

13 January 2024

Our Ref: JC/MC/kW/N74026/24/tt

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

Attn: Ms. Trista Lau

Dear Sirs,

Contract No. EP/SP/77/15
North-East New Territories Landfill Extension (NENTX)
NENTX – Submission of Monthly EM&A Report (No. 13) – December 2023

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. 13) – December 2023 for the construction stage dated 10 January 2024 together with ET's certification letter and IEC's verification for your perusal.

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

Yours faithfully For and on behalf of

**VEOLIA HONG KONG HOLDING LIMITED** 

Colin Mitchell Project Manager

Encl.

cc. EPD - Davy Lau / Nikita Chan (by email only)

Arup — Anson Cheung (1 copy & email)

MIEL - Steve Kok / Claudine Lee (email only)

Aurecon - Fredrick Leong (1 copy & email)

VHK -JC/MC/KW

Tel: +852 2902 5200 · Fax: +852 2177 3866

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

Monthly Environmental Monitoring and Audit Report (No. 13) – December 2023 2024-01-10





Meinhardt Infrastructure and

邁進基建環保工程顧問有限公司

33-35 Wong Chuk Hang Road

**Environment Ltd** 

香港黃竹坑道33-35號

Tel 電話: +852 2858 0738

Fax 傳真: +852 2540 1580

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

10/F Genesis

Hong Kong

創協坊10樓

Our Ref.:

Date:

CL/91823/0979-VES 12 January 2024

#### By Email

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

Attn.: Mr. Colin Mitchell

Dear Sir

Re: Contract No. EP/SP/77/15

North-East New Territories Landfill Extension (NENTX)

Monthly Environmental Monitoring and Audit Report (No.13) -

December 2023

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.13) – December 2023" dated 12 January 2024.

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

Yours faithfully

MEINHARDT INFRASTRUCTURE AND ENVIRONMENT LTD

Claudine Lee

Independent Environmental Checker

Aurecon Hong Kong Limited Unit 1608, 16/F, Tower B, Manulife Financial Centre, 223 – 231 Wai Yip Street, Kwun Tong Hong Kong T +852 3664 6888 F +852 3664 6999 E hongkong@aurecongroup.com w aurecongroup.com



Ref: P521530-0000-REP-NN-0079

By Email

12 January 2024

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

Attn: Ms. Claudine Lee,

Dear Claudine,

Re: Contract No. EP/SP/77/15

Northeast New Territories Landfill Extension

Submission of Monthly Environmental Monitoring and Audit Report (No.13) – December

2023

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.13) – December 2023" dated 12 January 2024 for your verification.

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

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

Fredrick Leong

**Environmental Team Leader** 

Encl

CC.

2. IEC Representative – Ms. Echo Hung (By email: echohung@meinhardt.com.hk)

<sup>1.</sup> Monthly Environmental Monitoring and Audit Report (No.13) – December 2023

<sup>1.</sup> IEC - Ms. Claudine Lee (By email: claudinelee@meinhardt.com.hk)

# **Document Control Record**

# Document prepared by:

# **Aurecon Hong Kong Limited**

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

223 - 231 Wai Yip Street, Kwun Tong, Kowloon

Hong Kong S. A. R.

T +852 3664 6888

**F** +852 3664 6999

E <u>hongkong@aurecongroup.com</u>

**W** aurecongroup.com

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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 13th Monthly EM&A Report presents the EM&A works conducted from 1 to 31 December 2023 in accordance with the EM&A Manual.

# Summary of Construction Works undertaken during Report Period

The major construction works undertaken during the reporting period include:

-	Material loading and unloading, site traffic 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	1, 7, 13, 19, 23 & 29 December 2023
-	Construction Noise Monitoring during normal weekdays at each monitoring station	5 times	1, 7, 13, 19 & 29 December 2023
-	Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	19 December 2023
-	Landfill Gas Monitoring during normal weekdays for Construction Works	24 times	1 to 2, 4 to 9, 11 to 16, 18 to 23, 27 to 30 December 2023
-	Joint Environmental Site Inspection	4 times	4, 11, 18 & 27 December 2023
-	General Site Inspection by EPD-RNG	1 time	11 December 2023

#### **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 2.6 to 2.10 and Section 12.3 of the approved Environmental Monitoring and Audit (EM&A) Manual and Environmental Permit (EP and FEP) condition 3.3, Monthly EM&A report should be submitted to the Director of Environmental Protection (DEP), within 2 weeks after the end of the reporting month. The submissions shall be certified by the Environmental Team (ET) Leader and verified by the Independent Environmental Checker (IEC).
- 1.1.4. The construction phase and EM&A programme of the Project commenced on 1 December 2022.

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

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

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

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

# 1.3. Purpose of this Report

1.3.1. This is the 13<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 December 2023.

# 1.4. Structure of the Report

1.4.1. The structure of the report is as follows:

Section 1 - Introduction

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

Section 2 - Project Information

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

Section 3 – Air Quality Monitoring

- Construction Dust

Section 4 – Noise Monitoring

Section 5 – Water Quality Monitoring

- Groundwater Monitoring
- Surface Water Monitoring

Section 6 - Waste Management

Section 7 - Landfill Gas Monitoring

Section 8 - Landscape and Visual

Section 9 - Cultural Heritage

Section 10 – Ecological Monitoring

Section 11 - Site Inspection and Audit

Section 12 – Environmental Non-Conformance

Section 13 – Implementation Status on Environmental Mitigation Measures

Section 14 - Future Key Issues

#### 2. **Project Information**

#### 2.1. **Construction Activities**

2.1.1. A summary of the major construction activities undertaken in this reporting period is shown in Appendix L. Construction programme is illustrated 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)	Ms. Claudine Lee	2859 5409
(Meinhardt Infrastructure and Environment Ltd.)		
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 N.

Table 2-2 Status of Submissions required under the FEP & EP during reporting period

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

#### 2.4. **Status of Environmental Approval Document**

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

Table 2-3 Summary of the relevant valid permits, licences, and/or notifications on environmental protection

Permit / Licenses / Notification	Reference	Expiry Date	Remark
Environmental Permit (EP)	EP-292/2007	Throughout the Contract	Permit granted on 26 November 2007
Further Environmental Permit (FEP)	FEP-01/292/2007	Throughout the Contract	Permit granted on 28 April 2022
Further Environmental Permit (FEP)	FEP-02/292/2007	Throughout the Contract	Permit granted on23 August 2023
Notification of Construction Works as required under Air Pollution Control (Construction Dust) Regulation	479809	Throughout the Construction Phase	Notified on 13 May 2022
Registration of Waste Producer under Waste Disposal Ordinance	7043692	Throughout the Contract	Registered on 13 April 2022
Registration as Chemical Waste Producer	5213-642-P1034-18	Throughout the Contract	Registered on 11 July 2022
Construction Noise Permit	GW-RN1012-23	22 December 2023	Permit granted on 22 September 2023
Effluent Discharge License under Water Pollution Control Ordinance	WT00042301-2022	31 October 2027	Permit granted on 18 October 2022 Variation of Licence (Permit granted on 7 February 2023)

# 2.5. Environmental Monitoring and Audit Progress

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

Table 2-4 Summary of the Monitoring Activities in this reporting period

	Items	Times	Date
-	Air Quality Monitoring during normal weekdays at each monitoring station	6 times	1, 7, 13, 19, 23 & 29 December 2023
-	Construction Noise Monitoring during normal weekdays at each monitoring station	5 times	1, 7, 13, 19 & 29 December 2023
-	Surface Water Quality Monitoring during normal weekdays at each monitoring station	1 time	19 December 2023
-	Landfill Gas Monitoring during normal weekdays for Construction Works	24 times	1 to 2, 4 to 9, 11 to 16, 18 to 23, 27 to 30 December 2023
-	Joint Environmental Site Inspection	4 times	4, 11, 18 & 27 December 2023
-	General Site Inspection by EPD-RNG	1 time	11 December 2023

#### **Air Quality**

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

#### **Noise**

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

#### Groundwater

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

# **Surface Water Quality**

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

#### **Landfill Gas**

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 December 2023. The Contractor has generally implemented part of the mitigation measures as recommended. One general site inspection was conducted by Environmental Protection Department-Regional Office (North) (EPD-RNG) during the reporting period.

# 3. Air Quality Monitoring

#### 3.1 Construction Dust

# 3.1.1 Monitoring Requirement

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

# 3.1.2 Monitoring Parameters, Frequency and Location

- 3.1.2.1 According to the EM&A Manual, three monitoring stations namely AM(D)1, AM(D)2 and AM(D)3 are selected for the impact monitoring.
- 3.1.2.2 A baseline monitoring plan has been submitted to IEC and EPD on 31 May 2022 including the proposal with justification of change of monitoring locations. Due to limited access to the original monitoring locations at AM(D)1, AM(D)2 and AM(D)3, the adjusted stations at AM1, AM2 and AM3 were agreed with IEC prior to the baseline and impact monitoring. The locations of adjusted dust monitoring locations are shown in **Figure 2**.
- 3.1.2.3 The detailed monitoring schedule is shown in **Appendix C**. The locations of dust monitoring stations are shown in **Table 3-1**. The monitoring parameters, frequency and duration are shown in **Table 3-2**.

Table 3-1 Locations of Dust Monitoring Stations

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

#### Remarks:

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

AM(D)1 Tung Lo Hang, AM(D)2 Heung Yuen Wai, AM(D)3 Wo Keng Shan Tsuen are the air monitoring stations for the construction phase EM&A programme as identified in the approved EM&A Manual for the Project. The access to Tung Lo Hang, Heung Yuen

Wai and Wo Keng Shan Tsuen were denied. A search for alternative air monitoring locations (AM1, AM2 & AM3) was carried out during the site visit.

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

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

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

Monitoring Station	Parameter	Frequency and Duration
AM4 AM2 AM2	1-hr TSP	At least 3 times per 6 days
AM1, AM2, AM3	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. TSP monitoring, direct reading dust meters were used to measure 1-hr TSP levels.
- 3.1.3.2 Table 3-3 summarises the equipment that were used in the dust monitoring programme. The calibration certificates are shown in Appendix D.

Table 3-3 **Dust Monitoring Equipment** 

Equipment	Model	Expiry Date	Monitoring Station
	TE-5170X (S/N: 1105)	AM1	
High Volume Sampler (HVS)	TE-5170X (S/N: 1106)	3 Jan 2024	AM2
	TE-5170X (S/N: 1856)		АМ3
	Sibata LD- 5R (S/N: 0Z4545)	30 Nov 2024	
Direct Reading Dust Meter	Sibata LD- 5R (S/N: 882106)		AM1 to AM3
	Sibata LD- 5R (S/N: 942532)		
Calibration Kit (for HVS)	TE-5025A (S/N: 4166)	19 Jun 2024	AM1 to AM3

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 halflength 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:

- 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 E** and **Appendix F**.

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

	Average 1-hr TSP Concentration, µg/m³ (Range)		
Month	Dust Monitoring Station		
	AM1	AM2	AM3
Dec 2023	29 (26 – 34)	37 (23 – 59)	51 (40 – 67)
Action Level	>285	>279	>285
Limit Level	>500		

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

	Average 24-hr TSP Concentration, μg/m³ (Range)			
Month	Dι	Dust Monitoring Station		
	AM1	AM2	AM3	
Dec 2023	97 (71 – 108)	81 (65 – 119)	91 (70 – 122)	
Action Level	>164	>152	>163	
Limit Level	>260			

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

Table 3-6 Summary of Impact 1-hr & 24-hr TSP Exceedance during the reporting period

Dust Mon	itoring Station	Al	M1	A	M2	A	М3
Parameters	evel Exceedance	Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level
1-hr TSP	Exceedance Date	-	-	-	-	-	-
	Exceedance Count	0	0	0	0	0	0
24-hr TSP	Exceedance Date	-	-	-	-	-	-
	Exceedance Count	0	0	0	0	0	0

Remarks: \* equal to non-project related

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

# 3.1.6 Wind Data Monitoring

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

# 3.1.7 Recommended Mitigation Measures

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

#### 3.1.8 Event and Action Plan

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

Table 3-7 **Event and Action Plan for dust impact** 

Event	ET	IEC	Contractor
Exceedance of Action Level			
Exceedance for one sample	<ul> <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> <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> <li>Rectify any unacceptable practice</li> <li>Amend working methods if appropriate</li> </ul>
Exceedance for two or more consecutive samples	<ul> <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> <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> <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> <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> <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> <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> <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> <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> <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 C**. The frequency and duration are shown in **Table 4-2**.

Table 4-1 Noise Monitoring Locations

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

Remarks:

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

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

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

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

Table 4-2 Noise Monitoring Parameters, Frequency and Duration

Monitoring Station	Parameter	Frequency and Duration
NM1a and NM2a	L <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 D**.

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 E** and **Appendix F**.

Table 4-4 Summary of Noise Monitoring Results during normal working hours (07:00-19:00, Monday to Saturday)

	Average Leq, 30min, dB(A) (Range)  Noise Monitoring Station		
Month			
	NM1a	NM2a	
Dec 2023	61.9 (57.7 – 64.1)	53.5 (49.6 – 54.9)	
Action Level	When one documented complaint is received		
Limit Level	>75dB(A)		

Remark:

- (1) \* A correction of +3 dB(A) was made to the free field measurements
- (2) If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.
- **4.5.2** No exceedance of Action and Limit Levels of construction noise was recorded during the reporting period. Therefore, there was no record of Notification of Environmental Quality Limits Exceedance in the **Appendix G**.
- **4.5.3** No particular observations are identified near the monitoring stations during the monitoring period.
- **4.5.4** The Summary of Impact Noise Exceedance are shown in **Table 4-5**.

Table 4-5 Summary of Impact Noise Exceedance during the reporting period

Noise Monitoring Station		NM1(a)		NM2(a)	
Level Exceedance Parameters		Action Level	Limit Level	Action Level	Limit Level
LA <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 F**.

# 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 onsite 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> <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> <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>	Submit noise mitigation proposals to IEC     Implement the agreed noise mitigation proposals
Exceedance of Limit Level	<ul> <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> <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> <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 C**.

Table 5-1 Surface water quality monitoring locations

Monitoring Station	Location	Coordinates (HK Grid)		
Monitoring Station	Location	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 D.

Table 5-3 Surface Water Quality Monitoring Equipment

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

# 5.2.4 Summary of Surface Water Quality Monitoring Procedure

**Operational/ Analytical Procedures** 

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

**Laboratory Analytical Methods** 

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

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

Parameters	Detection Limit (in EM&A Manual)	Limit of Reporting	Method Reference
рН	0.1	0.1	APHA 4500 H+ B
Electrical conductivity	1 μS/cm	1 μS/cm	APHA 2510 B
Alkalinity	1 mg/L	1 mg/L	APHA 2320 B
COD	10 mg/L	5 mg/L	APHA 5220 C
BOD <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 NH3 G
TKN	0.4 mg/L	0.1 mg/L	APHA 4500Norg: D
Nitrate	0.5 mg/L	0.01 mg/L	APHA 4500 NO3 I
Sulphate	5 mg/L	1 mg/L	USEPA 375.4
Sulphite	2 mg/L	2 mg/L	APHA 4500 SO3 B
Phosphate	0.01 mg/L	0.01 mg/L	APHA 4500-P B & F
Chloride	0.5 mg/L	0.5 mg/L	USEPA 325.1
Sodium	50 μg/L	50 μg/L	USEPA 6010C
Mg	50 μg/L	50 μg/L	USEPA 6010C
Ca	50 μg/L	50 μg/L	USEPA 6010C
K	50 μg/L	50 μg/L	USEPA 6010C
Fe	50 μg/L	10 μg/L	USEPA 6010C
Ni	1 μg/L	1 μg/L	USEPA 6020A
Zn	10 μg/L	10 μg/L	USEPA 6020A
Mn	1 μg/L	1 μg/L	USEPA 6020A
Cu	1 μg/L	1 μg/L	USEPA 6020A
Pb	1 μg/L	1 μg/L	USEPA 6020A
Cd	0.2 μg/L	0.2 μg/L	USEPA 6020A
Coliform Count	1 cfu/ 100mL	1 cfu/ 100mL	DoE section 7.8, 7.9.4.1 & 3
Oil and Grease	5 mg/L	5 mg/L	APHA 5520 B

### **QA/ QC Requirements**

5.2.4.4 All in situ monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or other international accreditation scheme before use, and subsequently re-calibrated at the intervals according to manufacturer's requirement throughout all stages of the surface water quality monitoring programme. 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 19 December 2023. No adverse weather was observed during reporting period. The detailed monitoring schedule is shown in Appendix C.
- 5.2.5.2 The summary of monitoring results 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 E** and **Appendix F**.
- 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 Station						
Monitoring	WM1			WM2			
Parameter(s)	Monitoring Results	Action Level	Limit Level	Monitoring Results	Action Level	Limit Level	
рН	7.6	>7.7	>7.8	7.5	>7.6	>7.7	
DO in mg/L	7.6	<7.4	<4	5.6	<5	<4	
Turbidity in NTU	5.8	>9.2	>9.5	60.2	>108.3	>108.9	
Electrical Conductivity in µS/cm	95			191			
SS in mg/L	9.5	>9.7	>11.4	44.6	>94.5	>94.7	
Alkalinity in mg/L	16			54			
COD in mg/L	7			7			
BOD <sub>5</sub> in mg/L	<2			<2			
TOC in mg/L	<1			2			
Ammonia-nitrogen in mg/L	0.03			0.26			
TKN in mg/L	0.2			0.5			
Nitrate in mg/L	0.03			0.15			
Sulphate in mg/L	3			22			
Sulphite in mg/L	<2			<2			
Phosphorus in mg/L	0.0			<0.01			
Chloride in mg/L	6			8			
Sodium in µg/L	8380			7770			
Magnesium in μg/L	500	-	<del></del>				
Calcium in µg/L	3290			23800			
Potassium in µg/L	400			2480			
Iron in μg/L	930			3080			
Nickel in µg/L	1.0			2			
Zinc in µg/L	<10			26			
Manganese in µg/L	57			2540			
Copper in µg/L	<1						
Lead in µg/L	<1						
Cadmium in µg/L	<0.2						
Coliform Count in cfu/100mL	Not Detected			10			
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 Parameters		Action Level	Limit Level	Action Level	Limit Level
рН	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 G**.

# 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

- 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 J.
- 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> <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>	Verify Notification of Exceedance     Check monitoring data and Contractor's working methods	Rectify unacceptable practice     Amend working methods if appropriate
Action level being exceeded by two or more consecutive sampling days	<ul> <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> <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> <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> <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> <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> <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> </ul>
Limit level being exceeded by two or more consecutive sampling days	<ul> <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> <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> <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 I.
- 6.1.2 A total of 57,681 tonnes of C&D materials was reused at alternative disposal ground (NENT Landfill) during the reporting period. A total of 2.48 tonnes of Yard waste (collected to Y-Park) was generated during the reporting period. A total of 5296.17 tonnes of Imported fill was generated during the reporting period. A total of 34.26 tonnes of general refuse and A total of 375.34 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 D. 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
$O_2$	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 Action Plan for the monitoring during construction phase

Parameter	Monitoring Result	Action
	Action Level <19% O <sub>2</sub>	Ventilate trench/void to restore O <sub>2</sub> to >19%
Oxygen (O <sub>2</sub> )	Limit Level <18% O <sub>2</sub>	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore O <sub>2</sub> to >19%
	Action Level >10% LEL*	Prohibit hot works Increase ventilation to restore CH <sub>4</sub> to <10% LEL
Methane (CH₄)	Limit Level >20% LEL*	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore CH <sub>4</sub> to <10% LEL
	Action Level** >0.5%** CO <sub>2</sub>	Ventilate to restore CO <sub>2</sub> to <0.5%
Carbon dioxide (CO <sub>2</sub> )	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%

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

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

<sup>\*\*</sup> This Action Level of  $CO_2$  at 0.5% is set for reference only, assuming no  $CO_2$  emission from a particular location.

# 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

Table 7-5	Summary of LFG Monitoring Results						
LFG	Monitoring		Monitorin	g Parameter(s)			
Monitoring Station	Date	CH <sub>4</sub> in %	LEL in %/v	CO <sub>2</sub> in %	O <sub>2</sub> in %		
Station			Average Mo	nitoring Results			
	1 Dec 2023	0	0	0	20.2		
	2 Dec 2023	0	0	0	20.1		
	4 Dec 2023	0	0	0	20.1		
	5 Dec 2023	0	0	0	20.1		
	6 Dec 2023	0	0	0	20.2		
	7 Dec 2023	0	0	0	20.2		
	8 Dec 2023	0	0	0	20.1		
	9 Dec 2023	0	0	0	20.2		
	11 Dec 2023	0	0	0	20.1		
	12 Dec 2023	0	0	0	20.2		
	13 Dec 2023	0	0	0	20.1		
Portion A +50	14 Dec 2023	0	0	0	20.2		
mpD to 70 mpD Platform	15 Dec 2023	0	0	0	20.1		
	16 Dec 2023	0	0	0	20.2		
	18 Dec 2023	0	0	0	20.0		
	19 Dec 2023	0	0	0	20.1		
	20 Dec 2023	0	0	0	20.2		
	21 Dec 2023	0	0	0	20.1		
	22 Dec 2023	0	0	0	20.2		
	23 Dec 2023	0	0	0	20.1		
	27 Dec 2023	0	0	0	20.1		
	28 Dec 2023	0	0	0	20.1		
	29 Dec 2023	0	0	0	20.1		
	30 Dec 2023	0	0	0	20.1		
Action		>10% LEL		>0.5%** CO <sub>2</sub>	<19%		

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

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

<sup>\*\*</sup> 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.

Table 7-6 Summary of Landfill Gas Exceedance during the reporting period

Landfill G	as Monitoring Station	Portion A +50 mpD	to 70 mpD Platform
	Level Exceedance	Action Level	Limit Level
Parameter	's		
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 G.
- **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 K**.

#### 8.2 Result and Observation

- **8.2.1** Measures to mitigate the landscape and visual impacts during the construction phase has been checked to ensure compliance with the intended aims of the measures within the reporting period. The progress of the engineering works are regularly reviewed on site to identify the earliest practical opportunities for the landscape works to be undertaken.
- 8.2.2 In order to monitor the landscape and visual impact after providing mitigation measures effectively, all the specified and affected LCAs, LRs and VSRs should be monitored. Implementation of the mitigation measures during construction phase of the Project has been monitored through the regular site inspection/audit.

# 9 Cultural Heritage

- 9.1.1 The Mitigation measures for preservation of the cultural landscape feature located within the project area was conducted before commencement of construction of the project based on the requirement of Survey Report and Mapping Records for Boulder Paths BP1 & 2 & Conditions of G2, G4, G5 G6, G7, G8, G14, G15, G25, G26 and G27 within NENTX.
- **9.1.2** The survey and mapping works carried out on 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-	1 <sup>st</sup>	24 Nov 2022		
transplantation	2 <sup>nd</sup>	9 Dec 2022		
Monitoring	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-	1 <sup>st</sup> (Aug 2022)	29 Aug 2022		
translocation	2 <sup>nd</sup> (Sep 2022)	28 Sep 2022		
Monitoring	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 & 27 December 2023. A joint environmental site inspection was carried out by the representatives of the ER, the Contractor, IEC and the ET on 18 December 2023. The joint environmental site inspection records are shown in Appendix J. There was no noncompliance recorded during the site inspections.
- **11.1.3** Major findings and recommendations are summarized as follows:

#### 04 December 2023

# Observation(s):

- The general waste shall be removed and disposed in the enclosed bin at Portion D. The contractor was recommended to clean up the site regularly and provide enough enclosed bin on-site to keep the site clean and tidy.
- The muddy water which is caused from the watering at the Portion D was found. The deposited silt and grit are found under the construction materials at the Portion D. The contractor was reminded that the muddy water should be collected from the proper channel and final to the silt removal facility for treatment. The deposited silt and grit under the construction materials at the Portion D should be removed.
- The dust dispersion was observed in the site. The contractor was advised to regularly water the works area and provide enough sprayers to dampen the surface of construction materials and the site, especially during the work process, to minimize dust dispersion.

## 11 December 2023

#### Observation(s):

 The accumulated uprooting of trees at portion E4 was observed. The contractor was advised to regularly water the uprooted trees to prevent dust dispersion and arrange for regular disposal to avoid accumulation.

## 18 December 2023

## Observation(s):

- Stockpiling of dusty material without covered by impervious sheet at Portion D
  was observed. The contractor was reminded that stockpiling of dusty material
  should be covered by impervious sheet at Portion D to prevent dust dispersion.
- Insufficient silt fence around the stockpile area at SBA was observed. The
  contractor was advised to provide and maintain sufficient silt fence around the
  stockpile area in each layer, ensuring that each layer effectively prevents
  sediment from entering the surface water drainage system.

### Reminder(s):

 The contractor was recommended that the exposed slope surface at SBA should be covered by an impervious sheet in the short term and should be shotcrete or other measurements for long-term surface protection.

#### 27 December 2023

## Observation(s):

- Assess road was dry and fugitive dust was observed, especially at portion E4.
   The contractor was recommended to arrange watering and provide enough sprayers to minimize dust dispersion at all assess road.
- Exposed slope surface without covered by tarpaulin sheets at portion E4 was observed. The contractor was advised that the exposed slope surface at portion E4 should be covered by tarpaulin sheets or other measurement like shotcrete or hydroseeding for long term slope surface protection.
- Dusty materials without covered by impervious sheet at portion E4 was observed. The contractor was reminded that the dusty materials should be covered with impervious sheet to prevent dust suppression.
- **11.1.4** One general site inspection was conducted by Environmental Protection Department-Regional Office (North) (EPD-RNG) during reporting period.

# 12 Environmental Non-conformance

# 12.1 Summary of Monitoring Exceedance

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

- **12.1.1** No exceedance of the Action Levels and Limit Level were recorded at designated monitoring stations during the reporting period. The Notification of Environmental Quality Limits Exceedance is presented in **Appendix G**.
- **12.1.2** The Summary of Impact 1-hr & 24-hr TSP Exceedance are shown in **Table 12-1**.

Table 12-1 Summary of Impact 1-hr & 24-hr TSP Exceedance during the reporting period

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

Remarks: \* equal to non-project related

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

Table 12-2 Summary of Impact Noise Exceedance during the reporting period

Noise Monitoring Station		NM1(a)		NM2(a)	
Level Exceedance Parameters		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

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

Table 12-3 Summary of Impact Surface Water Quality Exceedance during the reporting period

Surface Water Quality Monitoring Station		WM1		WM2	
Parameters	Level Exceedance	Action Level	Limit Level	Action Level	Limit Level
рН	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 Ga	as Monitoring Station	Portion A +50 mpD	Portion A +50 mpD to 70 mpD Platform				
	Level Exceedance	Action Level	Limit Level				
Parameter	S						
CH <sub>4</sub>	Exceedance Date	-	-				
	Exceedance Count	0	0				
CO <sub>2</sub>	Exceedance Date	-	-				
	Exceedance Count	0	0				
<b>O</b> <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

		Environmental Aspects							
Reporting Period		Air Quality	Noise	Water Quality	Waste	Ecology			
D 0000	Complaint Date	-	-	-	-	-			
Dec 2023	No. of Complaint	0	0	0	0	0			
Reporting Period Total		0	0	0	0	0			
Accum	ulate of project	1	0	5	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 O**.

# 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 K**.

#### 14 **Future Key Issues**

#### 14.1 **Key Issues for the Coming Month**

- 14.1.1 Works to be undertaken for the coming monitoring periods are summarized below. Detailed construction activities and locations are summarized in **Appendix L**.
  - Material loading and unloading, site traffic 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 C.

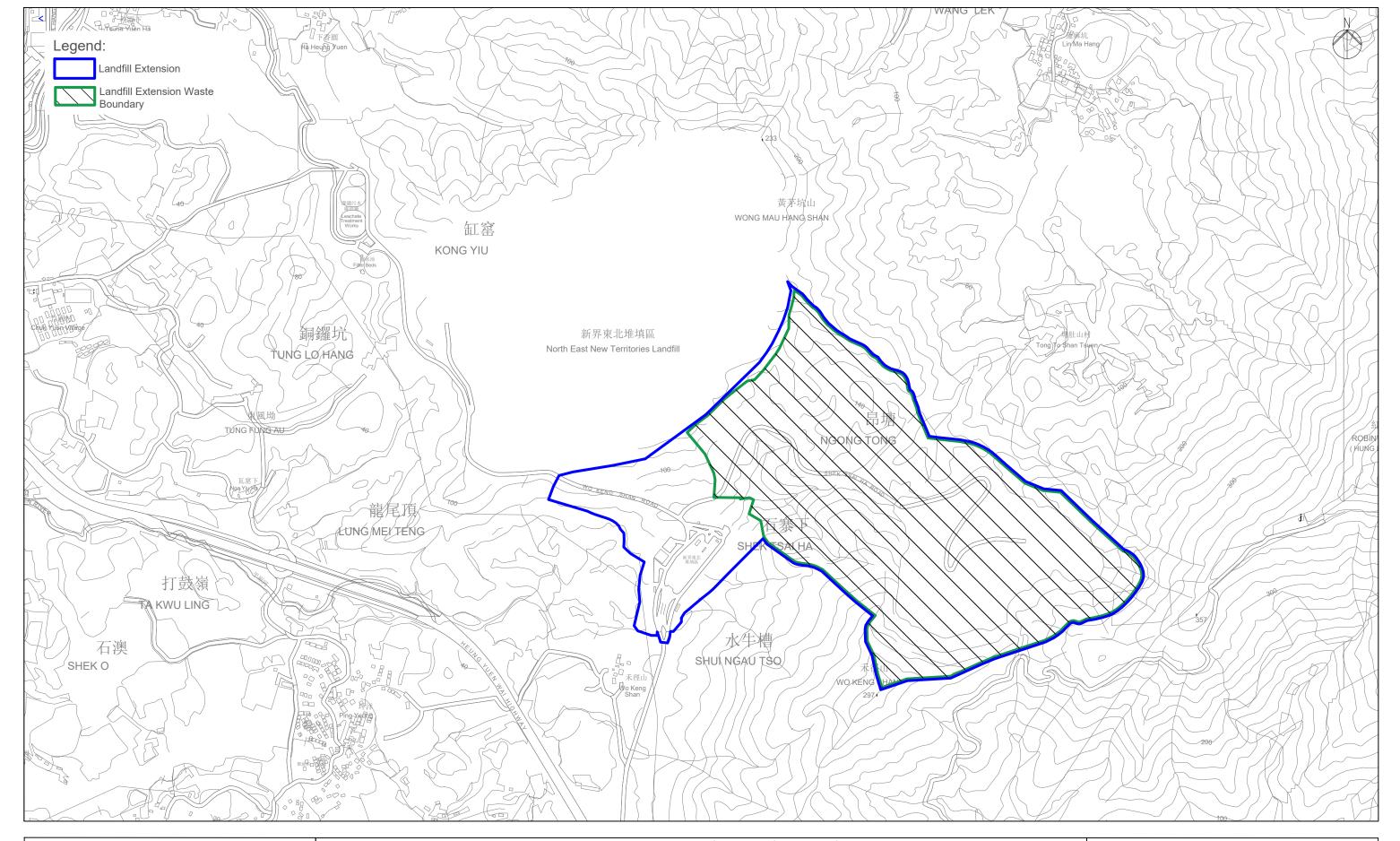
#### 14.3 **Construction Programme for the Next Month**

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

# 15 Conclusion

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



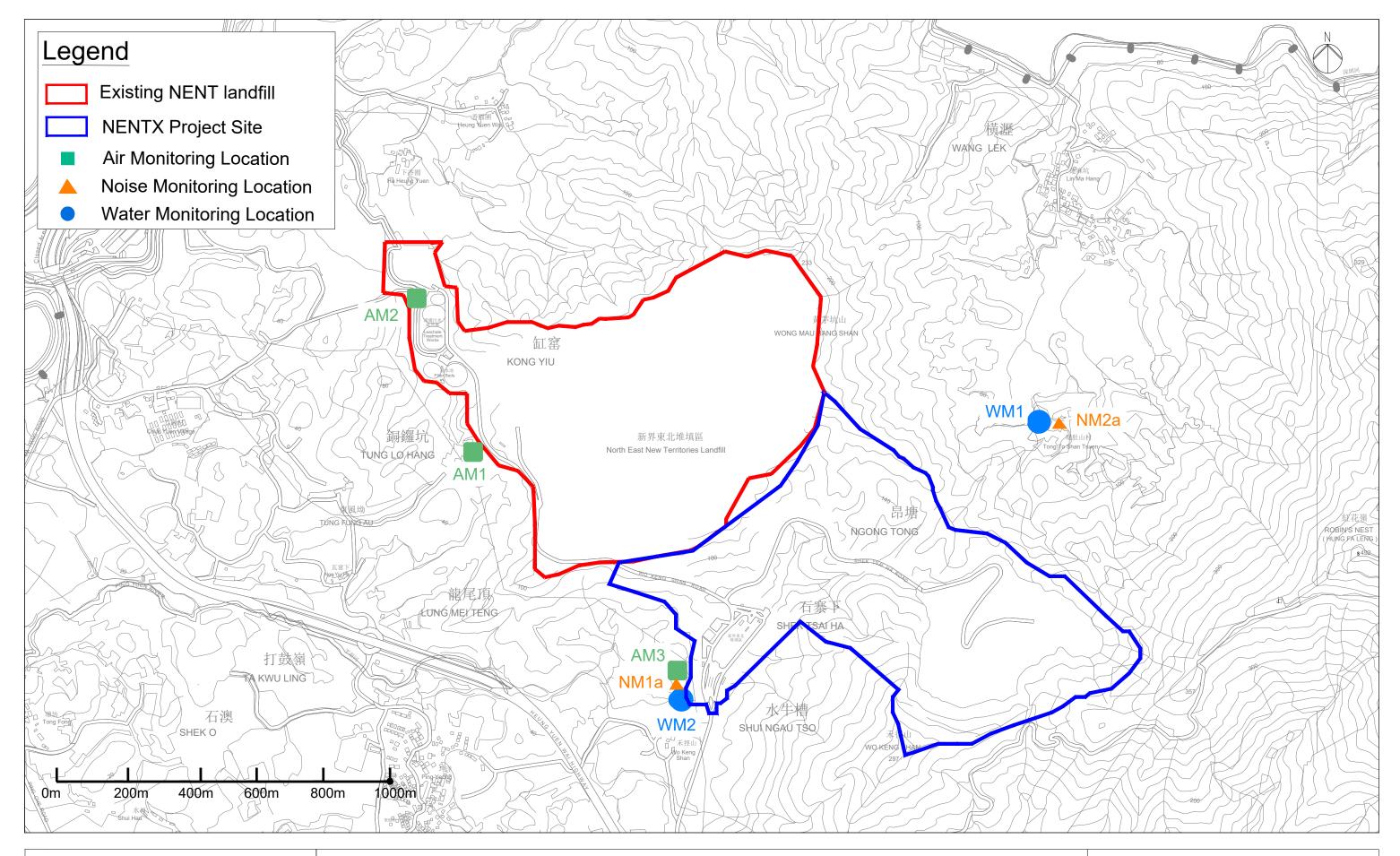


North-East New Territories (NENT) Landfill Extension Location Plan of the Project Site

Figure 1.1

Scale: 1:10000

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



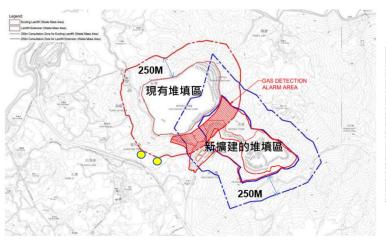


North East New Territories (NENT) Landfill Extension Impact Monitoring Location

Figure 2

# Figure 3 Landfill Gas Monitoring Locations

Gas Monitoring Point • Monitoring Frequency: 2 times per day



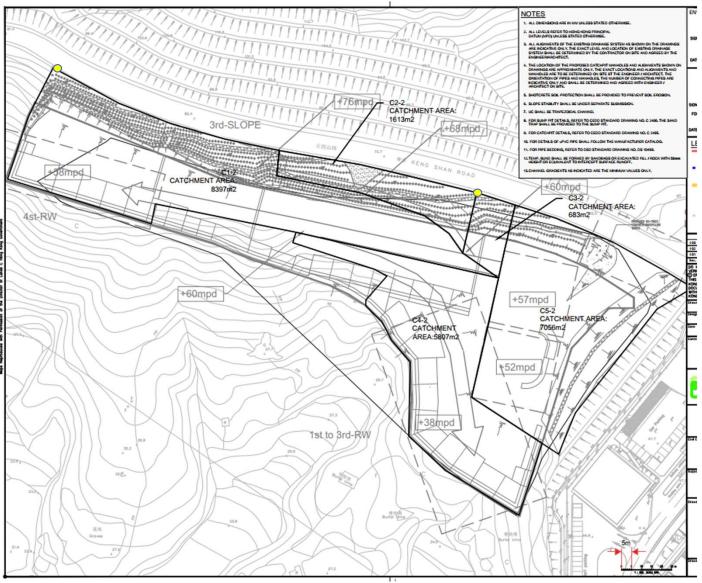
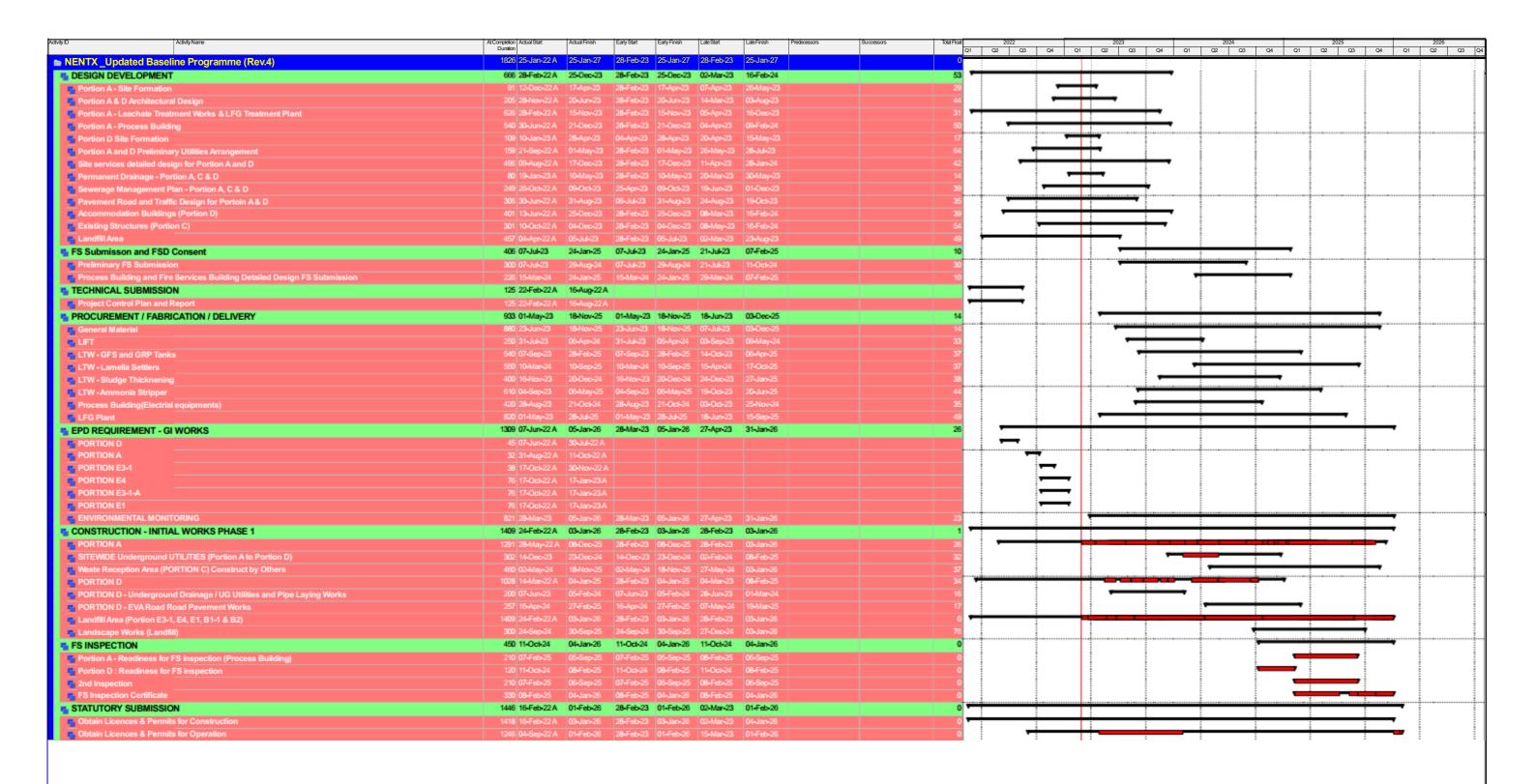


Figure 3 Landfill Gas Monitoring Locations

# Appendix A Construction Programme





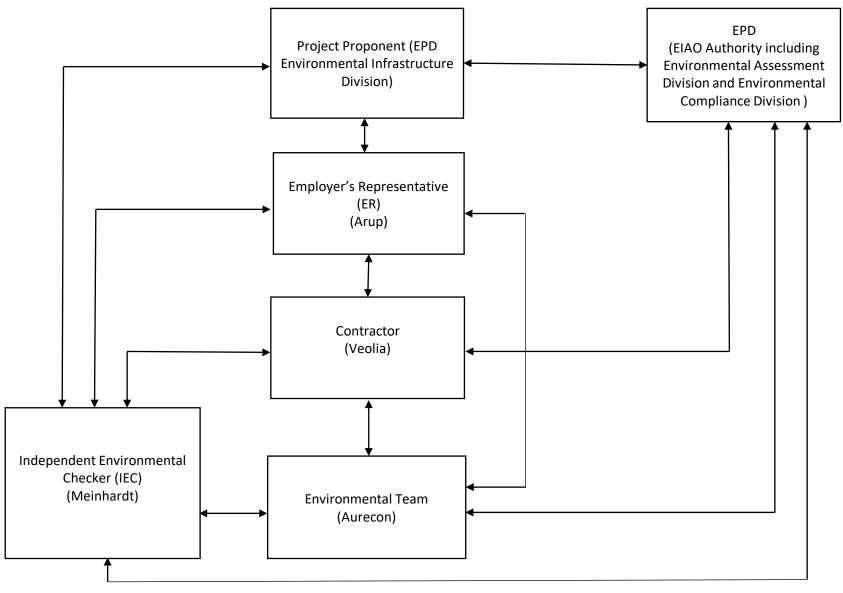


NORTH EAST NEW TERRITORIES (NENTX) LANDFILL EXTENSION
UPDATED BASELINE PROGRAMME (Rev.4)
Ececutive Summary
INITIAL WORKS (PHASE 1)
Page 1 of 1



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

Appendix B Project Organization Chart & Management Structure



Notes:

EPD - Environmental Protection Department

Arup – Ove Arup & Partners Limited

Veolia - Veolia Environmental Services Hong Kong Limited

Meinhardt - Meinhardt Infrastructure And Environment Limited

Aurecon - Aurecon Hong Kong Limited



# Appendix C Monitoring Schedule for Reporting Month & Next Month

#### Impact Monitoring Schedule for NENT Landfill Extension (December 2023) (version 3.0)

12-2023								
Sun	Mon	Tue	Wed	Thur	Fri	Sat		
					Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	2		
3	4	5	6	Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a		9		
10	11	12	Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	14		16		
17	18	Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a Surface water quality monitoring at WM1 and WM2		21		Air quality monitoring at AM1, AM2 and AM3		
24 / 31	25	26	27	28	Air quality monitoring at AM1, AM2 and AM3 Noise monitoring at NM1a and NM2a	30		

#### 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 (January 2024) (version 1.0)

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

#### 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 D Calibration Certificates

# Air Quality



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

## Information of Calibrated Equipement

Verification Test Date:	1-Dec-23	to	30-Nov-24	Next Verification Test Date:	30-Nov-24
Unit-under-Test- Model No.:		Sibata LD-5F	R		
Unit-under-Test Serial No.:	0Z4545				
Our Report Refrence No.:	R	PT-23-HVS-00	)23		
Calibration Location:	AM2.	location near	the Leachate Trea	atment Works within the NENTX Landfill	

# **Standard Equipment Information**

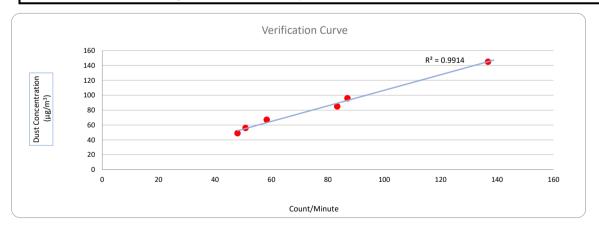
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

## **Equipement Vertification Result**

Verification		Duration			Results from	Results from Standard Equipment	
Test No.	Date	Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (μg/m³) 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:	2.1545	*Correlation Coefficient,R:	<u>0.9957</u>
Verification Test Result:	Strong Correlation,	Results were accepted.		* If the Correlation Coefficient, R is <0.5. Chec	cking and Re-verification are required.



Operated By:

Andy Li

Project Technician, Environmental

Date: 02-12-2023

Checked By: Tandy Tse Date: 02-12-2023

Senior Consultant, Environmental



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

## Information of Calibrated Equipement

Verification Test Date:	1-Dec-23	to	30-Nov-24	Next Verification Test Date:	30-Nov-24
Unit-under-Test- Model No.:		Sibata LD-5R			
Unit-under-Test Serial No.:	882106			-	
Our Report Refrence No.:		RPT-23-HVS-00	21	-	
Calibration Location:	AM2, location near the Leachate Tre			eatment Works within the NENTX Landfill	
<del>-</del>					_

# **Standard Equipment Information**

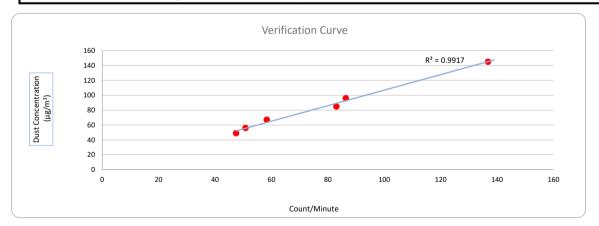
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

## **Equipement Vertification Result**

Verification		Duration			Results from	Calibrated Equipement	Results from Standard Equipment
Test No.	Date	Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (μg/m³) y-axis
1	28/11/2023	8789.68	8792.68	180.00	15546	86	96
2	28/11/2023	8792.68	8795.68	180.00	14944	83	85
3	28/11/2023	8795.68	8798.68	180.00	8543	47	49
4	30/11/2023	8798.68	8801.68	180.00	10499	58	67
5	30/11/2023	8801.68	8804.68	180.00	24622	137	145
6	30/11/2023	8804.68	8807.68	180.00	9145	51	56

## Linear Regression of y on x

Slope, K factor:	1.0437	Intercept:	2.4993	*Correlation Coefficient,R:	<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 Date: 02-12-2023

Project Technician, Environmental

Checked By: Tandy Tse Date: 02-12-2023

Senior Consultant, Environmental



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

#### Information of Calibrated Equipement

Verification Test Date:	1-Dec-23	to	30-Nov-24	Next Verification Test Date:	30-Nov-24
Unit-under-Test- Model No.:		Sibata LD-5R			
Unit-under-Test Serial No.:		942532			
Our Report Refrence No.:	R	PT-23-HVS-00	22		
Calibration Location:	AM2, location near the Leachate Tre		the Leachate Trea	tment Works within the NENTX Landfill	

#### **Standard Equipment Information**

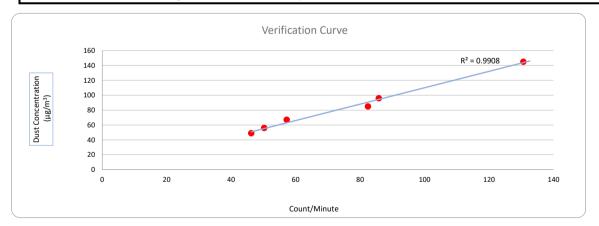
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5028A
Equipment serial no.:	1106	3702
Last Calibration Date:	04-Nov-23	31-Mar-23
Next Calibration Date:	04-Jan-24	30-Mar-24

#### **Equipement Vertification Result**

Verification	erification		Duration		Results from Calibrated Equipement		Results from Standard Equipment
Test No.	Date	Start-time End-time Elapsed Time (in min)		Total Counts	Counts/ Minute x-axis	Dust Concentration (μg/m³) 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:	<u>1.1020</u>	Intercept:	-0.1223	*Correlation Coefficient,R:	<u>0.9954</u>
Verification Test Result:	Strong Correlation, Results were accepted.			* If the Correlation Coefficient, R is <0.5. Che	cking and Re-verification are required.



Operated By: Andy Li Date: 02-12-2023

Project Technician, Environmental

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



#### HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

#### Site Information

Location:	Representative ForTung Lo Hang	Site ID:	AM1	Date:	04-Nov-2023
Serial No:	1105	Model:	TE-5170X	Operator:	Andy Li

#### **Ambient Condition**

Actual Pressure during Calibration (Pa) (mm Hg):	1012 0	Actual Temperature during Calibration (T <sub>a</sub> ) (deg K):	299.0
--	--------	--	-------

#### **Calibration Orifice**

Model:	TE-5025A	TE-5025A Slope (m <sub>c</sub> ):	
Serial No.:	4166	Intercept (b <sub>c</sub> ):	-0.35800
Calibration Due Date:	19-Jun-24	Corr. Coeff:	0.9998

#### **Calibration Data**

Plate or	$\Delta H_2O$	Qa, X-Axis	I, CFM	IC, Y-Axis
Test #	(in)	(m³/min)	(chart)	(corrected)
18	13.40	2.179	57.0	65.73
13	9.60	1.870	50.0	57.65
10	7.00	1.622	46.0	53.04
7	4.00	1.268	40.0	46.12
5	2.00	0.946	34.0	39.21

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

21.0403 19.1736 Corr. Coeff= 0.9983 m=

#### Calculations

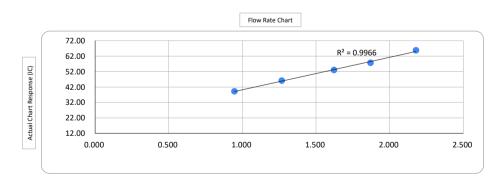
Qa =  $1/m_c^*[Sqrt (\Delta H_2O^*(P_a/P_{Std})^*(T_{Std}/T_a))-b_c]$  $IC = I*(Sqrt (P_a/P_{Std})*(T_{Std}/T_a))$ 

Qa = actual flow rate IC = corrected chart response I = actual chart response m<sub>c</sub> = calibrator slope

b<sub>c</sub> = calibrator intercept

m = sampler slope b = sampler intercept T<sub>Std</sub> = 298 deg K  $P_{Std}$  = 760 mm Hg

T<sub>a</sub> = actual temperature during calibration (deg K) P<sub>a</sub> = actual pressure during calibration (mm Hg)



(m³/min)

Checked by: Tandy Tse

Senior Consultant, Environmental

Date: 04-Nov-2023



#### HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

#### Site Information

Location:	Representative For Heung Yuen Wai	Site ID:	AM2	Date:	04-Nov-2023
Serial No:	1106	Model:	TE-5170X	Operator:	Andy Li

#### **Ambient Condition**

Actual Pressure during Calibration (P <sub>a</sub> ) (mm Hg):	1012.0	Actual Temperature during Calibration (T <sub>a</sub> ) (deg K):	299.0
---	--------	--	-------

#### **Calibration Orifice**

Model:	TE-5025A	Slope (m <sub>c</sub> ):	2.10188
Serial No.:	4166	Intercept (b <sub>c</sub> ):	-0.35800
Calibration Due Date:	19-Jun-24	Corr. Coeff:	0.9998

#### **Calibration Data**

Plate or	∆H <sub>2</sub> O	Qa, X-Axis	I, CFM	IC, Y-Axis
Test #	(in)	(m³/min)	(chart)	(corrected)
18	12.00	2.071	55.0	63.42
13	9.40	1.852	49.0	56.50
10	6.40	1.558	43.0	49.58
7	4.40	1.321	40.0	46.12
5	2.40	1.020	33.0	38.05

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

14.4432 Corr. Coeff= 0.9950 m=

#### Calculations

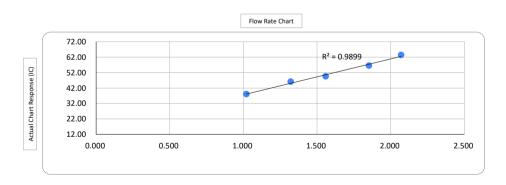
Qa =  $1/m_c^*[Sqrt (\Delta H_2O^*(P_a/P_{Std})^*(T_{Std}/T_a))-b_c]$  $IC = I*(Sqrt (P_a/P_{Std})*(T_{Std}/T_a))$ 

Qa = actual flow rate IC = corrected chart response I = actual chart response m<sub>c</sub> = calibrator slope

b<sub>c</sub> = calibrator intercept

m = sampler slope b = sampler intercept T<sub>Std</sub> = 298 deg K P<sub>Std</sub> = 760 mm Hg

T<sub>a</sub> = actual temperature during calibration (deg K) P<sub>a</sub> = actual pressure during calibration (mm Hg)



(m³/min)

Checked by: Tandy Tse

Senior Consultant, Environmental

04-Nov-2023 Date:



#### HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

#### Site Information

Location:	Representative For Wo Keng Shan Tsuen	Site ID:	АМ3	Date:	04-Nov-2023
Serial No:	1856	Model:	TE-5170X	Operator:	Andy Li

#### **Ambient Condition**

Actual Pressure during Calibration (Pa) (mm Hg):	1012 0	Actual Temperature during Calibration (T <sub>a</sub> ) (deg K):	302.3
--	--------	--	-------

#### **Calibration Orifice**

Model:	TE-5025A	Slope (m <sub>c</sub> ):	2.10188
Serial No.:	4166	Intercept (b <sub>c</sub> ):	-0.35800
Calibration Due Date:	19-Jun-24	Corr. Coeff:	0.99998

#### **Calibration Data**

Plate or	∆H <sub>2</sub> O	Qa, X-Axis	I, CFM	IC, Y-Axis
Test #	(in)	(m³/min)	(chart)	(corrected)
18	12.40	2.092	57.0	65.37
13	8.40	1.752	48.0	55.05
10	6.40	1.551	44.0	50.46
7	4.20	1.288	40.0	45.87
5	2.40	1.016	34.0	38.99

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

m=	23.8033	b=	14.4997	Corr. Coeff=	0.9949

#### Calculations

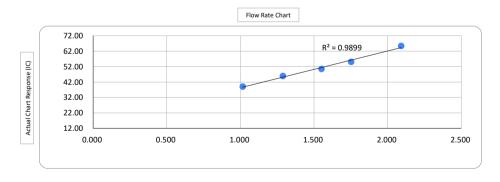
Qa =  $1/m_c^*[Sqrt (\Delta H_2O^*(P_a/P_{Std})^*(T_{Std}/T_a))-b_c]$  $IC = I*(Sqrt (P_a/P_{Std})*(T_{Std}/T_a))$ 

Qa = actual flow rate IC = corrected chart response I = actual chart response m<sub>c</sub> = calibrator slope

b<sub>c</sub> = calibrator intercept

m = sampler slope b = sampler intercept T<sub>Std</sub> = 298 deg K P<sub>Std</sub> = 760 mm Hg

T<sub>a</sub> = actual temperature during calibration (deg K) P<sub>a</sub> = actual pressure during calibration (mm Hg)



(m³/min)

Checked by: Tandy Tse

Senior Consultant, Environmental

Date: 04-Nov-2023



RECALIBRATION DUE DATE:

June 19, 2024

# Certificate of Calibration

**Calibration Certification Information** 

Cal. Date:

June 19, 2023

Rootsmeter S/N: 438320

Ta: 294
Pa: 754.9

°K

Operator:

Calibration Model #:

Jim Tisch

n Hscn

TE-5025A

Calibrator S/N: 4166

mm Hg

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4500	3.2	2.0
2	3	4	1	1.0260	6.4	4.0
3	5	6	1	0.9170	8.0	5.00
4	7	8	1	0.8770	8.8	5.50
5	9	10	1	0.7240	12.8	8.00

			- HOLLOW	-	0.00					
	Data Tabulation									
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	√∆H(Ta/Pa)					
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)					
1.0025	0.6914	1.4190	0.9958	0.6867	0.8826					
0.9983	0.9730	2.0068	0.9915	0.9664	1.2481					
0.9961	1.0863	2.2436	0.9894	1.0790	1.3955					
0.9951	1.1346	2.3532	0.9883	1.1270	1.4636					
0.9897	1.3670	2.8380	0.9830	1.3578	1.7651					
	m=	2.10188		m=	1.31616					
QSTD[	b=	-0.03580	QA	b=	-0.02227					
	r=	0.99998		r=	0.99998					

	Calculation	ns		
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)	
Qstd=	Vstd/ΔTime		Va/ΔTime	
	For subsequent flow rat	AND DESCRIPTION OF THE PARTY OF		
Qstd=	$1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$		$1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$	

	Standard Conditions
Tstd:	298.15 °K
Pstd:	760 mm Hg
	Key
ΔH: calibrator	manometer reading (in H2O)
ΔP: rootsmete	er manometer reading (mm Hg)
Ta: actual absorption	olute temperature (°K)
Pa: actual bard	ometric pressure (mm Hg)
b: intercept	- 01
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 Kaboratory Manager

Date of issue: 04 April 2023

Certificate No.: APJ22-164-CC002

NR TESTING LABORATION OF THE PROPERTY OF THE P

Page 1 of 4

## Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

#### 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)			Appl	ied value	UUT Reading,	IEC 61672 Class 1	
Range, dB	Freq. V	Veighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA	SPL	Fast	94	1000	94.1	±0.4

#### Linearity

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

#### Time Weighting

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

Certificate No.: APJ22-164-CC002

(A+A) \*L 2 Page 2 of 4

Homepage: http://www.aa-lab.com

E-mail:inquiry@aa-lab.com



#### Frequency Response

#### Linear Response

Setting of Unit-under-test (UUT)		Applied value		UUT Reading,	IEC 61672 Class 1		
Range, dB	Freq. Wo	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
		31.5	94.3	±2.0			
				63	94.3	±1.5	
30-130 dB SPL				125	94.3	±1.5	
	Fast	94	250	94.2	±1.4		
30-130	30-130 db SPL	1 ast	94	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,	IEC 61672 Class 1	
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
			31.5	55.0	-39.4 ±2.0		
				63	68.2	-26.2 ±1.5	
			125	78.2	-16.1 ±1.5		
30-130	30-130 dBA SPL	Fast	94	250	85.6	-8.6 ±1.4	
30-130				500	91.0	-3.2 ±1.4	
					1000	94.1	Ref
				2000	95.0	+1.2 ±1.6	
			4000	94.1	$+1.0\pm1.6$		

### C-weighting

Setting of Unit-under-test (UUT)		Applied value		UUT Reading,	IEC 61672 Class 1		
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	91.3	-3.0 ±2.0
		Fast	94	63	93.5	-0.8 ±1.5	
				125	94.1	-0.2 ±1.5	
30-130	30-130 dBC SPL			250	94.2	$-0.0\pm1.4$	
30-130				500	94.2	$-0.0 \pm 1.4$	
					1000	94.1	Ref
				2000	93.6	-0.2 ±1.6	
			4000	92.3	-0.8 ±1.6		

Certificate No.: APJ22-164-CC002



Page 3 of 4



#### 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.



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Homepage: http://www.aa-lab.com

## 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	n, 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

NR TESTING LABORATORY (A+A) \*L

Page 1 of 2



#### 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:

1006	hPa
52.9	%
	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	Accept lower level	Accept upper level	Measured value
dB	dB	dB	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.

MR TESTING LABORATOR (A+A) \*L

Certificate No.: APJ23-049-CC003

Page 2 of 2





### **Calibration Certificate**

Certificate No. 300737

Page

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

 $(23 \pm 3)^{\circ}C$ 

**Supply Voltage** 

Relative Humidity: (50 ± 25) %

**Test Specifications** 

**Ambient Temperature:** 

Calibration check.

Ref. Document/Procedure: T03, Z04.

**Test Results** 

All results were within the manufacturer's specification.

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

Main Test equipment used:

Equipment No. Description

Cert. No.

Traceable to

S155

Std. Anemometer

206240

NIM-PRC

S223C

Std. Thermometer

205617

NIM-PRC

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

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

Calibrated by :

13-Feb-23

Date:

This Certificate is issued by:

Hong Kong Calibration Ltd.

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



## **Calibration Certificate**

Certificate No. 300737

Page 2 of 2 Pages

Results:

#### 1. Velocity

Applied Value (m/s)	UUT Reading (m/s)	Mfr's Spec.
0.00	0.00	
2.50	2.43	
5.00	5.04	1 (2 0/ - 5 1: + 0 2/ )
10.00	10.07	$\pm$ (3 % of reading + 0.3 m/s)
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:  $\pm$  (0.9 % + 0.16 m/s) for Velocity,  $\pm$  0.1 °C for Temperature, for a confidence probability of not less than 95 %.

3. Atmospheric Pressure: 1 002 hPa

----- END -----

## Water Quality

Tel: (852) 3956 8717; Fax: (852) 3956 3928

#### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BC120001

Date of Issue

: 05 December 2023

Page No.

: 1 of 2

#### PART A - CUSTOMER INFORMATION

Acuity Sustainability Consulting Limited

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

PART B - SAMPLE INFORMATION

Name of Equipment:

HORIBA U-53

Manufacturer:

**HORIBA** 

Serial Number :

PPHNOMXY

Date of Received:

30 November 2023

Date of Calibration:

Date of Next Calibration:

04 December 2023

Request No.:

03 March 2024 D-BC120001

#### PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

**Test Parameter** 

Reference Method

pH value

APHA 21e 4500-H+ B

Temperature

Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March

2008: Working Thermometer Calibration Procedure

Salinity

APHA 21e 2520 B

Dissolved oxygen

APHA 23e 4500-O G (Membrane Electrode Method)

Turbidity

APHA 21e 2130 B (Nephelometric Method)

#### PART D - CALIBRATION RESULT

#### (1) pH value

Target ( pH unit )	Display Reading (pH unit)	Tolerance	Result
4.00	4.10	0.10	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	9.92	-0.09	Satisfactory

Tolerance of pH value should be less than  $\pm\,0.2$  ( pH unit )

#### (2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
36	36.77	0.77	Satisfactory
25	26.77	1.77	Satisfactory
15	16.26	1.26	Satisfactory

Tolerance of Temperature should be less than  $\pm\,2.0$  (  $^{\circ}C$  )

#### (3) Salinity

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

Tolerance of Salinity should be less than  $\pm 10.0$  (%)

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun-ning Assistant Manager

### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BC120001

Date of Issue

: 05 December 2023

Page No.

: 2 of 2

#### (4) Dissolved oxygen

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

Tolerance of Dissolved oxygen should be less than  $\pm 0.5$  ( mg/L )

#### (5) Turbidity

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

Tolerance of Turbidity should be less than  $\pm 10.0$  (%)

#### 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 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

I.D.

Model

: FP111

Serial No.

: 22K100858

**Test Conditions** 

Date of Test: 27-Mar-23

**Ambient Temperature:** 20°C Supply Voltage : --

Relative Humidity: 75%

**Test Specifications** 

Calibration check

Ref. Document/Procedure: V12

**Test Results** 

All results were within the manufacturer's specification.

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

Main Test equipment used:

Equipment No. Description

Cert. No.

Traceable to

S179

Std. Tape

301321

NIM-PRC

S136A

Stop Watch

201878

SCL-HKSAR

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

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

Calibrated by:

Kin Wong

Approved by:

Alan Chu

This Certificate is issued by:

Hong Kong Calibration Ltd.

27-Mar-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. 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







Certificate Number: G505207\_1/33483

Date Of Calibration: 31-Aug-2023

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 (CH₄)										
Certified Gas (%)	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 (CO₂)										
Certified Gas (%)	Certified Gas (%) Instrument Reading (%) Uncertainty (%)										
5.0	4.8	0.074									
15.0	14.5	0.13									
40.0	39.9	0.29									

	Oxygen (O₂)	
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

O2 readings recorded at:

24.4 °C ± 2.5 °C

Barometric Pressure:

0998 mbar ± 4 mbar

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

Instrument has passed calibration as the measurement result is within the specification limit. The specification limit takes into account the measurement uncertainty.

The results relate only to the item calibrated

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

Calibration Instance: 117 IGC Instance: 117

Page 1 of 2 | LP015GIUKAS-2.5

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

### CERTIFICATION OF CALIBRATION







Certificate Number: G505207\_1/33483

Date Of Calibration: 31-Aug-2023

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:

Baromet	er (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

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## Appendix E Monitoring Results

## Air Quality

1-hour TSP Concentration (µg/m³) at Location AM1

Date	Equipment	Equipment	K-factor	Weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	Action Level	Limit Level
Date	<b>Brand &amp; Model</b>	Serial No.	K-Iactoi	weather	Sampling Time (1)	Sampling Time (2)	Sampling Time (3)	μg/m <sup>3</sup>	μg/m³	μg/m <sup>3</sup>	μg/m <sup>3</sup>	μg/m <sup>3</sup>	μg/m <sup>3</sup>
1/12/2023	Sibata LD-5R	882106	0.00107	Fine	8:12	9:12	10:12	32	33	34	33		
7/12/2023	Sibata LD-5R	882106	0.00107	Fine	8:20	9:20	10:20	26	30	26	27		
13/12/2023	Sibata LD-5R	882106	0.00107	Fine	13:06	14:06	15:06	26	31	29	29	285	500
19/12/2023	Sibata LD-5R	0Z4545	0.00107	Fine	13:00	14:00	15:00	29	31	28	29	200	500
23/12/2023	Sibata LD-5R	882106	0.00107	Fine	8:10	9:10	10:10	26	28	27	27		
29/12/2023	Sibata LD-5R	882106	0.00107	Fine	8:16	9:16	10:16	29	31	28	29		
							Average		29				
							Max.		34		]		

Min.

26

1-hour TSP Concentration (µg/m³) at Location AM2

Date	Equipment	Equipment	K-factor	Weather	Sampling Time (1)	e (1) Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	<b>Action Level</b>	Limit Level		
Date	Brand & Model	Serial No.	IX-Iactor	Weather	camping time (1)		Camping Time (2)	Camping Time (2)	Sampling Time (2)	camping rime (2)	μg/m <sup>3</sup>	μg/m³	μg/m³	μg/m³	μg/m³
1/12/2023	Sibata LD-5R	0Z4545	0.00114	Fine	8:10	9:10	10:10	23	29	28	27				
7/12/2023	Sibata LD-5R	0Z4545	0.00114	Fine	8:45	9:45	10:45	23	31	23	26				
13/12/2023	Sibata LD-5R	0Z4545	0.00114	Fine	13:30	14:30	15:30	36	39	41	39	279	500		
19/12/2023	Sibata LD-5R	942632	0.00114	Fine	13:10	14:10	15:10	32	26	59	39	219	500		
23/12/2023	Sibata LD-5R	0Z4545	0.00114	Fine	8:20	9:20	10:20	41	51	48	47				
29/12/2023	Sibata LD-5R	0Z4545	0.00114	Fine	8:29	9:29	10:29	45	49	49	48				
				_			Average		37			_			
							Max.		59						

1-hour TSP Concentration (µg/m³) at Location AM3

Date	Equipment	Equipment	K-factor	Weather Sampling Time (1)	Sampling Time (1) Sampling Time (2)	Sampling Time (3)	Reading (1)	Reading (2)	Reading (3)	Average	<b>Action Level</b>	Limit Level		
Date	Brand & Model	Serial No.	IX-Idotoi			Camping Time (1)	Camping Time (2)	camping Time (2)	(1) Camping Time (2)	Sampling Time (3)	μg/m <sup>3</sup>	μg/m³	μg/m³	μg/m³
1/12/2023	Sibata LD-5R	942532	0.00108	Fine	8:56	9:56	10:56	41	44	41	42			
7/12/2023	Sibata LD-5R	942532	0.00108	Fine	8:30	9:30	10:30	40	41	43	41			
13/12/2023	Sibata LD-5R	942532	0.00108	Fine	13:19	14:19	15:19	41	45	46	44	285	500	
19/12/2023	Sibata LD-5R	882106	0.00108	Fine	13:25	14:25	15:25	54	56	51	54	200	500	
23/12/2023	Sibata LD-5R	942532	0.00108	Fine	8:40	9:40	10:40	61	67	63	64			
29/12/2023	Sibata LD-5R	942532	0.00108	Fine	8:40	9:40	10:40	59	60	58	59			
							Average		51					

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

Ctort Doto	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elaps	e Time	Sampling Time	Averaged Flow Rate	Averaged Flow Rate	Total Flow Volume	Filter W	eight (g)	Particulate weight	Concentration	Action Level	Limit Level
Start Date	weather Condition	(°C)	(hPa)	Initial	Final	(minutes)	(cfm)	(m³/min)	(m <sup>3</sup> )	Initial	Final	(g)	(µg/m³)	(µg/m³)	(µg/m3)
1/12/2023	Fine	22.4	1021.6	2220.54	2244.54	1440	37	0.87	1252	2.6571	2.7868	0.1297	104		
7/12/2023	Fine	23.0	1017.1	2248.16	2272.16	1440	39	0.93	1342	2.6809	2.8133	0.1324	99		
13/12/2023	Fine	21.9	1013.9	2274.59	2298.59	1440	43	1.12	1614	2.7086	2.8647	0.1561	97	164	260
19/12/2023	Fine	15.7	1022.3	2302.23	2326.23	1440	39	0.99	1424	2.6961	2.7976	0.1015	71	104	200
23/12/2023	Fine	14.9	1029.3	2330.47	2354.47	1440	44	1.23	1765	2.6607	2.8512	0.1905	108		
29/12/2023	Fine	22.1	1019.7	2358.14	2382.14	1440	40	1.01	1456	2.7038	2.8518	0.1480	102		
												Average	97		
												Min	71		
												Max	108		

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

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse	e Time	Sampling Time	Averaged Flow Rate	Flow Rate	Total Flow Volume	Filter W	eight (g)	Particulate weight	Concentration	<b>Action Level</b>	Limit Level
Start Date	weather Condition	(°C)	(hPa)	Initial	Final	(minutes)	(cfm)	(m³/min)	(m <sup>3</sup> )	Initial	Final	(g)	(µg/m³)	(µg/m³)	(µg/m3)
1/12/2023	Fine	22.4	1021.6	1762.33	1786.33	1440	39	1.06	1523	2.6588	2.7662	0.1074	71		
7/12/2023	Fine	23.0	1017.1	1790.54	1814.54	1440	39	1.07	1542	2.6711	2.7754	0.1043	68		
13/12/2023	Fine	21.9	1013.9	1818.06	1842.06	1440	39	1.07	1539	2.7082	2.8094	0.1012	66	152	260
19/12/2023	Fine	15.7	1022.3	1846.27	1870.27	1440	39	1.10	1585	2.7011	2.8040	0.1029	65	152	200
23/12/2023	Fine	14.9	1029.3	1874.80	1898.80	1440	38	1.05	1509	2.6907	2.8709	0.1802	119		
29/12/2023	Fine	22.1	1019.7	1902.04	1926.04	1440	40	1.10	1579	2.6881	2.8389	0.1508	95		
	•	- <del>-</del>	-			•	•		•	<del>-</del>	·	Average	81		-
												Min	65		
												Max	119		

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

Start Date	Weather Condition	Avg Air Temp	Avg Atmospheric Pressure	Elapse	e Time	Sampling Time	Averaged Flow Rate	Flow Rate	Total Flow Volume	Filter W	eight (g)	Particulate weight	Concentration	<b>Action Level</b>	Limit Level
Start Date	weather Condition	(°C)	(hPa)	Initial	Final	(minutes)	(cfm)	(m³/min)	(m <sup>3</sup> )	Initial	Final	(g)	(µg/m³)	(µg/m³)	(µg/m3)
1/12/2023	Fine	22.4	1021.6	2764.81	2788.81	1440	41	1.14	1635	2.6410	2.7973	0.1563	96		
7/12/2023	Fine	23.0	1017.1	2793.17	2817.17	1440	40	1.08	1560	2.6675	2.7853	0.1178	76		
13/12/2023	Fine	21.9	1013.9	2820.70	2844.70	1440	38	1.00	1435	2.6922	2.8038	0.1116	78	163	260
19/12/2023	Fine	15.7	1022.3	2849.06	2873.06	1440	37	0.98	1417	2.6667	2.7662	0.0995	70	103	200
23/12/2023	Fine	14.9	1029.3	2877.38	2901.38	1440	42	1.19	1717	2.7055	2.9143	0.2088	122		
29/12/2023	Fine	22.1	1019.7	2904.83	2928.83	1440	39	1.03	1478	2.6995	2.8553	0.1558	105		
												Average	91		
												Min	70		
												Max	122		

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 <sub>e</sub>	<sub>q</sub> (dB(A	<u>(</u> ))				L <sub>10</sub> (c	IB(A))					L <sub>90</sub> (0	dB(A))		
Date	weather	m/s	Start Tille	Elia Tille	1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th
1/12/2023	Fine	1.7	10:23	10:53	56.4	57.7	58.4	57.6	57.1	58.8	57.7	58.3	59.3	60.3	59.9	59.1	60.6	52.4	53.4	54.6	53.1	53.6	54.5
7/12/2023	Fine	1.7	16:30	17:00	61.2	62.4	61.5	61.9	62.9	63.1	62.2	63.6	64.5	64.2	63.9	64.4	65.6	55.4	59.1	60.6	58.8	59.9	59.8
13/12/2023	Fine	1.9	16:00	16:30	60.1	61.2	61.9	60.3	58.2	59.1	60.3	62.6	63.2	63.6	61.9	60.3	61.3	59.1	59.3	59.9	58.2	57.1	58.6
19/12/2023	Fine	1.6	8:15	8:45	62.4	63.2	63.6	62.9	61.2	59.9	62.4	63.2	64.9	64.3	63.4	62.2	61.4	61.5	61.4	61.1	60.2	59.4	58.6
29/12/2023	Fine	2.1	8:32	9:02	64.5	63.6	65.2	62.6	64.4	64.1	64.1	65.3	64.9	66.3	63.6	65.9	65.1	62.1	61.7	64.2	60.5	62.4	62.2

Average	61.9	
Baseline Level	55.4	
Action Level	When one va	alid documented complaint is received
Limit Level	75	

Impact Phase Construction Noise Monitoring Data at Location NM2a

		otion Noice inc																					
Date	Weather	Wind speed	Start Time	End Time				L <sub>e</sub>	$_q$ (dB(A	<b>(</b> ))				L <sub>10</sub> (0	B(A))					L <sub>90</sub> (c	B(A))		
Date	weather	m/s	Start Tille	Elia Tille	1st	2nd	3rd	4th	5th	6th	Overall (30min)	1st	2nd	3rd	4th	5th	6th	1st	2nd	3rd	4th	5th	6th
1/12/2023	Fine	1.6	14:30	15:00	49.3	50.4	50.6	49.3	48.6	49.3	49.6	52.3	53.6	53.9	52.4	51.6	52.6	45.3	46.2	46.3	45.4	44.6	46.3
7/12/2023	Fine	1	15:10	15:40	54.8	52.6	52.7	58.3	54.6	53.2	54.9	57.6	55.5	55.6	61.3	55.2	55.2	45.2	45.8	46.3	46	46.7	42.5
13/12/2023	Fine	2.1	14:05	14:35	53.2	52.1	53.6	54.1	54.4	53.1	53.5	54.3	53.2	54.5	55.9	55.8	54.1	51.1	50.3	51.6	52.4	51.6	50.6
19/12/2023	Fine	1.8	9:50	10:20	52.5	51.9	54.3	54.4	53.1	52.6	53.2	52.5	51.9	54.3	54.4	53.1	52.6	52.5	51.9	54.3	54.4	53.1	52.6
29/12/2023	Fine	1.4	13:10	13:40	54.2	55.6	53.4	54.1	54.6	54.9	54.5	54.2	55.6	53.4	54.1	54.6	54.9	54.2	55.6	53.4	54.1	54.6	54.9
-	-		-	-	_		_		_	_								_					

Average 53.5

Baseline Level 54.5

Action Level When one valid documented complaint is received

Limit Level 75

Water Quality

### Monitoring Location: WM1

Date	Time	Weather	Water Depth (m)	Water Flow (L/s)	Water Temperature (°C)		DO (mg/L)			рН			Turbidity (NTU)			SS (mg/L)	
					( 0)	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level
19-Dec-23	9:34	Sunny	1.1	0.1	16.0	7.6	<7.4	<4	7.6	>7.7	>7.8	5.8	>9.2	>9.5	9.5	>9.7	>11.4

### Monitoring Location: WM2

Date	Time	Weather	Water Depth (m)	Water Flow (L/s)	Water Temperature (°C)		DO (mg/L)			рН			Turbidity (NTU)			SS (mg/L)	
					( 0)	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level	Value	Action Level	Limit Level
19-Dec-23	8:19	Sunny	0.60	0.2	14.7	5.6	<5	<4	7.5	>7.6	>7.7	60.2	>108.3	>108.9	44.6	>94.5	>94.7

Remarks

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

<sup>2. &</sup>quot;TBC" equal to "To be confirm"

<sup>3.</sup> Orange Text equal to exceed Action Level
4. Red Text equal to exceed Limit Level

## **ALS Technichem (HK) Pty Ltd**



### **ALS Laboratory Group**

ANALYTICAL CHEMISTRY & TESTING SERVICES

#### CERTIFICATE OF ANALYSIS

: ACUMEN LABORATORY AND TESTING LIMITED Client

: HUNTINGTON HUI

: UNIT D, 12/F, FORD GLORY PLAZA, Address

NOS.37-39 WING HONG STREET, CHEUNG

SHA WAN, KOWLOON, HONG KONG

: Huntington.Hui@aurecongroup.com E-mail

Telephone

Contact

Facsimile

: NENTX Project

Order number : ----

C-O-C number : ----

Site

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

: ALS Technichem (HK) Pty Ltd Laboratory

: Richard Fung

: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing

Yip Street, Kwai Chung, N.T., Hong Kong

: richard.fung@alsglobal.com E-mail

: +852 2610 1044 Telephone : +852 2610 2021 Facsimile

: HKE/2751/2022\_V3

Quote number

Contact

Address

: 19-Dec-2023 Date Samples Received

: 05-Jan-2024 Issue Date

: 1 of 9

: HK2351542

: 2 No. of samples received

: 2 No. of samples analysed

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

Signatories

Position

Authorised results for

Page

Work Order

Fung Lim Chee, Richard

**Managing Director** 

Inorganics

Fung Lim Chee, Richard

**Managing Director** 

Metals ENV

Ng Sin Kou, May

A

Laboratory Manager

Microbiology\_ENV

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

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

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Client : ACUMEN LABORATORY AND TESTING LIMITED

Work Order HK2351542



#### 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 19-Dec-2023 to 04-Jan-2024.

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

#### Specific Comments for Work Order: HK2351542

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

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

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

Microbiological sample(s) was/ were collected in 250mL sterile plastic bottles containing sodium thiosulfate. Sample(s) arrived at the laboratory at 12:05.

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.

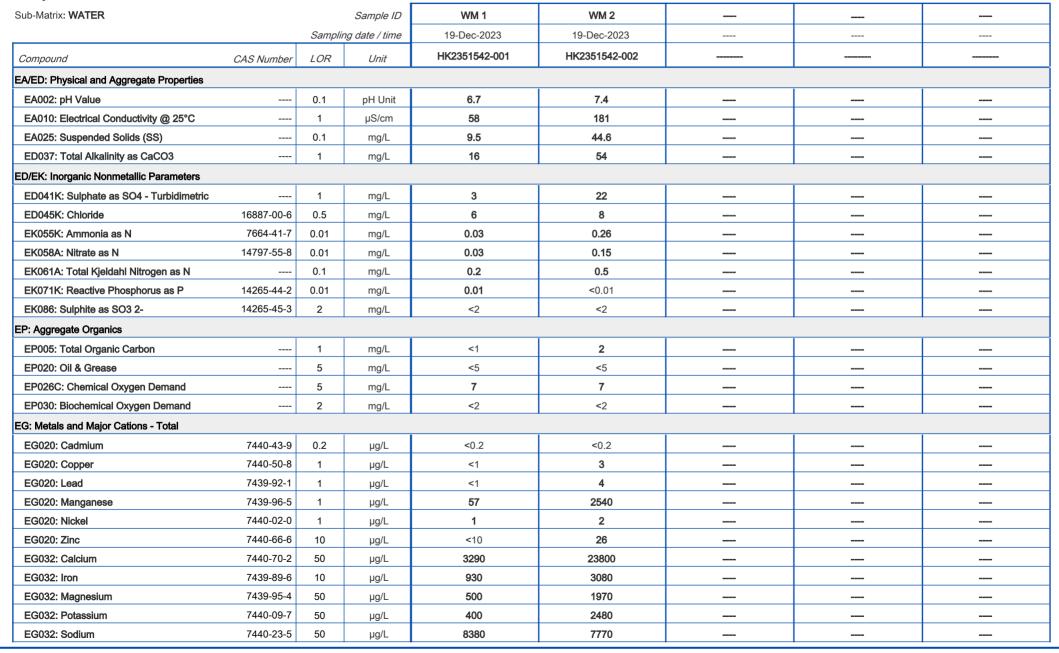
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Client

ACUMEN LABORATORY AND TESTING LIMITED

Work Order HK2351542

#### Analytical Results





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Client : ACUMEN LABORATORY AND TESTING LIMITED

Work Order HK2351542



Sub-Matrix: WATER			Sample ID	WM 1	WM 2	 	
		Samplir	ng date / time	19-Dec-2023	19-Dec-2023	 	
Compound	CAS Number	LOR	Unit	HK2351542-001	HK2351542-002	 	
EM: Microbiological Testing							
EM002: E. coli		1	CFU/100mL	NOT DETECTED	6	 	
EM003: Total Coliforms		1	CFU/100mL	NOT DETECTED	10	 	

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Client .

ACUMEN LABORATORY AND TESTING LIMITED

Work Order

HK2351542

#### 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					Labor	ratory Duplicate (DUP)	Report	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	<i>RPD</i> (%)
EA/ED: Physical and A	ggregate Properties (QC Lot: 55	506837)						
HK2351568-001	Anonymous	EA010: Electrical Conductivity @ 25°C		1	μS/cm	1030	1030	0.4
HK2351542-001	WM 1	EA010: Electrical Conductivity @ 25°C		1	μS/cm	58	58	0.0
EA/ED: Physical and A	ggregate Properties (QC Lot: 55	507217)						
HK2351542-001	WM 1	EA002: pH Value		0.1	pH Unit	6.7	6.8	0.0
EA/ED: Physical and A	ggregate Properties (QC Lot: 55	507633)						
HK2351542-001	WM 1	ED037: Total Alkalinity as CaCO3		1	mg/L	16	16	0.0
EA/ED: Physical and A	ggregate Properties (QC Lot: 55	511192)						
HK2351542-001	WM 1	EA025: Suspended Solids (SS)		0.5	mg/L	9.5	9.8	2.6
HK2351559-001	Anonymous	EA025: Suspended Solids (SS)		0.5	mg/L	2.4	2.7	12.7
ED/EK: Inorganic Nonm	netallic Parameters (QC Lot: 55	06883)						
HK2351572-001	Anonymous	EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	5.02	5.22	3.9
ED/EK: Inorganic Nonm	netallic Parameters (QC Lot: 55	09610)						
HK2351341-001	Anonymous	EK055K: Ammonia as N	7664-41-7	0.01	mg/L	26.3	26.0	1.5
ED/EK: Inorganic Nonm	netallic Parameters (QC Lot: 55	09762)						
HK2351563-001	Anonymous	ED045K: Chloride	16887-00-6	1	mg/L	<1	<1	0.0
ED/EK: Inorganic Nonm	netallic Parameters (QC Lot: 55	09764)						
HK2351563-001	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric		1	mg/L	<1	<1	0.0
ED/EK: Inorganic Nonm	netallic Parameters (QC Lot: 55	20400)						
HK2351542-001	WM 1	EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2	<2	0.0
D/EK: Inorganic Nonm	netallic Parameters (QC Lot: 55	20402)						
HK2350899-001	Anonymous	EK061A: Total Kjeldahl Nitrogen as N		0.1	mg/L	69.2	77.2	10.9
EP: Aggregate Organic	s (QC Lot: 5519884)							
HK2351477-001	Anonymous	EP005: Total Organic Carbon		1	mg/L	26	26	0.0
EP: Aggregate Organic	s (QC Lot: 5519905)							
HK2351503-001	Anonymous	EP026C: Chemical Oxygen Demand		5	mg/L	14	14	0.0
EG: Metals and Major C	Cations - Total (QC Lot: 550930	4)						
HK2351542-002	WM 2	EG032: Iron	7439-89-6	10	μg/L	3080	3110	0.8
		EG032: Calcium	7440-70-2	50	μg/L	23800	23900	0.2

Client

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ACUMEN LABORATORY AND TESTING LIMITED

Work Order

HK2351542



Matrix: WATER					Labora	atory Duplicate (DUP)	Report	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Ca	ations - Total (QC Lot: 55	09304) - Continued						
HK2351542-002	WM 2	EG032: Magnesium	7439-95-4	50	μg/L	1970	1990	0.9
		EG032: Potassium	7440-09-7	50	μg/L	2480	2480	0.0
		EG032: Sodium	7440-23-5	50	μg/L	7770	7720	0.6
EG: Metals and Major Ca	ations - Total (QC Lot: 55	09305)						
HK2351542-002	WM 2	EG020: Cadmium	7440-43-9	0.2	μg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	μg/L	3	3	0.0
		EG020: Lead	7439-92-1	1	μg/L	4	4	0.0
		EG020: Manganese	7439-96-5	1	μg/L	2540	2600	2.2
		EG020: Nickel	7440-02-0	1	μg/L	2	2	0.0
		EG020: Zinc	7440-66-6	10	μg/L	26	24	5.5

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

Matrix: WATER			Method Blank (ME	3) Report		Laboratory Contr	rol Spike (LCS) and Labor	atory Control S	pike Duplicate (	DCS) Report	
					Spike Concentration	Spike Re	covery (%)	Recove	ny Limits(%)	RP	D (%)
Method: Compound	CAS Number	LOR	Unit	Result		LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC L	.ot: 5506837)						•				
EA010: Electrical Conductivity @ 25°C		1	μS/cm	<1	146.9 µS/cm	101		93.5	106		
				<1	1412 μS/cm	101		94.3	105		
EA/ED: Physical and Aggregate Properties (QC L	.ot: 5507633)										
ED037: Total Alkalinity as CaCO3		1	mg/L	<1	50 mg/L	104		95.0	105		
EA/ED: Physical and Aggregate Properties (QC L	.ot: 5511192)										
EA025: Suspended Solids (SS)		0.5	mg/L	<0.5	20 mg/L	95.5		86.6	113		
ED/EK: Inorganic Nonmetallic Parameters (QC Lo	ot: 5506883)										
EK071K: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	97.2		92.4	106		
ED/EK: Inorganic Nonmetallic Parameters (QC Lo	ot: 5509610)										
EK055K: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	100		89.3	109		
ED/EK: Inorganic Nonmetallic Parameters (QC Lo	ot: 5509762)										
ED045K: Chloride	16887-00-6	1	mg/L	<1	10 mg/L	102		88.2	108		
ED/EK: Inorganic Nonmetallic Parameters (QC Lo	ot: 5509764)										

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Client : ACUMEN LABORATORY AND TESTING LIMITED

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Matrix: WATER			Method Blank (MB	) Report		Laboratory Contr	rol Spike (LCS) and Labora	atory Control S	pike Duplicate (	DCS) Report	
					Spike Concentration	Spike Re	covery (%)	Recove	ery Limits(%)	RPI	ס (%)
Method: Compound	CAS Number	LOR	Unit	Result		LCS	DCS	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC L			!								
ED041K: Sulphate as SO4 - Turbidimetric		1	mg/L	<1	5 mg/L	102		91.4	109		
ED/EK: Inorganic Nonmetallic Parameters (QC L	_ot: 5520400)										
EK086: Sulphite as SO3 2-	14265-45-3	2	mg/L	<2							
ED/EK: Inorganic Nonmetallic Parameters (QC L	_ot: 5520402)										
EK061A: Total Kjeldahl Nitrogen as N		0.1	mg/L	<0.1	0.5 mg/L	106		89.0	120		
EP: Aggregate Organics (QC Lot: 5506664)											
EP030: Biochemical Oxygen Demand			mg/L		198 mg/L	104		77.6	118		
EP: Aggregate Organics (QC Lot: 5519884)											
EP005: Total Organic Carbon		1	mg/L	<1	5 mg/L	111		87.3	120		
				<1	100 mg/L	100		88.8	120		
EP: Aggregate Organics (QC Lot: 5519905)											
EP026C: Chemical Oxygen Demand			mg/L		25 mg/L	99.6		92.0	108		
					250 mg/L	98.8		92.3	106		
EP: Aggregate Organics (QC Lot: 5519939)											
EP020: Oil & Grease		2	mg/L	<2	20 mg/L	85.2		81.7	105		
EG: Metals and Major Cations - Total (QC Lot: 5	5509304)										
EG032: Calcium	7440-70-2	50	μg/L	<50	2000 μg/L	103		85.0	115		
EG032: Iron	7439-89-6	10	μg/L	<10	2000 μg/L	113		85.0	115		
EG032: Magnesium	7439-95-4	50	μg/L	<50	2000 μg/L	110		85.0	115		
EG032: Potassium	7440-09-7	50	μg/L	<50	2000 μg/L	105		85.0	115		
EG032: Sodium	7440-23-5	50	μg/L	<50	2000 μg/L	113		85.0	115		
EG: Metals and Major Cations - Total (QC Lot: 5	5509305)										
EG020: Cadmium	7440-43-9	0.2	μg/L	<0.2	5 μg/L	99.8		85.0	109		
EG020: Copper	7440-50-8	1	μg/L	<1	50 μg/L	107		90.0	111		
EG020: Lead	7439-92-1	1	μg/L	<1	50 μg/L	99.7		89.0	111		
EG020: Manganese	7439-96-5	1	μg/L	<1	50 μg/L	103		85.0	115		
EG020: Nickel	7440-02-0	1	μg/L	<1	50 μg/L	102		87.0	110		
EG020: Zinc	7440-66-6	10	μg/L	<10	50 μg/L	104		86.0	114		

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Client : ACUMEN LABORATORY AND TESTING LIMITED

Work Order HK2351542



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

Matrix: WATER	Matrix: WATER				Matrix Spi	ike (MS) and Matri	x Spike Duplic	ate (MSD) Re	port	
				Spike	Spike Re	ecovery (%)	Recovery	Limits (%)	RPD	) (%)
Laboratory sample ID	Sample ID	Method: Compound	Method: Compound CAS Number		MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorgani	ic Nonmetallic Parameters (QC Lot: 5506	883)								
HK2351572-001	Anonymous	EK071K: Reactive Phosphorus as P	14265-44- 2	5 mg/L	107		75.0	125		
ED/EK: Inorgani	ic Nonmetallic Parameters (QC Lot: 5509	610)								
HK2351341-001	Anonymous	EK055K: Ammonia as N	7664-41-7	50 mg/L	103		75.0	125		
ED/EK: Inorgani	ic Nonmetallic Parameters (QC Lot: 5509	762)								
HK2351563-001	Anonymous	ED045K: Chloride	16887-00- 6	5 mg/L	89.0		75.0	125		
ED/EK: Inorgani	ic Nonmetallic Parameters (QC Lot: 5509	764)								
HK2351563-001	Anonymous	ED041K: Sulphate as SO4 - Turbidimetric		5 mg/L	101		75.0	125		
ED/EK: Inorgani	ic Nonmetallic Parameters (QC Lot: 5520	402)								
HK2350899-001	Anonymous	EK061A: Total Kjeldahl Nitrogen as N		50 mg/L	110		75.0	125		
EP: Aggregate 0	Organics (QC Lot: 5519884)									
HK2351477-001	Anonymous	EP005: Total Organic Carbon		25 mg/L	94.4		75.0	125		
EP: Aggregate 0	Organics (QC Lot: 5519905)									
HK2351501-001	Anonymous	EP026C: Chemical Oxygen Demand		10 mg/L	102		75.0	125		
EG: Metals and	Major Cations - Total (QC Lot: 5509304)									
HK2351542-001	WM 1	EG032: Calcium	7440-70-2	2000 μg/L	94.3		75.0	125		
		EG032: Iron	7439-89-6	2000 μg/L	106		75.0	125		
		EG032: Magnesium	7439-95-4	2000 μg/L	102		75.0	125		
		EG032: Potassium	7440-09-7	2000 μg/L	101		75.0	125		
		EG032: Sodium	7440-23-5	2000 μg/L	# Not		75.0	125		
					Determined					
	Major Cations - Total (QC Lot: 5509305)									
HK2351542-001	WM 1	EG020: Cadmium	7440-43-9	5 μg/L	101		75.0	125		
		EG020: Copper	7440-50-8	50 μg/L	102		75.0	125		
		EG020: Lead EG020: Manganese	7439-92-1 7439-96-5	50 μg/L 50 μg/L	99.7 104		75.0 75.0	125 125		

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Client

ACUMEN LABORATORY AND TESTING LIMITED

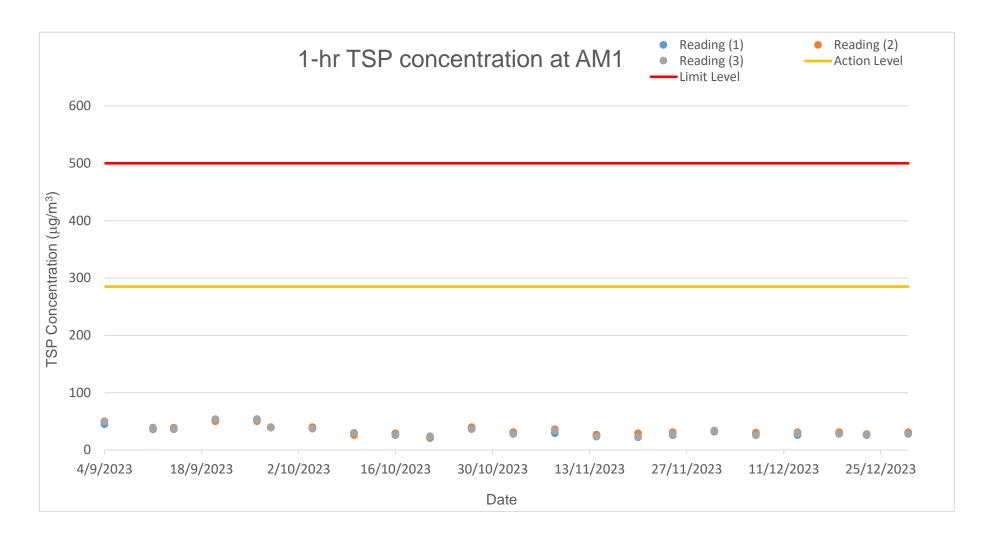
Work Order HK2351542

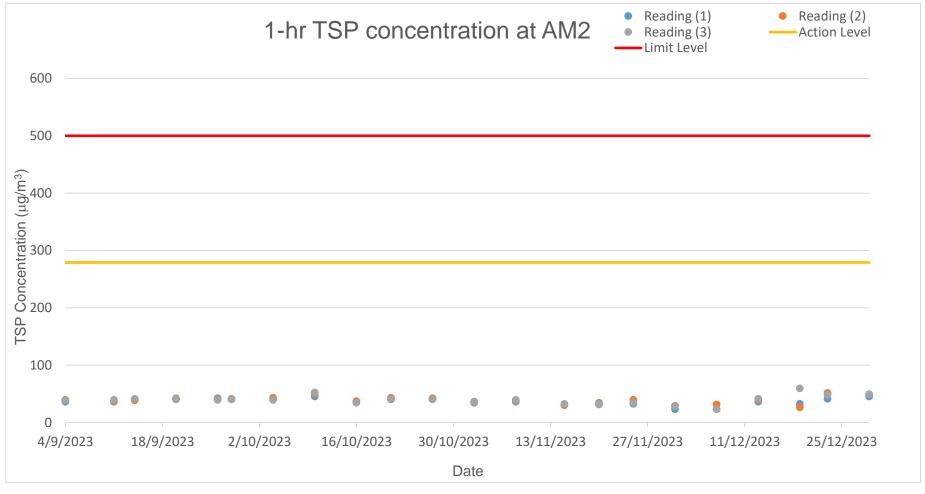


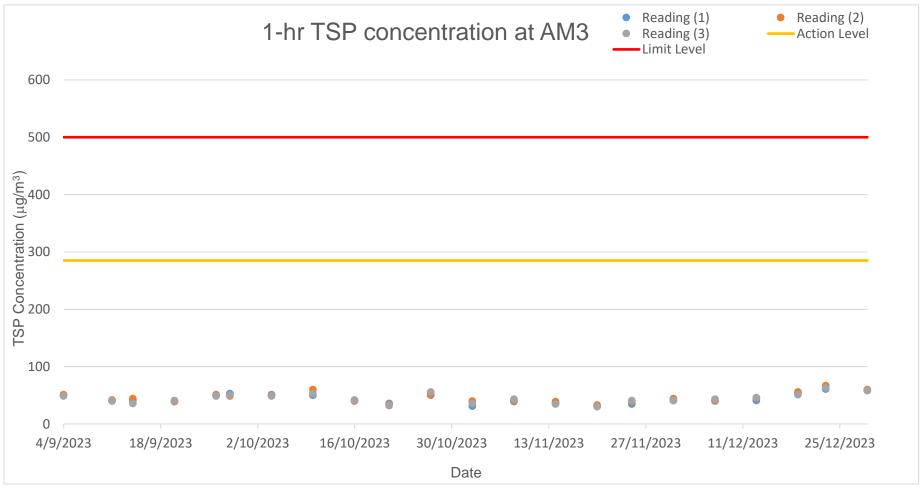
Matrix: WATER		Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report								
				Spike	Spike Re	эсоvөгу (%)	Recovery I	Limits (%)	RPD	(%)
Laboratory	Sample ID	Method: Compound	CAS Number	Concentration	MS	MSD	Low	High	Value	Control
sample ID										Limit
EG: Metals and I	Major Cations - Total (QC Lot: 5509305)	- Continued								
HK2351542-001	WM 1	EG020: Nickel	7440-02-0	50 μg/L	94.6		75.0	125		
		EG020: Zinc	7440-66-6	50 μg/L	98.9		75.0	125		

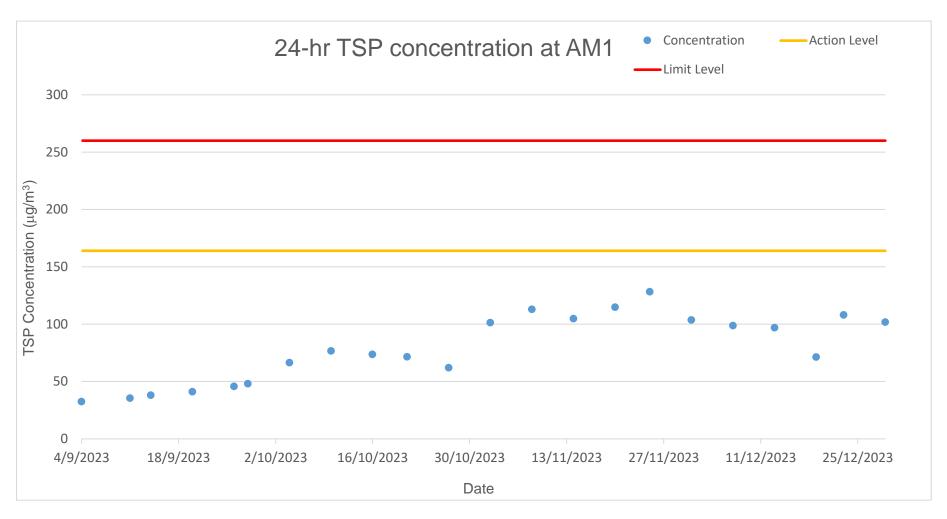
## Appendix F Graphical Presentations

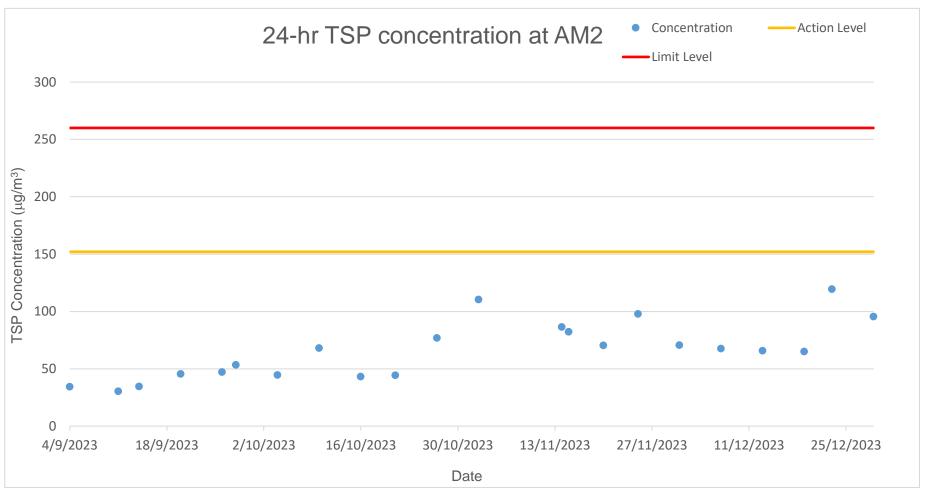
# Air Quality

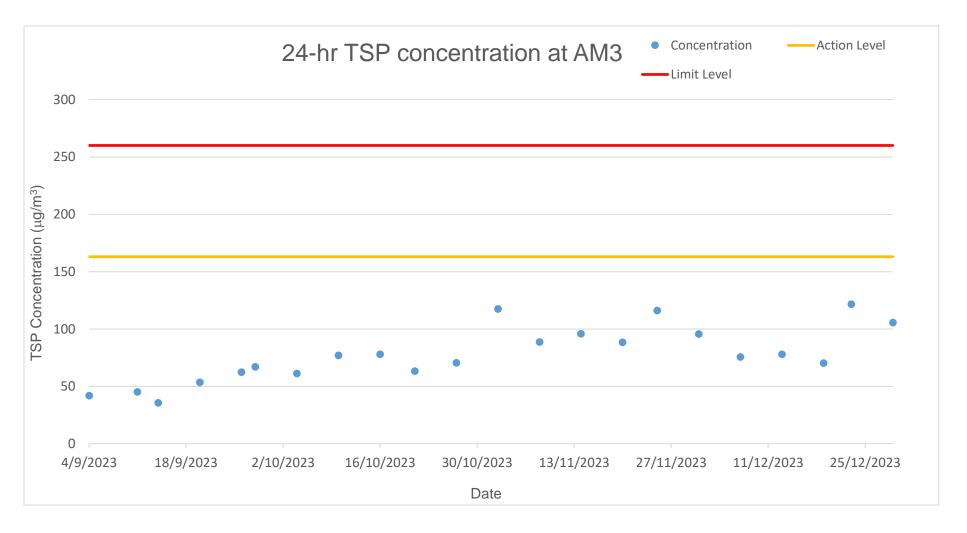




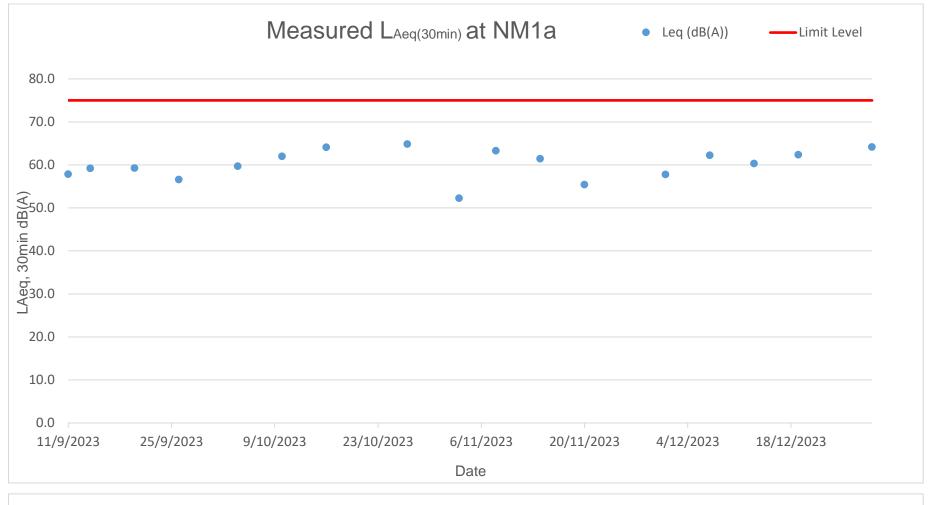


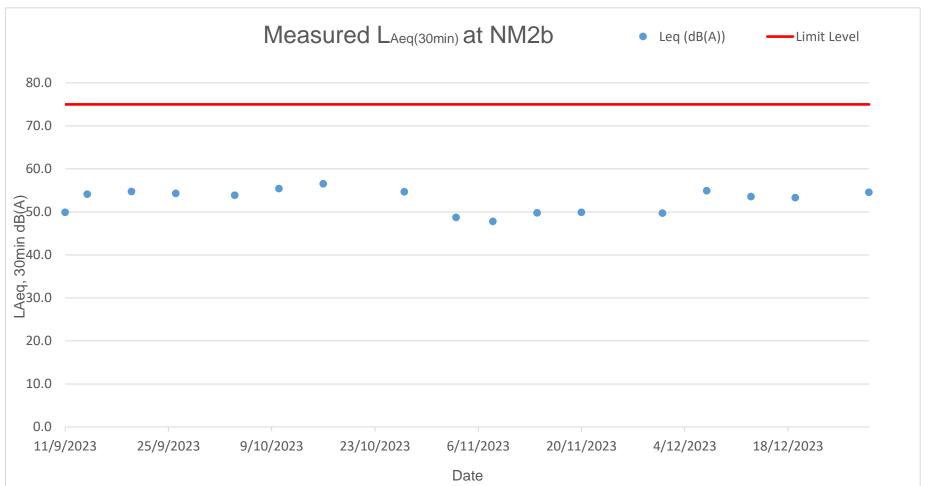




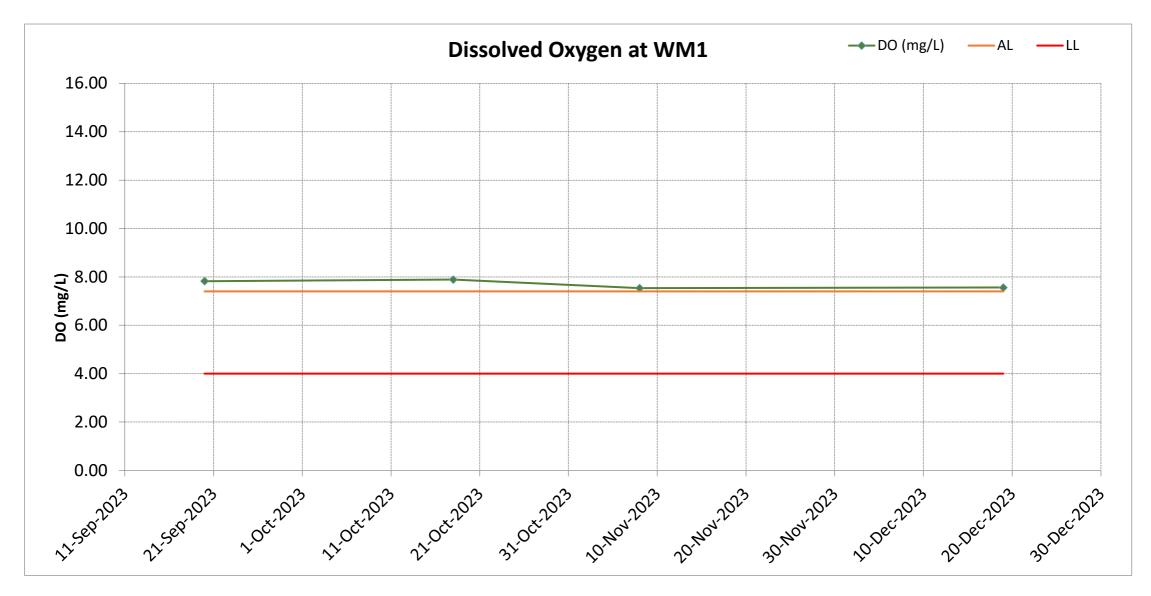


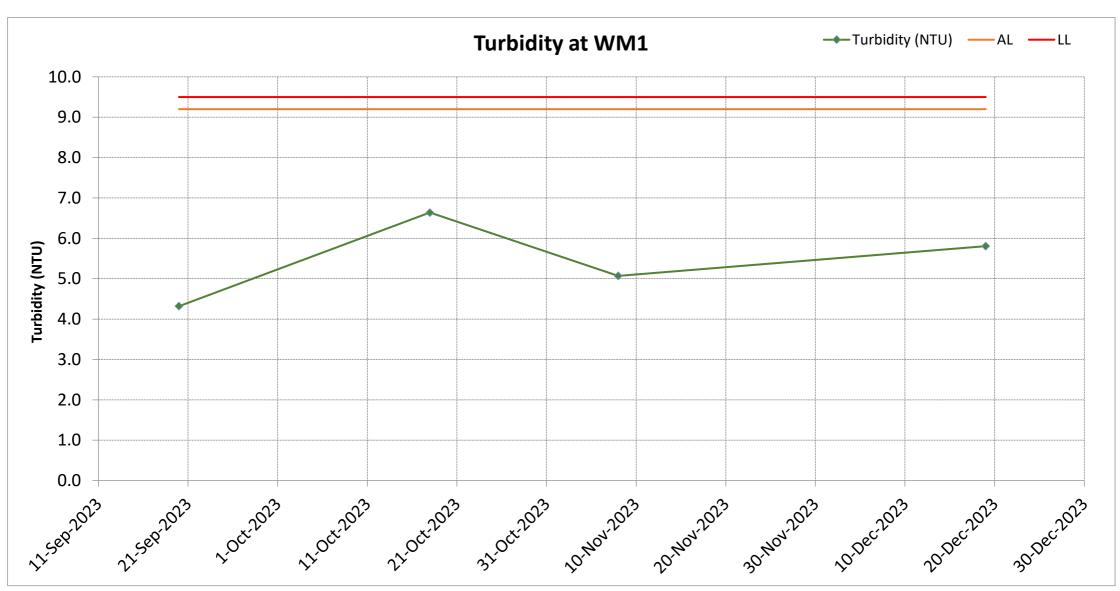
# **Noise**

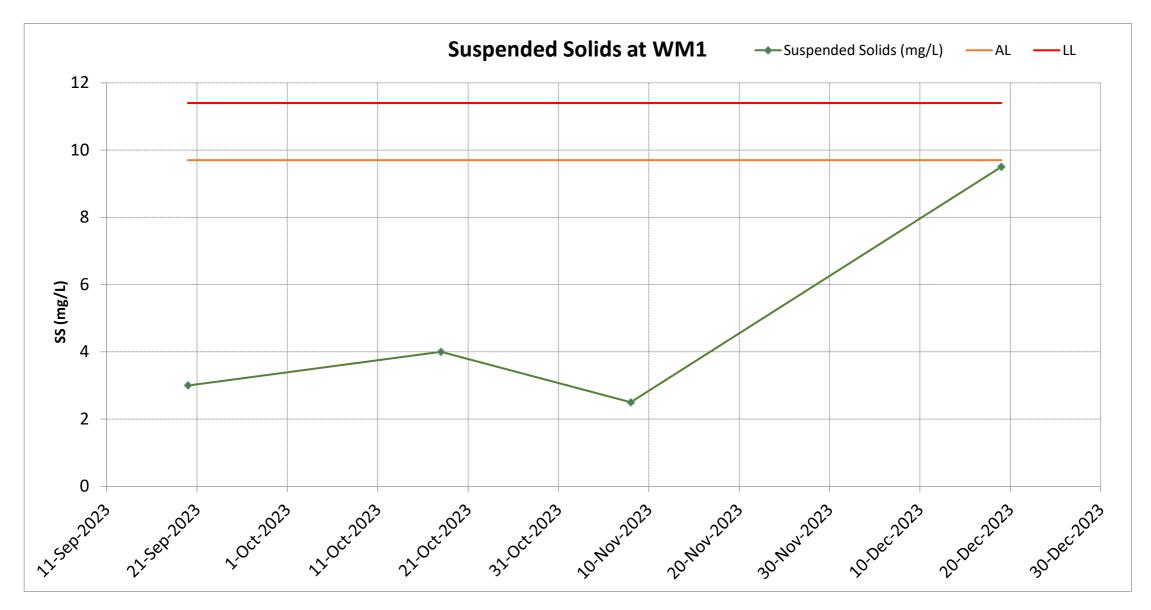


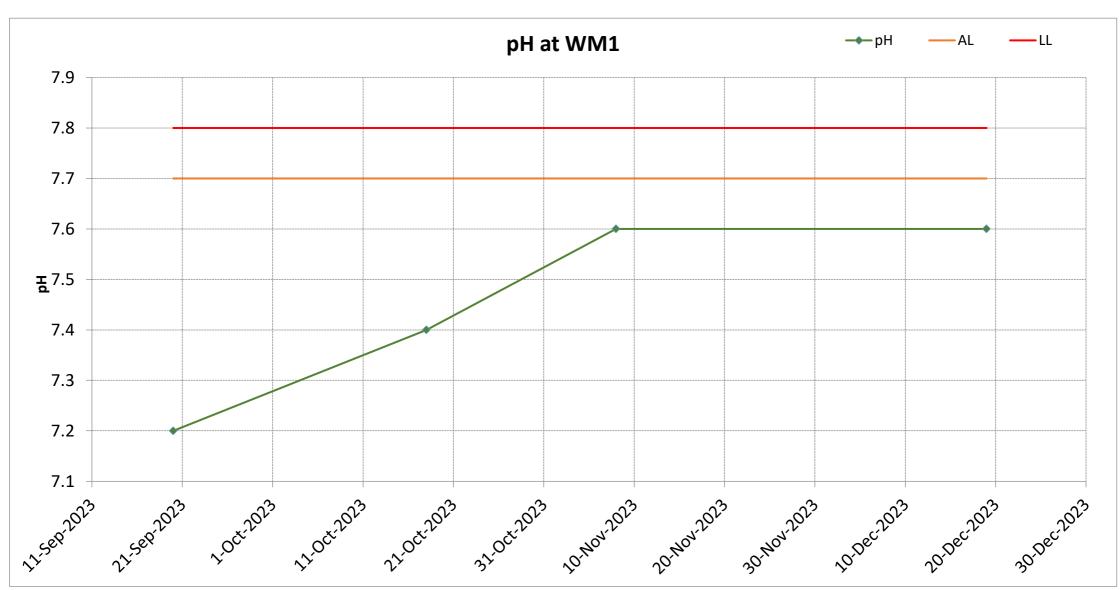


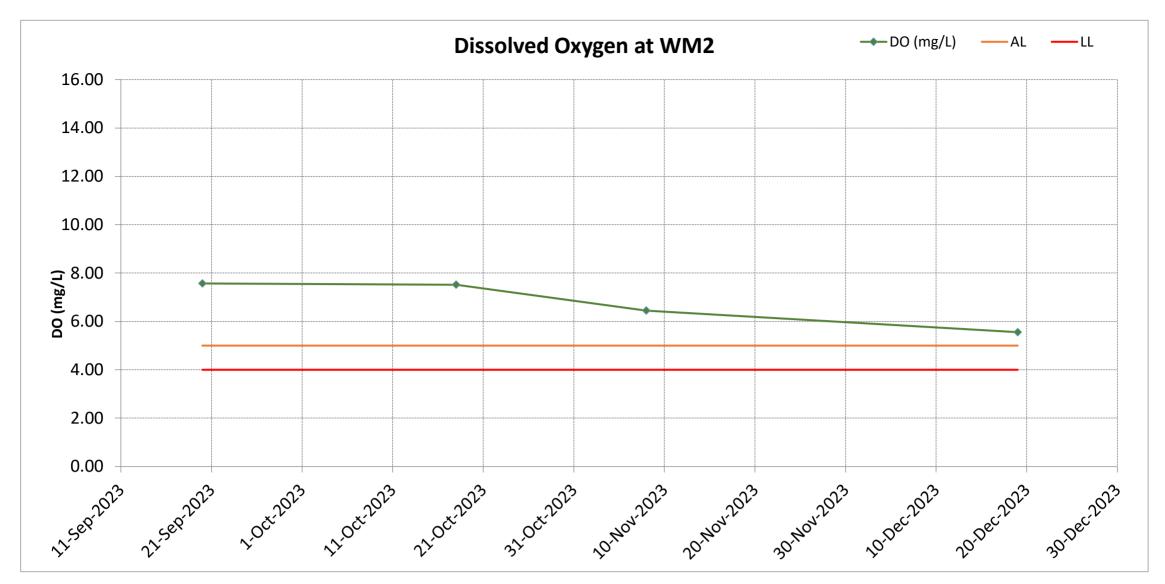
Water Quality

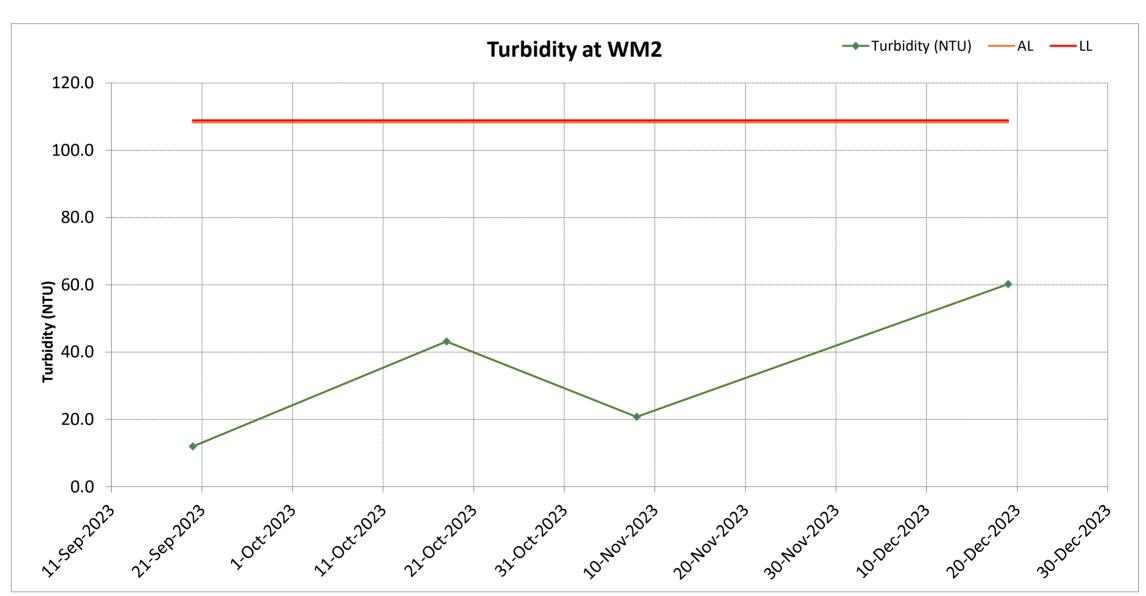


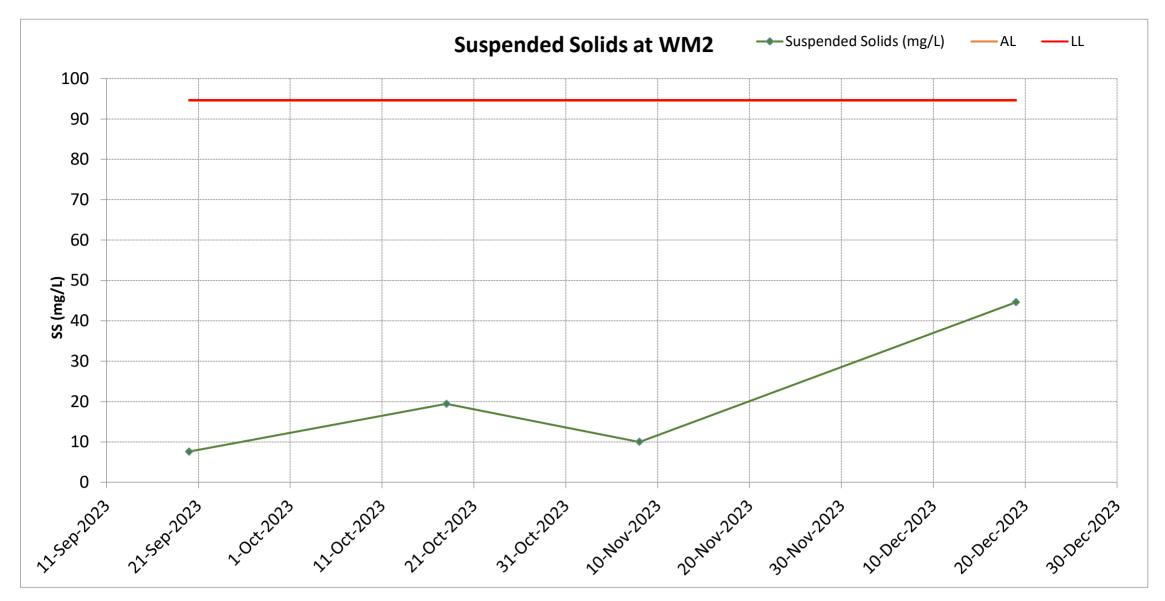


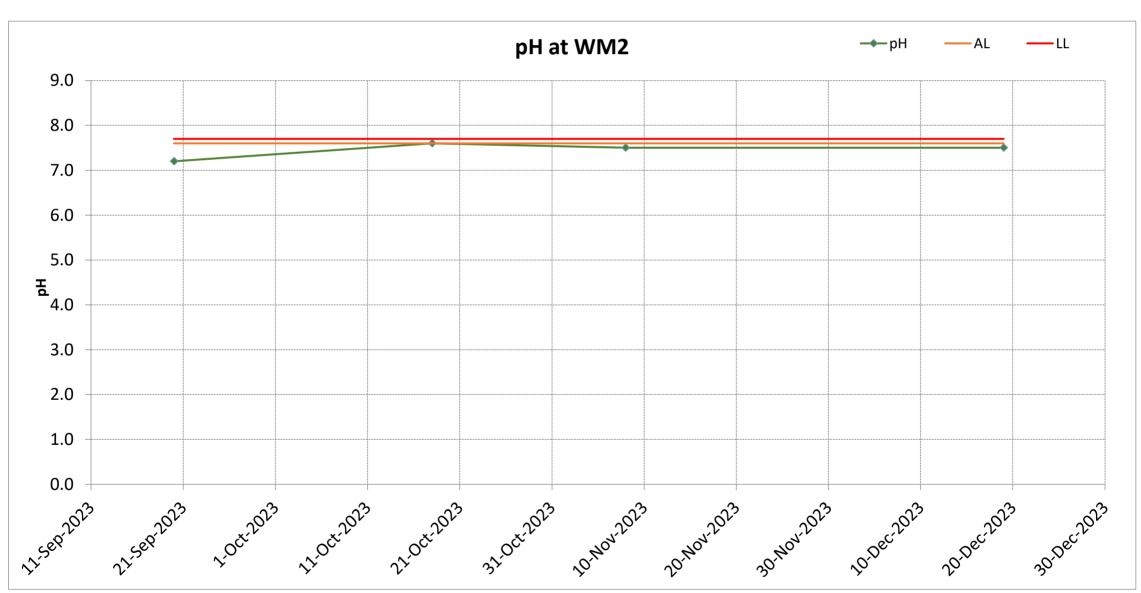












### Appendix G Notification of Environmental Quality Limits Exceedance

### **Notification of Environmental Quality Limits Exceedance**

### **Air Quality Monitoring - Construction Dust**

				<b>1-</b> ł	nr TSP Exce	edance Co	unt	24-hr TSP Exceedance Count					
Dust Monitoring	Level	Monitoring Parameter (s)		Reporting period Accumulate project to date			Reportir	ng period	Accumulate project to date				
Station	Exceedance	1-hr TSP	24-hr TSP	Project related	Non- project related	Project related	Non- project related	Project related	Non- project related	Project related	Non- project replated		
AM1	Action	0	0	0	0	0	0	0	0	0	2		
AIVI I	Limit	0	0	0	0	0	0	0	0	0	3		
A N A O	Action	0	0	0	0	0	0	0	0	0	0		
AM2	Limit	0	0	0	0	0	0	0	0	0	0		
4140	Action	0	0	0	0	0	0	0	0	0	4		
AM3	Limit	0	0	0	0	0	0	0	0	0	3		

### **Noise Monitoring**

			LAeq (30mins) Exceedance Count							
Noise Monitoring	Level	Monitoring Parameter	Reportir	ng period	Accumulate project to date					
Station	Exceedance	LAeq (30mins)	Project related	Non- project related	Project related	Non- project related				
N 1 N 4 4	Action	0	0	0	0	0				
NM1a	NM1a Limit		0	0	0	0				
NIMO	Action		0	0	0	0				
NM2a	Limit	0	0	0	0	0				

### **Notification of Environmental Quality Limits Exceedance**

### **Surface Water Monitoring**

Surface							Exceedance Count														
Water	Level	Moni	Monitoring Parameter (s)			Reporting period						Accumulate project to date									
Quality Monitoring	Exceedance						Project	related	t	No	n-proje	ct repla	ited		Projec	t related	t	Noi	n-proje	ct repla	ited
Station		DO	рН	Turb	SS	DO	рН	Turb	SS	DO	рН	Turb	SS	DO	рН	Turb	SS	DO	рН	Turb	SS
10/044	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
WM1	Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/040	Action	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WM2	Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

Remarks:

- 1. "DO" equal to Dissolved Oxygen
- 2. "Turb" equal to Turbidity
- 3. "SS" equal to Suspended Solids

### Landfill Gas (LFG) Monitoring

LFG Monitoring	Monitoring	No. of Exceedance				
Station	Parameter(s)	Limit Level				
	CH₄	0				
Portion A +50 mpD to +70 mpD Platform	CO <sub>2</sub>	0				
	O <sub>2</sub>	0				

## Appendix H Wind Data

D 0 FF		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231201 0000 20231201 0010	0.1	60 93
20231201_0010 20231201_0020	0.1 0.1	93
20231201_0020	0.1	164
20231201_0040 20231201_0050	0.1	340 293
	0.1	
20231201_0100	0.1	296
20231201_0110	0.1	96
20231201_0120	0.1	159
20231201_0130	0.1	103
20231201_0140	0.1	49
20231201_0150	0.1	73
20231201_0200	0.1	122
20231201_0210	0.1	141
20231201_0220	0.1	3
20231201_0230	0.1	266
20231201_0240	0.1	120
20231201_0250	0.1	153
20231201_0300	0.1	116
20231201_0310	0.1	150
20231201_0320	0.1	74
20231201_0330	0.1	88
20231201_0340	0.1	145
20231201_0350	0.1	43
20231201_0400	0.1	289
20231201_0410	0.1	336
20231201_0420	0.1	304
20231201_0430	0.1	320
20231201_0440	0.1	314
20231201_0450	0.1	70
20231201 0500	0.1	346
20231201_0510	0.1	321
20231201_0520	0.1	137
20231201_0530	0.1	92
20231201 0540	0.2	301
20231201_0550	0.8	62
20231201_0600	1.9	303
20231201 0610	0.1	24
20231201_0620	0.1	11
20231201_0630	0.1	351
20231201_0640	1.4	299
20231201 0650	1	53
20231201_0700	0.1	297
20231201_0710	0.1	292
20231201_0720	0.1	12
20231201_0720	0.9	4
20231201_0740	0.3	11
20231201_0740	0.1	48
20231201_0730	0.2	337
20231201_0800	0.9	3
20231201_0810	1.5	327
20231201_0820	0.6	45
20231201_0830	0.4	337
20231201_0840	0.4	321
20231201_0900	0.0	317
20231201_0900	1.3	312
20231201_0910	0.1	29
20231201_0920	0.1	29
20231201_0930	0.1	59
20231201_0940	0.1	285
20231201_0930	0.1	49
20231201_1000	0.1	323
20231201_1010	0.1	316
20231201_1020	0.1	334
20231201_1030		70
	0.1	
	0.2	108 314
20231201_1100		
20231201_1110	1.5	9
20231201_1120	0.1	24
20231201_1130	0.1	318
20231201_1140	0.1	20
20231201_1150	0.2	336

Date & Time	WF 10 1/ />	WE ID: .:
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231201_1200	2.7	98
20231201_1210	2.2	2
20231201_1220	0.1	315
20231201_1230 20231201_1240	0.1 0.1	294 250
20231201_1240	0.1	313
20231201_1230	0.8	61
20231201 1310	0.8	59
20231201_1320	0.1	26
20231201_1330	2.8	56
20231201_1340	0.1	48
20231201_1350 20231201_1400	0.1 1.7	261 295
20231201_1400	0.1	147
20231201_1110	0.1	247
20231201_1430	0.1	60
20231201_1440	0.4	97
20231201_1450	2.7	9
20231201_1500	0.1	71
20231201_1510 20231201_1520	0.1	296 300
20231201_1520	0.1	72
20231201_1530	0.6	63
20231201_1550	0.7	310
20231201_1600	0.1	301
20231201_1610	0.2	328
20231201 1620	0.4	14
20231201_1630 20231201_1640	0.1 0.1	250 15
20231201_1040	0.7	298
20231201 1700	0.1	278
20231201_1710	0.1	337
20231201_1720	0.1	64
20231201_1730	0.1	309
20231201_1740	0.1	345 129
20231201_1750 20231201_1800	0.1 0.1	317
20231201 1810	0.2	350
20231201_1820	0.1	17
20231201_1830	0.3	92
20231201_1840	0.1	133
20231201_1850	0.1	49
20231201_1900 20231201_1910	0.1 0.1	6 134
20231201_1910	0.1	47
20231201_1930	0.1	80
20231201_1940	0.1	147
20231201_1950	0.6	336
20231201_2000	0.1	284
20231201_2010 20231201_2020	0.1 0.4	284 80
20231201_2020	0.4	327
20231201_2030	0.1	219
20231201_2050	0.1	69
20231201_2100	0.1	5
20231201_2110	0.1	349
20231201_2120 20231201_2130	0.1 0.1	102 63
20231201_2130 20231201_2140	0.1	337
20231201_2140	0.2	95
20231201_2130	0.1	316
20231201_2210	0.1	63
20231201_2220	0.1	348
20231201_2230	0.1	9
20231201_2240 20231201_2250	0.1	56
20231201_2250	0.1 0.4	10 302
20231201_2300	0.1	334
20231201_2310	0.1	306
20231201_2330	1.1	332
20231201_2340	2.1	46
20231201_2350	0.1	344

D . A		
Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231202 0000	0.1	338
20231202_0010	0.2	5
20231202_0020	0.1	332
20231202_0030	0.1	26
20231202_0040	0.1	8
20231202_0050	0.1	332
20231202_0100	0.1	54
20231202_0110 20231202_0120	0.1	93
20231202_0120 20231202_0130	0.1	47
20231202_0130	0.1	326
20231202 0150	0.1	308
20231202_0200	0.1	60
20231202_0210	0.1	234
20231202_0220	0.1	323
20231202_0230	0.1	345
20231202_0240	0.1	80
20231202_0250 20231202_0300	0.1 0.2	52 323
20231202_0300 20231202_0310	0.3	334
20231202_0310	0.1	311
20231202_0320	0.1	328
20231202_0340	0.1	334
20231202_0350	0.1	83
20231202_0400	0.1	231
20231202_0410	0.1	45
20231202 0420 20231202 0430	0.1	108
20231202_0430 20231202_0440	0.1 0.1	79 158
20231202_0440	0.1	160
20231202_0130	0.1	336
20231202 0510	0.2	334
20231202_0520	0.1	11
20231202_0530	0.2	13
20231202_0540	0.1	17
20231202_0550	0.1	188
20231202 0600 20231202 0610	0.1	8 28
20231202_0610 20231202_0620	0.1 0.1	168
20231202_0020	0.1	80
20231202_0640	0.1	29
20231202 0650	0.1	150
20231202_0700	0.1	72
20231202_0710	0.1	341
20231202_0720	0.1	172
20231202_0730	0.1	280
20231202_0740	0.1	147
20231202_0750 20231202_0800	0.1 0.1	74 220
20231202_0800	0.1	72
20231202_0810	0.1	100
20231202_0830	0.1	158
20231202_0840	0.1	214
20231202_0850	0.1	177
20231202_0900	0.1	137
20231202_0910	0.1	117
20231202_0920	0.2	314
20231202_0930 20231202_0940	0.2 0.1	218 15
20231202_0940	0.1	229
20231202_0930	0.2	178
20231202_1010	0.1	288
20231202_1020	0.1	111
20231202_1030	0.1	172
20231202_1040	0.1	162
20231202_1050	0.1	70
20231202_1100	0.1	291
20231202_1110 20231202_1120	0.4 0.8	232 236
20231202_1120	0.8	240
20231202_1130	0.1	242
20231202_1140	0.1	183
		-00

Date & Time	WF 10 17 ()	W. 15: .:
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231202_1200	0.1	136
20231202_1210	0.1	183
20231202_1220	0.1	154
20231202_1230 20231202_1240	0.1	249 152
20231202_1240 20231202_1250	0.5 0.2	29
20231202_1230	0.5	182
20231202_1300	0.3	200
20231202_1310	0.3	50
20231202_1330	0.6	190
20231202_1340	0.1	228
20231202_1350	0.1	205
20231202_1400	1.1	212
20231202_1410 20231202_1420	0.2 1.1	234 173
20231202_1420	0.2	256
20231202_1440	0.2	192
20231202_1450	0.1	221
20231202_1500	0.1	183
20231202_1510	0.1	136
20231202_1520	1	155
20231202_1530	0.4	195
20231202_1540 20231202_1550	0.1 1.9	250 196
20231202_1500	1.5	196
20231202_1000	0.1	251
20231202_1620	0.1	236
20231202_1630	0.1	82
20231202_1640	0.1	262
20231202_1650	0.1	105
20231202_1700	0.1	93
20231202_1710	0.1 0.1	123 90
20231202_1720 20231202_1730	0.1	90
20231202_1730	0.1	312
20231202_1740	0.1	26
20231202 1800	0.1	58
20231202_1810	0.1	19
20231202_1820	0.1	164
20231202_1830	0.1	84
20231202_1840 20231202_1850	0.1 0.1	85 34
20231202_1830	0.1	2
20231202_1910	0.1	16
20231202 1920	0.1	36
20231202_1930	0.1	12
20231202_1940	0.1	130
20231202_1950	0.1	63
20231202_2000	0.1	18
20231202_2010 20231202_2020	0.1 0.8	11 131
20231202_2020	0.8	47
20231202_2030	0.4	66
20231202_2050	0.1	89
20231202_2100	0.4	182
20231202_2110	0.1	163
20231202_2120	0.1	294
20231202_2130 20231202_2140	0.1	191 145
20231202_2140 20231202_2150	0.1 0.1	145
20231202_2130	0.1	104
20231202_2200	0.1	338
20231202 2220	0.1	330
20231202_2230	0.3	39
20231202_2240	0.5	218
20231202_2250	1.4	327
20231202_2300	0.2	78
20231202_2310 20231202_2320	0.3 0.1	333 50
20231202_2320	0.1	252
20231202_2330	0.1	176
20231202_2310	0.2	317

D-4- 0 T:		
Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231203_0000	0.1	148
20231203_0010	0.1	11
20231203_0020	0.1	150
20231203_0030	0.1	153
20231203_0040	0.1	150
20231203_0050	0.1	108
20231203_0100	0.1	98
20231203_0110	0.1	125
20231203_0120	0.1	108
20231203 0130	0.1	101
20231203_0140 20231203_0150	0.1 0.1	151 153
20231203_0130	0.1	66
20231203_0200	0.1	133
20231203_0210	0.1	152
20231203_0230	0.1	124
20231203 0240	0.1	125
20231203_0250	0.1	125
20231203 0300	0.1	106
20231203_0310	0.1	150
20231203_0320	0.1	0
20231203_0330	0.1	131
20231203_0340	0.1	44
20231203_0350	0.1	281
20231203_0400	0.1	227
20231203_0410 20231203_0420	0.1	42 114
20231203_0420 20231203_0430	0.1	132
20231203_0440	0.1	211
20231203_0450	0.1	206
20231203 0500	0.1	179
20231203 0510	0.1	182
20231203_0520	0.1	194
20231203_0530	0.1	233
20231203_0540	0.1	148
20231203_0550	0.1	207
20231203 0600	0.1	170
20231203_0610	0.1	203
20231203_0620 20231203_0630	0.1 0.1	132 141
20231203_0030	0.1	157
20231203_0040	0.1	98
20231203_0700	0.1	318
20231203_0710	0.1	187
20231203_0720	0.1	109
20231203_0730	0.1	95
20231203_0740	0.1	148
20231203_0750	0.1	308
20231203_0800	0.3	335
20231203_0810	1.8	321
20231203_0820	0.2	305
20231203_0830	0.1	6 337
20231203_0840 20231203_0850	0.1	113
20231203_0900	0.1	334
20231203_0900	0.3	62
20231203_0910	0.1	152
20231203_0930	0.1	212
20231203_0940	0.1	323
20231203_0950	0.2	243
20231203_1000	0.1	257
20231203_1010	0.3	302
20231203_1020	0.1	233
20231203_1030	0.1	189
20231203_1040	0.1	137
20231203_1050 20231203_1100	0.1	165 288
20231203_1100 20231203_1110	0.1 0.1	288 16
20231203_1110	0.1	193
20231203_1120	0.4	166
20231203_1130	0.7	220
20231203_1150	0.5	174

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231203 1200	0.2	195
20231203_1200	0.4	318
20231203_1220	0.8	198
20231203 1230	0.2	241
20231203 1240	1.1	219
20231203_1250	0.1	10
20231203_1300	0.1	86
20231203_1310	0.8	112
20231203_1320	0.1	117
20231203_1330	0.1	179
20231203_1340	1	187
20231203_1350	0.1	203
20231203_1400	1.6	196
20231203_1410	0.3	190
20231203_1420	0.1	91
20231203_1430	0.7	181
20231203_1440	0.5	291
20231203_1450	0.2	279
20231203 1500	0.5	111
20231203_1510 20231203_1520	0.1	124
	0.1	149
20231203_1530	0.1	270
20231203_1540	0.1 0.1	87 82
20231203_1550 20231203_1600	0.1	49
20231203_1600 20231203_1610	0.1	59
20231203_1610	0.1	106
20231203_1630	0.1	98
20231203_1640	0.1	27
20231203_1650	0.1	128
20231203_1030	0.1	69
20231203_1700	0.1	111
20231203_1710	0.1	114
20231203 1730	0.1	103
20231203_1740	0.1	99
20231203 1750	0.1	345
20231203 1800	0.1	126
20231203_1810	0.1	79
20231203_1820	0.1	96
20231203_1830	0.1	12
20231203_1840	0.1	200
20231203_1850	0.1	113
20231203_1900	0.8	100
20231203_1910	0.1	352
20231203_1920	0.1	61
20231203_1930	0.1	128
20231203_1940	0.1	242
20231203_1950	0.1	141
20231203_2000	0.1	154
20231203_2010 20231203_2020	0.1 0.1	113 150
20231203_2020 20231203_2030	0.1	99
20231203 2040	0.1	80
20231203 2050	0.1	94
20231203_2030	0.1	156
20231203_2100	0.1	88
20231203_2110	0.1	144
20231203_2120	0.1	81
20231203 2140	0.1	102
20231203 2150	0.1	84
20231203 2200	0.1	173
20231203_2210	0.1	114
20231203 2220	0.1	156
20231203_2230	0.1	93
20231203_2240	0.1	246
20231203_2250	0.1	30
20231203_2300	0.1	317
20231203_2310	0.1	19
20231203_2320	0.1	121
20231203_2330	0.1	82
20231203_2340	0.1	108
20231203_2350	0.1	309

D . 0 m		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM) 20231204 0000	0.1	92
20231204_0000 20231204_0010	0.1	139
20231204_0010	0.1	297
20231204_0020	0.1	146
20231204_0040	0.1	106
20231204_0040	0.1	150
20231204_0030	0.1	77
20231204_0110	0.1	102
20231204_0120	0.1	129
20231204 0130	0.1	160
20231204_0140	0.1	167
20231204_0150	0.1	175
20231204 0200	0.1	138
20231204 0210	0.1	69
20231204_0220	0.1	50
20231204_0230	0.1	93
20231204_0240	0.1	149
20231204_0250	0.1	90
20231204_0300	0.1	110
20231204_0310	0.1	111
20231204_0320	0.1	108
20231204_0330	0.1	77
20231204_0340	0.1	117
20231204_0350	0.1	44
20231204_0400	0.1	13
20231204_0410	0.1	137
20231204_0420	0.1	14
20231204 0430	0.1	153
20231204_0440	0.1	157
20231204_0450	0.1	109
20231204_0500	0.1	94
20231204_0510	0.1	85
20231204_0520	0.1	52
20231204_0530 20231204_0540	0.1 0.1	131 108
20231204_0550	0.1	83
20231204_0530	0.1	85 85
20231204_0000	0.1	81
20231204_0620	0.1	220
20231204_0630	0.1	148
20231204_0640	0.1	84
20231204_0650	0.1	103
20231204_0700	0.1	235
20231204_0710	0.1	203
20231204_0720	0.1	218
20231204_0730	0.1	136
20231204_0740	0.1	120
20231204_0750	0.1	186
20231204_0800	0.1	114
20231204_0810	0.1	163
20231204_0820	0.1	150
20231204_0830	0.1	149
20231204_0840	0.1	216
20231204 0850 20231204 0900	0.1 0.1	126
20231204_0900 20231204_0910	0.1	185 213
20231204_0910	0.5	188
20231204_0920	0.1	221
20231204_0940	0.3	217
20231204_0950	0.1	40
20231204_0000	0.2	180
20231204_1010	0.4	214
20231204_1020	0.1	192
20231204_1030	0.2	183
20231204_1040	0.9	189
20231204_1050	0.1	187
20231204_1100	0.6	188
20231204_1110	0.1	239
20231204_1120	1.2	216
20231204_1130	0.1	175
20231204_1140	0.1	286
20231204_1150	0.1	147

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231204 1200	0.2	234
20231204_1210	1.9	314
20231204_1220	0.6	181
20231204 1230	0.1	290
20231204_1240	0.1	228
20231204_1250	0.1	302
20231204_1300	1.2	199
20231204_1310	2.3	27
20231204_1320	0.3	73
20231204_1330	0.1	71
20231204_1340	1.1	221
20231204_1350	0.3	212
20231204_1400	0.1	60
20231204_1410 20231204_1420	0.1	298 192
20231204_1420 20231204_1430	1.2	322
20231204_1440	0.1 0.1	208
20231204_1440	0.1	161
20231204_1430	0.1	189
20231204 1510	0.2	270
20231204_1510	0.1	178
20231204_1530	0.1	277
20231204_1530	0.6	156
20231204_1550	0.6	107
20231204_1600	0.4	112
20231204_1610	0.1	57
20231204 1620	0.1	63
20231204_1630	0.3	45
20231204_1640	0.1	113
20231204_1650	0.1	43
20231204_1700	0.1	56
20231204_1710	0.1	10
20231204_1720	0.1	157
20231204_1730	0.1	125
20231204_1740	0.1	134
20231204_1750	0.1	137
20231204_1800 20231204_1810	0.1	106
	0.1 0.1	162
20231204_1820 20231204_1830	0.1	77 347
20231204_1840	0.1	8
20231204_1850	0.1	65
20231204 1900	0.1	317
20231204_1910	0.1	328
20231204 1920	0.1	69
20231204 1930	0.1	180
20231204 1940	0.1	160
20231204_1950	0.2	69
20231204_2000	0.8	55
20231204_2010	0.1	80
20231204_2020	0.1	236
20231204_2030	0.1	201
20231204_2040	0.3	152
20231204 2050	0.3	140
20231204_2100	0.1	178
20231204_2110	0.1	93
20231204_2120 20231204_2130	0.1 0.1	108 123
20231204_2130 20231204_2140	0.1	60
20231204_2140	0.2	144
20231204_2130	0.1	94
20231204_2200	0.1	154
20231204_2210	0.1	162
20231204_2230	0.1	109
20231204_2240	0.1	81
20231204_2250	0.1	63
20231204_2300	0.1	46
20231204_2310	0.7	47
20231204_2320	0.6	131
20231204_2330	0.1	73
20231204_2340	0.1	50
20231204_2350	0.1	65

D + 0 FF:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		19
20231205 0000 20231205 0010	0.3	292
20231205_0010	0.1 0.1	123
		117
20231205_0030	0.1	
20231205_0040 20231205_0050	0.1	150
	0.1	133
20231205_0100	0.1	139
20231205_0110	0.1	124
20231205_0120	0.1	346
20231205_0130	0.1	109
20231205_0140	0.1	306
20231205_0150	0.1	154
20231205_0200	0.1	81
20231205_0210	0.1	18
20231205_0220	0.1	118
20231205_0230	0.1	145
20231205_0240	0.1	275
20231205_0250	0.1	189
20231205_0300	0.1	89
20231205_0310	0.1	120
20231205_0320	0.1	144
20231205_0330	0.1	65
20231205_0340	0.1	98
20231205_0350	0.1	160
20231205_0400	0.1	145
20231205_0410	0.1	109
20231205_0420	0.2	53
20231205_0430	0.1	34
20231205_0440	0.1	66
20231205_0450	0.1	309
20231205 0500	0.1	348
20231205_0510	0.1	63
20231205_0520	0.1	60
20231205_0530	0.1	25
20231205 0540	0.1	351
20231205_0550	0.1	10
20231205 0600	0.1	65
20231205 0610	0.1	135
20231205_0620	0.1	79
20231205_0630	0.1	98
20231205_0640	0.1	67
20231205 0650	0.1	68
20231205_0700	0.1	87
20231205_0710	0.1	163
20231205_0720	0.1	93
20231205_0720	0.1	48
20231205_0740	0.1	189
20231205_0740	0.1	180
20231205_0750	0.1	112
20231205_0810	0.1	92
20231205_0820	0.1	149
20231205_0830	0.1	129
20231205_0840	0.1	148
20231205_0850	0.1	98
20231205_0900	0.1	230
20231205_0900	0.1	63
20231205_0910	0.1	91
20231205_0930	0.1	105
20231205_0940	0.1	232
20231205_0940		200
20231205_1000	0.1 0.1	214
	0.1	
20231205_1010 20231205_1020		263 147
20231205_1020	0.2	
	0.1	206
	0.1	176
20231205_1050	0.3	142
20231205_1100	0.5	227
20231205_1110	1.5	192
20231205_1120	0.5	120
20231205_1130	1.5	322
20231205_1140	0.4	162
20231205_1150	0.1	111

Dota & Tima	I	
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		242
20231205_1200	0.2	343
20231205_1210	0.1	263
20231205_1220	0.1	223
20231205_1230	1.5	177
20231205_1240	3.1	160
20231205_1250	0.1	144
20231205_1300	0.1	186
20231205 1310	0.8	219
20231205 1320	2.5	246
20231205 1330	1.6	176
20231205_1340	0.7	178
20231205 1350	0.1	190
20231205_1400	0.1	79
20231205_1410	0.1	256
20231205_1410		259
	0.1	
20231205_1430	0.1	16
20231205_1440	0.7	113
20231205_1450	0.1	332
20231205_1500	0.1	61
20231205_1510	0.1	231
20231205_1520	0.1	235
20231205_1530	0.3	215
20231205_1540	0.8	220
20231205_1550	1.8	163
20231205_1600	0.1	253
20231205 1610	0.7	194
20231205 1620	1.1	180
20231205_1630	0.2	198
20231205_1640	0.2	205
20231205_1040		156
	0.1	
20231205_1700	0.1	181
20231205_1710	0.1	122
20231205_1720	0.1	182
20231205_1730	0.1	44
20231205_1740	0.1	66
20231205_1750	0.1	78
20231205_1800	0.1	57
20231205_1810	0.1	28
20231205_1820	0.1	70
20231205_1830	0.1	3
20231205 1840	0.1	37
20231205 1850	0.1	73
20231205 1900	0.1	21
20231205_1910	0.1	0
20231205 1920	0.1	99
20231205_1930	0.1	26
20231205_1940	0.1	52
20231205_1940	0.1	38
20231205_1930	0.1	21
20231205_2010	0.1	330
20231205_2020	0.1	5
20231205_2030	0.1	130
20231205_2040	0.1	63
20231205_2050	0.1	53
20231205_2100	0.1	17
20231205_2110	0.1	32
20231205_2120	0.1	6
20231205_2130	0.1	193
20231205_2140	0.1	96
20231205_2150	0.1	66
20231205_2200	0.1	5
20231205 2210	0.1	44
20231205 2220	0.1	128
20231205_2230	0.1	80
20231205_2240	0.1	62
20231205 2250	0.1	57
20231205_2230	0.1	5
20231205_2300		57
	0.1	
20231205_2320	0.1	58
20231205_2330	0.1	69
20231205_2340	0.1	104
20231205_2350	0.1	35

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM) 20231206_0000	0.1	50
20231206_0000	0.1	74
20231206_0020	0.1	94
20231206_0030	0.1	114
20231206_0040	0.1	243
20231206_0050	0.1	63
20231206_0100	0.1	87
20231206_0110	0.1	64
20231206_0120	0.1 0.1	8 162
20231206_0130 20231206_0140	0.1	63
20231206_0150	0.1	345
20231206 0200	0.1	195
20231206_0210	0.1	136
20231206_0220	0.1	117
20231206_0230	0.1	127
20231206_0240	0.1	150
20231206_0250	0.1	219
20231206_0300	0.1	171
20231206_0310 20231206_0320	0.1 0.1	185 28
20231206_0320	0.1	28
20231206_0330	0.1	66
20231206_0340	0.1	50
20231206_0400	0.1	323
20231206_0410	0.1	109
20231206_0420	0.1	98
20231206_0430	0.1	35
20231206_0440	0.1	326
20231206_0450	0.1	67
20231206_0500	0.1	225
20231206_0510	0.1	139
20231206_0520	0.1 0.1	43
20231206_0530 20231206_0540	0.1	126
20231206_0540	0.1	61
20231206_0600	0.1	298
20231206_0610	0.1	339
20231206_0620	0.1	263
20231206_0630	0.1	108
20231206_0640	0.1	55
20231206_0650	0.2	59
20231206_0700	0.1	212
20231206_0710	0.1	128
20231206_0720 20231206_0730	0.1 0.1	165 80
20231206_0740	0.1	219
20231206_0750	0.1	190
20231206 0800	0.1	241
20231206_0810	0.1	193
20231206_0820	0.1	231
20231206_0830	0.1	267
20231206_0840	0.1	128
20231206_0850	0.1	209
20231206_0900	0.1	166
20231206_0910 20231206_0920	0.1 1.1	129 198
20231206_0920	0.2	232
20231206_0940	0.1	210
20231206_0940	0.1	257
20231206_1000	0.1	139
20231206_1010	0.3	70
20231206_1020	1.0	74
20231206_1030	0.1	83
20231206_1040	0.6	126
20231206_1050	0.1	180
20231206_1100	0.1	46
20231206_1110 20231206_1120	0.1	117
20231206_1120	1.9 0.2	93
20231206_1140	0.2	107
20231206_1140	0.1	296
20251200_1150	0.1	270

(YYYMMBB HHMM) wind speed (ins) wind Direction (Degre VYYMMBB HHMM) wind speed (ins) wind Direction (Degre VYYMMBB HHMM) wind speed (ins) wind Direction (Degre VYYMMBB LIREM) wind Direction (Degre VYMMBB LIREM) wind Direction (Degre VYMBB LIREM) wind Direct	Date & Time	WE 10 1/ ()	W. 15:
20231206 1210	(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231206 1220			
20231206 1230			
20231206 1240			
20231206 1300   0.1   330   20231206 1310   0.5   90   0.5   90   0.5   90   20231206 1320   0.1   105   20231206 1320   0.1   105   20231206 1320   0.1   105   20231206 1340   1.6   52   20231206 1350   0.1   66   52   20231206 1400   0.9   352   20231206 1400   0.9   352   20231206 1400   0.1   178   20231206 1430   0.1   42   20231206 1440   0.3   45   20231206 1440   0.3   45   20231206 1500   0.2   324   20231206 1500   0.2   324   20231206 1500   0.2   316   20231206 1500   0.2   316   20231206 1500   0.2   316   20231206 1500   0.2   315   20231206 1500   0.2   315   20231206 1500   0.2   315   20231206 1500   0.2   315   20231206 1500   0.2   315   20231206 1500   0.2   315   20231206 1500   0.2   315   20231206 1500   0.2   315   20231206 1500   0.2   315   20231206 1500   0.2   315   20231206 1500   0.3   337   20231206 1500   0.3   337   20231206 1600   0.8   32   20231206 1600   0.8   32   20231206 1600   0.8   32   20231206 1600   0.8   32   20231206 1600   0.1   344   20231206 1600   0.1   344   20231206 1600   0.1   32   26   20231206 1600   0.1   207   20231206 1700   0.6   159   20231206 1700   0.6   159   20231206 1700   0.6   159   20231206 1700   0.1   107   20231206 1700   0.1   107   20231206 1700   0.1   107   20231206 1700   0.1   107   20231206 1700   0.1   107   20231206 1700   0.1   107   20231206 1700   0.1   107   20231206 1700   0.1   107   20231206 1700   0.1   107   20231206 1800   0.1   152   20231206 1800   0.1   152   20231206 1800   0.1   152   20231206 1800   0.1   155   20231206 1800   0.1   155   20231206 1800   0.1   155   20231206 1900   0.1   155   20231206 1900   0.1   155   20231206 1900   0.1   155   20231206 1900   0.1   155   20231206 1900   0.1   155   20231206 1900   0.1   155   20231206 2000   0.1   228   20231206 2000   0.1   228   20231206 2000   0.1   228   20231206 2000   2.7   268   20231206 2000   2.7   268   20231206 2000   2.7   268   20231206 2000   2.7   268   20231206 2000   2.7   268   20231206 2000   2.7   268   20231206 2000   2.7   268   2023120			
20231206 1300			
20231206 1310			
20231206 1330			
2023 206   1340			105
2023 206   1400   0.9   352   2023 206   1400   1.0   63   2023 206   1410   1.0   63   2023 206   1420   0.1   178   2023 206   1430   0.1   42   2023 206   1430   0.1   42   2023 206   1450   0.5   15   2023 206   1500   0.2   324   2023 206   1500   0.2   316   2023 206   1500   0.2   316   2023 206   1520   0.7   66   2023 206   1530   0.6   62   2023 206   1540   0.2   315   2023 206   1550   0.3   337   2023 206   1550   0.3   337   2023 206   1500   0.8   32   2023 206   1600   0.8   32   2023 206   1600   0.8   32   2023 206   1630   1.2   26   2023 206   1630   1.2   26   2023 206   1630   1.2   26   2023 206   1650   0.1   82   2023 206   1650   0.1   74   2023 206   1700   0.6   159   2023 206   1700   0.6   159   2023 206   1720   0.1   81   2023 206   1730   0.1   81   2023 206   1750   0.1   81   2023 206   1800   0.1   193   2023 206   1800   0.1   152   2023 206   1800   0.1   152   2023 206   1800   0.1   152   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   155   2023 206   1800   0.1   18   2023 206   1900   0.1   8   2023 206   1900   0.1   8   2023 206   1900   0.1   32   2023 206   2000   0.1   33   2023 206   2000   0.1   32   2023 206   2000   0.1   32   2023 206   2000   0.1   32   2023 206   2000   0.1   32   2023 206   2000   0.1   32   2023 206   2000   0.1   32   2023 206  2000   0.1   17   2023 206  2000   0.1   17   2023 206  2000   0.1   17   2023 206  2000   0.1   17   2023 206  2000   0.1   19   2023 206  2000   0.1   19   2023 206  2000   0.1   19   2023 206  2000   0.			
2023 206   1400   0.9   352			
20231206 1410			
2023 206   1420			
20231206 1440			
20231206 1440			
20231206 1450			
20231206 1510         0.2         316           20231206 1520         0.7         66           20231206 1530         0.6         62           20231206 1540         0.2         315           20231206 1600         0.8         32           20231206 1610         0.1         344           20231206 1630         1.2         26           20231206 1630         1.2         26           20231206 1640         0.1         207           20231206 1650         0.1         207           20231206 1650         0.1         207           20231206 1650         0.1         74           20231206 1700         0.6         159           20231206 1700         0.6         159           20231206 1720         0.1         107           20231206 1730         0.1         81           20231206 1730         0.1         81           20231206 1750         0.1         193           20231206 1800         0.1         193           20231206 1800         0.1         152           20231206 1800         0.1         132           20231206 1830         0.1         132           2023120			
20231206 1510         0.2         316           20231206 1520         0.7         66           20231206 1530         0.6         62           20231206 1540         0.2         315           20231206 1550         0.3         337           20231206 1610         0.1         344           20231206 1620         0.1         82           20231206 1630         1.2         26           20231206 1640         0.1         207           20231206 1650         0.1         74           20231206 1700         0.6         159           20231206 1710         0.1         107           20231206 1730         0.1         81           20231206 1730         0.1         81           20231206 1750         0.1         193           20231206 1800         0.1         193           20231206 1800         0.1         193           20231206 1810         1.9         342           20231206 1830         0.1         132           20231206 1830         0.1         131           20231206 1840         0.1         132           20231206 1850         0.1         155           202312			
20231206 1540         0.6         62           20231206 1540         0.2         315           20231206 1550         0.3         337           20231206 1600         0.8         32           20231206 1610         0.1         344           20231206 1630         1.2         26           20231206 1640         0.1         207           20231206 1700         0.6         159           20231206 1770         0.1         107           20231206 1720         0.1         61           20231206 1730         0.1         81           20231206 1730         0.1         81           20231206 1740         1.7         324           20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1800         0.1         152           20231206 1830         0.1         152           20231206 1830         0.1         152           20231206 1830         0.1         132           20231206 1830         0.1         132           20231206 1850         0.1         155           20231206 1850         0.1         155           20231	20231206_1510		
20231206 1540         0.2         315           20231206 1550         0.3         337           20231206 1600         0.8         32           20231206 1610         0.1         344           20231206 1620         0.1         82           20231206 1630         1.2         26           20231206 1650         0.1         74           20231206 1700         0.6         159           20231206 1710         0.1         107           20231206 1730         0.1         61           20231206 1730         0.1         81           20231206 1750         0.1         193           20231206 1800         0.1         193           20231206 1800         0.1         152           20231206 1800         0.1         132           20231206 1830         0.1         132           20231206 1830         0.1         132           20231206 1840         0.1         132           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1900         0.1         155           20231206 1900         0.1         155           20231			
20231206 1550         0.3         337           20231206 1600         0.8         32           20231206 1610         0.1         344           20231206 1620         0.1         82           20231206 1630         1.2         26           20231206 1650         0.1         74           20231206 1700         0.6         159           20231206 1710         0.1         107           20231206 1720         0.1         61           20231206 1730         0.1         81           20231206 1750         0.1         193           20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1830         0.1         132           20231206 1840         0.1         132           20231206 1850         0.1         131           20231206 1850         0.1         131           20231206 1850         0.1         155           20231206 1900         0.1         8           20231206 1900         0.1         8           20231206			
20231206 1600         0.8         32           20231206 1610         0.1         344           20231206 1620         0.1         82           20231206 1630         1.2         26           20231206 1650         0.1         207           20231206 1700         0.6         159           20231206 1700         0.1         107           20231206 1720         0.1         107           20231206 1720         0.1         61           20231206 1730         0.1         81           20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1830         0.1         132           20231206 1830         0.1         132           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1930         0.1         228           2023120			
20231206 1610         0.1         344           20231206 1620         0.1         82           20231206 1630         1.2         26           20231206 1640         0.1         207           20231206 1700         0.6         159           20231206 1710         0.1         107           20231206 1730         0.1         61           20231206 1730         0.1         81           20231206 1740         1.7         324           20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1820         3.8         64           20231206 1830         0.1         132           20231206 1840         0.1         311           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1900         0.1         155           20231206 1900         0.1         155           20231206 1900         0.1         155           20231206 1900         0.1         8           20231206 1930         0.1         22           2023120			
20231206 1620         0.1         82           20231206 1630         1.2         26           20231206 1640         0.1         207           20231206 1650         0.1         74           20231206 1700         0.6         159           20231206 1710         0.1         107           20231206 1730         0.1         81           20231206 1740         1.7         324           20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1810         1.9         342           20231206 1820         3.8         64           20231206 1830         0.1         132           20231206 1840         0.1         311           20231206 1850         0.1         132           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1900         0.1         8           20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1930         0.1         228           20231206			
20231206 1630			
20231206 1640         0.1         207           20231206 1650         0.1         74           20231206 1700         0.6         159           20231206 1710         0.1         107           20231206 1730         0.1         81           20231206 1730         0.1         81           20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1820         3.8         64           20231206 1830         0.1         132           20231206 1840         0.1         311           20231206 1850         0.1         155           20231206 1900         0.1         155           20231206 1900         0.1         155           20231206 1900         0.1         8           20231206 1900         0.1         8           20231206 1900         0.1         8           20231206 1900         0.5         221           20231206 1930         0.1         228           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206			
20231206 1650         0.1         74           20231206 1700         0.6         159           20231206 1710         0.1         107           20231206 1720         0.1         61           20231206 1730         0.1         81           20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1820         3.8         64           20231206 1830         0.1         132           20231206 1840         0.1         311           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1910         4.5         49           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 2090         0.5         221           20231206 2000         0.1         50           20231206			
20231206 1700         0.6         159           20231206 1710         0.1         107           20231206 1720         0.1         61           20231206 1730         0.1         81           20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1820         3.8         64           20231206 1830         0.1         132           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 1950         0.6         337           20231206 2010         1.8         17           20231206 2010         1.8         17           20231206 2010         1.8         17           20231206 2010         1.8         17           20231206			
20231206 1710         0.1         107           20231206 1720         0.1         61           20231206 1730         0.1         81           20231206 1740         1.7         324           20231206 1800         0.1         193           20231206 1810         1.9         342           20231206 1810         1.9         342           20231206 1830         0.1         132           20231206 1840         0.1         311           20231206 1850         0.1         155           20231206 1900         0.1         155           20231206 1910         4.5         49           20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 1950         0.6         337           20231206 2000         0.1         50           20231206 2000         0.1         50           20231206 2000         0.1         50           20231206 2000         0.1         50           20231206 2000         0.1         50           20231206 2000         0.1         50           20231206			
20231206 1720         0.1         61           20231206 1730         0.1         81           20231206 1740         1.7         324           20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1820         3.8         64           20231206 1830         0.1         132           20231206 1850         0.1         31           20231206 1850         0.1         155           20231206 1850         0.1         155           20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 2040         0.1         50           20231206 2010         1.8         17           20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 20			
20231206 1740         1.7         324           20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1830         0.1         132           20231206 1840         0.1         311           20231206 1850         0.1         155           20231206 1900         0.1         155           20231206 1910         4.5         49           20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 1950         0.6         337           20231206 2000         0.1         50           20231206 2000         0.1         50           20231206 2000         0.1         50           20231206 2000         0.1         50           20231206 2000         0.1         50           20231206 2000         0.2         63           20231206 2000         0.2         63           20231206 2030         0.2         63           20231206 2030         0.2         63           20231206		0.1	61
20231206 1750         0.1         193           20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1820         3.8         64           20231206 1830         0.1         132           20231206 1850         0.1         311           20231206 1850         0.1         155           20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 2090         0.1         50           20231206 2000         0.1         50           20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2010         2.3         293           20231206 2050         4.3         19           20231206 2050         4.3         19           20231206 20	20231206_1730	0.1	81
20231206 1800         0.1         152           20231206 1810         1.9         342           20231206 1820         3.8         64           20231206 1830         0.1         132           20231206 1840         0.1         311           20231206 1900         0.1         155           20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 1950         0.6         337           20231206 2000         0.1         50           20231206 2010         1.8         17           20231206 2010         1.8         17           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2			
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20231206 1820         3.8         64           20231206 1830         0.1         132           20231206 1840         0.1         311           20231206 1850         0.1         155           20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 2000         0.6         337           20231206 2010         1.8         17           20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2150         0.2         67           20231206 22			
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20231206 1840         0.1         311           20231206 1850         0.1         155           20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 1950         0.6         337           20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2030         0.2         63           20231206 2050         4.3         19           20231206 2050         2.3         293           20231206 2100         2.3         293           20231206 2100         2.3         293           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         37           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 22			
20231206 1850         0.1         155           20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 2000         0.1         50           20231206 2000         0.1         50           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2010         2.3         293           20231206 2030         0.2         63           20231206 2030         0.2         3           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 210         0.4         262           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2140         0.2         37           20231206 2150         0.2         67           20231206 2210<			
20231206 1900         0.1         8           20231206 1910         4.5         49           20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 2000         0.1         50           20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2010         2.3         293           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2200         0.2         37           20231206 2200         0.2         37           20231206 2200         0.1         17           20231206 2200 </td <td></td> <td></td> <td></td>			
20231206 1910         4.5         49           20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 2000         0.6         337           20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2050         4.3         19           20231206 2010         2.3         293           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         37           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2250			
20231206 1920         0.5         221           20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 1950         0.6         337           20231206 2000         0.1         50           20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         17           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2240         0.1         17           20231206 2300			
20231206 1930         0.1         228           20231206 1940         3.3         348           20231206 2000         0.6         337           20231206 2000         0.1         50           20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2230         0.1         17           20231206 2250         0.1         17           20231206 2250         0.1         17           20231206 2300<			
20231206 1950         0.6         337           20231206 2000         0.1         50           20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2210         0.1         67           20231206 2210         0.1         17           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2300         0.1         53           20231206 2310         0.1         129           20231206 2310         0.1         157           20231206 2310         0.1         159	20231206_1930		
20231206 2000         0.1         50           20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         129           20231206 2310         0.1         57           20231206 2320         0.1         57           20231206 2320 <td>20231206_1940</td> <td></td> <td></td>	20231206_1940		
20231206 2010         1.8         17           20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2200         0.1         67           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         129           20231206 2310         0.1         57           20231206 2310         0.1         57           20231206 2320         0.1         57           20231206 2310 <td></td> <td></td> <td></td>			
20231206 2020         2.7         268           20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         53           20231206 2310         0.1         129           20231206 2310         0.1         57           20231206 2320         0.1         45			
20231206 2030         0.2         63           20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         129           20231206 2310         0.1         57           20231206 2320         0.1         45			
20231206 2040         0.2         79           20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         129           20231206 2310         0.1         57           20231206 2310         0.1         57           20231206 2320         0.1         45			
20231206 2050         4.3         19           20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         129           20231206 2310         0.1         57           20231206 2320         0.1         57           20231206 2320         0.1         45			
20231206 2100         2.3         293           20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         129           20231206 2310         0.1         57           20231206 2320         0.1         45			
20231206 2110         0.1         328           20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         129           20231206 2310         0.1         57           20231206 2320         0.1         45		2.3	
20231206 2120         0.4         262           20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         129           20231206 2310         0.1         57           20231206 2320         0.1         45			
20231206 2130         3.7         8           20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         129           20231206 23100         0.1         57           20231206 2320         0.1         45			
20231206 2140         0.2         309           20231206 2150         0.2         67           20231206 2200         0.2         37           20231206 2210         0.1         67           20231206 2220         0.1         17           20231206 2230         0.1         32           20231206 2240         0.1         17           20231206 2250         0.1         53           20231206 2300         0.1         129           20231206 2310         0.1         57           20231206 2320         0.1         45			
20231206 2200     0.2     37       20231206 2210     0.1     67       20231206 2220     0.1     17       20231206 2230     0.1     32       20231206 2240     0.1     17       20231206 2250     0.1     53       20231206 2300     0.1     129       20231206 2310     0.1     57       20231206 2320     0.1     45			
20231206 2210 0.1 67 20231206 2220 0.1 17 20231206 2230 0.1 32 20231206 2240 0.1 17 20231206 2250 0.1 53 20231206 2250 0.1 53 20231206 2300 0.1 129 20231206 2310 0.1 57 20231206 2310 0.1 57 20231206 2320 0.1 57			
20231206 2220     0.1     17       20231206 2230     0.1     32       20231206 2240     0.1     17       20231206 2250     0.1     53       20231206 2300     0.1     129       20231206 2310     0.1     57       20231206 2320     0.1     45			51
20231206_2230     0.1     32       20231206_2240     0.1     17       20231206_2250     0.1     53       20231206_2300     0.1     129       20231206_2310     0.1     57       20231206_2320     0.1     45			
20231206     2240     0.1     17       20231206     2250     0.1     53       20231206     2300     0.1     129       20231206     2310     0.1     57       20231206     2320     0.1     45			
20231206     2250     0.1     53       20231206     2330     0.1     129       20231206     2310     0.1     57       20231206     2320     0.1     45			
20231206 2300 0.1 129 20231206 2310 0.1 57 20231206 2320 0.1 45			
20231206 2310 0.1 57 20231206 2320 0.1 45	20231200_2230		
20231206_2320	20231206_2300		
	20231206_2320	0.1	45
20231206_2340			
20231206_2350			

D + 0 FF:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231207 0000 20231207 0010	0.1	38 41
20231207_0010 20231207_0020	0.1 0.1	38
20231207_0020	0.1	68
20231207_0040	0.1	63
20231207_0050	0.1	36
20231207_0100	0.1	8
20231207_0110	0.1	109
20231207_0120	0.1	352
20231207_0130	0.1	57
20231207_0140	0.1	52
20231207_0150	0.1	55 50
20231207_0200	0.1	53
20231207_0210	0.1	34
20231207_0220	0.1	58
20231207_0230	0.1	43
20231207_0240	0.1	33
20231207_0250	0.1	331
20231207_0300	0.1	53
20231207_0310	0.1	57
20231207_0320	0.1	37
20231207_0330	0.1	47
20231207_0340	0.1	40
20231207_0350	0.1	58
20231207_0400	0.1	42
20231207_0410	0.1	27
20231207_0420	0.1	36
20231207_0430	0.1	45
20231207_0440	0.1	37
20231207_0450	0.1	27
20231207_0500	0.1	17
20231207_0510	0.1	45
20231207_0520	0.1	52
20231207_0530	0.1	53
20231207 0540	0.1	59
20231207_0550	0.1	48
20231207_0600	0.1	59
20231207 0610	0.1	18
20231207_0620	0.1	47
20231207_0630	0.1	28
20231207_0640	0.1	30
20231207 0650	0.1	38
20231207_0700	0.1	45
20231207_0710	0.1	39
20231207_0720	0.1	42
20231207_0730	0.1	88
20231207_0740	0.1	3
20231207_0750	0.1	55
20231207_0790	0.1	86
20231207_0810	0.1	49
20231207_0820	0.1	115
20231207_0830	0.1	89
20231207 0840	0.1	140
20231207_0850	0.1	150
20231207_0830	0.1	121
20231207_0900	0.1	136
20231207_0910	0.1	143
20231207_0920	0.1	172
20231207_0930	0.4	159
20231207_0940	0.6	163
20231207_0930	0.0	202
20231207_1010	0.1	218
20231207_1010	0.3	121
20231207_1020	1.1	129
20231207_1030	0.2	181
20231207_1040	1.1	210
	0.2	194
	1.5	201
20231207_1120	0.9	178
20231207_1130	2.9	147
20231207_1140	1.4	211
20231207_1150	3	212

Data & Tima		
Date & Time (YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231207 1200	2.2	305
20231207_1210	0.5	205
20231207_1210	0.3	183
20231207 1230	0.1	56
20231207 1240	0.6	135
20231207_1250	1.6	253
20231207_1300	0.2	153
20231207 1310	0.3	129
20231207_1320	0.1	333
20231207_1330	0.8	90
20231207_1340	0.2	182
20231207_1350	3	172
20231207_1400	0.1	146
20231207_1410	0.5	98
20231207_1420	0.1	331
20231207_1430	1.2	294
20231207_1440	0.3	157
20231207_1450	0.5	5
20231207_1500	1.7	193
20231207_1510	0.1	136
20231207_1520	0.1	95
20231207_1530	1.5	109
20231207_1540	0.1	183
20231207_1550	0.1	137
20231207_1600	0.1	15
20231207_1610	0.1	66
20231207_1620	0.1	71
20231207_1630 20231207_1640	1.9 0.1	83 207
20231207_1640 20231207_1650	0.1	47
20231207_1030	0.2	340
20231207_1700	0.1	81
20231207_1710	0.1	127
20231207_1720	0.1	50
20231207 1740	0.1	73
20231207 1750	0.1	48
20231207_1750	0.1	7
20231207 1810	0.1	297
20231207_1820	0.1	8
20231207 1830	0.1	304
20231207 1840	0.1	351
20231207 1850	0.1	340
20231207 1900	0.1	331
20231207_1910	0.1	133
20231207_1920	0.1	83
20231207_1930	0.1	16
20231207_1940	0.1	21
20231207_1950	0.1	66
20231207_2000	0.1	57
20231207_2010	0.1	44
20231207_2020	0.1	37
20231207_2030	0.1	35
20231207_2040	0.1	12
20231207_2050	0.1	52
20231207_2100	0.1	221
20231207_2110	0.1	108
20231207_2120	0.1	33
20231207_2130	0.1	9
20231207_2140	0.1	225
20231207_2150	0.1	153
20231207_2200	0.1	47
20231207_2210 20231207_2220	0.1	225 73
20231207_2220 20231207_2230	0.1 0.1	50
20231207_2230	0.1	50
20231207_2240	0.1	59
20231207_2230	0.1	38
20231207_2300	0.1	86
20231207_2310	0.1	98
20231207_2320	0.1	35
20231207_2330	0.1	95
20231207_2340	0.1	36
20231201_2330	0.1	30

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM) 20231208 0000	0.1	46
20231208_0000 20231208_0010	0.1	313
20231208_0020	0.1	48
20231208_0030	0.1	45
20231208_0040	0.1	87
20231208_0050	0.1	221
20231208_0100	0.1	81
20231208_0110	0.1	58
20231208_0120	0.1	257
20231208 0130	0.1	51
20231208_0140	0.1	47
20231208_0150 20231208_0200	0.1	165
20231208_0200 20231208_0210	0.1	94 123
20231208_0220	0.1 0.1	95
20231208_0220	0.1	60
20231208_0240	0.1	39
20231208_0250	0.1	196
20231208 0300	0.1	213
20231208_0310	0.1	52
20231208_0320	0.1	52
20231208_0330	0.1	12
20231208_0340	0.1	52
20231208_0350	0.1	97
20231208_0400	0.1	134
20231208_0410	0.1	120
20231208_0420 20231208_0430	0.1	179 47
20231208 0440	0.1 0.1	24
20231208_0450	0.1	67
20231208_0500	0.1	32
20231208_0510	0.1	145
20231208_0520	0.1	52
20231208_0530	0.1	49
20231208_0540	0.1	36
20231208_0550	0.1	82
20231208_0600	0.1	84
20231208_0610	0.1	246
20231208_0620	0.1	252
20231208_0630	0.1	54
20231208_0640 20231208_0650	0.1 0.1	24 125
20231208_0700	0.1	315
20231208_0710	0.1	121
20231208_0710	0.1	181
20231208 0730	0.1	110
20231208_0740	0.1	168
20231208_0750	0.1	270
20231208_0800	0.1	216
20231208_0810	0.1	334
20231208_0820	0.1	203
20231208_0830	0.1	119
20231208_0840	0.1	141
20231208_0850 20231208_0900	0.1 0.1	154 140
20231208_0900	0.1	110
20231208_0910	0.1	153
20231208_0930	0.1	76
20231208_0940	1.5	116
20231208_0950	0.1	349
20231208_1000	0.2	46
20231208_1010	0.1	167
20231208_1020	0.1	194
20231208_1030	0.1	56
20231208_1040	0.3	2
20231208_1050	0.1	76
20231208_1100 20231208_1110	0.1 0.1	110 225
20231208_1110	0.1	284
20231208_1120	0.1	291
20231208_1140	0.4	99
20231208_1150	0.1	331

D . 0 FF		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		· = ·
20231208_1200	0.1 0.1	6 305
20231208_1210 20231208_1220	2.6	10
20231208_1220	0.1	134
20231208_1230	0.1	46
20231208_1240	0.5	2
20231208_1230	0.1	189
20231208_1310	0.2	12
20231208_1310	0.1	220
20231208 1330	6.3	42
20231208_1340	0.1	324
20231208_1350	0.2	63
20231208 1400	0.1	92
20231208_1410	4.8	162
20231208 1420	0.1	82
20231208_1430	0.1	47
20231208 1440	0.2	75
20231208_1450	1.4	37
20231208_1500	0.4	161
20231208_1510	0.2	133
20231208_1520	0.2	114
20231208_1530	0.4	197
20231208_1540	0.3	24
20231208_1550	0.3	131
20231208_1600	1.2	169
20231208_1610	0.2	174
20231208_1620	5.2	143
20231208_1630	0.2	14
20231208_1640	0.1	58
20231208_1650	0.1	83
20231208_1700	0.1	138
20231208_1710	1.4	127
20231208_1720	0.3	120
20231208_1730	0.1	110
20231208_1740	0.1	140
20231208_1750	0.1	105
20231208_1800 20231208_1810	0.1	24 51
20231208_1810 20231208_1820	0.1 0.1	37
20231208_1820	0.7	4
20231208_1840	0.1	188
20231208_1840	0.1	105
20231208_1900	0.1	300
20231208_1910	0.1	7
20231208_1920	0.1	53
20231208_1930	0.1	58
20231208_1940	0.1	135
20231208_1950	0.1	350
20231208 2000	0.1	217
20231208_2010	0.1	23
20231208_2020	0.1	59
20231208 2030	0.1	27
20231208_2040	0.2	92
20231208_2050	0.1	276
20231208_2100	0.1	100
20231208_2110	1.3	137
20231208_2120	0.1	267
20231208_2130	0.1	123
20231208_2140	0.1	290
20231208_2150	0.1	71
20231208_2200	0.1	185
20231208_2210	4.2	303
20231208_2220	0.1	240
20231208_2230	1.1	42
20231208_2240	1.9	332
20231208_2250	0.3	110
20231208_2300	0.1	66
20231208_2310	0.6	57
20231208_2320	0.1	56
20231208_2330	1	13
20231208_2340	0.1	14
20231208_2350	0.1	335

D + 0 FF:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)	1.5	00
20231209_0000 20231209_0010	0.8	88
20231209_0010	0.1	342
20231209_0030	0.1	271
20231209 0030	0.1	118
20231209 0040	0.1	36
20231209 0050	0.4	193
20231209_0100	0.1	34
20231209_0110	0.1	136
20231209 0120	0.1	5
20231209_0130	0.1	99
20231209_0140	0.1	75
20231209 0150	0.1	280
20231209_0200	0.1	50
20231209_0210	0.1	101
20231209_0220	0.1	327
20231209_0230	0.1	96
20231209_0240	0.1	71
20231209_0250	0.4	89
20231209_0300	0.1	47
20231209_0310	0.1	103
20231209_0320	0.1	337
20231209_0330	0.1	14
20231209_0340	0.1	215
20231209_0350	0.1	40
20231209_0400	0.2	88
20231209_0410	0.1	144
20231209_0420	0.1	287
20231209_0430	0.1	116
20231209_0440 20231209_0450	0.1	280 54
	0.1	27
	0.1 0.1	89
20231209_0510 20231209_0520	0.1	288
20231209_0520	0.1	97
20231209_0540	0.1	146
20231209_0550	0.1	317
20231209 0600	0.1	70
20231209_0610	0.1	96
20231209_0620	0.1	298
20231209_0630	0.1	54
20231209_0640	0.1	48
20231209_0650	0.1	37
20231209_0700	0.1	91
20231209_0710	0.1	43
20231209_0720	0.1	183
20231209_0730	0.1	220
20231209_0740	0.1	26
20231209_0750	0.1	153
20231209_0800	0.1	67
20231209_0810	0.1	330
20231209_0820	0.2	300
20231209_0830	0.1	103
20231209_0840 20231209_0850	0.1 0.1	75 66
20231209_0830	0.1	115
20231209_0900	0.1	39
20231209_0910	1.6	342
20231209_0930	0.1	62
20231209 0940	0.5	352
20231209 0950	0.7	340
20231209_1000	0.1	130
20231209_1010	1.2	320
20231209_1020	1.6	347
20231209_1030	0.4	45
20231209_1040	1.9	210
20231209_1050	1	24
20231209_1100	0.9	304
20231209_1110	1.1	219
20231209_1120	0.1	330
20231209_1130	0.1	54
20231209_1140	0.5	239

Dota & Time	ı	
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		50
20231209_1200 20231209_1210	0.7	50 52
	0.1	
20231209_1220	1	72
20231209_1230	1.5	99
20231209_1240	6.6	85
20231209_1250	0.5	120
20231209_1300	0.3	333
20231209_1310	2.4	323
20231209 1320	0.1	203
20231209 1330	0.4	1
20231209_1340	0.1	7
20231209 1350	3	180
20231209 1400	0.1	148
20231209 1410	0.1	342
20231209 1420	0.1	343
20231209_1420	0.6	92
20231209_1440	0.1	155
20231209_1450	2.6	156
20231209 1500	1.4	28
20231209_1510	1.6	30
20231209_1520	0.2	141
20231209_1530	3.2	111
20231209_1540	2.1	151
20231209_1550	0.4	190
20231209_1600	0.1	283
20231209_1610	0.2	75
20231209 1620	1.1	165
20231209_1630	0.1	196
20231209 1640	0.7	100
20231209 1650	0.9	145
20231209 1700	0.1	314
20231209_1710	0.1	230
20231209_1710	0.1	281
		101
	0.1	
20231209_1740	0.1	91
20231209_1750	0.1	101
20231209_1800	0.4	133
20231209_1810	0.2	150
20231209_1820	0.2	71
20231209_1830	0.3	111
20231209_1840	0.1	91
20231209_1850	1.8	123
20231209_1900	0.2	143
20231209_1910	0.4	196
20231209_1920	0.8	93
20231209_1930	0.3	230
20231209_1940	0.1	177
20231209_1950	0.7	187
20231209 2000	0.1	138
20231209_2010	1.4	121
20231209_2020	2.5	144
20231209 2030	0.2	332
20231209 2040	0.1	21
20231209 2050	0.4	242
20231209 2100	0.4	178
20231209_2100	0.1	7
20231209_2110	1.7	327
	0.2	289
20231209_2140	0.1	0
20231209_2150	1.1	180
20231209_2200	0.1	37
20231209_2210	0.3	171
20231209 2220	0.1	265
20231209_2230	0.7	123
20231209_2240	0.1	77
20231209_2250	0.3	268
20231209_2300	0.1	327
20231209_2310	0.1	188
20231209_2320	0.1	34
20231209_2330	0.2	314
20231209 2340	0.1	334
20231209 2350	0.1	149

D + 0 FF:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM) 20221210, 0000	0.2	18
20231210_0000 20231210_0010	0.2	298
20231210_0010	0.4	14
20231210_0020	0.4	271
20231210_0030	1.3	0
20231210_0030	0.1	331
20231210_0040	0.1	222
20231210_0100	0.1	234
20231210_0110	0.2	338
20231210_0110	0.4	58
20231210_0130	0.1	339
20231210_0140	1.7	351
20231210 0150	0.2	287
20231210_0200	1.4	325
20231210_0210	0.1	255
20231210_0220	0.5	291
20231210_0230	0.1	68
20231210_0240	0.1	334
20231210_0250	0.1	355
20231210_0300	0.1	173
20231210_0300	0.1	244
20231210_0320	0.1	73
20231210_0330	0.1	190
20231210_0340	0.1	172
20231210_0350	0.1	79
20231210_0400	0.8	356
20231210_0410	0.2	57
20231210_0420	0.1	291
20231210_0430	6	137
20231210_0440	0.1	208
20231210_0450	0.7	278
20231210_0500	0.3	251
20231210_0510	0.1	241
20231210_0520	0.1	353
20231210_0530	0.1	134
20231210_0540	0.1	2
20231210 0550 20231210 0600	0.1	247
	0.1 0.1	286
20231210_0610 20231210_0620	0.1	288 284
20231210_0630	0.1	20
20231210_0030	0.1	317
20231210_0650	0.1	36
20231210_0700	0.1	123
20231210_0700	0.4	59
20231210_0710	0.1	72
20231210_0720	0.1	189
20231210_0740	0.7	228
20231210 0750	0.1	125
20231210_0800	0.6	181
20231210_0810	0.1	260
20231210_0820	1.3	336
20231210_0830	0.1	198
20231210_0840	0.3	200
20231210_0850	0.1	45
20231210_0900	0.3	117
20231210_0910	0.1	108
20231210_0920	2.1	126
20231210_0930	2.2	13
20231210_0940	2.5	153
20231210_0950	1.1	121
20231210_1000	0.1	168
20231210_1010	0.2	76
20231210_1020	2.8	87
20231210_1030	0.1	221
20231210_1040	0.4	29
20231210_1050	0.1	333
20231210_1100	0.1	292
20231210_1110	0.1	19
20231210_1120	1.4	100
20231210_1130	0.8	348
20231210_1140	0.1	185

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231210 1200	0.3	343
20231210_1210	2.2	92
20231210_1220	3.4	117
20231210_1230	0.1	326
20231210_1240	0.3	89
20231210_1250	4.9	125
20231210_1300	0.8	69
20231210_1310 20231210_1320	0.6 1.5	186 91
20231210_1320	2.4	112
20231210_1330	0.8	154
20231210 1350	1.9	102
20231210_1400	2.9	113
20231210_1410	1.6	350
20231210_1420	0.1	336
20231210_1430	1	53
20231210_1440	3.5	98
20231210_1450	1.2	16 22
20231210 1500 20231210 1510	1.6 0.1	355
20231210_1510	2.1	124
20231210_1520	0.1	100
20231210 1540	0.1	50
20231210_1550	0.8	49
20231210_1600	0.1	354
20231210_1610	0.1	14
20231210_1620	1.9	177
20231210_1630	0.8	107
20231210_1640	0.1	46
20231210_1650	0.2	315
20231210_1700 20231210_1710	0.9	339
20231210_1710 20231210_1720	0.1 1.4	353 301
20231210_1720	0.3	286
20231210_1730	0.1	7
20231210_1740	0.1	25
20231210_1750	0.1	274
20231210_1810	0.1	10
20231210_1820	0.2	85
20231210_1830	0.1	56
20231210_1840	0.7	157
20231210_1850	1.6	20
20231210_1900	0.4	194
20231210_1910	0.1	249
20231210_1920 20231210_1930	0.1 0.2	248 355
20231210_1940	0.3	202
20231210_1950	0.7	78
20231210 2000	0.1	227
20231210_2010	0.9	302
20231210_2020	1.3	298
20231210_2030	3.2	329
20231210_2040	0.1	84
20231210_2050	0.6	287
20231210_2100	2.7	21
20231210_2110 20231210_2120	0.1	183
20231210_2120 20231210_2130	0.1 0.5	55 312
20231210_2130	1.6	154
20231210_2140	2.1	330
20231210_2130	2.5	310
20231210 2210	0.1	141
20231210_2220	1	348
20231210_2230	1.8	26
20231210_2240	0.8	350
20231210_2250	0.2	6
20231210_2300	0.1	68
20231210_2310	0.1	288
20231210_2320	0.1	26
20231210_2330	0.1	175
20231210_2340 20231210_2350	0.1	189
20231210_2330	0.1	122

Date & Time	W:-1 C1 (/-)	W:-1 D:(D)
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231211_0000	0.1	42
20231211_0010 20231211_0020	0.4 0.1	179 49
20231211_0020	0.1	335
20231211_0030	0.6	102
20231211 0040	0.1	174
20231211_0050	0.1	254
20231211_0100	1.1	81
20231211_0110	0.1	256
20231211_0120 20231211_0130	0.1 0.1	178 142
20231211_0130 20231211_0140	0.1	342
20231211 0150	0.1	183
20231211 0200	0.1	64
20231211_0210	0.1	67
20231211_0220	0.1	144
20231211_0230	0.1	53
20231211_0240	0.1	318
20231211_0250 20231211_0300	0.1 0.1	20 104
20231211_0300	0.1	101
20231211_0320	0.2	76
20231211_0330	0.1	344
20231211_0340	0.1	128
20231211_0350	0.1	33
20231211_0400 20231211_0410	0.1	181 34
20231211_0410 20231211_0420	0.1	336
20231211_0420	0.1	67
20231211_0440	0.1	159
20231211_0450	0.1	113
20231211_0500	0.9	24
20231211_0510	0.8	133
20231211_0520	1.2	144 99
20231211_0530 20231211_0540	0.1	68
20231211_0550	0.1	233
20231211 0600	0.1	46
20231211_0610	0.1	110
20231211_0620	0.1	190
20231211_0630	0.1	93
20231211_0640 20231211_0650	0.1 0.1	134 80
20231211_0000	0.1	328
20231211_0710	0.1	273
20231211_0720	0.1	142
20231211_0730	0.1	86
20231211_0740	0.1	170
20231211_0750	0.1	224
20231211_0800 20231211_0810	0.1 0.1	212 119
20231211_0810	0.1	226
20231211_0830	0.1	278
20231211_0840	0.1	218
20231211_0850	0.1	82
20231211_0900	0.1	113
20231211_0910 20231211_0920	2.1 0.1	111 55
20231211_0920	0.1	33
20231211_0930	0.4	163
20231211_0950	1.1	77
20231211_1000	0.1	191
20231211_1010	0.1	73
20231211_1020	0.2	118
20231211_1030 20231211_1040	0.5	226
20231211_1040 20231211_1050	0.1 0.1	75 244
20231211_1030	0.6	216
20231211_1100	5	195
20231211_1120	0.1	251
20231211_1130	0.1	39
20231211_1140	0.7	58

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231211_1200	0.1	62
20231211_1210	0.9	120
20231211_1220	0.8	11
20231211_1230	0.1	100
20231211_1240	0.1	89
20231211_1250	0.1	70
20231211_1300	0.1	174
20231211_1310	0.1	75
20231211_1320	0.1	99
20231211_1330	0.8	217
20231211_1340	0.1	195
20231211_1350	0.5	273
20231211_1400	0.8	201
20231211_1410	1.8	33
20231211_1420	0.1	278
20231211_1430	0.1	193
20231211_1440	0.7	101
20231211_1450	0.1	196
20231211_1500	0.9	87
20231211_1510	1	122
20231211_1520	0.1	104
20231211_1530	0.1	58
20231211_1540	1.1	213
20231211_1550	0.1	189
20231211_1600	0.1	171
20231211_1610	0.1	113
20231211_1620	0.1	111
20231211_1630	0.1	112
20231211_1640	0.1	94
20231211_1650	0.1	183
20231211_1700	0.1	99
20231211_1710	0.1	38
20231211_1720	0.1	97
20231211_1730	0.1	39
20231211_1740	0.1	329
20231211_1750	0.1	45
20231211_1800	0.1	99
20231211_1810	0.1	119
20231211_1820	0.1	82
20231211_1830	0.1	37
20231211_1840	0.1	56
20231211_1850	0.1	57
20231211_1900	0.1	88
20231211_1910	0.1	14
20231211_1920	0.1	98
20231211_1930	0.1	19
20231211_1940	0.1	55
20231211_1950	0.1	56
20231211_2000	0.1	102
20231211_2010	0.1	118
20231211_2020	0.1	118
20231211_2030	0.1	110
20231211_2040	0.1	97
20231211_2050	0.1	46
20231211_2100	0.1	334
20231211_2110	0.1	77
20231211_2120	0.1	77
20231211_2130	0.1	95
20231211_2140	0.1	69
20231211_2150	0.1	73
20231211_2200	0.1	63
20231211_2210	0.1	72
20231211_2220	0.1	72
20231211_2230	0.1	72
20231211_2240	0.1	81
20231211_2250	0.1	64
20231211_2300	0.1	51
20231211_2310	0.1	42
20231211_2320	0.1	50
20231211_2330	0.1	39
20231211_2340	0.1	40
20231211_2350	0.1	43

CYYYYMMBB HHMMD	Date & Time	W:- 1 C 1 (/-)	Wind Direction (Decemb
20231212 0010	(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231212 0020			
20231212 0030			
20231212 0030			
20231212 0040			
2023 212 0100			
2023 212 0110			
2023 212 0120			
2023 212 0130			
20231212 0140			
20231212 0200			
20231212 0210			
20231212 0220			
20231212 0230			
20231212 0240			
20231212 0300			
20231212 0310		0.1	
20231212 0320			
20231212 0330			
20231212 0340			
20231212 0350			
20231212 0400	20231212_0350		53
2023 212 0420	20231212_0400	0.1	138
20231212 0430			
20231212 0440			
20231212 0450			
20231212 0500			
20231212 0520	20231212_0500		53
20231212 0530			
20231212 0540			
20231212 0550			
20231212 0600			
20231212 0620			
20231212 0630         0.1         55           20231212 0640         0.1         57           20231212 0750         0.1         33           20231212 0700         0.1         109           20231212 0710         0.1         272           20231212 0730         0.1         113           20231212 0740         0.1         191           20231212 0750         0.1         216           20231212 0800         0.1         147           20231212 0810         0.1         162           20231212 0830         0.1         204           20231212 0830         0.1         227           20231212 0850         0.1         307           20231212 0850         0.1         151           20231212 0900         1.1         153           20231212 0910         0.1         132           20231212 0930         0.1         241           20231212 0930         0.1         241           20231212 0940         1.6         87           20231212 1000         0.1         32           20231212 1000         0.1         32           20231212 1000         0.1         32           202312			
20231212 0640         0.1         57           20231212 0650         0.1         33           20231212 0700         0.1         109           20231212 0710         0.1         272           20231212 0730         0.1         113           20231212 0730         0.1         191           20231212 0750         0.1         216           20231212 0800         0.1         147           20231212 0810         0.1         162           20231212 0820         0.1         204           20231212 0830         0.1         227           20331212 0840         0.1         307           20231212 0850         0.1         151           20231212 0850         0.1         151           20231212 0850         0.1         153           20231212 0900         1.1         153           20231212 0900         1.1         153           20231212 0900         0.1         241           20231212 0930         0.1         241           20231212 0930         0.1         97           20231212 0940         1.6         87           20231212 1000         0.1         322           202			
20231212 0650			
20231212 0700			
20231212 0710         0.1         272           20231212 0730         0.1         113           20231212 0730         0.1         105           20231212 0740         0.1         191           20231212 0750         0.1         216           20231212 0800         0.1         147           20231212 0810         0.1         162           20231212 0820         0.1         204           20231212 0830         0.1         227           20231212 0840         0.1         307           20231212 0850         0.1         151           20231212 0900         1.1         153           20231212 0910         0.1         132           20231212 0920         0.1         241           20231212 0930         0.1         97           20231212 0940         1.6         87           20231212 1000         0.1         291           20231212 1000         0.1         332           20231212 1000         0.1         332           20231212 1000         0.1         281           20231212 1050         0.1         281           20231212 1050         0.1         332           2			
20231212 0730			272
20231212 0740			
20231212 0750			
20231212 0800			
20231212 0810			
20231212 0820         0.1         204           20231212 0830         0.1         227           20231212 0840         0.1         307           20231212 0850         0.1         151           20231212 0900         1.1         153           20231212 0910         0.1         132           20231212 0920         0.1         241           20231212 0930         0.1         97           20231212 0940         1.6         87           20231212 1000         0.1         291           20231212 1000         0.1         322           20231212 1010         0.1         322           20231212 1020         1         332           20231212 1030         0.1         281           20231212 1050         0.7         96           20231212 1050         0.1         310           20231212 1100         1.6         71           20231212 1100         0.1         41           20231212 1100         0.2         87           20231212 1100         0.2         87           20231212 1100         0.1         141           20231212 1100         0.2         87			
20231212 0840         0.1         307           20231212 0850         0.1         151           20231212 0900         1.1         153           20231212 0910         0.1         132           20231212 0920         0.1         241           20231212 0930         0.1         97           20231212 0940         1.6         87           20231212 0950         0.1         291           20231212 1000         0.1         75           20231212 1010         0.1         322           20231212 1030         1         332           20231212 1030         0.1         281           20231212 1050         0.7         96           20231212 1050         0.1         310           20231212 1100         1.6         71           20231212 1100         0.1         141           20231212 1100         0.2         87           20231212 1130         0.8         135	20231212_0820	0.1	204
20231212 0850			
20231212 0900			
20231212 0910         0.1         132           20231212 0920         0.1         241           20231212 0930         0.1         97           20231212 0940         1.6         87           20231212 0950         0.1         291           20231212 1000         0.1         75           20231212 1010         0.1         322           20231212 1020         1         332           20231212 1030         0.1         281           20231212 1040         0.7         96           20231212 1050         0.1         310           20231212 1050         1.6         71           20231212 1100         1.6         71           20231212 110         0.1         141           20231212 1100         0.2         87           20231212 1130         0.8         135			
20231212 0920         0.1         241           20231212 0930         0.1         97           20231212 0940         1.6         87           20231212 0950         0.1         291           20231212 1000         0.1         75           20231212 1010         0.1         322           20231212 1020         1         332           20231212 1030         0.1         281           20231212 1040         0.7         96           20231212 1050         0.1         310           20231212 1100         1.6         71           20231212 110         0.1         141           20231212 1120         0.2         87           20231212 1130         0.8         135			
20231212 0940         1.6         87           20231212 0950         0.1         291           20231212 1000         0.1         75           20231212 1010         0.1         322           20231212 1020         1         332           20231212 1030         0.1         281           20231212 1040         0.7         96           20231212 1050         0.1         310           20231212 1050         1.6         71           20231212 1100         1.6         71           20231212 1110         0.1         141           20231212 1120         0.2         87           20231212 1130         0.8         135	20231212_0920		241
20231212 0950         0.1         291           20231212 1000         0.1         75           20231212 1010         0.1         322           20231212 1020         1         332           20231212 1030         0.1         281           20231212 1040         0.7         96           20231212 1050         0.1         310           20231212 1100         1.6         71           20231212 110         0.1         141           20231212 1120         0.2         87           20231212 1130         0.8         135			
20231212 1000         0.1         75           20231212 1010         0.1         322           20231212 1020         1         332           20231212 1030         0.1         281           20231212 1040         0.7         96           20231212 1050         0.1         310           20231212 1100         1.6         71           20231212 110         0.1         141           20231212 1120         0.2         87           20231212 1130         0.8         135			
20231212         1010         0.1         322           20231212         1020         1         332           20231212         1030         0.1         281           20231212         1040         0.7         96           20231212         1050         0.1         310           20231212         1100         1.6         71           20231212         110         0.1         141           20231212         1120         0.2         87           20231212         1130         0.8         135			
20231212         1020         1         332           20231212         1030         0.1         281           20231212         1040         0.7         96           20231212         1050         0.1         310           20231212         1100         1.6         71           20231212         1110         0.1         141           20231212         1120         0.2         87           20231212         1130         0.8         135			
20231212         1030         0.1         281           20231212         1040         0.7         96           20231212         1050         0.1         310           20231212         1100         1.6         71           20231212         110         0.1         141           20231212         1120         0.2         87           20231212         1130         0.8         135			
20231212 1050     0.1     310       20231212 1100     1.6     71       20231212 1110     0.1     141       20231212 1120     0.2     87       20231212 1130     0.8     135	20231212_1030	0.1	281
20231212     1100     1.6     71       20231212     1110     0.1     141       20231212     1120     0.2     87       20231212     1130     0.8     135			
20231212     1110     0.1     141       20231212     1120     0.2     87       20231212     1130     0.8     135			
20231212 1120			
20231212_1130			
	20231212_1130	0.8	135
	20231212_1140		

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Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231212_1200	0.2	334
20231212_1210	0.3	163
20231212_1220	1.2	186
20231212 1230	0.8	175
20231212 1240	1.3	166
	0.1	176
20231212_1300	0.1	42
20231212_1310	1	52
20231212 1320	1.1	96
20231212 1330	0.2	43
20231212 1340	0.1	105
20231212_1310	1.7	125
	1.7	
20231212_1400		104
20231212_1410	3.7	226
20231212_1420	1.5	71
20231212_1430	0.1	69
20231212_1440	0.1	192
20231212_1450	2.4	116
20231212_1500	0.1	94
20231212_1500		19
	0.6	
20231212_1520	0.1	216
20231212_1530	0.5	30
20231212_1540	0.1	24
20231212_1550	0.1	36
20231212_1600	0.2	36
20231212_1610	0.2	70
20231212_1010	0.3	343
20231212_1630	0.1	348
20231212_1640	0.1	81
20231212_1650	0.4	89
20231212_1700	0.1	97
20231212_1710	0.1	99
20231212_1720	0.2	152
20231212 1730	1.4	138
20231212 1740	0.1	316
20231212_1740	0.1	3
		120
20231212_1800	1.8	
20231212_1810	0.1	207
20231212_1820	0.1	69
20231212_1830	0.1	176
20231212_1840	0.1	318
20231212 1850	1.8	53
20231212 1900	0.6	292
20231212_1910	0.1	289
20231212_1910	0.2	133
	0.1	26
20231212_1940	0.1	162
20231212_1950	0.1	135
20231212_2000	0.1	114
20231212 2010	0.1	131
20231212_2020	0.1	298
20231212 2030	0.1	30
20231212_2030	0.1	135
	0.1	133
20231212_2100	0.1	327
20231212_2110	0.3	121
20231212_2120	0.1	150
20231212_2130	0.1	101
20231212_2140	0.1	159
20231212 2150	0.1	111
20231212 2200	0.1	142
20231212 2210	0.2	152
20231212 2220	0.4	44
20231212 2220		
	0.1	156
20231212_2240	0.1	53
20231212_2250	0.1	125
20231212_2300	0.1	171
20231212 2310	0.1	133
20231212_2320	0.1	149
20231212 2330	0.1	120
20231212_2330	0.1	73
20231212 2350		
20231212_2330	0.1	85

D . 0 m		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM) 20231213 0000	0.1	122
20231213_0000	0.6	61
20231213_0020	0.1	290
20231213_0030	0.2	285
20231213_0040	0.1	172
20231213_0050	0.1	236
20231213_0100	0.1	204
20231213_0110	0.1	234
20231213_0120 20231213_0130	0.2 1.3	129 17
20231213_0140	0.9	14
20231213_0110	0.6	131
20231213 0200	1.2	50
20231213_0210	0.1	235
20231213_0220	0.1	148
20231213_0230	0.1	125
20231213_0240	0.1	86
20231213_0250	0.1	132
20231213_0300 20231213_0310	0.1	112 147
20231213_0320	0.1 0.1	151
20231213_0320	0.1	143
20231213_0330	0.1	153
20231213_0350	0.1	155
20231213_0400	0.1	42
20231213_0410	0.1	95
20231213_0420	0.1	257
20231213_0430	0.1	232
20231213_0440	0.1	183
20231213_0450	0.1	273
20231213_0500	0.1	43
20231213_0510 20231213_0520	0.1 0.1	6 164
20231213_0520	0.1	12
20231213_0540	0.1	62
20231213_0550	0.1	148
20231213 0600	0.1	321
20231213_0610	0.1	97
20231213_0620	0.2	140
20231213_0630	0.1	111
20231213_0640	0.2	8
20231213_0650	0.2	87
20231213_0700	0.1	147
20231213_0710 20231213_0720	0.8 0.1	92 126
20231213_0720	0.1	283
20231213_0740	0.1	165
20231213_0740	0.1	112
20231213_0800	0.1	12
20231213_0810	0.1	66
20231213_0820	0.1	123
20231213_0830	0.6	336
20231213_0840	0.1	332
20231213_0850	0.1	344
20231213_0900 20231213_0910	0.2	90 84
20231213_0910	0.1	86 86
20231213_0920	0.1	34
20231213_0940	0.1	170
20231213_0950	0.2	340
20231213_1000	0.6	101
20231213_1010	0.1	107
20231213_1020	0.2	96
20231213_1030	0.3	24
20231213_1040	0.1	91
20231213_1050	0.1	335
20231213_1100 20231213_1110	0.1	76 343
20231213_1110	0.1 1.5	343
20231213_1120	0.9	52
20231213_1130	1	331
20231213_1150	0.2	27

Date & Time	Wr. 10 17 7	Wr. 1D: (C. (D. )
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231213 1200	0.1	351
20231213_1210 20231213_1220	0.1 0.1	69 301
20231213_1220	0.1	114
20231213_1240	0.1	348
20231213_1250	0.1	147
20231213_1300	0.1	123
20231213_1310	0.8	151
20231213_1320 20231213_1330	0.2 0.8	267 337
20231213_1330 20231213_1340	0.8	356
20231213_1310	3	39
20231213_1400	2.3	317
20231213_1410	0.2	88
20231213_1420 20231213_1430	0.9	1
20231213_1430 20231213_1440	0.2 0.1	182 308
20231213_1440	2.8	46
20231213_1500	0.1	312
20231213_1510	0.1	44
20231213_1520	0.3	9
20231213_1530	0.2	294 20
20231213_1540 20231213_1550	1.2 0.1	20 51
20231213_1530	0.8	84
20231213_1610	0.2	348
20231213_1620	0.5	294
20231213 1630	0.1	341
20231213_1640 20231213_1650	0.1 0.5	299 347
20231213_1000	1.8	72
20231213_1710	0.1	314
20231213_1720	0.1	6
20231213_1730	0.1	204
20231213_1740	0.6	344
20231213_1750 20231213_1800	0.1 0.1	92 105
20231213_1810	1.1	118
20231213_1820	0.1	311
20231213_1830	0.2	4
20231213_1840	0.3	84
20231213_1850	0.6	124
20231213_1900 20231213_1910	0.2 0.1	334 41
20231213_1910	0.1	72
20231213_1930	0.1	203
20231213_1940	0.1	215
20231213_1950	0.1	87
20231213_2000 20231213_2010	0.1 0.1	62 83
20231213_2010	0.1	152
20231213_2020	0.1	161
20231213_2040	1	102
20231213_2050	0.4	98
20231213_2100	0.1	38
20231213_2110 20231213_2120	0.3 3.5	3 42
20231213_2120	0.1	148
20231213_2140	0.1	60
20231213_2150	0.3	125
20231213_2200	0.1	314
20231213_2210	0.1	96
20231213_2220 20231213_2230	0.3 0.1	114 142
20231213_2230	0.1	329
20231213_2250	0.1	121
20231213_2300	1.3	13
20231213_2310	0.1	305
20231213_2320 20231213_2330	0.2 0.2	83 194
20231213_2340	0.2	310
20231213_2340	2.2	138

D + 0 FF:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)	0.7	308
20231214_0000		
20231214_0010 20231214_0020	0.1 0.1	106 111
20231214_0020	0.1	208
20231214_0030	0.1	308
20231214_0040	0.1	144
20231214_0050	0.1	186
20231214_0100	0.1	79
20231214_0110	0.1	165
20231214 0120	0.1	84
20231214_0130	0.1	319
20231214_0140	0.1	261
20231214_0150	0.1	20
20231214_0200	0.1	70
20231214_0210	0.1	180
20231214_0220	0.1	180
20231214_0230	0.1	49
20231214_0240	0.1	254
20231214_0250	0.1	80
20231214_0300	0.1	54
20231214_0310	0.1	207
20231214_0320	0.1	193
20231214_0330	0.1	129
20231214_0340	0.1	126
20231214_0350	0.1	75
20231214_0400	0.1	112
20231214_0410	0.5	25
20231214 0420	0.2	145
20231214_0430	0.1	172
20231214 0440	0.1	200
20231214 0450	0.1	146
20231214 0500	0.1	172
20231214_0510	0.1	28
20231211_0510	0.1	340
20231214 0530	3.3	106
20231214_0540	0.1	350
20231214_0550	0.1	335
20231214_0500	0.8	21
20231214_0610	0.1	104
20231214_0620	0.1	223
20231214_0020	0.1	153
20231214_0030	0.9	140
20231214_0650	0.1	210
	0.1	
		206
20231214_0710 20231214_0720	0.1	190 114
20231214_0720	0.3	339
		139
	0.6	
20231214_0750	0.3	132
20231214_0800	0.1	132
20231214_0810	0.1	201
20231214_0820	0.1	95
20231214_0830	0.3	158
20231214_0840	0.5	202
20231214_0850	0.1	95
20231214_0900	0.4	99
20231214_0910	0.4	114
20231214_0920	0.1	108
20231214_0930	1	342
20231214_0940	0.1	56
20231214_0950	0.1	28
20231214_1000	0.8	338
20231214_1010	0.1	258
20231214_1020	0.1	76
20231214_1030	0.1	69
20231214_1040	0.1	90
20231214_1050	1.2	150
20231214_1100	0.1	245
20231214_1110	0.4	13
20231214_1120	0.1	329
20231214_1130	0.1	355
20231214_1140	0.2	24

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231214 1200	0.4	50
20231214_1210	0.5	83
20231214_1220	0.1	319
20231214 1230	0.1	178
20231214 1240	0.7	106
20231214_1250	0.1	237
20231214_1300	0.1	145
20231214_1310	0.8	226
20231214_1320	0.2	124
20231214_1330	0.1	325 2
20231214_1340	0.2	
20231214_1350	0.8	210
20231214_1400	1.6	208
20231214_1410	2	100
20231214_1420	0.3	43
20231214_1430	0.1	338
20231214_1440	0.1	256
20231214_1450	1.1	73
20231214_1500	0.9	133
20231214_1510	0.3	192
20231214_1520	1.7	107
20231214_1530	1	335
20231214_1540	0.1	93
20231214_1550	0.1	150
20231214_1600 20231214_1610	0.1 0.1	129 43
20231214_1610	0.1	112
20231214_1630	0.1	53
20231214_1030	0.1	229
20231214_1040	0.1	151
20231214_1000	0.1	130
20231214_1710	0.1	206
20231214_1710	0.5	345
20231214 1730	0.6	60
20231214 1740	0.1	82
20231214 1750	0.2	190
20231214 1800	0.1	201
20231214 1810	0.1	96
20231214 1820	0.1	292
20231214_1830	0.6	145
20231214_1840	0.1	242
20231214_1850	0.6	117
20231214_1900	0.1	116
20231214_1910	0.1	351
20231214_1920	0.1	81
20231214_1930	0.1	209
20231214_1940	0.4	147
20231214_1950	0.1	89
20231214_2000	0.2	89
20231214_2010	0.1	47
20231214_2020 20231214_2030	1.4 0.7	149 275
20231214 2040	0.7	129
20231214 2040	0.5	129 84
20231214_2000	0.1	173
20231214_2100	0.1	221
20231214_2110	0.4	107
20231214_2130	0.1	31
20231214_2130	0.1	320
20231214_2150	0.2	95
20231211_2190	1.9	147
20231214_2200	2.3	276
20231214 2220	0.1	96
20231214_2230	0.2	150
20231214_2240	0.1	94
20231214_2250	0.1	115
20231214_2300	0.2	183
20231214_2310	0.1	111
20231214_2320	0.3	155
20231214_2330	0.1	149
20231214_2340	0.1	187
20231214_2350	0.1	313

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM) 20231215 0000	0.5	151
20231215_0000	0.3	198
20231215_0010	0.5	129
20231215 0020	0.5	134
20231215 0030	3.3	161
20231215_0040	1.3	84
20231215_0050	0.1	187
20231215_0100	0.6	127
20231215_0110	0.1	214
20231215_0120	0.1	21
20231215_0130	0.1	59 285
20231215_0140 20231215_0150	0.1 0.1	335
20231215_0130	0.1	209
20231215_0200	0.1	72
20231215_0220	0.1	343
20231215 0230	0.1	129
20231215_0240	0.1	129
20231215_0250	0.1	95
20231215_0300	0.1	147
20231215_0310	0.1	160
20231215_0320	0.1	50
20231215_0330	0.1	182
20231215_0340	0.1	74
20231215_0350	0.1	49
20231215_0400 20231215_0410	0.1	20 70
20231215_0410 20231215_0420	0.1 0.1	65
20231215_0420	0.1	18
20231215_0440	0.1	196
20231215 0450	0.1	126
20231215_0500	0.1	329
20231215_0510	1	93
20231215_0520	0.5	341
20231215_0530	0.6	125
20231215_0540	0.1	216
20231215 0550	1.6	192
20231215_0600	2.5	20 337
20231215_0610 20231215_0620	0.1	350
20231215_0630	0.1	138
20231215_0640	0.2	135
20231215_0650	0.7	70
20231215_0700	0.1	307
20231215_0710	0.2	314
20231215_0720	0.1	136
20231215_0730	0.2	109
20231215_0740	0.3	342
20231215_0750	0.1	122
20231215_0800 20231215_0810	0.1	5 313
20231215_0810	0.1 0.5	313 111
20231215_0820	0.6	10
20231215_0840	0.2	103
20231215_0850	1.5	321
20231215_0900	0.3	79
20231215_0910	1.5	126
20231215_0920	0.1	139
20231215_0930	0.1	181
20231215_0940	3.1	2
20231215_0950	1.2	337
20231215_1000	3.3	196 124
20231215_1010 20231215_1020	1.8	342
20231215_1020	0.6	328
20231215_1040	2.3	42
20231215_1050	1.8	328
20231215_1100	1.5	340
20231215_1110	1.4	66
20231215_1120	0.7	67
20231215_1130	0.3	32
20231215_1140	0.1	7

D-4- 0 Ti	I	
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		· - ·
20231215_1200	0.5	302
20231215_1210	0.1	313
20231215_1220	2.1	103
20231215 1230	2.3	108
20231215 1240	2.6	121
20231215_1250	0.8	154
20231215_1300	0.5	219
20231215_1310	0.1	165
20231215 1320	2.9	114
20231215 1330	3	97
20231215 1340	ĺ	172
20231215_1310	0.5	74
20231215_1400	1.3	327
20231215_1410	1.1	170
20231215_1420	3.2	99
20231215 1430	6.1	115
20231215_1440	0.3	26
20231215 1450	0.1	61
20231215 1500	0.5	134
20231215_1510	0.8	51
20231215_1520	0.1	61
20231215_1530	0.1	354
20231215_1540	0.2	132
20231215_1550	0.2	116
20231215_1600	0.1	78
	0.5	307
20231215_1620	0.6	57
20231215_1630	0.1	215
20231215_1640	0.1	113
20231215_1650	0.1	175
20231215 1700	0.3	104
20231215 1710	1.3	163
20231215 1720	0.1	218
		165
	0.1	
20231215_1740	0.1	108
20231215_1750	0.2	330
20231215_1800	0.1	178
20231215 1810	0.1	264
20231215_1820	0.1	343
20231215 1830	0.2	281
20231215_1840	0.1	296
		291
	1	
20231215_1900	0.4	312
20231215_1910	0.1	194
20231215_1920	0.1	114
20231215_1930	0.5	261
20231215_1940	0.1	157
20231215 1950	0.1	90
20231215_1930	0.1	355
20231215_2010	2.4	332
20231215_2020	0.8	153
20231215_2030	1.9	332
20231215_2040	0.1	11
20231215_2050	0.2	301
20231215_2100	0.5	283
20231215_2100	0.1	0
		15
	0.1	
20231215_2130	0.3	92
20231215_2140	0.2	338
20231215_2150	0.1	330
20231215_2200	0.1	307
20231215 2210	1.1	107
20231215 2220	0.1	263
20231215_2220	0.1	331
20231215_2240	0.5	353
20231215_2250	0.4	316
20231215_2300	0.1	134
20231215_2310	0.1	346
20231215_2320	0.1	117
20231215 2330	0.1	180
20231215_2330	0.1	204
20231215_2340		
20231213_2330	0.1	151

D + 0 FF:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231216 0000 20231216 0010	0.1	<u>8</u> 22
20231216_0010	0.1 0.1	250
		163
20231216_0020	0.1	
20231216_0030	0.1	78
20231216_0040	0.1	138
20231216_0050	1.6	155
20231216_0100	0.1	303
20231216_0110	0.1	115
20231216_0120	0.1	87
20231216_0130	0.1	98 114
20231216_0140	0.1	
20231216_0150	0.1	101
20231216_0200	0.1	145
20231216_0210	0.1	111
20231216_0220	0.1	195
20231216_0230	0.1	82
20231216_0240	0.1	63
20231216_0250	0.1	50
20231216_0300	0.1	98
20231216_0310	0.5	99
20231216_0320	0.1	282
20231216_0330	0.1	77
20231216_0340	0.1	98
20231216_0350	0.1	109
20231216_0400	0.1	110
20231216_0410	0.1	83
20231216_0420	0.1	138
20231216_0430	0.1	46
20231216_0440	0.1	101
20231216 0450	0.1	299
20231216_0500	0.1	140
20231216_0510	0.1	166
20231216 0520	0.1	174
20231216 0530	0.1	96
20231216_0540	0.1	312
20231216_0550	0.1	294
20231216 0600	1.3	344
20231216_0610	0.1	289
20231216_0620	0.1	215
20231216_0630	0.4	118
20231216 0640	0.3	255
20231216_0650	0.2	291
20231216_0700	1.7	294
20231216_0710	0.1	323
20231216_0710	0.1	282
20231216_0730	1.8	300
20231216_0740	3.5	329
20231216_0710	5.3	245
20231216_0800	0.9	349
20231216_0810	0.6	281
20231216_0820	0.4	341
20231216 0830	7.4	300
20231216_0840	2.7	343
20231216_0850	4	311
20231216_0000	0.6	340
20231216_0910	1.9	278
20231216 0920	4.3	340
20231216_0920	0.4	66
20231216_0930	4.9	329
20231216_0940	0.4	343
20231216_0930	3.2	326
20231216_1000	6.5	7
20231216_1010	0.2	265
20231216_1030	0.1	28 53
20231216_1040	1.8	38
20231216_1050	0.7	
20231216_1100	1.7	341
20231216_1110	4.2	342
20231216_1120	3.6	333
20231216_1130	5.1	318
20231216_1140	0.7	37

Dota & Time	1	
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)	1.4	256
20231216_1200	1.4	256
20231216_1210	0.5	129
20231216_1220	0.5	342
20231216_1230	1.3	345
20231216 1240	0.4	175
20231216_1250	3.3	7
20231216_1300	1.2	308
20231216_1310	2.6	354
20231216 1320	9.4	324
20231216 1330	2.9	99
20231216_1340	2.1	47
20231216_1350	1.4	346
20231216_1400	0.1	293
20231216_1410	1.2	40
20231216_1420	1.9	341
20231216_1430	0.1	348
20231216_1440	2.2	99
20231216_1450	3	309
20231216_1500	0.6	314
20231216_1510	1.3	279
20231216_1520	0.1	22
20231216_1530	0.1	154
20231216_1540	0.1	356
20231216_1550	0.1	23 324
20231216_1600	1.4	324
20231216_1610	0.5	310
20231216 1620	1.8	287
20231216_1630	2.9	291
20231216_1640	0.2	13
20231216 1650	0.3	331
20231216_1700	0.2	340
20231216_1710	0.1	325
20231216_1720	0.2	302
20231216_1730	2.7	37
20231216_1740	0.2	3
20231216_1750	2.5	332
20231216 1800	0.2	355
20231216_1810	0.1	355
20231216_1820	0.3	95
20231216_1830	1.5	229
20231216 1840	0.8	335
20231216_1850	0.9	326
20231216_1900	0.1	10
20231216_1910	0.2	66
20231216_1920	0.1	42
20231216_1930	1	324
20231216_1940	0.4	310
20231216_1950	0.1	64
20231216 2000	0.5	286
20231216_2010	0.3	10
20231216_2020	0.3	20
20231216 2030	0.2	286
20231216 2040	1.1	330
20231216_2050	0.5	87
20231216_2100	0.5	303
20231216_2110	3.2	321
20231216_2120	0.1	311
20231216_2130	0.3	324
20231216_2140	0.2	37
20231216_2150	4	296
20231216_2200	0.1	34
20231216_2210	2.5	323
20231216 2220	0.3	274
20231216_2220 20231216_2230	0.1	86
20231210_2230		303
20231216_2240	5.2	
20231216_2250	0.1	281
20231216_2300	2.8	318
20231216_2310	0.1	51
20231216_2320	0.1	31
20231216_2330	1.2	335
20231216 2340	0.2	337
20231216_2350	1.1	340
		210

D 0 FF		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231217_0000	0.1	222 312
20231217_0010 20231217_0020	0.1 3.4	338
20231217_0020	0.1	338
		25
20231217_0040	0.7	
20231217_0050	0.2	16
20231217_0100	0.8	287
20231217_0110	0.5	70
20231217_0120	0.1	350
20231217_0130	0.3	325
20231217_0140	1.9	13
20231217_0150	2.5	7
20231217_0200	4.7	341
20231217_0210	0.7	9
20231217_0220	0.1	284
20231217_0230	0.1	13
20231217_0240	0.1	28
20231217_0250	0.2	53
20231217_0300	1.2	340
20231217_0310	1.3	316
20231217_0320	2	327
20231217_0330	0.1	0
20231217_0340	0.1	157
20231217_0350	0.1	20
20231217_0400	0.5	312
20231217_0410	0.1	45
20231217_0420	1.4	30
20231217_0430	0.4	347
20231217_0440	1.6	96
20231217_0450	0.1	279
20231217 0500	0.1	256
20231217_0510	1.5	5
20231217 0520	0.1	297
20231217_0530	0.2	338
20231217 0540	0.1	35
20231217_0550	0.2	302
20231217_0600	0.3	315
20231217 0610	1.8	335
20231217_0620	0.1	19
20231217_0630	0.4	6
20231217_0640	0.1	7
20231217 0650	3	327
20231217_0700	3.8	309
20231217_0710	0.5	328
20231217_0710	0.7	0
20231217_0720	0.1	147
20231217_0730	0.1	29
20231217_0740	1.1	295
20231217_0730	0.1	348
20231217_0800	0.2	29
20231217_0810	0.1	305
20231217_0820	0.1	26
20231217_0830	0.1	316
20231217_0840	1.2	43
20231217_0830	0.1	248
20231217_0900	0.1	38
20231217_0910	0.1	17
20231217_0920	0.1	229
20231217_0930	0.1	328
20231217_0940	0.1	124
20231217_0930	0.1	282
20231217_1000	0.1	240
20231217_1010	1.4	328
20231217 1020	0.1	80
		90
	1.5	314
20231217_1050	0.5 0.2	
20231217_1100		70
20231217_1110	0.1	10
20231217_1120	5.8	61
20231217_1130	0.2	86
20231217_1140	1.3	44
20231217_1150	0.4	37

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231217 1200	1.2	104
20231217_1210	2.2	176
20231217_1220	0.1	165
20231217 1230	0.1	301
20231217 1240	0.3	99
20231217 1250	0.1	97
20231217_1300	0.2	40
20231217_1310	0.4	257
20231217_1320	0.4	50
20231217_1330	0.3	77
20231217_1340	0.1	60
20231217_1350	0.2	313
20231217_1400	0.1	202
20231217_1410	0.1	351
20231217_1420	0.1	298
20231217_1430	0.2	316
20231217_1440	0.8	38
20231217_1450	0.2	307
20231217_1500	0.1	49
20231217_1510	0.7	302
20231217_1520 20231217_1530	0.3	42
	0.1	274
20231217_1540	0.8	41 338
20231217_1550 20231217_1600	0.5 0.1	338 39
20231217_1600 20231217_1610	0.1	297
20231217_1010	0.1	280
20231217_1620	0.2	236
20231217_1640	0.1	230
20231217_1650	0.5	336
20231217_1000	0.2	57
20231217_1710	0.1	60
20231217_1720	0.1	272
20231217 1730	0.1	338
20231217 1740	0.9	280
20231217 1750	0.4	20
20231217 1800	0.1	15
20231217_1810	1	296
20231217_1820	0.5	297
20231217_1830	0.2	308
20231217_1840	0.1	313
20231217_1850	0.1	111
20231217_1900	0.1	52
20231217_1910	0.1	245
20231217_1920	0.1	97
20231217_1930	0.1	331
20231217_1940	0.1	51
20231217_1950	0.2	294
20231217_2000	0.1	334
20231217_2010 20231217_2020	0.1 0.1	306 314
20231217_2020 20231217_2030	0.1	303
20231217 2040	0.1	157
20231217 2050	0.1	146
20231217_2030	0.1	324
20231217_2100	0.1	151
20231217_2110	0.1	135
20231217_2130	0.1	138
20231217 2140	0.2	120
20231217 2150	0.1	176
20231217_2200	0.1	115
20231217_2210	0.1	192
20231217_2220	0.1	125
20231217_2230	0.1	148
20231217_2240	0.1	219
20231217_2250	0.1	275
20231217_2300	0.1	131
20231217_2310	0.1	207
20231217_2320	0.1	108
20231217_2330	0.1	129
20231217_2340	0.1	152
20231217_2350	0.1	216

D . 0 m		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM) 20231218_0000	0.1	171
20231218_0010	0.1	100
20231218_0020	0.1	164
20231218_0030	0.2	162
20231218_0040	0.1	172
20231218_0050	0.1	133
20231218_0100	0.1	145
20231218_0110	0.1	133
20231218_0120 20231218_0130	0.1 0.1	130 50
20231218_0140	0.1	263
20231218 0150	0.1	110
20231218 0200	0.1	156
20231218_0210	0.3	101
20231218_0220	0.1	139
20231218_0230	0.1	164
20231218_0240	0.1	277
20231218_0250	0.1	86
20231218_0300	0.1	131
20231218_0310 20231218_0320	0.1 0.1	138 175
20231218_0320	0.1	115
20231218 0340	0.1	154
20231218_0350	0.1	214
20231218_0400	0.6	172
20231218_0410	0.1	17
20231218_0420	0.1	234
20231218_0430	0.4	134
20231218_0440 20231218_0450	0.1	161 241
20231218_0450 20231218_0500	0.1 0.1	174
20231218_0510	0.1	228
20231218_0520	0.1	91
20231218 0530	0.4	312
20231218_0540	0.1	133
20231218_0550	0.1	288
20231218 0600	0.1	154
20231218_0610	0.1	139
20231218_0620 20231218_0630	0.1 0.5	127
20231218_0630 20231218_0640	0.3	153 202
20231218_0650	0.1	114
20231218_0700	0.1	64
20231218_0710	0.1	315
20231218_0720	0.2	349
20231218_0730	0.1	342
20231218_0740	0.1	104
20231218_0750	0.1	348
20231218_0800	0.2	3
20231218_0810 20231218_0820	0.1 0.1	58 275
20231218_0830	0.1	310
20231218_0840	0.1	140
20231218_0850	0.1	139
20231218_0900	0.1	191
20231218_0910	0.1	173
20231218_0920	0.6	304
20231218_0930	0.1	323
20231218_0940	0.1	321
20231218_0950 20231218_1000	0.1	307
20231218_1000	0.1	198 348
20231218_1010	0.1	279
20231218_1020	0.1	318
20231218_1040	0.5	327
20231218_1050	0.1	250
20231218_1100	0.1	190
20231218_1110	0.1	253
20231218_1120	0.1	244
20231218_1130	0.1	285
20231218_1140	0.1	208
20231218_1150	0.1	215

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231218 1200	0.1	75
20231218_1210	0.3	110
20231218_1220	0.1	46
20231218_1230	0.1	58
20231218_1240	0.1	325
20231218_1250	0.1	217
20231218_1300	0.1	215
20231218_1310	0.1	262
20231218_1320	0.1	120
20231218_1330	0.1	93
20231218_1340	0.5	125
20231218_1350	0.1	34
20231218_1400	0.2	137
20231218_1410	0.1	76
20231218_1420 20231218_1430	0.1	249 322
20231218_1440	0.1 0.1	189
20231218_1450	0.1	263
20231218_1430	0.1	27
20231218_1510	0.1	258
20231218_1510	0.1	176
20231218_1530	0.1	145
20231218 1540	0.1	284
20231218_1550	0.1	162
20231218_1600	0.1	227
20231218_1610	0.1	44
20231218_1620	0.1	199
20231218_1630	0.1	199
20231218_1640	0.1	91
20231218_1650	0.1	98
20231218_1700	0.1	166
20231218_1710	0.1	57
20231218_1720	0.1	198
20231218_1730	0.1	228
20231218_1740	0.1	242 118
20231218_1750 20231218_1800	0.1 0.1	233
20231218_1810	0.1	143
20231218_1820	0.1	102
20231218_1830	0.1	145
20231218 1840	0.1	88
20231218 1850	0.1	221
20231218_1900	0.1	148
20231218_1910	0.1	180
20231218_1920	0.1	103
20231218_1930	0.1	140
20231218_1940	0.1	75
20231218_1950	0.1	129
20231218_2000	0.1	237
20231218_2010	0.1	122
20231218_2020	0.1	120
20231218_2030	0.1	54 125
20231218_2040 20231218_2050	0.1 0.1	125 26
20231218_2050 20231218_2100	0.1	301
20231218_2110	0.1	103
20231218_2110	0.1	86
20231218_2130	0.1	57
20231218 2140	0.1	147
20231218 2150	0.1	128
20231218_2200	0.1	131
20231218_2210	0.1	187
20231218_2220	0.1	216
20231218_2230	0.1	262
20231218_2240	0.1	240
20231218_2250	0.1	305
20231218_2300	0.1	101
20231218_2310	0.1	87
20231218_2320	0.1	212
20231218_2330	0.1	147
20231218_2340	0.1	123
20231218_2350	0.1	237

D + 0 FF:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM) 20231219_0000	0.1	148
20231219 0000	0.1	340
20231219_0010	0.1	148
20231219_0020	0.1	204
20231219_0040	0.1	155
20231219 0050	0.1	337
20231219 0100	0.1	150
20231219_0110	0.1	161
20231219_0120	0.3	155
20231219 0130	0.1	147
20231219_0140	0.1	155
20231219_0150	0.1	196
20231219 0200	0.2	141
20231219_0210	0.1	147
20231219_0220	0.1	186
20231219_0230	0.1	220
20231219 0240	1.4	249
20231219_0250	0.2	268
20231219_0300	0.1	167
20231219_0310	0.1	221
20231219_0320	0.4	150
20231219_0330	0.8	132
20231219_0340	0.1	184
20231219_0350	0.2	122
20231219_0400	1.9	153
20231219_0410	0.2	104
20231219_0420	0.1	159
20231219_0430	0.4	140
20231219_0440	0.1	154
20231219_0450	1.4	129
20231219_0500	0.3	197
20231219_0510	1.1	134
20231219_0520	0.2	156
20231219_0530 20231219_0540	0.4	129 138
20231219_0550	0.3	156
20231219_0600	0.1	93
20231219_0000	0.2	106
20231219_0620	1.2	69
20231219_0630	0.1	158
20231219 0640	0.1	71
20231219_0650	0.6	95
20231219_0700	0.1	98
20231219_0710	0.3	165
20231219_0720	0.1	144
20231219_0730	0.8	108
20231219_0740	0.1	0
20231219_0750	0.1	159
20231219_0800	0.1	91
20231219_0810	4.2	343
20231219_0820	0.6	74
20231219_0830	0.1	265
20231219_0840	0.1	145
20231219_0850	0.1	<u>87</u>
20231219_0900 20231219_0910	0.2	53 40
20231219_0910	0.3	233
20231219_0920	0.1	218
20231219_0940	0.1	154
20231219_0940	0.1	317
20231219_1000	0.1	205
20231219_1010	0.1	152
20231219_1020	0.1	345
20231219_1030	1.1	166
20231219_1040	1.5	148
20231219_1050	0.9	74
20231219_1100	3	114
20231219_1110	0.2	98
20231219_1120	0.1	313
20231219_1130	1.8	139
20231219_1140	2.2	170
20231219_1150	0.1	134

Data & Tima		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		110
20231219 1200	0.3	118
20231219_1210	0.2	88
20231219_1220	0.2	240
20231219_1230	0.1	75
20231219_1240	0.1	278
20231219_1250	0.1	328
20231219_1300	0.1	206
20231219_1310	0.2	304
20231219 1320	0.2	113
20231219 1330	0.7	145
20231219 1340	0.1	338
20231219 1350	0.8	109
20231219_1400	1.9	100
20231219 1410	1.3	287
20231219_1410	2	127
20231219_1420	3	159
20231219_1440	3.9	136
20231219_1450	0.3	156
20231219 1500	0.1	248
20231219_1510	0.4	100
20231219_1520	0.2	185
20231219_1530	1.3	186
20231219_1540	0.2	150
20231219_1550	0.1	200
20231219_1600	0.1	322
20231219_1610	1.2	71
20231219_1620	0.1	258
20231219_1630	0.3	231
20231219_1640	0.1	149
20231219_1650	0.1	51
20231219_1700	0.1	100
20231219_1710	0.1	265
20231219_1720	0.1	192
20231219_1730	0.2	318
20231219_1740	0.3	152
20231219_1750	0.1	141
20231219_1800	1.5	62
20231219_1810	0.1	185
20231219_1820	0.3	115
20231219_1830	0.1	345
20231219_1840	0.1	89
20231219_1850	0.1	46
20231219_1900	0.1	5
20231219_1910	0.1	319
20231219_1920	0.1	290
20231219_1930	0.2	311
20231219_1940	0.1	332
20231219_1950	0.1	89
20231219_2000	0.5	81
20231219_2010	0.1	46
20231219_2020	0.4	25
20231219_2030	0.2	64
20231219_2040	0.1	238
20231219_2050	1.7	321
20231219_2100	0.1	149
20231219_2110	0.1	82
20231219_2120	0.2	336
20231219_2130	1.8	336
20231219_2140	0.1	111
20231219_2150	0.1	145
20231219_2200	0.1	15
20231219_2210	0.1	347
20231219_2220	1.2	317
20231219_2230	0.1	353
20231219_2240	0.1	344
20231219_2250	0.4	71
20231219_2300	0.1	313
20231219_2310	0.1	269
20231219_2320	0.1	272
20231219_2330	1	8
20231219_2340	0.4	18
20231219_2350	0.2	355

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB HHMM)		
20231220 0000	4.8	338
20231220_0010	0.1	342
20231220_0020	0.1	318
20231220_0030	2.5	1
20231220_0040	0.2	349
20231220_0050	0.2	271
20231220_0100	0.1	314
20231220_0110	0.7	298
20231220_0120	0.8	116
20231220 0130	1.9	5
20231220_0140	4.2	325
20231220_0150	1.3	74
20231220_0130	0.8	294
20231220_0200	0.1	53
20231220_0210		1
	5	
20231220_0230	0.1	37
20231220_0240	0.2	286
20231220_0250	0.1	95
20231220_0300	1.3	22
20231220_0310	0.5	215
20231220_0320	2.7	345
20231220_0330	1.2	349
20231220_0340	0.1	69
20231220 0350	0.9	331
20231220 0400	0.5	348
20231220_0410	0.6	306
20231220 0420	4.5	61
20231220_0420	1.4	294
20231220_0430	0.2	345
20231220_0450	2.5	311
20231220_0500	2.3	298
20231220_0510	1.5	63
20231220_0520	0.2	330
20231220_0530	0.4	348
20231220_0540	0.2	307
20231220_0550	0.2	72
20231220_0600	0.3	86
20231220 0610	0.1	350
20231220_0620	2.1	343
20231220_0630	0.2	322
20231220 0640	0.2	336
20231220 0650	1.6	79
20231220_0700	2.5	343
20231220_0700	1.8	59
20231220_0710	0.1	323
		294
20231220_0730	0.1	
20231220_0740	0.1	108
20231220_0750	0.1	93
20231220_0800	0.1	354
20231220_0810	0.1	71
20231220_0820	0.3	48
20231220_0830	0.7	8
20231220_0840	0.1	217
20231220_0850	2.9	313
20231220_0900	0.4	2
20231220_0910	0.5	66
20231220_0920	2.2	32
20231220_0930	0.3	53
20231220_0940	0.4	279
20231220 0950	0.1	131
20231220_1000	0.1	3
20231220_1000	0.2	47
20231220_1010	0.2	26
20231220 1020	0.4	24
	0.4 4	309
20231220_1040		
20231220_1050	1.8	325
20231220_1100	1.1	336
20231220_1110	2.9	316
20231220_1120	0.1	322
20231220_1130	0.8	282
20231220_1140	0.3	20
20231220_1150	0.1	63

Data & Tima		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		240
20231220 1200	0.3	240
20231220_1210 20231220_1220	0.9	265
	4.4	312
20231220_1230	0.2	227
20231220_1240	1.3	356
20231220_1250	1.6	55
20231220_1300	1.5	338
20231220_1310	0.1	193
20231220 1320	1.5	305
20231220_1330	0.3	30
20231220_1340	0.1	19
20231220 1350	1.8	23
20231220_1400	0.1	338
20231220_1400	0.2	137
20231220_1410	0.5	95
	0.2	39
20231220_1440	0.1	119
20231220_1450	1.2	289
20231220_1500	0.2	165
20231220_1510	0.6	309
20231220_1520	0.2	150
20231220_1530	0.6	260
20231220_1540	1.4	336
20231220_1550	0.1	343
20231220_1600	3.8	341
20231220_1610	0.4	9
20231220_1620	0.5	316
20231220_1630	6.7	314
20231220 1640	0.1	336
20231220 1650	0.1	171
20231220 1700	5.4	310
20231220 1710	0.1	319
20231220_1720	1.3	34
20231220 1730	0.1	127
20231220_1740	0.1	20
20231220 1750	0.4	35
20231220 1800	0.2	64
20231220 1810	0.1	352
20231220_1820	0.9	36
20231220 1830	0.1	326
20231220 1840	0.1	286
20231220 1850	0.2	324
20231220 1900	0.1	284
20231220_1910	0.3	280
20231220 1920	0.1	4
20231220 1930	0.1	35
20231220_1940	1.3	50
20231220 1950	0.1	286
20231220 2000	0.5	95
20231220_2010	0.1	29
20231220_2020	0.4	318
20231220 2030	3.5	302
20231220 2040	0.3	274
20231220 2050	0.1	278
20231220_2100	0.2	56
20231220_2110	0.2	10
20231220 2120	0.2	290
20231220_2130	0.4	338
20231220 2140	0.1	345
20231220 2150	2	324
20231220_2200	0.2	325
20231220_2210	0.1	320
20231220_2210	0.1	313
20231220 2230	0.1	38
20231220_2230	0.1	243
20231220_2210	0.9	304
20231220_2230	0.7	304
20231220_2300	0.1	304
20231220_2310	0.1	306
20231220_2320	0.2	21
20231220_2330	0.1	1
20231220_2340	0.1	310
		510

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)	1.1	77
20231221_0000 20231221_0010	1.1	290
20231221_0010 20231221_0020	0.2	27
20231221_0020	0.1	253
20231221_0030	0.1	85
20231221_0040	0.1	286
20231221_0030	0.1	307
20231221_0110	0.1	329
20231221 0120	0.2	291
20231221 0130	0.1	15
20231221_0140	0.2	354
20231221_0150	0.1	69
20231221_0200	0.2	45
20231221_0210	0.8	301
20231221_0220	0.1	351
20231221_0230	0.1	28
20231221_0240	0.2	301
20231221_0250	0.2	325
20231221_0300	0.4	31
20231221_0310	0.1	265
20231221_0320	0.3	44
20231221_0330	0.1	281
20231221_0340	2.7	309
20231221_0350	2.2	335 347
20231221_0400	0.5	
20231221_0410 20231221_0420	0.3 0.2	309 313
20231221_0420	0.3	310
20231221_0440	0.5	90
20231221_0440	0.1	342
20231221_0130	0.1	2
20231221_0510	0.1	345
20231221_0520	0.1	23
20231221 0530	0.1	18
20231221 0540	0.1	242
20231221_0550	0.8	42
20231221_0600	3	302
20231221_0610	2.1	335
20231221_0620	1.3	339
20231221_0630	2.1	316
20231221_0640	0.1	42
20231221_0650	0.1	48
20231221_0700	0.1	37
20231221_0710	0.2	345
20231221_0720	0.1	318
20231221_0730	1.3	238
20231221_0740	2.3	312 324
20231221_0750 20231221_0800	1.4	324
20231221_0800	1.4	321 4
20231221_0810	0.1	34
20231221_0820	0.1	258
20231221_0840	3.6	351
20231221_0850	3.9	334
20231221_0900	0.8	301
20231221_0910	1.6	321
20231221_0920	0.1	70
20231221_0930	0.3	296
20231221_0940	1	314
20231221_0950	0.1	39
20231221_1000	2.6	320
20231221_1010	0.8	48
20231221_1020	5.9	312
20231221_1030	1.1	36
20231221_1040	0.2	69
20231221_1050	0.4	352
20231221_1100	0.3	333
20231221_1110	1.8	347
20231221_1120	0.1	326
20231221_1130	0.2	47
20231221_1140	2.4	299
20231221_1150	0.3	119

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231221 1200	0.3	287
20231221_1210	0.4	3
20231221_1220	0.1	349
20231221 1230	0.1	5
20231221 1240	0.6	346
20231221_1250	0.2	27
20231221 1300	7.8	331
20231221_1310	0.2	125
20231221 1320	0.2	89
20231221 1330	0.6	109
20231221_1340	0.7	17
20231221_1350	0.1	60
20231221_1400	0.1	214
20231221_1410	2.8	74
20231221_1420	0.4	10
20231221_1430	0.8	234
20231221_1440	2.4	298
20231221_1450	0.8	343
20231221_1500	1.2	272
20231221_1510	0.4	317
20231221_1520	1	252
20231221_1530	0.1	335
20231221_1540	4	252
20231221_1550	3.6	326
20231221_1600	2	320
20231221_1610	1.4	288
20231221_1620	0.9	261
20231221_1630	0.6	198
20231221_1640	0.3	280
20231221_1650 20231221_1700	0.1	329
	0.1	63
20231221_1710	1.5	334 307
20231221_1720 20231221_1730	1.8	
	1.9	300 28
20231221_1740 20231221_1750	0.6 4.6	331
20231221 1/30	0.3	106
20231221_1810	0.4	236
20231221_1820	0.2	30
20231221 1830	0.1	4
20231221 1840	1.7	284
20231221 1850	4.2	350
20231221 1900	4.6	324
20231221_1910	0.1	342
20231221_1920	0.1	134
20231221_1930	0.2	348
20231221_1940	0.1	42
20231221_1950	3.6	315
20231221_2000	0.9	53
20231221_2010	2.4	289
20231221_2020	0.9	47
20231221_2030	2.5	271
20231221_2040	0.1	345
20231221_2050	0.2	61
20231221_2100	0.1	313
20231221_2110	1.6	326
20231221_2120	1.3	299
20231221_2130	1.3	321
20231221_2140	1.5	57
20231221_2150	0.1	89
20231221_2200	0.1	0
20231221_2210	1.2	88
20231221_2220 20231221_2230	3.5 4.1	328 245
20231221_2230	0.1	245
20231221_2240	1.7	267
20231221_2230	0.1	179
20231221_2300	1.6	35
20231221_2310	1.6	335
20231221_2320	0.1	58
20231221_2330	0.1	112
20231221_2340	0.2	285

D . 0 F:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		334
20231222 0000 20231222 0010	2.9 2.9	
20231222_0010 20231222_0020	2.9	271 344
20231222_0020	0.4	13
20231222_0040 20231222_0050	0.4 0.2	263
		4
20231222_0100	1.2	13
20231222_0110	5.6	339
20231222_0120	1	267
20231222_0130	0.3	250
20231222_0140	3.3	349
20231222_0150	0.4	268
20231222_0200	0.2	141
20231222_0210	0.1	308
20231222_0220	0.1	329
20231222_0230	0.1	353
20231222_0240	0.1	87
20231222_0250	0.1	211
20231222 0300	0.6	243
20231222_0310	0.1	345
20231222_0320	0.1	213
20231222_0330	0.4	307
20231222_0340	0.2	317
20231222_0350	0.2	17
20231222_0400	0.7	339
20231222_0410	0.1	54
20231222_0420	0.8	289
20231222_0430	1.1	3
20231222_0440	0.1	268
20231222_0450	1	324
20231222_0500	0.4	306
20231222_0510	1.6	299
20231222_0520	0.6	299
20231222_0530	0.1	153
20231222_0540	3.6	325
20231222_0550	1.1	314
20231222_0600	1	320
20231222_0610	0.1	336
20231222_0620	0.4	311
20231222_0630	0.1	292
20231222_0640	0.1	326
20231222_0650	3.2	315
20231222_0700	0.1	284
20231222_0710	0.1	86
20231222_0720	2.4	295
20231222_0730	0.3	311
20231222_0740	0.8	320
20231222_0750	0.6	341
20231222_0800	0.1	343
20231222_0810	1.7	337
20231222_0820	0.4	341
20231222_0830	0.2	337
20231222_0840	0.1	117
20231222_0850	0.1	226
20231222_0900	1.1	332
20231222_0910	0.9	348
20231222_0920	0.2	252
20231222_0930	0.3	105
20231222_0940	0.5	8
20231222 0950	0.1	12
20231222_1000	0.7	53
20231222_1010	2.9	73
20231222 1020	0.1	37
20231222_1030	0.5	313
20231222_1040	0.5	350
20231222_1050	0.1	27
20231222 1100	0.1	177
20231222_1100	1.3	307
20231222_1110	0.6	80
20231222_1120	0.1	298
20231222_1130	0.2	83
20231222_1140	0.1	26
20231222_1130	V.1	20

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231222 1200	0.3	60
20231222_1210	0.2	56
20231222_1220	0.1	333
20231222_1230	0.1	136
20231222_1240	2.1	1
20231222_1250	0.6	325
20231222_1300	0.1	288
20231222_1310	1.2	12
20231222_1320	1.6	284
20231222_1330	0.4	315
20231222_1340	0.1	279
20231222_1350	0.6	8
20231222_1400	0.1	327
20231222_1410	0.1	84
20231222_1420	0.1	32
20231222_1430	0.1	20
20231222_1440	0.1	320
20231222_1450 20231222_1500	0.8 0.1	337 107
20231222_1500 20231222_1510		330
20231222_1510	0.1 0.1	162
20231222_1520	0.5	21
20231222_1530	0.8	339
20231222_1540	0.8	17
20231222_1530	1	6
20231222_1610	0.1	271
20231222 1620	0.1	279
20231222_1630	0.1	315
20231222 1640	0.1	301
20231222 1650	0.1	65
20231222 1700	0.1	33
20231222 1710	0.1	129
20231222 1720	0.1	90
20231222_1730	0.1	105
20231222_1740	0.1	3
20231222_1750	0.1	113
20231222_1800	0.1	67
20231222_1810	0.1	152
20231222_1820	0.1	136
20231222_1830	0.1	138
20231222_1840	0.1	94
20231222_1850	0.1	183
20231222_1900	0.1	143
20231222_1910	0.1	310
20231222_1920 20231222_1930	0.1	81 312
20231222_1930	0.1 0.1	304
20231222_1940	0.1	152
20231222 2000	0.1	141
20231222_2000	0.1	109
20231222_2010	0.1	146
20231222 2030	0.1	233
20231222 2040	0.1	149
20231222_2050	0.1	139
20231222_2100	0.1	62
20231222_2110	0.2	129
20231222_2120	0.1	171
20231222_2130	0.1	138
20231222_2140	0.1	112
20231222_2150	0.1	80
20231222_2200	0.1	134
20231222_2210	0.1	112
20231222 2220	0.1	46
20231222_2230	0.1	67
20231222_2240	0.2	96
20231222_2250	0.1	68
20231222_2300	0.1	139
20231222_2310	0.1	3
20231222_2320	0.1	176
20231222_2330 20231222_2340	0.1	55 330
20231222 2350	0.4	294
20231222_2330	0.1	L74

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB HHMM)		
20231223_0000 20231223_0010	0.1 0.1	327 167
20231223_0020	0.1	305
20231223_0030	0.6	355
20231223_0040	0.2	294
20231223_0050 20231223_0100	0.1 0.1	302 287
20231223_0100	0.1	319
20231223_0120	0.2	21
20231223_0130	0.1	77
20231223_0140 20231223_0150	0.1 0.1	6 356
20231223_0130	0.1	307
20231223_0210	6.2	292
20231223_0220	3.5	319
20231223_0230	0.5	13
20231223_0240 20231223_0250	1.4 0.2	78 75
20231223_0300	1.5	332
20231223_0310	2.8	328
20231223_0320	0.4	60
20231223_0330 20231223_0340	0.1 0.4	217 52
20231223_0340	0.4	293
20231223_0400	0.2	34
20231223_0410	0.6	301
20231223 0420 20231223 0430	0.1	237
20231223 0430 20231223 0440	0.2 0.1	346 36
20231223_0450	0.6	326
20231223_0500	2.4	14
20231223_0510	2.7	325
20231223_0520 20231223_0530	0.3 0.2	74 343
20231223_0540	1.3	0
20231223_0550	0.1	2
20231223_0600	0.6	228
20231223_0610 20231223_0620	1.1 0.1	326 348
20231223_0020	2	22
20231223_0640	0.1	349
20231223_0650	0.1	353
20231223_0700	0.1	331 345
20231223_0710 20231223_0720	0.1 0.3	294
20231223_0730	0.1	43
20231223_0740	1.9	325
20231223_0750	0.2	300
20231223_0800 20231223_0810	1.1 1.5	298 19
20231223_0820	0.3	15
20231223_0830	0.1	38
20231223_0840	0.4	329
20231223_0850 20231223_0900	0.4 0.1	355 322
20231223_0910	0.1	310
20231223_0920	0.1	238
20231223_0930	0.4	60
20231223_0940 20231223_0950	0.1 0.1	347 340
20231223_1000	0.1	318
20231223_1010	0.1	311
20231223_1020	0.3	338
20231223_1030 20231223_1040	0.1	295 337
20231223_1040	0.1 0.3	80
20231223_1100	0.2	128
20231223_1110	0.9	101
20231223_1120	0.2	173
20231223_1130 20231223_1140	0.3 0.1	133 95
20231223_1140	0.1	170

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231223 1200	0.1	207
20231223_1210	0.8	150
20231223 1220	0.1	143
20231223_1230	0.1	144
20231223 1240	0.3	114
20231223 1250	0.8	99
20231223 1300	1	145
20231223_1310	0.1	106
20231223 1320	0.1	150
20231223 1330	0.4	57
20231223_1340	0.8	57
20231223 1350	0.5	114
20231223_1400	0.2	256
20231223 1410	0.1	161
20231223_1420	0.1	68
20231223 1430	0.4	120
20231223_1440	0.1	39
20231223 1450	0.1	279
20231223_1500	0.1	126
20231223_1510	0.1	117
20231223_1520	0.1	41
20231223_1530	0.1	280
20231223 1540	0.1	320
20231223_1550	0.1	123
20231223_1600	0.4	19
20231223_1610	1.2	56
20231223 1620	0.1	316
20231223_1630	0.2	16
20231223_1640	0.1	85
20231223 1650	2.3	299
20231223 1700	0.1	317
20231223 1710	0.4	15
20231223_1720	0.2	336
20231223 1730	0.1	352
20231223_1740	0.1	327
20231223_1750	0.1	120
20231223_1800	0.1	310
20231223_1810	0.1	313
20231223_1820	0.1	100
20231223_1830	0.1	5
20231223_1840	0.2	147
20231223_1850	0.1	76
20231223_1900	0.1	338
20231223_1910	0.1	148
20231223_1920	0.1	109
20231223_1930	0.1	184
20231223_1940	0.1	43
20231223_1950	0.1	113
20231223_2000	0.1	98
20231223_2010	0.1	295
20231223_2020	0.1	89
20231223_2030	0.1	86
20231223_2040	0.1	61
20231223 2050 20231223 2100	0.1	353 128
20231223_2100 20231223_2110	0.1 0.1	53
20231223_2110	0.1	
20231223_2120	0.1	72
20231223_2130	0.1	86
20231223_2140	0.1	90
20231223_2130	0.1	71
20231223_2200	0.1	62
20231223 2220	0.1	52
20231223 2220	0.1	70
20231223_2230	0.1	85
20231223_2240	0.1	75
20231223_2230	0.1	87
20231223_2300	0.1	49
20231223_2310	0.1	64
20231223_2320	0.1	39
20231223_2330	0.1	352
20231223_2350	0.1	86

Date & Time	Wind Spand (m/s)	Wind Direction (Decree)
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231224_0000 20231224_0010	0.1 0.1	140 84
20231224_0010	0.1	65
20231224_0030	0.1	72
20231224_0040	0.1	48
20231224_0050 20231224_0100	0.1 0.1	93 75
20231224_0100	0.1	49
20231224_0120	0.1	90
20231224_0130	0.1	73
20231224_0140 20231224_0150	0.1 0.1	60 72
20231224_0130	0.1	80
20231224_0210	0.1	78
20231224_0220	0.1	86
20231224_0230	0.1	62 51
20231224_0240 20231224_0250	0.1 0.1	60
20231224 0300	0.1	73
20231224_0310	0.1	73
20231224_0320	0.1	53 72
20231224_0330 20231224_0340	0.1 0.1	57
20231224_0350	0.1	76
20231224_0400	0.1	85
20231224_0410	0.1	46
20231224_0420 20231224_0430	0.1 0.1	49 91
20231224_0430	0.1	83
20231224_0450	0.1	79
20231224_0500	0.1	73
20231224_0510 20231224_0520	0.1 0.1	70 87
20231224_0520	0.1	89
20231224_0540	0.1	46
20231224_0550	0.1	85
20231224_0600 20231224_0610	0.1 0.1	61 69
20231224_0620	0.1	85
20231224_0630	0.1	65
20231224_0640	0.1	60
20231224_0650 20231224_0700	0.1 0.1	28 51
20231224_0710	0.1	63
20231224_0720	0.1	95
20231224_0730	0.1	72
20231224_0740 20231224_0750	0.1 0.1	73 111
20231224_0800	0.1	128
20231224_0810	0.1	88
20231224_0820	0.1	120
20231224_0830 20231224_0840	0.1 0.1	156 57
20231224 0850	0.1	139
20231224_0900	0.1	162
20231224_0910	0.1	61
20231224_0920 20231224_0930	0.1 2.2	59 296
20231224_0940	0.2	295
20231224_0950	1.4	301
20231224_1000	0.2	4 221
20231224_1010 20231224_1020	1.2 0.6	321 9
20231224_1020	0.7	339
20231224_1040	1.1	323
20231224_1050	1	60
20231224_1100 20231224_1110	0.9 2.9	305 334
20231224_1110	1.5	352
20231224_1130	6.1	6
20231224_1140	1.8	240
20231224_1150	0.2	85

Data & Tima		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB HHMM)		25
20231224 1200	0.1	85
20231224_1210	0.2	304
20231224_1220	2	2
20231224_1230	0.1	159
20231224_1240	0.8	95
20231224_1250	4.2	49
20231224_1300	1.2	16
20231224 1310	1	77
20231224 1320	0.1	68
20231224 1330	4.7	71
20231224 1340	0.8	88
20231224 1350	1.8	116
20231224 1400	0.1	256
20231224_1410	0.4	100
20231224_1410	0.6	139
	2.1	117
20231224_1440	2.8	58
20231224_1450	0.1	305
20231224_1500	0.7	52
20231224_1510	0.1	29
20231224_1520	0.1	0
20231224_1530	0.1	194
20231224_1540	0.3	23
20231224_1550	1	88
20231224_1600	0.1	249
20231224_1610	0.7	134
20231224_1620	0.1	60
20231224_1630	0.1	124
20231224_1640	0.1	66
20231224_1650	0.1	129
20231224_1700	0.1	132
20231224_1710	0.1	98
20231224_1720	0.1	242
20231224_1730	0.1	106
20231224_1740	0.1	152
20231224_1750	0.1	343
20231224_1800	0.1	29
20231224_1810	0.1	70
20231224_1820	0.1	45
20231224_1830	0.1	87
20231224_1840	0.1	31
20231224_1850	0.1	130
20231224_1900	0.4	12
20231224_1910	0.4	41
20231224_1920	1.6	273
20231224_1930	0.4	334
20231224_1940	0.2	174
20231224_1950	0.1	154
20231224_2000	0.6	141
20231224_2010	0.1	100
20231224_2020	0.1	330
20231224_2030	0.1	183
20231224_2040	0.8	99
20231224_2050	1.5	137
20231224_2100	0.2	323
20231224_2110	0.1	23
20231224_2120	0.2	92
20231224_2130	0.1	240
20231224_2140	0.1	140
20231224_2150	0.1	90
20231224_2200	0.1	108
20231224_2210	0.1	314
20231224 2220	0.1	112
20231224_2230	0.1	0
20231224_2240	0.1	17
20231224_2250	0.1	306
20231224_2300	0.1	211
20231224_2310	0.1	111
20231224_2320	0.1	136
20231224_2330	0.1	159
20231224_2340	0.1	114
20231224_2350	0.1	37
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D 0 FF:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231225_0000 20231225_0010	0.1	83 349
20231225_0010	0.1 0.1	85
20231225_0020	0.1	68
20231225_0040	0.1	124
20231225_0050	0.1	135
20231225_0100	0.1	36
20231225_0110	0.1	30
20231225_0120	0.1	77
20231225 0130	0.1	326
20231225_0140	0.1	113
20231225_0150	0.1	100
20231225_0200	0.2	338
20231225_0210	0.1	126
20231225_0220	0.1	121
20231225_0230	0.1	133
20231225_0240	0.1	118
20231225_0250	0.1	327
20231225_0300	0.1	106
20231225_0310	0.1	350
20231225_0320	0.1	312
20231225_0330	0.1	352
20231225_0340	0.1	23
20231225_0350	0.1	51
20231225_0400	0.1	29
20231225_0410	0.1	39
20231225_0420	0.1	75
20231225_0430	0.1	76
20231225_0440	0.1	333
20231225_0450	0.1	314
20231225 0500	0.1	64
20231225_0510	0.1	59
20231225_0520	0.1	73
20231225_0530	0.1	81
20231225_0540	0.1	65
20231225_0550	0.1	68
20231225_0600	0.1	58
20231225 0610	0.1	64
20231225_0620	0.1	72
20231225_0630	0.1	73
20231225_0640	0.1	93
20231225 0650	0.1	94
20231225_0700	0.1	63
20231225_0710	0.1	43
20231225_0720	0.1	52
20231225_0730	0.1	71
20231225_0740	0.1	74
20231225_0750	0.1	71
20231225_0790	0.1	45
20231225_0800	0.1	34
20231225_0820	0.1	104
20231225_0830	0.1	108
20231225_0840	0.1	128
20231225_0850	0.1	121
20231225_0830	0.1	138
20231225 0910	0.1	155
20231225_0920	0.1	172
20231225_0920	0.1	183
20231225_0940	0.1	130
20231225_0940	0.1	126
20231225 1000	0.3	222
20231225_1010	0.4	140
20231225_1010	0.1	318
20231225 1020	0.6	221
20231225_1030	0.0	140
20231225_1040		249
	0.2	
20231225_1100	0.1	67
20231225_1110	3.2	260
20231225_1120	0.1	257
20231225_1130	0.2	256
20231225 1140	0.3	201
20231225_1150	0.3	243

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231225_1200	0.1	335
20231225_1210	0.3	203
20231225_1220	0.1	259
20231225_1230	1.3 0.3	265
20231225_1240 20231225_1250	0.3	229 171
20231225_1230	0.5	150
20231225_1310	1.7	285
20231225 1320	0.2	21
20231225_1330	0.1	255
20231225_1340	0.3	89
20231225_1350	1.5	340
20231225_1400 20231225_1410	0.1	114
20231225_1410 20231225_1420	0.2	231 36
20231225_1420	0.7	253
20231225_1440	0.1	279
20231225 1450	0.1	111
20231225_1500	1.3	50
20231225_1510	0.1	320
20231225_1520	0.1	11
20231225_1530	0.1	40
20231225_1540 20231225_1550	0.1 0.6	184 217
20231225_1600	0.0	209
20231225_1610	0.1	338
20231225 1620	0.2	159
20231225_1630	0.1	36
20231225_1640	0.1	343
20231225_1650	0.1	70
20231225_1700	0.1	111
20231225_1710 20231225_1720	0.1 0.1	318 55
20231225_1720	0.1	65
20231225_1740	0.1	32
20231225_1750	0.1	353
20231225_1800	0.1	29
20231225_1810	0.1	340
20231225_1820	0.1	344
20231225_1830 20231225_1840	0.1 0.1	30 11
20231225_1840	0.1	73
20231225_1900	0.1	23
20231225_1910	0.1	47
20231225_1920	0.1	37
20231225_1930	0.1	45
20231225_1940	0.1	49 13
20231225_1950 20231225_2000	0.1 0.1	32
20231225_2000	0.1	59 59
20231225_2010	0.1	15
20231225_2030	0.1	44
20231225_2040	0.1	141
20231225_2050	0.1	36
20231225_2100	0.1	106
20231225_2110 20231225_2120	0.1	346 41
20231225_2120	0.1	152
20231225_2140	0.1	106
20231225 2150	0.1	45
20231225_2200	0.1	46
20231225_2210	0.1	71
20231225_2220	0.1	62
20231225_2230	0.1	211
20231225_2240 20231225_2250	0.1	8 51
20231225_2250	0.1 0.1	51
20231225_2300	0.1	90
20231225_2310	0.1	83
20231225_2330	0.1	57
20231225_2340	0.1	58
20231225_2350	0.1	25

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB HHMM)		
20231226_0000	0.1 0.1	25 179
20231226_0010 20231226_0020	0.1	78
20231226_0030	0.1	238
20231226_0040	0.1	89
20231226_0050	0.1	103
20231226_0100 20231226_0110	0.1 0.1	166 265
20231226 0120	0.1	15
20231226_0130	0.1	15
20231226_0140	0.1	47
20231226_0150 20231226_0200	0.1 0.1	49 155
20231226 0210	0.1	127
20231226_0220	0.1	228
20231226_0230	0.1	123
20231226_0240	0.1	142
20231226_0250 20231226_0300	0.1	126 62
20231226_0310	0.1	146
20231226_0320	0.1	211
20231226_0330	0.1	213
20231226_0340 20231226_0350	0.1 0.1	165 240
20231226_0400	0.1	126
20231226_0410	0.1	78
20231226_0420	0.1	79
20231226 0430	0.1	164
20231226_0440 20231226_0450	0.1 0.1	282 15
20231226_0430	0.1	48
20231226_0510	0.1	53
20231226_0520	0.1	65
20231226_0530	0.1	16
20231226_0540 20231226_0550	0.1 0.1	37 253
20231226 0600	0.1	84
20231226_0610	0.1	92
20231226_0620	0.1	33
20231226_0630 20231226_0640	0.1 0.1	146 38
20231226_0650	0.1	142
20231226_0700	0.1	36
20231226_0710	0.1	32
20231226_0720	0.1	21 124
20231226_0730 20231226_0740	0.1 0.1	244
20231226_0750	0.1	269
20231226_0800	0.1	155
20231226_0810	0.1	280
20231226_0820 20231226_0830	0.1 0.1	244 16
20231226 0840	0.1	208
20231226_0850	0.1	216
20231226_0900	0.1	176
20231226_0910	0.1	97
20231226_0920 20231226_0930	0.1 0.1	143 133
20231226_0940	0.1	193
20231226_0950	0.1	141
20231226_1000	0.1	147
20231226_1010 20231226_1020	0.1 0.1	254 154
20231226_1030	0.1	154
20231226_1040	0.1	135
20231226_1050	0.2	195
20231226_1100	0.2	244
20231226_1110 20231226_1120	0.1 0.2	168 60
20231226 1130	0.1	76
20231226_1140	0.8	196
20231226_1150	0.1	183

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM) 20231226_1200	0.1	275
20231226_1210	0.1	99
20231226_1220	1.5	266
20231226_1230	0.1	101
20231226_1240	0.1	163
20231226_1250 20231226_1300	0.1 0.1	59 286
20231226_1310	0.7	146
20231226_1320	0.3	91
20231226_1330	0.3	304
20231226_1340	0.9	101
20231226_1350 20231226_1400	0.4 1.2	8 19
20231226_1410	0.1	135
20231226_1420	1.2	175
20231226_1430	0.9	191
20231226_1440	0.1	88
20231226_1450	0.1	189
20231226_1500 20231226_1510	0.3 0.1	57 333
20231226_1510	0.1	62
20231226_1530	0.2	139
20231226_1540	0.1	164
20231226_1550	0.1	208
20231226_1600 20231226_1610	0.2 1.3	114 52
20231226 1610	1.7	138
20231226 1630	0.1	30
20231226_1640	0.2	168
20231226_1650	0.1	19
20231226_1700	0.1	42
20231226_1710 20231226_1720	0.1 0.1	62 94
20231226 1730	0.1	84
20231226_1740	0.2	101
20231226_1750	0.2	138
20231226_1800	1.2	111
20231226_1810 20231226_1820	0.1 0.6	43 110
20231226_1830	0.3	98
20231226_1840	0.6	108
20231226_1850	0.1	72
20231226_1900	0.1	128
20231226_1910 20231226_1920	0.1 0.4	105 123
20231226_1920	0.1	347
20231226_1940	0.1	68
20231226_1950	0.1	126
20231226_2000	0.1	22
20231226_2010 20231226_2020	0.1 0.1	126 55
20231226 2030	0.1	232
20231226_2040	0.1	327
20231226_2050	0.1	81
20231226_2100	0.1	78
20231226_2110	0.1	330 354
20231226_2120 20231226_2130	0.1	354 163
20231226_2130	0.1	312
20231226_2150	0.1	38
20231226_2200	0.1	337
20231226 2210	0.1	102
20231226_2220 20231226_2230	0.1 0.1	339 338
20231226_2240	0.1	121
20231226_2250	0.1	136
20231226_2300	0.1	51
20231226_2310	0.1	131
20231226_2320	0.1	343
20231226_2330 20231226_2340	0.1 0.1	26 51
20231226 2350	0.1	280
		=0.0

D + 0 FF:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM) 20231227 0000	0.1	119
20231227_0000 20231227_0010	0.1	95
20231227_0010	0.1	256
20231227_0020	0.1	91
20231227_0030	0.1	195
20231227_0040	0.1	344
20231227 0100	0.1	259
20231227_0100	0.1	165
20231227_0120	0.1	156
20231227 0130	0.1	268
20231227_0140	0.1	122
20231227_0150	0.1	56
20231227 0200	0.1	7
20231227 0210	0.1	326
20231227_0220	0.1	325
20231227_0230	0.1	13
20231227_0240	0.1	94
20231227_0250	0.1	35
20231227_0300	0.1	54
20231227_0310	0.1	338
20231227_0320	0.1	334
20231227_0330	0.1	328
20231227_0340	0.1	224
20231227_0350	0.1	46
20231227_0400	0.1	66
20231227_0410	0.1	120
20231227_0420	0.1	54
20231227_0430	0.1	81
20231227_0440	0.1	54
20231227_0450	0.1	132
20231227_0500	0.1	58
20231227_0510	0.1	22
20231227_0520 20231227_0530	0.1	326
20231227_0530 20231227_0540	0.1 0.1	337 66
20231227_0550	0.1	70
20231227_0600	0.1	69
20231227_0000	0.1	328
20231227_0620	0.1	274
20231227_0630	0.1	149
20231227_0640	0.1	84
20231227 0650	0.1	13
20231227_0700	0.1	121
20231227_0710	0.1	275
20231227_0720	0.1	64
20231227_0730	0.1	94
20231227_0740	0.1	222
20231227_0750	0.1	85
20231227_0800	0.1	33
20231227_0810	0.1	62
20231227_0820	0.1	91
20231227_0830	0.1	7
20231227_0840	0.1	148
20231227_0850	0.1	109
20231227_0900	0.1	101
20231227_0910	0.1	160
20231227_0920 20231227_0930	0.1	210 130
	0.1	130
20231227_0940 20231227_0950	0.1	169
20231227 1000	0.1	200
20231227_1010	0.1	137
20231227_1010	0.1	123
20231227 1020	0.1	158
20231227_1040	0.2	91
20231227_1050	0.1	181
20231227_1100	0.1	64
20231227_1110	0.1	84
20231227_1120	0.1	139
20231227_1130	0.1	52
20231227_1140	0.1	291
20231227_1150	0.1	76

Date & Time	I	
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231227 1200	0.1	130
20231227_1210	0.1	199
20231227_1210 20231227_1220	0.2	67
20231227_1230	0.1	212
20231227_1240	0.4	153
20231227_1250	0.1	268
20231227_1300	0.3	178
20231227_1310	0.9	115
20231227 1320	0.1	242
20231227_1330 20231227_1340	0.1	256
20231227_1340	0.1 0.1	55 101
20231227_1330	0.1	156
20231227_1400	0.1	35
20231227 1420	0.1	155
20231227 1430	0.3	94
20231227 1440	0.2	63
20231227_1450	0.1	136
20231227_1500	0.7	89
20231227_1510	0.1	136
20231227_1520	0.1	67
20231227_1530	0.1	61
20231227_1540	0.1	97
20231227_1550	0.1	188
20231227_1600	0.5	125
20231227_1610 20231227_1620	0.2 0.1	66 114
20231227_1620	0.1	68
20231227_1640	0.1	55
20231227_1650	0.1	35
20231227_1700	0.1	250
20231227_1710	0.1	59
20231227_1720	0.1	84
20231227_1730	0.1	339
20231227_1740	0.1	310
20231227_1750	0.1	82
20231227 1800	0.1	67
20231227_1810	0.1	94
20231227_1820	0.1	5
20231227_1830	0.1	317
20231227_1840 20231227_1850	0.1 0.1	39 18
20231227_1830	0.1	72
20231227_1900	0.1	49
20231227_1910	0.1	343
20231227_1930	0.1	299
20231227_1940	0.1	337
20231227_1950	0.1	52
20231227_2000	0.1	86
20231227_2010	0.1	349
20231227_2020	0.1	45
20231227_2030	0.1	23
20231227_2040	0.1	340
20231227_2050	0.1	333
20231227_2100 20231227_2110	0.1 0.1	114 158
20231227_2110	0.1	138 88
20231227_2120	0.1	103
20231227_2130	0.1	71
20231227_2140	0.1	61
20231227_2200	0.1	61
20231227 2210	0.1	344
20231227_2220	0.1	4
20231227_2230	0.1	323
20231227_2240	0.1	306
20231227_2250	0.1	61
20231227_2300	0.1	38
20231227_2310	0.1	72
20231227_2320	0.1	14 143
20231227_2330 20231227_2340	0.1 0.1	34
20231227_2350	0.1	89
ZUZJ1ZZ1_ZJJU	0.4	07

Date & Time	Wind Spood (m/s)	Wind Direction (Decree)
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231228_0000 20231228_0010	0.3 0.1	183 77
20231228_0010 20231228_0020	0.8	58
20231228_0030	0.1	129
20231228_0040	0.1	42
20231228_0050 20231228_0100	0.1 0.1	128 84
20231228_0110	0.2	98
20231228_0120	0.5	125
20231228_0130	0.2	82
20231228_0140 20231228_0150	0.1 0.1	111 162
20231228_0200	0.2	132
20231228_0210	0.1	4
20231228_0220	0.1	162
20231228_0230 20231228_0240	0.1 0.1	197 119
20231228 0250	0.1	340
20231228_0300	0.1	318
20231228_0310	0.1	94
20231228_0320 20231228_0330	0.1 0.1	33 321
20231228_0330	0.1	70
20231228_0350	0.1	78
20231228_0400	0.2	29
20231228_0410 20231228_0420	0.1 0.1	69 123
20231228_0420	0.1	35
20231228_0440	2.1	142
20231228_0450	0.1	104
20231228_0500	0.1 0.1	312 104
20231228_0510 20231228_0520	0.1	282
20231228_0530	0.1	79
20231228_0540	0.1	65
20231228_0550	0.1	160
20231228_0600 20231228_0610	0.1 0.1	307 116
20231228_0620	0.1	342
20231228_0630	0.1	45
20231228_0640 20231228_0650	0.1 0.1	108 148
20231228_0700	0.1	141
20231228_0710	0.1	202
20231228_0720	0.1	31
20231228_0730 20231228_0740	0.1 0.1	184 62
20231228_0740	0.1	124
20231228_0800	0.1	189
20231228_0810	0.1	53
20231228_0820 20231228_0830	0.1 0.1	100 343
20231228 0840	0.1	
20231228_0850	0.1	137
20231228_0900	0.1	199
20231228_0910 20231228_0920	0.1 0.1	173 88
20231228_0920	0.1	88 181
20231228_0940	0.1	9
20231228_0950	1.4	10
20231228_1000 20231228_1010	0.1 0.2	98 309
20231228 1010	0.2	280
20231228_1030	0.1	66
20231228_1040	0.1	117
20231228_1050 20231228_1100	0.1 0.1	206 15
20231228_1110	0.1	41
20231228_1120	1.1	9
20231228_1130	1.4	1 222
20231228_1140 20231228_1150	0.2 0.2	332 134
20231220_1130	V.Z	127

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231228 1200 20231228 1210	0.1 1.6	20 68
20231228_1210	0.1	64
20231228_1230	1	56
20231228_1240	2	121
20231228_1250	2.2	141
20231228_1300	0.1	304
20231228_1310 20231228_1320	0.1 0.1	28 152
20231228 1330	0.3	124
20231228_1340	2.8	216
20231228_1350	0.4	67
20231228_1400	1.2	199
20231228_1410 20231228_1420	1.1 0.3	261 18
20231228_1420	0.5	322
20231228_1440	0.2	103
20231228_1450	0.1	267
20231228_1500	1.3	48
20231228_1510	0.1	52
20231228_1520 20231228_1530	0.2 0.1	236
20231228_1530 20231228_1540	0.6	50 97
20231228_1550	0.3	135
20231228_1600	0.8	89
20231228_1610	0.1	113
20231228_1620	0.1	51
20231228_1630 20231228_1640	0.3 0.1	113 52
20231228_1040	1.1	127
20231228 1700	1.3	128
20231228_1710	0.1	90
20231228_1720	0.5	110
20231228_1730	0.1	16
20231228 1740 20231228 1750	0.1 0.1	106 53
20231228_1730	0.1	80
20231228 1810	0.1	96
20231228_1820	0.1	159
20231228_1830	0.1	313
20231228_1840	0.1	16
20231228_1850 20231228_1900	0.2 0.1	41 302
20231228_1900	0.1	326
20231228 1920	0.4	110
20231228_1930	0.1	9
20231228_1940	0.4	109
20231228_1950	0.1	142
20231228_2000 20231228_2010	0.1 0.1	103 97
20231228_2010	0.1	98
20231228_2030	0.1	110
20231228_2040	0.1	236
20231228_2050	0.2	123
20231228_2100	0.1	50
20231228_2110 20231228_2120	0.1 0.2	68 83
20231228_2120	0.2	109
20231228_2140	0.1	349
20231228_2150	0.1	347
20231228_2200	0.1	208
20231228_2210	0.1	131
20231228 2220 20231228 2230	0.1 0.1	333 180
20231228_2240	0.1	168
20231228_2250	0.1	158
20231228_2300	0.1	110
20231228_2310	0.1	154
20231228_2320	0.1	259
20231228_2330 20231228_2340	0.1 0.1	78 317
20231228_2340	0.1	27

D 0 FF:		
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231229_0000 20231229_0010	0.1	28 131
20231229_0010	0.1 0.1	65
20231229_0020	0.1	64
20231229_0040	0.1	56
20231229_0050	0.1	52
20231229_0100	0.1	38
20231229_0110	0.1	50
20231229_0120	0.1	57
20231229_0130	0.1	17
20231229_0140	0.1	59
20231229_0150	0.1	53
20231229_0200	0.1	14
20231229_0210	0.1	318
20231229_0220	0.1	65
20231229_0230	0.1	64
20231229_0240	0.1	64
20231229_0250	0.1	331
20231229_0300	0.1	80
20231229_0310	0.1	60
20231229_0320	0.1	23
20231229_0330	0.1	80
20231229_0340	0.1	4
20231229 0350	0.1	27
20231229_0400	0.1	348
20231229_0410	0.1	25
20231229_0410	0.1	38
20231229_0430	0.1	38
20231229_0440	0.1	48
20231229_0440	0.1	22
20231229_0430	0.1	35
20231229_0510	0.1	206
20231229_0520	0.1	99
20231229_0530	0.1	30
20231229_0540	0.1	23
20231229_0550	0.1	143
20231229_0600	0.1	309
20231229_0610	0.1	342
20231229_0620	0.1	348
20231229_0630	0.1	317
20231229_0640	0.1	42
20231229_0650	0.1	104
20231229_0700	0.1	334
20231229_0710	0.1	81
20231229_0720	0.1	283
20231229_0730	0.1	4
20231229_0740	0.1	216
20231229_0750	0.1	70
20231229_0800	0.1	337
20231229_0810	0.1	240
20231229_0820	0.1	148
20231229_0830	0.1	120
20231229 0840	0.1	138
20231229_0850	0.1	109
20231229_0900	0.1	161
20231229 0910	0.2	194
20231229 0920	0.1	27
20231229_0920	0.3	271
20231229_0930	0.3	83
20231229 0940		
	0.1 0.1	203
		273
20231229_1010	0.3	353
20231229_1020	0.1	98
20231229_1030	0.1	119
20231229_1040	0.1	307
20231229_1050	0.1	17
20231229_1100	3	221
20231229_1110	0.2	94
20231229_1120	2.2	50
20231229_1130	0.1	50
20231229_1140	0.2	152
20231229_1150	0.1	45

D-t- 0 T:	1	
Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)	0.1	00
20231229_1200	0.1	80
20231229_1210	0.5	63
20231229_1220	0.1	75
20231229_1230	0.1	184
20231229_1240	2	161
20231229_1250	0.9	111
20231229_1300	1.4	133
20231229_1310	2.6	41
20231229_1320	0.3	129
20231229_1330	0.1	294
20231229_1340	0.2	117
20231229_1350	0.1	60
20231229 1400	1.6	115
20231229 1410	0.2	106
20231229 1420	0.3	115
20231229 1430	0.1	36
20231229_1440	3.5	176
20231229 1450	0.6	81
20231229 1500	0.1	317
20231229_1500	3.3	156
20231229_1510	3.1	154
20231229_1520		37
	0.1	
20231229_1540	0.2	56
20231229_1550	0.1	27
20231229_1600	1.5	187
20231229_1610	0.3	123
20231229_1620	1	98
20231229_1630	0.1	272
20231229_1640	1.2	190
20231229_1650	0.3	78
20231229_1700	0.1	344
20231229_1710	0.1	151
20231229_1720	0.2	85
20231229 1730	0.1	163
20231229_1740	0.1	341
20231229_1750	0.1	76
20231229 1800	0.2	115
20231229 1810	1.2	188
20231229_1820	0.1	178
20231229 1830	0.2	94
20231229 1840	0.1	289
20231229 1850	0.1	315
20231229_1830	0.1	82
20231229_1900	0.1	80
		99
20231229_1920	0.1	
20231229_1930	0.5	123
20231229_1940	0.4	111
20231229_1950	0.4	117
20231229_2000	0.1	84
20231229_2010	0.1	117
20231229_2020	0.2	195
20231229_2030	0.3	191
20231229_2040	0.5	105
20231229_2050	0.3	350
20231229_2100	0.4	7
20231229_2110	0.1	158
20231229_2120	0.1	91
20231229 2130	0.1	133
20231229 2140	0.1	40
20231229 2150	0.1	103
20231229 2200	0.1	130
20231229_2200	0.1	140
20231229_2210	0.1	213
20231229_2220	0.6	117
20231229_2230	0.0	123
20231229_2240	1	79
20231229_2250		123
	0.6	
20231229_2310	0.1	120
20231229_2320	0.1	5
20231229_2330	0.1	7
20231229_2340	0.1	161
20231229_2350	0.1	38

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231230_0000	0.1	100
20231230_0010 20231230_0020	0.1 0.1	113 344
20231230_0020	0.1	332
20231230_0040	0.1	51
20231230 0050	0.1	65
20231230_0100	0.1	102
20231230_0110	0.1	45
20231230_0120	0.1	38
20231230_0130	0.1	349
20231230_0140 20231230_0150	0.1 0.1	344 65
20231230_0130	0.1	22
20231230_0200	0.1	53
20231230 0220	0.1	92
20231230_0230	0.1	2
20231230_0240	0.1	236
20231230_0250	0.1	7
20231230_0300	0.1	265
20231230_0310 20231230_0320	0.1 0.1	110 124
20231230_0320	0.1	124 47
20231230_0330	0.1	85
20231230_0340	0.1	65
20231230_0400	0.1	39
20231230_0410	0.1	133
20231230_0420	0.1	83
20231230_0430	0.1	13
20231230_0440 20231230_0450	0.1	97 354
20231230_0430	0.1 0.1	33
20231230_0500	0.1	34
20231230_0520	0.1	45
20231230_0530	0.1	38
20231230_0540	0.1	274
20231230_0550	0.1	0
20231230_0600	0.1	101
20231230_0610	0.1	48
20231230_0620	0.1	12
20231230_0630 20231230_0640	0.1 0.1	336 314
20231230_0040	0.1	187
20231230_0700	0.1	172
20231230_0710	0.1	169
20231230_0720	0.1	38
20231230_0730	0.1	312
20231230_0740	0.1	205
20231230_0750	0.1	136
20231230_0800 20231230_0810	0.1	72 123
20231230_0810	0.1	70
20231230_0820	0.1	71
20231230_0840	0.1	214
20231230_0850	0.1	173
20231230_0900	0.1	71
20231230_0910	0.1	129
20231230_0920	0.1	132
20231230_0930	0.1	112
20231230_0940 20231230_0950	0.1	146 149
20231230_0930	0.2	174
20231230_1000	0.1	166
20231230_1010	0.2	133
20231230_1030	0.1	120
20231230_1040	0.1	222
20231230_1050	0.3	325
20231230_1100	0.3	122
20231230_1110	0.1	229
20231230_1120	1.4	294
20231230_1130 20231230_1140	0.1	233 34
	0.1	

Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
(YYYYMMBB_HHMM)		
20231230 1200 20231230 1210	0.4	47
	0.2	240
	1.1	201
20231230_1230	0.1	237
20231230_1240 20231230_1250	0.2	208
	0.1	16
	0.7	203
20231230_1310	0.1	82
20231230_1320	1.6	200
20231230_1330	0.1	338 38
20231230_1340 20231230_1350	0.1	
20231230_1330	1.6	68 236
20231230_1400	0.1 0.1	172
20231230_1410		141
	0.1	239
20231230_1430 20231230_1440	0.1	332
20231230_1440	0.1	127
	0.3	
		151 221
20231230_1510 20231230_1520	0.3	
20231230_1520 20231230_1530	0.2	166 145
20231230_1540 20231230_1550	0.1	280
	0.1	145
20231230_1600 20231230_1610	0.1	230
20231230_1610 20231230_1620	0.9 0.1	222 251
		146
20231230_1630 20231230_1640	0.1 0.1	136
20231230_1650	0.1	148
20231230_1030	0.1	97
20231230_1700		63
	0.1	345
20231230_1720 20231230_1730	0.1	42
20231230_1730 20231230_1740	0.1	51
	0.2 0.1	138
20231230_1750 20231230_1800		95
20231230 1810	0.1	92
20231230_1810	0.1 0.1	87
20231230_1820	0.1	111
20231230_1840	0.1	307
20231230_1850	0.1	300
20231230_1830	0.1	18
20231230_1900	0.2	90
20231230_1910	0.2	97
20231230_1920	0.1	229
20231230_1940	0.1	128
20231230_1940	0.1	204
20231230_1930	0.1	275
20231230_2000	0.1	170
20231230_2010	0.1	263
20231230_2020	0.1	145
20231230_2030	0.1	67
20231230_2040	0.1	42
20231230_2030	0.1	83
20231230_2100	0.1	49
20231230_2110	0.1	66
20231230_2120	0.1	53
20231230_2140	0.1	48
20231230 2150	0.1	46
20231230_2130	0.1	45
20231230_2200	0.1	348
20231230 2220	0.1	45
20231230 2230	0.1	51
20231230_2240	0.1	61
20231230_2250	0.1	67
20231230_2300	0.1	26
20231230_2300	0.1	71
20231230_2310	0.1	45
20231230_2330	0.1	3
20231230_2330	0.1	47
20231230_2350	0.1	348

CYYYMMBB HHMM         Wind Speed (m/s)         Wind Direction (Degree 20231231 0000           20231231 0010         0.1         41           20231231 0020         0.1         44           20231231 0030         0.1         60           20231231 0040         0.1         94           20231231 0100         0.1         316           20231231 0110         0.1         86           20231231 0110         0.1         47           20231231 0130         0.1         147           20231231 0130         0.1         13           20231231 0140         0.1         83           20231231 0000         0.1         46           20231231 0000         0.1         46           20231231 0220         0.1         44           20231231 0220         0.1         44           20231231 0230         0.1         129           20231231 0250         0.1         264           20231231 0300         0.1         129           20231231 0300         0.1         71           20231231 0300         0.1         71           20231231 0300         0.1         71           20231231 0300         0.1         71			
11   11   13   13   13   13   13   13	Date & Time	Wind Speed (m/s)	Wind Direction (Degree)
2023 231 0010			
20231231 0020			
20231231 0030			
20231231 0040			
20231231 0050			
20231231 0110			4
20231231 0120	20231231_0100	0.1	316
20231231 0130	20231231_0110	0.1	86
20231231 0140			
20231231 0150			
20231231 0200			
20231231 0210			
20231231 0220			
20231231 0230			
20231231 0240			
20231231 0250			
20231231 0300			
20231231 0310			
20231231 0330			49
20231231 0340		0.1	
20231231 0350			
20231231 0400			
20231231 0410			
20231231 0420			
20231231 0430			
20231231 0440			
20231231 0450			
20231231 0500			
20231231 0510			
20231231 0520			
20231231 0540	20231231_0520	0.1	60
20231231 0550		0.1	
20231231 0600         0.1         59           20231231 0610         0.1         302           20231231 0620         0.1         254           20231231 0630         0.1         41           20231231 0640         0.1         67           20231231 0650         0.1         69           20231231 0700         0.1         67           20231231 0710         0.1         66           20231231 0730         0.1         67           20231231 0730         0.1         67           20231231 0750         0.1         67           20231231 0800         0.1         67           20231231 0800         0.1         339           20231231 0800         0.1         27           20231231 0820         0.1         21           20231231 0830         0.1         211           20231231 0840         0.1         159           20231231 0840         0.1         112           20231231 0900         0.1         112           20231231 0900         0.1         112           20231231 0900         0.1         154           20231231 0900         0.1         145           20231231 09			
20231231 0610			
20231231 0620			
20231231 0630			
20231231 0640			
20231231 0650			
20231231 0700			
20231231 0710			
20231231 0720			
20231231 0740			
20231231 0750	20231231_0730	0.1	67
20231231 0800			
20231231 0810			
20231231 0820         0.1         236           20231231 0830         0.1         211           20231231 0840         0.1         159           20231231 0850         0.1         113           20231231 0900         0.1         112           20231231 0910         0.1         154           20231231 0920         0.1         145           20231231 0930         0.1         136           20231231 0940         0.1         151           20231231 0950         0.1         143           20231231 1000         0.1         161           20231231 1000         0.4         140           20231231 1020         1.1         149           20231231 1030         0.1         141           20231231 1050         0.8         151           20231231 1050         0.8         151           20231231 1100         0.1         183			
20231231 0830			
20231231 0840			
20231231 0850			
20231231 0900   0.1   112   112   20231231 0910   0.1   154   145   20231231 0920   0.1   145   145   20231231 0930   0.1   136   145   20231231 0940   0.1   151   151   20231231 0950   0.1   143   20231231 1000   0.1   161   143   20231231 1010   0.4   140   20231231 1020   1.1   149   20231231 1030   0.1   141   20231231 1040   0.1   161   20231231 1050   0.8   151   20231231 1050   0.8   151   20231231 1050   0.1   183   20231231 1100   0.1   183   20231231 1100   0.1   183   20231231 1100   0.1   183   20231231 1100   0.1   183   20231231 1100   0.1   183   20231231 1100   0.1   183   20231231 1100   0.1   183   20231231 1100   0.1   183   20231231 1100   0.1   183   20231231 1100   0.1   183   20231231 1100   0.1   20231231   0.0   0.1   20231231   0.0   0.1   0.1   0.1   0.1   0.1   0.1   0.1   0.1   0.1   0.1   0.1   0.1   0.1   0.1   0.			
20231231 0910   0.1   154			
20231231 0920			
20231231 0940         0.1         151           20231231 0950         0.1         143           20231231 1000         0.1         161           20231231 1010         0.4         140           20231231 1020         1.1         149           20231231 1030         0.1         141           20231231 1040         0.1         161           20231231 1050         0.8         151           20231231 1100         0.1         183			
20231231 0950         0.1         143           20231231 1000         0.1         161           20231231 1010         0.4         140           20231231 1020         1.1         149           20231231 1030         0.1         141           20231231 1040         0.1         161           20231231 1050         0.8         151           20231231 1100         0.1         183		0.1	136
20231231 1000   0.1   161     20231231 1010   0.4   140     20231231 1020   1.1   149     20231231 1030   0.1   141     20231231 1040   0.1   161     20231231 1050   0.8   151   20231231 1100   0.1   183     20231231 1100   0.1   183     20231231 1100   0.1   183     20231231 1100   0.1   20231231 1100   0.1   20231231 1100   0.1   20231231 1100   20231231   202			
20231231     1010     0.4     140       20231231     1020     1.1     149       20231231     1030     0.1     141       20231231     1040     0.1     161       20231231     1050     0.8     151       20231231     1100     0.1     183		0.1	143
20231231     1020     1.1     149       20231231     1030     0.1     141       20231231     1040     0.1     161       20231231     1050     0.8     151       20231231     1100     0.1     183			
20231231_1030     0.1     141       20231231_1040     0.1     161       20231231_1050     0.8     151       20231231_1100     0.1     183			
20231231_1040     0.1     161       20231231_1050     0.8     151       20231231_1100     0.1     183	20231231_1020		
20231231 1050 0.8 151 20231231 1100 0.1 183			
20231231_1100 0.1 183			
	20231231_1000		
1 ZUZ51Z51 1110 1 01 1 134	20231231_1100	0.1	134
20231231_1110			
20231231_1130 1.6 224			
20231231_1140 0.9 172	20231231_1140		172
20231231_1150 0.5 185	20231231_1150	0.5	185

Date & Time		
(YYYYMMBB_HHMM)	Wind Speed (m/s)	Wind Direction (Degree)
20231231 1200	1.6	217
20231231_1210	3	170
20231231_1210	0.1	305
20231231_1220	0.9	205
20231231_1230	0.4	346
20231231_1250 20231231_1300	0.1	10
	0.2	2 257
20231231_1310	0.1	237
20231231_1320	0.7	0
20231231_1330	0.1	72 239
20231231_1340	0.1	
20231231_1350	0.1	157
20231231_1400	0.3	181
20231231_1410	0.2	342
20231231_1420	0.2	4
20231231_1430	0.1	103
20231231_1440	0.1	149
20231231_1450	0.1	67
20231231_1500	0.1	81
20231231_1510	0.1	35
20231231_1520	0.4	326
20231231_1530	0.1	170
20231231_1540	1.2	106
20231231_1550	0.8	182
20231231_1600	0.3	71
20231231_1610	1.7	141
20231231_1620	0.2	164
20231231_1630	0.2	110
20231231_1640	0.1	124
20231231_1650	0.1	0
20231231_1700	0.1	305
20231231_1710	0.2	107
20231231_1720	0.3	292
20231231_1730	0.1	126
20231231_1740	0.1	328
20231231_1750	0.1	354
20231231_1800	0.1	53
20231231_1810	0.1	293
20231231_1820	0.2	297
20231231_1830	0.1	128
20231231_1840	0.1	85
20231231_1850	0.1	81
20231231_1900	0.1	346
20231231_1910	0.4	51
20231231_1920	0.2	31
20231231_1930	0.1	10
20231231_1940	0.5	184
20231231_1950	0.9	34
20231231_2000	0.1	123
20231231_2010	0.3	192
20231231_2020	8.6	340
20231231_2030	2	196
20231231_2040	1.4	163
20231231_2050	0.3	34
20231231_2100	0.1	156
20231231_2110	0.1	185
20231231_2120	0.5	90
20231231_2130	6.8	354
20231231_2140	3.9	166
20231231_2150	4.4	103
20231231_2200	0.2	100
20231231_2210	1.8	330
20231231_2220	0.1	5
20231231_2230	0.7	44
20231231_2240	1.1	56
20231231_2250	0.4	34
20231231_2300	0.1	122
20231231_2310	0.7	110
20231231_2320	0.1	102
20231231_2330	0.3	13
20231231_2340	1.3	2
20231231_2350	0.1	28

# Appendix I Waste Flow Table

## **Waste Flow Table**

		Total Qua		ert C&D Mate m the Contr	erials to be (	Generated	II Total Quantities of Recyclables Generation II					Total Quantities of C&D Materials to be Generated from the Contract		
Month	Total Quantity Generated	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	
Total	420,745.38	0.00	0.00	409,834	0.00	7,925.54	0.00	0.00	0.00	27.73	0.00	259.93	2,697.81	

#### Note:

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

## Appendix J Joint Environmental Site Inspection Records

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

1. 6 November 2023 observation 1 - The outside surrounding of the scaffolding has been covered by dust screen, sheeting or netting at Portion D.

#### Observation(s):

- 1. The general waste shall be removed and disposed in the enclosed bin at Portion D.
- 2. The muddy water which is caused from the watering at the Portion D is found. The deposited silt and grit are found under the construction materials at the Portion D.
- 3. The dust dispersion is observed in the site.

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

- The contractor has been recommended to clean up the site regularly and provide enough enclosed bin on-site to keep the site clean and tidy.
- The contractor has been reminded that the muddy water should be collected from the proper channel and final to the silt removal facility for treatment. The deposited silt and grit under the construction materials at the Portion D should be removed.
- 3. The contractor has been advised to regularly water the works area and provide enough sprayers to dampen the surface of construction materials and the site, especially during the work process, to minimize dust dispersion.

1989 - 178 1989 - 178 1988 - 278 - 188	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:	4.		2.	HO.
Name:	Joan Lo	I'	Matt Choy/Kristy Wong	Sylvia Ho
Date:	04 December 2023		04 December 2023	04 December 2023

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

- 1. 6 November 2023 Observation 2 The deposited silt and grit under the tower crane at Portion A had been removed.
- 2. 6 November 2023 Observation 3 The enclosed bins at the SBA had been labelled as "type of waste".
- 3. 20 November 2023 Observation 2 The waste at the waste skip of SBA was removed and the enclosed bins at the SBA had been labelled as "type of waste".
- 4 December 2023 Observation 3 The water spraying by the water truck was arranged from the contractor on the site to ensure that the site was wetted.

#### Observation(s):

1. The accumulated uprooting of trees at portion E4 is observed.

#### <u>Corrective Actions – Mitigation Measures Implemented or Proposed (if any):</u>

 The contractor has been advised to regularly water the uprooted trees to prevent dust dispersion and arrange for regular disposal to avoid accumulation.

Environmental Site Inspection Checklist (Rev. 3)

"Stan.

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:	A.			40
Name:	Joan Lo	ing Ly	Matt Choy/Kristy Wong	Sylvia Ho
Date:	11 December 2023	1 *	11 December 2023	11 December 2023

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

- 1. 4 December 2023 Observation 1 The general waste was removed to ensure the site clean and tidy.
- 2. 4 December 2023 Observation 2 The muddy water, and the deposited silt and grit were cleaned and removed at Portion D.
- 3. 11 December 2023 Observation 1 The accumulated uprooting of tree at portion E4 was removed and disposed.
- 4. 18 December 2023 Observation 1 Stockpiling of dusty material was covered by impervious sheet at Portion D.

#### Observation(s):

- 1. Stockpiling of dusty material without covered by impervious sheet at Portion D is observed.
- Insufficient silt fence around the stockpile area at SBA is observed.

#### <u>Corrective Actions – Mitigation Measures Implemented or Proposed (if any):</u>

- The contractor has been reminded that stockpiling of dusty material should be covered by impervious sheet at Portion D to prevent dust dispersion.
- 2. The contractor has been advised to provide and maintain sufficient silt fence around the stockpile area in each layer, ensuring that each layer effectively prevents sediment from entering the surface water drainage system.
- 3. The contractor has been recommended that the exposed slope surface at SBA should be covered by an impervious sheet in the short term and should be shotcrete or other measurements for long-term surface protection.

Environmental Site Inspection Checklist (Rev. 3)

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:	+	hm		40
Name:	Joan Lo	Echo Hung	Matt Choy/Kristy Wong	Sylvia Ho
Date:	18 December 2023	18 December 2023	18 December 2023	18 December 2023

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

1. 18 Dec 2023 Observation 2 – Temporary silt fences around soil stockpile area was provided.

#### Observation(s):

- 1. Assess road is dry and fugitive dust is observed, especially at portion E4.
- 2. Exposed slope surface without covered by tarpaulin sheets at portion E4 is observed.
- 3. Dusty materials without covered by impervious sheet at portion E4 is observed.

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

- 1. The contractor has been recommended to arrange watering and provide enough sprayers to minimize dust dispersion at all assess road.
- The contractor has been advised that the exposed slope surface at portion E4 should be covered by tarpaulin sheets or other measurement like shotcrete or hydroseeding for long term slope surface protection.
- 3. The contractor has been reminded that the dusty materials should be covered with impervious sheet to prevent dust suppression.

Environmental Site Inspection Checklist (Rev. 3)

	Environmental Team's Representative:	Independent Environmental Checker's Representative:	Contractor's Representative:	Employee's Representative
Signature:	4.	I	2	Del
Name:	Joan Lo	I.	Matt Choy/Kristy Wong	Jackae Tam.
Date:	27 December 2023	1 *	27 December 2023	27 December 2023

# Appendix K Environmental Mitigation Implementation Schedule (EMIS)

#### North East New Territories (NENT) Landfill Extension

			ion Schedule (EMIS) Construction Phase					
EIA Ref.	EM&A Log Ref.	Weekly Site Inspection Item	Recommended Precautionary/Mitigation Measures (to be implemented when the trigger level is exceeded, where necessary)	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	What requirement or standards for the measures to achieve?	Status
Air Quali						_		
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	Contractor	Entire NENT Landfill Extension site	within the criteria of EIA	# (Refer to Appendix J  (1) 27 Dec 2023 Weekly Site Inspection Observation 2  (2) 27 Dec 2023 Weekly Site Inspection Observation 3)
		B4, B15 & B18	Dust emission from construction vehicle movement is confined within the worksites area.	criteria.				# (Refer to Appendix J 27 Dec 2023 Weekly Site Inspection Observation 1)
		B11 – B12 • Watering facilities will be provided at every designated vehicular exit point.					✓ Vehicle washing facilities provided at vehicular exit point in Portion A, B1-2, D, E3-1 & E4	
		-	Good site practice is recommended during construction phase.					✓
Construc	ction Noise			<u> </u>	1			
S4	S4.9	C1	<ul> <li>Use of good site practices to limit noise emissions by considering the following:</li> <li>Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme;</li> </ul>	Control construction airborne noise by means of good site	Contractor	Contractor Entire construction site	Noise Control Ordinance	<b>→</b>
		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;	d				<b>√</b>
		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;					<b>√</b>
		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;					<b>√</b>
		C6	(f) Material stockpiles, mobile container site officer and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.					<b>√</b>
S4 Construc	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>√</b>
S5.8.1	S5.2.1	(a) At the start of site establishment, perimeter cut-off drains to direct off-site water around the constructed with internal drainage works and erosion and sedimentation control facilities implemented	(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.	runoff and erosion from site surface, drainage channel, stockpiles, wheel washing facilities, etc to minimize water	Contractor	Entire Construction site	ProPECC PN 1/94  Water Pollution Control Ordinance	<ul><li>(a) The perimeter cut-off drains are establishing in progress (Completion: 85%)</li><li>(b) ✓</li></ul>
		D2	<ul> <li>(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.</li> </ul>					<ul><li>(a) N/A</li><li>(b) ✓</li><li>(c) ✓</li></ul>
		D3	<ul> <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>					✓

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.

North East New Territories (NENT) Landfill Extension

Friving mental Mitigation Implementation Schedule (EMIS) Construction Phase

			tion Schedule (EMIS) Construction Phase				1	
EIA	EM&A	Weekly	Recommended Precautionary/Mitigation Measures	Objectives of the	Who to	Location of the	What requirement or	Status
Ref.	Log Ref	Site	(to be implemented when the trigger level is exceeded, where necessary)	Recommended	implement	measures	standards for the measures to	
		Inspection		Measures & Main	the		achieve?	
		Item		Concerns to address	measures?			
	tion Runoff	<u> </u>		<u> </u>		T	1	
S5.8.1	S5.2.1	D4	(April to September). (b) All exposed earth areas should be completed and vegetated as soon as possible after	Control construction	Contractor	Entire	ProPECC PN 1/94	(a) <b>√</b>
				runoff and erosion from site surface, drainage channel, stockpiles, wheel		Construction		(b) <b>√</b>
			earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where			site	DSD Technical Circular	(c) # (Refer to Appendix J
							TC01/2017	27 Dec 2023 Weekly Site Inspection
			rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means.				Water Pollution Control	Observation 2)
		D5	• (a) The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water	washing facilities, etc to minimize water			Ordinance	(a) <b>√</b>
			nows, and all traine areas and access roads protected by coarse stone ballast. (b) All additional advantage	quality during construction stage			Ordinance	(b) N/A
			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.	- construction stage				
		D6	(a) All drainage facilities and erosion and sediment control structures should be regularly inspected and (b)  maintained to ensure proper and efficient operation at all times and particularly following rainstorms. (c)					(a) <b>√</b>
			maintained to ensure proper and efficient operation at all times and particularly following rainstorms. (c)					(b) <b>√</b>
			Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated					(d) <b>√</b>
		D7	areas.					
		ן טי	<ul> <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.</li> <li>(b) Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.</li> <li>Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50 m³ should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.</li> </ul>					(a) <b>√</b>
								(b) <b>√</b>
		D8						<b>√</b>
								<b>'</b>
			washing away of constitution materials, soil, sit of acons into any drainage system.					
		D9	(a) Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed	1				(a) <b>√</b>
			so as (b) to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.					(b) <b>√</b>
								(6) 4
		D10	Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm					✓
			is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silly surface runoff during storm					
			events, especially for areas located near steep slopes.					
		D11	(a) All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris					(a) <b>√</b>
			and the like is deposited by them on roads. (b) An adequately designed and sited wheel washing bay should					(b) <b>√</b>
			be provided at every construction site exit. (c) Wash-water should have sand and silt settled out and removed					(c) <b>√</b>
			at least on a weekly basis (d) to ensure the continued efficiency of the process. (e) The section of access road					(d) <b>√</b>
			leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall					(c) <b>√</b>
		D40	toward the wheel-wash bay to prevent vehicle tracking of soil and silly water to public roads and drains.					
		D12	(a) Oil interceptors should be provided in the site drainage system downstream of any oil/fuel pollution sources.  (b) The sit interceptors about the amount of site and second regularly to prevent the release of site and regularly to prevent the regular to					(a) N/A
1			(b) The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into					(b) N/A (c) N/A
			the storm water drainage system after accidental spillage. (c) A bypass should be provided for the oil interceptors to prevent flushing during heavy rain.					(O) IN/A
1		D13	<ul> <li>Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to</li> </ul>					./
1		טוט	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.					✓
1		D14	<ul> <li>All fuel tanks and storage areas should be provided with docks and sited on sealed areas, within bunds of a</li> </ul>					<b>√</b>
			capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching					<b>Y</b>
1			water sensitive receivers nearby.					
1		D15	To prevent pollution risks arising from works area (waste reception area) and haul roads, intercepting bund or					N/A
		D15	barrier along the roadside should be constructed.					
			The state of the s					
Remarks:								

Compliance of mitigation measure

Recommendation was made during site audit but improved/rectified by the contractor

Not Applicable at this stage were conducted in the reporting period. N/A

#### North East New Territories (NENT) Landfill Extension

EIA	EM&A	Weekly	Recommended Precautionary/Mitigation Measures	Objectives of the	Who to	Location of the	What requirement or	Status	
Ref.	Log Ref	Site	(to be implemented when the trigger level is exceeded, where necessary)	Recommended	implement	measures	standards for the measures to		
		Inspection		Measures & Main	& Main the a		achieve?		
		Item		Concerns to address	measures?				
	ction Runoff	·		T -	Т -	T -			
S5.8.1 S5.	S5.2.1	D19	Sewage Effluent from Workforce	Control sewage	Contractor	On-site	ProPECC PN 1/94	✓	
			(a) Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage	effluent arising from		sanitary	DOD Tarkeiral Girandan		
			generated by the workforce. (b) A licensed contractor should be employed to provide appropriate and adequate	the sanitary facilities provided for the on-		facilities	DSD Technical Circular TC01/2017		
		D20	portable toilets and be responsible for appropriate disposal and maintenance.	site construction			1001/2017	N/A	
		D20	Notices will be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction phase of the Project.	workforce			Water Pollution Control	IVA	
				Workioroo			Ordinance		
		-	Regular environmental audit on the construction site can provide an effective control of any malpractices and     applications continued improvement of any irrepresentation of the construction of the c					✓	
			can achieve continual improvement of environmental performance on site.				Waste Disposal Ordinance		
S5.8.1	S5.2.1	D21	Accidental Spillage of Chemical	Control of chemical	Contractor	Service	ProPECC PN 1/94	(a) N/A	
			• (a) Any service workshop and maintenance facilities shall be located within a bunded area, and sumps and oil	leakage		workshop and		(b) N/A	
			interceptors shall be provided. (b) Maintenance of equipment involving activities with potential for leakage and			maintenance	Water Pollution Control		
			spillage will only be undertaken within the areas.			facilities	Ordinance		
							W		
Erosia:	Control Ms =						Waste Disposal Ordinance	1	
	Control Mea	sures	Erosion Control /Measures	Erosion control	Contractor	Drainage	ProPECC PN 1/94		
S5.8.2	S5.2.2	-	a. Preserve Natural Vegetation	Erosion control	Contractor	Drainage system	FIUPECC PN 1/94	✓	
			This Best Management Practices will involve preserving natural vegetation to the greatest extent possible			System	Water Pollution Control		
			during the construction process. and after construction where appropriate. Maintaining natural vegetation is				Ordinance		
			the most effective and inexpensive form of erosion prevention control.						
		-	b. Provision of Buffer Zone	=				✓	
			A buffer zone consists of an undisturbed area or strip of natural vegetation or an established suitable planting					,	
				adjacent to a disturbed area that reduces erosion and runoff. The rooted vegetation holds soils acts as a wind					
			break and filters runoff that may leave the site.						
		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						✓	
			A well-established vegetative cover is one of the most effective methods of reducing erosion. Vegetation should						
			1						
			for inactive tipping areas to prevent soil erosion during rainy season.	-				To be implemented	
		-	d. Ground Cover Ground Cover is a protective layer of straw or other suitable material applied to the soil surface. Straw mulch					To be implemented	
			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.						
		-	e. Hydraulic Application	=				To be implemented	
			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.						
			f. Sod					✓	
			Establishes permanent turf for immediate erosion protection and stabilizes rainageways.						
			g. Matting					✓	
			There are numerous erosion control products available that can be described in various ways, such as matting,						
			blankets, fabric and nets. These products are referred as matting. A wide range of materials and combination	on nut					
			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						
		7	significant difference in the effectiveness of the Best Management Practices.			1			

Remarks:

Compliance of mitigation measure

Recommendation was made during site audit but improved/rectified by the contractor

N/A Not Applicable at this stage were conducted in the reporting period.

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

			tion Schedule (EMIS) Construction Phase					
EIA	EM&A	Weekly	Recommended Precautionary/Mitigation Measures	Objectives of the	Who to	Location of the	What requirement or	Status
Ref.	Log Ref	Site	(to be implemented when the trigger level is exceeded, where necessary)	Recommended	implement	measures	standards for the measures to achieve?	
		Inspection		Measures & Main	the			
		Item		Concerns to address	measures?			
Erosion (	Control Mea	sures (Cont'o	) )			•		•
S5.8.2	S5.2.2		h. Plastic Sheeting		Contractor	Drainage	ProPECC PN 1/94	✓
			Plastic Sheeting will provide immediate protection to slopes and stockpiles. However, it has been known to			system		·
			transfer erosion problems because water will sheet flow off the plastic at high velocity. This is usually				Water Pollution Control	
			attributable to poor application, installation and maintenance.				Ordinance	
		_	i. Dust Control	-			oramanos	<b>√</b>
			Dust Control is one preventative measure to minimize the wind transport of soil, prevent traffic hazards and					Y
			reduce sediment transported by wind and deposited in water resources.					
0 (	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0 1	reduce sediment transported by while and deposited in water resources.					
		age System			Ta	T	T	
S5.8.2	S5.2.2	D22	• (a) Temporary surface water drainage system will be provided to manage runoff during construction and	Surface Water	Contractor	Surface water	Water Pollution Control	(a) <b>√</b>
				Management/ Control		system	Ordinance	(b) <b>√</b>
			This system will collect surface water from the areas of higher elevations to those of lower elevations and	run off		Construction		(c) <b>√</b>
			ultimately to the point of discharge. (d) Erosion will therefore be minimised.				TM-water	
		Doo		4				(d) <b>√</b>
		D23	(a) The temporary surface water drainage system will include the use of a silt fence around the soil stockpile					(a) # (Refer to Appendix J
			areas to prevent sediment from entering the system. (b) Regular cleaning will be carried out to prevent blockage					18 Dec 2023 Weekly Site Inspection
			of the passage of water flow in silt fence.					Observation 2)
								(b) <b>√</b>
		-	• Intermediate drainage system will be installed for filled cell/phase. The major purpose of the intermediate					N/A
			drainage system is to prevent the clean surface water run-off from the filled phases coming into contact with					
			the waste mass in active cell and to prevent excessive surface water infiltration through the intermediate cover,					
			thus contribute to increasing volume of leachate. The intermediate drainage system will collect the clean					
			surface water run-off and divert it to the permanent discharge channels connected to the public drainage					
			system.					
			,	-				N/A
		-	• In addition, surface flow from the haul road (especially near the wheel washing facility) will be collected to a					IVA
			dry weather flow interceptor and conveyed to the on-site leachate treatment plant for further treatment.					
Waste M	1anagement							
S6	WM1	-	C&D Materials	Good site practice to	Contractor	Entire	Waste Disposal Ordinance	✓
				minimise C&D waste		construction site		
			• Implement proper waste management measures during construction phase as stipulated in the Environmental	generation and			ETWB TC(W) No. 19/2005  DEVB TC(W) No. 6/2010	
			Management Plan (EMP) in accordance with the ETWB TC(W) No. 19/2005 Environmental Management in	reuse/recycle all C&D				
			Construction Sitos	on-site as far as				
		_	Implement a trip-ticket system to ensure that the movement of C&D materials are properly documented and	possible				<b>√</b>
			verified in accordance with DEVB TC(W) No. 6/2010. Copies/counterfoils from trip-tickets (with quantities of					Y
			C&D Materials off-site) should be kept for record purposes.					
		-	Appropriate waste management should be implemented in accordance with the ETWB TC(W) No. 19/2005.	1				✓
				_				•
		E4	• (a) Make provisions in Contract documents to allow and promote the use of recycled aggregates where					(a) <b>√</b>
			appropriate. Ensure material balance in terms of excavated C&D materials in the design of NENT landfill					(b) <b>√</b>
			extension project. (b) The contract specifications should specify no excavated materials should be removed					
		1	from the landfill extension site, but should be fully reused.					
		<u> </u>		4				
		E5	Careful design, planning and good site management to minimise over-ordering and waste materials such as					(a) <b>√</b>
		1	concrete, mortars and cement grouts. (a)(b) The design of formwork should maximise the use of standard					(b) <b>√</b>
		1	wooden panels so that high reuse levels can be achieved. (c) Alternatives such as steel formwork or plastic					(c) <b>√</b>
		1	fencing should be considered to increase the potential for reuse.					
		F0	() 71 0 ( ) 1 11 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2					
		E6	• (a) The Contractor should recycle as much as possible the C&D waste on-site through proper waste					(a) <b>√</b>
		1	segregation on-site. (b) Concrete and masonry should be used as general fill and steel reinforcement bars can					(b) <b>√</b>
		1	be used by scrap steel mills. (c) Proper areas should be designated for waste segregation and storage					(c) <b>√</b>
		1	wherever site conditions permit. (d) Maximise the use of reusable steel formwork to reduce the amount of C&D					(d) <b>√</b>
		1	material.					(u) <b>Y</b>

Remarks:

Compliance of mitigation measure

Recommendation was made during site audit but improved/rectified by the contractor

N/A Not Applicable at this stage were conducted in the reporting period.

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

		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
te Ma	anagement (	(Cont'd)						
	WM1	E7	<ul> <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>	Good site practice to minimise C&D waste generation and reuse/recycle all C&D on-site as far as	Contractor	Entire construction site	Waste Disposal Ordinance  ETWB TC(W) No. 19/2005  DEVB TC(W) No. 6/2010	(a) <b>√</b> (b) <b>√</b>
		E8	(a) Excavated slope, stockpiled material and bund walls should be covered by tarpaulin until used in order to prevent wind-blown dust during dry weather, and to reduce muddy runoff during wet weather. (b)(c) Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers	possible			DE VB 10(VV) NO. 0/2010	(a) <b>√</b> (b) <b>√</b> (c) <b>√</b>
		E9	If any topsoil-like materials need to be stockpiled for any length of time, consideration should be given to hydroseeding of the topsoil on the stockpile to improve its visual appearance and prevent soil erosion.					N/A
	-	E10	<ul> <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	Training of site personnel for cleanliness, proper waste management procedures including chemical waste handling, and waste reduction, reuse and recycling concepts.					<b>√</b>
		E12	Regular cleaning and maintenance programme systems, sumps and oil interceptors.					✓
		E13	(a) Prior to disposal of C&D waste, wood, steel and other metals should be separated for re-use and/or recycling to minimise the quantity of waste to be disposed of to landfill. (b)(c) Proper storage and site practices should be implemented to minimise the potential for damage or contamination of construction materials.					(a) <b>√</b> (b) <b>√</b> (c) N/A
			Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. Minimise excessive ordering of concrete, mortars and cement grout by doing careful check before ordering.					<b>√</b>
	WM2	E16 – E23	<ul> <li>Chemical Waste</li> <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 C disposal of chemical waste generated onsite to minimise the associated hazards	Contractor	or Entire construction site	Waste Disposal (Chemical Waste) General Regulation  Code of Practice on the	<b>√</b>
		-	<ul> <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>	on human health and environment			Packaging, Labelling and Storage of Chemical Waste	<b>√</b>
		E17 & E18	Containers used for storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; have a capacity of less than 450 liters unless the specification has been approved by the EPD. Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Regulation.					<b>√</b>
		E19	(a) The storage area for chemical wastes should be clearly labelled and used solely for storage of chemical waste, (b) enclosed with at least 3 sides, having an impermeable floor and bund of sufficient capacity to accommodate 110% of volume of the largest container or 20 % of total volume of waste stored in that area, (c)(d) whichever is the greatest, having adequate ventilation, being covered to prevent rainfall entering, and being arranged so that incompatible materials are adequately separated.					(a) ✓ (b) N/A (c) N/A (d) N/A
		E20	Chemical waste should be collected by licensed waste collectors and disposed of at licensed facility, e.g. Chemical Waste Treatment Centre.					✓

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.

5

EM&, Log F	Ref Site	spection	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
lanagen	nent (Con	nt'd)						
WM3	3 E1		<ul> <li>General Refuse</li> <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	Contractor	Entire construction site	Waste Disposal Ordinance	✓
	E2	2	• (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	visual nuisance				<ul> <li>(a) ✓</li> <li>(b) ✓</li> <li>(c) ✓</li> <li>(d) ✓</li> </ul>
	-		<ul> <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.</li> <li>Burning of refuse on construction sites is prohibited by law.</li> </ul>					✓
	-		Aluminium cans should be separated from general waste stream and collected by recyclers. Proper collection bins should be provided on- site to facilitate the waste sorting.					✓
	-		• Office waste paper should recycled if the volume warrant collection by recyclers. Participation in community waste paper recycling programme should be considered by the Contractor, including waste paper, aluminium cans, plastic bottles, waste batteries, etc.					✓
	ndfill Exte							
LFG1	1   F1		Special LFG precautions should be taken due to close proximity of NENT landfill extension site to existing landfill	To minimise the risk	Contractor	Entire	Landfill Gas Hazard	N/A
1.500			to avoid potential hazards of LFG exposure (ignition, explosion, asphyxiation, toxicity).	of LFG hazards to		construction	Assessment Guidance Note	
LFG2	2 F2	2	Prominent safety warning signs should be erected on-site to alert all personnel and visitors of LFG hazards during	personnel in construction site		site	(EPD/TR8/97)	✓
LFG3	3 F3	2	excavation works.  No smoking or burning should be permitted on-site.	Construction site			F&IU (Confined Spaces)	<b>√</b>
LFG4			Prominent 'No smoking' and 'No Naked Flames' signs should be erected on-site.				Regulations	<b>Y</b>
LFG5			<u> </u>	<u>-</u> -				Υ
			No worker should be allowed to work alone at any time in excavated trenches or confined areas on-site.				Code of Practice on Safety	V
LFG6			Adequate fire fighting equipment should be provided on-site.				and Health at Work in Confined Spaces	<b>Y</b>
LFG7			Construction equipment should be equipped with vertical exhaust at least 0.6m above ground installed with spark arrestors.					✓
LFG8			Electrical motors and extension cords should be explosion-proof and intrinsically safe for use on-site.					✓
LFG9	9 F9		'Permit to Work' system should be implemented.					✓
LFG1	10 F1		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.					✓
LFG1	11 F1		(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
LFG1	12 F1:	2	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.					<b>√</b>
LFG1	13 F1:		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.					✓
LFG1	14 F1	4	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.					<b>√</b>
LFG1	15 F1:	5	(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

Remark

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.

North East New Territories (NENT) Landfill Extension

			tion Schedule (EMIS) Construction Phase	Ohio ations of the	\//b - +-	Lagging	M/h of your instance	Chatrica
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 (C								
		dfill Extension		1	T	T =	1	1 .
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	<b>√</b>
	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.				Code of Practice on Safety and Health at Work in Confined Spaces	(a) N/A (b) N/A (c) N/A
	LFG18		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.					<b>√</b>
	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.					✓
Landsc	ape and Vi	isual Phases			•	•		
S8	LV1	G4	Advanced screening tree planting     Early planting using fast growing trees and tall shrubs at strategic locations within site to block major view corridors to the site from the VSRs, and to locally screen haul roads, excavation works and site preparation works.     Roadside planter and shrub planting design in front of Cheung Shan Temple.	To minimise the impact on existing vegetation retained by personnel in construction	Contractor	Entire construction site	DEVB TC(W) No. 4/2020 - Tree Preservation  DEVB TC(W)) No. 6/2015 - Maintenance of Vegetation	<b>√</b>
S8	LV2	G5	Boundary Green Belt planting Considerable planting belts proposed around the site perimeter and the construction of temporary soil bunds will screen the landfill operations to a certain degree. Fast growing and fire resistant plant species will be used.	To provide initiation on permanent landscape and visual			and Hard Landscape Features  DEVB TC(W) No. 6/2011 -	To be implemented during operation phase
S8	LV3 G6		Temporary landscape treatment as green surface cover  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.	mitigation measures			Maintenance of Man-made Slopes and Emergency Repair on Stability of Land	<b>√</b>
S8	LV4	G7	Existing tree preservation 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.					<b>√</b>

Remarks:

Compliance of mitigation measure

\* Recommendation was made during site audit but improved/rectified by the contractor

Recommendation was made during site audit but not yet improved/rectified by the contractor.

N/A Not Applicable at this stage were conducted in the reporting period.

North East New Territories (NENT) Landfill Extension

Fryironmental Mitigation Implementation Schedule (EMIS) Construction Phase

<u>viron</u> m		ation Implementa	tion Schedule (EMIS) Construction Phase					
ΞIA	EM&A	Weekly Site	Recommended Precautionary/Mitigation Measures	Objectives of the	Who to	Location of the	What requirement or	Status
Ref.	Log	Inspection	(to be implemented when the trigger level is exceeded, where necessary)	Recommended	implement	measures	standards for the measures to	
	Ref	Item		Measures & Main	the		achieve?	
		1.0		Concerns to address	measures?		456761	
				concerns to address	measures:			
cology								
		on Measures:						
310	E1	-	Restriction of construction activities to the work areas that would be clearly demarcated.	To minimise	Contractor	Entire	Practice Note for Professional	✓
				environmental		construction site	, , ,	
	E2	_	Reinstatement of the work areas immediately after completion of the works.	impacts and			Construction Site Drainage	<b>√</b>
	LZ		Temperature of the work areas immediately after completion of the works.	therefore potential			(PN1/94)	•
				ecological impacts			,	
	E3	-	Only well-maintained plant should be operated on-site and plant should be serviced regularly during the	within and near the			Code of Practice on the	$\checkmark$
			construction programme.	construction site			Packaging, Labelling and	
	E4	+_	Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work	CONSTRUCTION SILE			Storage of Chemical Wastes,	<b>√</b>
	L4	-	periods or should be throttled down to a minimum.					Y
							EPD (1992)	
	E5	-	Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed				ETWB TC(W)) No. 33/2002 Management of Construction and Demolition Material	$\checkmark$
			away from nearby NSRs.					
	E6	_	Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction	+				N/A
		-						IN/A
	E7		works.				Including Rock	
		-	Mobile plant should be sited as far away from NSRs as possible and practicable.					$\checkmark$
							DEVB TC(W) No. 6/2010 Trip	·
	E8		Material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen	4			Ticket System for Disposal of Construction and Demolition Materials	
	⊏0	-	noise from on-site construction activities.  Use of "quiet" plant and working methods.					✓
	E9	-						$\checkmark$
	E10			4			ETWB TC(W)No.19/2005	
	E10	1 -	Construction phase mitigation measures in the Practice Note for Professional Persons on Construction Site				Environmental Management	✓
			Drainage.				on Construction Sites	
	E11	-	Design and set up of the temporary on-site drainage system will be undertaken by the contractor prior to the	1				✓
			commencement of construction.					
	F40			4				
	E12	<del>-</del>	Design and incorporation of silt/sediment traps in the permanent drainage channels to enhance deposition rates					✓
			and regular removal of reposited silt and grit.					
	E13	-	Minimization of surface excavation works during the rainy seasons (April to September), and in particular, control	7				N/A
			of silty surface runoff during storm events, especially for areas located near steep slopes.					
	F4.4							<del>                                     </del>
	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	7				N/A
	1				I	1		

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.

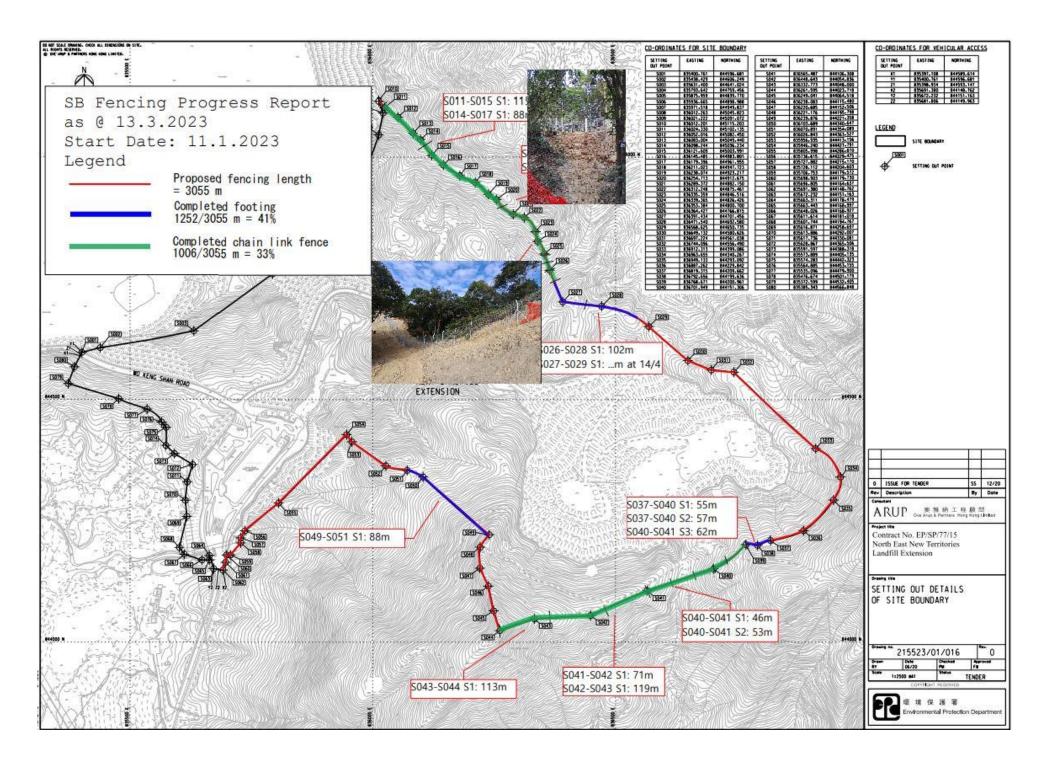
Not Applicable at this stage were conducted in the reporting period. N/A

# Appendix L Construction Site Activities

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 Covering of cement storage 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 M Mitigation Measures of Cultural Landscape Features



# Appendix N Detail Status of EP Submission

### Detail Status of Submissions required under the FEP & EP

FEP Condition	EP Condition	Submission / Measures	Status
2.1	2.3	Management Organization of Main Construction Companies	Submission Date (12 Oct 2022)
2.2	2.4	Setting up of Community Liaison Group (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 (3 Aug 2023)
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	Submission Date (19 Jan 2023)
		Monitoring	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 (17 May 2023)
			11 <sup>th</sup> monitoring (16 Jun 2023)
			12 <sup>th</sup> monitoring (12 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	Translocation was carried out in July 2022
			Submission Date (27 December 2022)
			1 <sup>st</sup> monitoring (29 Aug 2022)
			2 <sup>nd</sup> monitoring (28 Sep 2022)
			3 <sup>rd</sup> monitoring (28 Oct 2022)
			4 <sup>th</sup> monitoring (28 Oct 2022)
			5 <sup>th</sup> monitoring (29 Dec 2022)
			6 <sup>th</sup> monitoring (30 Jan 2023)
			7 <sup>th</sup> monitoring (24 Feb 2023)
			8 <sup>th</sup> monitoring (20 Mar 2023)
			9 <sup>th</sup> monitoring (19 Apr 2023)
			10 <sup>th</sup> monitoring (12 May 2023)
			11 <sup>th</sup> monitoring (7 Jun 2023)
			12 <sup>th</sup> monitoring (18 Jul 2023)
2.9	2.11	Submission of Detailed Landfill Gas Hazard Assessment Report	Submission Date (6 Oct 2022)
2.10	2.12	Submission of Waste Management Plan	Submission Date (30 Dec 2022)
3.2	3.2	Submission of Baseline Monitoring Report	Submission Date (30 Nov 2022)

Appendix O Cumulative complaint / enquiry log, Summaries of complaints and enquiries

## **Environmental Complaints Log**

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

Complaint Ref. No.	Date of Complaint Received	Received from	Received by	Aspect of Complaint	Date of Investigation	Investigation Summary & Conclusion	Date of Reply
C003_20230615	15 Jun 2023	EPD-RNG	ET	Water Quality	16, 19, 21 Jun, 18 Jul 2023	It was noted from EPD-RNG's email to the ET on 15 June 2023 that EPD received information regarding the muddy water was observed at River Ganges (GR3) (Water Quality Monitoring Location from EPD). In summary of the investigation, the muddy water caused from multipotential 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 multipotential 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"
- "EPD-RNG" equal to "Environmental Protection Department-Regional Office (North)"
   "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	0	5
Waste Management	0	0	0
Total	6	0	6

#### 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

