MOTT MACDONALD

Agreement No. CE 30/2018 (EP) Environmental Team for Kai Tak Sports Park – Design and Construction

Monthly EM&A Report for March 2025

April 2025

Culture, Sports and Tourism Bureau

Culture, Sports and Tourism
Bureau & Recreation Branch
Kai Tak Sports Park Section
Room 2307-2310, 23/F, Skyline
Tower, 39 Wang Kwong Road,
Kowloon Bay Kai Tak, Kowloon

Agreement No. CE 30/2018 (EP) Environmental Team for Kai Tak Sports Park – Design and Construction

Monthly EM&A Report for March 2025

April 2025

Mott MacDonald Hong Kong Limited
registered in Hong Kong no. 236497

Culture, Sports and Tourism Bureau

Culture, Sports and Tourism Bureau
The Government of the Hong Kong Special Administrative Region of the People's Republic of China

ERM

Environmental Permit No. EP-544/2017

Kai Tak Sports Park - Investigation

Independent Environmental Checker Verification

Reference Document/Plan

Document/~~Plan~~ to be ~~Certified~~/ Verified:	Monthly EM&A Report No. 71 (February 2025)
Date of Report:	11 April 2025
Date received by IEC:	11 April 2025

Reference EP Condition

Environmental Permit Condition: 3.4

Three hard copies and one electronic copy of the monthly EM&A Report shall be submitted to the Director within 10 working days after the end of each reporting month. The monthly EM&A Reports shall include a summary of all non-compliance with the recommendations in the approved EIA Report (Register No. AEIAR–204/2017) or this Permit. The submissions shall be certified by the ET Leader and verified by the IEC as complying with the requirements as set out in the EM&A Manual before submission to the Director. Additional copies of submission shall be provided upon request by the Director.

IEC Verification

I hereby verify that the above referenced document/~~plan~~ complies with the above referenced condition of EP-544/2017.

Ms Mandy To

Independent Environmental Checker

Date: 11 April 2025

Our ref: 0500384_IEC Verification Cert_KTSP_Monthly EM&A Rpt No.72.docx

Culture, Sports and Tourism Bureau
The Government of the Hong Kong Special Administrative Region of the People's Republic of China

MOTT MACDONALD

Environmental Permit No. EP- 544/2017

Kai Tak Sports Park – Investigation

Environmental Team Leader Certification

Reference Document /Plan

Document/~~Plan~~ to be Certified:	Monthly EM&A Report for March 2025
Date of Report:	11 April 2025
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ETL Certification

I hereby certify that the above reference document complies with the above referenced condition of EP-544/2017.

Sunny Chan

Mr Sunny Chan
Environmental Team Leader Date: 14 April 2025

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Executive summary

The Project – hereby meaning the Designated Project (Items O.6 and O.7 Part I, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO)), comprising the "Kai Tak Sports Park" (KTSP) project and the Hotel and Office (H/O) Development of NKIL 6607 adjoining the KTSP – is located in the Kai Tak Development (KTD) area in Kowloon.

An EIA Report for the Project (Register No. AEIAR-204/2017) was approved by the Environmental Protection Department (EPD) on 6 January 2017. The current Environmental Permit (EP) for the Project, namely No. EP-544/2017, was issued on 8 September 2017. These documents are available through the EIA Ordinance Register. The Project construction works commenced on 8 April 2019.

In February 2019, Mott MacDonald Hong Kong Limited was appointed by the Home Affairs Bureau (HAB), as the Environmental Team (ET) to implement the Environmental Monitoring & Audit (EM&A) programme for the construction phase and first year of operation of the Project in accordance with the approved EM&A Manual.

In July 2022, Home Affairs Bureau (HAB) has been reorganized as Culture, Sports and Tourism Bureau (CSTB).

This is the 72nd Monthly EM&A Report for the construction phase of the Project which summaries findings of the EM&A programme during the reporting period from 1 to 31 March 2025.

Key Construction Works in the Reporting Period

A summary of construction activities undertaken during the reporting period is presented below:

KTSP*

- Mobilization and lifting;
- Concreting;
- Excavation; and
- Landscape work.

H/O Development**

- Nil

Note:

*Termination of construction phase EM&A programme for Kai Tak Sports Park was proposed by ET and agreed by IEC on 19 March 2025 and approved by EPD on 25 March 2025.

**According to the Project Architect and Contractor of the Hotel and Office Development, the construction works at Hotel and Office Development area have been substantially completed and the Hotel area has been handed over to the developer on 25 September 2024.

Termination of EM&A site inspection at Hotel and Office Development area was proposed by ET and agreed by IEC on 7 October 2024 and approved by EPD on 24 October 2024.

Environmental Monitoring and Audit Progress

The monthly EM&A programme was undertaken by ET in accordance with the approved EM&A Manual. A summary of the monitoring activities during the reporting period is presented below:

Activity	Monitoring Locations	Date
Air Quality Monitoring (1-hour TSP)	AMS1-T2*, AMS2, AMS4	3, 7, 13, 19, 25, 31 Mar 2025
Noise Monitoring ($L_{eq\ (30\ min)}$)	NMS1-T2*, NMS2, NMS4	3, 13, 19, 25, 31 Mar 2025
Weekly environmental site inspections	-	5, 12, 19, 25 Mar 2025
Landscape and visual site inspections	-	5, 19 Mar 2025

*Note:

During the reporting period, temporary impact monitoring stations, AMS1-T and NMS1-T, were no longer accessible from 13 August 2024, due to the relocation of the Agriculture, Fisheries and Conservation Department Kowloon Animal Management Centre. Alternative temporary air quality and noise impact monitoring stations, AMS1-T2 and NMS1-T2, were proposed by ET and agreed by IEC on 9 August 2024 and further approved by EPD on 28 August 2024 for conducting impact monitoring during the reporting period. The details of temporary monitoring stations are described in Section 2 and Section 3 respectively.

Noise Monitoring for Music Event and Large-Scale Test Event

Activity	Monitoring Locations	Date
Noise Monitoring ($L_{eq\ (15\ min)}$)	NMS1B*, NMS3, NMS5	18, 24 Jan 2025 4, 16 Feb 2025 1 Mar 2025

*Note:

During the reporting period, music event noise monitoring station NMS1A was currently under construction and not accessible for noise monitoring. Temporary noise monitoring station, NMS1B, was used to conduct noise monitoring during the reporting period. Details of temporary relocation of music event noise monitoring locations are presented in Proposal of Temporary Relocation of Music Event Noise Monitoring Station from Sung Wong Toi Road Public Housing Site to Grand Waterfront, NMS1B was proposed by ET and agreed by IEC on 5 December 2024 and further approved by EPD on 21 January 2025 for conducting noise monitoring during the reporting period.

Noise monitoring was carried out by operator for music event and large-scale stress test event during the testing period. The details of the noise monitoring results have been reported to EPD by the operator to fullfill the EM&A Manual and the approved Noise Mitigation Plan (NMP) requirement during the reporting period.

Breaches of Action and Limit Levels

Air Quality

There was no breach of Action or Limit Levels for air quality (1-hr TSP) during the reporting month.

Noise

No Action Level exceedances for noise were recorded during the reporting month.

Two Limit Level exceedances for noise were recorded at NMS1-T2 during the reporting month. Exceedance investigations were conducted and summarised in **Appendix M**.

Complaint Log
There were no complaints in relation to the environmental impact received during the reporting month.

Notifications of Summons and Successful Prosecutions

There were no notifications of summons or prosecutions received during this reporting period.

Reporting Changes

There was no reporting change during the reporting period.

Future Key Issues

The future key issues to be undertaken in the upcoming month are:

KTSP

- Landscape work.

1 Introduction

1.1 Background

The Project – hereby meaning the Designated Project (Items O.6 and O.7 Part I, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO)), comprising the "Kai Tak Sports Park" (KTSP) project and the Hotel and Office (H/O) Development of NKIL 6607 adjoining the KTSP – is located in the Kai Tak Development (KTD) area in Kowloon.

The key construction works of the Project include:

(i) KTSP project

a. a multi-purpose Main Stadium with a spectator capacity of around 50,000;
b. a Public Sports Ground, with a spectator capacity of around 5,000;
c. an Indoor Sports Centre with a multi-purpose main arena with a seating capacity of up to 10,000 and an ancillary sports hall with a seating capacity of 500;
d. retail and dining outlets with a gross floor area (GFA) of about 57,000 square metres (m^2), a bowling centre with 40 lanes and a health and wellness centre with about 2,500 m^2 GFA;
e. more than 8 hectares of public open space including landscaped deck structures across Shing Kai Road, passive amenities and park features, outdoor ball courts; and
f. ancillary facilities such as car parks, toilets, changing rooms, etc.

(ii) H/O Development

g. an office development;
h. a 300-room hotel with a GFA of about 16,000 m^2; and
i. ancillary facilities such as retails, car parks, etc.

In February 2019, Mott MacDonald Hong Kong Limited (MMHK) was commissioned by the Home Affairs Bureau (HAB) under Agreement No. CE 30/2018 (EP) to undertake the Environmental Team (ET) services for carrying out the Environmental Monitoring & Audit (EM&A) programme during the construction phase and first year of operation of the Project in accordance with the approved Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-204/2017), EM&A Manual (including any subsequent amendments) and EP (including any subsequent variations of it and/or any further environmental permit issued under the EIAO). The current EP (No. EP-544/2017) was issued by EPD on 8 September 2017.

In July 2022, Home Affairs Bureau (HAB) has been reorganized as Culture, Sports and Tourism Bureau (CSTB).

This is the 72nd Monthly EM&A Report summarising the key findings of the construction phase EM&A programme from 1 to 31 March 2025 (the "reporting period") and is submitted to fulfil Condition 3.4 of the EP.

1.2 Project Organisation

The organisation chart and lines of communication with respect to the on-site environmental management structure of the key personnel are shown in **Appendix A**. The key personnel contact names and numbers are summarized in **Table 1.1**.

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone	Fax
Project Proponent (Culture, Sports and Tourism Bureau)	Project Director (Sports Park)	Lilian Cheung	3586 3403	3586 0591
Supervising Officer's Representative (Culture, Sports and Tourism Bureau)	Senior Engineer	Keith Man	3586 3149	3586 0591
Environmental Team (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Sunny Chan	2828 5962	2827 1823
	Deputy Environmental Team Leader	Ken Wong	2828 5757	2827 1823
Independent Environmental Checker (ERM Hong Kong Limited)	Independent Environmental Checker	Mandy To	2271 3000	3015 8052
Contracted Party (Kai Tak Sports Park Limited)	Assistant Contract Manager	Eric Chung	3552 5003	2845 9295
	Environmental Officer	Gary Yim	3552 5013	3552 5099
Hotel and Office Development				
Project Manager (Sanon Limited)	Senior Group Project Director	David Lee	2910 8368	2815 9949
	Project Manager	William Chan	2910 8363	2815 9949
Project Architect (P&T Architects & Engineers Limited)	Project Architect	Patrick Chan	2832 7205	-
Contractor (Hip Hing Construction Co., Ltd.	Project Manager	Michael Wong	9671 9952	-
24-hour Community Liaison Hotline	-	-	5587 6112	-

1.3 Works Area and Construction Programme

The construction works commenced on 8 April 2019. The works area of the Project is shown in **Appendix B**. The Construction Works Programme of the Project is provided in **Appendix C**.

1.4 Construction Works undertaken during the Reporting Period

A summary of construction activities undertaken during this reporting period is presented below:

KTSP*

- Mobilization and lifting;
- Concreting;
- Excavation; and
- Landscape work.

H/O Development**

- Nil

Note:

*Termination of construction phase EM&A programme for Kai Tak Sports Park was proposed by ET and agreed by IEC on 19 March 2025 and approved by EPD on 25 March 2025.

**According to the Project Architect and Contractor of the Hotel and Office Development, the construction works at Hotel and Office Development area have been substantially completed and the Hotel area has been handed over to the developer on 25 September 2024.

Termination of EM&A site inspection at Hotel and Office Development area was proposed by ET and agreed by IEC on 7 October 2024 and approved by EPD on 24 October 2024.

2 Air Quality Monitoring

2.1 Introduction

In accordance with the EM&A Manual of the Project, baseline 1-hour Total Suspended Particulates (TSP) levels at air quality monitoring stations AMS1 and AMS2 were established. Impact 1-hour TSP monitoring was conducted for at least three times every 6 days.

2.2 Monitoring Parameters, Frequency and Duration

Table 2.1 summarises the monitoring parameters, frequency and duration of impact air quality monitoring.

Table 2.1: Air Quality Monitoring Parameters, Frequency and Duration

Parameter	Frequency and Duration
1-hour TSP	3 times every six-days

2.3 Monitoring Locations

According to the EM&A Manual, a total of five air quality monitoring stations are identified for impact monitoring. Of these, two air sensitive receivers (AMS3 and AMS5) are planned residential use and were not available for baseline monitoring; the same two are also currently not available for impact monitoring.

Table 2.2 describes the impact air quality monitoring stations and **Figure 2.1** shows their locations.

Table 2.2: Construction Dust Monitoring Locations

Monitoring Station	Location	Status
AMS1	Hong Kong Society for the Blind Workshop, Roof Floor	Existing Air Sensitive Receiver (not accessible from 1 September 2022)
AMS2	Sky Tower, Podium of Tower 7	Existing Air Sensitive Receiver
AMS4	Retail Building in front of The Henley, Rooftop	Existing Air Sensitive Receiver
AMS3	Kai Tak Area 2B Site 4 (2B4) (residential use)	Planned Air Sensitive Receiver
AMS5	Kai Tak Area 1L Site 3 (1L3) (residential use)	Planned Air Sensitive Receiver

During the reporting period, monitoring locations AMS2 and AMS4 were set up at the proposed locations for impact monitoring.

Permission on setting up and carrying out impact monitoring works at AMS3 and AMS5 will be sought once each respective development is completed and occupied.

The impact monitoring station AMS1 was no longer open for impact monitoring from 1 September 2022, due to relocation of the Hong Kong Society for the Blind Workshop.

Temporary air quality monitoring station, AMS1-T, was used to conduct dust monitoring during the reporting period. Details of temporary alternative monitoring location was presented in

Temporary Alternative Proposal for Monitoring Station as proposed by ET and agreed by IEC dated 6 January 2021.

During the reporting period, temporary monitoring station AMS1-T, was no longer accessible from 13 August 2024, due to the relocation of the Agriculture, Fisheries and Conservation Department Kowloon Animal Management Centre. Alternative temporary air quality monitoring station, AMS1-T2 was proposed by ET and agreed by IEC on 9 August 2024 and further approved by EPD on 28 August 2024 for conducting impact monitoring during the reporting period.

The details of temporary monitoring stations are described in **Table 2.3** and the location of temporary monitoring station is shown in **Figure 2.1**.

Table 2.3: Temporary Construction Dust Monitoring Location

Monitoring Station	Location	Status
AMS1-T	Agriculture, Fisheries and Conservation Department Kowloon Animal Management Centre, 102 Sung Wong Toi Road	Existing Air Sensitive Receiver (not accessible from 13 August 2024)
AMS1-T2	Shing Kai Road Garden	Existing Air Sensitive Receiver (from 13 August 2024)

2.4 Monitoring Action and Limit Levels

The Action and Limit Levels for 1-hr TSP are provided in **Table 2.4**.

Table 2.4: Action and Limit Levels for 1-hour TSP

Monitoring Station	Action Level, µg/m^3	Limit Level, µg/m^3
AMS1 – Hong Kong Society for the Blind Workshop, Roof Floor	283	500
AMS2 – Sky Tower, Podium of Tower 7	280	500
AMS3 - Kai Tak Area 2B Site 4 (2B4) (residential use)	287*	500
AMS4 - Kai Tak Area 1K Site 3 (1K3) (residential use)	287*	500
AMS5 - Kai Tak Area 1L Site 3 (1L3) (residential use)	287*	500

*Remarks: the Action Level for AMS3, AMS4 and AMS5 were derived from an alternative monitoring station AMS3-4-5 during the baseline monitoring.

The event and action plan is provided in **Appendix D**.

If exceedance(s) at these stations is/are recorded by the ET of the Project, it will carry out an investigation and findings will be reported in the monthly EM&A Report.

2.5 Monitoring Schedule for the Reporting Period

The schedule for air quality monitoring at AMS1-T2, AMS2 and AMS4 in the reporting period is presented in **Appendix E**.

2.6 Monitoring Equipment

Portable direct reading dust meters were used to carry out the 1-hour TSP monitoring. The brand(s) and model(s) of the equipment used for air quality monitoring stations AMS1-T, AMS2 and AMS4 under this Project are given in **Table 2.5**.

Table 2.5: 1-hour TSP Monitoring Equipment

Equipment	Brand	Model No.
Portable direct reading dust meter	Sibata Digital Dust Monitor	LD-3B (S/N: 235786, 245834, 276017, 6Z7784)

2.7 Monitoring Methodology

Field Monitoring

The measuring procedures of the 1-hour TSP dust meter are in accordance with the Manufacturer's Instruction Manual as follows:

- Turn the power on.
- Close the air collecting opening cover.
- Push the "TIME SETTING" switch to [BG].
- Push "START/STOP" switch to perform background measurement for 6 seconds.
- Turn the knob at SENSI ADJ position to insert the light scattering plate.
- Leave the equipment for 1 minute upon "SPAN CHECK" is indicated in the display.
- Push "START/STOP" switch to perform automatic sensitivity adjustment. This measurement takes 1 minute.
- Pull out the knob and return it to MEASURE position.
- Setting time period of 1 hour for the 1-hour TSP measurement.
- Push "START/STOP" to start the 1-hour TSP measurement.
- Regular checking of the time period setting to ensure monitoring time of 1 hour.

Maintenance and Calibration

- The 1-hour dust meter would be checked at 3-month intervals and calibrated at 1-year intervals throughout all stages of the air quality monitoring.
- Calibration records for direct dust meters are given in **Appendix F**.

2.8 Monitoring Results

The monitoring results for 1-hour TSP at AMS1-T2, AMS2 and AMS4 are summarized in **Table 2.6**. Detailed impact air quality monitoring results are presented in **Appendix G**.

Table 2.6: Summary of 1-hour TSP Monitoring Results During the Reporting Period

Monitoring Station	Average, $\mu g/m^3$	Min, $\mu g/m^3$	Max, $\mu g/m^3$	Action Level, $\mu g/m^3$	Limit Level, $\mu g/m^3$
AMS1-T2	44	31	54	283	500
AMS2	32	25	45	280	500
AMS4	30	22	41	287	500

There was no Action and Limit Level exceedance of 1-hr TSP level recorded at station AMS1-T2, AMS2 and AMS4 by the ET during the reporting period.

2.9 Wind Data

Wind data at Kai Tak automatic weather station collected from the Hong Kong Observatory (HKO) were used for the air quality monitoring and they are shown in **Appendix H**. It is considered that the wind data obtained at the existing Kai Tak wind station are representative of the Project area and could be used for undertaking the construction phase baseline and impact air quality monitoring programme for the Project.

The proposed use of the existing wind data from Kai Tak automatic weather station collected from HKO for wind data collection instead of setting up wind monitoring equipment near the monitoring stations was proposed by ET and agreed by IEC in accordance with the requirements as stated in Section 3.4.7 of the EM&A Manual of the Project.

2.10 Application of De-NOx Paint

The proposed use of the DeNOx paint was part of the Best Practice Means (BPM) for enhancing air quality as stated in Section 3.2 of the approved Air Quality Management Plan (AQMP) of the Project.

According to the contractor information, the application of De-NOx paint at the external site boundary wall of KTSP facing CKR tunnel was completed between 14 October 2024 and 18 October 2024 in accordance with the approved AQMP requirement.

3 Noise Monitoring

3.1 Introduction

In accordance with the EM&A Manual, impact noise monitoring was conducted at least once per week for each noise monitoring location during the construction phase of the Project.

3.2 Monitoring Parameters, Frequency and Duration

Table 3.1 summarises the monitoring parameters, frequency and duration of impact noise monitoring.

Table 3.1: Noise Monitoring Parameters, Frequency and Duration

Parameter	Frequency and Duration
30-minutes measurement at each monitoring station between 0700 and 1900 on normal weekdays (Monday to Saturday). L_{eq}, L_{10} and L_{90} would be recorded.	At least once per week

3.3 Monitoring Locations

According to the approved EM&A Manual, a total of seven noise monitoring stations were identified for the impact monitoring locations. Of these, four noise sensitive receivers are planned residential use (NMS1A, NMS2A, NMS3 and NMS5). **Table 3.2** describes the details of the monitoring stations and **Figure 3.1** shows the locations of noise monitoring stations.

Table 3.2: Construction Noise Monitoring Locations

Monitoring Station	Location Description	Status
NMS1	Hong Kong Society for the Blind Workshop, Roof Floor	Existing Noise Sensitive Receiver (not accessible from 1 September 2022)
NMS2	Sky Tower, Podium of Tower 7	Existing Noise Sensitive Receiver
NMS4	Retail Building in front of The Henley, Rooftop	Existing Noise Sensitive Receiver
NMS1A	Sung Wong Toi Road Public Housing Site	Planned Noise Sensitive Receiver
NMS2A	Sung Wong Toi Road CDA Site (mixed use)	Planned Noise Sensitive Receiver
NMS3	Kai Tak Area 2B Site 4 (2B4) (residential use)	Planned Noise Sensitive Receiver
NMS5	Kai Tak Area 1L Site 3 (1L3) (residential use)	Planned Noise Sensitive Receiver

During the reporting period, monitoring locations NMS2 and NMS4 were set up at the proposed locations for impact monitoring.

Since NMS1A & NMS2A are planned (i.e. not existing) noise sensitive receivers, noise monitoring should be carried out initially at NMS1 and NMS2 respectively before the population intake of the planned developments. Once the planned developments are completed and occupied, NMS1A shall replace NMS1, while NMS2A shall replace NMS2. It is proposed that

the baseline noise level and Limit Level at NMS1A and NMS2A will be the same as those derived from the baseline monitoring data recorded at NMS1 and NMS2 respectively.

Permission on setting up and carrying out impact monitoring works at NMS3 and NMS5 will be sought once each respective development is completed and occupied.

During the reporting period, monitoring station NMS1 was no longer open for impact monitoring from 1 September 2022, due to relocation of the Hong Kong Society for the Blind Workshop. Temporary noise monitoring station, NMS1-T, was used to conduct noise monitoring during the reporting period. Details of temporary alternative monitoring locations are presented in Temporary Alternative Proposal for Monitoring Station as proposed by ET and agreed by IEC dated 6 January 2021.

During the reporting period, temporary monitoring station NMS1-T, was no longer accessible from 13 August 2024, due to the relocation of the Agriculture, Fisheries and Conservation Department Kowloon Animal Management Centre. Alternative temporary noise monitoring station, NMS1-T2 was proposed by ET and agreed by IEC on 9 August 2024 and further approved by EPD on 28 August 2024 for conducting impact monitoring during the reporting period.

The details of temporary monitoring station are described in **Table 3.3** and the location of noise monitoring station is shown in **Figure 3.1**

Table 3.3: Temporary Construction Noise Monitoring Location

Monitoring Station	Location Description	Status	Type of Measurement
NMS1-T	Agriculture, Fisheries and Conservation Department Kowloon Animal Management Centre, 102 Sung Wong Toi Road	Exiting Noise Sensitive Receiver (not accessible from 13 August 2024)	Façade
NMS1-T2	138 To Kwa Wan Road	Exiting Noise Sensitive Receiver (from 13 August 2024)	Façade

3.4 Action and Limit Levels

The Action and Limit Levels for construction noise are defined in **Table 3.4**.

Table 3.4: Action and Limit Level for Construction Noise

Monitoring Station	Time Period	Action Level	Limit Level
NMS1-T2 NMS2 NMS4	0700 – 1900 hours on normal weekdays	When one documented complaint is received	75 dB(A)

The event and action plan is provided in **Appendix D**.

If exceedance(s) at these stations is/are recorded by the ET of the Project, it will carry out an investigation and findings will be reported in the monthly EM&A Report.

3.5 Monitoring Schedule for the Reporting Period

The schedule for noise monitoring in the reporting period is presented in **Appendix E**.

3.6 Monitoring Equipment

Noise monitoring was performed using sound level meters at each designed monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications (IEC) 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was deployed to check the sound level meters at a known sound pressure level. Brand and model of the equipment used for noise monitoring under this Project is given in **Table 3.5**

Table 3.5: Noise Monitoring Equipment

Equipment	Brand	Model No.
Integrated Sound Level Meter	Rion	NL-52 (S/N 00643040)
Acoustic Calibrator	LARSON DAVIS	CAL200 (S/N 11334)

3.7 Monitoring Methodology

- Façade and Free Field measurements were made at the monitoring locations.
- For Façade measurement, the microphone head of the sound level meter was positioned 1m exterior of the noise sensitive façade and lowered sufficiently so that the building's external wall acts as a reflecting surface.
- For free field, the microphone of the Sound Level Meter was set at least 1.2 m above the ground.
- A correction of +3dB(A) was made for free field measurement.
- The battery condition was checked to ensure the correct 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
  - time measurement: 30-minute intervals (between 0700-1900 on normal weekdays)
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94 dB at 1 kHz. If the difference in the calibration level before and after measurement was more than 1 dB, the measurement would be considered invalid and repeated after the re-calibration or repair of the equipment.
- During the monitoring period, the L_{eq}, L_{10} and L_{90} were recorded. In addition, any site observations and noise sources were recorded on a standard record sheet.
- Noise measurements were not made in presence of fog, rain, wind with a steady speed exceeding 5m/s or wind with gusts exceeding 10m/s.

Maintenance and Calibration

- The microphone head of the sound level meter and calibrator is cleaned with soft cloth at quarterly intervals.
- The sound level meter and calibrator are sent to the supplier or HOKLAS laboratory to check and calibrate at yearly intervals.
- Calibration records are shown in **Appendix F**.

3.8 Monitoring Results (Construction Noise)

The monitoring results for construction noise are summarized in **Table 3.6**. Detailed impact noise monitoring results and relevant graphical plots are presented in **Appendix G**.

Table 3.6: Summary of Construction Noise Monitoring Results During the Reporting Period

	Measured Noise Level $L_{eq\ (30\ mins)}$, dB(A)			
Monitoring Station	Average	Min	Max	Limit Level
NMS1-T2	75	74	76	75
NMS2	69	69	70	75
NMS4	63	62	63	75

No noise exceedances were recorded at stations NMS2 and NMS4 by ET during the reporting period.

Two Limit Level exceedances for noise level were recorded at station NMS1-T2 during the reporting period. Exceedance investigations were conducted and the details were shown in **Appendix M**.

3.9 Noise Monitoring (Music Event and Large-Scale Stress Test Event)

During the reporting period, noise monitoring for music event and large-scale stress test event during the testing period were conducted by operator. A summary of music event and large-scale stress test event during the testing period is shown in **Table 3.7** and the location of the music event noise monitoring stations is shown in **Figure 3.2.**

Table 3.7: Summary of Music Event During the Testing Period

Date	Event	Time	Location
18 Jan 2025	"FOUR in LOVE" CHARITY LIVE 2025	16:00 – 20:00	Kai Tak Stadium
24 Jan 2025	Large-Scale Stress Test	16:00 – 21:30	Kai Tak Stadium, Kai Tak Arena, Youth Sport Park
4 Feb 2025	Large-Scale Stress Test	16:00 – 22:00	Kai Tak Stadium
16 Feb 2025	Large-Scale Stress Test	15:00 – 18:30	Whole KTSP
1 Mar 2025	Grand Opening	16:00 – 20:45	Kai Tak Stadium

The details of music event noise monitoring stations are described in **Table 3.8** and the location of noise monitoring station is shown in **Figure 3.2**.

Table 3.8: Noise Monitoring Stations for Music Event during Testing Period

Monitoring Station	Location Description	Status	Type of Measurement
NMS1A	Sung Wong Toi Road Public Housing Site	Planned Noise Sensitive Receiver (under construction, not accessible)	Façade
NMS3	Kai Tak Area 2B Site 4 (2B4) (residential use)	Planned Noise Sensitive Receiver	Façade

Monitoring Station	Location Description	Status	Type of Measurement
		(under construction, accessible)	
NMS5	The Henley	Existing Noise Sensitive Receiver	Façade

During the reporting period, music event noise monitoring station NMS1A was currently under construction and not accessible for noise monitoring. Temporary noise monitoring station, NMS1B, was used to conduct noise monitoring during the reporting period. Details of temporary relocation of music event noise monitoring locations are presented in Proposal of Temporary Relocation of Music Event Noise Monitoring Station from Sung Wong Toi Road Public Housing Site to Grand Waterfront, NMS1B was proposed by ET and agreed by IEC on 5 December 2024 and further approved by EPD on 21 January 2025 for conducting noise monitoring during the reporting period.

Table 3.9: Temporary Music Event Noise Monitoring Location

Monitoring Station	Location Description	Status	Type of Measurement
NMS1A	Sung Wong Toi Road Public Housing Site	Planned Noise Sensitive Receiver (under construction)	Façade
NMS1B	Grand Waterfront, Refuge Floor	Exiting Noise Sensitive Receiver	Façade

In accordance with the EM&A Manual, for music events held in the daytime or evening time period, the event organizer shall appoint an appropriate person to measure the noise level at each NMS for every 5 minutes and every 15 minutes period throughout the event. The prevailing background noise level should be measured before and after the event. The background noise level measured before the event will be used to determine the Action Level for the monitoring of that event.

Table 3.10: Trigger and Action Levels for Noise from Music Event

Time Period	Trigger Level	Action Level
7 a.m. to 11 p.m. during music events (including rehearsal and main event)	Measured in Leq(15min), 7 dB above the background noise level at the NMS	Measured in Leq(5min), 10 dB above the background noise level at the NMS

Table 3.11: Noise Monitoring Equipment

Equipment	Brand	Model No.
Integrated Sound Level Meter	NTi Audio	XL3 (S/N A3A-01211-F0, A3A-01246-F0, A3A-01249-F0)

The manufacturer calibration records for the sound level meters are shown in **Appendix F**.

Table 3.12: Summary of Noise Monitoring Result for Music Event During the Testing Period

Date	Noise Monitoring Stations					
	NMS1B Leq (15min)		NMS3 Leq (15min)		NMS5 Leq (15min)	
	Pre-Event	During Event	Pre-Event	During Event	Pre-Event	During Event
18 Jan 2025	67	62 - 71	65	57 - 70	68	57 - 67
24 Jan 2025	66	62 - 69	66	59 - 68	65	56 - 67
4 Feb 2025	64	61 - 64	62	56 - 68	60	56 - 61
16 Feb 2025	63	62 - 64	63	58 - 69	60	57 - 61
1 Mar 2025	68	57 - 71	65	56 - 69	61	56 - 63

No noise exceedances were recorded at monitoring stations NMS1B, NMS3 and NMS5 by operator during the reporting period. The details of the noise monitoring results have been reported to EPD by the operator to fullfill the EM&A Manual and the approved Noise Mitigation Plan (NMP) requirement during reporting period.

4 Environmental Site and Audit

4.1 Site Inspection

Site inspections were carried out by ET on a weekly basis to monitor the implementation of proper environmental pollution control mitigation measures for the Project. Key observations were recorded in the site inspection checklist and passed to the Contracted Party together with the appropriate recommended mitigation measures where necessary. During the reporting period, site inspections were carried out on 5, 12, 19 and 25 March 2025. Joint IEC site inspections were carried out on 25 March 2025.

Bi-weekly landscape and visual site audit was carried out on 5 and 19 March 2025. The landscape and visual audit have been audited by Registered Landscape Architect (RLA). No major observations of landscape and visual impact were identified. The result findings were summarised in **Appendix K.**

Key observations during the site inspections are described in **Table 4.1.**

Table 4.1: Summary of Site Inspections and Recommendations

Inspection Date	Key Observations	Recommendations / Actions	Close-Out Date / Status
Kai Tak Sports Park			
5 Mar 2025	Accumulation of general refuse on ground was observed at northern site.	The contractor was reminded to clear the general refuse regularly.	12 Mar 2025
12 Mar 2025	Accumulation of mud on haul road near site entrance was observed at northern site.	The contractor was reminded to provide regular water spraying to prevent accumulation of mud near site entrance.	19 Mar 2025
19 Mar 2025	Accumulation of general refuse was observed at southern site.	The contractor was reminded to clear the general refuse regularly.	25 Mar 2025
25 Mar 2025	Nil	N/A	N/A
Termination of construction phase EM&A programme for Kai Tak Sports Park approved by EPD on 25 March 2025.			
Hotel and Office Development			
Termination of EM&A site inspection at Hotel and Office Development area approved by EPD on 24 October 2024.			

4.2 Advice on the Solid and Liquid Waste Management Status

KTSP

The Contracted Party was registered as a chemical waste producer for the Project. Construction and demolition (C&D) material sorting was carried out on site. Sufficient numbers of receptacles were provided for general refuse collection and sorting. Excavated inert C&D materials were reused to minimise the disposal of C&D waste to public fill.

The Contracted Party was reminded to maintain on site waste sorting and recording system and maximize reuse / recycling of C&D wastes, whenever these are generated.

H/O Development

Termination of EM&A site inspection at Hotel and Office Development area was proposed by ET and agreed by IEC on 7 October 2024 and approved by EPD on 24 October 2024.

The monthly summary of waste flow table is detailed in **Appendix I**.

4.3 Environmental Licenses and Permits

The valid environmental licenses and permits for the Project during the reporting period are summarized in **Appendix J**.

4.4 Implementation Status of Environmental Mitigation Measures

In response to the site audit findings, the Contracted Party carried out corrective actions.

A summary of the environmental mitigation measures implementation status is presented in **Appendix K**. Most of the necessary mitigation measures were implemented properly.

4.5 Summary of Exceedance of the Environmental Quality Performance Limit

Air Quality

No Action and Limit Level exceedances of 1-hour TSP level was recorded at AMS1-T2, AMS2 and AMS4 during the reporting period.

Noise

No Action Level exceedances for noise were recorded during the reporting month.

Two Limit Level exceedances for noise level were recorded at NMS1-T2 during the reporting month. Exceedance investigations were conducted and summarised in **Appendix M**.

4.6 Summary of Complaints, Notification of Summons and Successful Prosecution

Complaints

There was no complaints received in relation to the environmental impact during the reporting month.

Notification of Summons and Successful Prosecution

No notification of summons or prosecutions was received during the reporting period.

Statistics on notifications of summons and successful prosecutions are summarized in **Appendix L**.

5 Future Key Issues

5.1 Construction Programme for the Coming Months

As informed by the Contracted Party, the major construction activities have been completed and the remaining site activities for the coming month (April 2025) are summarized in **Table 5.1**.

Table 5.1: Site Activities for the Coming Month

Site Area	Description of Activities
• Kai Tak Sports Park	• Landscape work**
• Hotel and Office Development	• N/A**

**Note:

According to the Project Architect and Contractor of the Hotel and Office Development, the construction works at Hotel and Office Development area have been substantially completed and the Hotel area has been handed over to the developer on 25 September 2024.

Termination of EM&A site inspection at Hotel and Office Development area was proposed by ET and agreed by IEC on 7 October 2024 and approved by EPD on 24 October 2024.

According to the CSTB on 14 March 2025, the technical compliance of KTSP have been achieved on 28 February 2025.

Termination of construction phase EM&A programme for Kai Tak Sports Park was proposed by ET and agreed by IEC on 19 March 2025 and approved by EPD on 25 March 2025. The remaining landscape work will be under operation phase.

All weekly site inspection and monitoring for air quality and noise for under construction phase EM&A programme will be terminated accordingly effective from 1 April 2025.

6 Conclusions

6.1 Conclusions

General

The construction works for the Project commenced on 8 April 2019.

The ET of the Project has implemented the air quality and noise environmental impact monitoring under the construction phase EM&A programme during the reporting period.

Noise monitoring was carried out by operator for music event and large-scale stress test event during the testing period. The details of the noise monitoring results have been reported to EPD by the operator to fullfill the EM&A Manual and the approved Noise Mitigation Plan (NMP) requirement during the reporting period.

Termination of construction phase EM&A programme for Kai Tak Sports Park was proposed by ET and agreed by IEC on 19 March 2025 and approved by EPD on 25 March 2025.

Breaches of Action and Limit Levels

Air Quality

No Action or Limit Level exceedances of 1-hour TSP level was recorded during the reporting period.

Noise

No Action Level exceedances for noise were recorded during the reporting month.

Two Limit Level exceedance for noise level were recorded at NMS1-T2 during the reporting month. Exceedance investigations were conducted and summarised in **Appendix M.**

No noise exceedances for music event and large-scale events were recorded during the reporting period.

Environmental Site Inspections

Environmental site inspections were carried out four times during the reporting period. Recommendations on remedial actions were given to the Contracted Party for the deficiencies identified during the site inspections.

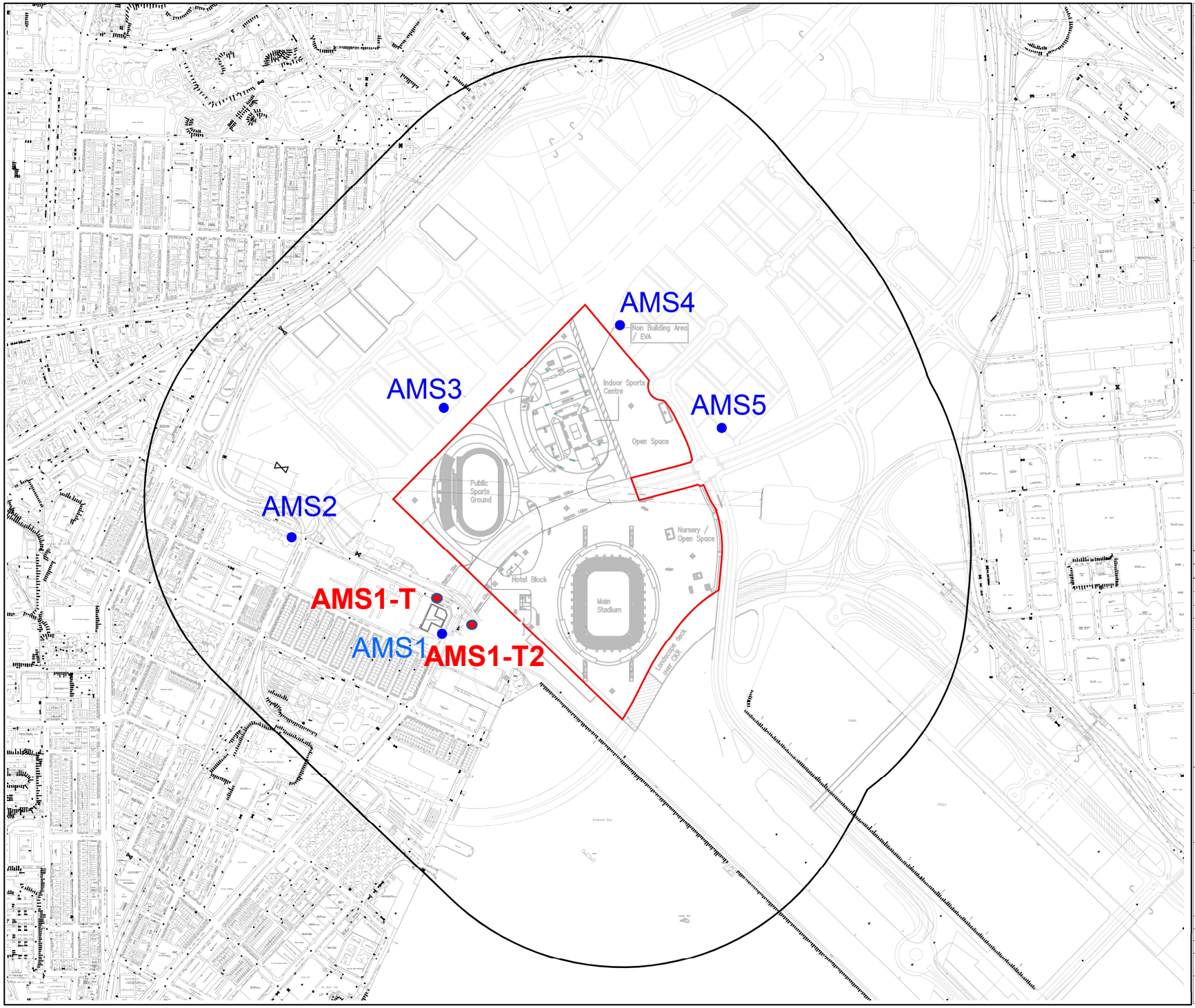
Complaints

There was no complaints received in relation to the environmental impact during the reporting period.

Notifications of Summons and Successful Prosecutions

There were no notifications of summons or prosecutions received during the reporting period.

Figures



Key Plan

Notes:

1. ALL LEVELS ARE METRES TO PRINCIPAL DATUM (PD) UNLESS NOTED OTHERWISE.
2. ALL CO-ORDINATES REFER TO HONG KONG 1980 METRIC GRID CO-ORDINATES SYSTEM.
3. PIPE AND BOX CULVERT SIZES ARE SHOWN IN MILLIMETERS

Key to symbols:

LEGEND:

- Project Site
- 500m from Site Boundary
- AMS1 Air Monitoring Station 1
- AMS1-T **Temporary Air Monitoring Station**

Rev	Date	Drawn	Description	Ch'k'd	App'd

MOTT MACDONALD
3/F Mapletree Bay Point
348 Kwun Tong Road
Kwun Tong, Kowloon
Hong Kong
T +852 2828 5757
F +852 2827 1823
W mottmac.com

Client

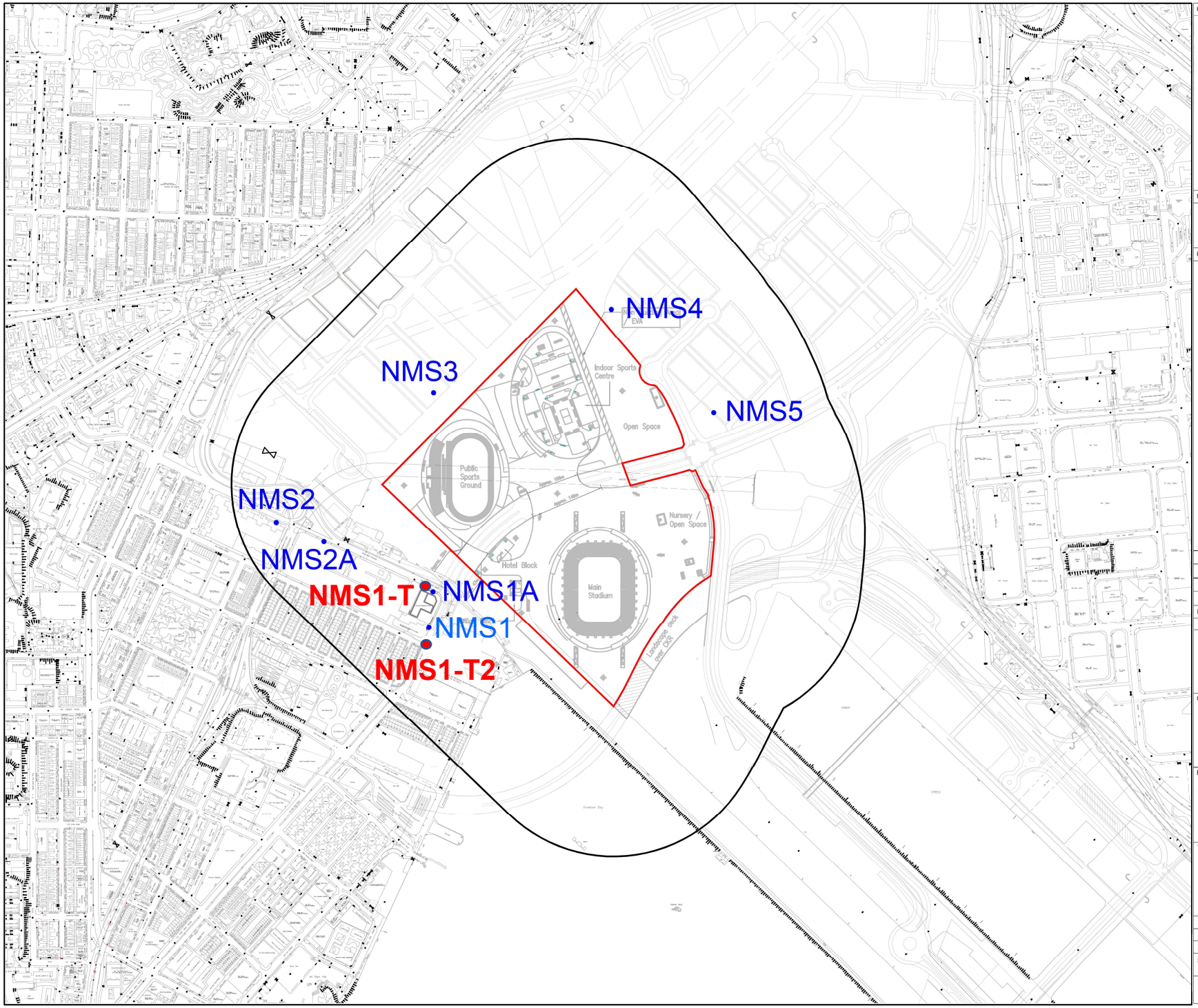
Project

Title

Figure 2.1
Location of Air Quality Monitoring Stations

Designed			Eng check		
Drawn			Coordination		
Dwg check			Approved		
Scale at A3		Status		Rev	

Drawing Number



Key Plan:

Notes:

1. ALL LEVELS ARE METRES TO PRINCIPAL DATUM (PD) UNLESS NOTED OTHERWISE.
2. ALL CO-ORDINATES REFER TO HONG KONG 1980 METRIC GRID CO-ORDINATES SYSTEM.
3. PIPE AND BOX CULVERT SIZES ARE SHOWN IN MILLIMETERS

Key to symbols:

LEGEND:

- Project Site
- 300m from Site Boundary
- NMS1 — Construction Noise Monitoring Station 1
- NMS1-T — **Temporary Noise Monitoring Station**

Rev	Date	Drawn	Description	Ch'k'd	App'd

MOTT MACDONALD
3/F Mapletree Bay Point
348 Kwun Tong Road
Kwun Tong, Kowloon
Hong Kong
T +852 2828 5757
F +852 2827 1823
W mottmac.com

Client

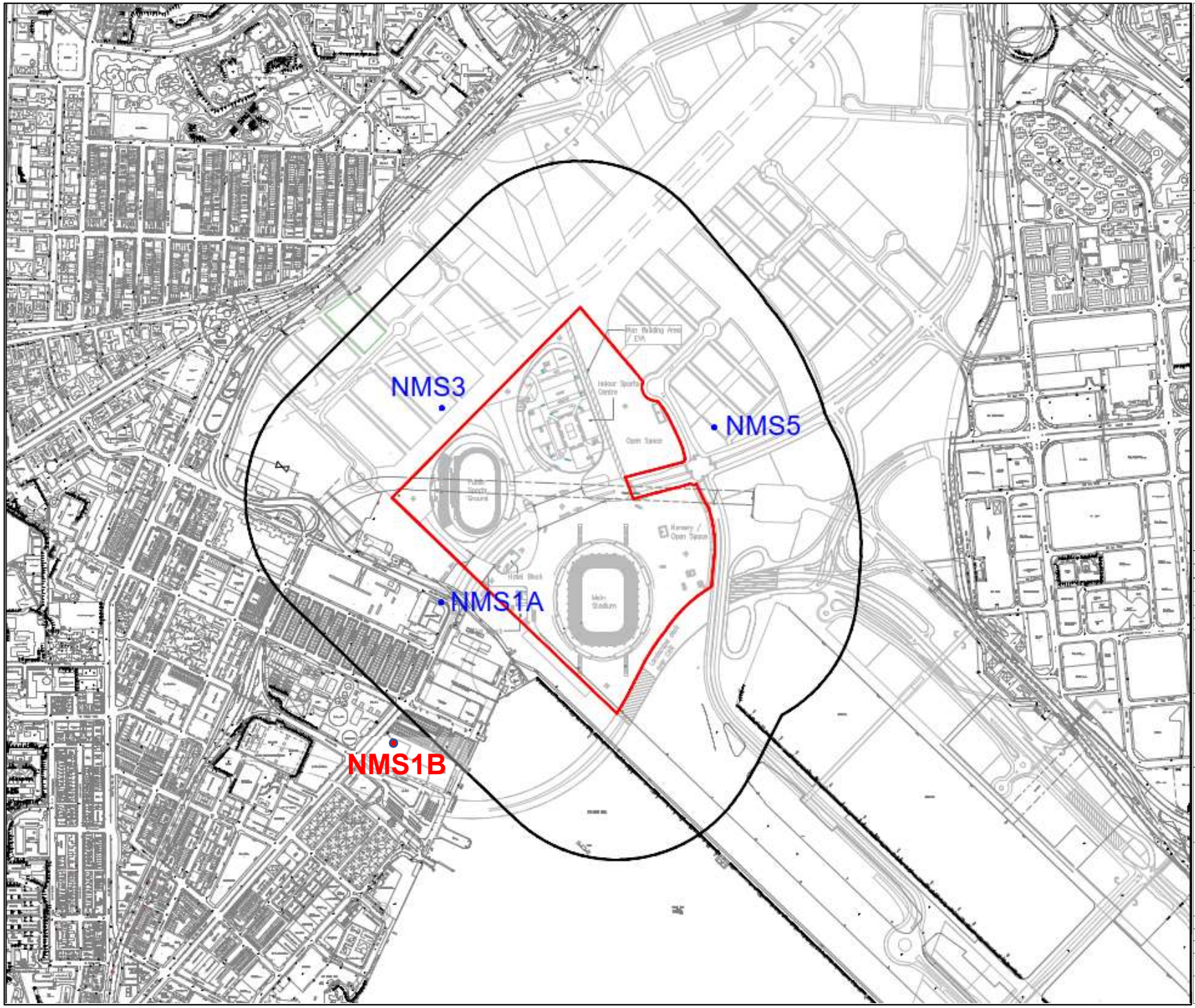
Project

Title

Figure 3.1
Location of Noise Monitoring Stations

Designed			Eng check		
Drawn			Coordination		
Dwg check			Approved		
Scale at A3		Status		Rev	

Drawing Number



Key Plan

Notes:

1. ALL LEVELS ARE METRES TO PRINCIPAL DATUM (PD) UNLESS NOTED OTHERWISE.
2. ALL CO-ORDINATES REFER TO HONG KONG 1980 METRIC GRID CO-ORDINATES SYSTEM.
3. PIPE AND BOX CULVERT SIZES ARE SHOWN IN MILLIMETERS

Key to symbols:

LEGEND:

- Project Site
- 300m from Site Boundary
- NMS3 — Music Event Noise Monitoring Station 3
- NMS1B — **Temporary Music Event Noise Monitoring Station**

Rev	Date	Drawn	Description	Ch'k'd	App'd

MOTT MACDONALD

3/F Mapletree Bay Point
348 Kwun Tong Road
Kwun Tong, Kowloon
Hong Kong
T +852 2828 5757
F +852 2827 1823
W mottmac.com

Client

Project

Title

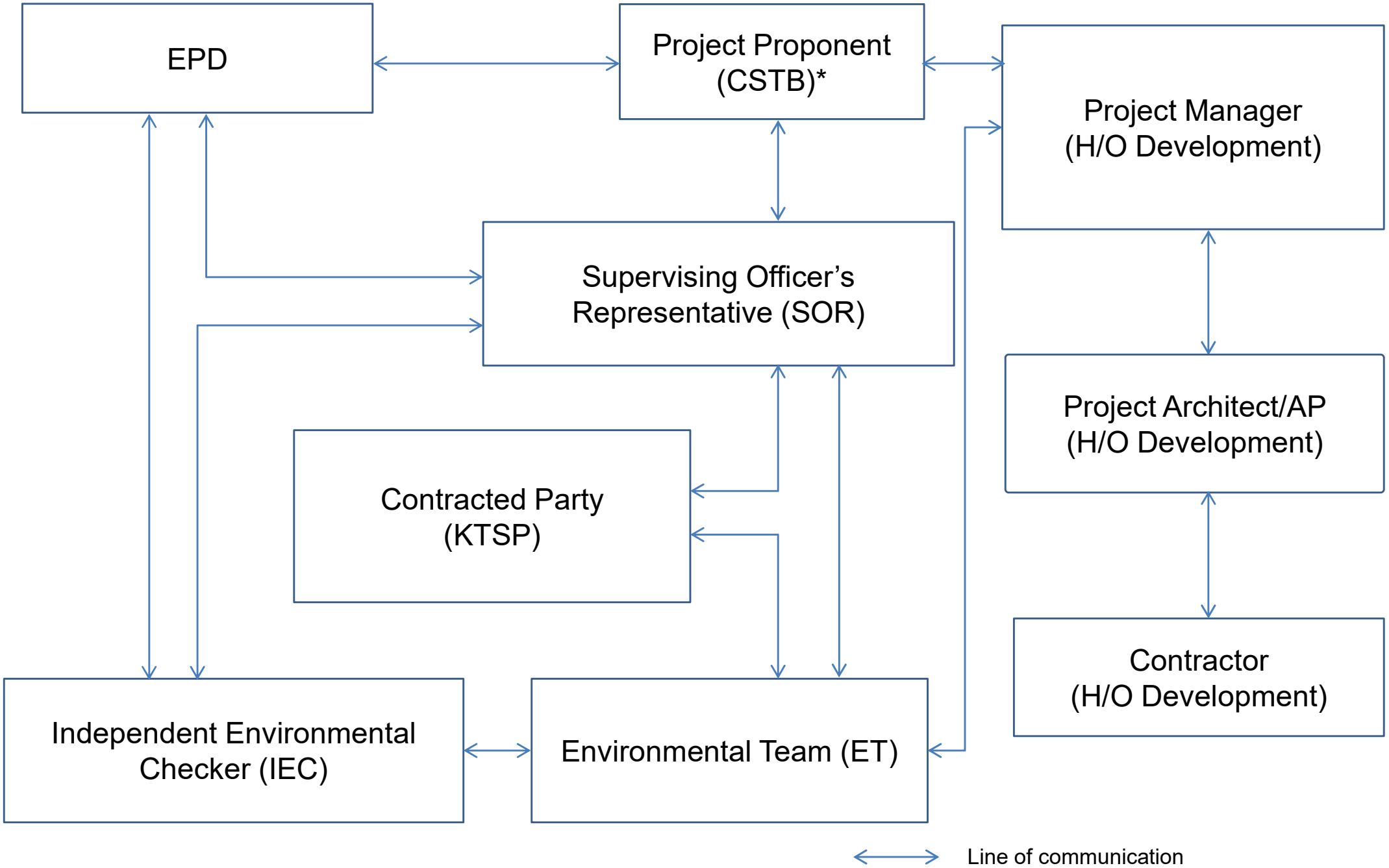
Figure 3.2
Location of Music Event Noise Monitoring Stations

Designed			Eng check		
Drawn			Coordination		
Dwg check			Approved		
Scale at A3		Status		Rev	

Drawing Number

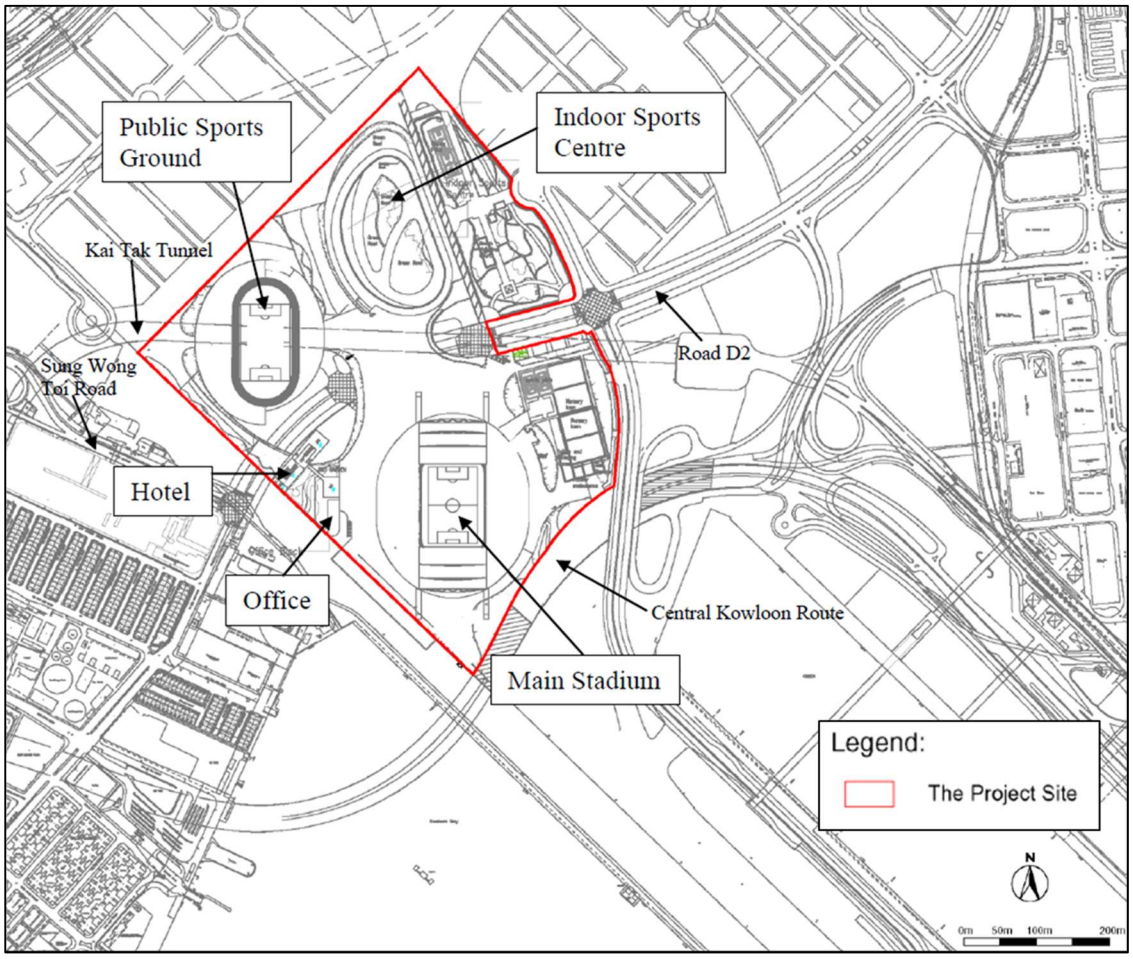
Appendix A. Project Organization for Environmental Works

Project Organisation for Environmental Works



** Home Affairs Bureau (HAB) reorganized as Culture, Sports and Tourism Bureau (CSTB) in July 2022*

Appendix B. Location of Works Areas



Appendix C. Construction Programme

Construction Programme (Mar 2025 to Apr 2025)

Kai Tak Sports Park

	2024						2025					
Construction Activities	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Plants Mobilization												
Loading/ Unloading of Materials												
Excavation												
C&D Waste Disposal												
Concreting												
Lifting												
C&D Materials Internal Transportation												
Landscape Work												
Impact Water Sampling (SRMP)												

Hotel and Office Development

	2024						2025					
Construction Activities	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Loading/Unloading of Materials												
Concreting												
Landscape Work												
C&D Waste Disposal												

Remark:

According to the Project Architect and Contractor of the Hotel and Office Development, the construction works at Hotel and Office Development area have been substantially completed and the Hotel area has been handed over to the developer on 25 September 2024. Termination of EM&A site inspection at Hotel and Office Development area was proposed by ET and agreed by IEC on 7 October 2024 and pending approval approved from by EPD on 24 October 2024.

Termination of construction phase EM&A programme for Kai Tak Sports Park was proposed by ET and agreed by IEC on 18 March 2025 and approved by EPD on 31 March 2025. The remaining landscape work will be under operation phase.

The construction programme is updated according to the latest information from contractor in March 2025. Any amendment of the programme details will be subject to the final decision of the KTSP project.

Appendix D. Event and Action Plan

Should non-compliance of the air quality criteria occur, actions in accordance with the Event and Action Plan in **Table D.1** and **Table D.2** shall be carried out.

Table D.1: Event and Action Plan for Construction Air Quality (Action Level)

Event	Action			
	ET	IEC	SOR	Contracted Party
Action Level				
Exceedance for one sample	1. Inform IEC, SOR and Contracted Party; 2. Identify source, investigate the causes of exceedance and propose remedial measures; 3. Repeat measurement to confirm finding.	1. Check monitoring data submitted by ET; 2. Check Contracted Party's working method.	1. Notify Contracted Party.	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
Exceedance for two or more consecutive samples	1. Inform IEC, SOR and Contracted Party; 2. Identify source; 3. Advise the SOR on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC, SOR and Contracted Party on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and SOR; 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by ET; 2. Check Contracted Party's working method; 3. Discuss with ET and Contracted Party on possible remedial measures; 4. Advise the ET/SOR on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contracted Party; 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial to SOR and IEC within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.

Table D.2: Event and Action Plan for Construction Air Quality (Limit Level)

Event	Action			
	ET	IEC	SOR	Contracted Party
Limit Level				
Exceedance for one sample	1. Inform IEC, SOR, Contracted Party and EPD; 2. Identify source, investigate the causes of exceedance and propose remedial measures; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contracted Party's remedial actions and keep IEC, EPD and SOR informed of the results.	1. Check monitoring data submitted by ET; 2. Check Contracted Party's working method; 3. Discuss with ET and Contracted Party on possible remedial measures; 4. Advise the SOR on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contracted Party; 3. Ensure remedial measures properly implemented.	1. Take immediate action to avoid further exceedance; 2. Discuss with ET and IEC on remedial actions; 3. Submit proposals for remedial actions to IEC within 3 working days of notification; 4. Implement the agreed proposals; 5. Amend proposal if appropriate.
Exceedance for two or more consecutive samples	1. Notify IEC, SOR, Contracted Party and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contracted Party's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and SOR and Contracted Party to discuss the remedial actions to be taken; 7. Assess effectiveness of Contracted Party's remedial actions and keep IEC, EPD and SOR informed of the results; 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by ET; 2. Check Contracted Party's working method; 3. Discuss amongst SOR, ET, and Contracted Party on the potential remedial actions; 4. Review Contracted Party's remedial actions whenever necessary to assure their effectiveness and advise the SOR accordingly; 5. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contracted Party; 3. In consultation with the IEC, agree with the Contracted Party on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contracted Party to terminate that portion of work until the exceedance ceases.	1. Take immediate action to avoid further exceedance; 2. Discuss with ET and IEC on remedial actions; 3. Submit proposals for remedial actions to SOR and IEC within 3 working days of notification; 4. Implement the agreed proposals; 5. Resubmit proposals if problem still not under control; 6. Stop the relevant portion of works as determined by the SOR until the exceedance ceases.

Should non-compliance of the noise criteria occur, actions in accordance with the Event and Action Plan in **Table D.3** shall be carried out.

Table D.3: Event and Action Plan for Construction Noise

Event	Action			
	ET	IEC	SOR	Contracted Party
Action Level	1. Notify IEC, SOR and Contracted Party of exceedance; 2. Identify source; 3. Investigate the causes of exceedance and propose remedial measures; 4. Report the results of investigation to the IEC, SOR and Contracted Party; 5. Discuss with the IEC, SOR and Contracted Party and formulate remedial measures; 6. Increase monitoring frequency to check mitigation effectiveness.	1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contracted Party and advise the SOR accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contracted Party; 3. Require Contracted Party to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented	1. Submit noise mitigation proposals to SOR with copy to ET and IEC; 2. Implement noise mitigation proposals.
Limit Level	1. Inform IEC, SOR, EPD and Contracted Party; 2. Identify source; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contracted Party's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, SOR and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contracted Party's remedial actions and keep IEC, EPD and SOR informed of the results; 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst SOR, ET, and Contracted Party on the potential remedial actions; 2. Review Contracted Party's remedial actions whenever necessary to assure their effectiveness and advise the SOR accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contracted Party; 3. Require Contracted Party to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented; 5. If exceedance continues, investigate what portion of the work is responsible and instruct the Contracted Party to terminate that portion of work until the exceedance ceases.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to SOR with copy to ET and IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Terminate the relevant portion of works as determined by the SOR until the exceedance ceases.

Appendix E. Environmental Site Inspection and Monitoring Schedule

Table E.1: Site Inspection and Monitoring Schedule for March 2025

Impact Environmental Monitoring Schedule for March 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 AMS1-T2, AMS2, AMS4 NMS1-T2, NMS2, NMS4	4	5 site inspection landscape and visual audit	6	7 AMS1-T2, AMS2, AMS4	8
9	10	11	12 site inspection	13 AMS1-T2, AMS2, AMS4 NMS1-T2, NMS2, NMS4	14	15
16	17	18	19 site inspection landscape and visual audit AMS1-T2, AMS2, AMS4 NMS1-T2, NMS2, NMS4	20	21	22
23	24	25 site inspection AMS1-T2, AMS2, AMS4 NMS1-T2, NMS2, NMS4	26	27	28	29
30	31 AMS1-T2, AMS2, AMS4 NMS1-T2, NMS2, NMS4					

Air Quality/Noise Monitoring

Remark: Joint site walk with IEC on 25 March 2025.

Appendix F. Calibration Certificates

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	: MR MAGNUM FAN	WORK ORDER	: HK2419604
CLIENT	: ENVIROTECH SERVICES CO.		
ADDRESS	: RM 712, 7/F, MY LOFT 9 HOI WING ROAD, TUEN MUN, N.T. HK	SUB-BATCH	: 1
		DATE RECEIVED	: 20-MAY-2024
		DATE OF ISSUE	: 24-MAY-2024
PROJECT	: ----	NO. OF SAMPLES	: 1
		CLIENT ORDER	: ----

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
- Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
- Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition.
- Calibration was subcontracted to Envirotech Services Company.

Signatories

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

Signatories	*Position*
Richard Fung	Managing Director

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.

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

WORK ORDER : HK2419604
SUB-BATCH : 1
CLIENT : ENVIROTECH SERVICES CO.
PROJECT : ----

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK2419604-001	Sibata LD-3B (235786)	Equipments	11-May-2024	S/N: 235786

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

Envirotech Services Co.

Rm. 712, 7/F
My Loft,
9 Hoi Wing Road,
Tuen Mun, H.K.
Tel : 2560 8460
Fax : 2560 6553
E-mail: envirotech@netvigator.com

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust Monitor
Manufacturer:	Sibata LD-3B
Serial No.:	235786
Equipment Ref.:	N/A
ALS Job Order:	HK2418944

Standard Equipment

Standard Equipment:	High Volume Sampler (TSP)
Location :	Envirotech Room (Calibration Room)
Equipment Ref.:	HVS 8162
Last Calibration Date:	25-Mar-2024

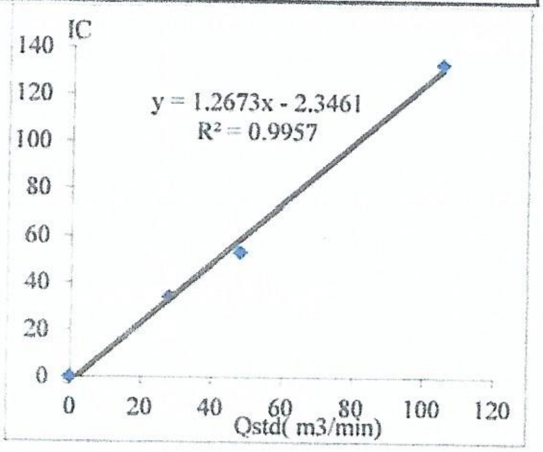
Equipment Verification Results:

Verification Date: 11-May-2024

Hour	Time	Mean Temp °C	Mean Pressure (hpa)	Concentration in μg/m³ (Standard Equipment) (Y-Axis)	Concentration in μg/m³ (Calibrated Equipment) (X-Axis)
1hr 00mins	0830-0930	26.8	1015	34	28
2hr 00mins	0935-1135	28.5	1015	53	48
3hr 00mins	1310-1610	29.5	1016	133	105

Linear Regression of Y or X

Slope (K-factor):	1.2673(μg/m³)/CPM
Correlation Coefficient (R):	0.9978
Date of Issue:	19-May-2024



Remarks:

1 . Strong Correlation (>0.8)

2. Factor 1.2673(μg/m³)/CPM should be applied for TSP monitoring

*If R<0.5, repair or verification is required for the equipment

Operator:	P.F.Yeung	Signature	Fai	Date:	19 May 2024
QC Reviewer:	K.F.Ho	Signature	[signature]	Date:	19 May 2024

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	: MR MAGNUM FAN	WORK ORDER	: HK2448121
CLIENT	: ENVIROTECH SERVICES CO.		
ADDRESS	: RM 712, 7/F, MY LOFT 9 HOI WING ROAD, TUEN MUN, N.T. HK	SUB-BATCH	: 1
		DATE RECEIVED	: 13-NOV-2024
		DATE OF ISSUE	: 20-NOV-2024
PROJECT	: ----	NO. OF SAMPLES	: 1
		CLIENT ORDER	: ---

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
- Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
- Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition.
- Calibration was subcontracted to Envirotech Services Company.

Signatories

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

Signatories	Position
Richard Fung	Managing Director

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.

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

WORK ORDER : HK2448121
SUB-BATCH : 1
CLIENT : ENVIROTECH SERVICES CO.
PROJECT : ----

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK2448121-001	Sibata LD-3B (245834)	Equipments	09-Nov-2024	S/N: 245834

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

Envirotech Services Co.
Rm. 712, 7/F
My Loft,
9 Hoi Wing Road,
Tuen Mun, H.K.
Tel : 2560 8450
Fax : 2560 8553
E-mail: envirotech@netvigator.com

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust Monitor
Manufacturer:	Sibata LD-3B
Serial No.:	245834
Equipment Ref.:	N/A
ALS Job Order:	HK2446853

Standard Equipment

Standard Equipment:	High Volume Sampler (TSP)
Location :	Envirotech Room (Calibration Room)
Equipment Ref.:	HVS 8162
Last Calibration Date:	19-Oct-2024

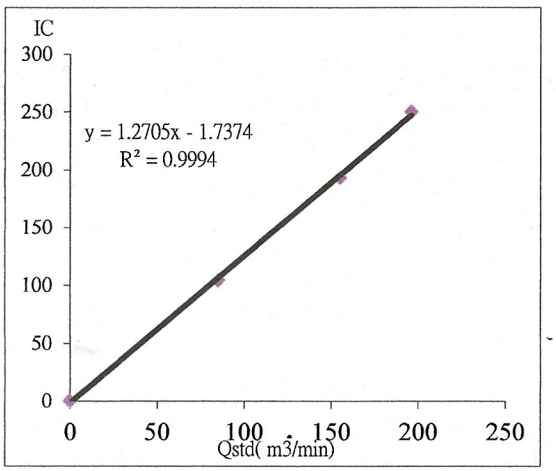
Equipment Verification Results:

Verification Date: 9-Nov-2024

Hour	Time	Mean Temp °C	Mean Pressure (hpa)	Concentration in µg/m³ (Standard Equipment) (Y-Axis)	Concentration in µg/m³ (Calibrated Equipment) (X-Axis)
1hr 00mins	0905-1005	24.9	1013	85	104
2hr 00mins	1015-1215	25.2	1014	155	193
3hr 00mins	1430-1730	25.6	1014	196	250

Linear Regression of Y or X

Slope (K-factor):	1.2705(µg/m³)/CPM
Correlation Coefficient (R):	0.9997
Date of Issue:	13-Nov-2024



Remarks:

1 . Strong Correlation (>0.8)

2. Factor 1.2705(µg/m³)/CPM should be applied for TSP monitoring

*If R<0.5, repair or verification is required for the equipment

Operator: P.F.Yeung Signature Date: 11 Nov 2024

QC Reviewer: K.F.Ho Signature Date: 11 Nov 2024

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	: MR MAGNUM FAN	WORK ORDER	: HK2430444
CLIENT	: ENVIROTECH SERVICES CO.		
ADDRESS	: RM 712, 7/F, MY LOFT 9 HOI WING ROAD, TUEN MUN, N.T. HK	SUB-BATCH	: 1
		DATE RECEIVED	: 29-JUL-2024
		DATE OF ISSUE	: 5-AUG-2024
PROJECT	: ----	NO. OF SAMPLES	: 1
		CLIENT ORDER	: ----

General Comments

- **Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.**
- **Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.**
- **Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition.**
- **Calibration was subcontracted to Envirotech Services Company.**

Signatories

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

Signatories	*Position*
Richard Fung	Managing Director

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.

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**

WORK ORDER : HK2430444
SUB-BATCH : 1
CLIENT : ENVIROTECH SERVICES CO.
PROJECT : ----

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK2430444-001	Sibata LD-3B (276017)	Equipments	23-Jul-2024	S/N: 276017

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

Envirotech Services Co.
Rm. 712, 7/F
Miu Lok,
9 Hoi Wing Road,
Tuen Mun, N.T.
Tel : 2560 8450
Fax : 2560 6553
E-mail: envirotech@netvigator.com

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust Monitor
Manufacturer:	Sibata LD-3B
Serial No.:	276017
Equipment Ref.:	N/A
ALS Job Order:	HK2429643

Standard Equipment

Standard Equipment:	High Volume Sampler (TSP)
Location :	Envirotech Room (Calibration Room)
Equipment Ref.:	HVS 8162
Last Calibration Date:	1-Jun-2024

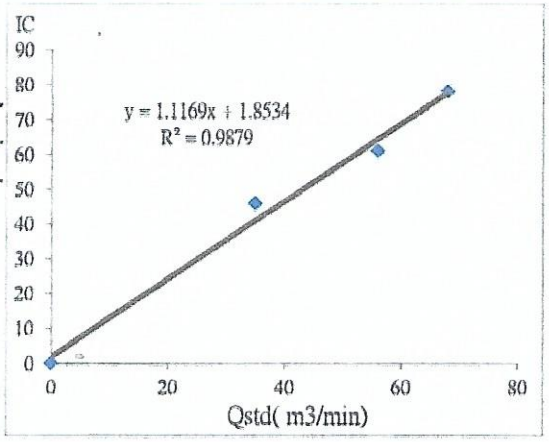
Equipment Verification Results:

Verification Date: 23-Jul-2024

Hour	Time	Mean Temp °C	Mean Pressure (hpa)	Concentration in µg/m³ (Standard Equipment) (Y-Axis)	Concentration in µg/m³ (Calibrated Equipment) (X-Axis)
1hr 00mins	0900-1000	28.8	1006	35	46
2hr 00mins	1005-1205	29.8	1005	56	61
3hr 00mins	1400-1700	32.2	1005	68	78

Linear Regression of Y or X

Slope (K-factor):	1.1169(µg/m³)/CPM
Correlation Coefficient (R):	0.9939
Date of Issue:	28-Jul-2024



Remarks:

1 . Strong Correlation (>0.8)

2. Factor 1.1169(µg/m³)/CPM should be applied for TSP monitoring

*If R<0.5, repair or verification is required for the equipment

Operator: P.F.Yeung Signature Tai Date: 28 July 2024

QC Reviewer: K.F.Ho Signature Date: 28 July 2024

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	: MR MAGNUM FAN	WORK ORDER	: HK2412745
CLIENT	: ENVIROTECH SERVICES CO.		
ADDRESS	: RM 712, 7/F, MY LOFT 9 HOI WING ROAD, TUEN MUN, N.T. HK	SUB-BATCH	: 1
		DATE RECEIVED	: 5-APR-2024
		DATE OF ISSUE	: 12-APR-2024
PROJECT	: ----	NO. OF SAMPLES	: 1
		CLIENT ORDER	: ----

General Comments

- Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.
- Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified. The result(s) is/are related only to the item(s) tested.
- Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition.
- Calibration was subcontracted to Envirotech Services Company.

Signatories

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

Signatories	*Position*
Richard Fung	Managing Director

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.

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**

WORK ORDER : HK2412745
SUB-BATCH : 1
CLIENT : ENVIROTECH SERVICES CO.
PROJECT : ----

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK2412745-001	Sibata LD-3B (6Z7784)	Equipments	25-Mar-2024	S/N: 6Z7784

Envirotech Services Co.
Rm. 712, 7/F
My Loft,
9 Hoi Wing Road,
Tuen Mun, H.K.
Tel : 2660 8450
Fax : 2660 8653
E-mail: envirotech@netvigator.com

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust Monitor
Manufacturer:	Sibata LD-3B
Serial No.:	6Z7784
Equipment Ref.:	N/A
ALS Job Order:	HK2411837

Standard Equipment

Standard Equipment:	High Volume Sampler (TSP)
Location :	Envirotech Room (Calibration Room)
Equipment Ref.:	HVS 8162
Last Calibration Date:	25-Mar-2024

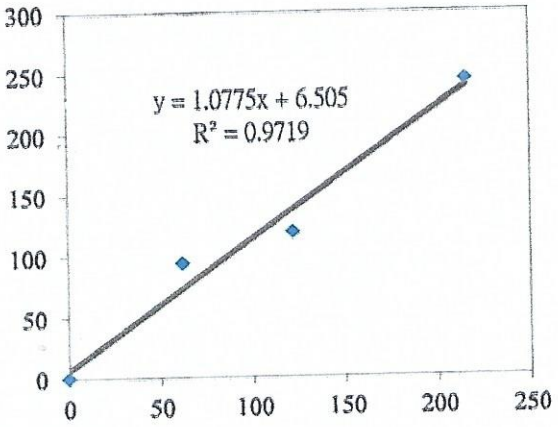
Equipment Verification Results:

Verification Date: 25-Mar-2024

Hour	Time	Mean Temp °C	Mean Pressure (hpa)	Concentration in µg/m³ (Standard Equipment) (Y-Axis)	Concentration in µg/m³ (Calibrated Equipment) (X-Axis)
1hr 00mins	0900-1000	24.5	1016	94	62
2hr 00mins	1005-1205	26.2	1017	119	122
3hr 00mins	1315-1615	29.0	1014	244	216

Linear Regression of Y or X

Slope (K-factor):	1.0775(µg/m³)/CPM
Correlation Coefficient (R):	0.9859
Date of Issue:	5-Apr-2024



Remarks:

1 . Strong Correlation (>0.8)

2. Factor 1.0775 (µg/m³)/CPM should be applied for TSP monitoring

*If R<0.5, repair or verification is required for the equipment

Operator: P.F.Yeung Signature Fai Date: 05 April 2024

QC Reviewer: K.F.Ho Signature at Date: 05 April 2024

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C242738
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC24-0781) Date of Receipt / 收件日期 : 3 May 2024

Description / 儀器名稱 : Precision Acoustic Calibrator
Manufacturer / 製造商 : LARSON DAVIS
Model No. / 型號 : CAL200
Serial No. / 編號 : 11334
Supplied By / 委託者 : Envirotech Services Co.
Room 712, 7/F, My Loft, 9 Hoi Wing Road, Tuen Mun,
New Territories, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C
Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 19 May 2024

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed specified limits.
These limits refer to manufacturer's published or user's specified tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Hottinger Brüel & Kjær Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試 : H T Wong
Assistant Engineer

Certified By 核證 : K C Lee
Engineer

Date of Issue 簽發日期 : 20 May 2024

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 – 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C242738
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.

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

3. Test equipment :

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C233799
CL281	Multifunction Acoustic Calibrator	CDK2302738
TST150A	Measuring Amplifier	C241879

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	User's Limit (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	93.60	± 0.5	± 0.20
114 dB, 1 kHz	113.60		

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Limit	Uncertainty of Measured Value (Hz)
1	1.000	1 kHz ± 1 %	± 1

Remarks : - The user's limit is a customer pre-defined operating tolerance of the UUT, suitable for one's own intended use.

- The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this 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 environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration

for

Description:	***Sound Level Meter***
Manufacturer:	***RION***
Type No.:	***NL-52 (Serial No.: 00643040)***
Microphone:	***PCB 377B02 (Serial No.: 172764)***
Preamplifier:	***NH-25 (Serial No.:21757)***

Submitted by:

Customer:	*Envirotech Services Co.*
Address:	*Rm.712, 7/F., My Loft, 9 Hoi Wing Road, Tuen Mun, Hong Kong*

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

☑ **Within (31.5Hz – 8kHz)**
☐ **Outside**

the allowable tolerance.

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

Date of receipt: 25 September 2024

Date of calibration: 27 September 2024

Date of NEXT calibration: 26 September 2025

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 27 September 2024

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

Certificate No.: APJ24-072-CC001

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

1. *Calibration Precaution:*

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

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

2. *Calibration Conditions:*

Air Temperature: 24.9 °C
Air Pressure: 1006 hPa
Relative Humidity: 54.5 %

3. *Calibration Equipment:*

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV240081	HOKLAS

4. *Calibration Results*

Sound Pressure Level

Reference Sound Pressure Level

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBA SPL	Fast	94	1000	94.0	±0.4

Linearity

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBA SPL	Fast	94	1000	94.0	Ref
			104		104.0	±0.3
			114		114.0	±0.3

Time Weighting

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

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

Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dB SPL	Fast	94	31.5	93.8	±2.0
				63	93.9	±1.5
				125	93.9	±1.5
				250	93.9	±1.4
				500	93.9	±1.4
				1000	94.0	Ref
				2000	94.0	±1.6
				4000	94.5	±1.6
				8000	91.8	+2.1; -3.1

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA SPL	Fast	94	31.5	54.4	-39.4 ±2.0
				63	67.8	-26.2 ±1.5
				125	77.8	-16.1 ±1.5
				250	85.3	-8.6 ±1.4
				500	90.7	-3.2 ±1.4
				1000	94.0	Ref
				2000	95.2	+1.2 ±1.6
				4000	95.5	+1.0 ±1.6
				8000	90.8	-1.1+2.1; -3.1

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBC SPL	Fast	94	31.5	90.8	-3.0 ±2.0
				63	93.1	-0.8 ±1.5
				125	93.7	-0.2 ±1.5
				250	93.9	-0.0 ±1.4
				500	93.9	-0.0 ±1.4
				1000	94.0	Ref
				2000	93.8	-0.2 ±1.6
				4000	93.7	-0.8 ±1.6
				8000	89.0	–3.0 +2.1: –3.1

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

5. *Calibration Results Applied*

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

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.15
	63 Hz	± 0.10
	125 Hz	± 0.10
	250 Hz	± 0.05
	500 Hz	± 0.10
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
	8000 Hz	± 0.10
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

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

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

Manufacturer Calibration Certificate

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3. All tests are traceable in accordance with ISO/IEC 17025.

No pattern approval is available for this sound level meter configuration.

Sound Level Meter

Manufacturer	NTi Audio		
Type	XL3	S/N	A3A-01211-F0
Firmware	V1.38		
Microphone Model	M2340		
Preamplifier	MA230	S/N	1829
Microphone Capsule	MC230A	S/N	A28679
Performance class			
Customer Inventory Nr.			

Customer

Date 03 September 2024

Certificate FL-24-122

Results **PASSED**
(for detailed report see next pages)

Operator

Markus Frick

NTi Audio AG • Im alten Riet 102, 9494 Schaan • Liechtenstein
info@nti-audio.com • www.nti-audio.com

Measurement equipment

Test System

Model	NTi Audio FX100, S/No. 11094
Last Calibration	02 July 2024
Cal Certificate	NTI Cal #3393
Next Calibration	02 July 2025

Reference Microphone

Model	MTG MV203 S/N #2435, Mic Capsule MK202 S/No. #7313
Last Calibration	18 November 2022
Cal Certificate	DAkkS-000875
Next Calibration	17 November 2024

Sound Calibrator

Model	Norsonic 1251 S/No. #30930
Reference Level	114 dB
Calibration Frequency	1000 Hz
Last Calibration	08 December 2022
Cal Certificate	METAS #259-19602
Next Calibration	07 December 2024

Environmental conditions

Temperature	23.3 °C
Humidity	52 %
Pressure	966 hPa

Notes

- This calibration certificate documents the traceability to national standards, which realize the units of measurement according to the international Systems of Units (SI).

- The user is obliged to have the object recalibrated at appropriate intervals.
- This calibration certificate may not be reproduced other than in full except with the permission of the issuing laboratory. Calibration certificates without signature are not valid.
- All limits listed in this report are acceptance limits in accordance with IEC61672.
- The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with the regulations of the GUM.

NTi AUDIO

1. Indication at the calibration check frequency

The indication of the sound level meter at the calibration check frequency is checked by application of the sound calibrator and adjusted, if necessary, to indicate the required sound level for the environmental conditions under which the tests are performed. All levels in [dB].

Sensitivity before calibration	Sensitivity after calibration	Meas level	Limit -	Limit +	Uncert.	Status
40.6 mV/Pa	41.8 mV/Pa	114	113	115	0.2	Passed

2. Self-generated noise

2.1 Microphone cartridge installed

The self-generated noise is measured in the most-sensitive level range as a time-averaged sound pressure level with frequency-weighting A and an averaging time of 30 seconds. All levels in [dB].

Weight-ing	Meas level	Limit +	Uncert.	Status
A	16.7	19.0	0.1	Passed

2.2 Microphone cartridge replaced by the capsule replacement NTI-K65-15

The self-generated noise is measured in the most-sensitive level range as a time-averaged sound pressure level for all frequency-weightings and an averaging time of 30 seconds. All levels in [dB] referenced to S = 42 mV/Pa.

Weight-ing	Meas level	Limit +	Uncert.	Status
A	10.7	13.0	0.1	Passed
C	12.9	16.0	0.1	Passed
Z	19.2	24.0	0.1	Passed

3. Acoustic signal tests of a frequency weighting

The frequency weighting is tested for frequency-weighting A, using an acoustic test facility. The sound level meter is set to a fast time-weighted sound level in the reference level range. All levels in [dB].

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
125	70.0	69.6	-0.4	-1.0	1.0	0.4	Passed
250	77.1	76.8	-0.3	-1.0	1.0	0.4	Passed
500	82.7	82.8	0.1	-1.0	1.0	0.4	Passed
1000	86.0	86.1	0.1	-0.7	0.7	0.4	Passed
2000	87.2	87.3	0.1	-1.0	1.0	0.4	Passed
4000	87.0	87.0	0.0	-1.0	1.0	0.4	Passed
8000	84.9	84.6	-0.3	-2.5	1.5	0.4	Passed

NTi AUDIO

4. Electric signal tests of frequency weightings

Frequency weightings are determined relative to the response at 1 kHz using steady sinusoidal electrical input signals. The sound level meter is set to display F-time-weighted sound level in the reference level range. All available frequency weightings provided in the sound level meter are verified. All levels in [dB].

4.1 A-Weighting

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
1000	80.0	80.0	0.0	-0.7	0.7	0.1	Passed
63	106.2	80.0	0.0	-1.0	1.0	0.1	Passed
125	96.1	80.0	0.0	-1.0	1.0	0.1	Passed
250	88.6	80.0	0.0	-1.0	1.0	0.1	Passed
500	83.2	80.0	0.0	-1.0	1.0	0.1	Passed
2000	78.8	80.0	0.0	-1.0	1.0	0.1	Passed
4000	79.0	79.9	-0.1	-1.0	1.0	0.1	Passed
8000	81.1	79.7	-0.3	-2.5	1.5	0.1	Passed
12500	84.3	79.4	-0.6	-2.5	1.5	0.1	Passed
16000	86.6	78.7	-1.3	-2.5	1.5	0.1	Passed

4.2 C-Weighting

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
1000	80.0	80.0	0.0	-0.7	0.7	0.1	Passed
63	80.8	80.0	0.0	-1.0	1.0	0.1	Passed
125	80.2	80.1	0.1	-1.0	1.0	0.1	Passed
250	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
500	80.0	80.1	0.1	-1.0	1.0	0.1	Passed
2000	80.2	80.1	0.1	-1.0	1.0	0.1	Passed
4000	80.8	79.9	-0.1	-1.0	1.0	0.1	Passed
8000	83.0	79.7	-0.3	-2.5	1.5	0.1	Passed
12500	86.2	79.4	-0.6	-2.5	1.5	0.1	Passed
16000	88.5	78.6	-1.4	-2.5	1.5	0.1	Passed

4.3 Z-Weighting

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
1000	80.0	80.0	0.0	-0.7	0.7	0.1	Passed
63	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
125	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
250	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
500	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
2000	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
4000	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
8000	80.0	79.9	-0.1	-2.5	1.5	0.1	Passed
12500	80.0	79.8	-0.2	-2.5	1.5	0.1	Passed
16000	80.0	79.9	-0.1	-2.5	1.5	0.1	Passed

5. Frequency and time weightings at 1kHz

While injecting a constant steady signal at the reference frequency of 1 kHz the F-time-weighted sound level, S-time-weighted sound level and time-averaged sound level are verified with frequency weighting A. Additionally the F-time-weighted sound level for frequency weightings C and Z is measured. The first measurement serves as reference and differences in the reading with respect to this first one are determined. All levels in [dB].

Level	Exp level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
LAF	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LAS	114.0	113.8	-0.2	-0.7	0.7	0.1	Passed
LAeq	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LCF	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LCeq	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LZF	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LZeq	114.0	114.0	0.0	-0.7	0.7	0.1	Passed

6. Level linearity on the reference level range

The level linearity on the reference level range is determined by applying steady sinusoidal electrical signals at a frequency of 8 kHz with the sound level meter set for frequency-weighting A and fast time-weighting. All levels in [dB].

Exp abs level	Meas. level	Abs dev	Abs Limit -	Abs Limit +	Exp rel level	Rel dev	Rel Limit -	Rel Limit +	Uncert.	Status
114.0	114.0	0.0	-0.8	0.8	0.0	0.0	-0.3	0.3	0.1	Passed
119.0	119.0	0.0	-0.8	0.8	119.0	0.0	-0.3	0.3	0.1	Passed
124.0	124.0	0.0	-0.8	0.8	124.0	0.0	-0.3	0.3	0.1	Passed
129.0	129.0	0.0	-0.8	0.8	129.0	0.0	-0.3	0.3	0.1	Passed
134.0	134.0	0.0	-0.8	0.8	134.0	0.0	-0.3	0.3	0.1	Passed
135.0	135.0	0.0	-0.8	0.8	135.0	0.0	-0.3	0.3	0.1	Passed
136.0	136.0	0.0	-0.8	0.8	136.0	0.0	-0.3	0.3	0.1	Passed
137.0	137.0	0.0	-0.8	0.8	137.0	0.0	-0.3	0.3	0.1	Passed
114.0	114.0	0.0	-0.8	0.8	0.0	0.0	-0.3	0.3	0.1	Passed
109.0	109.0	0.0	-0.8	0.8	109.0	0.0	-0.3	0.3	0.1	Passed
104.0	104.0	0.0	-0.8	0.8	104.0	0.0	-0.3	0.3	0.1	Passed
99.0	99.0	0.0	-0.8	0.8	99.0	0.0	-0.3	0.3	0.1	Passed
94.0	94.0	0.0	-0.8	0.8	94.0	0.0	-0.3	0.3	0.1	Passed
89.0	89.0	0.0	-0.8	0.8	89.0	0.0	-0.3	0.3	0.1	Passed
84.0	84.0	0.0	-0.8	0.8	84.0	0.0	-0.3	0.3	0.1	Passed
79.0	79.0	0.0	-0.8	0.8	79.0	0.0	-0.3	0.3	0.1	Passed
74.0	74.0	0.0	-0.8	0.8	74.0	0.0	-0.3	0.3	0.1	Passed
69.0	69.0	0.0	-0.8	0.8	69.0	0.0	-0.3	0.3	0.1	Passed
64.0	64.0	0.0	-0.8	0.8	64.0	0.0	-0.3	0.3	0.1	Passed
59.0	59.0	0.0	-0.8	0.8	59.0	0.0	-0.3	0.3	0.1	Passed
54.0	54.0	0.0	-0.8	0.8	54.0	0.0	-0.3	0.3	0.1	Passed
49.0	49.0	0.0	-0.8	0.8	49.0	0.0	-0.3	0.3	0.1	Passed
44.0	44.0	0.0	-0.8	0.8	44.0	0.0	-0.3	0.3	0.1	Passed
39.0	39.0	0.0	-0.8	0.8	39.0	0.0	-0.3	0.3	0.1	Passed
34.0	34.0	0.0	-0.8	0.8	34.0	0.0	-0.3	0.3	0.1	Passed
29.0	29.0	0.0	-0.8	0.8	29.0	0.0	-0.3	0.3	0.1	Passed
28.0	28.0	0.0	-0.8	0.8	28.0	0.0	-0.3	0.3	0.1	Passed
27.0	27.1	0.1	-0.8	0.8	27.0	0.1	-0.3	0.3	0.1	Passed
26.0	26.1	0.1	-0.8	0.8	26.1	0.0	-0.3	0.3	0.1	Passed
25.0	25.1	0.1	-0.8	0.8	25.1	0.0	-0.3	0.3	0.1	Passed

7. Level linearity including the level range control

This test is not applicable for a single-range sound level meter.

8. Toneburst response

The response of the sound level meter to short-duration signals is tested on the reference level range with 4 kHz tonebursts that start and stop at zero crossings and are extracted from steady 4 kHz sinusoidal electrical input signals. The sound level meter is set for frequency weighting A. All levels in [dB].

The continuous signal level is 123 dB.

Burst signal	Burst duration [ms]	Exp level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
LAF	200	122.0	121.9	-0.1	-0.5	0.5	0.2	Passed
LAF	2	105.0	104.8	-0.2	-1.5	1.0	0.2	Passed
LAF	0.25	96.0	95.5	-0.5	-3.0	1.0	0.2	Passed
LAS	200	115.6	115.5	-0.1	-0.5	0.5	0.2	Passed
LAS	2	96.0	95.9	-0.1	-3.0	1.0	0.2	Passed
LAeq10s	200	106.0	105.9	-0.1	-0.5	0.5	0.2	Passed
LAeq10s	2	86.0	85.9	-0.1	-0.5	0.5	0.2	Passed
LAeq10s	0.25	77.0	76.8	-0.2	-0.5	0.5	0.2	Passed

9. C-weighted peak sound level

The sound level meter is tested on the least-sensitive level range with fast time weighting and C frequency weighting. The test signals are a single complete cycle of an 8 kHz sinusoid starting and stopping at zero crossings and positive and negative half cycles of a 500 Hz sinusoid that also start and stop at zero crossings. All levels in [dB].

Burst signal	Source level	Exp LCp-LCF	Meas LCp-LCF	Dev	Limit -	Limit +	Uncert.	Status
8kHz	114.0	3.4	3.2	-0.2	-2.0	2.0	0.2	Passed
500Hz +	132.0	2.4	2.2	-0.2	-1.0	1.0	0.2	Passed
500Hz -	132.0	2.4	2.2	-0.2	-1.0	1.0	0.2	Passed

10. Overload Indication

Overload indication is tested on the least-sensitive level range with the sound level meter set to A-weighted, time-averaged sound level. Positive and negative one-half-cycle sinusoidal electrical signals at a frequency of 4 kHz are used. All levels in [dB].

Start level	OV +	OV -	Dev	Limit -	Limit +	Uncert.	Status
137.0	139.6	139.6	0.0	-1.5	1.5	0.3	Passed

Manufacturer Calibration Certificate

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3. All tests are traceable in accordance with ISO/IEC 17025.

No pattern approval is available for this sound level meter configuration.

Sound Level Meter

Manufacturer	NTi Audio		
Type	XL3	S/N	A3A-01246-F0
Firmware	V1.38		
Microphone Model	M2340		
Preamplifier	MA230	S/N	1815
Microphone Capsule	MC230A	S/N	A28693
Performance class			
Customer Inventory Nr.			

Customer

Date 03 September 2024

Certificate FL-24-125

Results **PASSED**
(for detailed report see next pages)

Operator

Markus Frick

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info@nti-audio.com • www.nti-audio.com

Measurement equipment

Test System

Model	NTi Audio FX100, S/No. 11094
Last Calibration	02 July 2024
Cal Certificate	NTI Cal #3393
Next Calibration	02 July 2025

Reference Microphone

Model	MTG MV203 S/N #2435, Mic Capsule MK202 S/No. #7313
Last Calibration	18 November 2022
Cal Certificate	DAkkS-000875
Next Calibration	17 November 2024

Sound Calibrator

Model	Norsonic 1251 S/No. #30930
Reference Level	114 dB
Calibration Frequency	1000 Hz
Last Calibration	08 December 2022
Cal Certificate	METAS #259-19602
Next Calibration	07 December 2024

Environmental conditions

Temperature	25.4 °C
Humidity	43 %
Pressure	965 hPa

Notes

- This calibration certificate documents the traceability to national standards, which realize the units of measurement according to the international Systems of Units (SI).

- The user is obliged to have the object recalibrated at appropriate intervals.
- This calibration certificate may not be reproduced other than in full except with the permission of the issuing laboratory. Calibration certificates without signature are not valid.
- All limits listed in this report are acceptance limits in accordance with IEC61672.
- The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with the regulations of the GUM.

NTi AUDIO

1. Indication at the calibration check frequency

The indication of the sound level meter at the calibration check frequency is checked by application of the sound calibrator and adjusted, if necessary, to indicate the required sound level for the environmental conditions under which the tests are performed. All levels in [dB].

Sensitivity before calibration	Sensitivity after calibration	Meas level	Limit -	Limit +	Uncert.	Status
20.0 mV/Pa	45.5 mV/Pa	114	113	115	0.2	Passed

2. Self-generated noise

2.1 Microphone cartridge installed

The self-generated noise is measured in the most-sensitive level range as a time-averaged sound pressure level with frequency-weighting A and an averaging time of 30 seconds. All levels in [dB].

Weighting	Meas level	Limit +	Uncert.	Status
A	16.3	18.0	0.1	Passed

2.2 Microphone cartridge replaced by the capsule replacement NTI-K65-15

The self-generated noise is measured in the most-sensitive level range as a time-averaged sound pressure level for all frequency-weightings and an averaging time of 30 seconds. All levels in [dB] referenced to S = 42 mV/Pa.

Weighting	Meas level	Limit +	Uncert.	Status
A	10.5	13.0	0.1	Passed
C	13.5	16.0	0.1	Passed
Z	19.1	24.0	0.1	Passed

3. Acoustic signal tests of a frequency weighting

The frequency weighting is tested for frequency-weighting A, using an acoustic test facility. The sound level meter is set to a fast time-weighted sound level in the reference level range. All levels in [dB].

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
125	70.0	69.2	-0.8	-1.0	1.0	0.4	Passed
250	77.1	77.3	0.2	-1.0	1.0	0.4	Passed
500	82.7	82.8	0.1	-1.0	1.0	0.4	Passed
1000	86.0	86.0	0.0	-0.7	0.7	0.4	Passed
2000	87.2	87.4	0.2	-1.0	1.0	0.4	Passed
4000	87.0	86.9	-0.1	-1.0	1.0	0.4	Passed
8000	84.9	84.4	-0.5	-2.5	1.5	0.4	Passed

NTi AUDIO

4. Electric signal tests of frequency weightings

Frequency weightings are determined relative to the response at 1 kHz using steady sinusoidal electrical input signals. The sound level meter is set to display F-time-weighted sound level in the reference level range. All available frequency weightings provided in the sound level meter are verified. All levels in [dB].

4.1 A-Weighting

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
1000	80.0	80.0	0.0	-0.7	0.7	0.1	Passed
63	106.2	80.0	0.0	-1.0	1.0	0.1	Passed
125	96.1	79.9	-0.1	-1.0	1.0	0.1	Passed
250	88.6	80.0	0.0	-1.0	1.0	0.1	Passed
500	83.2	80.0	0.0	-1.0	1.0	0.1	Passed
2000	78.8	80.0	0.0	-1.0	1.0	0.1	Passed
4000	79.0	79.9	-0.1	-1.0	1.0	0.1	Passed
8000	81.1	79.7	-0.3	-2.5	1.5	0.1	Passed
12500	84.3	79.4	-0.6	-2.5	1.5	0.1	Passed
16000	86.6	78.7	-1.3	-2.5	1.5	0.1	Passed

4.2 C-Weighting

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
1000	80.0	80.0	0.0	-0.7	0.7	0.1	Passed
63	80.8	80.0	0.0	-1.0	1.0	0.1	Passed
125	80.2	80.1	0.1	-1.0	1.0	0.1	Passed
250	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
500	80.0	80.1	0.1	-1.0	1.0	0.1	Passed
2000	80.2	80.1	0.1	-1.0	1.0	0.1	Passed
4000	80.8	79.9	-0.1	-1.0	1.0	0.1	Passed
8000	83.0	79.7	-0.3	-2.5	1.5	0.1	Passed
12500	86.2	79.3	-0.7	-2.5	1.5	0.1	Passed
16000	88.5	78.6	-1.4	-2.5	1.5	0.1	Passed

4.3 Z-Weighting

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
1000	80.0	80.0	0.0	-0.7	0.7	0.1	Passed
63	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
125	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
250	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
500	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
2000	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
4000	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
8000	80.0	79.9	-0.1	-2.5	1.5	0.1	Passed
12500	80.0	79.8	-0.2	-2.5	1.5	0.1	Passed
16000	80.0	79.9	-0.1	-2.5	1.5	0.1	Passed

5. Frequency and time weightings at 1kHz

While injecting a constant steady signal at the reference frequency of 1 kHz the F-time-weighted sound level, S-time-weighted sound level and time-averaged sound level are verified with frequency weighting A. Additionally the F-time-weighted sound level for frequency weightings C and Z is measured. The first measurement serves as reference and differences in the reading with respect to this first one are determined. All levels in [dB].

Level	Exp level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
LAF	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LAS	114.0	113.8	-0.2	-0.7	0.7	0.1	Passed
LAeq	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LCF	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LCeq	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LZF	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LZeq	114.0	114.0	0.0	-0.7	0.7	0.1	Passed

6. Level linearity on the reference level range

The level linearity on the reference level range is determined by applying steady sinusoidal electrical signals at a frequency of 8 kHz with the sound level meter set for frequency-weighting A and fast time-weighting. All levels in [dB].

Exp abs level	Meas. level	Abs dev	Abs Limit -	Abs Limit +	Exp rel level	Rel dev	Rel Limit -	Rel Limit +	Uncert.	Status
114.0	114.0	0.0	-0.8	0.8	0.0	0.0	-0.3	0.3	0.1	Passed
119.0	119.0	0.0	-0.8	0.8	119.0	0.0	-0.3	0.3	0.1	Passed
124.0	124.0	0.0	-0.8	0.8	124.0	0.0	-0.3	0.3	0.1	Passed
125.0	125.0	0.0	-0.8	0.8	125.0	0.0	-0.3	0.3	0.1	Passed
126.0	126.0	0.0	-0.8	0.8	126.0	0.0	-0.3	0.3	0.1	Passed
114.0	114.0	0.0	-0.8	0.8	0.0	0.0	-0.3	0.3	0.1	Passed
109.0	109.0	0.0	-0.8	0.8	109.0	0.0	-0.3	0.3	0.1	Passed
104.0	104.0	0.0	-0.8	0.8	104.0	0.0	-0.3	0.3	0.1	Passed
99.0	99.0	0.0	-0.8	0.8	99.0	0.0	-0.3	0.3	0.1	Passed
94.0	94.0	0.0	-0.8	0.8	94.0	0.0	-0.3	0.3	0.1	Passed
89.0	89.0	0.0	-0.8	0.8	89.0	0.0	-0.3	0.3	0.1	Passed
84.0	84.0	0.0	-0.8	0.8	84.0	0.0	-0.3	0.3	0.1	Passed
79.0	79.0	0.0	-0.8	0.8	79.0	0.0	-0.3	0.3	0.1	Passed
74.0	74.0	0.0	-0.8	0.8	74.0	0.0	-0.3	0.3	0.1	Passed
69.0	69.0	0.0	-0.8	0.8	69.0	0.0	-0.3	0.3	0.1	Passed
64.0	63.9	-0.1	-0.8	0.8	64.0	-0.1	-0.3	0.3	0.1	Passed
59.0	59.0	0.0	-0.8	0.8	58.9	0.1	-0.3	0.3	0.1	Passed
54.0	54.0	0.0	-0.8	0.8	54.0	0.0	-0.3	0.3	0.1	Passed
49.0	49.0	0.0	-0.8	0.8	49.0	0.0	-0.3	0.3	0.1	Passed
44.0	44.0	0.0	-0.8	0.8	44.0	0.0	-0.3	0.3	0.1	Passed
39.0	39.0	0.0	-0.8	0.8	39.0	0.0	-0.3	0.3	0.1	Passed
34.0	34.0	0.0	-0.8	0.8	34.0	0.0	-0.3	0.3	0.1	Passed
33.0	33.0	0.0	-0.8	0.8	33.0	0.0	-0.3	0.3	0.1	Passed
32.0	32.0	0.0	-0.8	0.8	32.0	0.0	-0.3	0.3	0.1	Passed
31.0	31.0	0.0	-0.8	0.8	31.0	0.0	-0.3	0.3	0.1	Passed
30.0	30.0	0.0	-0.8	0.8	30.0	0.0	-0.3	0.3	0.1	Passed
29.0	29.0	0.0	-0.8	0.8	29.0	0.0	-0.3	0.3	0.1	Passed

7. Level linearity including the level range control

This test is not applicable for a single-range sound level meter.

8. Toneburst response

The response of the sound level meter to short-duration signals is tested on the reference level range with 4 kHz tonebursts that start and stop at zero crossings and are extracted from steady 4 kHz sinusoidal electrical input signals. The sound level meter is set for frequency weighting A. All levels in [dB].

The continuous signal level is 123 dB.

Burst signal	Burst duration [ms]	Exp level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
LAF	200	122.0	121.9	-0.1	-0.5	0.5	0.2	Passed
LAF	2	105.0	104.7	-0.3	-1.5	1.0	0.2	Passed
LAF	0.25	96.0	95.6	-0.4	-3.0	1.0	0.2	Passed
LAS	200	115.6	115.5	-0.1	-0.5	0.5	0.2	Passed
LAS	2	96.0	95.9	-0.1	-3.0	1.0	0.2	Passed
LAeq10s	200	106.0	105.9	-0.1	-0.5	0.5	0.2	Passed
LAeq10s	2	86.0	85.7	-0.3	-0.5	0.5	0.2	Passed
LAeq10s	0.25	77.0	76.7	-0.3	-0.5	0.5	0.2	Passed

9. C-weighted peak sound level

The sound level meter is tested on the least-sensitive level range with fast time weighting and C frequency weighting. The test signals are a single complete cycle of an 8 kHz sinusoid starting and stopping at zero crossings and positive and negative half cycles of a 500 Hz sinusoid that also start and stop at zero crossings. All levels in [dB].

Burst signal	Source level	Exp LCp-LCF	Meas LCp-LCF	Dev	Limit -	Limit +	Uncert.	Status
8kHz	114.0	3.4	3.3	-0.1	-2.0	2.0	0.2	Passed
500Hz +	132.0	2.4	2.2	-0.2	-1.0	1.0	0.2	Passed
500Hz -	132.0	2.4	2.2	-0.2	-1.0	1.0	0.2	Passed

10. Overload Indication

Overload indication is tested on the least-sensitive level range with the sound level meter set to A-weighted, time-averaged sound level. Positive and negative one-half-cycle sinusoidal electrical signals at a frequency of 4 kHz are used. All levels in [dB].

Start level	OV +	OV -	Dev	Limit -	Limit +	Uncert.	Status
136.3	138.9	138.9	0.0	-1.5	1.5	0.3	Passed

Manufacturer Calibration Certificate

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3. All tests are traceable in accordance with ISO/IEC 17025.

No pattern approval is available for this sound level meter configuration.

Sound Level Meter

Manufacturer	NTi Audio		
Type	XL3	S/N	A3A-01249-F0
Firmware	V1.38		
Microphone Model	M2340		
Preamplifier	MA230	S/N	1809
Microphone Capsule	MC230A	S/N	A28712
Performance class			
Customer Inventory Nr.			

Customer

Date 03 September 2024

Certificate FL-24-124

Results **PASSED**
(for detailed report see next pages)

Operator

Markus Frick

NTi Audio AG • Im alten Riet 102, 9494 Schaan • Liechtenstein
info@nti-audio.com • www.nti-audio.com

Measurement equipment

Test System

Model	NTi Audio FX100, S/No. 11094
Last Calibration	02 July 2024
Cal Certificate	NTI Cal #3393
Next Calibration	02 July 2025

Reference Microphone

Model	MTG MV203 S/N #2435, Mic Capsule MK202 S/No. #7313
Last Calibration	18 November 2022
Cal Certificate	DAkkS-000875
Next Calibration	17 November 2024

Sound Calibrator

Model	Norsonic 1251 S/No. #30930
Reference Level	114 dB
Calibration Frequency	1000 Hz
Last Calibration	08 December 2022
Cal Certificate	METAS #259-19602
Next Calibration	07 December 2024

Environmental conditions

Temperature	23.3 °C
Humidity	40 %
Pressure	965 hPa

Notes

- This calibration certificate documents the traceability to national standards, which realize the units of measurement according to the international Systems of Units (SI).

- The user is obliged to have the object recalibrated at appropriate intervals.
- This calibration certificate may not be reproduced other than in full except with the permission of the issuing laboratory. Calibration certificates without signature are not valid.
- All limits listed in this report are acceptance limits in accordance with IEC61672.
- The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with the regulations of the GUM.

NTi AUDIO

1. Indication at the calibration check frequency

The indication of the sound level meter at the calibration check frequency is checked by application of the sound calibrator and adjusted, if necessary, to indicate the required sound level for the environmental conditions under which the tests are performed. All levels in [dB].

Sensitivity before calibration	Sensitivity after calibration	Meas level	Limit -	Limit +	Uncert.	Status
44.4 mV/Pa	44.5 mV/Pa	114	113	115	0.2	Passed

2. Self-generated noise

2.1 Microphone cartridge installed

The self-generated noise is measured in the most-sensitive level range as a time-averaged sound pressure level with frequency-weighting A and an averaging time of 30 seconds. All levels in [dB].

Weighting	Meas level	Limit +	Uncert.	Status
A	16.1	19.0	0.1	Passed

2.2 Microphone cartridge replaced by the capsule replacement NTI-K65-15

The self-generated noise is measured in the most-sensitive level range as a time-averaged sound pressure level for all frequency-weightings and an averaging time of 30 seconds. All levels in [dB] referenced to S = 42 mV/Pa.

Weighting	Meas level	Limit +	Uncert.	Status
A	10.6	13.0	0.1	Passed
C	12.8	16.0	0.1	Passed
Z	18.4	24.0	0.1	Passed

3. Acoustic signal tests of a frequency weighting

The frequency weighting is tested for frequency-weighting A, using an acoustic test facility. The sound level meter is set to a fast time-weighted sound level in the reference level range. All levels in [dB].

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
125	70.0	69.4	-0.6	-1.0	1.0	0.4	Passed
250	77.1	77.0	-0.1	-1.0	1.0	0.4	Passed
500	82.7	82.9	0.2	-1.0	1.0	0.4	Passed
1000	86.0	86.2	0.2	-0.7	0.7	0.4	Passed
2000	87.2	87.5	0.3	-1.0	1.0	0.4	Passed
4000	87.0	87.4	0.4	-1.0	1.0	0.4	Passed
8000	84.9	85.4	0.5	-2.5	1.5	0.4	Passed

NTi AUDIO

4. Electric signal tests of frequency weightings

Frequency weightings are determined relative to the response at 1 kHz using steady sinusoidal electrical input signals. The sound level meter is set to display F-time-weighted sound level in the reference level range. All available frequency weightings provided in the sound level meter are verified. All levels in [dB].

4.1 A-Weighting

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
1000	80.0	80.0	0.0	-0.7	0.7	0.1	Passed
63	106.2	79.9	-0.1	-1.0	1.0	0.1	Passed
125	96.1	79.9	-0.1	-1.0	1.0	0.1	Passed
250	88.6	79.9	-0.1	-1.0	1.0	0.1	Passed
500	83.2	79.9	-0.1	-1.0	1.0	0.1	Passed
2000	78.8	79.9	-0.1	-1.0	1.0	0.1	Passed
4000	79.0	79.8	-0.2	-1.0	1.0	0.1	Passed
8000	81.1	79.6	-0.4	-2.5	1.5	0.1	Passed
12500	84.3	79.3	-0.7	-2.5	1.5	0.1	Passed
16000	86.6	78.6	-1.4	-2.5	1.5	0.1	Passed

4.2 C-Weighting

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
1000	80.0	80.0	0.0	-0.7	0.7	0.1	Passed
63	80.8	80.0	0.0	-1.0	1.0	0.1	Passed
125	80.2	80.0	0.0	-1.0	1.0	0.1	Passed
250	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
500	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
2000	80.2	80.0	0.0	-1.0	1.0	0.1	Passed
4000	80.8	79.9	-0.1	-1.0	1.0	0.1	Passed
8000	83.0	79.6	-0.4	-2.5	1.5	0.1	Passed
12500	86.2	79.3	-0.7	-2.5	1.5	0.1	Passed
16000	88.5	78.5	-1.5	-2.5	1.5	0.1	Passed

4.3 Z-Weighting

Freq. [Hz]	Gen. level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
1000	80.0	80.0	0.0	-0.7	0.7	0.1	Passed
63	80.0	80.1	0.1	-1.0	1.0	0.1	Passed
125	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
250	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
500	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
2000	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
4000	80.0	80.0	0.0	-1.0	1.0	0.1	Passed
8000	80.0	79.9	-0.1	-2.5	1.5	0.1	Passed
12500	80.0	79.8	-0.2	-2.5	1.5	0.1	Passed
16000	80.0	79.9	-0.1	-2.5	1.5	0.1	Passed

5. Frequency and time weightings at 1kHz

While injecting a constant steady signal at the reference frequency of 1 kHz the F-time-weighted sound level, S-time-weighted sound level and time-averaged sound level are verified with frequency weighting A. Additionally the F-time-weighted sound level for frequency weightings C and Z is measured. The first measurement serves as reference and differences in the reading with respect to this first one are determined. All levels in [dB].

Level	Exp level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
LAF	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LAS	114.0	113.8	-0.2	-0.7	0.7	0.1	Passed
LAeq	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LCF	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LCeq	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LZF	114.0	114.0	0.0	-0.7	0.7	0.1	Passed
LZeq	114.0	114.0	0.0	-0.7	0.7	0.1	Passed

6. Level linearity on the reference level range

The level linearity on the reference level range is determined by applying steady sinusoidal electrical signals at a frequency of 8 kHz with the sound level meter set for frequency-weighting A and fast time-weighting. All levels in [dB].

Exp abs level	Meas. level	Abs dev	Abs Limit -	Abs Limit +	Exp rel level	Rel dev	Rel Limit -	Rel Limit +	Uncert.	Status
114.0	114.0	0.0	-0.8	0.8	0.0	0.0	-0.3	0.3	0.1	Passed
119.0	119.0	0.0	-0.8	0.8	119.0	0.0	-0.3	0.3	0.1	Passed
124.0	124.0	0.0	-0.8	0.8	124.0	0.0	-0.3	0.3	0.1	Passed
129.0	129.0	0.0	-0.8	0.8	129.0	0.0	-0.3	0.3	0.1	Passed
134.0	134.0	0.0	-0.8	0.8	134.0	0.0	-0.3	0.3	0.1	Passed
135.0	135.0	0.0	-0.8	0.8	135.0	0.0	-0.3	0.3	0.1	Passed
136.0	136.0	0.0	-0.8	0.8	136.0	0.0	-0.3	0.3	0.1	Passed
114.0	113.9	-0.1	-0.8	0.8	0.0	0.0	-0.3	0.3	0.1	Passed
109.0	108.9	-0.1	-0.8	0.8	108.9	0.0	-0.3	0.3	0.1	Passed
104.0	104.0	0.0	-0.8	0.8	103.9	0.1	-0.3	0.3	0.1	Passed
99.0	99.0	0.0	-0.8	0.8	99.0	0.0	-0.3	0.3	0.1	Passed
94.0	94.0	0.0	-0.8	0.8	94.0	0.0	-0.3	0.3	0.1	Passed
89.0	88.9	-0.1	-0.8	0.8	89.0	-0.1	-0.3	0.3	0.1	Passed
84.0	84.0	0.0	-0.8	0.8	83.9	0.1	-0.3	0.3	0.1	Passed
79.0	78.9	-0.1	-0.8	0.8	79.0	-0.1	-0.3	0.3	0.1	Passed
74.0	74.0	0.0	-0.8	0.8	73.9	0.1	-0.3	0.3	0.1	Passed
69.0	68.9	-0.1	-0.8	0.8	69.0	-0.1	-0.3	0.3	0.1	Passed
64.0	63.9	-0.1	-0.8	0.8	63.9	0.0	-0.3	0.3	0.1	Passed
59.0	59.0	0.0	-0.8	0.8	58.9	0.1	-0.3	0.3	0.1	Passed
54.0	53.9	-0.1	-0.8	0.8	54.0	-0.1	-0.3	0.3	0.1	Passed
49.0	49.0	0.0	-0.8	0.8	48.9	0.1	-0.3	0.3	0.1	Passed
44.0	44.0	0.0	-0.8	0.8	44.0	0.0	-0.3	0.3	0.1	Passed
39.0	39.0	0.0	-0.8	0.8	39.0	0.0	-0.3	0.3	0.1	Passed
34.0	34.0	0.0	-0.8	0.8	34.0	0.0	-0.3	0.3	0.1	Passed
29.0	29.0	0.0	-0.8	0.8	29.0	0.0	-0.3	0.3	0.1	Passed
28.0	28.0	0.0	-0.8	0.8	28.0	0.0	-0.3	0.3	0.1	Passed
27.0	27.0	0.0	-0.8	0.8	27.0	0.0	-0.3	0.3	0.1	Passed
26.0	26.1	0.1	-0.8	0.8	26.0	0.1	-0.3	0.3	0.1	Passed
25.0	25.1	0.1	-0.8	0.8	25.1	0.0	-0.3	0.3	0.1	Passed

7. Level linearity including the level range control

This test is not applicable for a single-range sound level meter.

8. Toneburst response

The response of the sound level meter to short-duration signals is tested on the reference level range with 4 kHz tonebursts that start and stop at zero crossings and are extracted from steady 4 kHz sinusoidal electrical input signals. The sound level meter is set for frequency weighting A. All levels in [dB].

The continuous signal level is 123 dB.

Burst signal	Burst duration [ms]	Exp level	Meas level	Dev	Limit -	Limit +	Uncert.	Status
LAF	200	122.0	121.9	-0.1	-0.5	0.5	0.2	Passed
LAF	2	105.0	104.7	-0.3	-1.5	1.0	0.2	Passed
LAF	0.25	96.0	95.6	-0.4	-3.0	1.0	0.2	Passed
LAS	200	115.6	115.5	-0.1	-0.5	0.5	0.2	Passed
LAS	2	96.0	95.9	-0.1	-3.0	1.0	0.2	Passed
LAeq10s	200	106.0	105.9	-0.1	-0.5	0.5	0.2	Passed
LAeq10s	2	86.0	85.8	-0.2	-0.5	0.5	0.2	Passed
LAeq10s	0.25	77.0	76.6	-0.4	-0.5	0.5	0.2	Passed

9. C-weighted peak sound level

The sound level meter is tested on the least-sensitive level range with fast time weighting and C frequency weighting. The test signals are a single complete cycle of an 8 kHz sinusoid starting and stopping at zero crossings and positive and negative half cycles of a 500 Hz sinusoid that also start and stop at zero crossings. All levels in [dB].

Burst signal	Source level	Exp LCp-LCF	Meas LCp-LCF	Dev	Limit -	Limit +	Uncert.	Status
8kHz	114.0	3.4	3.1	-0.3	-2.0	2.0	0.2	Passed
500Hz +	132.0	2.4	2.2	-0.2	-1.0	1.0	0.2	Passed
500Hz -	132.0	2.4	2.2	-0.2	-1.0	1.0	0.2	Passed

10. Overload Indication

Overload indication is tested on the least-sensitive level range with the sound level meter set to A-weighted, time-averaged sound level. Positive and negative one-half-cycle sinusoidal electrical signals at a frequency of 4 kHz are used. All levels in [dB].

Start level	OV +	OV -	Dev	Limit -	Limit +	Uncert.	Status
136.5	139.2	139.2	0.0	-1.5	1.5	0.3	Passed

Appendix G. Monitoring Data and Graphical Plots (Air Quality and Noise)

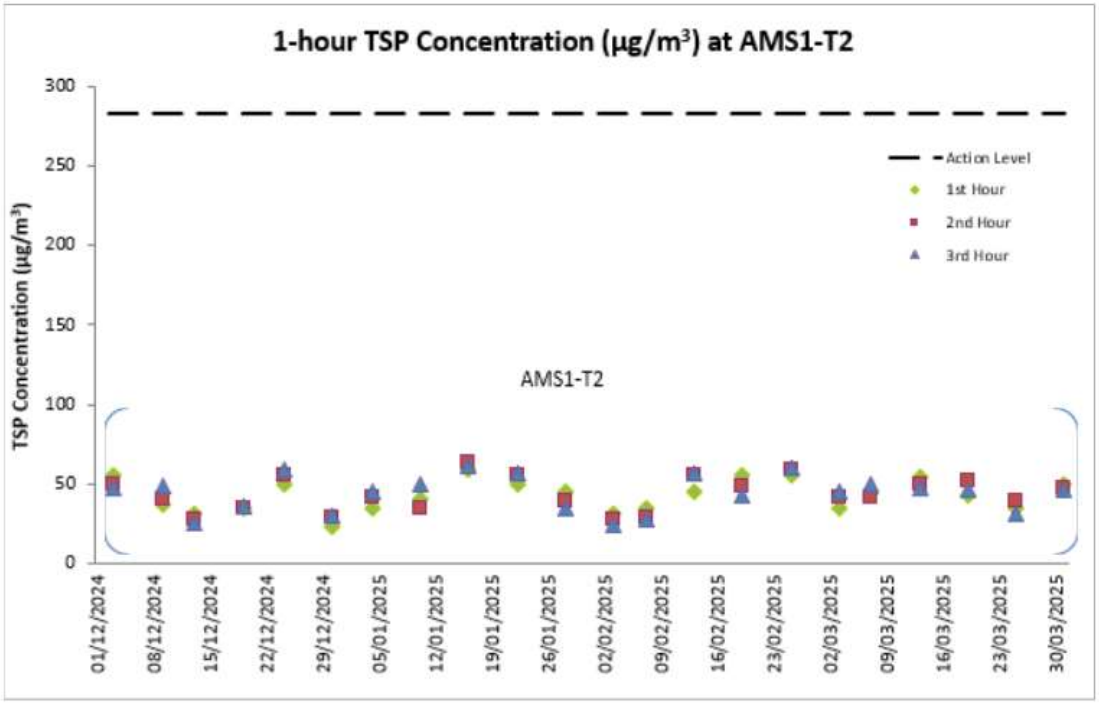
Data for 1-hour TSP Monitoring at Station AMS1-T2 during the Reporting Month

	Date	Start Time	Finish Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hour TSP ($\mu g/m^3$)
#	03-Mar-25	9:36	10:36	Fine	2.5	137	34
#	03-Mar-25	10:36	11:36	Fine	2.5	164	41
#	03-Mar-25	11:36	12:36	Fine	2.8	147	45
#	07-Mar-25	8:57	9:57	Rainy	0.6	21	44
#	07-Mar-25	9:57	10:57	Rainy	3.9	317	41
#	07-Mar-25	10:57	11:57	Rainy	2.5	333	50
#	13-Mar-25	9:52	10:52	Fine	1.4	154	54
#	13-Mar-25	10:52	11:52	Fine	2.5	151	49
#	13-Mar-25	11:52	12:52	Fine	3.3	158	47
#	19-Mar-25	9:34	10:34	Sunny	3.1	75	43
#	19-Mar-25	10:34	11:34	Sunny	5.3	129	52
#	19-Mar-25	11:34	12:34	Sunny	4.4	121	46
#	25-Mar-25	9:33	10:33	Sunny	0.3	variable	34
#	25-Mar-25	10:33	11:33	Sunny	1.7	127	39
#	25-Mar-25	11:33	12:33	Sunny	1.1	122	31
#	31-Mar-25	9:32	10:32	Cloudy	2.8	317	49
#	31-Mar-25	10:32	11:32	Cloudy	3.3	316	47
#	31-Mar-25	11:32	12:32	Cloudy	3.9	316	46

Note:
Impact Monitoring at Station AMS1-T2.

During the reporting period, temporary monitoring station AMS1-T, was no longer accessible from 13 August 2024, due to the relocation of the Agriculture, Fisheries and Conservation Department Kowloon Animal Management Centre. Alternative temporary air quality monitoring station, AMS1-T2 was proposed by ET and agreed by IEC on 9 August 2024 and further approved by EPD on 28 August 2024 for conducting impact monitoring during the reporting period.

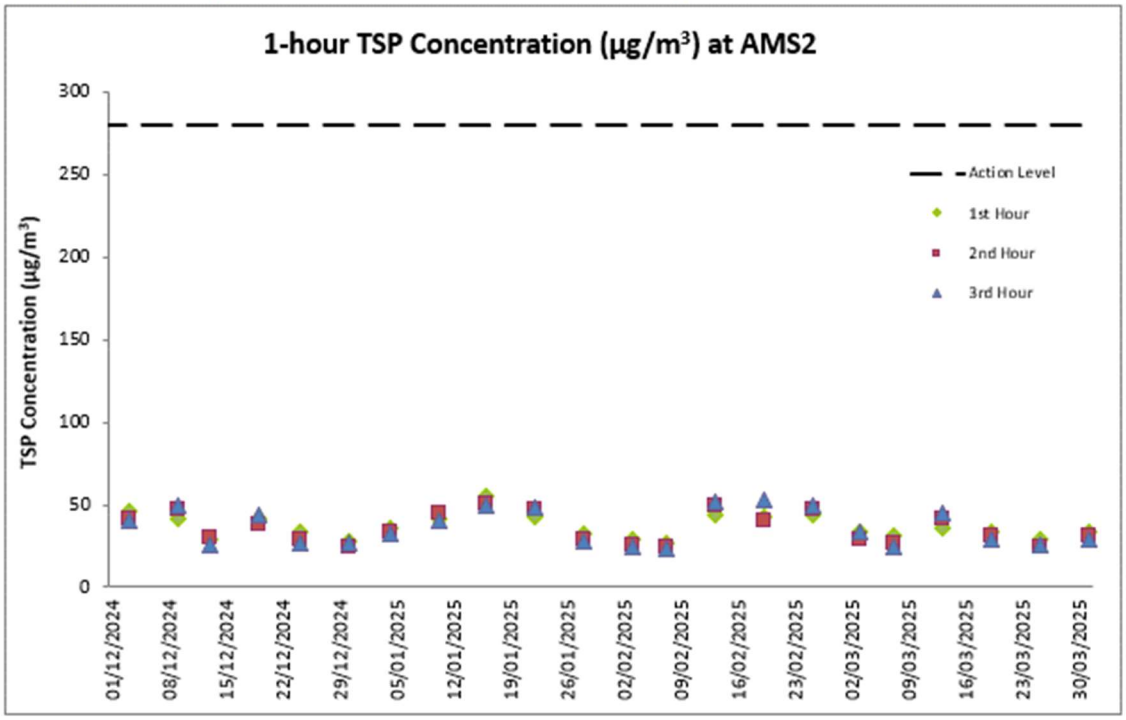
Graphical Presentation for 1-hour TSP Monitoring at AMS1-T2



Data for 1-hour TSP Monitoring at Station AMS2 during the Reporting Month

Date	Start Time	Finish Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hour TSP ($\mu g/m^3$)
03-Mar-25	8:51	9:51	Fine	3.3	136	33
03-Mar-25	9:51	10:51	Fine	2.2	139	29
03-Mar-25	10:51	11:51	Fine	2.5	151	34
07-Mar-25	8:45	9:45	Rainy	1.7	77	31
07-Mar-25	9:45	10:45	Rainy	1.7	330	27
07-Mar-25	10:45	11:45	Rainy	3.3	314	25
13-Mar-25	9:08	10:08	Fine	1.4	165	36
13-Mar-25	10:08	11:08	Fine	1.7	156	42
13-Mar-25	11:08	12:08	Fine	3.3	158	45
19-Mar-25	8:49	9:49	Sunny	1.9	110	34
19-Mar-25	9:49	10:49	Sunny	2.5	9	31
19-Mar-25	10:49	11:49	Sunny	3.9	118	29
25-Mar-25	8:48	9:48	Sunny	0.6	303	29
25-Mar-25	9:48	10:48	Sunny	0.6	285	25
25-Mar-25	10:48	11:48	Sunny	1.7	133	26
31-Mar-25	8:47	9:47	Cloudy	2.8	320	34
31-Mar-25	9:47	10:47	Cloudy	3.3	315	31
31-Mar-25	10:47	11:47	Cloudy	3.3	315	29

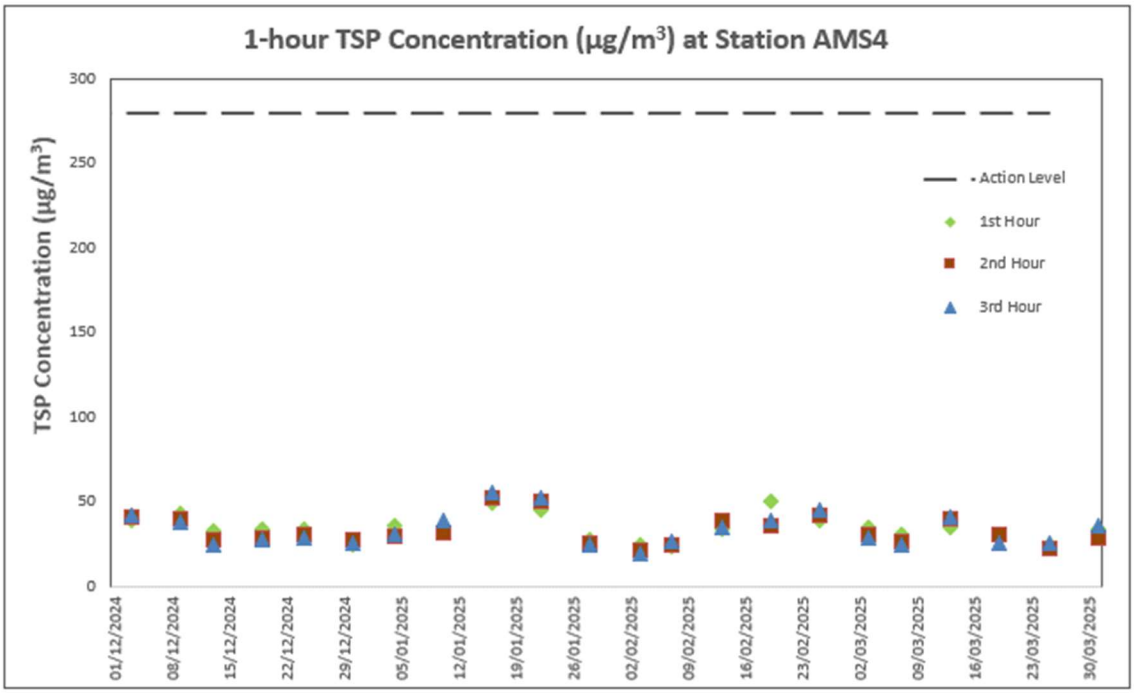
Graphical Presentation for 1-hour TSP Monitoring at AMS2



Data for 1-hour TSP Monitoring at Station AMS4 during the Reporting Month

Date	Start Time	Finish Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hour TSP ($\mu g/m^3$)
03-Mar-25	10:30	11:30	Fine	2.2	152	35
03-Mar-25	11:30	12:30	Fine	3.3	146	31
03-Mar-25	12:30	13:30	Fine	0.8	293	29
07-Mar-25	9:18	10:18	Rainy	2.2	25	31
07-Mar-25	10:18	11:18	Rainy	3.1	334	26
07-Mar-25	11:18	12:18	Rainy	3.3	323	24
13-Mar-25	10:50	11:50	Sunny	2.5	149	35
13-Mar-25	11:50	12:50	Sunny	3.3	157	40
13-Mar-25	12:50	13:50	Sunny	3.9	146	41
19-Mar-25	10:30	11:30	Sunny	4.2	129	29
19-Mar-25	11:30	12:30	Sunny	3.9	131	31
19-Mar-25	12:30	13:30	Sunny	5.0	153	25
25-Mar-25	10:27	11:27	Sunny	1.4	126	24
25-Mar-25	11:27	12:27	Sunny	1.1	112	22
25-Mar-25	12:27	13:27	Sunny	1.4	244	25
31-Mar-25	10:25	11:25	Cloudy	2.8	323	34
31-Mar-25	11:25	12:25	Cloudy	3.3	312	29
31-Mar-25	12:25	13:25	Cloudy	5.0	315	36

Graphical Presentation for 1-hour TSP Monitoring at AMS4



Data for Noise Monitoring at Station NMS1-T2 during the Reporting Month

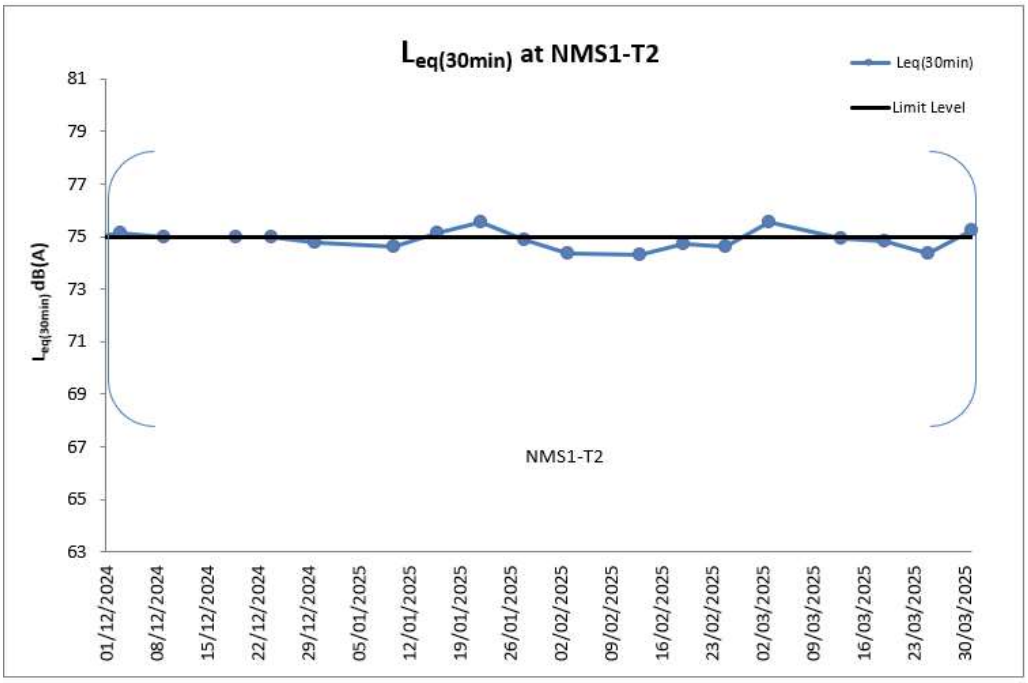
	Date	Time	Weather	$L_{eq(5min)}$	L_{10}	L_{90}	Measured $L_{eq(30min)}$
#	03-Mar-25	09:39	Fine	74.9	77.5	66.6	75.6
#	03-Mar-25	09:44	Fine	75.4	78.7	67.9	
#	03-Mar-25	09:49	Fine	76.6	79.8	68.3	
#	03-Mar-25	09:54	Fine	76.7	79.0	68.7	
#	03-Mar-25	09:59	Fine	74.0	77.2	66.4	
#	03-Mar-25	10:04	Fine	75.1	78.6	67.0	
#	13-Mar-25	09:55	Fine	74.2	77.1	66.1	75.0
#	13-Mar-25	10:00	Fine	75.2	78.2	68.6	
#	13-Mar-25	10:05	Fine	74.6	78.0	67.9	
#	13-Mar-25	10:10	Fine	75.1	78.4	68.0	
#	13-Mar-25	10:15	Fine	75.2	78.3	68.8	
#	13-Mar-25	10:20	Fine	75.3	78.5	67.8	
#	19-Mar-25	09:37	Sunny	74.4	77.5	66.6	74.8
#	19-Mar-25	09:42	Sunny	75.1	78.2	67.3	
#	19-Mar-25	09:47	Sunny	74.7	77.8	66.0	
#	19-Mar-25	09:52	Sunny	74.0	76.7	65.9	
#	19-Mar-25	09:57	Sunny	74.9	77.0	66.7	
#	19-Mar-25	10:02	Sunny	75.6	78.9	67.4	
#	25-Mar-25	09:36	Sunny	73.1	76.4	66.3	74.4
#	25-Mar-25	09:41	Sunny	74.5	77.2	67.6	
#	25-Mar-25	09:46	Sunny	74.7	77.7	67.7	
#	25-Mar-25	09:51	Sunny	73.0	76.8	66.9	
#	25-Mar-25	09:56	Sunny	75.9	78.0	68.0	
#	25-Mar-25	10:01	Sunny	74.4	77.6	67.5	
#	31-Mar-25	09:35	Cloudy	74.4	77.5	66.3	75.2
#	31-Mar-25	09:40	Cloudy	75.1	78.2	67.6	
#	31-Mar-25	09:45	Cloudy	76.7	79.8	68.0	
#	31-Mar-25	09:50	Cloudy	74.0	77.6	66.9	
#	31-Mar-25	09:55	Cloudy	75.9	78.0	67.7	
#	31-Mar-25	10:00	Cloudy	74.6	77.7	66.4	

Note:

Impact Monitoring at Station NMS1-T2.

During the reporting period, temporary monitoring station NMS1-T, was no longer accessible from 13 August 2024, due to the relocation of the Agriculture, Fisheries and Conservation Department Kowloon Animal Management Centre. Alternative temporary noise monitoring station, NMS1-T2 was proposed by ET and agreed by IEC on 9 August 2024 and further approved by EPD on 28 August 2024 for conducting impact monitoring during the reporting period.

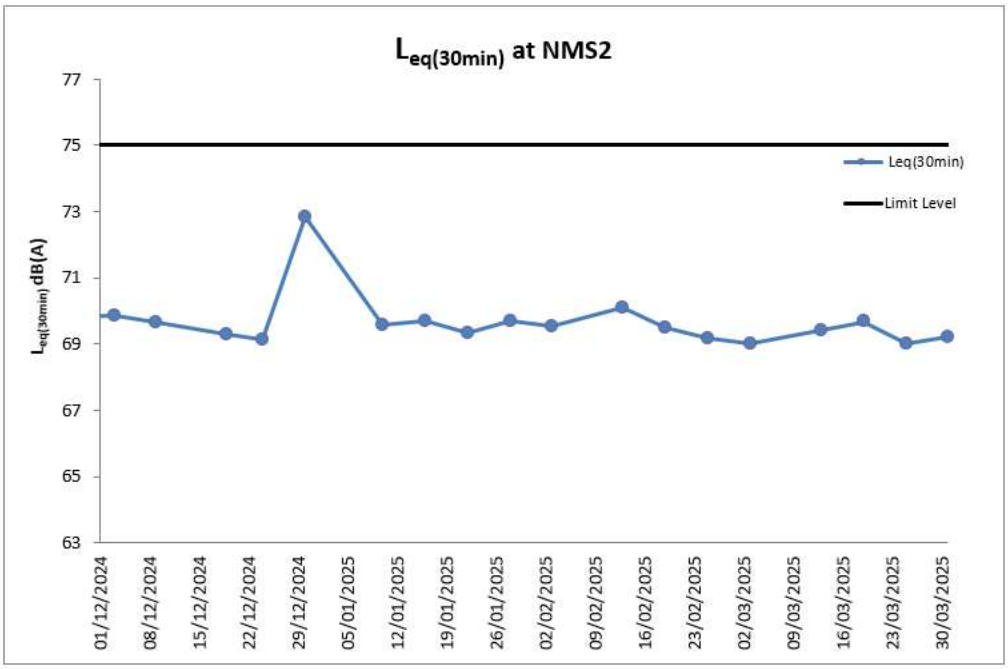
Graphical Presentation for Noise Monitoring at NMS1-T2



Data for Noise Monitoring at Station NMS2 during the Reporting Month

Date	Time	Weather	$L_{eq(5min)}$	L_{10}	L_{90}	Measured $L_{eq(30min)}$
03-Mar-25	08:54	Fine	68.7	71.8	64.3	
03-Mar-25	08:59	Fine	69.1	72.2	65.0	
03-Mar-25	09:04	Fine	70.0	73.0	66.7	69.0
03-Mar-25	09:09	Fine	67.9	70.5	64.6	
03-Mar-25	09:14	Fine	68.4	71.7	64.8	
03-Mar-25	09:19	Fine	69.6	72.4	65.9	
13-Mar-25	09:05	Fine	69.3	71.7	65.4	
13-Mar-25	09:10	Fine	68.8	71.2	65.5	
13-Mar-25	09:15	Fine	69.3	71.5	65.3	69.4
13-Mar-25	09:20	Fine	67.8	70.2	64.0	
13-Mar-25	09:25	Fine	69.3	71.6	65.3	
13-Mar-25	09:30	Fine	71.3	72.5	65.8	
19-Mar-25	08:52	Sunny	69.5	72.7	64.6	
19-Mar-25	08:57	Sunny	70.7	73.4	65.3	
19-Mar-25	09:02	Sunny	70.1	73.2	65.0	69.7
19-Mar-25	09:07	Sunny	69.0	72.9	64.8	
19-Mar-25	09:12	Sunny	68.9	71.0	64.7	
19-Mar-25	09:17	Sunny	69.6	72.5	65.6	
25-Mar-25	08:51	Sunny	69.4	72.6	67.4	
25-Mar-25	08:56	Sunny	67.6	70.5	65.3	
25-Mar-25	09:01	Sunny	68.1	71.2	66.0	69.0
25-Mar-25	09:06	Sunny	70.0	73.7	68.6	
25-Mar-25	09:11	Sunny	69.7	72.0	67.9	
25-Mar-25	09:16	Sunny	68.9	71.8	66.7	
31-Mar-25	08:50	Cloudy	68.1	71.2	66.0	
31-Mar-25	08:55	Cloudy	69.4	72.5	67.3	
31-Mar-25	09:00	Cloudy	68.0	71.9	66.7	69.2
31-Mar-25	09:05	Cloudy	70.7	73.8	68.6	
31-Mar-25	09:10	Cloudy	69.9	72.0	67.9	
31-Mar-25	09:15	Cloudy	68.6	71.7	66.4	

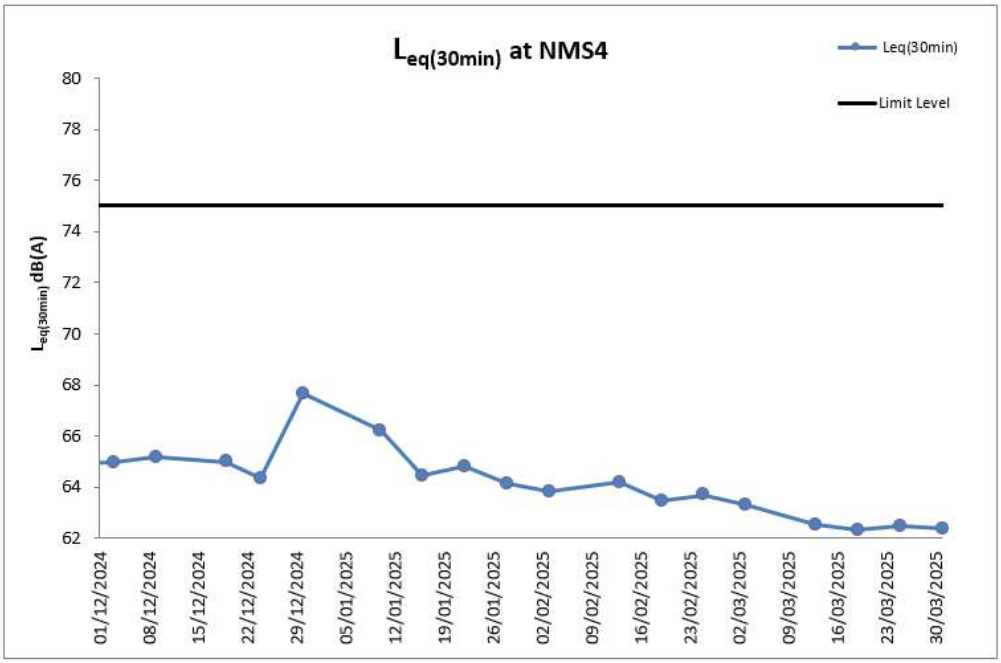
Graphical Presentation for Noise Monitoring at NMS2



Data for Noise Monitoring at Station NMS4 during the Reporting Month

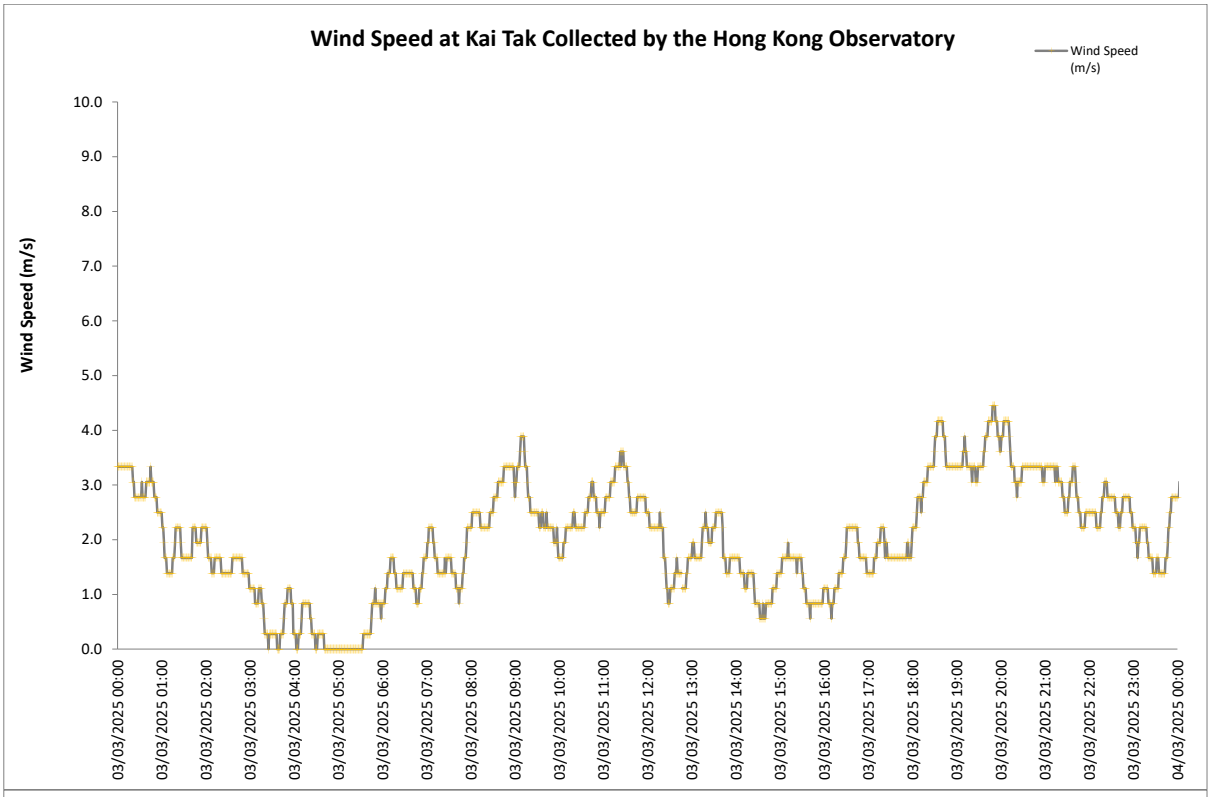
Date	Time	Weather	$L_{eq(5min)}$	L_{10}	L_{90}	Measured $L_{eq(30min)}$
03-Mar-25	08:54	Fine	63.7	65.8	61.6	63.3
03-Mar-25	08:59	Fine	64.4	66.5	62.3	
03-Mar-25	09:04	Fine	63.1	65.2	61.0	
03-Mar-25	09:09	Fine	62.0	64.7	60.9	
03-Mar-25	09:14	Fine	62.9	64.0	60.9	
03-Mar-25	09:19	Fine	63.4	65.5	61.6	
13-Mar-25	09:05	Cloudy	62.3	64.4	59.7	62.5
13-Mar-25	09:10	Cloudy	64.2	65.9	59.7	
13-Mar-25	09:15	Cloudy	61.6	63.3	59.7	
13-Mar-25	09:20	Cloudy	61.3	62.9	59.2	
13-Mar-25	09:25	Cloudy	62.4	64.6	59.8	
13-Mar-25	09:30	Cloudy	62.8	65.2	59.2	
19-Mar-25	08:52	Sunny	62.4	64.5	60.3	62.3
19-Mar-25	08:57	Sunny	63.1	65.2	61.6	
19-Mar-25	09:02	Sunny	62.7	64.8	60.0	
19-Mar-25	09:07	Sunny	61.0	63.7	59.9	
19-Mar-25	09:12	Sunny	62.9	64.0	60.7	
19-Mar-25	09:17	Sunny	61.6	63.9	59.4	
25-Mar-25	08:51	Sunny	63.1	65.2	61.3	62.5
25-Mar-25	08:56	Sunny	62.4	64.5	60.0	
25-Mar-25	09:01	Sunny	62.0	64.7	60.6	
25-Mar-25	09:06	Sunny	61.7	63.0	59.7	
25-Mar-25	09:11	Sunny	62.9	64.8	60.9	
25-Mar-25	09:16	Sunny	62.6	64.4	60.6	
31-Mar-25	08:50	Cloudy	62.4	64.5	60.3	62.4
31-Mar-25	08:55	Cloudy	61.1	63.2	59.6	
31-Mar-25	09:00	Cloudy	63.7	65.8	61.0	
31-Mar-25	09:05	Cloudy	62.0	64.7	60.9	
31-Mar-25	09:10	Cloudy	62.8	64.0	60.7	
31-Mar-25	09:15	Cloudy	61.9	63.6	59.4	

Graphical Presentation for Noise Monitoring at NMS4



Appendix H. Wind Data

3 March 2025


Wind Speed at Kai Tak Collected by the Hong Kong Observatory
Wind Speed (m/s)
Wind Speed (m/s)
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
03/03/2025 00:00
03/03/2025 01:00
03/03/2025 02:00
03/03/2025 03:00
03/03/2025 04:00
03/03/2025 05:00
03/03/2025 06:00
03/03/2025 07:00
03/03/2025 08:00
03/03/2025 09:00
03/03/2025 10:00
03/03/2025 11:00
03/03/2025 12:00
03/03/2025 13:00
03/03/2025 14:00
03/03/2025 15:00
03/03/2025 16:00
03/03/2025 17:00
03/03/2025 18:00
03/03/2025 19:00
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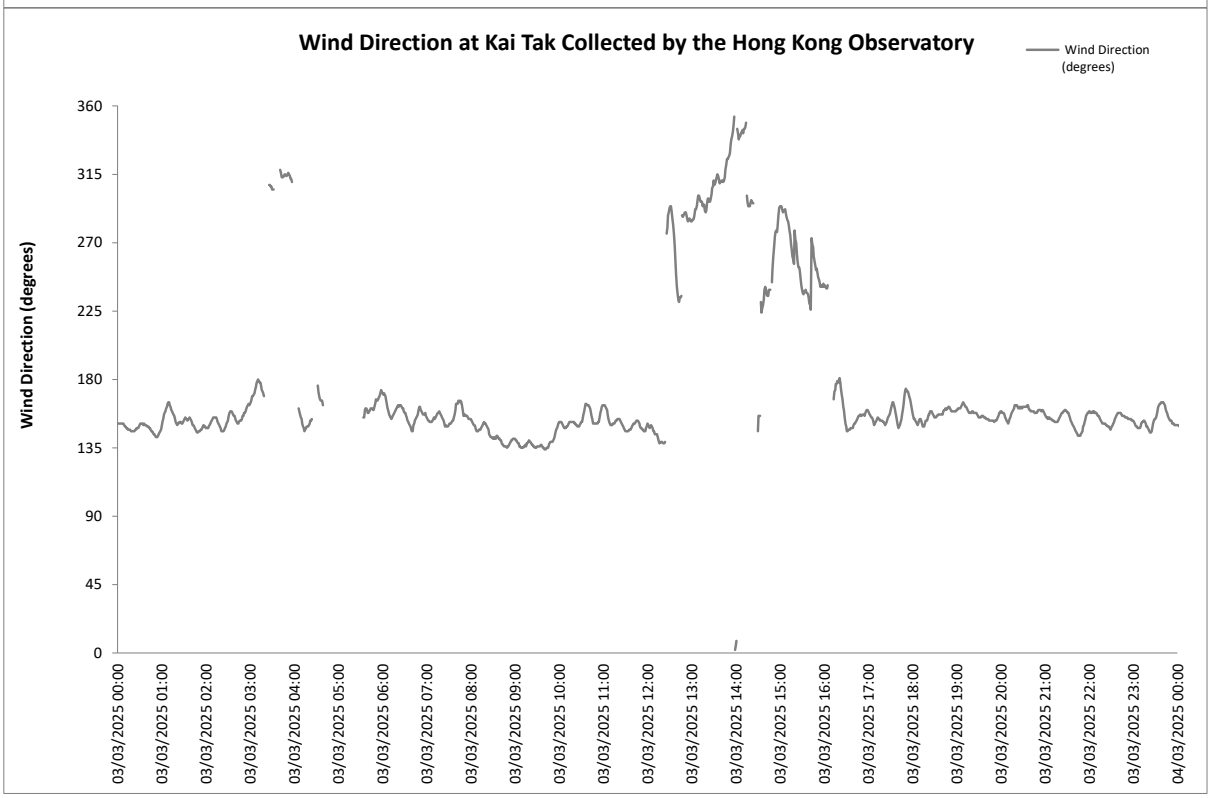
03/03/2025 21:00
03/03/2025 22:00
03/03/2025 23:00
04/03/2025 00:00


Wind Direction at Kai Tak Collected by the Hong Kong Observatory
Wind Direction (degrees)
Wind Direction (degrees)
360
315
270
225
180
135
90
45
0
03/03/2025 00:00
03/03/2025 01:00
03/03/2025 02:00
03/03/2025 03:00
03/03/2025 04:00
03/03/2025 05:00
03/03/2025 06:00
03/03/2025 07:00
03/03/2025 08:00
03/03/2025 09:00
03/03/2025 10:00
03/03/2025 11:00
03/03/2025 12:00
03/03/2025 13:00
03/03/2025 14:00
03/03/2025 15:00
03/03/2025 16:00
03/03/2025 17:00
03/03/2025 18:00
03/03/2025 19:00
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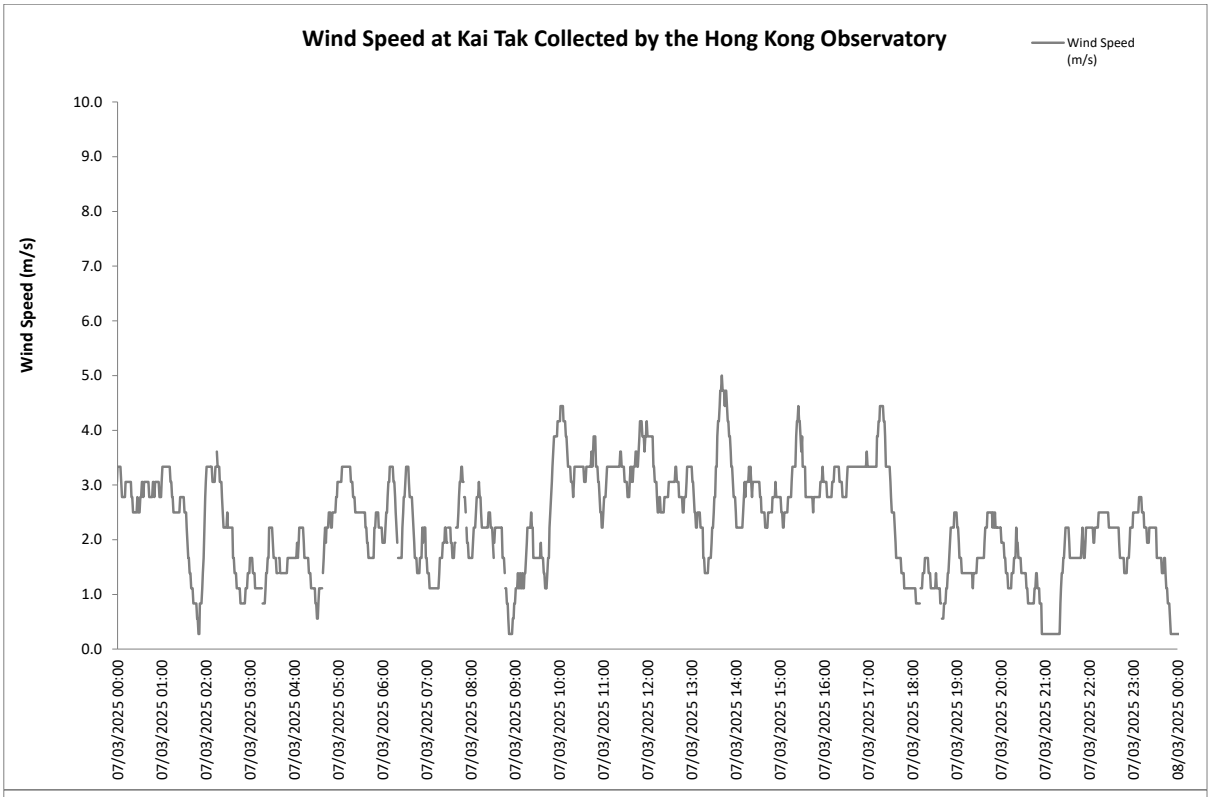
04/03/2025 00:00

7 March 2025


Wind Speed at Kai Tak Collected by the Hong Kong Observatory
Wind Speed (m/s)
Wind Speed (m/s)
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
07/03/2025 00:00
07/03/2025 01:00
07/03/2025 02:00
07/03/2025 03:00
07/03/2025 04:00
07/03/2025 05:00
07/03/2025 06:00
07/03/2025 07:00
07/03/2025 08:00
07/03/2025 09:00
07/03/2025 10:00
07/03/2025 11:00
07/03/2025 12:00
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07/03/2025 14:00
07/03/2025 15:00
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07/03/2025 17:00
07/03/2025 18:00
07/03/2025 19:00
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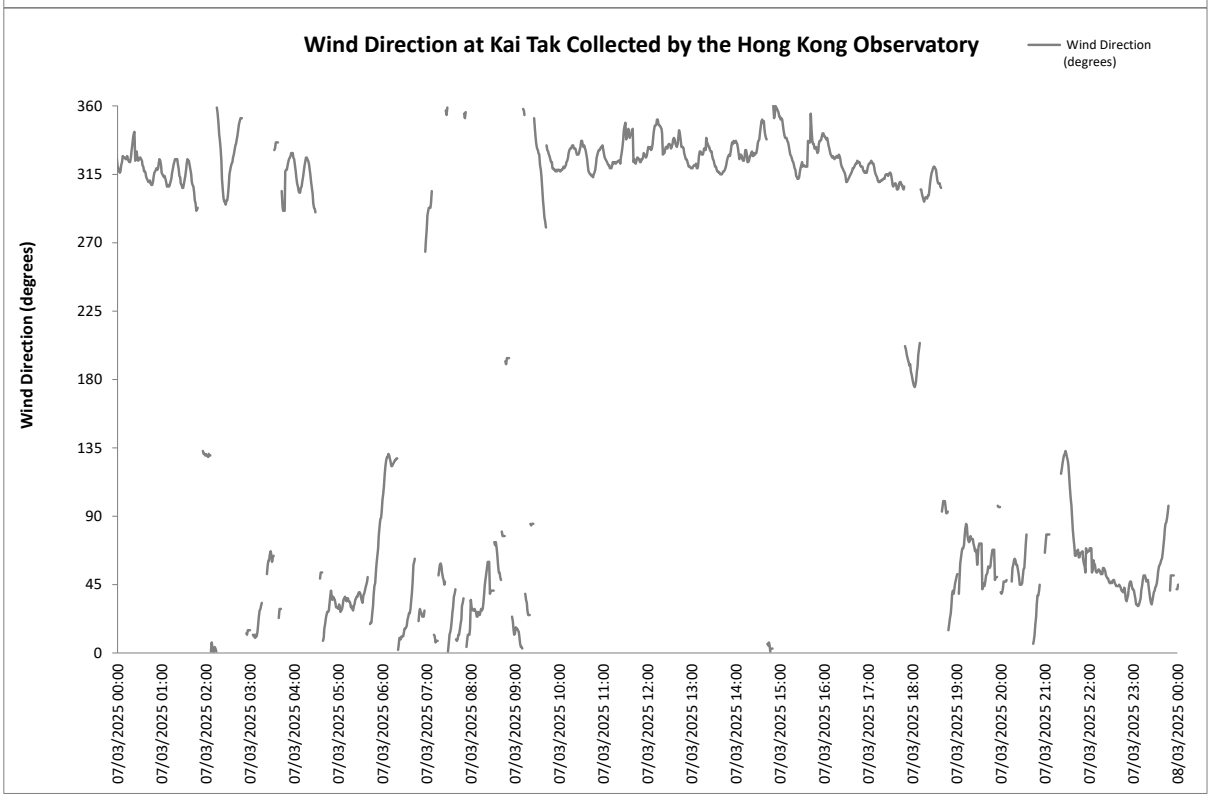
08/03/2025 00:00


Wind Direction at Kai Tak Collected by the Hong Kong Observatory
Wind Direction (degrees)
Wind Direction (degrees)
360
315
270
225
180
135
90
45
0
07/03/2025 00:00
07/03/2025 01:00
07/03/2025 02:00
07/03/2025 03:00
07/03/2025 04:00
07/03/2025 05:00
07/03/2025 06:00
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07/03/2025 09:00
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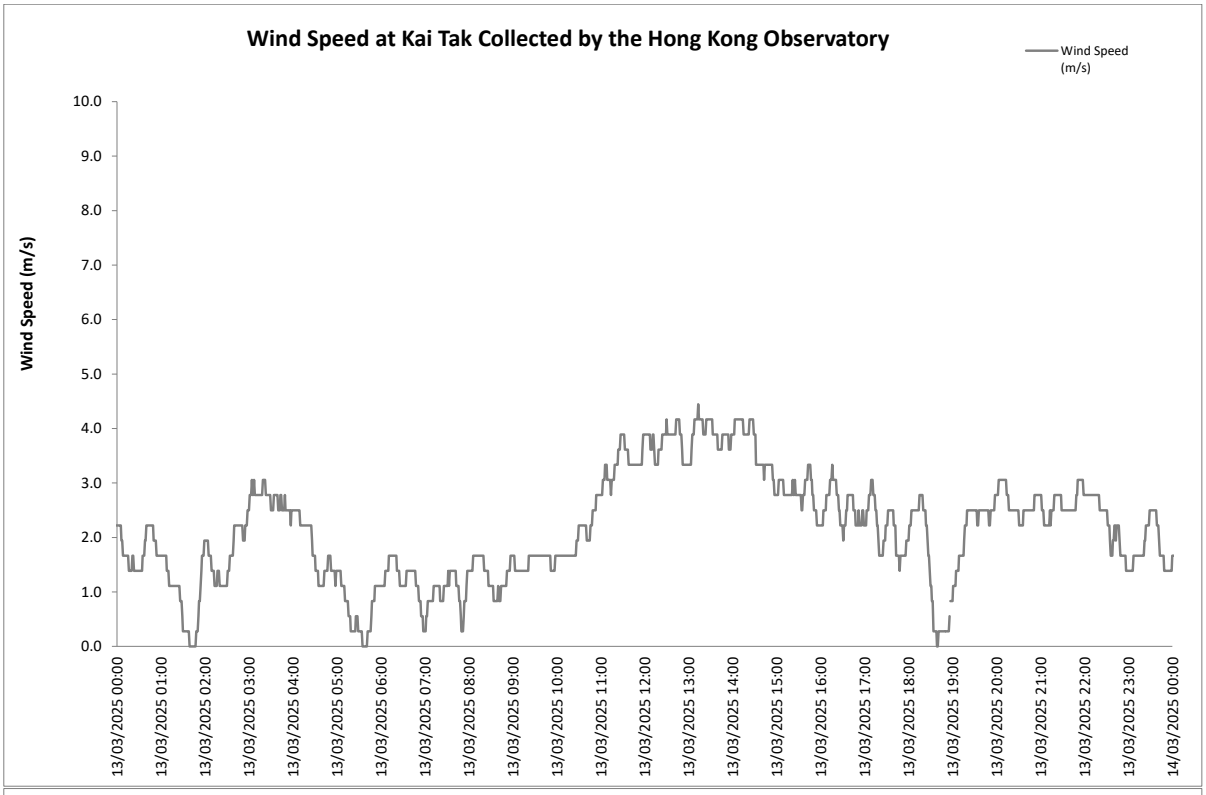
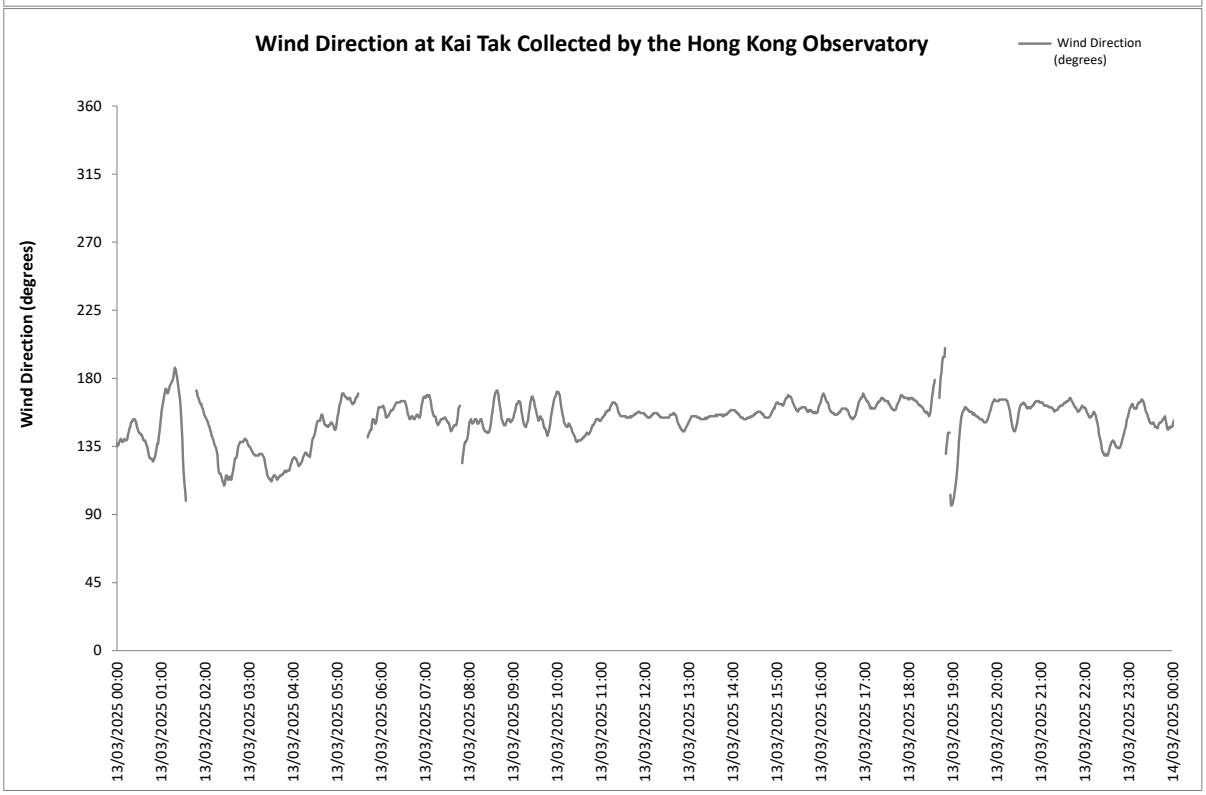
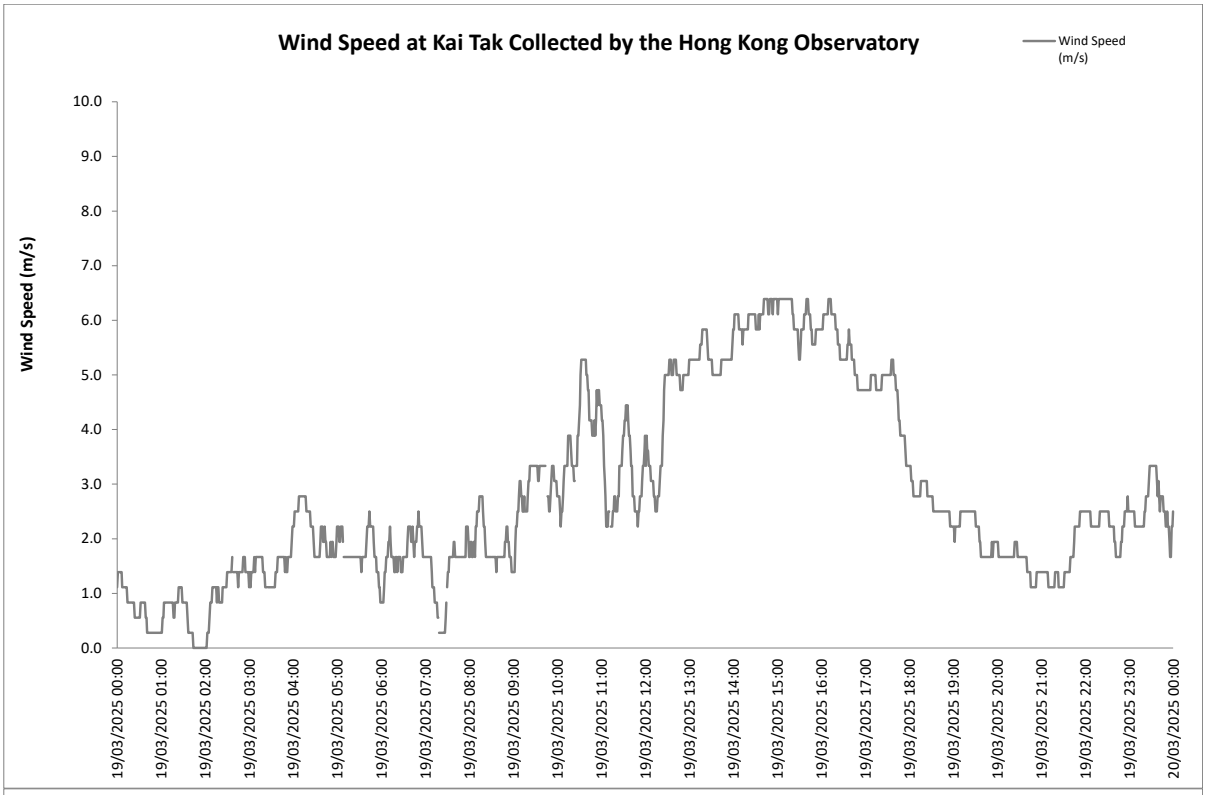
07/03/2025 11:00
07/03/2025 12:00
07/03/2025 13:00
07/03/2025 14:00
07/03/2025 15:00
07/03/2025 16:00
07/03/2025 17:00
07/03/2025 18:00
07/03/2025 19:00
07/03/2025 20:00
07/03/2025 21:00
07/03/2025 22:00
07/03/2025 23:00
08/03/2025 00:00

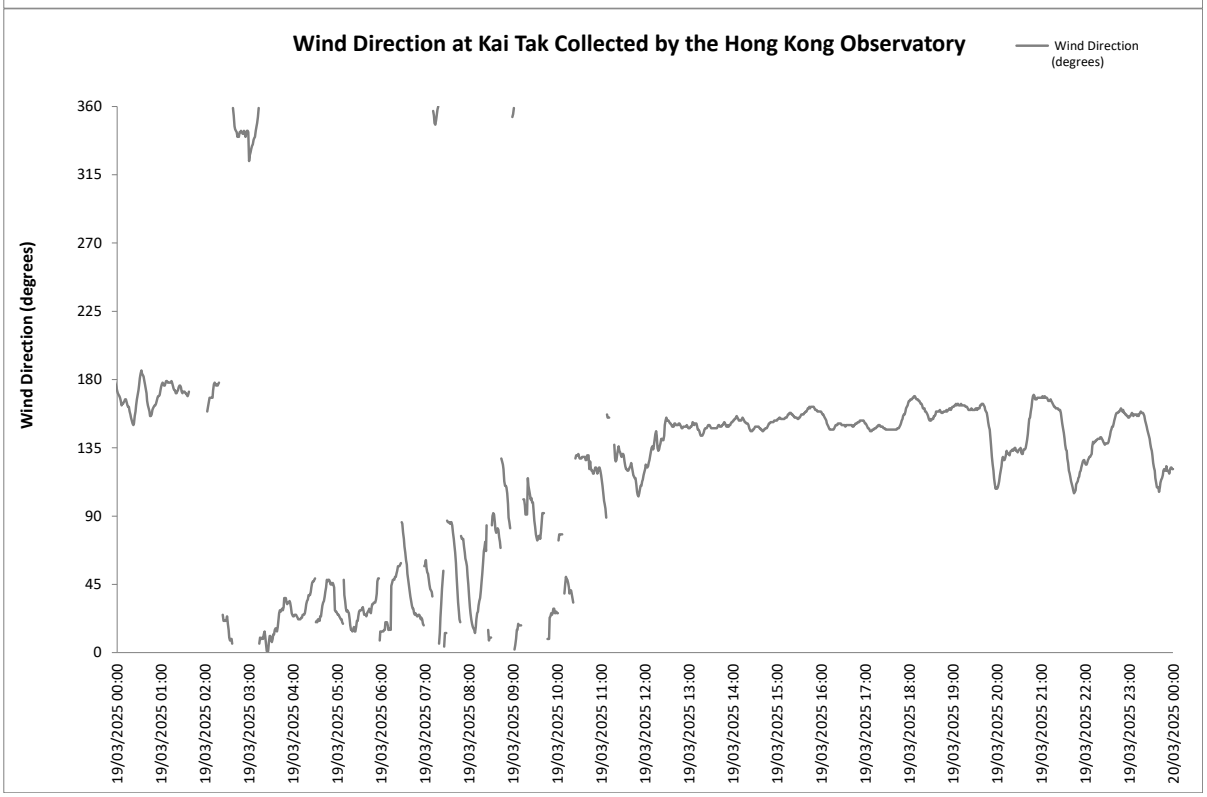
13 March 2025



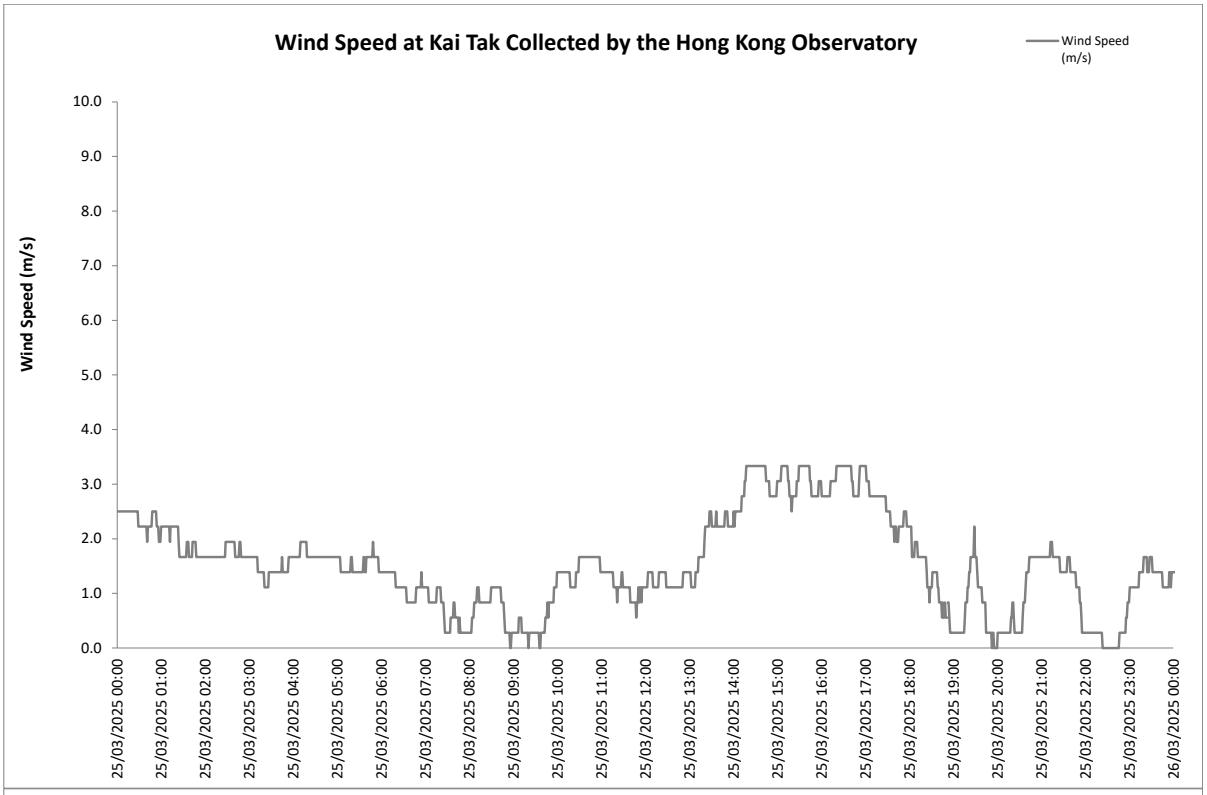


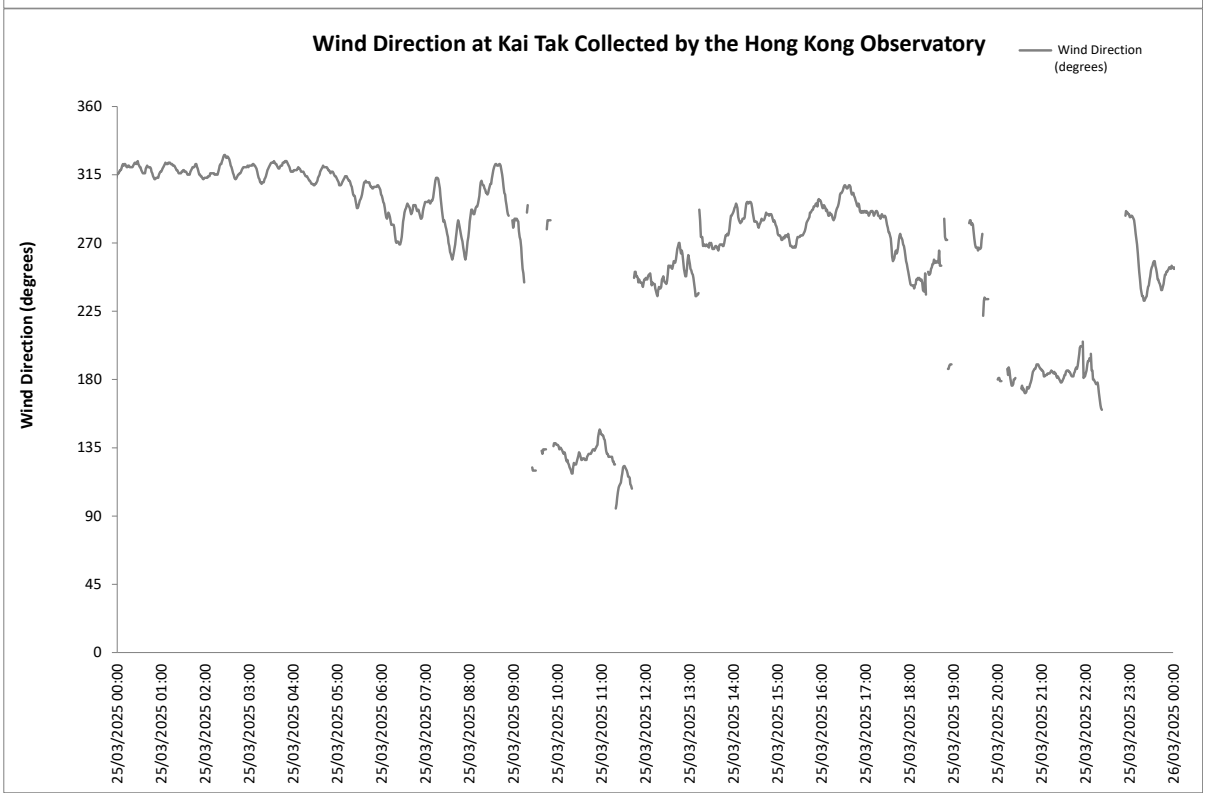
19 March 2025



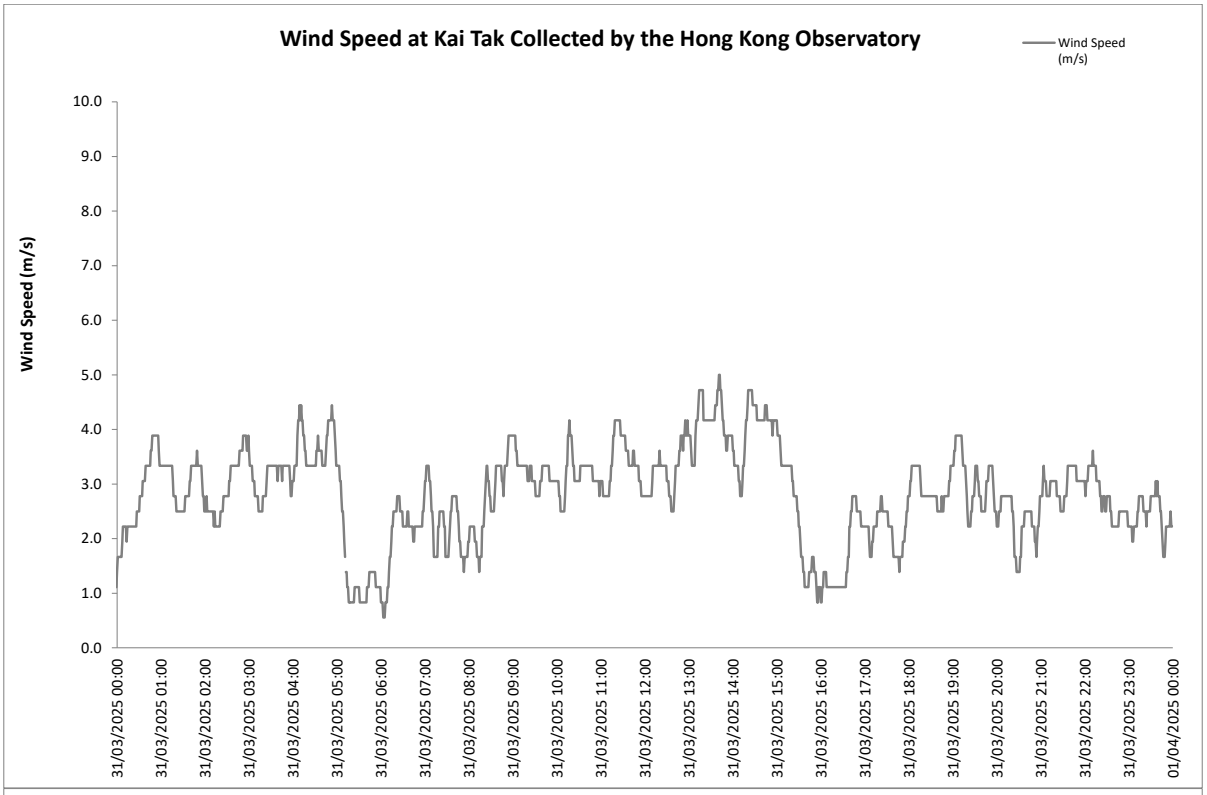


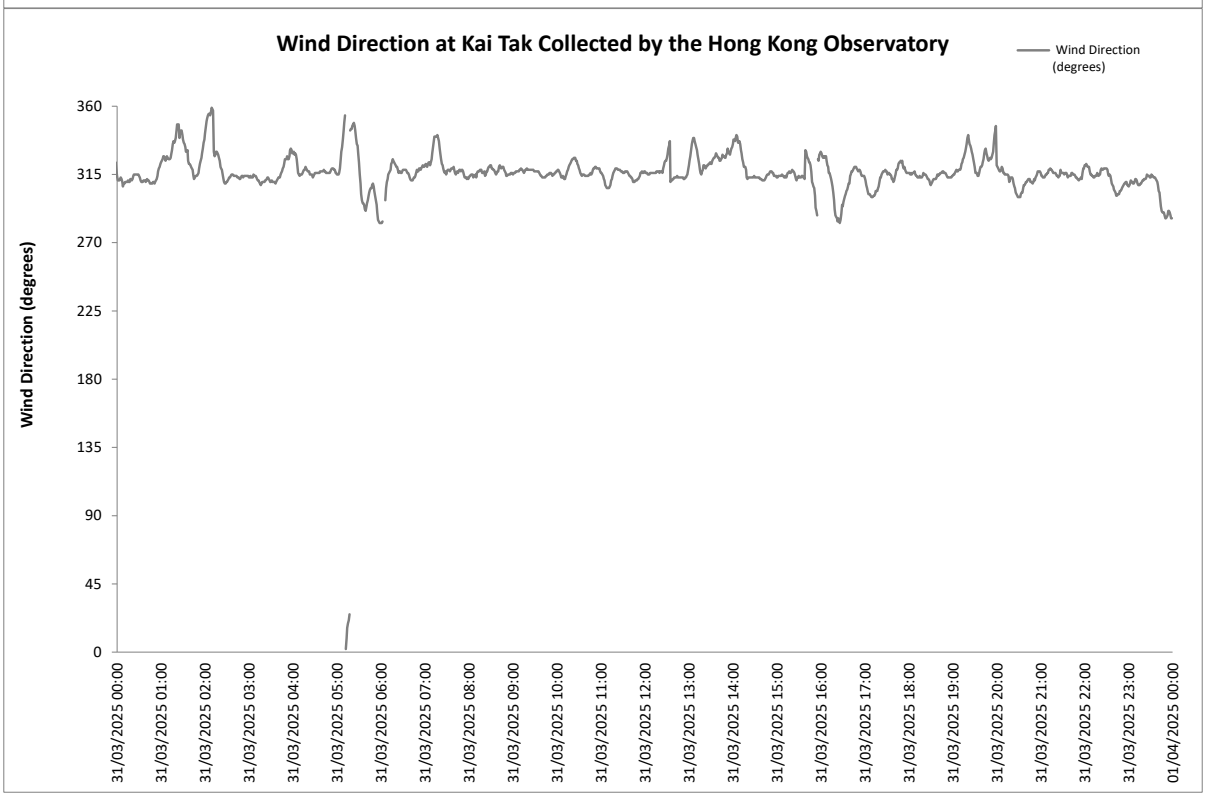
25 March 2025





31 March 2025





Appendix I. Waste Flow Table

Project: Kai Tak Sport Park
Contract No.: HAB/ KTSP/ 01
Contract Title: Design, Construction and Operation of the Kai Tak Sports Park at Kai Tak, Kowloon City District, Hong Kong
Year of Record: 2019-2025

協興工程有限公司
HIP HING ENGINEERING CO LTD
新創建集團成員 Member of NWS Holdings

Monthly Waste Flow Table

Month	Total Quantity Generated	Total Quantity Generated (Excluded Excavated Material)	Actual Quantities of Inert C&D Materials Generated Monthly								Actual Quantities of C&D Materials Generated Monthly						Remarks
			Excavated Materials			Non-excavated Materials					Metals (steel bar / metal strip)(1)	Metals (aluminum can)(1)	Paper / cardboard packaging (1)	Plastics (1) & (4)	Chemical waste (wasted lubricant oil/ oil container)	Other, e.g. general refuse	
			Disposed in Public Fill	Disposed in Sorting Facilities	Others (e.g Reused in the Contract / Other Projects)	Broken Concrete or Construction Waste Collected by Recycled Company	Reused in the Contract	Reused in other Projects	Disposed in Public Fill	Disposed in Sorting Facilities							
	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	
	a1	a2	b	b	b	c	d	e	f	g	h	i	j	k	l	m	
2019	43517.88	8326.30	35191.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	166.07	0.00	2.05	7.92	2.00	8148.27	
2020	811029.24	6341.58	49326.08	0.00	755361.58	0.00	0.00	0.00	0.00	0.00	3170.12	0.47	10.10	20.71	2.20	3137.98	
Jan-21	78129.57	1315.84	4253.06	0.00	72560.67	0.00	0.00	0.00	0.00	0.00	393.38	0.05	2.68	1.96	0.00	917.77	
Feb-21	70013.03	912.17	10767.60	0.00	58333.26	0.00	0.00	0.00	0.00	0.00	386.46	0.07	1.24	0.64	0.00	523.76	
Mar-21	51743.64	1314.81	18740.08	0.00	31688.75	0.00	0.00	0.00	0.00	0.00	320.13	0.12	2.08	2.45	0.00	990.03	
Apr-21	16431.34	1411.19	0.00	0.00	15020.15	0.00	0.00	0.00	0.00	0.00	467.54	0.02	1.84	1.70	0.00	940.09	
May-21	39675.06	1610.42	0.00	0.00	38064.64	0.00	0.00	0.00	0.00	0.00	442.35	0.00	1.31	2.81	0.00	1163.95	
Jun-21	56589.31	1812.39	0.00	0.00	54776.92	0.00	0.00	0.00	0.00	0.00	353.07	0.02	1.10	1.37	0.00	1456.83	
Jul-21	18264.19	2544.22	0.00	0.00	15719.97	0.00	0.00	0.00	0.00	0.00	383.64	0.00	1.55	3.36	0.00	2155.67	
Aug-21	7959.53	2028.39	4150.75	0.00	1780.39	0.00	0.00	0.00	0.00	0.00	326.91	0.00	1.28	1.40	0.00	1698.80	
Sep-21	32389.58	2259.89	30129.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	269.75	0.00	1.99	2.68	0.00	1985.47	
Oct-21	34559.10	2034.74	17144.35	0.00	15380.01	0.00	0.00	0.00	0.00	0.00	289.21	0.00	1.04	2.83	0.00	1741.66	
Nov-21	34821.07	2353.58	6551.45	0.00	25916.04	0.00	0.00	0.00	0.00	0.00	164.09	0.00	1.27	3.80	0.60	2183.82	
Dec-21	10648.02	2282.17	8365.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	125.27	0.00	1.54	0.69	0.00	2154.67	
Jan-22	6238.85	2367.85	3871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	130.89	0.00	1.43	1.76	0.00	2233.77	
Feb-22	6654.84	1294.33	5360.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	158.11	0.00	0.51	0.00	0.00	1135.71	
Mar-22	27279.95	1820.78	25459.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	162.33	0.00	0.81	0.85	0.00	1656.79	
Apr-22	15402.21	1792.21	13610.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.78	0.00	0.62	3.11	0.00	1751.70	
May-22	8425.54	2151.70	6273.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.12	0.00	0.61	1.47	0.00	2066.50	
Jun-22	8171.01	2700.44	5470.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	192.21	0.00	1.66	1.91	0.00	2504.66	
Jul-22	5804.34	2575.55	3228.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	238.36	0.00	1.56	4.87	0.00	2330.75	
Aug-22	11860.09	2557.97	9302.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	138.66	0.00	0.92	4.03	0.00	2414.36	
Sep-22	14721.29	2391.62	12329.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	155.67	0.00	0.52	5.72	0.00	2229.71	
Oct-22	12307.08	2428.20	9878.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.57	0.00	0.50	0.73	0.00	2411.40	
Nov-22	16034.69	2332.38	13702.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.73	0.00	1.07	1.24	0.00	2246.34	
Dec-22	21702.52	1944.12	19758.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.41	0.00	0.81	1.96	0.00	1926.94	
Jan-23	14065.32	1261.42	12803.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	1.54	0.00	1259.22	
Feb-23	17813.51	1729.85	16083.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43	1.83	0.00	1726.59	
Mar-23	14767.87	2148.99	12618.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	3.68	0.00	2144.35	
Apr-23	13579.71	1411.83	12167.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	3.06	0.00	1407.97	
May-23	9704.79	1744.90	7959.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.05	0.00	0.32	4.02	0.00	1733.51	
Jun-23	8426.09	1558.40	6867.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74	0.00	1.17	2.17	0.00	1544.32	
Jul-23	7550.66	1632.72	5917.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.05	0.00	1.46	2.62	0.00	1615.59	
Aug-23	9846.51	1561.03	8285.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	2.70	0.00	1557.90	
Sep-23	12162.88	1393.06	10769.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72	1.63	0.00	1389.71	
Oct-23	13388.21	1474.11	11914.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	5.02	0.00	1468.09	
Nov-23	19026.41	2051.03	16975.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	204.20	0.00	0.20	6.40	0.00	1840.23	
Dec-23	18201.46	1789.64	16411.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.31	0.00	0.00	4.38	0.00	1769.95	
Jan-24	20113.41	1685.40	18428.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.57	0.00	0.29	5.50	0.00	1668.04	
Feb-24	13274.14	898.67	12375.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.73	0.00	0.00	5.47	0.00	883.47	
Mar-24	15225.55	1537.94	13687.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	5.37	0.00	1532.37	
Apr-24	13965.14	1614.04	12351.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	6.07	0.00	1607.56	
May-24	6791.26	1238.65	5552.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	7.00	0.00	1231.09	
Jun-24	7715.02	1534.23	6180.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	6.64	0.00	1527.00	
Jul-24	6966.17	1189.79	5776.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	1182.43	
Aug-24	8660.75	1630.63	7030.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	4.58	0.00	1624.88	
Sep-24	10036.63	1188.71	8847.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	6.19	11.22	1170.52	
Oct-24	6878.83	1537.77	5341.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.08	0.00	1533.69	
Nov-24	7970.48	2134.55	5835.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55	0.00	2132.00	
Dec-24	7198.09	2181.86	5016.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00	2179.46	
Jan-25	3723.26	1357.80	2365.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1357.80	
Feb-25	3072.43	1105.88	1966.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	1105.63	
Mar-25	1682.48	686.55	995.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	686.55	
Total	1752180.01	104184.28	563393.36	0.00	1084602.38	0.00	0.00	0.00	0.00	0.00	8939.48	0.75	56.22	184.49	16.02	94987.32	

Total C&D waste generated	1752180.01	tonne	a1=b+c+d+e+f+g+h+i+j+k+l+m
Total C&D waste generated (excluding excavated materials)	104184.28	tonne	a2=c+d+e+f+g+h+i+j+k+l+m
Total recycled C&D waste	9180.94	tonne	a3=c+d+e+h+i+j+k
% of recycled C&D waste for BEAM Plus MA10 or MA11	8.81	%	a4=a3/a2 x 100%

Notes:
(1) Metal, paper & plastic were collected by recycler.
(2) The performance target of waste recycling are specified in the Contract.
(3) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
(4) Plastics refer to plastic bottles/ containers, plastic/ foam from packaging material.
(5) Broken concrete for recycling into aggregates.
(6) Excavated materials/waste will NOT be considered as part of construction waste. It should be excluded in the calculation.
(7) Disposal of inert waste to public fill or sorting facilities will NOT be considered as recycled waste.
(8)Disposal record for February 2025 and March 2025 have been updated according to the latest information from contractor in March 2025.
(9)Recycling record for metals, papers and plastics have been updated according to the latest information from contractor in March 2025.

Appendix J. Environmental Licences and Permits

Table J.1: Summary of Environmental Licences and Permits Status (KTSP)

Item No.	Type of Permit / Licence	Reference No.	Application Date	Valid from	Valid until	Remark
1	Environmental Permit under EIAO	EP-544/2017	21 Aug 2017	8 Sep 2017	N/A	Issued
2	Construction Dust Notification under APCO	441733	25 Jan 2019	29 Jan 2019	N/A	N/A
3	Construction Waste Disposal Account (Main)	7033182	12 Feb 2019	12 Feb 2019	N/A	N/A
4	Registration as a Chemical Waste Producer	WPN5213-286-H3906-02	29 Jan 2019	12 Feb 2019	N/A	N/A
5	Discharge Licence under WPCO	WT10002906-2024	7 Feb 2024	1 Jul 2024	30 Jun 2029	Issued
6	Construction Noise Permit (Construction Works, Northern Site)	GW-RE1500-24	5 Nov 2024	1 Dec 2024	31 May 2025	Issued
7	Construction Noise Permit (Construction Works, Southern Site)	GW-RE0047-25	7 Jan 2025	20 Feb 2025	19 Aug 2025	Issued

Table J.2: Summary of Environmental Licences and Permits Status (H/O Development)

Item No.	Type of Permit / Licence	Reference No.	Application Date	Valid from	Valid until	Remark
1	Environmental Permit under EIAO	EP-544/2017	21 Aug 2017	8 Sep 2017	N/A	Issued
2	Construction Dust Notification under APCO	458255	17 Jul 2020	17 Jul 2020	N/A	N/A
		470045	29 Jul 2021	29 Jul 2021	N/A	N/A
3	Construction Waste Disposal Account (Main)	7041267	29 Jul 2021	11 Aug 2021	N/A	Issued
4	Registration as a Chemical Waste Producer	WPN5211-286-H1103-23	29 Jul 2021	24 Aug 2021	N/A	Issued
5	Discharge Licence under WPCO	WT00039490-2021	6 Aug 2021	9 Nov 2021	30 Nov 2026	Issued

Appendix K. Environmental Mitigation Measures Implementation Status

Air Quality – Recommended Mitigation Measures

Air Quality Mitigation Measures during construction	Implementation Status	
	KTSP	H/O
• Good housekeeping to minimize dust generation, e.g. by properly handling and storing dusty materials	✓	*
• Store cement in shelter with 3 sides and the top covered by impervious materials if the stack exceeds 20 bags	✓	*
• Cement delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed	N/A	*
• Loading, unloading, transfer, handling or storage of bulk cement should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system	✓	*
• Dusty materials (e.g. debris) should be wetted by misting / water-spraying before any loading, unloading, transfer or transport operation	✓	*
• Any skip hoist for material transport should be fully enclosed by impervious sheeting	✓	*
• Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously	✓	*
• Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities to maintain the entire surface wet	✓	*
• Excavation area should be minimized as far as possible	✓	*
• Stockpile of dusty materials should not be extended beyond the pedestrian barriers, fencing or traffic cones	✓	*
• Excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet, and then removed, backfilled or reinstated where practicable within 24 hours of the excavation or unloading	✓	*
• Dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads	✓	*
• Properly fitted side and tail boards are necessary for any vehicle with open load area	✓	*
• While transporting materials that potentially create dust (e.g. debris), materials should not be loaded higher than side and tail boards, and should be fully covered by tarpaulin or similar materials which extent at least 300 mm over the edges of the side and tail boards to prevent leakage.	✓	*
• Limit the maximum vehicle speed within the site to 10km/hr	✓	*
• Haulage and delivery vehicles should be confined to designated roads	✓	*
• Every main haul road should either be 1.) paved with concrete and kept clear of dusty materials, or 2.) sprayed or watered to maintain the entire road surface wet	✓	*
• All on-site unpaved roads should be compacted and kept free of lose materials as possible	✓	*
• Provide vehicle washing (e.g. wheel washing bay & high pressure water jet where practicable) at every vehicle exit point for cleaning vehicle body and wheels	✓	*
• The vehicle washing area and the road between washing area and site exit should be paved with concrete, bituminous or other hardcores	✓	*
• The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials.	✓	*
• Dusty materials on every vehicle's body and wheels should be removed in washing area before leaving the site	✓	*

Air Quality Mitigation Measures during construction	Implementation Status	
	KTSP	H/O
• Regular maintenance of all plant equipment	✓	*
• Throttle down or switch off unused machines or machine in intermittent use	✓	*
• If the site is adjacent to area where accessible to the public (e.g. road and service lane etc.), hoarding of not less than 2.4 m high from ground level should be erected along the adjoining the entire length of that portion of the site boundary, except for a site entrance or exit. The hoarding should be well maintained throughout the construction period.	N/A	*
• Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding	✓	*
• Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies	✓	*
• Carry out air quality monitoring throughout the construction period	✓	*
• Carry out weekly site inspection to audit the implementation of mitigation measures	✓	*
• Regular watering once per hour on exposed worksites and haul road with an equivalent intensity of not less than 1.3L/m3 to achieve 91.7% dust removal efficiency.	✓	*
• Provision of electrical vehicle (EV) charging facilities in at least one-third of the car parking spaces for private cars. Provision of EV charging enabling facilities in all car parking spaces provided for private cars.	✓	*
Non-Road Mobile Machinery (NRMMs)		
• All NRMMs operated on-site are approved or exempted (as the case may be) and affixed with the requisite approval/exemption labels under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation or are in the process of application for such approval/exemption during the relevant grace period.	✓	*

Noise – Recommended Mitigation Measures

Noise Mitigation Measures during construction	Implementation Status	
	KTSP	H/O
• Adopt good site practice, such as throttle down or switch off equipment unused or intermittently used between works	✓	*
• Regular maintenance of equipment to prevent noise emission due to impair	✓	*
• Position mobile noisy equipment in locations away from NSRs and point the noise sources to directions away from NSRs	✓	*
• Use silencer or muffler for equipment	✓	*
• Make good use structures for noise screening	✓	*
• Use Quality Powered Mechanical Equipment (QPME) and quiet equipment which produces lower noise level.	✓	*
• Erect movable noise barrier of 3m height to shed large plant equipment (e.g. breaker, backhoe & mobile crane) or hand-held items (e.g. poker, wood saw, power rammer & compactor) near low-rise NSR. Where necessary, special design (e.g. with noise absorbing material or bend top) should be adopted. The barrier's length should be at least five times greater than its height, and the minimum surface density is 10 kg/m2. Alternatively, acoustic shed, enclosure or silencer (for generator, air compressor and concrete pump) or acoustic mat (for piling) can be adopted.	N/A	*
• Carry out regular site inspection to audit the implementation of mitigation measures	✓	*
• Carry out noise monitoring throughout the construction period	✓	*

Water Quality – Recommended Mitigation Measures

Water Quality Mitigation Measures during construction	Implementation Status	
	KTSP	H/O
• Practices outlined in ProPECC PN 1/94 Construction Site Drainage should be adopted.	✓	*
• Install perimeter channels in the works areas to intercept runoff from boundary prior to the commencement of any earthwork	✓	*
• To prevent storm runoff from washing across exposed soil surfaces, intercepting channels should be provided.	✓	*
• Drainage channels are required to convey site runoff to sand/silt traps and oil interceptors. Provision of regular cleaning and maintenance to ensure the normal operation of these facilities throughout the construction period.	✓	*
• Any practical options for the diversion and realignment of drainage should comply with both engineering and environmental requirements	✓	*
• Minimum distances of 100 m should be maintained between the discharge points of construction site runoff and the existing WSD saltwater intake and EMSD cooling water intake.	✓	*
• The following good site measures should be adopted for the use of the existing barging facilities being operated by the MTR SCL Project: - All vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash. - All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material. - Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site. - Loading of barges and hoppers should be controlled to prevent splashing of material into the surrounding water. - Barges or hoppers should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation.	N/A	*
• The runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS.	✓	*
• Reuse and recycling of the treated effluent from construction site runoff.	✓	*
• Weekly site audit should be carried out to check the implementation status of the recommended water quality impact mitigation measures throughout construction period.	✓	*
• The construction programme should be properly planned to minimise soil excavation, if any, in rainy seasons.	✓	*
• Any exposed soil surfaces should be properly protected to minimise dust emission.	✓	*
• In areas where a large amount of exposed soils exist, earth bunds or sand bags should be provided.	✓	*
• Exposed stockpiles should be covered with tarpaulin or impervious sheets at all times.	✓	*
• The stockpiles of materials should be placed at locations away from any stream courses so as to avoid releasing materials into the water bodies.	✓	*
• Final surfaces of earthworks should be compacted and protected by permanent work.	✓	*
• Haul roads should be paved with concrete and the temporary access roads protected using crushed stone or gravel, wherever practicable.	✓	*
• Wheel washing facilities should be provided at all site exits to ensure that earth, mud and debris would not be carried out of the works areas by vehicles.	P	*
• Good site practices should be adopted to keep the site dry and tidy, such as clean the rubbish and litter on the construction sites.	✓	*
• Adequate temporary site drainage and pumping should be provided, if necessary.	✓	*
• Provide sufficient temporary toilets in the works areas. The toilet facilities should be more than 30 m from any watercourse. A licensed waste collector should be deployed to clean the temporary toilets on a regular basis.	✓	*
• Notices should 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.	✓	*

Water Quality Mitigation Measures during construction	Implementation Status	
	KTSP	H/O
• Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.	✓	*
• Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.	✓	*
• Clean the construction sites on a regular basis.	P	*
• Oil interceptor in car parking area shall be designed and constructed according to Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers, APP-46 (PNAP 124)	✓	*
• Provide two sequential storage tanks to contain surface water with residual fertilizers and pesticides and third holding tank for incidental rainstorm	N/A	*
Sewerage and Sewage Treatment Implications		
• Implementation of Sewer No. 1 and Sewer No.2 as proposed in Sections 7.2.2 - 7.2.3 of the EIA Report	✓	*

Waste Management – Recommended Mitigation Measures

Waste Management Mitigation Measures during construction	Implementation Status	
	KTSP	H/O
• Inert C&D materials (or public fills) will be used to form the ramps and other filling area as far as civil engineering design permits.	✓	*
• The contractor should formulate waste management measures on waste minimization, storage, handling and disposal in a Waste Management Plan as part of Environmental Management Plan.	✓	*
• Adopt good site practice as follows: - Provide training to workers on site cleanliness, waste management (waste reduction, reuse and recycle) and chemical handling procedures - Provide sufficient waste collection points and regular removal - Cover waste materials with tarpaulin or in enclosure during transportation - Maintain drainage systems, sumps and oil interceptors - Sort out chemical waste for proper handling and treatment onsite or offsite	P	*
• Adopt waste reduction measures as follows: - Allocate area/containers for sorting, recovering and storing waste for reuse, recycle or disposal (e.g. demolition debris and excavated materials, general refuse like aluminium cans.) Remove waste from the Site for sorting once generated if no suitable space can be identified. - Allocate area for proper storage of construction materials to prevent contamination - Minimize wastage through careful planning and avoiding over-purchase of construction materials	✓	*
• Store waste materials properly as follows: - Avoid contamination by proper handling and storing waste - Prevent erosion by covering waste - Apply water spray on excavated materials - Maintain and clean storage area regularly - Sort and stockpile different materials at designated location to enhance reuse	✓	*
• Apply for relevant waste disposal permits in accordance with the Waste Disposal Ordinance (Cap. 354), Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 345) and the Land (Miscellaneous Provisions) Ordinance (Cap. 28), Dumping at Sea Ordinance (Cap. 466).	✓	*
• Hire licensed waste disposal contractors for waste collection and removal. Dispose waste at licensed waste disposal facilities.	✓	*
• Implement trip-ticket system for recording the amount of waste generated, recycled and disposed, including chemical wastes	✓	*

Waste Management Mitigation Measures during construction	Implementation Status	
	KTSP	H/O
• Reduce water content in wet spoil generated from piling work by mixing with dry materials. Only dispose treated spoil with less than 25% dry density to Public Fill Reception Facilities	✓	*
• Dispose dry waste or waste with less than 70% water content by weight to landfill	✓	*
• Follow the Code of Practice on the Packaging, Labelling and Storage of Chemical Waste as follows: - Store chemical wastes with suitable containers. Seal and maintain the container to avoid leakage or spillage during storage, handling and transport - Label chemical waste containers in both English and Chinese with instructions in accordance to Schedule 2 of the Waste Disposal (Chemical Waste) (General) Regulation - The container capacity should be smaller than 450 litres unless agreed by the EPD	✓	*
• Comply with the requirement of the chemical storage area: - Store only chemical waste and label clearly the chemical characters of the waste - Have at least 3 sides enclosed and protected from rainfall with cover - Provide sufficient ventilation - Have impermeable floor and has bunds to contain 110% of the capacity of the largest container or 20% of the total volume of the stored waste in the area, whichever is larger - Adequately spaced incompatible materials	✓	*
• Transfer used lubricants, waste oils and other chemicals to oil recycling companies, if possible, and empty oil drums for reuse or refill. No direct or indirect discharge is permitted	✓	*
• Hire licensed chemical waste disposal contractors for waste collection and removal. Dispose chemical waste at the approved Chemical Waste Treatment Centre at Tsing Yi or other licensed facility	✓	*
• Hire reputable waste collector to separately collect and dispose general refuse from other wastes. Cover the waste to prevent being blown away	✓	*
• The hauling of C&D materials shall follow established environmental mitigation measures as stated in Practice Note for Registered Contractors No. 17 “Control of Environmental Nuisance from Construction Sites” issued by the Buildings Department	✓	*
• Provide recycling bins for sorting out recyclables for collection by recycling companies. Non-recyclables should be removed to designated landfills every day by licensed collectors to prevent environmental and health nuisance.	✓	*
• Organize training and reminders to site staff on waste minimization through avoidance and reduction, reusing and recycling	✓	*
• Bentonite slurry which will not be reused shall be disposed of from the Site as soon as possible. Residual used dewatered bentonite slurry should be disposed to a public filling area and liquid bentonite slurry if mixed with inert fill material should be disposed to a public filling area.	N/A	*
• If chemical wastes were to be produced at the construction site, the Contractor would be required to register with the EPD as a Chemical Waste Producer, and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the waste such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport the chemical wastes. • The licensed collector shall deliver the waste to the Chemical Waste Treatment Centre at Tsing Yi, or other licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation	✓	*
• Carry out weekly site inspection to check the implementation status of the recommended waste management measures.	✓	*
• The barging of C&DM for this Project shall use the existing Kai Tak Barging Facility (KTBF), or otherwise approved by the Director.	N/A	*

Ecology – Recommended Mitigation Measures

Ecology Mitigation Measures during construction	Implementation Status	
	KTSP	H/O
• Erection of hoarding, fencing or provision of clear demarcation of work zone	✓	*
• Designate areas for placement of equipment, building materials and wastes away from drainage channels	✓	*
• Carry out weekly site inspection to check the implementation status and the effectiveness of the proposed mitigation measures	✓	*

Landscape and Visual – Recommended Mitigation Measures

Landscape and Visual Mitigation Measures during construction	Implementation Status	
	KTSP	H/O
• Construction Lighting Control - All security floodlights for construction sites should be equipped with adjustable shields, frosted diffusers and reflective covers, and be controlled to minimize light pollution and night-time glare to the visual sensitive receivers (VSRs).	✓	*
• Temporary Landscape Treatments - Including vertical greening, pot planting and application of green roofing to site offices, Hydroseeding of site formation areas and short term greening of site boundaries and land not immediately developed.	✓	*
• Decoration of Hoarding - Erection of screen hoardings should be designed appropriately to be compatible with the existing urban context, either brightly and imaginatively or with visually unobtrusive design and colours where more appropriate.	✓	*
• All security floodlights for construction sites shall be equipped with adjustable shield, frosted diffusers and reflective covers, and be carefully controlled to minimize light pollution and night-time glare to nearby receivers	✓	*
• Site inspection should be undertaken once every two weeks.	✓	*
• Compensatory Tree Planting - A new parkland area is created in the project development to be used for the implementation of compensatory tree planting to offset the net loss of key landscape resources. It is recommended that 340 trees be planted in this regard and a compensatory tree planting proposal outlining the locations of tree compensation will be submitted separately in seeking relevant government department's approval in accordance with DEVB TC No.7/2015.	✓	*

Other – Recommended Mitigation Measures

• Relevant environmental permits/licences should be posted at all vehicle entrances/exits.	✓	*

Legend:
✓ Implemented
× Not implemented
P Partially implemented
N/A Not applicable
* No inspection conducted

Appendix L. Statistics on Environmental Complaints, Notification of Summons and Successful Prosecutions

Table L.1: Statistics on Environmental Complaints, Notifications of Summons and Successful Prosecutions

Reporting Period	Complaints	Notifications of Summons	Successful Prosecutions
This reporting period (Mar 2025)	0	0	0
From commencement data of construction to end of reporting month	51	0	0

Appendix M. Exceedance Investigation Report

Exceedance Investigation Report

DETAIL OF EXCEEDANCE		**Ref: EXC_0034**
Monitoring Date:	3 March 2025	
Monitoring Time:	9:39 a.m.	
Monitoring Parameter:*	~~Dust~~ Noise ~~Water~~ ~~Other~~	
Monitoring Station:	NMS1-T2 (Roadside at 138 To Kwa Wan Road)	
Measured Level:	75.6 dB(A)	
Level Exceeded:	Limit Level Exceedance	

INVESTIGATION RESULT & RESPONSE

ET, IEC and SOR notified on: 2 April 2025

Investigation conducted on: 2 April 2025

Result of investigation:

Exceedance investigation was carried out with the contractor on 2 April 2025, the results of investigation were summarized as following:

According to the information from subcontractor, noise monitoring was carried out at noise monitoring station NMS1-T2 at roadside 138 To Kwa Wan Road between 9:39 a.m. and 10:09 a.m. on 3 March 2025. Nearby road traffic noise along Mok Cheong Street and To Kwa Wan Road with heavy vehicles were observed during the monitoring period. (Photo 1). No specific noisy construction activities from Kai Tak Sports Park was observed during the monitoring period at NMS1-T2.

Regular noise mitigation measure had been implemented to minimise possible environmental nuisance included:

1. Power Mechanical Equipment with Quality Power Mechanical Equipment (QPME) labels were used at site to lower the noise nuisance to the nearby residents. (Photo 2)
2. Regular site inspection was carried out to audit the implementation of mitigation measures (Photo 3)

In conclusion, the Limit Level noise exceedance at monitoring station NMS1-T2 was mainly due to nearby road traffic noise along Mok Cheong Street and To Kwa Wan Road and not related to the Kai Tak Sports Park Project.

RECOMMENDATIONS / MITIGATION MEASURES / ACTIONS

Environmental mitigation measures have been implemented as follow:

1. Power Mechanical Equipment with Quality Power Mechanical Equipment (QPME) labels were used at site to lower the noise nuisance to the nearby residents. (Photo 2)
2. Regular site inspection was carried out to audit the implementation of mitigation measures on site. (Photo 3)
3.Implementation of construction noise mitigation measures recommended in EIA's Environmental Mitigation Implementation Schedule.

Prepared by:	Sunny Chan	Title:	Environmental Team Leader
Signature:		Date:	2 April 2025

Attachment:

Photo Record:

Photo 1: Nearby road traffic along Mok Cheong Street and To Kwa Wan Road at NMS1-T2 on 3 March 2025.

Environmental Measure Implemented:

Photo 2: Power Mechanical Equipment with Quality Power Mechanical Equipment (QPME) labels were used at site to lower the noise nuisance to the nearby residents.

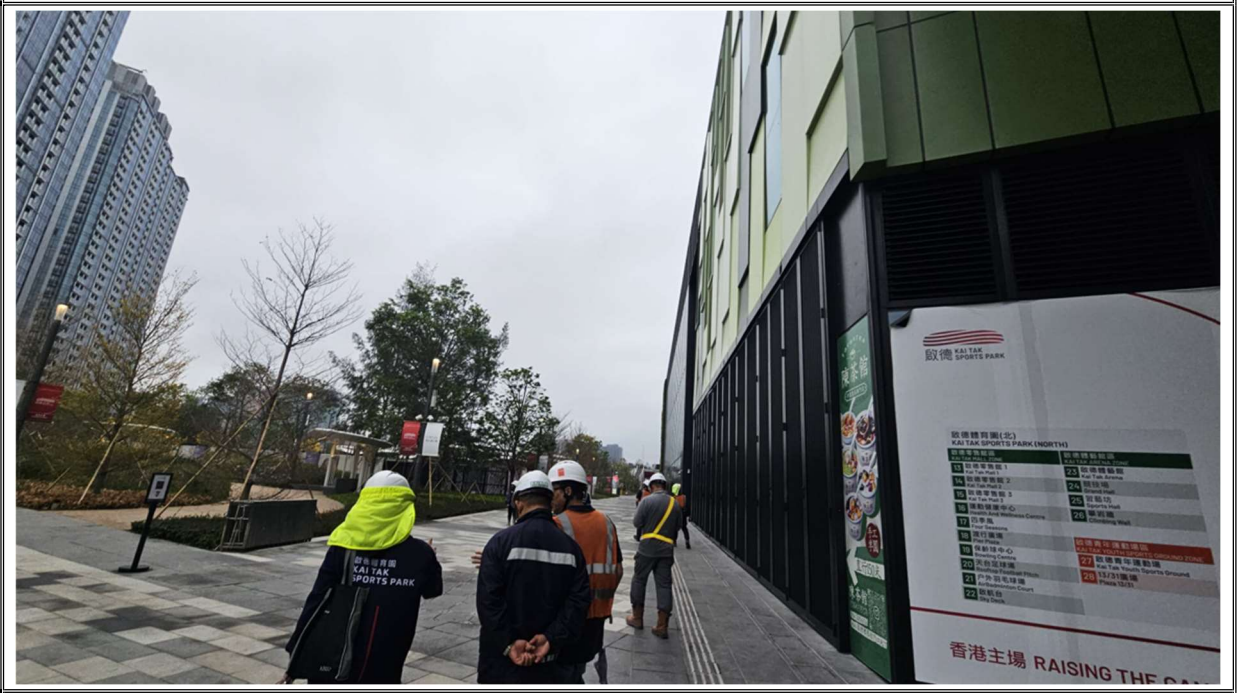


Photo 3: Regular site inspection was carried out to audit the implementation of mitigation measures on site.

Exceedance Investigation Report

DETAIL OF EXCEEDANCE		**Ref: EXC_0035**
Monitoring Date:	31 March 2025	
Monitoring Time:	9:35 a.m.	
Monitoring Parameter:*	~~Dust~~ Noise ~~Water~~ ~~Other~~	
Monitoring Station:	NMS1-T2 (Roadside at 138 To Kwa Wan Road)	
Measured Level:	75.2 dB(A)	
Level Exceeded:	Limit Level Exceedance	

INVESTIGATION RESULT & RESPONSE

ET, IEC and SOR notified on: 7 April 2025

Investigation conducted on: 7 April 2025

Result of investigation:

Exceedance investigation was carried out with the contractor on 7 April 2025, the results of investigation were summarized as following:

According to the information from subcontractor, noise monitoring was carried out at noise monitoring station NMS1-T2 at roadside 138 To Kwa Wan Road between 9:35 a.m. and 10:05 a.m. on 31 March 2025. Nearby road traffic noise along Mok Cheong Street and To Kwa Wan Road with heavy vehicles were observed during the monitoring period. (Photo 1). No specific noisy construction activities from Kai Tak Sports Park was observed during the monitoring period at NMS1-T2.

Regular noise mitigation measure had been implemented to minimise possible environmental nuisance included:

1. Power Mechanical Equipment with Quality Power Mechanical Equipment (QPME) labels were used at site to lower the noise nuisance to the nearby residents. (Photo 2)
2. Regular site inspection was carried out to audit the implementation of mitigation measures (Photo 3)

In conclusion, the Limit Level noise exceedance at monitoring station NMS1-T2 was mainly due to nearby road traffic noise along Mok Cheong Street and To Kwa Wan Road and not related to the Kai Tak Sports Park Project.

RECOMMENDATIONS / MITIGATION MEASURES / ACTIONS

Environmental mitigation measures have been implemented as follow:

1. Power Mechanical Equipment with Quality Power Mechanical Equipment (QPME) labels were used at site to lower the noise nuisance to the nearby residents. (Photo 2)
2. Regular site inspection was carried out to audit the implementation of mitigation measures on site. (Photo 3)
3.Implementation of construction noise mitigation measures recommended in EIA's Environmental Mitigation Implementation Schedule.

Prepared by:	Sunny Chan	Title:	Environmental Team Leader
Signature:		Date:	7 April 2025

Attachment:

Photo Record:

Photo 1: Nearby road traffic along Mok Cheong Street and To Kwa Wan Road at NMS1-T2 on 31 March 2025.

Environmental Measure Implemented:

Photo 2: Power Mechanical Equipment with Quality Power Mechanical Equipment (QPME) labels were used at site to lower the noise nuisance to the nearby residents.

Photo 3: Regular site inspection was carried out to audit the implementation of mitigation measures on site.