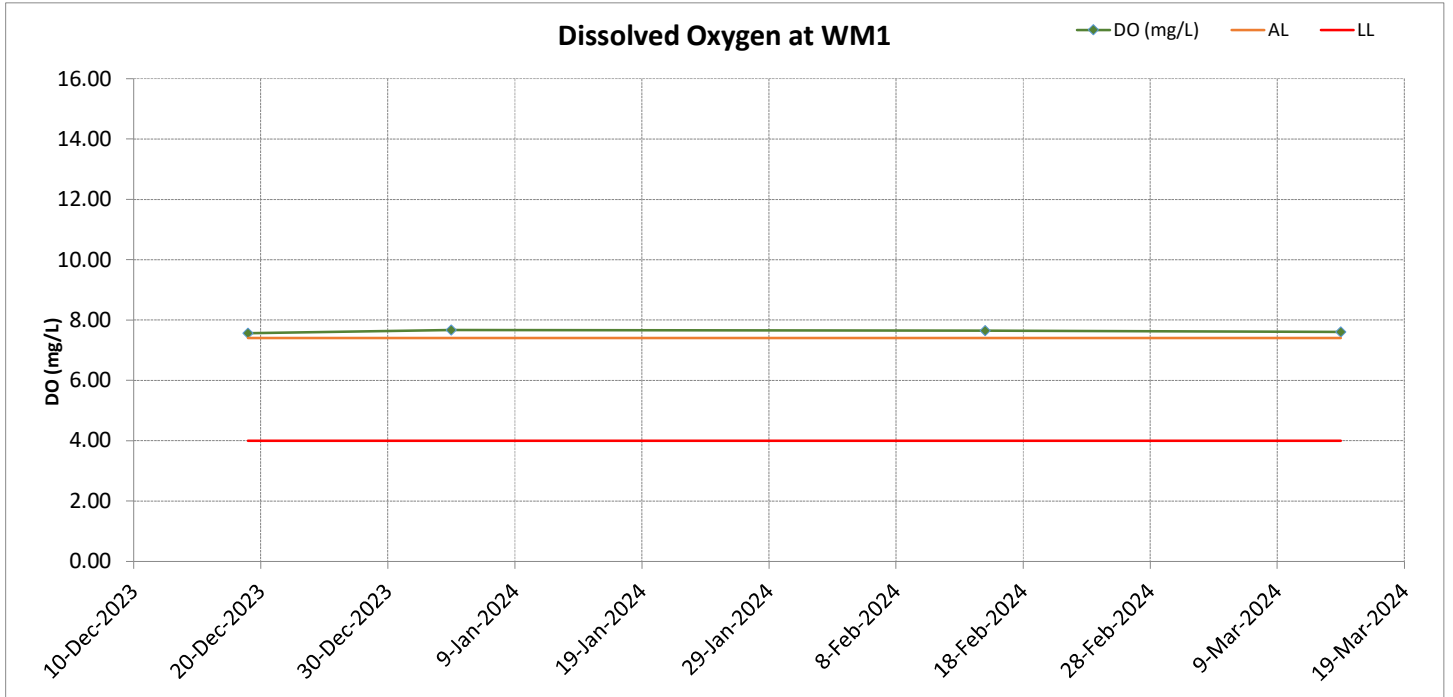
# Noise



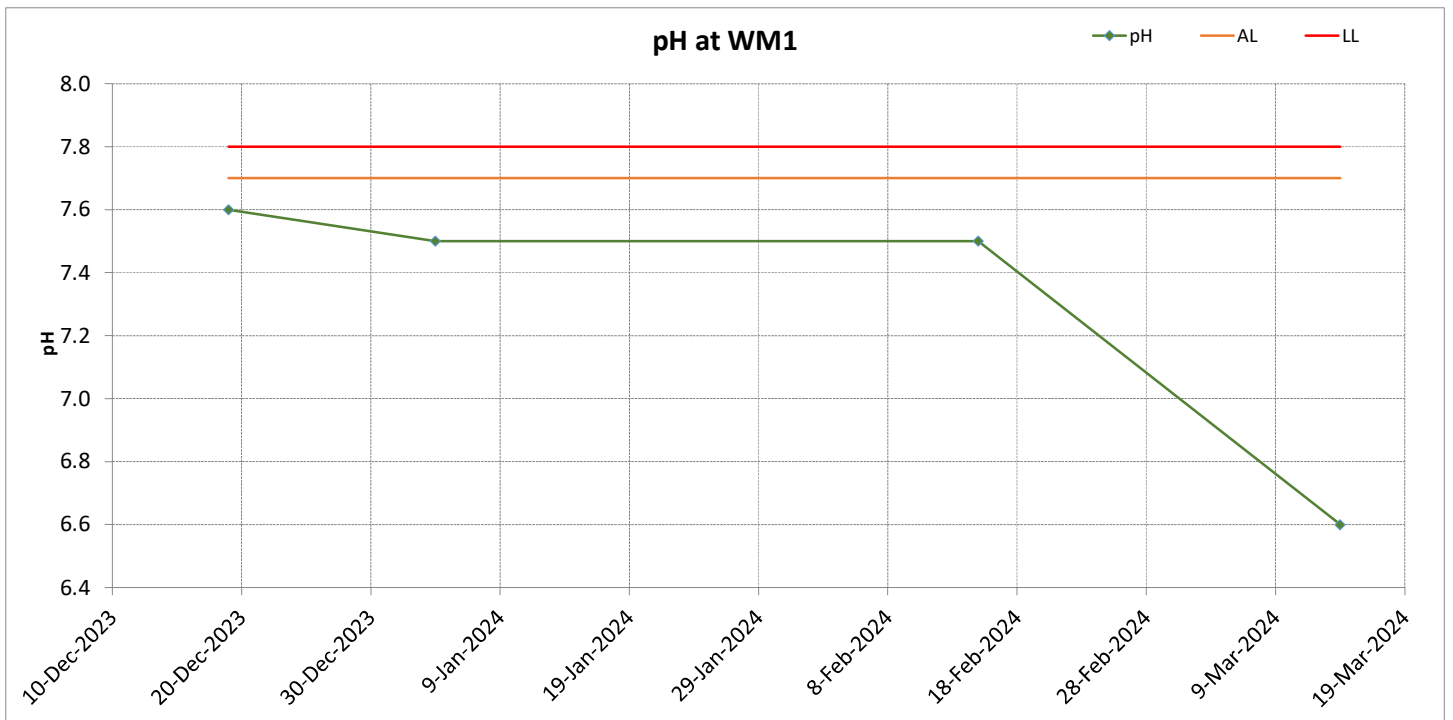
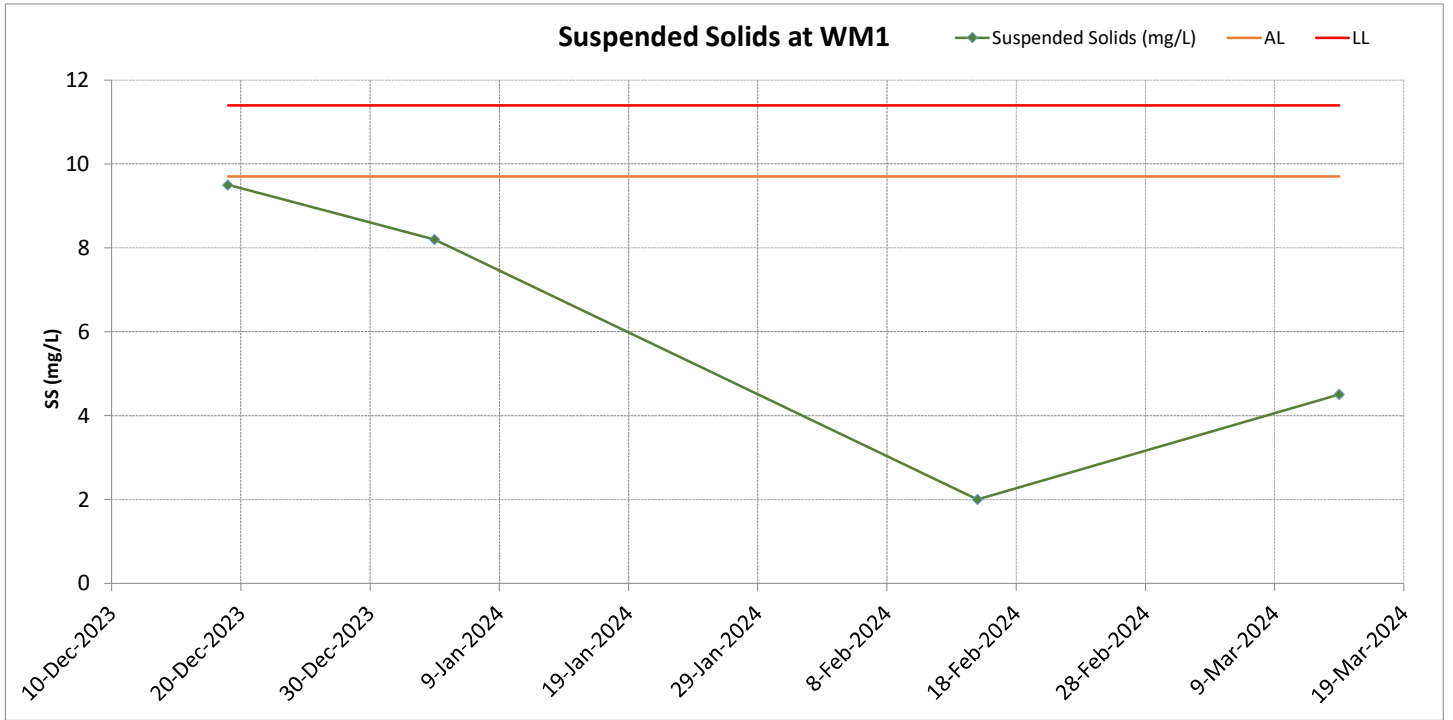
# Water Quality



# Surface Water Monitoring Results at WM1

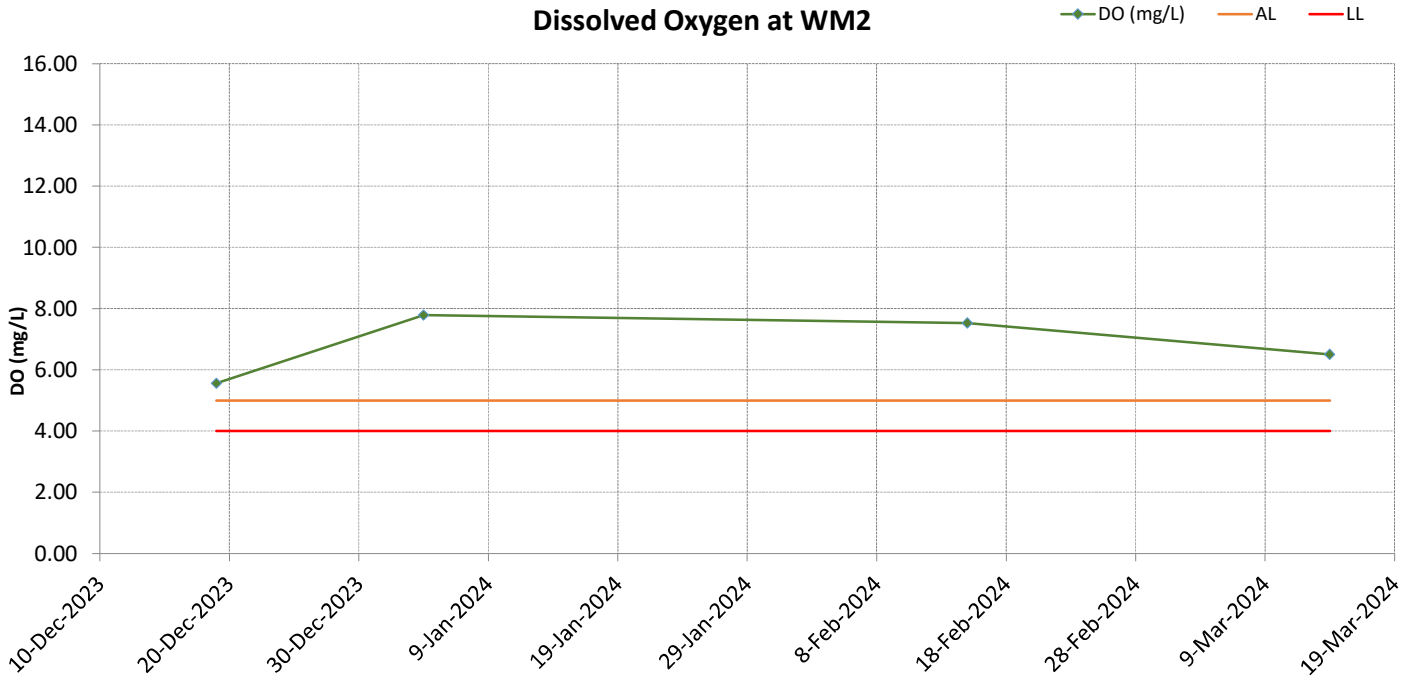


# Surface Water Monitoring Results at WM1

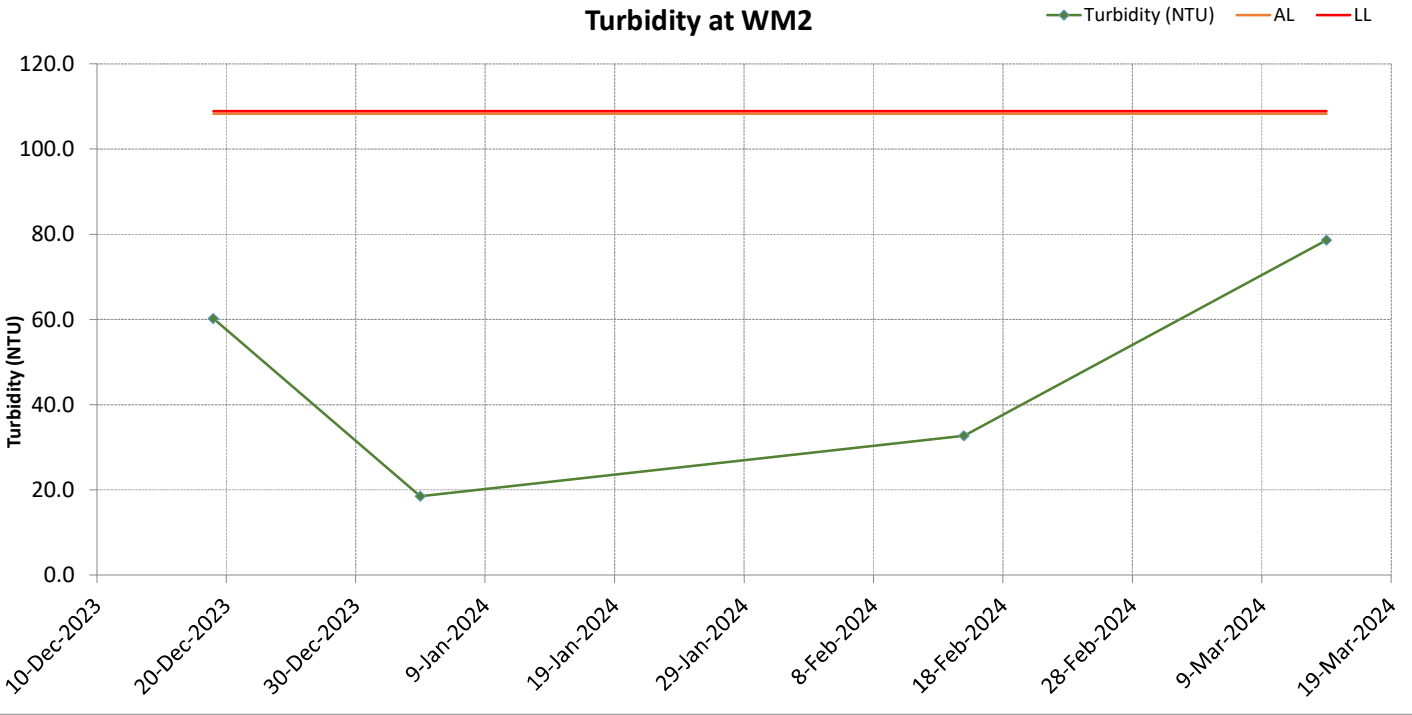


# Surface Water Monitoring Results at WM2

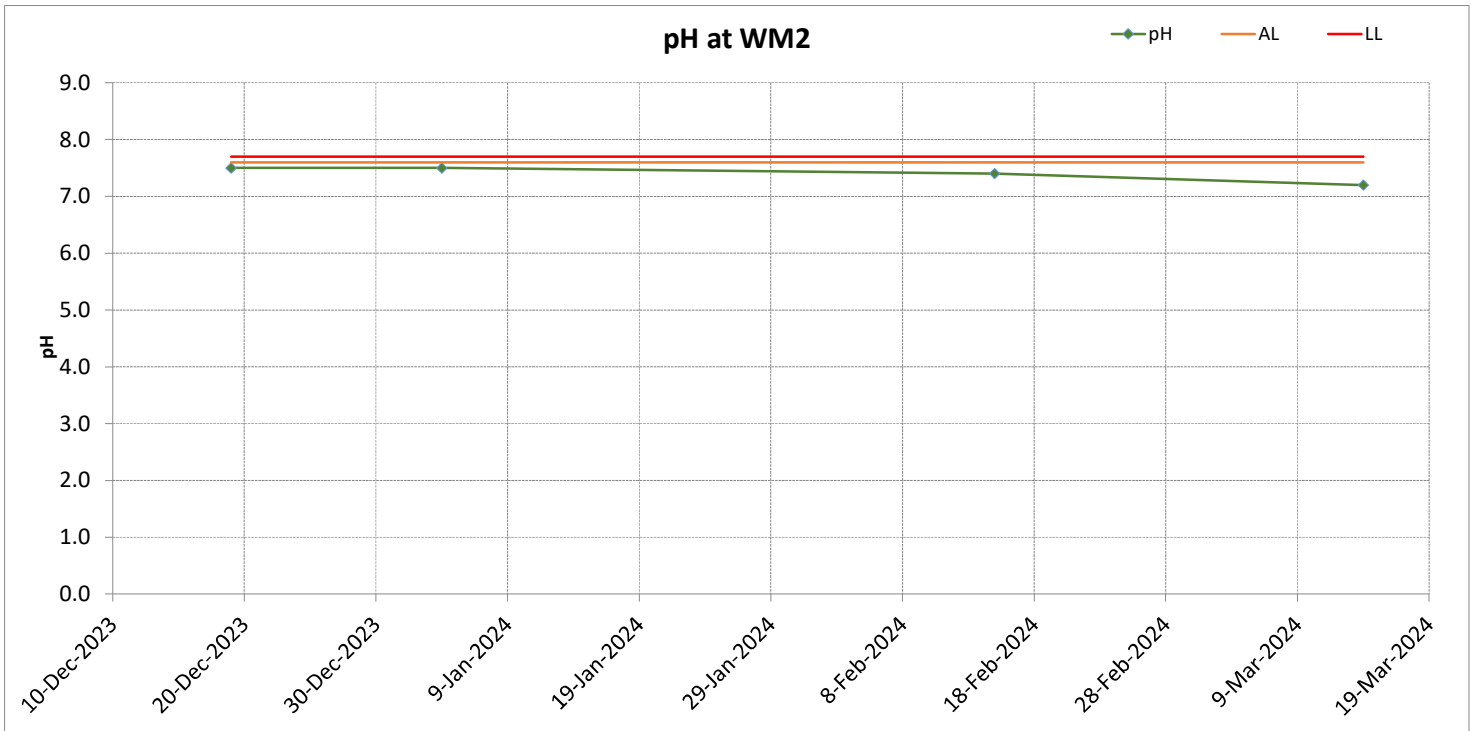
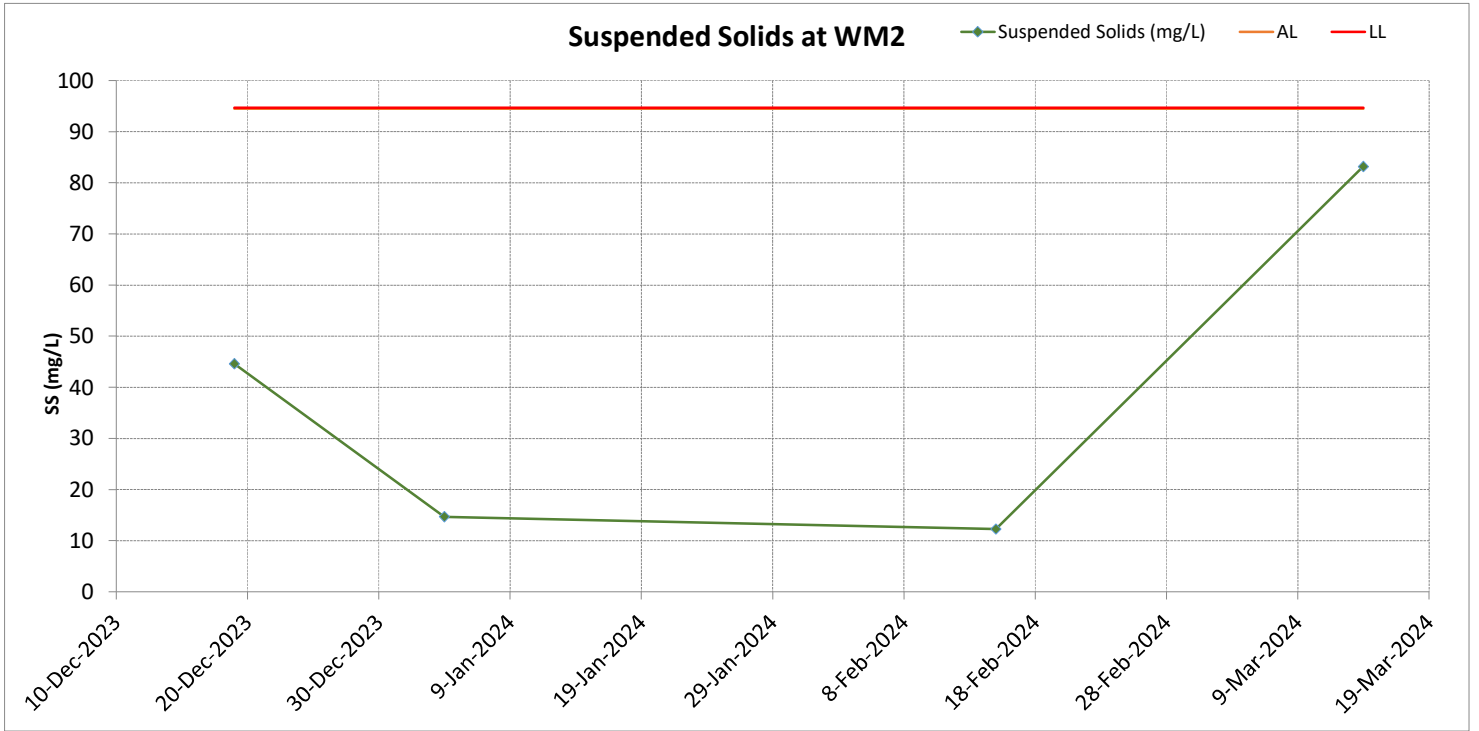
## Dissolved Oxygen at WM2



## Turbidity at WM2



# Surface Water Monitoring Results at WM2



# 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



# Appendix I Wind Data



Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240301 0003	0.3	29
20240301 0013	0.1	35
20240301 0023	0.1	39
20240301 0033	0.1	297
20240301 0043	0.1	197
20240301 0053	0.1	292
20240301 0103	0.1	227
20240301 0113	0.1	93
20240301 0123	0.7	337
20240301 0133	0.3	277
20240301 0143	0.1	211
20240301 0153	1	336
20240301 0203	2.6	327
20240301 0213	1.7	17
20240301 0223	0.1	341
20240301 0233	0.1	337
20240301 0243	0.4	296
20240301 0253	0.1	41
20240301 0303	0.2	301
20240301 0313	0.6	308
20240301 0323	0.2	27
20240301 0333	0.6	109
20240301 0343	0.3	215
20240301 0353	0.1	283
20240301 0403	0.1	214
20240301 0413	0.1	43
20240301 0423	1	322
20240301 0433	2.9	312
20240301 0443	0.1	38
20240301 0453	0.1	89
20240301 0503	0.2	313
20240301 0513	1.5	306
20240301 0523	0.2	60
20240301 0533	0.1	34
20240301 0543	0.4	301
20240301 0553	0.4	274
20240301 0603	0.2	325
20240301 0613	0.2	23
20240301 0623	0.1	336
20240301 0633	0.3	252
20240301 0643	0.1	323
20240301 0653	1.1	332
20240301 0703	0.1	318
20240301 0713	0.3	80
20240301 0723	0.1	13
20240301 0733	0.1	133
20240301 0743	0.1	207
20240301 0753	0.2	226
20240301 0803	0.1	64
20240301 0813	0.9	344
20240301 0823	0.1	310
20240301 0833	0.1	266
20240301 0843	2.7	344
20240301 0853	0.1	231
20240301 0903	0.1	75
20240301 0913	0.2	184
20240301 0923	0.1	255
20240301 0933	0.6	22
20240301 0943	0.1	285
20240301 0953	0.4	332
20240301 1003	1	312
20240301 1013	0.6	236
20240301 1023	2.9	304
20240301 1033	5.4	297
20240301 1043	1	334
20240301 1053	0.1	240
20240301 1103	4.8	280
20240301 1113	0.3	270
20240301 1123	0.1	215
20240301 1133	4.7	9
20240301 1143	0.1	288
20240301 1153	0.4	272

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240301 1203	3.8	80
20240301 1213	0.2	346
20240301 1223	1	345
20240301 1233	0.2	277
20240301 1243	2.8	304
20240301 1253	0.1	41
20240301 1303	3	50
20240301 1313	1.6	263
20240301 1323	2.8	318
20240301 1333	0.2	293
20240301 1343	3.7	339
20240301 1353	0.3	39
20240301 1403	0.1	250
20240301 1413	2.7	53
20240301 1423	1.1	343
20240301 1433	0.1	30
20240301 1443	4.1	321
20240301 1453	0.9	338
20240301 1503	0.1	320
20240301 1513	0.1	109
20240301 1523	1.6	331
20240301 1533	0.1	223
20240301 1543	1	307
20240301 1553	0.4	314
20240301 1603	0.3	325
20240301 1613	0.3	352
20240301 1623	0.1	68
20240301 1633	1.9	321
20240301 1643	0.1	98
20240301 1653	0.1	35
20240301 1703	0.1	121
20240301 1713	0.1	304
20240301 1723	0.1	77
20240301 1733	0.1	344
20240301 1743	0.1	94
20240301 1753	0.3	164
20240301 1803	0.7	50
20240301 1813	0.8	3
20240301 1823	0.1	15
20240301 1833	0.2	217
20240301 1843	0.4	63
20240301 1853	0.6	302
20240301 1903	0.7	352
20240301 1913	0.1	44
20240301 1923	2.2	349
20240301 1933	0.1	278
20240301 1943	0.1	135
20240301 1953	0.1	292
20240301 2003	0.1	142
20240301 2013	0.1	132
20240301 2023	0.1	215
20240301 2033	0.4	347
20240301 2043	0.2	45
20240301 2053	0.1	15
20240301 2103	0.1	52
20240301 2113	0.1	259
20240301 2123	0.1	244
20240301 2133	0.1	137
20240301 2143	0.1	138
20240301 2153	0.1	303
20240301 2203	0.1	187
20240301 2213	0.1	224
20240301 2223	0.1	262
20240301 2233	0.1	277
20240301 2243	0.1	140
20240301 2253	0.1	261
20240301 2303	0.1	278
20240301 2313	0.1	68
20240301 2323	0.1	289
20240301 2333	0.1	309
20240301 2343	0.9	339
20240301 2353	0.1	258

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240302 0003	0.1	53
20240302 0013	0.6	303
20240302 0023	0.1	43
20240302 0033	0.3	321
20240302 0043	0.1	14
20240302 0053	0.4	355
20240302 0103	0.1	335
20240302 0113	0.1	258
20240302 0123	0.1	1
20240302 0133	0.3	288
20240302 0143	0.1	332
20240302 0153	0.1	316
20240302 0203	0.1	334
20240302 0213	0.1	83
20240302 0223	0.1	291
20240302 0233	0.3	328
20240302 0243	0.1	275
20240302 0253	0.1	327
20240302 0303	0.2	287
20240302 0313	0.1	323
20240302 0323	0.1	45
20240302 0333	0.2	332
20240302 0343	0.1	193
20240302 0353	0.2	25
20240302 0403	0.1	18
20240302 0413	0.1	289
20240302 0423	0.2	306
20240302 0433	0.1	255
20240302 0443	0.1	322
20240302 0453	0.1	60
20240302 0503	1	46
20240302 0513	0.4	313
20240302 0523	0.6	326
20240302 0533	0.1	258
20240302 0543	0.6	299
20240302 0553	0.1	344
20240302 0603	0.2	340
20240302 0613	0.1	45
20240302 0623	0.1	135
20240302 0633	0.6	323
20240302 0643	0.1	310
20240302 0653	0.2	279
20240302 0703	1.9	317
20240302 0713	0.8	292
20240302 0723	0.1	292
20240302 0733	0.1	256
20240302 0743	0.6	314
20240302 0753	0.1	12
20240302 0803	0.1	72
20240302 0813	0.1	258
20240302 0823	0.1	341
20240302 0833	0.1	162
20240302 0843	0.1	27
20240302 0853	1.5	306
20240302 0903	0.1	294
20240302 0913	0.1	328
20240302 0923	0.1	27
20240302 0933	0.1	259
20240302 0943	0.1	128
20240302 0953	0.1	297
20240302 1003	0.1	23
20240302 1013	0.1	296
20240302 1023	0.1	139
20240302 1033	0.2	299
20240302 1043	0.1	123
20240302 1053	0.1	141
20240302 1103	0.1	134
20240302 1113	0.4	57
20240302 1123	0.1	45
20240302 1133	0.2	8
20240302 1143	0.1	307
20240302 1153	0.2	3

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240302 1203	0.1	310
20240302 1213	0.1	230
20240302 1223	0.6	143
20240302 1233	0.1	135
20240302 1243	0.1	55
20240302 1253	0.1	254
20240302 1303	0.3	148
20240302 1313	0.6	140
20240302 1323	0.1	100
20240302 1333	0.1	327
20240302 1343	0.1	130
20240302 1353	0.1	139
20240302 1403	1.3	192
20240302 1413	0.1	35
20240302 1423	0.6	28
20240302 1433	2.9	166
20240302 1443	0.7	147
20240302 1453	0.1	107
20240302 1503	0.3	19
20240302 1513	0.2	60
20240302 1523	0.5	122
20240302 1533	0.1	272
20240302 1543	0.1	240
20240302 1553	0.1	168
20240302 1603	0.1	221
20240302 1613	0.1	149
20240302 1623	0.2	147
20240302 1633	0.3	110
20240302 1643	0.2	117
20240302 1653	0.1	182
20240302 1703	0.1	112
20240302 1713	2.4	152
20240302 1723	0.1	138
20240302 1733	0.1	83
20240302 1743	0.1	170
20240302 1753	0.1	101
20240302 1803	0.1	197
20240302 1813	0.1	57
20240302 1823	0.1	85
20240302 1833	0.1	131
20240302 1843	0.1	119
20240302 1853	0.2	163
20240302 1903	0.1	27
20240302 1913	0.1	14
20240302 1923	0.1	127
20240302 1933	0.1	142
20240302 1943	0.1	155
20240302 1953	0.1	143
20240302 2003	0.1	98
20240302 2013	0.1	98
20240302 2023	0.1	99
20240302 2033	0.1	99
20240302 2043	0.1	100
20240302 2053	0.1	149
20240302 2103	0.1	178
20240302 2113	0.1	267
20240302 2123	0.1	244
20240302 2133	0.1	301
20240302 2143	0.1	106
20240302 2153	0.1	333
20240302 2203	0.1	125
20240302 2213	0.1	137
20240302 2223	0.1	243
20240302 2233	0.1	144
20240302 2243	0.1	141
20240302 2253	0.1	274
20240302 2303	0.1	110
20240302 2313	0.1	206
20240302 2323	0.1	146
20240302 2333	0.1	191
20240302 2343	0.1	147
20240302 2353	0.1	111

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240303 0003	0.1	111
20240303 0013	0.1	111
20240303 0023	0.1	147
20240303 0033	0.1	162
20240303 0043	0.1	94
20240303 0053	0.1	329
20240303 0103	0.1	112
20240303 0113	0.1	13
20240303 0123	0.1	124
20240303 0133	0.1	124
20240303 0143	0.1	300
20240303 0153	0.1	157
20240303 0203	0.1	136
20240303 0213	0.1	120
20240303 0223	0.1	76
20240303 0233	0.1	130
20240303 0243	0.1	141
20240303 0253	0.1	145
20240303 0303	0.1	132
20240303 0313	0.1	117
20240303 0323	0.1	119
20240303 0333	0.1	134
20240303 0343	0.1	133
20240303 0353	0.1	46
20240303 0403	0.1	74
20240303 0413	0.1	140
20240303 0423	0.1	97
20240303 0433	0.1	193
20240303 0443	0.1	138
20240303 0453	0.1	151
20240303 0503	0.1	128
20240303 0513	0.1	271
20240303 0523	0.1	147
20240303 0533	0.1	197
20240303 0543	0.1	147
20240303 0553	0.1	126
20240303 0603	0.1	207
20240303 0613	0.1	146
20240303 0623	0.1	240
20240303 0633	0.1	155
20240303 0643	0.1	154
20240303 0653	0.1	332
20240303 0703	0.1	137
20240303 0713	0.1	150
20240303 0723	0.1	229
20240303 0733	0.1	326
20240303 0743	0.1	145
20240303 0753	0.1	129
20240303 0803	0.1	276
20240303 0813	0.1	257
20240303 0823	0.1	122
20240303 0833	0.1	284
20240303 0843	0.4	294
20240303 0853	0.1	123
20240303 0903	0.2	7
20240303 0913	0.1	89
20240303 0923	0.1	275
20240303 0933	0.1	23
20240303 0943	0.2	58
20240303 0953	0.3	56
20240303 1003	0.1	245
20240303 1013	0.1	97
20240303 1023	0.1	301
20240303 1033	0.1	313
20240303 1043	0.1	127
20240303 1053	0.4	133
20240303 1103	0.6	199
20240303 1113	1	109
20240303 1123	0.1	72
20240303 1133	1.5	60
20240303 1143	0.4	16
20240303 1153	0.8	340

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240303 1203	2.1	121
20240303 1213	14.1	144
20240303 1223	0.3	115
20240303 1233	0.1	30
20240303 1243	0.7	129
20240303 1253	2.1	197
20240303 1303	0.3	52
20240303 1313	1.6	165
20240303 1323	0.3	54
20240303 1333	0.3	92
20240303 1343	0.6	284
20240303 1353	1	148
20240303 1403	0.2	283
20240303 1413	3.1	305
20240303 1423	0.3	328
20240303 1433	0.1	133
20240303 1443	0.1	333
20240303 1453	0.1	162
20240303 1503	2.1	68
20240303 1513	2.5	44
20240303 1523	0.1	313
20240303 1533	1.6	140
20240303 1543	2.1	19
20240303 1553	1.1	58
20240303 1603	4.4	291
20240303 1613	3	49
20240303 1623	2.3	298
20240303 1633	0.1	325
20240303 1643	0.1	263
20240303 1653	0.1	38
20240303 1703	0.1	42
20240303 1713	0.1	61
20240303 1723	0.1	6
20240303 1733	0.7	204
20240303 1743	0.4	60
20240303 1753	0.4	327
20240303 1803	3.4	26
20240303 1813	0.9	171
20240303 1823	1.2	343
20240303 1833	1.8	135
20240303 1843	0.1	156
20240303 1853	0.2	271
20240303 1903	0.1	145
20240303 1913	0.5	315
20240303 1923	1.4	35
20240303 1933	0.4	152
20240303 1943	0.3	56
20240303 1953	1.3	47
20240303 2003	0.4	143
20240303 2013	2.4	329
20240303 2023	0.2	40
20240303 2033	0.6	149
20240303 2043	0.6	117
20240303 2053	0.3	33
20240303 2103	0.1	103
20240303 2113	0.1	106
20240303 2123	2.5	66
20240303 2133	0.2	158
20240303 2143	0.7	168
20240303 2153	0.4	137
20240303 2203	1	352
20240303 2213	0.6	72
20240303 2223	0.4	77
20240303 2233	0.1	76
20240303 2243	0.4	233
20240303 2253	1.5	138
20240303 2303	1	181
20240303 2313	3.2	174
20240303 2323	0.2	171
20240303 2333	7.4	16
20240303 2343	1	76
20240303 2353	2.9	104

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240304 0003	0.2	72
20240304 0013	1.4	304
20240304 0023	0.1	52
20240304 0033	0.1	146
20240304 0043	0.5	40
20240304 0053	0.5	85
20240304 0103	5.6	14
20240304 0113	0.1	27
20240304 0123	0.3	275
20240304 0133	0.1	105
20240304 0143	0.1	297
20240304 0153	0.1	339
20240304 0203	0.2	48
20240304 0213	0.8	168
20240304 0223	1.2	179
20240304 0233	8.3	91
20240304 0243	0.5	270
20240304 0253	1.6	50
20240304 0303	0.6	20
20240304 0313	0.5	70
20240304 0323	2.7	289
20240304 0333	0.2	131
20240304 0343	0.2	87
20240304 0353	1.4	51
20240304 0403	8.1	147
20240304 0413	0.3	45
20240304 0423	2.2	73
20240304 0433	0.5	100
20240304 0443	2.1	7
20240304 0453	3.7	229
20240304 0503	1.4	314
20240304 0513	0.3	46
20240304 0523	1.7	57
20240304 0533	0.9	340
20240304 0543	0.8	154
20240304 0553	3.5	10
20240304 0603	0.4	65
20240304 0613	0.3	41
20240304 0623	2.5	163
20240304 0633	5	50
20240304 0643	1	151
20240304 0653	2.8	113
20240304 0703	1.3	38
20240304 0713	0.6	235
20240304 0723	3.1	69
20240304 0733	0.2	227
20240304 0743	2.4	62
20240304 0753	1.2	8
20240304 0803	4.9	318
20240304 0813	0.3	348
20240304 0823	0.1	272
20240304 0833	0.8	154
20240304 0843	1.1	337
20240304 0853	3.1	18
20240304 0903	0.1	267
20240304 0913	0.1	81
20240304 0923	2.1	42
20240304 0933	2.3	130
20240304 0943	0.1	126
20240304 0953	1.2	120
20240304 1003	6.5	179
20240304 1013	5.3	90
20240304 1023	0.3	85
20240304 1033	0.5	48
20240304 1043	0.8	64
20240304 1053	0.5	106
20240304 1103	3.1	20
20240304 1113	2.2	14
20240304 1123	0.1	102
20240304 1133	0.3	291
20240304 1143	1.4	155
20240304 1153	0.3	11

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240304 1203	0.1	231
20240304 1213	0.1	108
20240304 1223	0.1	115
20240304 1233	2.5	37
20240304 1243	3.6	52
20240304 1253	1.3	158
20240304 1303	0.2	279
20240304 1313	1.8	195
20240304 1323	2.2	95
20240304 1333	1.5	254
20240304 1343	3.9	337
20240304 1353	2.9	253
20240304 1403	1.6	12
20240304 1413	1.4	55
20240304 1423	0.2	30
20240304 1433	0.1	124
20240304 1443	1.2	134
20240304 1453	0.2	97
20240304 1503	4.9	41
20240304 1513	0.3	183
20240304 1523	0.5	24
20240304 1533	0.9	345
20240304 1543	1.3	286
20240304 1553	0.3	294
20240304 1603	0.9	317
20240304 1613	0.9	303
20240304 1623	1	25
20240304 1633	0.5	351
20240304 1643	0.6	54
20240304 1653	1.9	130
20240304 1703	0.1	33
20240304 1713	0.3	158
20240304 1723	0.2	352
20240304 1733	0.1	347
20240304 1743	0.1	53
20240304 1753	0.2	102
20240304 1803	0.1	75
20240304 1813	0.1	7
20240304 1823	0.3	17
20240304 1833	0.1	99
20240304 1843	0.5	139
20240304 1853	0.3	89
20240304 1903	1.6	292
20240304 1913	0.7	85
20240304 1923	0.1	174
20240304 1933	0.6	148
20240304 1943	0.6	314
20240304 1953	0.1	351
20240304 2003	1.1	339
20240304 2013	0.8	15
20240304 2023	0.2	356
20240304 2033	0.1	314
20240304 2043	0.1	341
20240304 2053	0.1	15
20240304 2103	0.1	42
20240304 2113	0.1	291
20240304 2123	0.2	77
20240304 2133	0.2	38
20240304 2143	0.1	266
20240304 2153	0.2	327
20240304 2203	2.4	35
20240304 2213	1.8	339
20240304 2223	0.2	343
20240304 2233	2.8	57
20240304 2243	0.1	339
20240304 2253	0.8	103
20240304 2303	0.9	288
20240304 2313	0.4	216
20240304 2323	0.1	105
20240304 2333	1.7	144
20240304 2343	0.1	116
20240304 2353	0.3	87

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240305 0003	0.3	162
20240305 0013	0.1	154
20240305 0023	0.1	26
20240305 0033	0.1	80
20240305 0043	0.1	42
20240305 0053	0.1	77
20240305 0103	0.1	71
20240305 0113	0.1	267
20240305 0123	0.1	351
20240305 0133	0.2	175
20240305 0143	0.1	95
20240305 0153	0.1	46
20240305 0203	0.2	145
20240305 0213	0.1	76
20240305 0223	0.1	120
20240305 0233	0.1	266
20240305 0243	0.1	158
20240305 0253	0.5	118
20240305 0303	0.1	3
20240305 0313	0.1	112
20240305 0323	1.1	148
20240305 0333	0.1	99
20240305 0343	0.1	20
20240305 0353	0.2	43
20240305 0403	0.6	100
20240305 0413	0.1	67
20240305 0423	0.1	49
20240305 0433	0.1	90
20240305 0443	0.1	220
20240305 0453	0.1	112
20240305 0503	0.2	42
20240305 0513	0.1	352
20240305 0523	0.6	310
20240305 0533	0.2	77
20240305 0543	0.7	20
20240305 0553	0.2	54
20240305 0603	0.1	190
20240305 0613	0.1	200
20240305 0623	0.1	42
20240305 0633	0.1	159
20240305 0643	0.1	182
20240305 0653	0.2	196
20240305 0703	0.1	111
20240305 0713	0.4	90
20240305 0723	0.1	121
20240305 0733	0.1	64
20240305 0743	0.1	52
20240305 0753	0.2	140
20240305 0803	0.1	37
20240305 0813	0.1	185
20240305 0823	0.1	83
20240305 0833	1.2	136
20240305 0843	0.5	150
20240305 0853	1.2	146
20240305 0903	0.4	155
20240305 0913	0.1	283
20240305 0923	0.1	344
20240305 0933	0.2	283
20240305 0943	0.1	205
20240305 0953	0.1	95
20240305 1003	0.1	219
20240305 1013	0.1	98
20240305 1023	0.1	179
20240305 1033	0.1	174
20240305 1043	0.1	133
20240305 1053	0.1	140
20240305 1103	0.2	255
20240305 1113	0.1	75
20240305 1123	0.9	178
20240305 1133	0.1	46
20240305 1143	0.2	265
20240305 1153	0.2	199

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240305 1203	0.1	218
20240305 1213	0.1	220
20240305 1223	1.8	103
20240305 1233	0.2	316
20240305 1243	0.1	97
20240305 1253	0.2	160
20240305 1303	0.1	19
20240305 1313	0.4	254
20240305 1323	0.2	203
20240305 1333	0.1	195
20240305 1343	1.1	163
20240305 1353	0.1	164
20240305 1403	0.7	244
20240305 1413	3.7	87
20240305 1423	0.2	300
20240305 1433	1.3	254
20240305 1443	0.2	207
20240305 1453	0.3	279
20240305 1503	0.1	162
20240305 1513	0.1	289
20240305 1523	0.4	148
20240305 1533	0.1	231
20240305 1543	0.9	265
20240305 1553	0.1	238
20240305 1603	0.1	26
20240305 1613	0.5	174
20240305 1623	0.1	108
20240305 1633	0.1	231
20240305 1643	0.1	123
20240305 1653	0.1	246
20240305 1703	0.4	329
20240305 1713	0.5	149
20240305 1723	0.1	141
20240305 1733	0.1	192
20240305 1743	0.1	248
20240305 1753	0.1	231
20240305 1803	0.1	328
20240305 1813	0.1	230
20240305 1823	0.2	281
20240305 1833	0.1	231
20240305 1843	0.1	229
20240305 1853	0.1	274
20240305 1903	0.1	190
20240305 1913	0.1	136
20240305 1923	0.1	225
20240305 1933	0.1	228
20240305 1943	0.1	270
20240305 1953	0.1	118
20240305 2003	0.1	117
20240305 2013	0.1	276
20240305 2023	0.1	253
20240305 2033	0.1	76
20240305 2043	0.1	339
20240305 2053	0.1	234
20240305 2103	0.1	231
20240305 2113	0.1	300
20240305 2123	0.1	122
20240305 2133	0.1	345
20240305 2143	0.1	261
20240305 2153	0.1	54
20240305 2203	0.1	54
20240305 2213	0.1	54
20240305 2223	0.1	4
20240305 2233	0.1	146
20240305 2243	0.1	56
20240305 2253	0.1	12
20240305 2303	0.1	59
20240305 2313	0.1	21
20240305 2323	0.1	34
20240305 2333	0.1	339
20240305 2343	0.1	46
20240305 2353	0.1	14

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240306 0003	0.1	40
20240306 0013	0.1	34
20240306 0023	0.1	241
20240306 0033	0.1	293
20240306 0043	0.1	320
20240306 0053	0.1	290
20240306 0103	0.1	160
20240306 0113	0.1	228
20240306 0123	0.1	297
20240306 0133	0.1	281
20240306 0143	0.1	267
20240306 0153	0.1	245
20240306 0203	0.1	284
20240306 0213	0.1	42
20240306 0223	0.1	28
20240306 0233	0.1	105
20240306 0243	0.1	177
20240306 0253	0.1	167
20240306 0303	0.1	18
20240306 0313	0.1	18
20240306 0323	0.1	123
20240306 0333	0.1	123
20240306 0343	0.1	103
20240306 0353	0.1	14
20240306 0403	0.1	14
20240306 0413	0.1	44
20240306 0423	0.1	344
20240306 0433	0.1	49
20240306 0443	0.1	37
20240306 0453	0.1	236
20240306 0503	0.1	263
20240306 0513	0.1	256
20240306 0523	0.1	278
20240306 0533	0.1	273
20240306 0543	0.1	287
20240306 0553	0.1	21
20240306 0603	0.1	133
20240306 0613	0.1	351
20240306 0623	0.1	151
20240306 0633	0.1	150
20240306 0643	0.1	18
20240306 0653	0.1	326
20240306 0703	0.1	144
20240306 0713	0.1	123
20240306 0723	0.1	97
20240306 0733	0.1	143
20240306 0743	0.1	238
20240306 0753	0.1	132
20240306 0803	0.1	126
20240306 0813	0.1	354
20240306 0823	0.1	18
20240306 0833	0.5	215
20240306 0843	0.1	280
20240306 0853	0.1	76
20240306 0903	0.1	103
20240306 0913	0.1	145
20240306 0923	0.1	38
20240306 0933	0.4	2
20240306 0943	0.3	30
20240306 0953	0.1	30
20240306 1003	0.1	26
20240306 1013	0.1	77
20240306 1023	0.3	128
20240306 1033	0.1	19
20240306 1043	0.1	324
20240306 1053	0.1	344
20240306 1103	0.1	172
20240306 1113	0.1	77
20240306 1123	0.1	83
20240306 1133	0.1	124
20240306 1143	0.1	262
20240306 1153	0.1	125

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240306 1203	0.1	250
20240306 1213	0.1	282
20240306 1223	0.1	252
20240306 1233	0.1	29
20240306 1243	0.1	216
20240306 1253	0.1	144
20240306 1303	0.1	87
20240306 1313	0.7	141
20240306 1323	0.5	141
20240306 1333	0.3	126
20240306 1343	0.2	151
20240306 1353	0.2	150
20240306 1403	0.1	123
20240306 1413	0.1	154
20240306 1423	0.1	118
20240306 1433	0.1	18
20240306 1443	0.1	208
20240306 1453	0.1	240
20240306 1503	0.1	64
20240306 1513	0.1	84
20240306 1523	0.1	92
20240306 1533	0.1	96
20240306 1543	0.1	259
20240306 1553	0.1	120
20240306 1603	0.2	335
20240306 1613	0.1	143
20240306 1623	0.1	291
20240306 1633	0.1	114
20240306 1643	0.1	32
20240306 1653	0.1	340
20240306 1703	0.1	54
20240306 1713	0.1	282
20240306 1723	0.1	354
20240306 1733	0.1	87
20240306 1743	0.1	290
20240306 1753	0.1	87
20240306 1803	0.1	335
20240306 1813	0.4	26
20240306 1823	0.1	146
20240306 1833	0.1	129
20240306 1843	0.1	82
20240306 1853	0.1	145
20240306 1903	0.1	119
20240306 1913	0.1	1
20240306 1923	0.1	337
20240306 1933	0.2	17
20240306 1943	0.2	279
20240306 1953	0.1	116
20240306 2003	0.1	71
20240306 2013	0.3	332
20240306 2023	0.7	347
20240306 2033	0.2	7
20240306 2043	0.1	303
20240306 2053	0.1	193
20240306 2103	0.1	304
20240306 2113	0.1	327
20240306 2123	0.1	98
20240306 2133	0.1	161
20240306 2143	0.1	149
20240306 2153	0.1	142
20240306 2203	0.1	56
20240306 2213	0.1	17
20240306 2223	0.1	342
20240306 2233	0.1	115
20240306 2243	0.1	157
20240306 2253	0.2	115
20240306 2303	0.1	246
20240306 2313	0.1	314
20240306 2323	0.1	142
20240306 2333	0.1	170
20240306 2343	0.1	121
20240306 2353	0.1	140

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240307 0003	0.1	67
20240307 0013	0.1	125
20240307 0023	0.1	133
20240307 0033	0.2	286
20240307 0043	0.1	159
20240307 0053	0.1	62
20240307 0103	0.1	21
20240307 0113	0.1	216
20240307 0123	0.1	2
20240307 0133	0.1	46
20240307 0143	0.2	342
20240307 0153	0.4	288
20240307 0203	0.1	164
20240307 0213	0.8	324
20240307 0223	0.1	322
20240307 0233	0.1	98
20240307 0243	0.1	350
20240307 0253	0.1	286
20240307 0303	0.1	305
20240307 0313	0.1	349
20240307 0323	0.1	82
20240307 0333	0.1	109
20240307 0343	0.1	103
20240307 0353	0.1	152
20240307 0403	0.1	3
20240307 0413	0.1	3
20240307 0423	0.1	124
20240307 0433	0.1	61
20240307 0443	0.1	118
20240307 0453	0.1	92
20240307 0503	0.1	117
20240307 0513	0.1	345
20240307 0523	0.1	112
20240307 0533	0.1	101
20240307 0543	0.2	45
20240307 0553	0.1	284
20240307 0603	0.1	307
20240307 0613	0.1	142
20240307 0623	0.1	143
20240307 0633	0.1	12
20240307 0643	0.1	239
20240307 0653	0.1	125
20240307 0703	0.1	118
20240307 0713	0.1	93
20240307 0723	0.1	271
20240307 0733	0.1	242
20240307 0743	0.1	148
20240307 0753	0.1	126
20240307 0803	0.1	88
20240307 0813	0.1	257
20240307 0823	0.1	226
20240307 0833	0.1	134
20240307 0843	0.1	276
20240307 0853	0.1	247
20240307 0903	0.2	303
20240307 0913	0.1	260
20240307 0923	0.1	218
20240307 0933	0.1	30
20240307 0943	0.2	256
20240307 0953	0.1	291
20240307 1003	0.1	242
20240307 1013	0.1	59
20240307 1023	0.1	69
20240307 1033	0.3	19
20240307 1043	0.1	14
20240307 1053	0.1	249
20240307 1103	0.1	149
20240307 1113	0.1	190
20240307 1123	0.1	48
20240307 1133	0.1	352
20240307 1143	0.1	100
20240307 1153	0.1	329

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240307 1203	0.1	31
20240307 1213	0.5	136
20240307 1223	0.4	102
20240307 1233	0.3	33
20240307 1243	0.1	93
20240307 1253	0.1	8
20240307 1303	0.5	107
20240307 1313	0.1	63
20240307 1323	0.1	310
20240307 1333	0.1	100
20240307 1343	0.1	137
20240307 1353	0.1	81
20240307 1403	0.2	40
20240307 1413	0.1	125
20240307 1423	0.3	146
20240307 1433	0.3	43
20240307 1443	0.1	163
20240307 1453	0.3	70
20240307 1503	0.1	317
20240307 1513	0.3	6
20240307 1523	0.1	289
20240307 1533	0.3	275
20240307 1543	0.2	285
20240307 1553	0.1	19
20240307 1603	0.1	316
20240307 1613	0.1	344
20240307 1623	0.1	173
20240307 1633	0.1	332
20240307 1643	0.2	30
20240307 1653	0.1	125
20240307 1703	0.2	119
20240307 1713	0.1	131
20240307 1723	0.1	79
20240307 1733	0.2	130
20240307 1743	0.1	141
20240307 1753	0.1	108
20240307 1803	0.1	324
20240307 1813	0.1	279
20240307 1823	0.2	312
20240307 1833	0.1	320
20240307 1843	0.1	102
20240307 1853	0.2	19
20240307 1903	0.1	82
20240307 1913	0.1	340
20240307 1923	0.1	274
20240307 1933	0.1	48
20240307 1943	0.1	187
20240307 1953	0.1	137
20240307 2003	0.1	146
20240307 2013	0.1	138
20240307 2023	0.1	315
20240307 2033	0.1	288
20240307 2043	0.1	91
20240307 2053	0.1	38
20240307 2103	0.1	179
20240307 2113	0.1	108
20240307 2123	0.1	73
20240307 2133	0.1	149
20240307 2143	0.1	52
20240307 2153	0.1	19
20240307 2203	0.1	251
20240307 2213	0.1	133
20240307 2223	0.2	153
20240307 2233	0.1	152
20240307 2243	0.1	91
20240307 2253	0.1	21
20240307 2303	0.1	103
20240307 2313	0.2	236
20240307 2323	0.1	20
20240307 2333	0.1	62
20240307 2343	0.1	85
20240307 2353	0.1	334

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240308 0003	0.1	323
20240308 0013	0.1	72
20240308 0023	0.1	131
20240308 0033	0.1	321
20240308 0043	0.1	61
20240308 0053	0.1	144
20240308 0103	0.1	154
20240308 0113	0.1	249
20240308 0123	0.1	140
20240308 0133	0.1	86
20240308 0143	0.1	132
20240308 0153	0.1	296
20240308 0203	0.1	129
20240308 0213	0.1	91
20240308 0223	0.1	316
20240308 0233	0.1	150
20240308 0243	0.1	273
20240308 0253	0.1	105
20240308 0303	0.1	132
20240308 0313	0.1	311
20240308 0323	0.1	91
20240308 0333	0.1	86
20240308 0343	0.1	273
20240308 0353	0.1	75
20240308 0403	0.1	139
20240308 0413	0.1	135
20240308 0423	0.1	162
20240308 0433	0.1	84
20240308 0443	0.1	294
20240308 0453	0.1	79
20240308 0503	0.1	155
20240308 0513	0.1	148
20240308 0523	0.1	156
20240308 0533	0.1	126
20240308 0543	0.1	94
20240308 0553	0.1	107
20240308 0603	0.1	137
20240308 0613	0.2	124
20240308 0623	0.1	172
20240308 0633	0.1	110
20240308 0643	0.1	116
20240308 0653	0.1	318
20240308 0703	0.1	123
20240308 0713	0.1	14
20240308 0723	0.1	152
20240308 0733	0.1	131
20240308 0743	0.1	132
20240308 0753	0.1	136
20240308 0803	0.1	48
20240308 0813	0.1	147
20240308 0823	0.1	123
20240308 0833	0.1	235
20240308 0843	0.2	151
20240308 0853	0.1	83
20240308 0903	0.1	122
20240308 0913	0.1	162
20240308 0923	0.1	249
20240308 0933	0.1	226
20240308 0943	0.1	244
20240308 0953	0.1	315
20240308 1003	0.1	32
20240308 1013	0.5	248
20240308 1023	0.5	249
20240308 1033	0.1	231
20240308 1043	2.2	95
20240308 1053	1.1	207
20240308 1103	0.2	344
20240308 1113	0.1	21
20240308 1123	1.4	143
20240308 1133	0.1	227
20240308 1143	2.1	294
20240308 1153	0.1	234

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240308 1203	0.1	169
20240308 1213	0.1	327
20240308 1223	5.2	127
20240308 1233	0.5	114
20240308 1243	0.1	110
20240308 1253	4	104
20240308 1303	0.4	129
20240308 1313	0.2	312
20240308 1323	1.9	140
20240308 1333	1.5	10
20240308 1343	0.4	282
20240308 1353	0.9	350
20240308 1403	0.1	91
20240308 1413	0.2	348
20240308 1423	0.5	92
20240308 1433	0.3	351
20240308 1443	2.3	26
20240308 1453	2.3	78
20240308 1503	0.8	110
20240308 1513	1.9	45
20240308 1523	1.3	22
20240308 1533	1.9	137
20240308 1543	2.3	122
20240308 1553	0.2	17
20240308 1603	1.2	44
20240308 1613	3.1	16
20240308 1623	0.7	41
20240308 1633	0.1	315
20240308 1643	2.4	39
20240308 1653	0.2	69
20240308 1703	2.4	60
20240308 1713	0.3	318
20240308 1723	0.9	131
20240308 1733	0.1	130
20240308 1743	0.3	46
20240308 1753	0.4	321
20240308 1803	0.1	249
20240308 1813	0.2	60
20240308 1823	0.1	311
20240308 1833	0.1	191
20240308 1843	0.1	98
20240308 1853	0.4	35
20240308 1903	0.1	79
20240308 1913	3.4	5
20240308 1923	0.9	163
20240308 1933	0.2	236
20240308 1943	2.6	5
20240308 1953	0.7	49
20240308 2003	0.5	21
20240308 2013	0.3	51
20240308 2023	0.6	107
20240308 2033	0.1	166
20240308 2043	0.4	239
20240308 2053	0.1	45
20240308 2103	0.1	314
20240308 2113	0.2	324
20240308 2123	0.4	316
20240308 2133	0.7	316
20240308 2143	1	17
20240308 2153	0.5	274
20240308 2203	1.4	353
20240308 2213	0.2	319
20240308 2223	0.9	56
20240308 2233	3.6	311
20240308 2243	0.1	288
20240308 2253	0.3	46
20240308 2303	0.3	137
20240308 2313	0.4	58
20240308 2323	3.7	538
20240308 2333	0.6	19
20240308 2343	0.1	154
20240308 2353	0.9	32



Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240309 0003	0.6	164
20240309 0013	0.1	197
20240309 0023	0.8	18
20240309 0033	0.5	1
20240309 0043	0.1	158
20240309 0053	1.9	118
20240309 0103	3.8	328
20240309 0113	0.5	79
20240309 0123	2.2	326
20240309 0133	0.1	5
20240309 0143	0.5	73
20240309 0153	3.2	26
20240309 0203	0.9	34
20240309 0213	0.4	289
20240309 0223	0.1	327
20240309 0233	0.1	222
20240309 0243	1.4	14
20240309 0253	0.1	88
20240309 0303	1	143
20240309 0313	0.1	124
20240309 0323	0.1	278
20240309 0333	0.1	88
20240309 0343	0.5	40
20240309 0353	0.1	65
20240309 0403	0.1	229
20240309 0413	0.1	170
20240309 0423	0.1	318
20240309 0433	0.1	187
20240309 0443	0.6	86
20240309 0453	0.1	272
20240309 0503	0.2	57
20240309 0513	0.5	346
20240309 0523	0.5	333
20240309 0533	0.1	59
20240309 0543	1.6	350
20240309 0553	0.6	321
20240309 0603	1.7	317
20240309 0613	0.2	54
20240309 0623	0.1	313
20240309 0633	0.1	252
20240309 0643	0.1	172
20240309 0653	0.1	160
20240309 0703	0.1	100
20240309 0713	0.1	141
20240309 0723	0.1	285
20240309 0733	0.2	353
20240309 0743	0.1	124
20240309 0753	0.1	72
20240309 0803	0.1	309
20240309 0813	0.1	102
20240309 0823	0.1	193
20240309 0833	0.2	148
20240309 0843	0.1	266
20240309 0853	0.1	132
20240309 0903	0.1	170
20240309 0913	0.1	98
20240309 0923	0.1	304
20240309 0933	0.2	177
20240309 0943	0.1	48
20240309 0953	1	23
20240309 1003	0.1	119
20240309 1013	0.1	165
20240309 1023	0.1	342
20240309 1033	0.1	5
20240309 1043	0.1	299
20240309 1053	0.2	56
20240309 1103	0.1	61
20240309 1113	0.1	228
20240309 1123	0.3	101
20240309 1133	0.1	76
20240309 1143	0.2	105
20240309 1153	0.1	242

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240309 1203	0.4	355
20240309 1213	0.1	159
20240309 1223	0.1	142
20240309 1233	0.1	6
20240309 1243	0.8	60
20240309 1253	0.1	144
20240309 1303	0.1	329
20240309 1313	0.2	269
20240309 1323	0.2	286
20240309 1333	0.2	322
20240309 1343	0.2	144
20240309 1353	0.1	158
20240309 1403	0.1	74
20240309 1413	0.2	116
20240309 1423	0.1	220
20240309 1433	0.1	197
20240309 1443	0.1	105
20240309 1453	0.1	53
20240309 1503	0.1	336
20240309 1513	0.1	3
20240309 1523	0.6	325
20240309 1533	0.8	159
20240309 1543	0.1	134
20240309 1553	0.2	147
20240309 1603	0.2	336
20240309 1613	0.1	218
20240309 1623	0.1	226
20240309 1633	0.1	335
20240309 1643	0.1	279
20240309 1653	0.7	56
20240309 1703	0.3	301
20240309 1713	0.1	36
20240309 1723	0.1	157
20240309 1733	3.8	124
20240309 1743	0.1	160
20240309 1753	0.2	113
20240309 1803	0.1	233
20240309 1813	0.1	113
20240309 1823	0.2	303
20240309 1833	0.1	21
20240309 1843	0.1	347
20240309 1853	0.1	159
20240309 1903	0.2	16
20240309 1913	0.1	325
20240309 1923	0.1	132
20240309 1933	1	157
20240309 1943	0.1	127
20240309 1953	0.1	169
20240309 2003	0.1	321
20240309 2013	0.1	191
20240309 2023	0.1	182
20240309 2033	0.1	81
20240309 2043	0.1	122
20240309 2053	0.1	300
20240309 2103	0.5	116
20240309 2113	0.1	324
20240309 2123	0.1	68
20240309 2133	0.1	76
20240309 2143	0.1	125
20240309 2153	0.2	117
20240309 2203	0.1	135
20240309 2213	0.1	240
20240309 2223	1.1	48
20240309 2233	0.1	41
20240309 2243	0.1	111
20240309 2253	0.1	25
20240309 2303	0.1	295
20240309 2313	0.1	339
20240309 2323	0.1	283
20240309 2333	0.1	148
20240309 2343	0.1	81
20240309 2353	0.2	295

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240310 0003	0.2	17
20240310 0013	0.1	94
20240310 0023	0.1	284
20240310 0033	0.1	344
20240310 0043	0.1	6
20240310 0053	0.1	323
20240310 0103	0.9	288
20240310 0113	0.1	286
20240310 0123	0.2	350
20240310 0133	0.1	53
20240310 0143	0.1	93
20240310 0153	0.1	341
20240310 0203	0.1	89
20240310 0213	0.1	225
20240310 0223	0.1	118
20240310 0233	0.1	294
20240310 0243	0.1	126
20240310 0253	0.1	146
20240310 0303	0.1	152
20240310 0313	0.1	47
20240310 0323	0.1	274
20240310 0333	0.1	295
20240310 0343	0.1	321
20240310 0353	0.1	316
20240310 0403	0.1	102
20240310 0413	0.1	245
20240310 0423	0.1	291
20240310 0433	0.1	113
20240310 0443	0.1	116
20240310 0453	0.1	280
20240310 0503	0.3	129
20240310 0513	0.2	115
20240310 0523	0.1	347
20240310 0533	0.1	41
20240310 0543	0.1	59
20240310 0553	0.2	114
20240310 0603	1.3	337
20240310 0613	0.1	231
20240310 0623	0.1	266
20240310 0633	0.1	323
20240310 0643	0.2	324
20240310 0653	0.1	52
20240310 0703	1.4	84
20240310 0713	0.1	352
20240310 0723	0.1	148
20240310 0733	0.1	333
20240310 0743	0.1	256
20240310 0753	0.2	16
20240310 0803	0.2	284
20240310 0813	0.1	30
20240310 0823	0.5	352
20240310 0833	0.2	56
20240310 0843	0.1	118
20240310 0853	0.3	335
20240310 0903	0.1	122
20240310 0913	0.1	28
20240310 0923	0.3	28
20240310 0933	0.2	205
20240310 0943	0.1	260
20240310 0953	0.3	23
20240310 1003	0.3	96
20240310 1013	1	334
20240310 1023	0.1	46
20240310 1033	0.1	223
20240310 1043	0.5	37
20240310 1053	0.1	321
20240310 1103	0.4	54
20240310 1113	0.2	311
20240310 1123	0.1	18
20240310 1133	2.4	329
20240310 1143	0.1	259
20240310 1153	0.1	117

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240310 1203	0.1	183
20240310 1213	0.2	117
20240310 1223	0.3	12
20240310 1233	0.2	52
20240310 1243	1.7	151
20240310 1253	0.4	108
20240310 1303	0.1	344
20240310 1313	0.8	10
20240310 1323	0.1	302
20240310 1333	0.2	342
20240310 1343	0.1	343
20240310 1353	0.2	98
20240310 1403	0.1	333
20240310 1413	0.1	111
20240310 1423	0.1	194
20240310 1433	0.6	78
20240310 1443	0.1	327
20240310 1453	0.1	182
20240310 1503	0.1	242
20240310 1513	0.1	143
20240310 1523	0.1	234
20240310 1533	0.2	81
20240310 1543	0.1	144
20240310 1553	0.1	354
20240310 1603	0.1	287
20240310 1613	0.1	345
20240310 1623	0.4	186
20240310 1633	0.2	305
20240310 1643	0.5	60
20240310 1653	0.1	281
20240310 1703	0.1	132
20240310 1713	0.2	294
20240310 1723	0.3	271
20240310 1733	0.1	275
20240310 1743	0.1	100
20240310 1753	1	99
20240310 1803	0.9	153
20240310 1813	0.1	309
20240310 1823	1.3	49
20240310 1833	0.1	147
20240310 1843	0.1	330
20240310 1853	0.1	223
20240310 1903	0.1	201
20240310 1913	0.1	38
20240310 1923	0.1	201
20240310 1933	1.9	160
20240310 1943	0.3	161
20240310 1953	0.2	160
20240310 2003	0.3	108
20240310 2013	0.1	84
20240310 2023	0.5	94
20240310 2033	0.3	177
20240310 2043	0.1	16
20240310 2053	2	306
20240310 2103	0.2	51
20240310 2113	0.6	100
20240310 2123	0.1	241
20240310 2133	0.6	103
20240310 2143	0.1	172
20240310 2153	0.1	34
20240310 2203	0.1	116
20240310 2213	0.1	309
20240310 2223	0.1	71
20240310 2233	0.1	109
20240310 2243	2.6	64
20240310 2253	6.2	307
20240310 2303	0.1	90
20240310 2313	0.1	207
20240310 2323	3.1	328
20240310 2333	0.5	332
20240310 2343	0.2	58
20240310 2353	0.4	3

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240311 0003	0.1	65
20240311 0013	0.5	180
20240311 0023	0.1	140
20240311 0033	0.1	95
20240311 0043	0.5	317
20240311 0053	2.1	151
20240311 0103	3.2	132
20240311 0113	0.7	276
20240311 0123	2.4	45
20240311 0133	0.3	324
20240311 0143	0.3	32
20240311 0153	1.3	349
20240311 0203	0.4	44
20240311 0213	0.3	168
20240311 0223	0.4	261
20240311 0233	0.2	3
20240311 0243	0.8	114
20240311 0253	2.4	148
20240311 0303	0.9	304
20240311 0313	0.3	9
20240311 0323	6.3	299
20240311 0333	0.2	166
20240311 0343	0.1	55
20240311 0353	0.2	314
20240311 0403	0.1	109
20240311 0413	0.3	79
20240311 0423	0.1	163
20240311 0433	1.9	335
20240311 0443	0.1	151
20240311 0453	0.1	347
20240311 0503	0.3	288
20240311 0513	0.1	119
20240311 0523	0.1	301
20240311 0533	0.1	144
20240311 0543	0.1	114
20240311 0553	0.1	41
20240311 0603	0.1	109
20240311 0613	0.1	299
20240311 0623	0.1	137
20240311 0633	0.1	108
20240311 0643	0.1	302
20240311 0653	0.1	123
20240311 0703	0.1	297
20240311 0713	0.1	297
20240311 0723	0.1	297
20240311 0733	0.1	297
20240311 0743	0.1	117
20240311 0753	0.1	38
20240311 0803	0.1	121
20240311 0813	0.2	306
20240311 0823	0.1	131
20240311 0833	0.2	115
20240311 0843	0.1	326
20240311 0853	0.1	174
20240311 0903	0.2	127
20240311 0913	0.8	144
20240311 0923	0.1	349
20240311 0933	0.2	147
20240311 0943	0.1	274
20240311 0953	0.1	191
20240311 1003	0.1	179
20240311 1013	0.1	149
20240311 1023	0.3	116
20240311 1033	0.1	159
20240311 1043	1	153
20240311 1053	0.1	84
20240311 1103	0.1	102
20240311 1113	0.1	282
20240311 1123	0.1	155
20240311 1133	0.1	123
20240311 1143	0.3	143
20240311 1153	0.1	152

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240311 1203	0.1	141
20240311 1213	0.1	136
20240311 1223	0.1	148
20240311 1233	0.1	218
20240311 1243	0.1	181
20240311 1253	0.1	264
20240311 1303	0.1	221
20240311 1313	0.1	147
20240311 1323	0.1	259
20240311 1333	0.1	257
20240311 1343	0.1	221
20240311 1353	0.1	247
20240311 1403	0.4	136
20240311 1413	0.1	148
20240311 1423	0.2	144
20240311 1433	0.1	148
20240311 1443	0.1	141
20240311 1453	0.8	134
20240311 1503	1.5	125
20240311 1513	0.2	148
20240311 1523	0.1	170
20240311 1533	0.1	105
20240311 1543	0.1	117
20240311 1553	0.1	182
20240311 1603	0.1	154
20240311 1613	0.1	141
20240311 1623	0.1	353
20240311 1633	0.1	157
20240311 1643	0.1	237
20240311 1653	0.2	109
20240311 1703	0.1	210
20240311 1713	0.6	124
20240311 1723	0.1	115
20240311 1733	0.1	136
20240311 1743	0.2	146
20240311 1753	0.1	87
20240311 1803	0.1	158
20240311 1813	0.8	99
20240311 1823	0.1	122
20240311 1833	0.1	159
20240311 1843	0.1	157
20240311 1853	0.1	171
20240311 1903	0.1	123
20240311 1913	0.1	28
20240311 1923	0.3	127
20240311 1933	0.1	283
20240311 1943	0.1	272
20240311 1953	0.1	132
20240311 2003	0.1	254
20240311 2013	0.1	152
20240311 2023	0.1	147
20240311 2033	0.1	116
20240311 2043	0.1	116
20240311 2053	0.1	116
20240311 2103	0.1	116
20240311 2113	0.1	258
20240311 2123	0.1	258
20240311 2133	0.1	33
20240311 2143	0.1	351
20240311 2153	0.1	2
20240311 2203	0.1	347
20240311 2213	0.1	137
20240311 2223	0.1	346
20240311 2233	0.1	126
20240311 2243	0.1	7
20240311 2253	0.1	133
20240311 2303	0.1	115
20240311 2313	0.1	299
20240311 2323	0.1	287
20240311 2333	0.1	23
20240311 2343	0.1	19
20240311 2353	0.1	118

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240312 0003	0.1	156
20240312 0013	0.1	86
20240312 0023	0.1	288
20240312 0033	0.1	135
20240312 0043	0.1	33
20240312 0053	0.1	38
20240312 0103	0.1	211
20240312 0113	0.1	305
20240312 0123	0.5	324
20240312 0133	0.1	128
20240312 0143	0.1	66
20240312 0153	0.1	170
20240312 0203	0.1	60
20240312 0213	0.1	288
20240312 0223	0.1	316
20240312 0233	0.1	320
20240312 0243	0.1	351
20240312 0253	0.1	33
20240312 0303	0.1	344
20240312 0313	0.4	333
20240312 0323	0.1	277
20240312 0333	1.3	140
20240312 0343	0.1	84
20240312 0353	0.1	132
20240312 0403	0.1	71
20240312 0413	0.1	61
20240312 0423	0.1	40
20240312 0433	0.1	40
20240312 0443	0.1	22
20240312 0453	0.1	69
20240312 0503	0.1	69
20240312 0513	0.1	69
20240312 0523	0.1	61
20240312 0533	0.1	61
20240312 0543	0.1	9
20240312 0553	0.1	41
20240312 0603	0.1	336
20240312 0613	0.1	58
20240312 0623	0.1	96
20240312 0633	0.1	50
20240312 0643	0.1	1
20240312 0653	0.1	42
20240312 0703	0.1	85
20240312 0713	0.1	85
20240312 0723	0.1	85
20240312 0733	0.1	85
20240312 0743	0.1	85
20240312 0753	0.1	85
20240312 0803	0.1	125
20240312 0813	0.1	142
20240312 0823	0.1	169
20240312 0833	0.1	135
20240312 0843	0.1	149
20240312 0853	0.2	141
20240312 0903	0.2	147
20240312 0913	0.1	149
20240312 0923	0.1	243
20240312 0933	0.3	145
20240312 0943	0.1	138
20240312 0953	0.4	250
20240312 1003	0.1	309
20240312 1013	0.1	141
20240312 1023	0.4	68
20240312 1033	1.8	155
20240312 1043	0.1	179
20240312 1053	0.1	208
20240312 1103	0.5	341
20240312 1113	0.2	352
20240312 1123	1.4	67
20240312 1133	2.1	311
20240312 1143	0.1	61
20240312 1153	0.1	301

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240312 1203	3.1	119
20240312 1213	0.1	190
20240312 1223	2.9	29
20240312 1233	3.1	154
20240312 1243	5.8	166
20240312 1253	0.2	290
20240312 1303	1.5	56
20240312 1313	0.4	77
20240312 1323	3	44
20240312 1333	3.9	341
20240312 1343	2.4	322
20240312 1353	0.4	134
20240312 1403	0.2	353
20240312 1413	0.4	321
20240312 1423	2.2	161
20240312 1433	2.8	68
20240312 1443	0.4	81
20240312 1453	0.9	6
20240312 1503	1.1	342
20240312 1513	0.1	197
20240312 1523	0.1	308
20240312 1533	0.4	326
20240312 1543	0.2	355
20240312 1553	0.8	286
20240312 1603	0.4	31
20240312 1613	0.4	114
20240312 1623	0.2	259
20240312 1633	0.1	348
20240312 1643	0.3	153
20240312 1653	0.1	37
20240312 1703	1.8	54
20240312 1713	0.1	257
20240312 1723	0.4	288
20240312 1733	0.8	42
20240312 1743	2.6	324
20240312 1753	1.7	118
20240312 1803	0.1	148
20240312 1813	1.1	118
20240312 1823	0.1	123
20240312 1833	0.1	198
20240312 1843	0.6	66
20240312 1853	0.3	51
20240312 1903	0.9	165
20240312 1913	0.1	108
20240312 1923	0.1	344
20240312 1933	0.1	152
20240312 1943	0.1	229
20240312 1953	0.1	148
20240312 2003	0.1	143
20240312 2013	0.1	121
20240312 2023	0.1	138
20240312 2033	0.1	119
20240312 2043	0.4	316
20240312 2053	1.1	345
20240312 2103	0.2	36
20240312 2113	0.1	296
20240312 2123	2.9	144
20240312 2133	0.2	119
20240312 2143	0.3	57
20240312 2153	0.2	185
20240312 2203	0.1	127
20240312 2213	0.8	144
20240312 2223	0.1	103
20240312 2233	0.1	66
20240312 2243	0.1	343
20240312 2253	0.1	183
20240312 2303	0.4	102
20240312 2313	0.1	13
20240312 2323	0.8	10
20240312 2333	0.1	295
20240312 2343	0.1	127
20240312 2353	0.1	133

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240313 0003	1.5	58
20240313 0013	0.1	174
20240313 0023	0.2	193
20240313 0033	0.1	124
20240313 0043	0.8	142
20240313 0053	0.4	93
20240313 0103	0.2	105
20240313 0113	0.3	11
20240313 0123	1.5	70
20240313 0133	0.2	167
20240313 0143	0.1	287
20240313 0153	4.9	168
20240313 0203	0.1	354
20240313 0213	1.6	38
20240313 0223	0.1	227
20240313 0233	0.1	24
20240313 0243	0.1	224
20240313 0253	0.1	90
20240313 0303	0.2	154
20240313 0313	0.1	101
20240313 0323	0.1	89
20240313 0333	0.1	62
20240313 0343	0.1	317
20240313 0353	0.1	92
20240313 0403	0.1	328
20240313 0413	0.1	170
20240313 0423	0.1	55
20240313 0433	0.1	167
20240313 0443	0.1	55
20240313 0453	0.1	240
20240313 0503	0.1	255
20240313 0513	0.9	146
20240313 0523	0.1	308
20240313 0533	0.4	33
20240313 0543	0.5	277
20240313 0553	0.1	288
20240313 0603	0.1	58
20240313 0613	0.1	74
20240313 0623	0.1	88
20240313 0633	0.1	62
20240313 0643	0.1	60
20240313 0653	0.1	213
20240313 0703	0.1	158
20240313 0713	0.1	136
20240313 0723	0.1	217
20240313 0733	0.1	86
20240313 0743	0.1	117
20240313 0753	0.8	102
20240313 0803	0.1	152
20240313 0813	1	32
20240313 0823	0.4	116
20240313 0833	0.4	103
20240313 0843	2.3	78
20240313 0853	1.9	116
20240313 0903	1.3	41
20240313 0913	0.5	93
20240313 0923	1	49
20240313 0933	0.5	36
20240313 0943	0.1	178
20240313 0953	0.1	40
20240313 1003	0.8	33
20240313 1013	3.6	61
20240313 1023	1.8	315
20240313 1033	2.8	333
20240313 1043	7.1	49
20240313 1053	3.6	12
20240313 1103	0.1	19
20240313 1113	1.1	332
20240313 1123	0.2	322
20240313 1133	0.8	126
20240313 1143	0.1	0
20240313 1153	0.2	299

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240313 1203	0.1	3
20240313 1213	0.3	114
20240313 1223	3.1	15
20240313 1233	0.3	114
20240313 1243	0.5	44
20240313 1253	0.9	350
20240313 1303	0.4	44
20240313 1313	0.9	323
20240313 1323	4.4	110
20240313 1333	0.5	301
20240313 1343	1.4	47
20240313 1353	0.6	13
20240313 1403	0.4	354
20240313 1413	0.2	2
20240313 1423	0.3	345
20240313 1433	0.4	300
20240313 1443	0.8	60
20240313 1453	0.4	347
20240313 1503	1	4
20240313 1513	1.3	83
20240313 1523	5.6	57
20240313 1533	0.8	266
20240313 1543	0.1	99
20240313 1553	1.6	179
20240313 1603	0.1	112
20240313 1613	0.6	117
20240313 1623	0.2	90
20240313 1633	1.5	101
20240313 1643	0.9	74
20240313 1653	0.3	353
20240313 1703	0.2	119
20240313 1713	0.3	28
20240313 1723	0.2	153
20240313 1733	0.8	150
20240313 1743	0.9	14
20240313 1753	0.6	95
20240313 1803	2.6	11
20240313 1813	1.3	318
20240313 1823	0.2	25
20240313 1833	0.5	20
20240313 1843	0.1	110
20240313 1853	2.7	152
20240313 1903	0.1	263
20240313 1913	0.7	177
20240313 1923	1	48
20240313 1933	1.8	87
20240313 1943	1.2	25
20240313 1953	0.4	148
20240313 2003	0.8	20
20240313 2013	1	129
20240313 2023	4	95
20240313 2033	1.8	28
20240313 2043	0.2	300
20240313 2053	1.1	10
20240313 2103	3.8	350
20240313 2113	2.1	28
20240313 2123	2.2	43
20240313 2133	0.9	70
20240313 2143	1.9	36
20240313 2153	1.3	22
20240313 2203	0.1	158
20240313 2213	0.2	66
20240313 2223	0.3	10
20240313 2233	1.3	58
20240313 2243	0.3	26
20240313 2253	0.3	52
20240313 2303	1.3	141
20240313 2313	2.3	7
20240313 2323	2.1	135
20240313 2333	1.2	149
20240313 2343	0.3	16
20240313 2353	0.5	91

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240314 0003	0.1	262
20240314 0013	0.2	68
20240314 0023	0.2	217
20240314 0033	0.8	5
20240314 0043	0.7	180
20240314 0053	0.4	333
20240314 0103	3.8	348
20240314 0113	2.2	60
20240314 0123	3.8	51
20240314 0133	4.6	60
20240314 0143	0.1	2
20240314 0153	0.3	332
20240314 0203	2.4	72
20240314 0213	0.1	175
20240314 0223	0.1	219
20240314 0233	2.1	103
20240314 0243	0.2	336
20240314 0253	0.1	44
20240314 0303	0.9	54
20240314 0313	0.2	126
20240314 0323	0.3	233
20240314 0333	0.8	1
20240314 0343	0.4	101
20240314 0353	2.1	342
20240314 0403	3.1	58
20240314 0413	0.1	19
20240314 0423	0.3	42
20240314 0433	0.6	157
20240314 0443	1.1	24
20240314 0453	1.8	34
20240314 0503	1.3	352
20240314 0513	0.2	341
20240314 0523	0.7	49
20240314 0533	0.1	159
20240314 0543	2.4	338
20240314 0553	0.1	266
20240314 0603	0.1	210
20240314 0613	1.2	317
20240314 0623	2.1	20
20240314 0633	5.5	146
20240314 0643	0.1	204
20240314 0653	0.6	35
20240314 0703	0.1	298
20240314 0713	0.4	300
20240314 0723	3.9	111
20240314 0733	0.9	69
20240314 0743	0.4	53
20240314 0753	0.1	298
20240314 0803	0.7	84
20240314 0813	3.3	52
20240314 0823	5.3	52
20240314 0833	1.5	2
20240314 0843	0.1	134
20240314 0853	1.5	92
20240314 0903	9.3	58
20240314 0913	0.3	165
20240314 0923	0.1	138
20240314 0933	0.5	130
20240314 0943	0.1	80
20240314 0953	0.1	158
20240314 1003	0.6	340
20240314 1013	0.1	28
20240314 1023	1.5	325
20240314 1033	5.5	50
20240314 1043	0.3	48
20240314 1053	1.4	126
20240314 1103	4.6	131
20240314 1113	4.1	140
20240314 1123	1	158
20240314 1133	1.4	340
20240314 1143	0.3	167
20240314 1153	0.4	97

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240314 1203	0.1	262
20240314 1213	0.2	68
20240314 1223	0.2	217
20240314 1233	0.8	5
20240314 1243	0.7	180
20240314 1253	0.4	333
20240314 1303	3.8	348
20240314 1313	2.2	60
20240314 1323	3.8	51
20240314 1333	4.6	60
20240314 1343	0.1	2
20240314 1353	0.3	332
20240314 1403	2.4	72
20240314 1413	0.1	175
20240314 1423	0.1	219
20240314 1433	2.1	103
20240314 1443	0.2	336
20240314 1453	0.1	44
20240314 1503	0.9	54
20240314 1513	0.2	126
20240314 1523	0.3	233
20240314 1533	0.8	1
20240314 1543	0.4	101
20240314 1553	2.1	342
20240314 1603	3.1	58
20240314 1613	0.1	19
20240314 1623	0.3	42
20240314 1633	0.6	157
20240314 1643	1.1	24
20240314 1653	1.8	34
20240314 1703	1.3	352
20240314 1713	0.2	341
20240314 1723	0.7	49
20240314 1733	0.1	159
20240314 1743	2.4	338
20240314 1753	0.1	266
20240314 1803	0.1	210
20240314 1813	1.2	317
20240314 1823	2.1	20
20240314 1833	5.5	146
20240314 1843	0.1	204
20240314 1853	0.6	35
20240314 1903	0.1	298
20240314 1913	0.4	300
20240314 1923	3.9	111
20240314 1933	0.9	69
20240314 1943	0.4	53
20240314 1953	0.1	298
20240314 2003	0.7	84
20240314 2013	3.3	52
20240314 2023	5.3	52
20240314 2033	1.5	2
20240314 2043	0.1	134
20240314 2053	1.5	92
20240314 2103	9.3	58
20240314 2113	0.3	165
20240314 2123	0.1	138
20240314 2133	0.5	130
20240314 2143	0.1	80
20240314 2153	0.1	158
20240314 2203	0.6	340
20240314 2213	0.1	28
20240314 2223	1.5	325
20240314 2233	5.5	50
20240314 2243	0.3	48
20240314 2253	1.4	126
20240314 2303	4.6	131
20240314 2313	4.1	140
20240314 2323	1	158
20240314 2333	1.4	340
20240314 2343	0.3	167
20240314 2353	0.4	97

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240315 0003	0.1	56
20240315 0013	0.1	84
20240315 0023	0.1	127
20240315 0033	0.1	110
20240315 0043	0.1	249
20240315 0053	0.1	291
20240315 0103	0.1	102
20240315 0113	0.6	148
20240315 0123	0.1	143
20240315 0133	0.1	344
20240315 0143	0.1	308
20240315 0153	0.1	232
20240315 0203	0.1	142
20240315 0213	0.1	239
20240315 0223	0.1	98
20240315 0233	0.1	159
20240315 0243	0.3	140
20240315 0253	0.1	320
20240315 0303	1.2	269
20240315 0313	0.3	352
20240315 0323	0.1	336
20240315 0333	0.1	150
20240315 0343	0.1	308
20240315 0353	0.1	316
20240315 0403	0.1	145
20240315 0413	0.1	108
20240315 0423	0.1	102
20240315 0433	1.8	348
20240315 0443	0.2	221
20240315 0453	0.2	104
20240315 0503	0.1	272
20240315 0513	0.1	107
20240315 0523	0.1	269
20240315 0533	0.1	31
20240315 0543	0.2	58
20240315 0553	0.1	41
20240315 0603	0.3	261
20240315 0613	0.1	269
20240315 0623	0.1	33
20240315 0633	0.5	346
20240315 0643	0.1	135
20240315 0653	0.1	127
20240315 0703	2	39
20240315 0713	0.6	71
20240315 0723	1	102
20240315 0733	0.3	89
20240315 0743	1.5	323
20240315 0753	0.6	4
20240315 0803	0.1	264
20240315 0813	0.1	324
20240315 0823	0.1	278
20240315 0833	0.1	296
20240315 0843	0.2	152
20240315 0853	0.1	90
20240315 0903	0.1	185
20240315 0913	0.1	3
20240315 0923	0.1	80
20240315 0933	0.1	120
20240315 0943	0.4	23
20240315 0953	2.2	76
20240315 1003	0.6	96
20240315 1013	0.1	127
20240315 1023	0.1	178
20240315 1033	0.4	159
20240315 1043	1.9	53
20240315 1053	0.9	337
20240315 1103	2.2	76
20240315 1113	1.2	56
20240315 1123	3.7	25
20240315 1133	0.1	336
20240315 1143	0.3	341
20240315 1153	0.4	354

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240315 1203	0.2	39
20240315 1213	0.1	81
20240315 1223	0.8	36
20240315 1233	0.1	344
20240315 1243	0.1	340
20240315 1253	1.6	327
20240315 1303	1.2	63
20240315 1313	0.1	76
20240315 1323	0.1	194
20240315 1333	0.2	145
20240315 1343	0.1	97
20240315 1353	0.2	164
20240315 1403	0.1	38
20240315 1413	0.4	36
20240315 1423	0.2	182
20240315 1433	0.1	79
20240315 1443	0.2	284
20240315 1453	0.2	333
20240315 1503	0.2	166
20240315 1513	0.1	353
20240315 1523	0.1	249
20240315 1533	0.2	298
20240315 1543	0.1	255
20240315 1553	0.1	177
20240315 1603	0.2	101
20240315 1613	1.9	92
20240315 1623	0.2	111
20240315 1633	0.1	80
20240315 1643	0.1	59
20240315 1653	0.1	207
20240315 1703	0.1	331
20240315 1713	0.1	324
20240315 1723	0.3	119
20240315 1733	0.1	235
20240315 1743	0.2	47
20240315 1753	0.2	144
20240315 1803	0.1	36
20240315 1813	0.1	335
20240315 1823	0.1	352
20240315 1833	0.4	353
20240315 1843	0.1	48
20240315 1853	0.2	313
20240315 1903	0.1	228
20240315 1913	0.1	74
20240315 1923	0.3	15
20240315 1933	0.1	40
20240315 1943	0.5	154
20240315 1953	0.1	27
20240315 2003	0.1	354
20240315 2013	0.6	129
20240315 2023	0.2	158
20240315 2033	0.1	35
20240315 2043	3.9	41
20240315 2053	0.2	343
20240315 2103	0.1	276
20240315 2113	0.1	55
20240315 2123	0.3	24
20240315 2133	1.3	81
20240315 2143	0.1	321
20240315 2153	1.1	18
20240315 2203	0.1	38
20240315 2213	1.6	75
20240315 2223	0.1	174
20240315 2233	0.1	165
20240315 2243	0.1	175
20240315 2253	0.1	316
20240315 2303	0.3	96
20240315 2313	0.3	100
20240315 2323	0.1	88
20240315 2333	0.1	152
20240315 2343	0.2	124
20240315 2353	1.1	29

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240316 0003	0.9	49
20240316 0013	1.1	338
20240316 0023	0.5	17
20240316 0033	0.2	57
20240316 0043	0.1	96
20240316 0053	0.1	328
20240316 0103	0.7	140
20240316 0113	1.1	301
20240316 0123	1.3	165
20240316 0133	0.7	172
20240316 0143	0.5	108
20240316 0153	0.3	107
20240316 0203	0.1	207
20240316 0213	1.3	33
20240316 0223	0.4	352
20240316 0233	0.1	97
20240316 0243	0.1	49
20240316 0253	0.1	91
20240316 0303	0.1	21
20240316 0313	0.2	104
20240316 0323	0.1	133
20240316 0333	0.1	157
20240316 0343	0.1	144
20240316 0353	0.3	121
20240316 0403	0.1	117
20240316 0413	0.1	157
20240316 0423	0.1	194
20240316 0433	0.1	159
20240316 0443	0.1	151
20240316 0453	0.2	100
20240316 0503	1	43
20240316 0513	0.6	337
20240316 0523	1.2	115
20240316 0533	0.4	51
20240316 0543	0.1	300
20240316 0553	0.5	235
20240316 0603	0.2	335
20240316 0613	0.1	42
20240316 0623	0.1	264
20240316 0633	0.1	41
20240316 0643	2.6	116
20240316 0653	1	53
20240316 0703	0.3	128
20240316 0713	1.8	142
20240316 0723	1	157
20240316 0733	2	310
20240316 0743	1.1	49
20240316 0753	0.1	36
20240316 0803	5	142
20240316 0813	0.1	227
20240316 0823	0.1	94
20240316 0833	0.1	317
20240316 0843	1.5	125
20240316 0853	0.1	328
20240316 0903	0.1	271
20240316 0913	0.1	299
20240316 0923	0.1	209
20240316 0933	0.3	28
20240316 0943	0.1	5
20240316 0953	0.1	15
20240316 1003	0.1	118
20240316 1013	0.1	268
20240316 1023	0.3	88
20240316 1033	1	18
20240316 1043	0.1	178
20240316 1053	0.1	19
20240316 1103	0.3	160
20240316 1113	3	94
20240316 1123	0.4	12
20240316 1133	0.4	328
20240316 1143	0.1	158
20240316 1153	0.6	2

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240316 1203	0.1	119
20240316 1213	0.1	325
20240316 1223	0.1	194
20240316 1233	0.2	41
20240316 1243	0.1	81
20240316 1253	1.5	157
20240316 1303	0.1	284
20240316 1313	1.3	343
20240316 1323	0.5	158
20240316 1333	0.2	341
20240316 1343	5.1	170
20240316 1353	0.1	110
20240316 1403	0.2	163
20240316 1413	0.2	52
20240316 1423	0.2	95
20240316 1433	0.9	2
20240316 1443	0.1	319
20240316 1453	0.2	102
20240316 1503	0.1	179
20240316 1513	0.2	22
20240316 1523	0.2	346
20240316 1533	0.8	61
20240316 1543	0.1	343
20240316 1553	0.1	190
20240316 1603	0.1	106
20240316 1613	0.1	145
20240316 1623	0.1	271
20240316 1633	0.2	86
20240316 1643	0.1	1
20240316 1653	0.9	141
20240316 1703	0.1	266
20240316 1713	0.1	74
20240316 1723	0.4	125
20240316 1733	0.1	146
20240316 1743	0.8	141
20240316 1753	0.5	139
20240316 1803	0.1	104
20240316 1813	0.7	54
20240316 1823	0.1	132
20240316 1833	0.5	140
20240316 1843	0.7	62
20240316 1853	0.2	68
20240316 1903	1.4	118
20240316 1913	0.1	186
20240316 1923	0.1	282
20240316 1933	0.1	110
20240316 1943	0.1	151
20240316 1953	0.1	280
20240316 2003	0.1	346
20240316 2013	0.1	58
20240316 2023	0.1	117
20240316 2033	0.1	97
20240316 2043	0.1	135
20240316 2053	0.1	77
20240316 2103	0.1	276
20240316 2113	0.1	236
20240316 2123	0.1	34
20240316 2133	0.1	127
20240316 2143	0.1	61
20240316 2153	0.3	100
20240316 2203	0.1	312
20240316 2213	0.1	116
20240316 2223	0.1	150
20240316 2233	0.1	284
20240316 2243	0.1	242
20240316 2253	0.1	149
20240316 2303	0.1	132
20240316 2313	0.1	275
20240316 2323	0.1	151
20240316 2333	0.1	137
20240316 2343	0.1	293
20240316 2353	0.1	290



Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240317 0003	0.1	167
20240317 0013	0.1	83
20240317 0023	0.1	285
20240317 0033	0.1	343
20240317 0043	0.1	54
20240317 0053	0.1	67
20240317 0103	0.1	301
20240317 0113	1.2	121
20240317 0123	0.1	118
20240317 0133	0.1	140
20240317 0143	0.1	229
20240317 0153	0.6	112
20240317 0203	0.1	117
20240317 0213	0.1	233
20240317 0223	0.1	325
20240317 0233	0.1	227
20240317 0243	0.1	107
20240317 0253	0.1	61
20240317 0303	0.1	264
20240317 0313	0.3	79
20240317 0323	0.9	320
20240317 0333	3	33
20240317 0343	0.1	83
20240317 0353	0.2	36
20240317 0403	0.2	159
20240317 0413	0.1	172
20240317 0423	2.2	120
20240317 0433	1.5	33
20240317 0443	0.2	346
20240317 0453	1.9	157
20240317 0503	0.1	113
20240317 0513	0.1	6
20240317 0523	0.5	10
20240317 0533	0.1	256
20240317 0543	0.1	114
20240317 0553	0.1	320
20240317 0603	0.1	112
20240317 0613	0.1	292
20240317 0623	0.1	273
20240317 0633	0.1	153
20240317 0643	0.1	149
20240317 0653	0.1	262
20240317 0703	0.1	232
20240317 0713	0.1	130
20240317 0723	0.1	159
20240317 0733	0.1	161
20240317 0743	0.2	107
20240317 0753	0.1	47
20240317 0803	0.1	343
20240317 0813	0.1	332
20240317 0823	0.1	257
20240317 0833	0.1	333
20240317 0843	0.1	130
20240317 0853	0.1	83
20240317 0903	0.1	21
20240317 0913	0.1	335
20240317 0923	0.1	263
20240317 0933	0.1	96
20240317 0943	0.1	173
20240317 0953	0.1	277
20240317 1003	0.1	217
20240317 1013	0.1	97
20240317 1023	0.1	242
20240317 1033	0.1	142
20240317 1043	0.7	30
20240317 1053	2.8	103
20240317 1103	0.1	142
20240317 1113	1	48
20240317 1123	0.1	263
20240317 1133	0.1	12
20240317 1143	0.9	147
20240317 1153	1.1	329

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240317 1203	1.2	40
20240317 1213	0.5	326
20240317 1223	0.2	202
20240317 1233	0.9	56
20240317 1243	0.1	7
20240317 1253	0.1	205
20240317 1303	0.1	162
20240317 1313	1.1	20
20240317 1323	0.1	320
20240317 1333	0.1	153
20240317 1343	1.1	143
20240317 1353	0.1	145
20240317 1403	1.1	342
20240317 1413	1.6	324
20240317 1423	0.1	339
20240317 1433	1.5	120
20240317 1443	0.1	169
20240317 1453	0.6	141
20240317 1503	1.5	134
20240317 1513	0.1	28
20240317 1523	0.1	280
20240317 1533	0.1	102
20240317 1543	0.2	46
20240317 1553	0.7	111
20240317 1603	1.2	131
20240317 1613	0.9	123
20240317 1623	0.1	224
20240317 1633	0.2	49
20240317 1643	0.2	84
20240317 1653	0.1	125
20240317 1703	0.3	108
20240317 1713	0.1	309
20240317 1723	0.1	5
20240317 1733	0.1	36
20240317 1743	0.4	92
20240317 1753	0.1	6
20240317 1803	0.1	299
20240317 1813	0.1	239
20240317 1823	0.1	133
20240317 1833	0.1	305
20240317 1843	0.1	327
20240317 1853	0.1	9
20240317 1903	0.1	22
20240317 1913	0.1	15
20240317 1923	0.1	148
20240317 1933	0.1	160
20240317 1943	0.1	98
20240317 1953	0.1	133
20240317 2003	0.1	139
20240317 2013	0.1	146
20240317 2023	0.1	117
20240317 2033	0.1	64
20240317 2043	0.1	65
20240317 2053	0.1	240
20240317 2103	0.1	90
20240317 2113	0.1	19
20240317 2123	0.1	123
20240317 2133	0.1	62
20240317 2143	0.1	51
20240317 2153	0.1	110
20240317 2203	0.1	150
20240317 2213	0.1	168
20240317 2223	0.1	76
20240317 2233	0.1	41
20240317 2243	0.1	348
20240317 2253	0.1	144
20240317 2303	0.1	137
20240317 2313	0.1	137
20240317 2323	0.1	127
20240317 2333	0.1	73
20240317 2343	0.1	51
20240317 2353	0.1	99

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240318 0003	0.1	89
20240318 0013	0.1	85
20240318 0023	0.1	28
20240318 0033	0.1	80
20240318 0043	0.1	49
20240318 0053	0.1	175
20240318 0103	0.1	126
20240318 0113	0.1	101
20240318 0123	0.1	18
20240318 0133	0.1	134
20240318 0143	0.1	119
20240318 0153	0.1	152
20240318 0203	0.1	23
20240318 0213	0.1	51
20240318 0223	0.1	134
20240318 0233	0.1	178
20240318 0243	0.1	46
20240318 0253	0.1	96
20240318 0303	0.1	123
20240318 0313	0.1	99
20240318 0323	0.1	96
20240318 0333	0.1	91
20240318 0343	0.1	92
20240318 0353	0.1	54
20240318 0403	0.1	343
20240318 0413	0.1	89
20240318 0423	0.1	130
20240318 0433	0.1	130
20240318 0443	0.1	39
20240318 0453	0.1	28
20240318 0503	0.1	61
20240318 0513	0.1	228
20240318 0523	0.1	229
20240318 0533	0.1	100
20240318 0543	0.1	100
20240318 0553	0.1	100
20240318 0603	0.1	88
20240318 0613	0.1	98
20240318 0623	0.1	67
20240318 0633	0.1	92
20240318 0643	0.1	317
20240318 0653	0.1	142
20240318 0703	0.1	260
20240318 0713	0.1	32
20240318 0723	0.1	335
20240318 0733	0.4	276
20240318 0743	0.2	148
20240318 0753	0.4	335
20240318 0803	0.1	1
20240318 0813	0.1	347
20240318 0823	2.1	46
20240318 0833	1.2	52
20240318 0843	0.1	30
20240318 0853	0.1	132
20240318 0903	0.1	80
20240318 0913	0.1	340
20240318 0923	0.3	355
20240318 0933	1	112
20240318 0943	0.1	136
20240318 0953	0.5	104
20240318 1003	0.9	13
20240318 1013	1.1	54
20240318 1023	0.4	48
20240318 1033	2.7	139
20240318 1043	0.5	132
20240318 1053	0.5	104
20240318 1103	1.4	122
20240318 1113	0.2	42
20240318 1123	2.2	35
20240318 1133	2	37
20240318 1143	0.3	355
20240318 1153	1.7	71

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240318 1203	1.5	68
20240318 1213	0.1	97
20240318 1223	3.1	60
20240318 1233	0.3	46
20240318 1243	0.8	33
20240318 1253	2.6	1
20240318 1303	6.7	8
20240318 1313	0.9	76
20240318 1323	2.8	52
20240318 1333	0.7	55
20240318 1343	0.8	13
20240318 1353	0.7	338
20240318 1403	1.3	307
20240318 1413	0.4	242
20240318 1423	0.1	208
20240318 1433	0.1	103
20240318 1443	0.1	117
20240318 1453	0.5	142
20240318 1503	0.3	73
20240318 1513	0.1	74
20240318 1523	1.4	30
20240318 1533	0.8	19
20240318 1543	0.6	340
20240318 1553	1.1	311
20240318 1603	0.3	22
20240318 1613	0.3	242
20240318 1623	3.9	313
20240318 1633	5.7	21
20240318 1643	2.4	334
20240318 1653	3	8
20240318 1703	6.4	12
20240318 1713	0.8	297
20240318 1723	0.3	46
20240318 1733	0.4	93
20240318 1743	0.1	99
20240318 1753	3.2	136
20240318 1803	1.3	47
20240318 1813	0.6	325
20240318 1823	0.7	318
20240318 1833	0.3	338
20240318 1843	0.1	59
20240318 1853	1.8	352
20240318 1903	1.1	38
20240318 1913	0.3	326
20240318 1923	1	164
20240318 1933	0.1	278
20240318 1943	1.8	109
20240318 1953	0.2	92
20240318 2003	0.4	143
20240318 2013	0.3	165
20240318 2023	0.1	45
20240318 2033	0.1	261
20240318 2043	0.5	156
20240318 2053	0.1	42
20240318 2103	0.8	161
20240318 2113	0.1	220
20240318 2123	0.1	321
20240318 2133	0.1	175
20240318 2143	0.2	97
20240318 2153	0.3	20
20240318 2203	0.2	226
20240318 2213	0.3	56
20240318 2223	0.7	311
20240318 2233	0.2	166
20240318 2243	0.3	347
20240318 2253	1.5	327
20240318 2303	0.1	52
20240318 2313	0.1	266
20240318 2323	0.1	350
20240318 2333	0.2	84
20240318 2343	0.1	104
20240318 2353	0.2	159

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240319 0003	0.1	132
20240319 0013	0.1	26
20240319 0023	0.2	23
20240319 0033	0.5	163
20240319 0043	0.1	337
20240319 0053	0.4	170
20240319 0103	0.1	150
20240319 0113	0.1	100
20240319 0123	0.1	307
20240319 0133	0.1	94
20240319 0143	0.1	192
20240319 0153	0.1	66
20240319 0203	0.7	48
20240319 0213	0.1	320
20240319 0223	0.5	322
20240319 0233	0.1	222
20240319 0243	0.1	142
20240319 0253	0.1	47
20240319 0303	0.1	74
20240319 0313	0.1	186
20240319 0323	0.1	168
20240319 0333	0.1	184
20240319 0343	0.1	82
20240319 0353	0.1	105
20240319 0403	0.1	334
20240319 0413	0.1	303
20240319 0423	0.1	321
20240319 0433	0.1	272
20240319 0443	0.1	328
20240319 0453	0.1	31
20240319 0503	0.3	86
20240319 0513	0.1	157
20240319 0523	0.1	313
20240319 0533	0.1	264
20240319 0543	0.1	269
20240319 0553	0.1	207
20240319 0603	0.1	111
20240319 0613	0.1	144
20240319 0623	0.1	142
20240319 0633	0.1	150
20240319 0643	0.1	309
20240319 0653	0.1	308
20240319 0703	0.1	314
20240319 0713	0.1	21
20240319 0723	0.1	123
20240319 0733	0.3	355
20240319 0743	0.1	29
20240319 0753	0.1	62
20240319 0803	0.1	94
20240319 0813	0.1	111
20240319 0823	0.1	250
20240319 0833	0.1	150
20240319 0843	0.1	268
20240319 0853	0.1	237
20240319 0903	0.1	254
20240319 0913	0.1	198
20240319 0923	0.1	278
20240319 0933	0.1	298
20240319 0943	0.1	259
20240319 0953	0.1	82
20240319 1003	0.1	97
20240319 1013	1	249
20240319 1023	0.2	293
20240319 1033	0.5	100
20240319 1043	0.1	71
20240319 1053	0.9	307
20240319 1103	0.1	188
20240319 1113	0.5	116
20240319 1123	0.1	162
20240319 1133	9.4	334
20240319 1143	1.4	285
20240319 1153	1.4	285

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240319 1203	0.1	115
20240319 1213	0.5	340
20240319 1223	1	30
20240319 1233	1.4	94
20240319 1243	0.1	49
20240319 1253	0.4	73
20240319 1303	6.1	339
20240319 1313	0.2	154
20240319 1323	0.9	50
20240319 1333	3.6	124
20240319 1343	0.2	59
20240319 1353	0.1	36
20240319 1403	0.8	86
20240319 1413	0.8	52
20240319 1423	2.6	134
20240319 1433	0.4	48
20240319 1443	0.4	288
20240319 1453	0.9	107
20240319 1503	0.1	299
20240319 1513	0.1	82
20240319 1523	0.2	322
20240319 1533	0.7	353
20240319 1543	2.4	62
20240319 1553	0.1	340
20240319 1603	0.1	70
20240319 1613	0.1	259
20240319 1623	1.8	42
20240319 1633	2.6	73
20240319 1643	0.2	37
20240319 1653	0.5	7
20240319 1703	0.1	111
20240319 1713	0.1	90
20240319 1723	0.2	56
20240319 1733	0.1	185
20240319 1743	0.1	40
20240319 1753	0.2	179
20240319 1803	0.2	131
20240319 1813	0.1	124
20240319 1823	0.1	342
20240319 1833	0.1	77
20240319 1843	0.1	308
20240319 1853	0.1	102
20240319 1903	0.3	353
20240319 1913	0.1	321
20240319 1923	0.1	32
20240319 1933	0.1	65
20240319 1943	0.1	273
20240319 1953	0.1	124
20240319 2003	0.1	139
20240319 2013	0.1	173
20240319 2023	0.3	319
20240319 2033	0.1	50
20240319 2043	0.1	79
20240319 2053	0.1	298
20240319 2103	0.4	141
20240319 2113	0.1	24
20240319 2123	0.1	55
20240319 2133	0.1	97
20240319 2143	0.1	112
20240319 2153	0.1	49
20240319 2203	0.1	96
20240319 2213	0.1	115
20240319 2223	0.2	37
20240319 2233	0.1	78
20240319 2243	0.1	105
20240319 2253	0.1	349
20240319 2303	0.1	72
20240319 2313	0.1	105
20240319 2323	0.1	41
20240319 2333	0.1	30
20240319 2343	0.1	45
20240319 2353	0.1	44

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240320 0003	0.1	165
20240320 0013	0.1	76
20240320 0023	0.1	46
20240320 0033	0.1	46
20240320 0043	0.1	52
20240320 0053	0.1	82
20240320 0103	0.1	69
20240320 0113	0.1	62
20240320 0123	0.1	55
20240320 0133	0.1	56
20240320 0143	0.1	78
20240320 0153	0.1	130
20240320 0203	0.1	40
20240320 0213	0.1	54
20240320 0223	0.1	71
20240320 0233	0.1	347
20240320 0243	0.1	79
20240320 0253	0.1	61
20240320 0303	0.1	79
20240320 0313	0.1	61
20240320 0323	0.1	56
20240320 0333	0.1	51
20240320 0343	0.1	84
20240320 0353	0.1	69
20240320 0403	0.1	56
20240320 0413	0.1	62
20240320 0423	0.1	45
20240320 0433	0.1	53
20240320 0443	0.1	72
20240320 0453	0.1	71
20240320 0503	0.1	48
20240320 0513	0.1	16
20240320 0523	0.1	50
20240320 0533	0.1	49
20240320 0543	0.1	102
20240320 0553	0.1	50
20240320 0603	0.1	70
20240320 0613	0.1	62
20240320 0623	0.1	46
20240320 0633	0.1	58
20240320 0643	0.1	64
20240320 0653	0.1	78
20240320 0703	0.1	50
20240320 0713	0.1	76
20240320 0723	0.1	112
20240320 0733	0.1	122
20240320 0743	0.1	84
20240320 0753	0.1	105
20240320 0803	0.2	138
20240320 0813	0.1	130
20240320 0823	0.1	149
20240320 0833	0.2	154
20240320 0843	0.1	133
20240320 0853	0.4	146
20240320 0903	0.1	119
20240320 0913	0.3	140
20240320 0923	0.1	119
20240320 0933	0.5	87
20240320 0943	0.1	228
20240320 0953	0.1	244
20240320 1003	0.1	138
20240320 1013	0.1	258
20240320 1023	0.1	270
20240320 1033	1.1	270
20240320 1043	0.6	52
20240320 1053	0.4	327
20240320 1103	3.1	112
20240320 1113	1.5	126
20240320 1123	1.1	133
20240320 1133	0.2	221
20240320 1143	0.8	9
20240320 1153	0.5	146

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240320 1203	4.3	135
20240320 1213	0.3	88
20240320 1223	1.5	165
20240320 1233	1	334
20240320 1243	0.3	179
20240320 1253	0.2	94
20240320 1303	2.5	143
20240320 1313	0.2	272
20240320 1323	3.1	28
20240320 1333	3.1	67
20240320 1343	0.5	147
20240320 1353	3.2	31
20240320 1403	0.6	350
20240320 1413	0.2	64
20240320 1423	1.2	0
20240320 1433	0.1	185
20240320 1443	0.9	105
20240320 1453	0.9	41
20240320 1503	2.2	134
20240320 1513	0.1	331
20240320 1523	0.9	167
20240320 1533	0.9	24
20240320 1543	1.8	352
20240320 1553	0.7	338
20240320 1603	0.3	332
20240320 1613	0.2	47
20240320 1623	0.1	254
20240320 1633	1	304
20240320 1643	0.2	341
20240320 1653	0.1	242
20240320 1703	0.1	200
20240320 1713	2.2	334
20240320 1723	0.1	295
20240320 1733	0.2	350
20240320 1743	1.1	335
20240320 1753	0.2	299
20240320 1803	0.1	18
20240320 1813	0.5	15
20240320 1823	0.1	291
20240320 1833	0.5	304
20240320 1843	0.1	312
20240320 1853	0.2	334
20240320 1903	0.2	130
20240320 1913	0.1	88
20240320 1923	0.1	126
20240320 1933	1.2	54
20240320 1943	0.1	321
20240320 1953	1.1	23
20240320 2003	0.4	85
20240320 2013	0.1	157
20240320 2023	0.3	114
20240320 2033	3	106
20240320 2043	0.3	97
20240320 2053	0.2	48
20240320 2103	0.3	32
20240320 2113	1.3	28
20240320 2123	0.5	130
20240320 2133	0.6	109
20240320 2143	2	114
20240320 2153	0.7	138
20240320 2203	1.2	89
20240320 2213	0.4	134
20240320 2223	1.5	64
20240320 2233	0.7	153
20240320 2243	3.4	177
20240320 2253	0.4	111
20240320 2303	1.4	85
20240320 2313	1	2
20240320 2323	1.2	55
20240320 2333	1.8	61
20240320 2343	2.7	298
20240320 2353	1.8	20

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240321 0003	0.6	106
20240321 0013	0.1	4
20240321 0023	0.6	120
20240321 0033	1.7	331
20240321 0043	0.2	18
20240321 0053	0.2	193
20240321 0103	0.4	54
20240321 0113	0.2	108
20240321 0123	0.2	20
20240321 0133	0.1	106
20240321 0143	0.2	173
20240321 0153	0.1	162
20240321 0203	0.9	41
20240321 0213	0.4	104
20240321 0223	0.1	79
20240321 0233	0.2	28
20240321 0243	0.2	150
20240321 0253	0.3	41
20240321 0303	0.1	71
20240321 0313	0.2	344
20240321 0323	0.1	351
20240321 0333	0.1	103
20240321 0343	0.1	72
20240321 0353	0.1	164
20240321 0403	0.1	30
20240321 0413	0.2	140
20240321 0423	0.1	298
20240321 0433	0.1	2
20240321 0443	0.1	324
20240321 0453	0.1	266
20240321 0503	0.1	261
20240321 0513	0.1	89
20240321 0523	2.8	44
20240321 0533	0.1	325
20240321 0543	0.1	350
20240321 0553	0.1	286
20240321 0603	0.1	108
20240321 0613	1.1	7
20240321 0623	0.1	259
20240321 0633	0.1	125
20240321 0643	2.1	49
20240321 0653	2.2	93
20240321 0703	1.6	51
20240321 0713	0.2	88
20240321 0723	0.2	136
20240321 0733	1.9	63
20240321 0743	1	23
20240321 0753	1	106
20240321 0803	0.2	309
20240321 0813	0.2	347
20240321 0823	0.8	54
20240321 0833	1.1	348
20240321 0843	0.1	84
20240321 0853	0.1	23
20240321 0903	0.1	38
20240321 0913	0.2	345
20240321 0923	0.9	44
20240321 0933	0.2	350
20240321 0943	0.2	52
20240321 0953	0.1	45
20240321 1003	1.1	106
20240321 1013	0.7	349
20240321 1023	0.1	61
20240321 1033	0.1	17
20240321 1043	0.6	328
20240321 1053	0.1	253
20240321 1103	0.1	91
20240321 1113	3.5	59
20240321 1123	0.1	119
20240321 1133	0.2	44
20240321 1143	4.3	150
20240321 1153	0.1	177

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240321 1203	0.2	6
20240321 1213	0.5	160
20240321 1223	0.2	152
20240321 1233	0.1	317
20240321 1243	3.1	11
20240321 1253	1	344
20240321 1303	0.2	68
20240321 1313	0.2	313
20240321 1323	1.8	326
20240321 1333	2.7	350
20240321 1343	0.1	178
20240321 1353	0.7	42
20240321 1403	0.1	10
20240321 1413	0.7	102
20240321 1423	1.7	132
20240321 1433	0.4	61
20240321 1443	1	157
20240321 1453	0.2	109
20240321 1503	0.7	303
20240321 1513	0.1	289
20240321 1523	1.8	126
20240321 1533	0.3	75
20240321 1543	0.2	283
20240321 1553	0.1	74
20240321 1603	0.3	139
20240321 1613	0.3	137
20240321 1623	0.1	120
20240321 1633	0.2	24
20240321 1643	0.1	240
20240321 1653	0.4	49
20240321 1703	0.3	134
20240321 1713	0.1	28
20240321 1723	0.3	21
20240321 1733	0.2	168
20240321 1743	0.1	337
20240321 1753	1.2	354
20240321 1803	0.1	308
20240321 1813	0.1	297
20240321 1823	0.1	134
20240321 1833	0.4	129
20240321 1843	0.2	20
20240321 1853	0.4	42
20240321 1903	0.2	162
20240321 1913	1.3	79
20240321 1923	0.4	42
20240321 1933	0.1	149
20240321 1943	2.2	141
20240321 1953	0.1	92
20240321 2003	0.1	138
20240321 2013	0.1	155
20240321 2023	0.1	180
20240321 2033	0.2	193
20240321 2043	0.1	182
20240321 2053	1.2	96
20240321 2103	0.1	210
20240321 2113	0.3	327
20240321 2123	0.1	58
20240321 2133	0.3	283
20240321 2143	0.6	148
20240321 2153	0.1	80
20240321 2203	1.3	59
20240321 2213	1.8	51
20240321 2223	0.2	30
20240321 2233	2.6	89
20240321 2243	0.5	170
20240321 2253	1.9	89
20240321 2303	1.9	329
20240321 2313	0.1	74
20240321 2323	0.1	253
20240321 2333	0.2	355
20240321 2343	0.1	355
20240321 2353	0.1	146

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240322 0003	0.3	136
20240322 0013	0.1	255
20240322 0023	0.7	11
20240322 0033	0.3	45
20240322 0043	0.1	138
20240322 0053	0.9	44
20240322 0103	0.1	111
20240322 0113	1.3	59
20240322 0123	0.1	179
20240322 0133	0.9	113
20240322 0143	0.1	114
20240322 0153	0.4	150
20240322 0203	0.9	81
20240322 0213	0.5	132
20240322 0223	0.3	111
20240322 0233	0.2	50
20240322 0243	3	131
20240322 0253	0.1	354
20240322 0303	0.6	321
20240322 0313	0.1	93
20240322 0323	0.1	240
20240322 0333	0.1	17
20240322 0343	0.1	169
20240322 0353	0.1	258
20240322 0403	0.2	145
20240322 0413	0.2	304
20240322 0423	0.4	110
20240322 0433	0.1	130
20240322 0443	2.2	119
20240322 0453	0.1	280
20240322 0503	0.3	16
20240322 0513	0.2	127
20240322 0523	0.6	66
20240322 0533	0.1	41
20240322 0543	0.2	188
20240322 0553	0.1	24
20240322 0603	0.2	133
20240322 0613	0.8	50
20240322 0623	0.2	335
20240322 0633	0.1	103
20240322 0643	0.9	58
20240322 0653	0.1	9
20240322 0703	0.1	172
20240322 0713	0.1	290
20240322 0723	0.1	258
20240322 0733	0.1	21
20240322 0743	0.2	13
20240322 0753	0.1	351
20240322 0803	0.2	338
20240322 0813	0.2	19
20240322 0823	0.1	44
20240322 0833	0.3	271
20240322 0843	0.1	62
20240322 0853	0.2	329
20240322 0903	0.2	273
20240322 0913	0.4	140
20240322 0923	0.1	57
20240322 0933	1	316
20240322 0943	0.5	339
20240322 0953	0.9	117
20240322 1003	0.9	319
20240322 1013	0.2	104
20240322 1023	0.7	350
20240322 1033	0.4	217
20240322 1043	3.4	319
20240322 1053	0.9	2
20240322 1103	0.1	354
20240322 1113	0.5	352
20240322 1123	0.1	273
20240322 1133	0.9	302
20240322 1143	1.2	294
20240322 1153	0.3	5

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240322 1203	3.1	42
20240322 1213	4.2	327
20240322 1223	0.2	170
20240322 1233	0.6	52
20240322 1243	1.4	349
20240322 1253	1.3	3
20240322 1303	1.3	63
20240322 1313	1.1	20
20240322 1323	0.2	66
20240322 1333	6.7	324
20240322 1343	1.7	331
20240322 1353	3.7	338
20240322 1403	0.8	353
20240322 1413	0.4	269
20240322 1423	0.7	191
20240322 1433	0.9	141
20240322 1443	2.6	294
20240322 1453	0.1	46
20240322 1503	0.1	27
20240322 1513	0.6	305
20240322 1523	1.4	165
20240322 1533	0.1	106
20240322 1543	0.3	82
20240322 1553	0.1	151
20240322 1603	0.2	279
20240322 1613	2.3	42
20240322 1623	0.4	30
20240322 1633	0.3	2
20240322 1643	1.1	61
20240322 1653	0.6	21
20240322 1703	0.2	352
20240322 1713	0.2	13
20240322 1723	1.2	58
20240322 1733	0.2	532
20240322 1743	0.1	19
20240322 1753	0.8	161
20240322 1803	0.1	294
20240322 1813	0.1	289
20240322 1823	0.1	24
20240322 1833	0.4	135
20240322 1843	0.2	24
20240322 1853	0.1	148
20240322 1903	0.1	48
20240322 1913	0.5	94
20240322 1923	0.4	125
20240322 1933	1	103
20240322 1943	0.1	120
20240322 1953	0.5	138
20240322 2003	0.4	113
20240322 2013	0.2	161
20240322 2023	0.4	134
20240322 2033	3.3	23
20240322 2043	0.9	104
20240322 2053	0.2	88
20240322 2103	0.2	52
20240322 2113	0.1	106
20240322 2123	0.1	131
20240322 2133	0.1	131
20240322 2143	0.1	182
20240322 2153	0.1	58
20240322 2203	0.1	69
20240322 2213	0.3	83
20240322 2223	2.9	90
20240322 2233	0.3	114
20240322 2243	0.8	133
20240322 2253	0.1	341
20240322 2303	0.8	105
20240322 2313	0.1	22
20240322 2323	0.2	143
20240322 2333	1.1	66
20240322 2343	6.4	107
20240322 2353	0.4	340

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240323 0003	0.1	71
20240323 0013	0.9	328
20240323 0023	0.5	31
20240323 0033	0.7	298
20240323 0043	0.1	87
20240323 0053	0.1	200
20240323 0103	0.3	116
20240323 0113	0.1	56
20240323 0123	0.1	129
20240323 0133	0.1	11
20240323 0143	1.1	135
20240323 0153	0.1	128
20240323 0203	0.3	296
20240323 0213	0.2	90
20240323 0223	0.1	177
20240323 0233	0.2	159
20240323 0243	0.4	300
20240323 0253	0.1	236
20240323 0303	0.3	305
20240323 0313	0.2	169
20240323 0323	0.1	24
20240323 0333	0.1	340
20240323 0343	0.1	315
20240323 0353	0.1	287
20240323 0403	0.1	332
20240323 0413	0.1	144
20240323 0423	0.1	6
20240323 0433	0.4	119
20240323 0443	0.2	349
20240323 0453	0.1	320
20240323 0503	0.1	349
20240323 0513	0.1	322
20240323 0523	0.1	234
20240323 0533	0.2	134
20240323 0543	0.1	320
20240323 0553	0.1	105
20240323 0603	0.1	250
20240323 0613	0.5	30
20240323 0623	0.1	255
20240323 0633	0.2	51
20240323 0643	0.2	350
20240323 0653	1	79
20240323 0703	1.7	347
20240323 0713	0.4	90
20240323 0723	0.6	264
20240323 0733	0.6	180
20240323 0743	1.1	162
20240323 0753	0.2	8
20240323 0803	0.9	65
20240323 0813	0.1	211
20240323 0823	0.1	171
20240323 0833	0.7	111
20240323 0843	0.2	115
20240323 0853	0.2	142
20240323 0903	0.1	293
20240323 0913	1.3	125
20240323 0923	0.1	49
20240323 0933	0.1	329
20240323 0943	0.2	321
20240323 0953	0.4	338
20240323 1003	0.1	41
20240323 1013	0.3	157
20240323 1023	0.3	114
20240323 1033	0.1	44
20240323 1043	0.1	21
20240323 1053	0.1	69
20240323 1103	0.1	80
20240323 1113	0.1	63
20240323 1123	1	329
20240323 1133	0.7	94
20240323 1143	0.6	286
20240323 1153	0.2	130

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240323 1203	0.1	306
20240323 1213	2.3	102
20240323 1223	0.3	246
20240323 1233	0.3	214
20240323 1243	0.1	137
20240323 1253	0.9	54
20240323 1303	0.1	271
20240323 1313	0.2	64
20240323 1323	0.4	348
20240323 1333	0.1	29
20240323 1343	0.1	15
20240323 1353	0.1	278
20240323 1403	0.9	90
20240323 1413	0.1	201
20240323 1423	0.2	349
20240323 1433	0.1	215
20240323 1443	1.2	90
20240323 1453	0.1	251
20240323 1503	1	132
20240323 1513	0.1	322
20240323 1523	0.1	268
20240323 1533	0.1	352
20240323 1543	1.4	122
20240323 1553	0.2	129
20240323 1603	0.3	134
20240323 1613	0.4	121
20240323 1623	0.7	48
20240323 1633	0.1	314
20240323 1643	0.7	19
20240323 1653	0.1	281
20240323 1703	0.1	296
20240323 1713	0.1	129
20240323 1723	0.1	350
20240323 1733	0.1	326
20240323 1743	0.3	76
20240323 1753	1.3	294
20240323 1803	0.1	347
20240323 1813	0.1	0
20240323 1823	0.3	349
20240323 1833	1.3	122
20240323 1843	0.4	136
20240323 1853	0.2	339
20240323 1903	0.3	72
20240323 1913	0.1	284
20240323 1923	0.1	59
20240323 1933	3.3	139
20240323 1943	0.1	83
20240323 1953	0.1	51
20240323 2003	0.6	71
20240323 2013	0.1	90
20240323 2023	0.1	56
20240323 2033	0.1	83
20240323 2043	0.1	78
20240323 2053	0.4	56
20240323 2103	0.1	51
20240323 2113	0.1	225
20240323 2123	0.1	105
20240323 2133	0.1	320
20240323 2143	0.2	342
20240323 2153	0.1	140
20240323 2203	0.3	141
20240323 2213	0.2	23
20240323 2223	0.1	141
20240323 2233	0.1	311
20240323 2243	0.3	59
20240323 2253	1	46
20240323 2303	0.1	109
20240323 2313	0.1	332
20240323 2323	0.1	352
20240323 2333	0.1	323
20240323 2343	0.1	86
20240323 2353	0.1	91

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240324 0003	0.1	341
20240324 0013	0.1	4
20240324 0023	0.4	102
20240324 0033	0.1	30
20240324 0043	0.2	47
20240324 0053	0.1	74
20240324 0103	0.2	274
20240324 0113	0.9	323
20240324 0123	2.8	140
20240324 0133	0.1	135
20240324 0143	0.1	179
20240324 0153	0.2	312
20240324 0203	0.1	177
20240324 0213	0.1	341
20240324 0223	0.1	244
20240324 0233	0.9	53
20240324 0243	0.2	93
20240324 0253	0.1	316
20240324 0303	0.3	96
20240324 0313	0.2	74
20240324 0323	0.3	168
20240324 0333	0.1	124
20240324 0343	0.2	96
20240324 0353	0.1	77
20240324 0403	0.2	109
20240324 0413	1.8	184
20240324 0423	0.1	179
20240324 0433	0.1	326
20240324 0443	0.2	68
20240324 0453	0.1	11
20240324 0503	0.1	50
20240324 0513	0.1	13
20240324 0523	0.1	313
20240324 0533	0.1	84
20240324 0543	0.8	101
20240324 0553	0.1	100
20240324 0603	0.1	88
20240324 0613	0.1	58
20240324 0623	0.1	319
20240324 0633	0.1	292
20240324 0643	0.1	313
20240324 0653	0.1	313
20240324 0703	0.1	178
20240324 0713	0.1	308
20240324 0723	0.1	143
20240324 0733	0.2	335
20240324 0743	0.7	112
20240324 0753	0.1	82
20240324 0803	0.1	5
20240324 0813	0.1	299
20240324 0823	0.3	44
20240324 0833	1.5	102
20240324 0843	0.4	20
20240324 0853	1	153
20240324 0903	0.1	52
20240324 0913	0.1	251
20240324 0923	0.1	307
20240324 0933	0.1	317
20240324 0943	0.2	283
20240324 0953	0.3	80
20240324 1003	1.7	38
20240324 1013	0.1	66
20240324 1023	0.2	295
20240324 1033	0.1	282
20240324 1043	1.3	351
20240324 1053	1.7	207
20240324 1103	0.1	62
20240324 1113	1.4	39
20240324 1123	2.2	129
20240324 1133	0.7	61
20240324 1143	0.4	335
20240324 1153	0.3	79

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240324 1203	1.1	130
20240324 1213	1.4	142
20240324 1223	0.5	19
20240324 1233	0.9	347
20240324 1243	1.9	353
20240324 1253	0.1	233
20240324 1303	0.7	64
20240324 1313	0.1	188
20240324 1323	0.1	56
20240324 1333	1.3	104
20240324 1343	0.1	59
20240324 1353	0.6	242
20240324 1403	0.1	67
20240324 1413	0.4	253
20240324 1423	0.1	296
20240324 1433	0.1	348
20240324 1443	1	24
20240324 1453	0.3	226
20240324 1503	1.3	271
20240324 1513	0.8	316
20240324 1523	0.1	29
20240324 1533	0.1	190
20240324 1543	0.4	332
20240324 1553	3.8	150
20240324 1603	0.1	344
20240324 1613	6.7	53
20240324 1623	0.1	116
20240324 1633	0.3	350
20240324 1643	0.8	291
20240324 1653	0.3	293
20240324 1703	0.9	57
20240324 1713	1.9	52
20240324 1723	1.4	33
20240324 1733	0.4	55
20240324 1743	0.6	94
20240324 1753	0.4	59
20240324 1803	1.2	56
20240324 1813	0.1	60
20240324 1823	0.7	347
20240324 1833	1.1	141
20240324 1843	0.1	75
20240324 1853	0.1	102
20240324 1903	0.5	96
20240324 1913	0.7	125
20240324 1923	0.2	59
20240324 1933	2.2	176
20240324 1943	1.3	127
20240324 1953	0.1	116
20240324 2003	1.1	108
20240324 2013	0.1	70
20240324 2023	0.7	119
20240324 2033	0.1	79
20240324 2043	0.1	59
20240324 2053	0.7	87
20240324 2103	0.4	117
20240324 2113	0.1	19
20240324 2123	0.3	145
20240324 2133	0.2	104
20240324 2143	0.1	95
20240324 2153	0.1	97
20240324 2203	0.1	42
20240324 2213	0.2	114
20240324 2223	0.1	111
20240324 2233	0.1	46
20240324 2243	0.1	339
20240324 2253	0.5	19
20240324 2303	0.1	53
20240324 2313	2.4	98
20240324 2323	0.3	111
20240324 2333	2.4	151
20240324 2343	0.1	143
20240324 2353	0.4	92



Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240325 0003	0.1	153
20240325 0013	0.1	28
20240325 0023	0.1	306
20240325 0033	0.1	90
20240325 0043	0.1	300
20240325 0053	0.1	83
20240325 0103	0.1	96
20240325 0113	0.1	50
20240325 0123	0.1	26
20240325 0133	0.1	94
20240325 0143	0.1	25
20240325 0153	0.1	128
20240325 0203	0.1	227
20240325 0213	0.1	146
20240325 0223	0.1	84
20240325 0233	0.1	84
20240325 0243	0.1	75
20240325 0253	0.1	69
20240325 0303	0.1	55
20240325 0313	0.1	82
20240325 0323	0.1	49
20240325 0333	0.4	126
20240325 0343	0.1	95
20240325 0353	0.1	93
20240325 0403	0.1	68
20240325 0413	0.1	91
20240325 0423	0.3	105
20240325 0433	0.1	17
20240325 0443	0.1	69
20240325 0453	0.1	76
20240325 0503	0.1	273
20240325 0513	0.2	127
20240325 0523	0.1	170
20240325 0533	0.1	89
20240325 0543	1	72
20240325 0553	0.1	36
20240325 0603	0.6	145
20240325 0613	1.6	140
20240325 0623	0.1	336
20240325 0633	0.1	147
20240325 0643	0.3	135
20240325 0653	0.1	58
20240325 0703	0.1	316
20240325 0713	0.2	337
20240325 0723	0.1	345
20240325 0733	0.1	144
20240325 0743	1	333
20240325 0753	0.3	100
20240325 0803	0.7	94
20240325 0813	0.1	255
20240325 0823	0.1	120
20240325 0833	0.3	135
20240325 0843	0.2	214
20240325 0853	0.1	165
20240325 0903	0.1	209
20240325 0913	0.1	245
20240325 0923	0.1	251
20240325 0933	0.1	162
20240325 0943	0.1	336
20240325 0953	0.1	253
20240325 1003	0.1	213
20240325 1013	0.1	41
20240325 1023	0.1	248
20240325 1033	0.1	184
20240325 1043	0.3	192
20240325 1053	0.5	208
20240325 1103	0.2	67
20240325 1113	0.1	129
20240325 1123	0.1	167
20240325 1133	0.1	36
20240325 1143	0.1	127
20240325 1153	0.1	281

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240325 1203	0.1	302
20240325 1213	0.2	303
20240325 1223	0.1	336
20240325 1233	0.1	251
20240325 1243	0.1	86
20240325 1253	0.1	84
20240325 1303	0.1	222
20240325 1313	0.1	277
20240325 1323	0.1	313
20240325 1333	0.1	126
20240325 1343	0.1	62
20240325 1353	1	104
20240325 1403	0.5	137
20240325 1413	0.4	259
20240325 1423	0.1	190
20240325 1433	0.1	108
20240325 1443	0.1	329
20240325 1453	0.5	316
20240325 1503	0.8	309
20240325 1513	0.1	166
20240325 1523	2.2	242
20240325 1533	0.1	72
20240325 1543	0.9	151
20240325 1553	0.7	174
20240325 1603	0.1	242
20240325 1613	0.1	274
20240325 1623	0.1	205
20240325 1633	0.1	340
20240325 1643	0.1	55
20240325 1653	0.1	88
20240325 1703	0.1	235
20240325 1713	0.4	127
20240325 1723	0.1	231
20240325 1733	0.1	285
20240325 1743	0.1	328
20240325 1753	0.1	72
20240325 1803	0.1	132
20240325 1813	0.1	152
20240325 1823	0.1	303
20240325 1833	0.1	119
20240325 1843	0.1	39
20240325 1853	0.1	102
20240325 1903	0.1	149
20240325 1913	0.1	109
20240325 1923	0.1	92
20240325 1933	0.1	37
20240325 1943	0.1	34
20240325 1953	0.1	76
20240325 2003	0.1	29
20240325 2013	0.1	5
20240325 2023	0.1	31
20240325 2033	0.1	94
20240325 2043	0.1	31
20240325 2053	0.1	55
20240325 2103	0.1	138
20240325 2113	0.1	62
20240325 2123	0.1	55
20240325 2133	0.1	48
20240325 2143	0.1	75
20240325 2153	0.1	91
20240325 2203	0.1	169
20240325 2213	0.1	34
20240325 2223	0.1	329
20240325 2233	0.1	341
20240325 2243	0.1	344
20240325 2253	0.1	340
20240325 2303	0.1	354
20240325 2313	0.1	228
20240325 2323	0.1	227
20240325 2333	0.1	91
20240325 2343	0.1	110
20240325 2353	0.1	85

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240326 0003	0.1	119
20240326 0013	0.1	120
20240326 0023	0.1	115
20240326 0033	0.1	130
20240326 0043	0.1	46
20240326 0053	0.1	86
20240326 0103	0.1	16
20240326 0113	0.1	346
20240326 0123	0.1	41
20240326 0133	0.1	54
20240326 0143	0.1	135
20240326 0153	0.1	199
20240326 0203	0.1	208
20240326 0213	0.1	143
20240326 0223	0.1	60
20240326 0233	0.1	97
20240326 0243	0.1	59
20240326 0253	0.1	76
20240326 0303	0.1	76
20240326 0313	0.1	76
20240326 0323	0.1	52
20240326 0333	0.1	71
20240326 0343	0.1	57
20240326 0353	0.1	55
20240326 0403	0.1	55
20240326 0413	0.1	59
20240326 0423	0.1	300
20240326 0433	0.1	81
20240326 0443	0.1	63
20240326 0453	0.1	85
20240326 0503	0.1	69
20240326 0513	0.1	60
20240326 0523	0.1	56
20240326 0533	0.1	64
20240326 0543	0.1	54
20240326 0553	0.1	53
20240326 0603	0.1	50
20240326 0613	0.1	55
20240326 0623	0.1	64
20240326 0633	0.1	229
20240326 0643	0.1	323
20240326 0653	0.1	332
20240326 0703	0.1	333
20240326 0713	0.1	333
20240326 0723	0.1	132
20240326 0733	0.1	103
20240326 0743	0.1	97
20240326 0753	0.1	131
20240326 0803	0.1	30
20240326 0813	0.1	127
20240326 0823	0.1	235
20240326 0833	0.3	248
20240326 0843	0.1	228
20240326 0853	0.1	110
20240326 0903	0.1	143
20240326 0913	0.1	77
20240326 0923	0.1	188
20240326 0933	0.1	132
20240326 0943	0.1	112
20240326 0953	0.1	273
20240326 1003	0.1	227
20240326 1013	0.1	145
20240326 1023	1.6	294
20240326 1033	0.1	105
20240326 1043	0.1	117
20240326 1053	0.1	107
20240326 1103	0.2	145
20240326 1113	0.1	108
20240326 1123	0.1	195
20240326 1133	0.5	65
20240326 1143	0.4	329
20240326 1153	0.3	127

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240326 1203	0.1	36
20240326 1213	0.1	13
20240326 1223	0.1	230
20240326 1233	0.1	167
20240326 1243	0.1	87
20240326 1253	0.1	153
20240326 1303	0.3	126
20240326 1313	1	24
20240326 1323	0.1	103
20240326 1333	0.1	11
20240326 1343	0.2	20
20240326 1353	0.1	48
20240326 1403	0.1	70
20240326 1413	0.1	164
20240326 1423	1	124
20240326 1433	0.2	132
20240326 1443	0.1	257
20240326 1453	0.1	298
20240326 1503	2.4	96
20240326 1513	0.1	88
20240326 1523	0.2	19
20240326 1533	0.2	17
20240326 1543	0.1	20
20240326 1553	0.1	5
20240326 1603	0.2	27
20240326 1613	1.7	59
20240326 1623	2.4	126
20240326 1633	0.1	324
20240326 1643	0.2	338
20240326 1653	0.1	25
20240326 1703	0.1	88
20240326 1713	0.1	40
20240326 1723	0.1	344
20240326 1733	0.3	110
20240326 1743	0.1	106
20240326 1753	0.1	105
20240326 1803	0.1	309
20240326 1813	0.1	23
20240326 1823	0.1	114
20240326 1833	0.1	333
20240326 1843	0.1	40
20240326 1853	0.4	127
20240326 1903	1.1	123
20240326 1913	0.1	68
20240326 1923	0.1	182
20240326 1933	0.4	165
20240326 1943	4.5	144
20240326 1953	1	106
20240326 2003	1.5	47
20240326 2013	0.1	338
20240326 2023	0.4	63
20240326 2033	0.2	103
20240326 2043	3.7	22
20240326 2053	0.8	120
20240326 2103	0.6	326
20240326 2113	6	29
20240326 2123	0.5	83
20240326 2133	0.8	70
20240326 2143	0.1	46
20240326 2153	0.2	139
20240326 2203	0.5	216
20240326 2213	1.8	56
20240326 2223	0.1	9
20240326 2233	0.4	353
20240326 2243	3.4	74
20240326 2253	0.6	331
20240326 2303	0.1	229
20240326 2313	0.1	289
20240326 2323	4	37
20240326 2333	0.4	315
20240326 2343	1.3	354
20240326 2353	0.2	114

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240327 0003	0.2	344
20240327 0013	0.8	303
20240327 0023	0.3	307
20240327 0033	5	132
20240327 0043	0.1	164
20240327 0053	0.6	64
20240327 0103	2.6	131
20240327 0113	0.1	52
20240327 0123	1	20
20240327 0133	0.5	225
20240327 0143	3.2	316
20240327 0153	3.1	317
20240327 0203	0.2	310
20240327 0213	0.1	262
20240327 0223	0.9	343
20240327 0233	0.9	37
20240327 0243	0.3	69
20240327 0253	0.1	102
20240327 0303	0.3	97
20240327 0313	0.4	45
20240327 0323	0.2	16
20240327 0333	0.2	133
20240327 0343	0.2	146
20240327 0353	1.9	144
20240327 0403	1	58
20240327 0413	0.1	0
20240327 0423	0.1	120
20240327 0433	0.3	143
20240327 0443	0.6	330
20240327 0453	0.3	131
20240327 0503	0.1	291
20240327 0513	1.7	131
20240327 0523	0.2	118
20240327 0533	0.6	108
20240327 0543	0.8	288
20240327 0553	0.5	54
20240327 0603	1.7	176
20240327 0613	1.8	330
20240327 0623	0.2	170
20240327 0633	0.1	339
20240327 0643	0.1	311
20240327 0653	0.5	337
20240327 0703	0.1	65
20240327 0713	0.1	55
20240327 0723	0.4	75
20240327 0733	0.5	318
20240327 0743	1.2	346
20240327 0753	1.8	333
20240327 0803	3	315
20240327 0813	1.9	345
20240327 0823	3.9	63
20240327 0833	2.5	7
20240327 0843	3.3	40
20240327 0853	0.5	21
20240327 0903	1.4	5
20240327 0913	1.8	328
20240327 0923	0.9	26
20240327 0933	2.1	44
20240327 0943	0.5	38
20240327 0953	0.1	302
20240327 1003	0.2	4
20240327 1013	0.4	335
20240327 1023	1.4	329
20240327 1033	3.2	31
20240327 1043	1.1	324
20240327 1053	0.3	1
20240327 1103	0.4	318
20240327 1113	0.2	337
20240327 1123	1.5	37
20240327 1133	1.9	47
20240327 1143	0.4	341
20240327 1153	0.8	318

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240327 1203	2.9	196
20240327 1213	0.2	192
20240327 1223	2.4	27
20240327 1233	2.3	49
20240327 1243	7.4	116
20240327 1253	1.9	162
20240327 1303	0.1	39
20240327 1313	0.1	224
20240327 1323	3.4	83
20240327 1333	0.5	27
20240327 1343	3.3	129
20240327 1353	0.4	352
20240327 1403	0.1	194
20240327 1413	3.2	198
20240327 1423	1.5	87
20240327 1433	0.3	221
20240327 1443	2.9	59
20240327 1453	0.5	93
20240327 1503	1.1	182
20240327 1513	0.8	94
20240327 1523	0.2	3
20240327 1533	1.3	321
20240327 1543	0.7	130
20240327 1553	0.8	173
20240327 1603	0.1	6
20240327 1613	1.9	161
20240327 1623	0.9	9
20240327 1633	0.1	72
20240327 1643	0.3	124
20240327 1653	3.1	58
20240327 1703	2.3	286
20240327 1713	1.8	104
20240327 1723	0.2	58
20240327 1733	0.2	70
20240327 1743	1.2	64
20240327 1753	0.3	285
20240327 1803	1	16
20240327 1813	0.6	328
20240327 1823	1.1	336
20240327 1833	0.1	149
20240327 1843	1.8	335
20240327 1853	1	353
20240327 1903	0.1	343
20240327 1913	1.5	174
20240327 1923	2.1	91
20240327 1933	0.1	286
20240327 1943	1.6	40
20240327 1953	0.1	15
20240327 2003	0.8	7
20240327 2013	0.1	119
20240327 2023	3.9	28
20240327 2033	1.3	331
20240327 2043	0.4	248
20240327 2053	1.2	324
20240327 2103	1.4	179
20240327 2113	6	44
20240327 2123	0.9	332
20240327 2133	1	139
20240327 2143	2	40
20240327 2153	0.5	32
20240327 2203	0.6	41
20240327 2213	3.1	107
20240327 2223	0.3	321
20240327 2233	4.1	35
20240327 2243	1.8	108
20240327 2253	0.4	128
20240327 2303	1.8	65
20240327 2313	0.6	339
20240327 2323	0.1	142
20240327 2333	0.1	272
20240327 2343	0.1	300
20240327 2353	2.1	97

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240328 0003	0.3	22
20240328 0013	1.3	118
20240328 0023	0.2	136
20240328 0033	0.8	114
20240328 0043	0.6	246
20240328 0053	0.1	163
20240328 0103	0.1	127
20240328 0113	0.9	349
20240328 0123	0.5	42
20240328 0133	4	56
20240328 0143	0.5	168
20240328 0153	0.6	329
20240328 0203	0.1	240
20240328 0213	1.8	130
20240328 0223	1.5	149
20240328 0233	0.3	69
20240328 0243	0.4	339
20240328 0253	0.7	45
20240328 0303	0.1	334
20240328 0313	0.1	276
20240328 0323	0.1	90
20240328 0333	0.5	330
20240328 0343	0.4	118
20240328 0353	0.2	347
20240328 0403	0.1	37
20240328 0413	1.1	157
20240328 0423	0.1	21
20240328 0433	0.1	0
20240328 0443	0.1	107
20240328 0453	0.1	139
20240328 0503	0.2	108
20240328 0513	0.6	113
20240328 0523	0.1	65
20240328 0533	0.1	104
20240328 0543	0.1	303
20240328 0553	0.1	297
20240328 0603	0.1	250
20240328 0613	0.1	30
20240328 0623	0.1	152
20240328 0633	0.1	351
20240328 0643	0.1	231
20240328 0653	0.1	120
20240328 0703	0.1	146
20240328 0713	0.1	151
20240328 0723	0.1	239
20240328 0733	0.1	111
20240328 0743	0.2	336
20240328 0753	0.1	84
20240328 0803	0.1	104
20240328 0813	0.6	99
20240328 0823	1.1	30
20240328 0833	0.1	71
20240328 0843	0.2	134
20240328 0853	0.2	245
20240328 0903	0.1	153
20240328 0913	0.6	143
20240328 0923	0.1	292
20240328 0933	0.4	241
20240328 0943	0.1	229
20240328 0953	2.3	282
20240328 1003	0.1	244
20240328 1013	0.5	107
20240328 1023	0.1	244
20240328 1033	0.1	164
20240328 1043	0.1	248
20240328 1053	0.1	141
20240328 1103	1.3	143
20240328 1113	0.6	144
20240328 1123	0.1	180
20240328 1133	0.1	246
20240328 1143	0.2	119
20240328 1153	0.1	110

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240328 1203	0.4	271
20240328 1213	0.1	256
20240328 1223	0.2	233
20240328 1233	2.6	158
20240328 1243	0.2	277
20240328 1253	0.3	185
20240328 1303	0.1	91
20240328 1313	0.6	232
20240328 1323	0.1	41
20240328 1333	0.1	242
20240328 1343	0.9	248
20240328 1353	0.1	212
20240328 1403	0.7	130
20240328 1413	0.1	259
20240328 1423	0.1	126
20240328 1433	0.2	253
20240328 1443	0.1	199
20240328 1453	0.1	240
20240328 1503	0.4	149
20240328 1513	0.1	289
20240328 1523	0.1	206
20240328 1533	0.1	132
20240328 1543	0.1	234
20240328 1553	0.2	255
20240328 1603	0.1	87
20240328 1613	0.1	255
20240328 1623	0.1	278
20240328 1633	0.1	235
20240328 1643	0.1	229
20240328 1653	0.1	214
20240328 1703	0.1	216
20240328 1713	0.2	151
20240328 1723	0.1	195
20240328 1733	0.1	230
20240328 1743	0.2	230
20240328 1753	0.1	211
20240328 1803	0.1	131
20240328 1813	0.1	118
20240328 1823	0.1	117
20240328 1833	0.1	117
20240328 1843	0.1	83
20240328 1853	0.1	83
20240328 1903	0.1	59
20240328 1913	0.1	34
20240328 1923	0.1	59
20240328 1933	0.1	60
20240328 1943	0.1	40
20240328 1953	0.1	29
20240328 2003	0.1	72
20240328 2013	0.1	72
20240328 2023	0.1	76
20240328 2033	0.1	65
20240328 2043	0.1	54
20240328 2053	0.1	54
20240328 2103	0.1	74
20240328 2113	0.1	74
20240328 2123	0.1	42
20240328 2133	0.1	42
20240328 2143	0.1	30
20240328 2153	0.1	30
20240328 2203	0.1	55
20240328 2213	0.1	49
20240328 2223	0.1	42
20240328 2233	0.1	52
20240328 2243	0.1	51
20240328 2253	0.1	52
20240328 2303	0.1	80
20240328 2313	0.1	46
20240328 2323	0.1	52
20240328 2333	0.1	62
20240328 2343	0.1	59
20240328 2353	0.1	52

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240329 0003	0.1	84
20240329 0013	0.1	84
20240329 0023	0.1	45
20240329 0033	0.1	45
20240329 0043	0.1	45
20240329 0053	0.1	57
20240329 0103	0.1	58
20240329 0113	0.1	58
20240329 0123	0.1	114
20240329 0133	0.1	109
20240329 0143	0.1	35
20240329 0153	0.1	45
20240329 0203	0.1	45
20240329 0213	0.1	69
20240329 0223	0.1	49
20240329 0233	0.1	40
20240329 0243	0.1	53
20240329 0253	0.1	17
20240329 0303	0.1	50
20240329 0313	0.1	0
20240329 0323	0.1	110
20240329 0333	0.1	57
20240329 0343	0.1	57
20240329 0353	0.1	52
20240329 0403	0.1	36
20240329 0413	0.1	36
20240329 0423	0.1	36
20240329 0433	0.1	62
20240329 0443	0.1	47
20240329 0453	0.1	77
20240329 0503	0.1	46
20240329 0513	0.1	59
20240329 0523	0.1	59
20240329 0533	0.1	28
20240329 0543	0.1	7
20240329 0553	0.1	14
20240329 0603	0.1	14
20240329 0613	0.1	14
20240329 0623	0.1	14
20240329 0633	0.1	14
20240329 0643	0.1	11
20240329 0653	0.1	204
20240329 0703	0.1	280
20240329 0713	0.1	24
20240329 0723	0.1	296
20240329 0733	0.1	178
20240329 0743	0.1	154
20240329 0753	0.1	248
20240329 0803	0.1	339
20240329 0813	0.1	153
20240329 0823	0.1	222
20240329 0833	0.1	276
20240329 0843	0.1	20
20240329 0853	0.1	79
20240329 0903	0.1	18
20240329 0913	0.1	160
20240329 0923	0.1	143
20240329 0933	1.8	141
20240329 0943	0.1	51
20240329 0953	0.1	151
20240329 1003	0.1	119
20240329 1013	0.1	171
20240329 1023	0.1	190
20240329 1033	0.3	132
20240329 1043	0.1	91
20240329 1053	0.2	143
20240329 1103	0.2	141
20240329 1113	0.1	267
20240329 1123	0.1	79
20240329 1133	0.1	90
20240329 1143	0.1	238
20240329 1153	0.6	287

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240329 1203	0.2	88
20240329 1213	0.1	173
20240329 1223	0.1	112
20240329 1233	0.9	173
20240329 1243	0.1	82
20240329 1253	0.1	173
20240329 1303	0.1	141
20240329 1313	0.1	151
20240329 1323	0.1	240
20240329 1333	0.1	233
20240329 1343	0.1	127
20240329 1353	0.1	134
20240329 1403	0.3	283
20240329 1413	0.5	116
20240329 1423	0.2	235
20240329 1433	0.1	217
20240329 1443	3	147
20240329 1453	0.8	135
20240329 1503	0.2	146
20240329 1513	0.2	135
20240329 1523	0.3	117
20240329 1533	0.5	51
20240329 1543	1.1	165
20240329 1553	0.2	156
20240329 1603	1.9	122
20240329 1613	0.4	63
20240329 1623	0.1	76
20240329 1633	0.1	156
20240329 1643	0.1	120
20240329 1653	0.1	125
20240329 1703	2.7	80
20240329 1713	0.8	74
20240329 1723	0.5	78
20240329 1733	0.8	90
20240329 1743	0.1	292
20240329 1753	0.8	52
20240329 1803	0.3	24
20240329 1813	0.2	85
20240329 1823	0.1	17
20240329 1833	0.1	47
20240329 1843	0.2	33
20240329 1853	2	124
20240329 1903	0.3	80
20240329 1913	0.9	82
20240329 1923	0.2	79
20240329 1933	0.4	146
20240329 1943	0.9	113
20240329 1953	0.1	108
20240329 2003	0.1	177
20240329 2013	0.1	288
20240329 2023	0.1	332
20240329 2033	0.1	121
20240329 2043	0.1	333
20240329 2053	0.1	252
20240329 2103	0.1	350
20240329 2113	0.1	114
20240329 2123	0.1	126
20240329 2133	0.1	113
20240329 2143	0.1	145
20240329 2153	0.1	145
20240329 2203	0.1	270
20240329 2213	0.1	114
20240329 2223	0.1	46
20240329 2233	0.1	39
20240329 2243	0.1	88
20240329 2253	0.1	28
20240329 2303	0.1	147
20240329 2313	0.2	111
20240329 2323	0.7	53
20240329 2333	0.2	51
20240329 2343	0.1	65
20240329 2353	0.4	123

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240330 0003	0.1	39
20240330 0013	0.1	146
20240330 0023	0.2	147
20240330 0033	0.6	50
20240330 0043	0.2	74
20240330 0053	0.1	275
20240330 0103	0.1	247
20240330 0113	1.5	89
20240330 0123	0.1	78
20240330 0133	0.1	17
20240330 0143	0.1	263
20240330 0153	0.6	88
20240330 0203	0.1	87
20240330 0213	1	50
20240330 0223	0.2	142
20240330 0233	0.1	139
20240330 0243	0.1	108
20240330 0253	0.1	273
20240330 0303	0.1	271
20240330 0313	0.6	155
20240330 0323	0.1	79
20240330 0333	1.1	93
20240330 0343	0.2	111
20240330 0353	0.5	132
20240330 0403	0.1	242
20240330 0413	0.6	27
20240330 0423	0.2	81
20240330 0433	0.1	139
20240330 0443	0.1	62
20240330 0453	0.1	15
20240330 0503	0.1	52
20240330 0513	0.1	284
20240330 0523	0.1	168
20240330 0533	0.1	266
20240330 0543	0.1	147
20240330 0553	0.1	125
20240330 0603	0.1	141
20240330 0613	0.1	12
20240330 0623	0.1	171
20240330 0633	0.1	120
20240330 0643	0.1	124
20240330 0653	0.3	121
20240330 0703	0.1	65
20240330 0713	0.1	337
20240330 0723	0.1	177
20240330 0733	0.1	142
20240330 0743	0.1	139
20240330 0753	0.1	318
20240330 0803	0.1	314
20240330 0813	0.1	102
20240330 0823	0.1	132
20240330 0833	0.1	254
20240330 0843	0.1	145
20240330 0853	0.1	105
20240330 0903	0.1	124
20240330 0913	0.2	0
20240330 0923	0.1	114
20240330 0933	0.1	312
20240330 0943	0.8	333
20240330 0953	0.4	42
20240330 1003	0.1	243
20240330 1013	0.1	3
20240330 1023	0.1	28
20240330 1033	0.1	144
20240330 1043	0.9	140
20240330 1053	0.9	338
20240330 1103	0.2	241
20240330 1113	0.6	165
20240330 1123	0.5	96
20240330 1133	0.3	37
20240330 1143	1	54
20240330 1153	0.2	270

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240330 1203	0.1	164
20240330 1213	0.1	8
20240330 1223	0.1	162
20240330 1233	0.6	32
20240330 1243	0.1	210
20240330 1253	0.1	186
20240330 1303	0.8	57
20240330 1313	2	136
20240330 1323	0.4	63
20240330 1333	0.8	120
20240330 1343	0.1	242
20240330 1353	0.1	165
20240330 1403	1	317
20240330 1413	0.3	61
20240330 1423	0.2	343
20240330 1433	0.9	121
20240330 1443	0.7	53
20240330 1453	0.6	66
20240330 1503	0.1	165
20240330 1513	0.2	126
20240330 1523	0.1	122
20240330 1533	0.2	138
20240330 1543	0.7	132
20240330 1553	2.8	112
20240330 1603	1.9	109
20240330 1613	0.4	142
20240330 1623	0.1	80
20240330 1633	0.1	125
20240330 1643	0.1	93
20240330 1653	1.9	159
20240330 1703	0.1	189
20240330 1713	0.1	7
20240330 1723	0.1	103
20240330 1733	0.1	123
20240330 1743	0.1	2
20240330 1753	0.2	115
20240330 1803	0.5	44
20240330 1813	0.3	90
20240330 1823	0.1	210
20240330 1833	0.1	62
20240330 1843	0.1	35
20240330 1853	0.1	138
20240330 1903	0.1	159
20240330 1913	0.1	338
20240330 1923	0.1	161
20240330 1933	0.2	128
20240330 1943	0.1	113
20240330 1953	0.1	167
20240330 2003	0.1	172
20240330 2013	0.1	176
20240330 2023	0.1	27
20240330 2033	0.1	105
20240330 2043	0.3	217
20240330 2053	0.1	345
20240330 2103	0.1	226
20240330 2113	0.6	148
20240330 2123	1.2	131
20240330 2133	0.1	136
20240330 2143	2.2	52
20240330 2153	0.1	209
20240330 2203	0.1	190
20240330 2213	0.2	287
20240330 2223	0.1	169
20240330 2233	1.3	121
20240330 2243	0.1	311
20240330 2253	0.1	259
20240330 2303	0.1	107
20240330 2313	0.3	156
20240330 2323	0.9	148
20240330 2333	0.3	163
20240330 2343	1	80
20240330 2353	0.6	44

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240331 0003	0.5	40
20240331 0013	0.1	83
20240331 0023	0.4	146
20240331 0033	0.3	59
20240331 0043	0.1	65
20240331 0053	0.1	263
20240331 0103	0.4	126
20240331 0113	0.1	133
20240331 0123	0.1	265
20240331 0133	0.1	132
20240331 0143	0.1	200
20240331 0153	0.1	236
20240331 0203	0.5	144
20240331 0213	0.1	59
20240331 0223	0.1	27
20240331 0233	0.1	196
20240331 0243	0.2	122
20240331 0253	0.1	337
20240331 0303	0.1	261
20240331 0313	0.1	182
20240331 0323	0.1	308
20240331 0333	0.1	84
20240331 0343	0.1	67
20240331 0353	0.1	40
20240331 0403	0.1	35
20240331 0413	0.1	46
20240331 0423	0.1	28
20240331 0433	0.1	96
20240331 0443	0.1	203
20240331 0453	0.1	176
20240331 0503	0.1	150
20240331 0513	0.1	90
20240331 0523	0.2	96
20240331 0533	0.1	82
20240331 0543	0.1	122
20240331 0553	0.1	273
20240331 0603	0.1	136
20240331 0613	0.1	114
20240331 0623	0.1	66
20240331 0633	0.1	67
20240331 0643	0.1	31
20240331 0653	0.1	147
20240331 0703	0.1	278
20240331 0713	0.1	252
20240331 0723	0.1	230
20240331 0733	0.1	140
20240331 0743	0.1	162
20240331 0753	0.1	255
20240331 0803	0.1	215
20240331 0813	0.2	247
20240331 0823	0.2	234
20240331 0833	0.1	240
20240331 0843	0.3	159
20240331 0853	0.4	132
20240331 0903	0.5	234
20240331 0913	0.1	337
20240331 0923	0.1	277
20240331 0933	0.1	245
20240331 0943	0.1	305
20240331 0953	0.1	110
20240331 1003	0.1	234
20240331 1013	0.1	147
20240331 1023	0.1	202
20240331 1033	0.1	287
20240331 1043	0.1	198
20240331 1053	0.1	108
20240331 1103	0.1	183
20240331 1113	0.3	259
20240331 1123	0.1	208
20240331 1133	0.1	260
20240331 1143	0.4	237
20240331 1153	0.1	79

Date & Time (YYYYMMBB HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20240331 1203	0.2	268
20240331 1213	0.4	226
20240331 1223	0.3	340
20240331 1233	0.2	265
20240331 1243	0.3	281
20240331 1253	0.2	342
20240331 1303	0.1	221
20240331 1313	0.1	249
20240331 1323	0.4	208
20240331 1333	0.3	223
20240331 1343	0.3	194
20240331 1353	0.3	278
20240331 1403	0.1	256
20240331 1413	0.4	234
20240331 1423	0.1	188
20240331 1433	0.1	263
20240331 1443	1.6	233
20240331 1453	1.1	251
20240331 1503	0.2	310
20240331 1513	0.1	158
20240331 1523	0.1	233
20240331 1533	2.1	254
20240331 1543	0.1	259
20240331 1553	0.1	353
20240331 1603	0.5	296
20240331 1613	0.1	253
20240331 1623	0.1	254
20240331 1633	0.1	152
20240331 1643	0.1	250
20240331 1653	0.1	149
20240331 1703	0.1	76
20240331 1713	0.1	259
20240331 1723	0.1	258
20240331 1733	0.1	290
20240331 1743	0.2	239
20240331 1753	0.1	255
20240331 1803	0.1	174
20240331 1813	0.1	231
20240331 1823	0.1	205
20240331 1833	0.1	236
20240331 1843	0.1	252
20240331 1853	0.1	149
20240331 1903	0.1	261
20240331 1913	0.1	251
20240331 1923	0.1	72
20240331 1933	0.1	269
20240331 1943	0.1	125
20240331 1953	0.1	64
20240331 2003	0.1	82
20240331 2013	0.1	131
20240331 2023	0.1	123
20240331 2033	0.1	155
20240331 2043	0.1	94
20240331 2053	0.1	108
20240331 2103	0.1	83
20240331 2113	0.1	68
20240331 2123	0.1	275
20240331 2133	0.1	136
20240331 2143	0.1	163
20240331 2153	0.1	237
20240331 2203	0.1	233
20240331 2213	0.1	121
20240331 2223	0.1	144
20240331 2233	0.1	321
20240331 2243	0.1	279
20240331 2253	0.1	156
20240331 2303	0.1	108
20240331 2313	0.1	108
20240331 2323	0.1	328
20240331 2333	0.1	66
20240331 2343	0.1	107
20240331 2353	0.1	143

## Appendix J Waste Flow Table



## Waste Flow Table

Month	Total Quantity Generated	Total Quantities of Inert C&D Materials to be Generated from the Contract					Total Quantities of Recyclables Generation				Total Quantities of C&D Materials to be Generated from the Contract		
		Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in Other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / Cardboard Packaging	Plastics	Yard Waste (to Y-Park)	Chemical Waste	General Refuse	Others, e.g. non-recyclable yard waste
	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in tonne)	(in '000L)	(in tonne)	(in tonne)
Dec-22	84.77	0	0	0	0	0	0	0	0	11.49	0	7.53	65.75
Jan-23	24.51	0	0	0	0	0	0	0	0	0	0	24.51	0
Feb-23	506.45	0	0	0	0	0	0	0	0	3.16	0	5.85	497.44
Mar-23	9,581.15	0	0	9,187	0	0	0	0	0	3.69	0	6.96	383.5
Apr-23	18,532.07	0	0	18,466	0	0	0	0	0	1.97	0	5.81	58.29
May-23	28,889.61	0	0	28,473	0	0	0	0	0	0	0	7.45	409.16
Jun-23	11,574.89	0	0	11,211	0	0	0	0	0	2.38	0	14.69	346.82
Jul-23	50,595.49	0	0	50,307	0	0	0	0	0	0	0	25.54	262.95
Aug-23	63,178.52	0	0	63,076	0	0	0	0	0	0	0	30.77	71.75
Sep-23	42,709.75	0	0	42,676	0	0	0	0	0	0	0	33.38	0
Oct-23	55,551.68	0	0	55,405	0	0	0	0	0	2.56	0	28.05	116.07
Nov-23	76,127.24	0	0	73,352	0	2629.37	0	0	0	0	0	35.13	110.74
Dec-23	63,389.25	0	0	57,681	0	5296.17	0	0	0	2.48	0	34.26	375.34
Jan-24	125,840.50	0	0	125,010	0	0	0	0	0	5.59	0	71.13	753.78
Feb-24	108,176.42	0	0	106,218	0	1771.16	0	0	0	0	0	53.76	133.17
Mar-24	70,683.04	0	0	68,989	0	1324.13	0	0	0	3.26	0	108.43	258.01
<b>Total</b>	<b>725,445.34</b>	<b>0.00</b>	<b>0.00</b>	<b>710,052</b>	<b>0.00</b>	<b>11,020.83</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>36.58</b>	<b>0.00</b>	<b>493.25</b>	<b>3,842.77</b>

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. 2 Feb 2024 Observation 1 – Inactive exposed slope area at Portion B2 was covered by impervious sheet.
2. 15 Feb 2024 Observation 1 – Sprinkling truck and sprayers were arranged and provided for dust suppression at SBA and Portion E4.
3. 26 Feb 2024 Observation 1 – Sprinkling truck and sprayers were arranged and provided for dust suppression at SBA and Portion E4.
4. 26 February 2024 Observation 3 – The impervious sheet was provided in the work area to prevent chemical spillage and minimize the risk of land contamination.
5. 26 Feb 2024 Observation 4 – The general waste and C&D waste were removed at Portion A.
6. 26 Feb 2024 Observation 5 – The chemical containers at Portion A were removed.

**Observation(s):**




1. More than 20 bags of cement or dry PFA and activities of loading, unloading, transfer, handing or storage of bulk cement or dry PFA without covered by impervious sheet or placed in an area sheltered on the top and 3 sides were observed at SBA.
2. The exposed earth slope at Portion B1-2 shall be covered by impervious sheet for short-term slope protection and shotcrete within 6 months after last construction activities.
3. The general waste and food waste at portion D shall be disposed into enclosed rubbish bins.
4. The chemical containers at portion B1-2 and oil drum at SBA shall be placed at the chemical trip tray.

**Reminder(s):**

1. The precaution shall be taken with Appendix A2 of ProPECC PN 1/94 before, during and after rainstorm.

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

1. The contractor has been advised that every stock of more than 20 bags of cement or dry PFA, and activities involving bulk cement or dry PFH, should be covered by impervious sheeting or placed in an area sheltered on the top and three sides.
2. The contractor has been recommended to provide impervious sheet for portion B1-2 slope protection to prevent dust dispersion.
3. The contractor has been reminded to provide an enclosed rubbish bins for waste disposal to ensure the site clean tidy.
4. The contractor has been advised to provide chemical drip tray for chemical storage to prevent chemical spillage.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Joan Lo	/	Matt Choy/Kristy Wong	Sylvia Ho
Date:	4 March 2024	/	4 March 2024	4 March 2024

**Follow up action for previous Site Inspection:**

1. 4 Mar 2024 Observation 3 – The general waste and food waste was removed and the enclosed bin was provided for waste disposal at portion D.

**Observation(s):**




1. The stagnant water is observed at Portion A and D.
2. The exposed slope surface without covered by impervious sheet temporarily at Portion B2 is observed.
3. The accumulation of waste is observed at Portion D.
4. The chemical container at Portion B2 shall be placed on the drip tray.

**Reminder(s):**

1. The precaution shall be taken with Appendix A2 of ProPECC PN 1/94 before, during and after rainstorm.

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

1. The contractor has been advised to install efficient channels at Portion A and D to properly direct stormwater to silt removal facility.
2. The contractor has been reminded that the exposed slope surface should be covered by impervious sheet temporarily and shotcreted for long-term slope protection at Portion B2.
3. The contractor has been recommended to increase waste disposal frequently if necessary to avoid waste accumulation.
4. The contractor has been reminded to provide the chemical drip tray for chemical storage to prevent chemical spillage.

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

**Follow up action for previous Site Inspection:**

1. 5 Feb 2024 Observation 1 – The exposed slope surface at Portion B2 was shotcreted for slope surface protection.
2. 26 Feb 2024 Observation 2 – The accumulation of deposited silt and grit was cleaned at Portion A.
3. 4 March 2024 Observation 2 – The exposed earth slope at Portion B1-2 was covered by impervious sheet for short-term slope protection.
4. 4 March 2024 Observation 3 – The oil drum at SBA was placed on the chemical drip tray properly.
5. 11 March 2024 Observation 1 – The water pumps were provided at Portion A and Portion D to remove the stagnant water to properly direct stormwater to silt removal facility.
6. 11 March 2024 Observation 2 – The exposed slope surface at Portion B2 was shotcreted for long-term slope surface protection.
7. 11 March 2024 Observation 3 – The accumulation of waste at Portion D was disposed.
8. 11 March 2024 Observation 4 – The chemical containers at Portion B2 were removed.

**Observation(s):**





1. The accumulation of deposited silt and grit is observed at Portion A.
2. The general waste and C&D waste at Portion A shall be disposed and stored in enclosed bins and waste skip properly.
3. The oil drum and chemical containers at Portion A shall be placed in the chemical drip tray with labelling.

**Reminder(s):**

1. The precaution shall be taken with Appendix A2 of ProPECC PN 1/94 before, during and after rainstorm.

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

1. The contractor has been recommended to install an efficient channel at Portion A to properly direct stormwater to silt removal facility and clean up the deposited silt and grit regularly.
2. The contractor has been reminded to increase the capacity and the number of enclosed bins and waste skips at Portion A for waste storage and disposal and clean up the accumulation of general waste and C&D waste regularly.
3. The contractor has been advised to provide enough chemical drip tray for chemical storage and label them in English and Chinese to recognize chemical container.

	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	<del>Sylvia Ho</del> Kenneth Lam
Date:	18 March 2024	18 March 2024	18 March 2024	18 March 2024



**Follow up action for previous Site Inspection:**

1. 4 March 2024 Observation 3 – The empty chemical containers at Portion B1-2 were removed.
2. 18 March 2024 Observation 2 – Waste skips were provided at Portion A for proper waste storage and disposal.
3. 18 March 2024 Observation 3 – The chemical drip tray was provided to place oil drum and the chemical containers at Portion A were removed.

**Observation(s):**



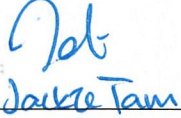
1. NRMM label shall be fixed on the generator and excavator at Portion E3-1A.
2. Unpaved main haul road at Portion E3-1A and E4 shall be wetted by water spraying.
3. General waste (e.g. food waste) shall be collected in enclosed bin at portion E3-1A.

**Reminder(s):**

1. The precaution shall be taken with Appendix A2 of ProPECC PN 1/94 before, during and after rainstorm.

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

1. The contractor has been reminded to display NRMM label on the generator and excavator at Portion E3-1A.
2. The contractor has been advised to increase the frequency of watering to ensure that the surface of the unpaved haul road is wetted and to prevent dust dispersion.
3. The contractor has been recommended to provide sufficient enclosed bin at Portion E3-1A for general waste collection and storage.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:		/		
Name:	Joan Lo	/	Matt Choy/Kristy Wong	<del>Sylvia Ho</del>
Date:	25 March 2024	/	25 March 2024	25 March 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
<b>Air Quality</b>								
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"> <li>Dust emission from construction vehicle movement is confined within the worksites area.</li> </ul>					# (Refer to Appendix K (1) 4 Mar 2024 Weekly Site Inspection Observation 2 (The exposed earth slope at Portion B1-2 was covered by impervious sheet for short-term slope protection. The long-term slope surface protection is conducted in progress.) (2) 25 Mar 2024 Weekly Site Inspection Observation 2)
		B11 – B12	<ul style="list-style-type: none"> <li>Watering facilities will be provided at every designated vehicular exit point.</li> </ul>					✓ Vehicle washing facilities provided at vehicular exit point in Portion A, B1-2, D, E3-1 & E4
		-	<ul style="list-style-type: none"> <li>Good site practice is recommended during construction phase.</li> </ul>					✓
<b>Construction Noise</b>								
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	✓
<b>Construction Runoff</b>								
S5.8.1	S5.2.1	D1	<u>Construction on Site Runoff</u> <ul style="list-style-type: none"> <li>(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.</li> </ul>	Control construction runoff and erosion from site surface, drainage channel, stockpiles, wheel washing facilities, etc to minimize water quality during construction stage	Contractor	Entire Construction site	ProPECC PN 1/94 Water Pollution Control Ordinance	(a) The perimeter cut-off drains are establishing in progress (Completion: 98%) (b) # (Refer to Appendix K 18 Mar 2024 Weekly Site Inspection Observation 1)
		D2	(a) The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. (b) Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/sediment trap. (c) The sediment/silt traps should be incorporated in the permanent drainage channels to enhance deposition rates.					(a) N/A (b) ✓ (c) ✓

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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
Construction Runoff (Cont'd)								
S5.8.1	S5.2.1	D3	<ul style="list-style-type: none"> <li>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.</li> </ul>	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	✓
		D4	<ul style="list-style-type: none"> <li>(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.</li> </ul>					(a) ✓ (b) ✓ (c) # (Refer to Appendix K 4 Mar 2024 Weekly Site Inspection Observation 2)
		D5	<ul style="list-style-type: none"> <li>(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.</li> </ul>					(a) ✓ (d) N/A
		D6	<ul style="list-style-type: none"> <li>(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.</li> </ul>					(a) ✓ (b) ✓ (c) # (Refer to Appendix K 18 Mar 2024 Weekly Site Inspection Observation 1)
		D7	<ul style="list-style-type: none"> <li>(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.</li> </ul>					(a) ✓ ✓
		D8	<ul style="list-style-type: none"> <li>Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50 m<sup>3</sup> 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.</li> </ul>					(b) ✓
		D9	<ul style="list-style-type: none"> <li>(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.</li> </ul>					(a) ✓ (c) ✓
		D10	<ul style="list-style-type: none"> <li>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.</li> </ul>					(b) ✓
		D11	<ul style="list-style-type: none"> <li>(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.</li> </ul>					(a) ✓ (b) ✓ (c) ✓ (d) ✓ (e) ✓
		D12	<ul style="list-style-type: none"> <li>(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.</li> </ul>					(a) N/A (b) N/A (e) N/A
		D13	<ul style="list-style-type: none"> <li>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.</li> </ul>					(c) ✓

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

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<b>Construction Runoff (Cont'd)</b>								
S5.8.1	S5.2.1	D14	<ul style="list-style-type: none"> <li>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.</li> </ul>	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	✓
		D15	<ul style="list-style-type: none"> <li>To prevent pollution risks arising from works area (waste reception area) and haul roads, intercepting bund or barrier along the roadside should be constructed.</li> </ul>					N/A
		D19	<u>Sewage Effluent from Workforce</u> (a) Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. (b) A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.					(a) ✓ (b) ✓
		D20	<ul style="list-style-type: none"> <li>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.</li> </ul>					N/A
		-	<ul style="list-style-type: none"> <li>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.</li> </ul>					✓
S5.8.1	S5.2.1	D21	<u>Accidental Spillage of Chemical</u> <ul style="list-style-type: none"> <li>(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.</li> </ul>	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
<b>Erosion Control Measures</b>								
S5.8.2	S5.2.2	-	<u>Erosion Control /Measures</u> a. Preserve Natural Vegetation This Best Management Practices will involve preserving natural vegetation to the greatest extent possible during the construction process. and after construction where appropriate. Maintaining natural vegetation is the most effective and inexpensive form of erosion prevention control.	Erosion control	Contractor	Drainage system	ProPECC PN 1/94  Water Pollution Control Ordinance	✓
		-	b. Provision of Buffer Zone A buffer zone consists of an undisturbed area or strip of natural vegetation or an established suitable planting adjacent to a disturbed area that reduces erosion and runoff. The rooted vegetation holds soils acts as a wind break and filters runoff that may leave the site.					✓
		-	c. Seeding (Temporary/Permanent) A well-established vegetative cover is one of the most effective methods of reducing erosion. Vegetation should be established on construction sites as the slopes are finished, rather than waiting until all the grading is complete. Besides, Hydroseeding will be applied on the surface of stockpiled soil and on temporary soil covers for inactive tipping areas to prevent soil erosion during rainy season.					✓
		-	d. Ground Cover Ground Cover is a protective layer of straw or other suitable material applied to the soil surface. Straw mulch and/or hydromulch are also used in conjunction with seeding of critical areas for the establishment of temporary or permanent vegetation. Ground cover provides immediate temporary protection from erosion. Mulch also enhances plant establishment by conserving moisture, holding fertilizer, seed, and topsoil in place, and moderating soil temperatures.					To be implemented
		-	e. Hydraulic Application Hydraulic application is a mechanical method of applying erosion control materials to bare soil in order to establish erosion-resistant vegetation on disturbed areas and critical slopes. By using hydraulic equipment, soil amendments, mulch, tackifying agents, Bonded Fiber Matrix (BFM) and liquid co-polymers can be uniformly broadcast, as homogenous slurry, onto the soil. These erosion and dust control materials can often be applied in one operation.					To be implemented
		-	f. Sod Establishes permanent turf for immediate erosion protection and stabilizes rainageways.					✓

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

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Erosion Control Measures (Cont'd)								
S5.8.2	S5.2.2		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.	Erosion control	Contractor	Drainage system	ProPECC PN 1/94  Water Pollution Control Ordinance	✓
			h. Plastic Sheeting Plastic Sheeting will provide immediate protection to slopes and stockpiles. However, it has been known to transfer erosion problems because water will sheet flow off the plastic at high velocity. This is usually attributable to poor application, installation and maintenance.					✓
		-	i. Dust Control Dust Control is one preventative measure to minimize the wind transport of soil, prevent traffic hazards and reduce sediment transported by wind and deposited in water resources.					✓
Surface Water Drainage System								
S5.8.2	S5.2.2	D22	<ul style="list-style-type: none"> <li>(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.</li> </ul>	Surface Water Management/ Control run off	Contractor	Surface water system Construction	Water Pollution Control Ordinance  TM-water	(a) ✓
		D23	<ul style="list-style-type: none"> <li>(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.</li> </ul>					(b) ✓
		-	<ul style="list-style-type: none"> <li>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.</li> </ul>					(c) ✓
		-	<ul style="list-style-type: none"> <li>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.</li> </ul>					(d) ✓
Waste Management								
S6	WM1	-	<u>C&amp;D Materials</u> <ul style="list-style-type: none"> <li>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.</li> </ul>	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"> <li>Implement a trip-ticket system to ensure that the movement of C&amp;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&amp;D Materials off-site) should be kept for record purposes.</li> </ul>					✓
		-	<ul style="list-style-type: none"> <li>Appropriate waste management should be implemented in accordance with the ETWB TC(W) No. 19/2005.</li> </ul>					✓
		E4	<ul style="list-style-type: none"> <li>(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&amp;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.</li> </ul>					(a) ✓
		E5	<ul style="list-style-type: none"> <li>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.</li> </ul>					(b) ✓
Remarks:								
✓	Compliance of mitigation measure							
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North East New Territories (NENT) Landfill Extension  
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Waste Management (Cont'd)								
S6	WM1	E6	<ul style="list-style-type: none"> <li>(a) The Contractor should recycle as much as possible the C&amp;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&amp;D material.</li> </ul>	Good site practice to minimise C&D waste generation and reuse/recycle all C&D on-site as far as possible	Contractor	Entire construction site	Waste Disposal Ordinance ETWB TC(W) No. 19/2005 DEVB TC(W) No. 6/2010	(a) ✓
		(b) ✓						
		(c) ✓						
		(d) ✓						
		(a) ✓						
		(b) ✓						
		(a) ✓						
		(b) ✓						
		(c) ✓						
E7	<ul style="list-style-type: none"> <li>(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&amp;D waste should be properly reused.</li> </ul>	(a) ✓						
(b) ✓								
E8	<ul style="list-style-type: none"> <li>(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</li> </ul>	(a) ✓						
(b) ✓								
(c) ✓								
E9	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓						
E10	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓						
E11	<ul style="list-style-type: none"> <li>Training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concepts.</li> </ul>	✓						
E12	<ul style="list-style-type: none"> <li>Regular cleaning and maintenance programme systems, sumps and oil interceptors.</li> </ul>	✓						
E13	<ul style="list-style-type: none"> <li>(a) Prior to disposal of C&amp;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.</li> </ul>	(a) ✓						
(b) ✓								
(c) N/A								
	<ul style="list-style-type: none"> <li>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.</li> </ul>	✓						
S6	WM2	E16 – E23	<p><u>Chemical Waste</u></p> <ul style="list-style-type: none"> <li>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.</li> </ul>	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"> <li>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</li> </ul>					✓
		E17 & E18	<ul style="list-style-type: none"> <li>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.</li> </ul>					✓
		E19	<ul style="list-style-type: none"> <li>(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.</li> </ul>					(a) ✓
		(b) N/A						
(c) N/A								
(d) N/A								
E20	<ul style="list-style-type: none"> <li>Chemical waste should be collected by licensed waste collectors and disposed of at licensed facility, e.g. Chemical Waste Treatment Centre.</li> </ul>	✓						

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Waste Management (Cont'd)								
S6	WM3	E1	<u>General Refuse</u> <ul style="list-style-type: none"> <li>General refuse generated on-site should be properly stored in enclosed bins or compaction units separately from construction and chemical wastes.</li> </ul>	Minimise generation of general refuse to avoid odour, pest and visual nuisance	Contractor	Entire construction site	Waste Disposal Ordinance	# (Refer to Appendix K 25 Mar 2024 Weekly Site Inspection Observation 3 (General waste at Portion E3-1A was removed by the contractor. The enclosed bin was provided near the rest area for workers. The enclosed bin with clearly label for collection of general waste (e.g.) food waste is implemented in progress.))
		E2	<ul style="list-style-type: none"> <li>(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</li> </ul>					(a) ✓ (b) ✓ (c) ✓ (d) ✓
		-	<ul style="list-style-type: none"> <li>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.</li> </ul>					✓
		-	<ul style="list-style-type: none"> <li>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.</li> </ul>					✓
		-	<ul style="list-style-type: none"> <li>Office waste paper should recycled if the volume warrant collection by recyclers. Participation in community waste paper recycling programme should be considered by the Contractor, including waste paper, aluminium cans, plastic bottles, waste batteries, etc.</li> </ul>					✓
LFG								
Within NENT Landfill Extension								
S7	LFG1	F1	Special LFG precautions should be taken due to close proximity of NENT landfill extension site to existing landfill to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity).	To minimise the risk of LFG hazards to personnel in construction site	Contractor	Entire construction site	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97)	N/A
	LFG2	F2	Prominent safety warning signs should be erected on-site to alert all personnel and visitors of LFG hazards during excavation works.					✓
	LFG3	F3	No smoking or burning should be permitted on-site.					✓
	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 <sub>4</sub> : 0-100% and LEL: 0-100%/v •CO <sub>2</sub> : 0-100% •O <sub>2</sub> : 0-21%	To minimise the risk of LFG hazards to personnel in construction site	Contractor	Entire construction site	Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97)  F&IU (Confined Spaces) Regulations  Code of Practice on Safety and Health at Work in Confined Spaces	✓
	LFG17	F17	(a) Periodically during groundwork construction, the works area should be monitored for CH <sub>4</sub> CO <sub>2</sub> and O <sub>2</sub> using appropriately calibrated portable gas detection equipment. The monitoring frequency and areas should be established prior to commencement of groundwork either by Safety Officer or appropriately qualified person. (b) Routine monitoring should be carried out in all excavations, manholes, created by temporary storage of building materials on-site. (c) All measurements in excavations should be made with monitoring tube located not more than 10mm from exposed ground surface.					(a) N/A (b) N/A (c) N/A
	LFG18	F18	For excavations deeper than 1m, measurements should be conducted: • At ground surface before excavation commences; • Immediately before any worker enters the excavation; • At the beginning of each working day for entire period the excavation remains open; and Periodically throughout the working day whilst workers are in excavation.					✓
	LFG19	F19	For excavations between 300mm and 1m, measurements should be conducted: • Directly after excavation has been completed; and Periodic all whilst excavation remains open.					✓
	LFG20	F20	For excavations less than 300mm, monitoring may be omitted at the discretion of Safety Officer or appropriately qualified person.					✓
Landscape and Visual Phases								
S8	LV1	G4	<u>Advanced screening tree planting</u> • Early planting using fast growing trees and tall shrubs at strategic locations within site to block major view corridors to the site from the VSRs, and to locally screen haul roads, excavation works and site preparation works. • Roadside planter and shrub planting design in front of Cheung Shan Temple.	To minimise the impact on existing vegetation retained by personnel in construction  To provide initiation on permanent landscape and visual mitigation measures	Contractor	Entire construction site	DEVB TC(W) No. 4/2020 - Tree Preservation  DEVB TC(W)) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features  DEVB TC(W) No. 6/2011 - Maintenance of Man-made Slopes and Emergency Repair on Stability of Land	✓
S8	LV2	G5	<u>Boundary Green Belt planting</u> Considerable planting belts proposed around the site perimeter and the construction of temporary soil bunds will screen the landfill operations to a certain degree. Fast growing and fire resistant plant species will be used.					To be implemented during operation phase
S8	LV3	G6	<u>Temporary landscape treatment as green surface cover</u> For certain areas where landfilling operations would have to be suspended temporarily for periods of years, simple temporary landscape treatment such as hydroseeding should be considered. During construction and operational phases, grass hydroseeding or synthetic covering material of green colour should also be used as a temporary slope cover if applicable.					✓
S8	LV4	G7	<u>Existing tree preservation</u> Transplant existing trees and vegetation, which are identified as ecologically significant in Ecological Impact Assessment and as rare tree species recorded in the tree survey, under circumstances where technically feasible. For all affected trees, the principle of avoidance of tree felling and tree transplanting of tree before felling should apply whenever possible. A tree felling application should be submitted to DEVB-GLTMS and be approved before any trees are felled or transplanted.					✓

Remarks:

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

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	

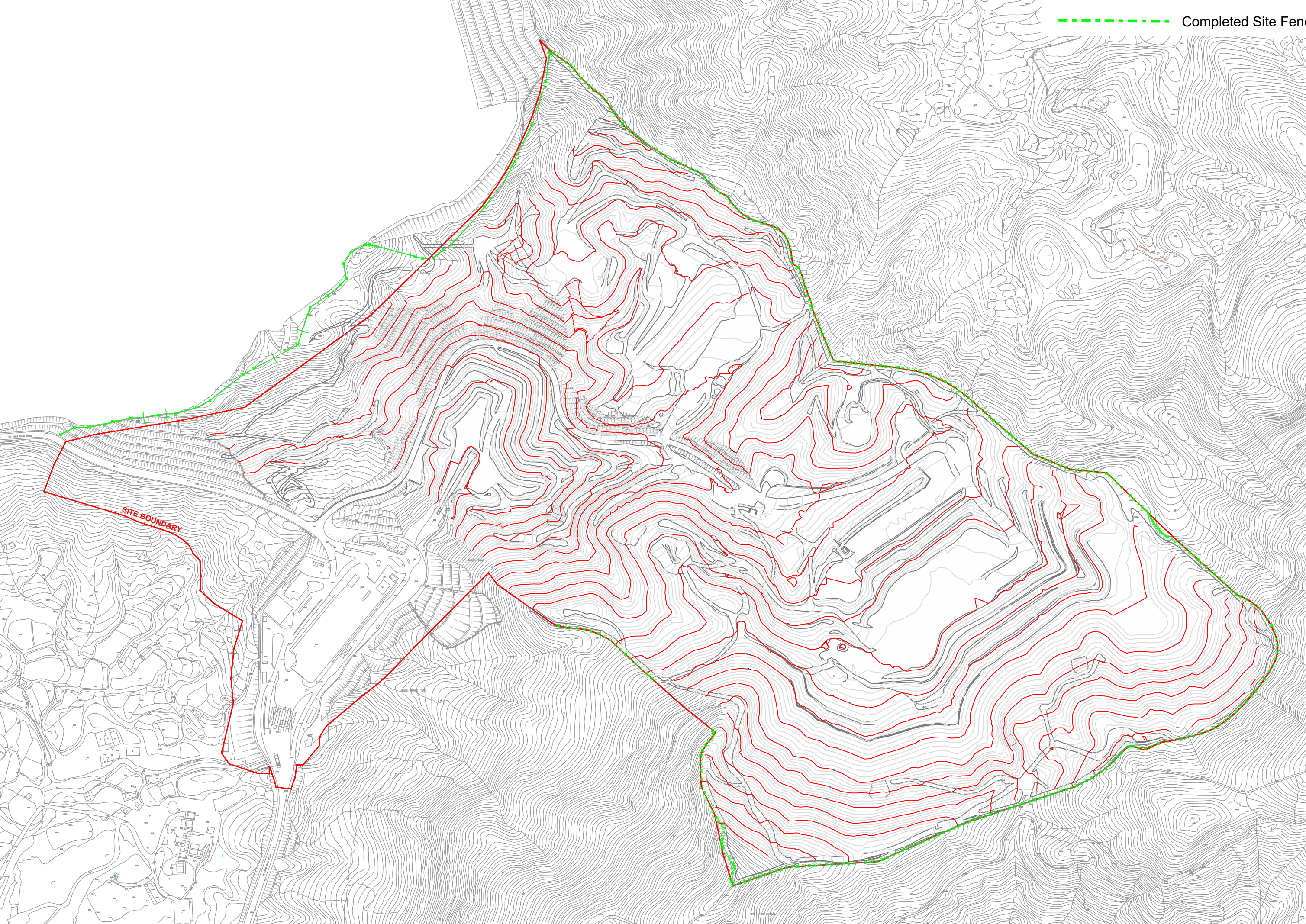
Remarks:

- ✓ 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

Remarks:

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

## Environmental Enquiries Log

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

Remarks:

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

## Cumulative Statistics on Complaints

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

Remarks:

1. \* Equal to non-project related

**Prepared by:**

Aurecon Hong Kong Limited

Unit 1608, 16/F, Tower B, Manulife Financial Centre,

223 – 231 Wai Yip Street, Kwun Tong,

Kowloon Hong Kong S. A. R.

T: +852 3664 6888

F: +852 3664 6999

E: [hongkong@aurecongroup.com](mailto:hongkong@aurecongroup.com)

**aurecon**

*Bringing ideas  
to life*



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

WetSep at Portion B2	TSWDS at Portion A
	



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

<p>TSWDS at Portion D</p> 	<p>TSWDS at Portion D</p> 
<p>Sedimentation Tank at Portion A</p> 	<p>Silt Removal Facility in Portion A</p> 
<p>Sedimentation Tank at Portion A</p> 	<p>Sedimentation Tank at Portion A</p> 



Silt Removal Facility in Portion A



Silt Removal Facility in Portion A

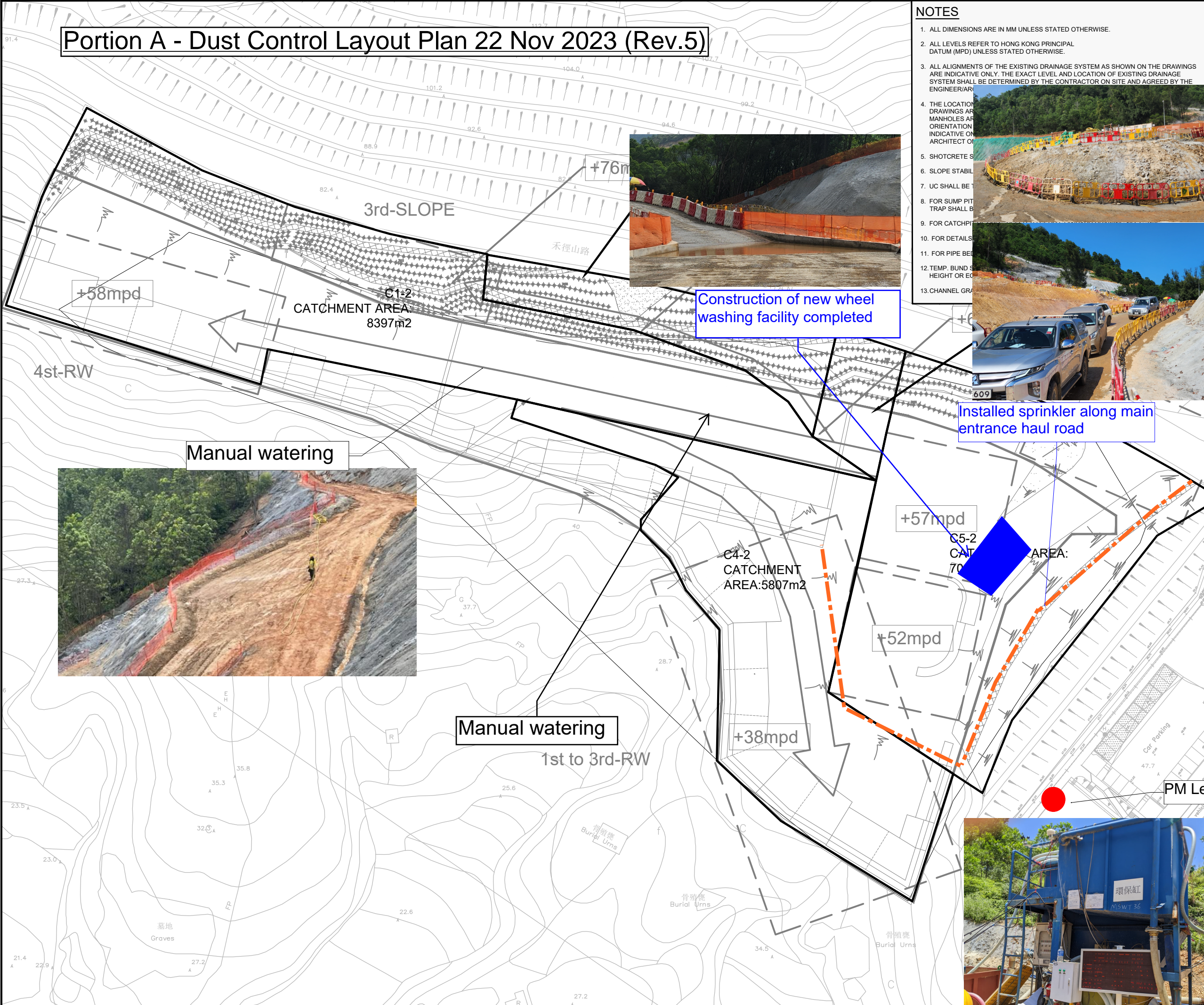


Silt Removal Facility in Portion A





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



- NOTES**
1. ALL DIMENSIONS ARE IN MM UNLESS STATED OTHERWISE.
  2. ALL LEVELS REFER TO HONG KONG PRINCIPAL DATUM (MPD) UNLESS STATED OTHERWISE.
  3. ALL ALIGNMENTS OF THE EXISTING DRAINAGE SYSTEM AS SHOWN ON THE DRAWINGS ARE INDICATIVE ONLY. THE EXACT LEVEL AND LOCATION OF EXISTING DRAINAGE SYSTEM SHALL BE DETERMINED BY THE CONTRACTOR ON SITE AND AGREED BY THE ENGINEER/ARCHITECT.
  4. THE LOCATION DRAWINGS ARE MANHOLES AND ORIENTATION INDICATIVE ONLY.
  5. SHOTCRETE SLOPE STABILIZATION SHALL BE USED WHERE NECESSARY.
  6. SLOPE STABILIZATION SHALL BE USED WHERE NECESSARY.
  7. UC SHALL BE USED WHERE NECESSARY.
  8. FOR SUMP PIT TRAP SHALL BE USED WHERE NECESSARY.
  9. FOR CATCHPITS SHALL BE USED WHERE NECESSARY.
  10. FOR DETAILS SHALL BE USED WHERE NECESSARY.
  11. FOR PIPE BED SHALL BE USED WHERE NECESSARY.
  12. TEMP. BUND SHALL BE USED WHERE NECESSARY.
  13. CHANNEL GRADES SHALL BE USED WHERE NECESSARY.

ENVIRONMENTAL PROTECTION DEPARTMENT

SIGNED: \_\_\_\_\_  
FOR ENVIRONMENTAL PROTECTION DEPARTMENT  
DATE: \_\_\_\_\_

MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD  
VERIFICATION BY INDEPENDENT CONSULTANTS  
SIGNED: \_\_\_\_\_  
FOR MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD  
DATE: \_\_\_\_\_

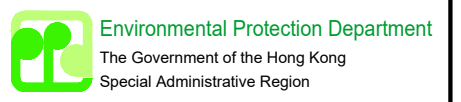
**LEGEND**  
----- Sprinkler alignment

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

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

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



Civil Contractor  
PM Level Sensor (in trial)  
Paul Y. Engineering

Supported by  
**ATKINS**  
Member of the SNC-Lavalin Group

Working Title  
Portion A  
Dust Control Layout Plan

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



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

↔ Routing of water truck  
 - - - Sprinkler

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



Dust control sprinklers all installed along the Haul Road



Mist Cannon  
 (using recycle water)



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

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

Hard paving of haul road

Set up of sprinklers completed  
 Damaged sprinkler will be reinstall after slope surface reinstate.



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



Mist Cannon

Set up of sprinklers scheduled completed for main haul road



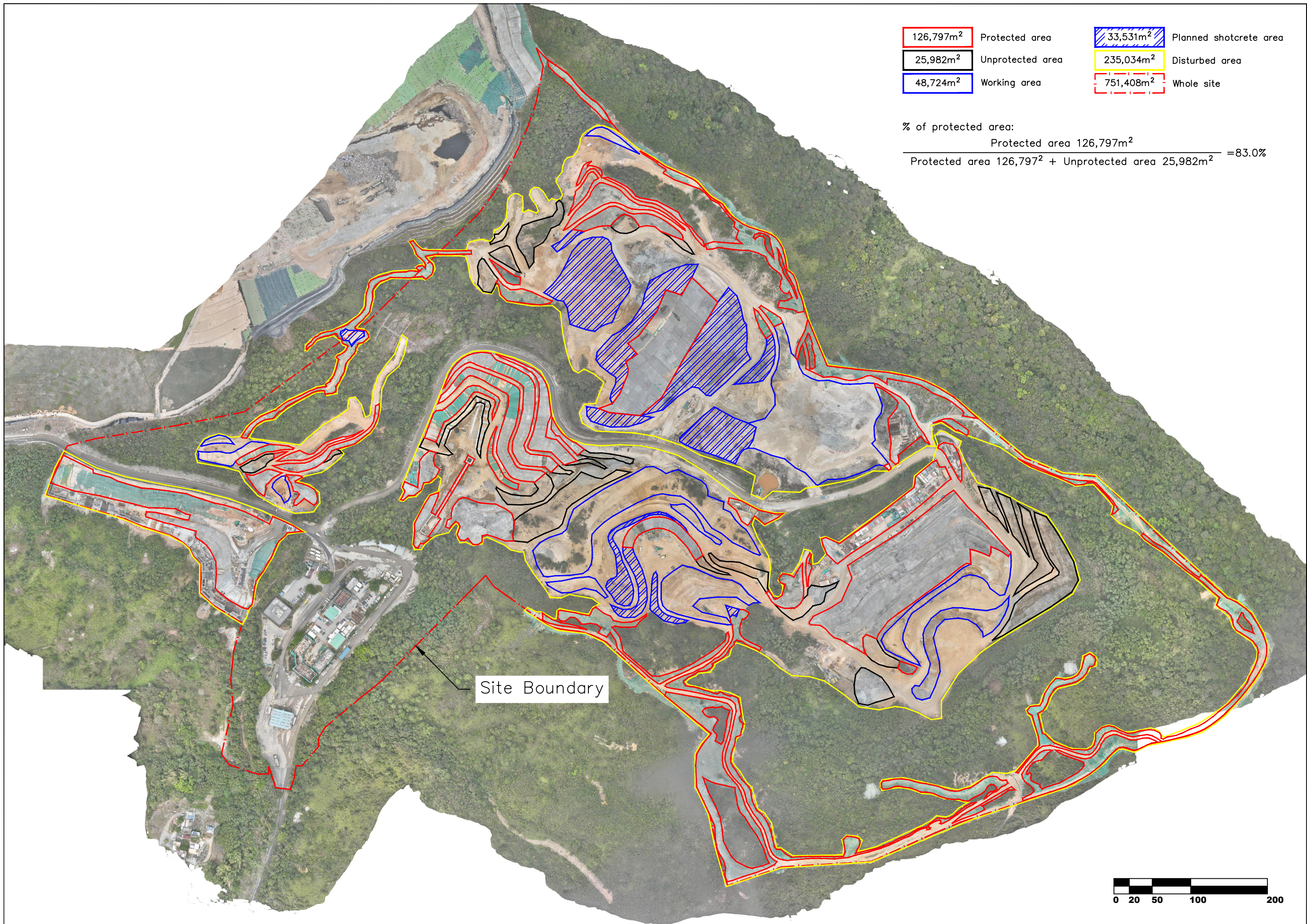
平原河  
 PING YUEN RIVER

水牛槽  
 SHUI NGAU TSO

石寨下  
 Shek Tsai Ha

昂塘  
 Ngong Tong



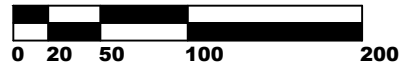


126,797m <sup>2</sup>	Protected area	33,531m <sup>2</sup>	Planned shotcrete area
25,982m <sup>2</sup>	Unprotected area	235,034m <sup>2</sup>	Disturbed area
48,724m <sup>2</sup>	Working area	751,408m <sup>2</sup>	Whole site

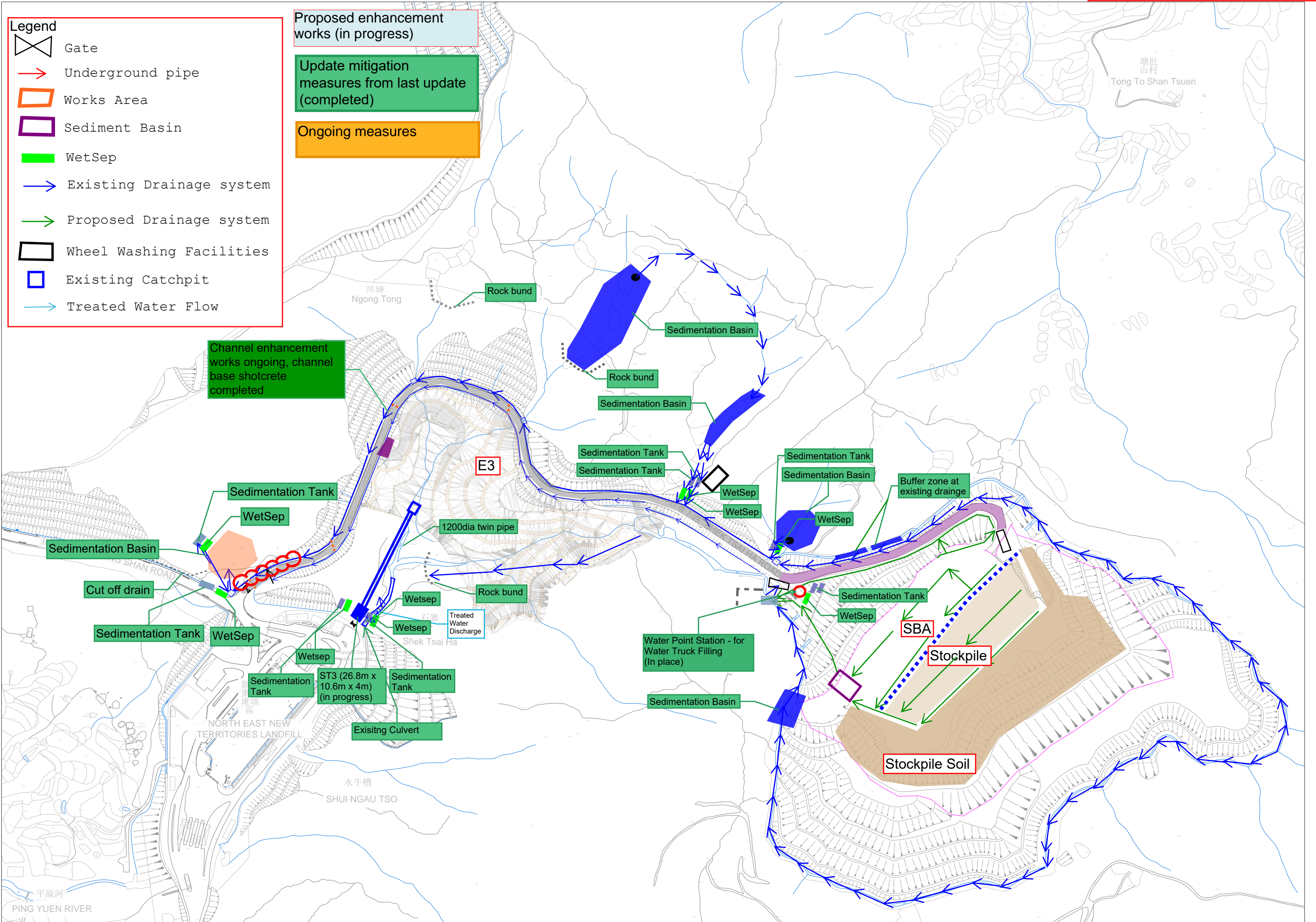
% of protected area:

$$\frac{\text{Protected area } 126,797\text{m}^2}{\text{Protected area } 126,797\text{m}^2 + \text{Unprotected area } 25,982\text{m}^2} = 83.0\%$$

Site Boundary









# Portion A - Temporary Drainage updated on 13 Mar 2024

## NOTES

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

## ENVIRONMENTAL PROTECTION DEPARTMENT

SIGNED: \_\_\_\_\_  
 FOR ENVIRONMENTAL PROTECTION DEPARTMENT  
 DATE: \_\_\_\_\_

MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD  
 VERIFICATION BY INDEPENDENT CONSULTANTS

SIGNED: \_\_\_\_\_  
 FOR MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD  
 DATE: \_\_\_\_\_

## LEGEND

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

I 03	THIRD SUBMISSION ISSUED	JT	JAN 2023	DSJS
I 02	SECOND SUBMISSION ISSUED	CC	NOV 2022	DSJS
I 01	FIRST SUBMISSION ISSUED	CC	JUN 2022	DSJS

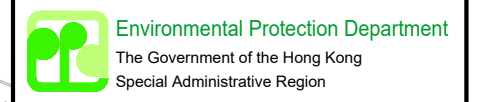
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Rev.	Description	By	Date	Approved

Date	19 JAN 2023	Scale	1:500 @ A3
Contract	CONTRACT EP/SP/77/15 NORTH EAST NEW TERRITORIES LANDFILL EXTENSION (NENTX)		

Date	19 JAN 2023	Scale	1:500 @ A3
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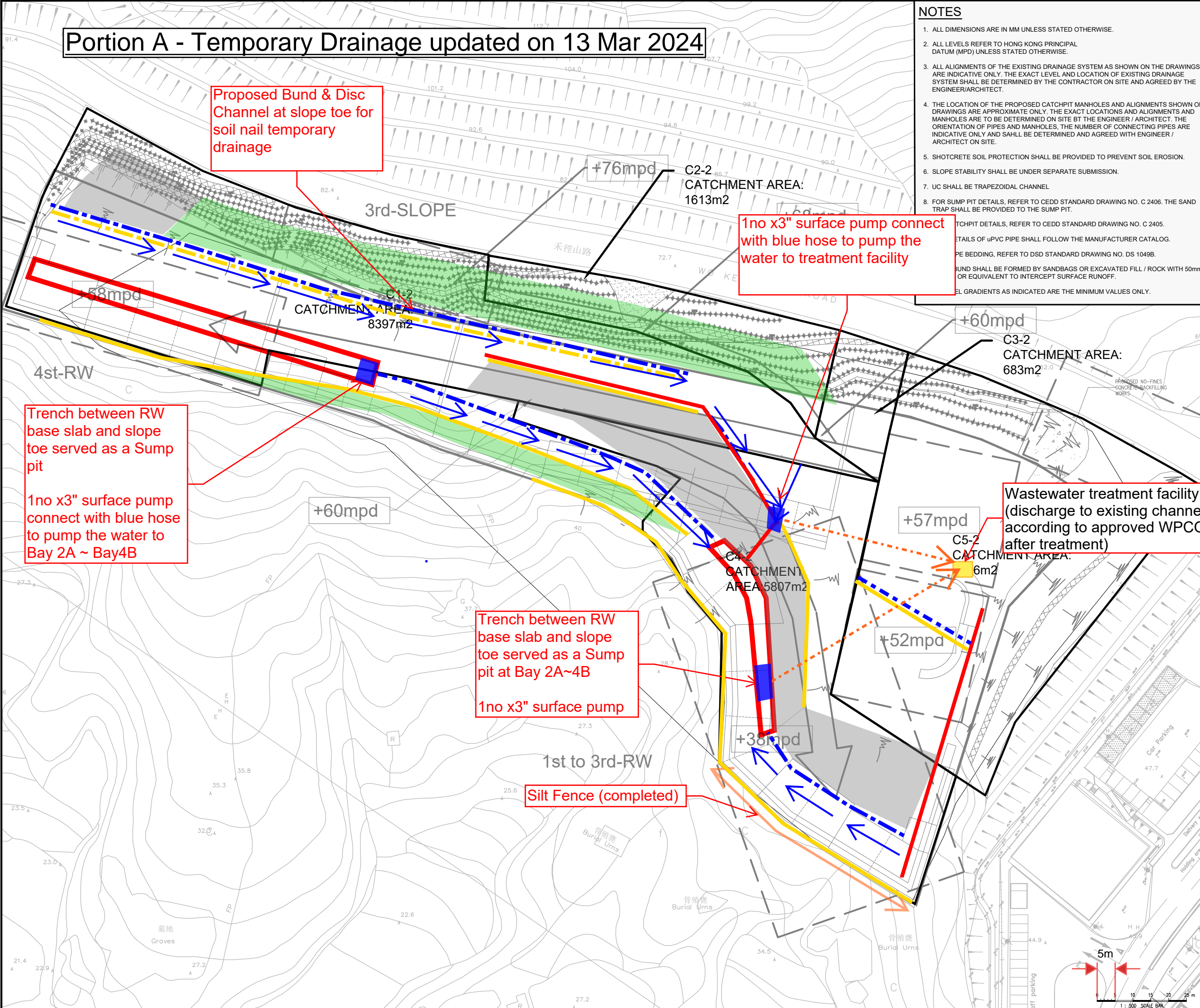
CONTRACT EP/SP/77/15  
 NORTH EAST NEW TERRITORIES  
 LANDFILL EXTENSION (NENTX)



Drawing Title  
**PORTION A TEMPORARY DRAINAGE CATCHMENT PLAN - STAGE 2**

Drawing No.	NENTX-ATKI-DW-C-A-182	Rev.	I 03
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Proposed Bund & Disc Channel at slope toe for soil nail temporary drainage

1no x3" surface pump connect with blue hose to pump the water to treatment facility

Trench between RW base slab and slope toe served as a Sump pit  
 1no x3" surface pump connect with blue hose to pump the water to Bay 2A ~ Bay4B

Trench between RW base slab and slope toe served as a Sump pit at Bay 2A~4B  
 1no x3" surface pump

Wastewater treatment facility (discharge to existing channel according to approved WPCO permit after treatment)

Silt Fence (completed)

