

Vol. 2 of 3

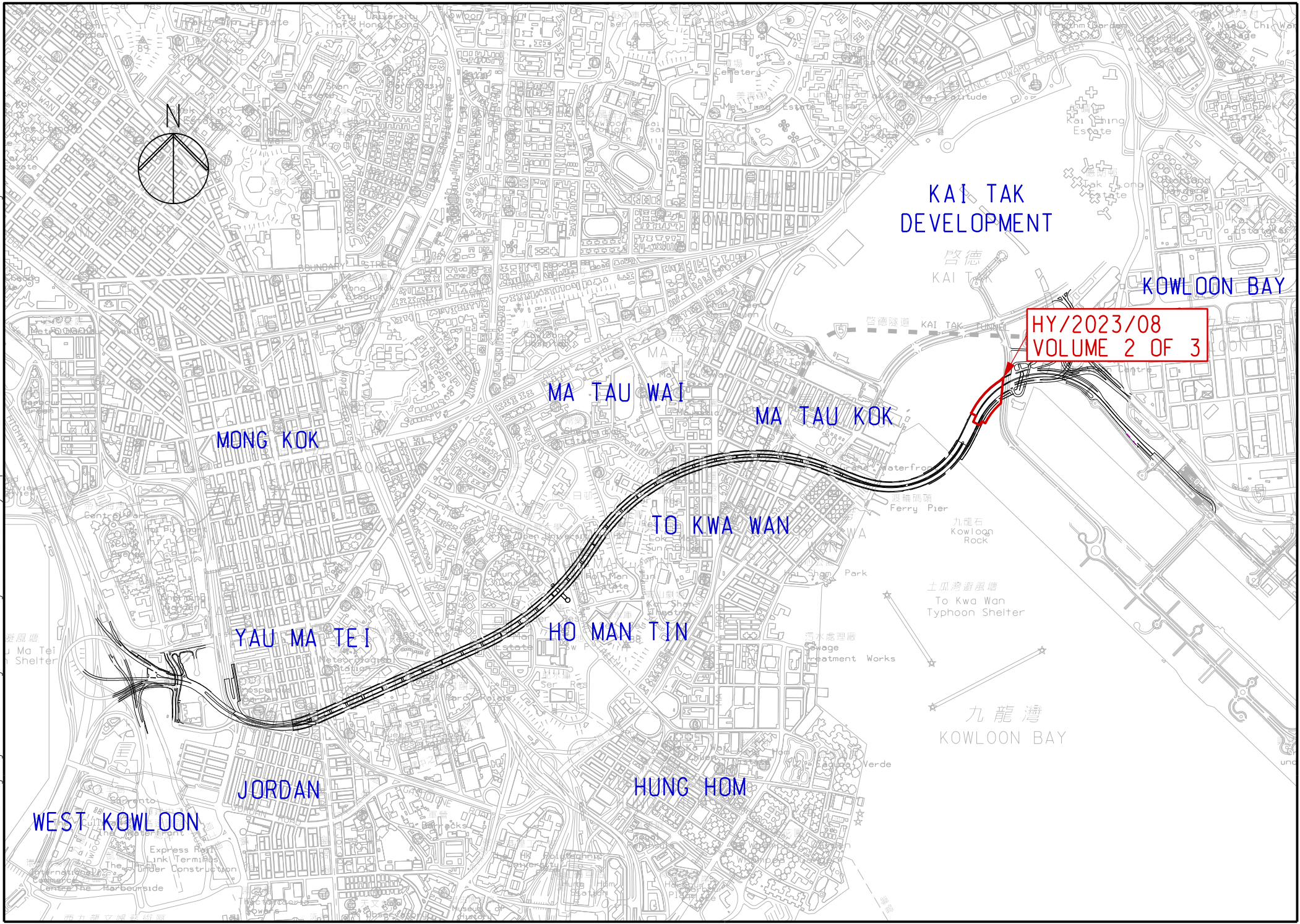
EP-457/2013/D

Remaining Works

Contract No. HY/2023/08

(Kai Tak Area)

April 2026



HY/2023/08
VOLUME 2 OF 3

KAI TAK
DEVELOPMENT

KOWLOON BAY

MA TAU WAI

MA TAU KOK

TO KWA WAN

MONG KOK

YAU MA TEI

HO MAN TIN

JORDAN

HUNG HOM

WEST KOWLOON

九龍灣
KOWLOON BAY

Environmental Permit No. EP-457/2013/D

Central Kowloon Route

Independent Environmental Checker Verification

Works Contract:	Remaining Works (HY/2023/08)
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Reference Document/Plan

Document/ Plan to be Certified / Verified:	Monthly EM&A Report No.18 (Kai Tak Phase 2B Landscaped Deck)
Date of Report:	11 May 2026
Date received by IEC:	12 May 2026

Reference EP Condition

Environmental Permit Condition:	3.4
Submission of Monthly EM&A Report of the Project	
3.4 Four hard copies and one electronic copy of monthly EM&A Report shall be submitted to the Director within 2 weeks after the end of each reporting month throughout the entire construction period. The EM&A Reports shall include a summary of all non-compliance. 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 the submission shall be provided to the Director upon request by the Director.	

IEC Verification

I hereby verify that the above referenced document/ plan complies with the above referenced condition of EP-457/2013/D.	
	
Ms Mandy To	Date: 12 May 2026
Independent Environmental Checker	

Contract No.: HY/2023/08 Central Kowloon Route – Remaining Works

Monthly Environmental Monitoring and Audit – Kai Tak Phase 2B Landscaped Deck – Report No. 18 (Period from 1st to 30th April 2026)

Build King – Tung Lee Joint Venture

Reference: P528199

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Executive Summary

1.1.1 Build King - Tung Lee Joint Venture (“Contractor”) commenced the construction works of Highway Department (HyD) Central Kowloon Route Contract No. HY/2023/08 – Central Kowloon Route – Remaining Works at Kai Tak West Area (“The Project”) on 11 November 2024. This is the 18th monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out in the Kai Tak West Area during the period from 1 April 2026 to 30 April 2026.

1.1.2 A summary of major construction activities informed by the Contractor for the Project during the reporting period is presented below.

Construction Activities Undertaken in Kai Tak West Area

- Finishes (floor & wall) installation at Kai Tak Phase 2B Landscaped Deck including at ramp
- Reinforced concrete works for additional retaining wall at Ground Level at Kai Tak Phase 2B
- Finishes for Staircase ST-02 at Kai Tak Phase 2B Landscaped Deck

Environmental Monitoring and Audit Works

1.1.3 Regular construction air quality monitoring (24-hour TSP and 1-hour TSP) and noise monitoring activities in the reporting month is summarised in below:

- Construction Air Quality Monitoring (24-hour TSP and 1-hour TSP x 3 times)
 - At Monitoring Station E-A14a on 2, 8, 14, 20, 25 and 30 April 2026
- Construction Noise Monitoring during normal working hours
 - At Monitoring Station E-N12a and EN-21a on 2, 8, 14, 20, 25 and 30 April 2026

1.1.4 Joint weekly site inspections were conducted by representatives of the Environmental team (ET), the Contractor and the Engineer on 1, 10, 17, 21 and 29 April 2026. A joint site inspection with the Independent Environmental Checker (IEC) was undertaken on 21 April 2026. Bi-weekly inspection of the implementation of landscape and visual mitigation measures was conducted by the ET on 1, 17 and 29 April 2026. Details of the audit findings and implementation status are presented in **Section 7**. Details of waste management are presented in **Section 4**.

1.1.5 A summary of the non-compliance (exceedance) during the reporting period is provided below.

- Air quality Monitoring
 - No Action / Limit Level exceedance for 1-hour TSP was recorded.
 - No Action / Limit Level exceedance for 24-hour TSP was recorded.
- Noise Monitoring
 - No Action / Limit Level exceedance for construction noise was recorded.

Complaints, Notification of Summons and Successful Prosecution

1.1.6 No environmental related complaints, notification of summons and successful prosecution were received in the reporting period.

Reporting Changes

1.1.7 There were no reporting changes during the reporting period.

Future Key Issues

1.1.8 A summary of construction activities informed by the Contractor for the next reporting period are listed below:

Construction Activities To be Undertaken in Kai Tak West Area

- Finishes (floor & wall) installation and E&M works at Kai Tak Phase 2B Landscaped Deck including at ramp and staircase
- E&M works at Kai Tak Phase 2B Landscaped Deck including at ramp and staircase
- Finishes for Staircase ST-02 at Kai Tak Phase 2B Landscaped Deck

1 Introduction

1.1 Basic Project Information

1.1.1 Central Kowloon Route (CKR) is a 4.7 km long dual 3-lane trunk road in Central Kowloon linking Yau Ma Tei Interchange in West Kowloon with the road network on Kai Tak Development and Kowloon Bay in East Kowloon.

1.1.2 The Central Kowloon Route – Design and Construction Environmental Impact Assessment Report (Register No.: AEIAR-171/2013) was approved with conditions by the Environmental Protection Department (EPD) on 11 July 2013. An Environmental Permit (EP-457/2013) was issued on 9 August 2013. Variations of EP (VEP) was subsequently applied for and the latest EP (EP-457/2013/D) was issued by EPD on 15 June 2021.

1.1.3 The construction of the CKR had been divided into different sections. Contract No. HY/2023/08 – Central Kowloon Route – Remaining Works covers part of the construction activities located at Kai Tak West Area and Yau Ma Tei Area under the EP, including:

- design and construction of landscaping works at Yau Ma Tei Landscaped Deck, Yau Ma Tei Rest Gardens, North Tree Park and Kai Tak Phase 2B Landscaped Deck;
- improvement of a section of Kai Fuk Road of approximately 300 metres in length;
- planting of compensatory trees; and
- associated civil works, electrical and mechanical works, road and drainage works, lighting works and establishment works.

1.1.4 The works site at Kai Tak West Area for the Contract No. HY/2023/08 are shown in **Appendix A**.

1.2 Purpose of the Report

1.2.1 This is the 18th monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out for the Project in the Kai Tak West Area during the period from 1 April 2026 to 30 April 2026.

1.3 Construction Activities Undertaken During the Reporting Period

1.3.1 A summary of major construction activities carried out during the reporting period are presented in **Table 1.1**. The construction programme is presented in **Appendix B**.

Table 1.1 Summary of Construction Activities during the Reporting Period

Construction Activities Undertaken in Kai Tak West Area	Progress
<ul style="list-style-type: none"> • Finishes (floor & wall) at Kai Tak Phase 2B Landscaped Deck including at ramp 	98%
<ul style="list-style-type: none"> • Reinforced concrete works for additional retaining wall at Ground Level at Kai Tak Phase 2B 	100%
<ul style="list-style-type: none"> • Finishes for Staircase ST-02 at Kai Tak Phase 2B Landscaped Deck 	10%

1.4 Project Organisation

1.4.1 The project organization structure is shown in **Appendix C**. The key personnel contact names and numbers for the Project are summarized in **Table 1.2**.

Table 1.2 Contact Information of Key Personnel

Party	Role	Position	Name	Contact No.
Arup – Mott MacDonald Joint Venture	Engineer's Representative ("ER")	Resident Engineer (Environmental)	Ms. Jim Li	9120 1157
ERM – Hong Kong Limited	Independent Environmental Checker ("IEC")	IEC	Ms. Mandy To	2271 3313
Aurecon Hong Kong Limited	Environmental Team ("ET")	ET Leader	Mr. F.C. Tsang	3664 6801
Build King – Tung Lee Joint Venture	Contractor	Environmental Officer	Mr. Tony Tsoi	9689 8956

1.5 Status of Environmental Licences, Notification and Permit

1.5.1 A summary of the valid permits, licences, and/ or notifications on environmental protection for this Project is presented in **Table 1.3**.

Table 1.3 Summary of the Environmental Licence, Notification, Permit and Documentations

Permit/ License/ Notification / Reference No.	Valid Period		Status	Remark
	From	To		
Environmental Permit				
EP-457/2013/D	15 June 2021	--	Valid	--
Wastewater Discharge License				
WT00046473- 2025	9 May 2025	End of Project	Valid	--
Notification of Construction Works Under the Air Pollution Control (Construction Dust Regulation)				
10007346	25 July 2024	End of Project	Notified	--
Chemical Waste Producer Registration				
5213-286- B2767-02	19 March 2025	--	Valid	--
Billing Account for Disposal of Construction Waste				
7051793	6 August 2024	--	Valid	--
Y-Park Membership				
C0280	12 August 2024	--	Valid	--
Construction Noise Permit				
GW-RE0303-26	24 March 2025	19 September 2026	Valid	General Activities at Kai Tak Phase 2B Landscaped Deck

2 Environmental Status

2.1 Environmental Permit (EP) Submission Status

2.1.1 Environmental permit (EP) conditions under the EIAO, submission status under the EP and implementation status of mitigation measures had been reviewed and implemented on schedule. The status of required submissions under the EP (EP-457/2013/D) during the reporting period for the Project are summarised in **Table 2.1**.

Table 2.1 Summary of Status of Required Submission for EP-457/2013/D for the Project

EP Condition (EP-457/2013/D)	Submission	Submission Date
3.4	Monthly EM&A Report – Kai Tak Phase 2B Landscape Deck (March 2026)	14 April 2026

3 Air Quality and Noise Monitoring

3.1 Air Quality

Monitoring Requirements

- 3.1.1 In accordance with the approved EM&A Manual, measurement of 24-hour and 1-hour Total Suspended Particulates (TSP) level at the designated air quality monitoring station is required. Impact 24-hour TSP monitoring should be carried out for at least once every 6 days, and 1-hour TSP monitoring should be done at least 3 times every 6 days while the highest dust impact is expected.

Monitoring Equipment

- 3.1.2 24-hour TSP air quality monitoring was performed using High Volume Sampler (HVS) located at the designated monitoring station. The HVS meets all the requirements of the EM&A Manual. A portable direct reading dust meter was used to carry out the 1-hour TSP monitoring.

- 3.1.3 A summary of the equipment that was deployed for the air quality monitoring is shown in **Table 3.1**.

Table 3.1 Air Quality Monitoring Equipment

Monitoring Parameter	Monitoring Equipment	Serial Number	Date of Calibration
24-hour TSP	High Volume Sampler (Model No. TE-5170X)	1087	28 March 2026
	Calibration Kit (Model No. TE-5025A)	4166	8 May 2025
	Calibration Kit (Model No. TE-5028A)	3702	2 January 2026
1-hour TSP	Digital Dust Indicator (Model: Sibata LD-5R)	467361	24 March 2026
		356840	24 March 2026
		356841	24 March 2026
		2Y6548	24 March 2026

Monitoring Locations

- 3.1.4 The monitoring station for air quality monitoring pertinent to the Project has been identified based on the approved EM&A Manual for the Project. The location of the air quality monitoring station is summarized in **Table 3.2** and shown in **Appendix G**.

Table 3.2 Air Quality Monitoring Station

Location I.D.	Monitoring Station	Description
E-A14a ⁽¹⁾	Block B of Merit Industrial Centre	Rooftop (13/F)

Note:

- (1) The air monitoring station proposed in the EM&A Manual (i.e. Wyler Gardens with ID: E-A14) was not available for impact dust monitoring, therefore impact monitoring was conducted at E-A14a as an alternative which was agreed by the ER, IEC and EPD.

Monitoring Methodology and QA/QC

3.1.5 24-hour TSP Monitoring

- The HVS was installed in the vicinity of the air sensitive receivers. The following criteria were considered in the installation of the HVS as far as practicable: -
 - A horizontal platform with appropriate support to secure the sampler against gusty wind was provided.
 - Two samplers should not be placed less than 2m apart from each other.
 - The distance between the HVS and any obstacles, such as buildings, was at least twice the height that the obstacle protrudes above the HVS.
 - A minimum of 2 meters separation from walls, parapets and penthouse for rooftop sampler.
 - A minimum of 2 meters separation from any supporting structure, measured horizontally is required.
 - No furnace or incinerator flues nearby.
 - Airflow around the sampler was unrestricted.
 - The sampler was located more than 20 meters from any dripline.
 - Any wire fence and gate, required to protect the sampler, did not obstruct the monitoring process.
 - Permission was obtained to set up the samplers and access to the monitoring station.
 - A secured supply of electricity was obtained to operate the sampler.

- Preparation of Filter Paper
 - Glass fibre filters, G810 were labelled and sufficient filters that were clean and without pinholes were selected.
 - All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than ± 3 °C; the relative humidity (RH) was < 50% and not variable by more than ± 5 %. A convenient working RH was 40%.
 - All filter papers were prepared and analysed by Acumen Laboratory and Testing Limited and ALS Technichem (HK) Pty Limited, which is a HOKLAS accredited laboratory and has comprehensive quality assurance and quality control programmes.
- Field Monitoring
 - The power supply was checked to ensure the HVS works properly.
 - The filter holder and the area surrounding the filter were cleaned.
 - The filter holder was removed by loosening the four bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully.
 - The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter.
 - The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied was sufficient to avoid air leakage at the edges.
 - Then the shelter lid was closed and was secured with the aluminium strip.
 - The HVS was warmed-up for about 5 minutes to establish run-temperature conditions.
 - A new flow rate record sheet was set into the flow recorder.
 - On site temperature and atmospheric pressure readings were taken and the flow rate of the HVS was checked and adjusted at around 1.3 m³/min, and complied with the range specified in the EM&A Manual (i.e. 0.6-1.7 m³/min).
 - The programmable digital timer was set for a sampling period of 24 hrs, and the starting time, weather condition and the filter number were recorded.
 - The initial elapsed time was recorded.
 - At the end of sampling, on site temperature and atmospheric pressure readings were taken and the final flow rate of the HVS was checked and recorded.
 - The final elapsed time was recorded.
 - The sampled filter was removed carefully and folded in half length so that only surfaces with collected particulate matter were in contact.

- It was then placed in a clean envelope and sealed.
 - All monitoring information was recorded on a standard data sheet.
 - Filters were then sent to Acumen Laboratory and Testing Limited for analysis.
- Maintenance and Calibration
 - The HVS and its accessories were maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.
 - HVSs were calibrated using TE-5025A Calibration Kit upon installation and thereafter at bi-monthly intervals.
 - Calibration certificate of the TE-5025A Calibration Kit and the HVSs are provided in **Appendix I**.
 - Wind Data Monitoring
 - The wind speed has been recorded from Hong Kong Observatory- King's Park meteorological station, along with portable wind speed meter stand by as back up when the information is not available from HKO.

3.1.6 1-hour TSP Monitoring

- The measuring procedures of the 1-hour 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 SENS 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.
 - Push the "TIME SETTING" switch the time set in the display to 3 hours.
 - Lower down the air collection opening cover.
 - Push "START/STOP" switch to start measurement.
- Maintenance and Calibration

- The 1-hour TSP meter was calibrated at 1-year intervals against a High Volume Sampler. Calibration certificates of the Laser Dust Monitors are provided in **Appendix I**.

Monitoring Schedule for the Reporting Month

- 3.1.7 The schedule for impact air quality monitoring in [April 2026](#) is provided in **Appendix H**.

Monitoring Results

- 3.1.8 The monitoring results for 24-hour TSP and 1-hour TSP are summarized in **Table 3.3** and **Table 3.4** respectively. Detailed air quality monitoring results and daily extract of meteorological observations are presented in **Appendix J**.

Table 3.3 Summary of 24-hour TSP Monitoring Result in the Reporting Period

Location I.D.	Range (µg/m ³)	Action Level (µg/m ³)	Limit Level (µg/m ³)
E-A14a	25 – 83	197.3	260

Table 3.4 Summary of 1-hour TSP Monitoring Result in the Reporting Period

Location I.D.	Range (µg/m ³)	Action Level (µg/m ³)	Limit Level (µg/m ³)
E-A14a	30 – 58	302.4	500

- 3.1.9 Major dust sources during the monitoring included construction dust and nearby traffic emission.

Observations

- 3.1.10 No Action/ Limit Level exceedance was recorded for all 1-hour TSP and 24-hour TSP monitoring at the monitoring location in the reporting period.
- 3.1.11 The event and action plan are annexed in **Appendix D**.
- 3.1.12 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of air quality mitigation measures within the site boundaries of this Project. A summary of observation during the site audits is shown in **Table 7.1** of this report.

3.2 Noise

Monitoring Requirements

- 3.2.1 In accordance with the EM&A Manual, impact noise monitoring should be conducted for at least once a week during the construction phase of the Project. **Table 3.5** summaries the monitoring parameters, frequency and duration of impact noise monitoring.

Table 3.5 Noise Monitoring Parameter, Frequency and Duration

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

Monitoring Equipment

- 3.2.2 Noise monitoring was performed using sound level meter at each designated 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. A summary of equipment is given in **Table 3.6**.

Table 3.6 Summary of Noise Monitoring Equipment

Equipment	Manufacturer and Model	Serial Number	Date of Calibration
Sound Level Meter	NTi XL3	A3A-01229-F0	24 July 2025
		A3A-01220-F0	22 October 2025
		A3A-01231-F0	10 June 2025
Acoustic Calibrator	RION NC-75	34724244	11 July 2025
		35124527	13 January 2026

Monitoring Locations

- 3.2.3 The monitoring stations for construction noise monitoring pertinent to the Project have been identified based on the approved EM&A Manual for the Project. Locations of the noise monitoring stations are summarized in **Table 3.7** and shown in **Appendix G**.

Table 3.7 Noise Monitoring Station for Construction Phase

Location I.D.	Monitoring Station	Description	Measurement
E-N12a ⁽¹⁾	19 Hing Yan Street	Rooftop (9/F)	Façade
E-N21a	Block B of Merit Industrial Centre	Rooftop (13/F)	Free-field ⁽²⁾

Note:

- (1) The noise monitoring stations proposed in the EM&A Manual (i.e. Grand Waterfront Tower 3 with ID: E-N12 and Hang Chien Court Block J with ID: E-N21) were not available for impact noise monitoring, therefore impact monitoring was conducted at E-N12a and E-N21a as an alternative which was agreed by the ER, IEC and EPD.
- (2) A correction of +3 dB(A) was made to the free-field measurements.

Monitoring Methodology and QA/QC

- **Monitoring Procedures**

- The sound level meter was set on a tripod at a height of 1.2 m above the ground.
- Façade measurement was made at E-N12a.
- Free field measurements was made at monitoring location E-N21a. A correction of +3 dB(A) shall be made to the free field measurements.
- 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
 - time weighting: Fast
 - time measurement: $L_{eq(30\text{-minutes})}$ during non-restricted hours i.e. 0700 – 1900 on normal weekdays.
- Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator for 94 dB(A) at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1 dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- During the monitoring period, the L_{eq} , L_{10} and L_{90} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.

- Noise measurement was paused during periods of high intrusive noise (e.g. dog barking, helicopter noise) if possible. Observations were recorded when intrusive noise was unavoidable.
- Noise monitoring was cancelled in the 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 was cleaned with soft cloth at regular intervals.
 - The meter and calibrator were sent to the supplier or HOKLAS laboratory to check and calibrate at yearly intervals.
 - Calibration certificates of the sound level meters and acoustic calibrators are provided in **Appendix K**.

Monitoring Schedule for the Reporting Month

3.2.4 The schedule for impact air quality monitoring in [April 2026](#) is provided in **Appendix H**.

Monitoring Results

3.2.5 The monitoring results for noise are summarized in **Table 3.8** and the monitoring data is provided in **Appendix L**.

Table 3.8 Summary of Construction Noise Monitoring Results in the Reporting Period

Location I.D.	Range, dB(A), L_{eq} (30 mins)	Limit Level, L_{eq} (30 mins)
E-N12a	53.0 – 56.5	75.0
E-N21a	59.9 – 70.5 ⁽¹⁾	75.0

Note:

(1) A correction of +3 dB(A) was made to the free-field measurements.

- 3.2.6 Major noise sources during the monitoring included nearby traffic noise with sometimes construction noise from the nearby construction.

Observations

- 3.2.7 No Action/ Limit Level exceedance was recorded for construction noise monitoring in the reporting period.
- 3.2.8 Site audits were carried out on a weekly basis to monitor and audit the timely implementation of noise mitigation measures within the site boundaries of this Project. A summary of observations during the site audits is shown in **Table 7.1** of this report.

4 Waste Management

4.1.1 Waste generated from this Project includes inert C&D materials and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/ cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. As advised by the Contractor, only general refuse was generated and disposed of during this reporting period.

4.1.2 With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting period are summarised in **Table 4.1**. Details of cumulative waste management data are presented as a waste flow table in **Appendix M**.

Table 4.1 Quantities of Waste Generated from the Project in the Reporting Period

Reporting period	Quantity					
	Inert C&D Materials (in '000 kg)	Chemical Waste (in 'kg)	Others, e.g. General Refuse disposed of at Landfill (in '000kg)	Non-inert C&D Materials		
				Paper/ cardboard (in '000kg)	Plastics (in '000 kg)	Metals (in '000 kg)
April 2026	182.300	0.00	8.490	0.00	0.00	0.00

5 Landscape and Visual

- 5.1.1 As per the EM&A Manuals, the landscape and visual mitigation measures shall be implemented, and site inspections should be undertaken once every two weeks during the construction period.
- 5.1.2 Bi-weekly inspection of the implementation of landscape and visual mitigation measures was conducted on [1, 17 and 29 April 2026](#). The observations and recommendations made during the site inspections are presented in **Table 7.1**. A summary of the implementation status is presented in **Appendix F**.

6 Summary of Complaints, Notification of Summons and Prosecutions

6.1.1 The environmental Complaints Handling Procedures is shown below.

<i>Complaint Received via Project Hotline</i>	<i>Complaint Received via 1823 or from other government departments</i>
Contractor notify ER, ET and IEC	ER notify Contractor, ET and IEC
Contractor log complaint and date of receipt onto the complaint database. Contractor, ER and ET to conduct investigation of complaint	
If complaint is considered not valid	If complaint is found valid
ET or ER to reply to the complainant if necessary	Contractor to identify and implement remedial measures in consultation with the IEC, ET and ER.
	The ER, ET and IEC to review the effectiveness of the Contractor's remedial measures and the updated situation; ET to undertake additional monitoring and audit to verify the situation if necessary and oversee that circumstances leading to the complaint do not recur. ER to conduct further inspection as necessary.
If the complaint is referred by the EPD, the Contractor to prepare interim report on the status of the complaint investigation and follow-up actions stipulated above, including the details of the remedial measures and additional monitoring identified or already taken, for submission to EPD within the timeframe assigned by the EPD	
The ET to record the details of the complaint, results of the investigation, subsequent actions taken to address the complaint and updated situation including the effectiveness of the remedial measures, supported by regular and additional monitoring results in the monthly EM&A reports	

- 6.1.2 Should non-compliance of the criteria occur, action in accordance with the Event and Action Plan in **Appendix D** and **Appendix E** shall be carried out.
- 6.1.3 No exceedance of the Action and Limit Levels of air quality (1-hour TSP and 24-hour TSP) monitoring and noise monitoring was recorded in the reporting period.
- 6.1.4 No complaint was received in the reporting period.
- 6.1.5 No non-compliance was received in the reporting period.
- 6.1.6 No notification of summons and successful prosecution was received in the reporting period.
- 6.1.7 Statistics on complaints, notifications of summons and successful prosecutions are summarized in **Appendix N**.

7 EM&A Site Inspection

7.1.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, 5 site inspections were carried out by the representative of ET, Contractor and Engineer on 1, 10, 17, 21 and 29 April 2026, along with bi-weekly inspection of the implementation of landscape and visual mitigation measures conducted on 1, 17 and 29 April 2026.

7.1.2 One joint site inspection with the IEC was also undertaken on 21 April 2026. No major environmental issue were observed during weekly site inspection. Key observations during the site inspections are summarized in **Table 7.1**.

Table 7.1 Summary of Site Observation

Date	Environmental Observations	Follow-up Status
1 April 2026	1. Chemicals should be kept inside drip trays to avoid leakage at Kai Tak Landscaped Deck.	1. The concerned chemical was removed. (Rectified on 9 April 2026)
10 April 2026	Nil.	Nil.
17 April 2026	Nil.	Nil.
21 April 2026	Nil.	Nil.
29 April 2026	1. At Kai Tak Landscaped Deck, drip tray(s) should be provided to chemicals to avoid leakage.	1. Drip tray was provided to the chemicals. (Rectified on 29 April 2026)

7.1.3 According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents had been implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in **Appendix F**.

8 Future Key Issues

8.1.1 The construction activities to be undertaken in the next reporting period are listed below:

Construction Activities To be Undertaken in Kai Tak West Area

- Finishes (floor & wall) installation and E&M works at Kai Tak Phase 2B Landscaped Deck including at ramp and staircase
- E&M works at Kai Tak Phase 2B Landscaped Deck including at ramp and staircase
- Finishes for Staircase ST-02 at Kai Tak Phase 2B Landscaped Deck

8.1.2 Potential environmental impacts arising from the above construction activities are mainly associated with dust and waste management.

8.1.3 The tentative schedule of air quality (1-hour TSP and 24-hour TSP) monitoring and noise monitoring in the next reporting period is presented in **Appendix H**.

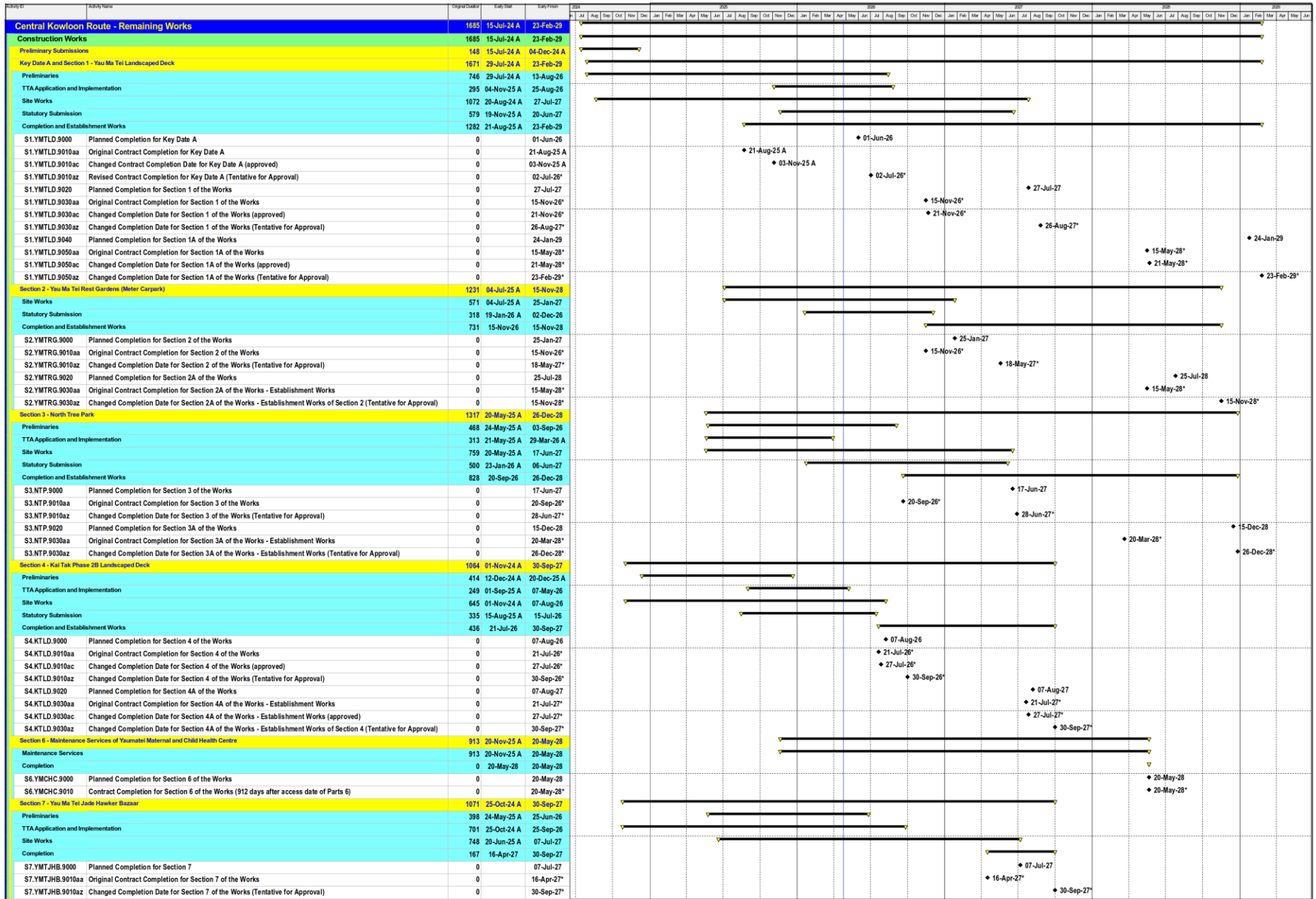
8.1.4 The construction programme for the Project for the next reporting period is presented in **Appendix B**.

9 Conclusion and Recommendations

- 9.1.1 This is the 18th monthly EM&A Report presenting the EM&A works undertaken in Kai Tak West Area during the period from 1 April 2026 to 30 April 2026 in accordance with the EM&A Manual and the requirement under EP-457/2013/D.
- 9.1.2 Air quality monitoring (including 1-hour TSP and 24-hour TSP) and noise monitoring were carried out in the reporting period. No exceedance of the Action or Limit Level was recorded for air quality monitoring and noise during the reporting period.
- 9.1.3 Weekly environmental site inspections by representatives of the ET, the Contractor and the Engineer were conducted during the reporting period. One joint site inspection with the IEC was carried out on 21 April 2026. Minor deficiencies were observed during site inspection and was rectified within specified deadlines. The environmental performance of the Project was therefore considered satisfactory.
- 9.1.4 No complaint was received in the reporting period.
- 9.1.5 No non-compliance situation was received in the reporting period.
- 9.1.6 No notification of summons or prosecution was received since commencement of the Contract.
- 9.1.7 The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Appendix A
Alignment and Works Site in Kai Tak West Area for
Contract No. HY/2023/08

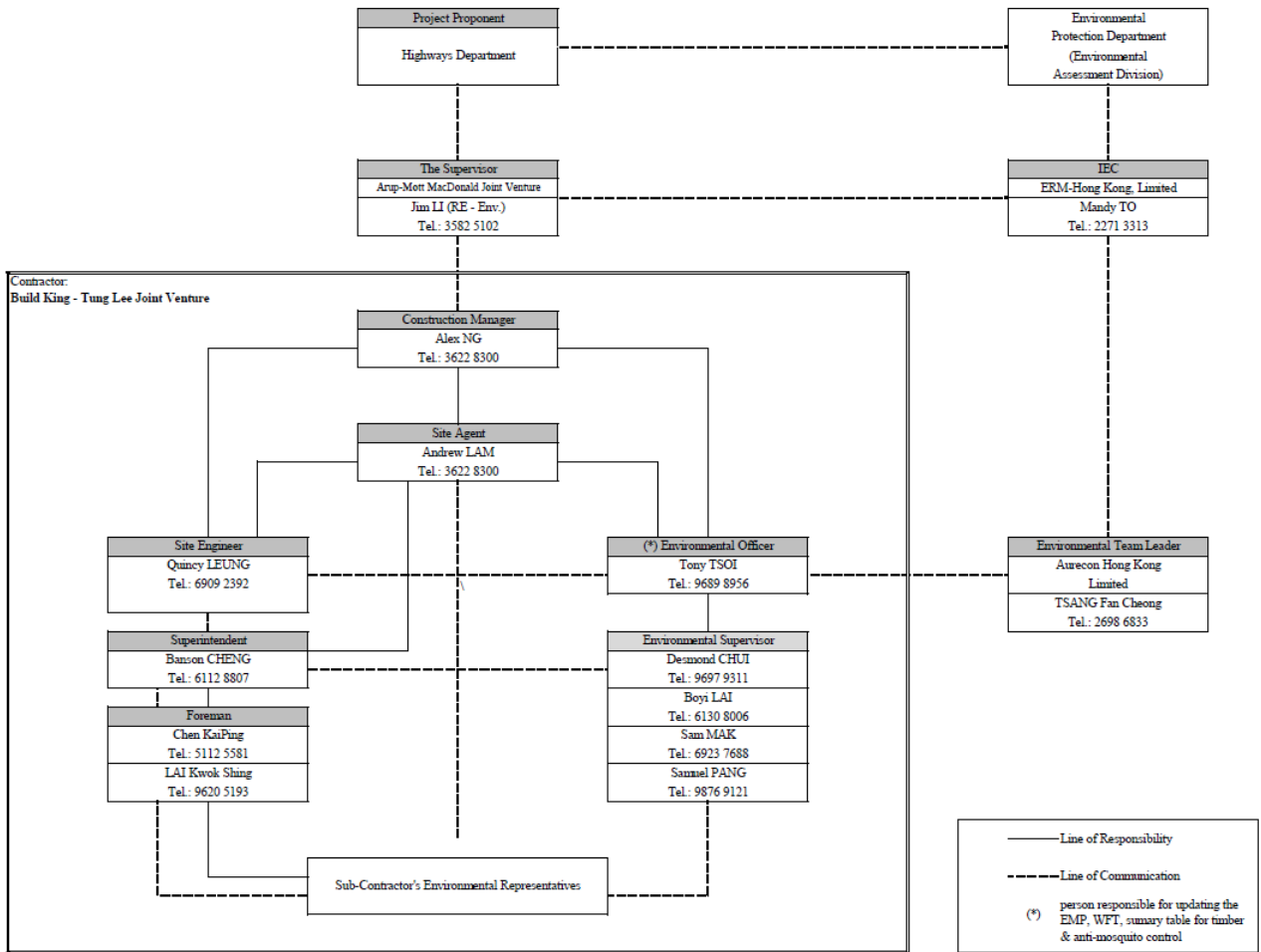
Appendix B
Construction Programme



Appendix C
Project Organisation Chart

Contract No.: HY/2023/08
Central Kowloon Route - Remaining Works
Environmental Organization Chart

Last Update: 30 Mar 2026



Appendix D

Event and Action Plan (EAP) (Air Quality Monitoring)

EVENT	ACTION			
	ENVIRONMENTAL TEAM (ET)	INDEPENDENT ENVIRONMENTAL CHECKER (IEC)	ENGINEER'S REPRESENTATIVE (ER)	CONTRACTOR
ACTION LEVEL				
Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method. 	<ol style="list-style-type: none"> 1. Notify Contractor. 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Submit proposals for remedial actions to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.

EVENT	ACTION			
	ENVIRONMENTAL TEAM (ET)	INDEPENDENT ENVIRONMENTAL CHECKER (IEC)	ENGINEER'S REPRESENTATIVE (ER)	CONTRACTOR
LIMIT LEVEL				
Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate.
Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consultation with the IEC, agree with the Contractor 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 Contractor to stop that portion of work until the exceedance is abated. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Appendix E
Event and Action Plan (EAP) (Noise Monitoring)

EVENT	ACTION			
	ENVIRONMENTAL TEAM (ET)	INDEPENDENT ENVIRONMENTAL CHECKER (IEC)	ENGINEER'S REPRESENTATIVE ER	CONTRACTOR
Action Level	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Notify IEC and Contractor; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness. 	<ol style="list-style-type: none"> 1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.

Appendix F
Environmental Mitigation Implementation Schedule
(EMIS)

Environmental Mitigation Implementation Schedule

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
Construction Dust Impact								
S4.3.10	D1	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation and Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation.	Minimize dust impact and adverse health effects at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> APCO To control the dust impact to meet HKAQO and TM-EIA criteria 	Implemented.
S4.3.10	D2	<ul style="list-style-type: none"> Mitigation measures in form of regular watering under a good site practice should be adopted. Watering once per hour on exposed worksites and haul road should be conducted to achieve dust removal efficiencies of 91.7%. While the above watering frequencies are to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.3 L/m² to achieve the dust removal efficiency. 	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> APCO To control the dust impact to meet HKAQO and TM-EIA criteria 	Implemented.
S4.3.10	D3	<ul style="list-style-type: none"> Proper watering at exposed spoil should be undertaken throughout the construction phase; Any 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 or backfilled or reinstated where practicable within 24 hours of the excavation or unloading; Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads; A stockpile of dusty material should not be extended beyond the pedestrian barriers, fencing or traffic cones; The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle. Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit 	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> APCO To control the dust impact to meet HKAQO and TM-EIA criteria 	Implemented for the 1 st to 8 th bullet. N/A for other bullets.

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<p>point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores;</p> <ul style="list-style-type: none"> • When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided and properly maintained as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period; • 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; • 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 so as to maintain the entire surface wet; • Any skip hoist for material transport should be totally enclosed by impervious sheeting; • Every stock of more than 20 bags of cement or dry-pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides; • Loading, unloading, transfer, handling or storage of bulk cement or dry PFA 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 						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<ul style="list-style-type: none"> Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies. 						
S4.3.10	D6	Implement regular dust monitoring under EM&A programme during the construction stage.	Monitoring of dust impact	Contractor	Selected rep. dust monitoring station	Construction stage	• TM-EIA	Implemented
Construction Noise (Airborne)								
S5.4.1	N1	<p>Implement the following good site practices:</p> <ul style="list-style-type: none"> Only well-maintained plant should be operated on-site, and plant should be serviced regularly during the construction programme; Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs; Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works; Mobile plant should be sited as far away from NSRs as possible and practicable; Material stockpiles, mobile container site office and other structures should be effectively utilized, where practicable, to screen noise from on-site construction activities. 	Control construction airborne noise	Contractor	All construction sites	Construction stage	• Annex 5, TM-EIAO	Implemented for the 1 st , 2 nd , 5 th bullets, N/A for other bullets
S5.4.1	N2	Install temporary hoarding located on the site boundaries between noisy construction activities and NSRs. The conditions of hoardings shall be properly maintained throughout the construction period.	Reduce the construction noise levels at low-level zone of NSRs	Contractor	All construction sites	Construction stage	• Annex 5, TM-EIAO	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
			through partial screening					
S5.4.1	N3	Install movable noise barriers (typical design is wooden framed barrier with a small-cantilevered on a skid footing with 25mm thick internal sound absorptive lining), acoustic mat or full enclosure, screen the noisy plants including air compressors, generators and handheld breakers, etc.	Screen the noisy plant items to be used at all construction sites	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM-EIAO	N/A
S5.4.1	N4	Use 'Quiet plant'	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM-EIAO	Implemented
S5.4.1	N5	Loading/ unloading activities should be carried out inside the full enclosure of mucking out points.	Reduce the noise levels of loading/ unloading activities	Contractor	Mucking out locations	Construction stage	• Annex 5, TM-EIAO	N/A
S5.4.1	N6	Sequencing operation of construction plants where practicable.	Operate sequentially within the same work site to reduce the construction airborne noise	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM-EIAO	N/A
S5.4.1	N7	Implement a noise monitoring programme under EM&A programme.	Monitor the construction noise levels at the selected representative locations	Contractor	Selected rep. noise monitoring station	Construction stage	• TM-EIAO	Implemented
Water Quality (Construction Phase)								
S6.9.1.1	W1	In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 2023 (ProPECC PN 2/23), construction phase mitigation measures shall include the following:	To minimize water quality impact from the construction site runoff and general	Contractor	All construction sites where practicable	Construction stage	<ul style="list-style-type: none"> • Water Pollution Control Ordinance • ProPECC PN 2/23 	Implemented for the 1 st , 3 rd , 7 th to 11 th , 13 th , 14 th to 16 th bullets

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<p>Construction Runoff</p> <ul style="list-style-type: none"> At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sandbag barriers should be provided on site to direct stormwater to silt removal facilities. The design of the temporary on-site drainage system will be undertaken by the contractor prior to the commencement of construction; The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/ sediment trap. The sediment/ silt traps should be incorporated in the permanent drainage channels to enhance deposition rates; The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 2/23, which states that the retention time for silt/ sand traps should be 5 minutes under maximum flow conditions. Sizes may vary depending upon the flow rate, but for a flow rate of 0.1 m³/s a sedimentation basin of 30 m³ would be required and for a flow rate of 0.5 m³/s the basin would be 150 m³. The detailed design of the sand/ silt traps shall be undertaken by the contractor prior to the commencement of construction; All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. Exposed slope surfaces should be covered by tarpaulin or other means; 	construction activities				<ul style="list-style-type: none"> TM-EIAO TM-DSS 	N/A for other bullets

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<ul style="list-style-type: none"> • The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows, and all traffic areas and access roads protected by coarse stone ballast. An additional advantage accruing from the use of crushed stone is the positive traction gained during prolonged periods of inclement weather and the reduction of surface sheet flows; • All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas; • Measures should be taken to minimize the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities; • Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50m³ should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system; • Manholes should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers; • Precautions be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC PN 						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<p>2/23. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes;</p> <ul style="list-style-type: none"> • All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and site wheel washing facilities should be provided at every construction site exit where practicable. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel wash bay to the public road should be paved with sufficient backfall toward the wheel wash bay to prevent vehicle tracking of soil and silty water to public roads and drains; • Oil interceptors should be provided in the drainage system downstream of any oil/ fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain; • Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts; • All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby; • Adopt best management practices; • All earth works should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to September) as far as practicable. 						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S6.9.1.2	W2	<u>Tunnelling Works and Underground Works</u> <ul style="list-style-type: none"> • Cut-&-cover tunnelling work should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to September) as far as practicable. • Uncontaminated discharge should pass through sedimentation tanks prior to off-site discharge; • The wastewater with a high concentration of SS should be treated (e.g. by sedimentation tanks with sufficient retention time) before discharge. Oil interceptors would also be required to remove oil, lubricants and grease from the wastewater; • Direct discharge of the bentonite slurry (as a result of D-wall) is not allowed. It should be reconditioned and reused wherever practicable. Temporary storage locations (typically a properly closed warehouse) should be provided on site for any unused bentonite that needs to be transported away after all the related construction activities area completed. The requirements in ProPECC PN 2/23 should be adhered to in the handling and disposal of bentonite slurries. 	To minimize construction water quality impact from tunnelling works	Contractor	All tunnelling portion	Construction stage	<ul style="list-style-type: none"> • Water Pollution Control Ordinance • ProPECC PN 2/23 • TM-DSS • TM-EIAO 	N/A
S6.9.1.3	W3	<u>Sewage Effluent</u> <ul style="list-style-type: none"> • Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance. 	To minimize water quality from sewage effluent	Contractor	All construction sites where practicable	Construction stage	<ul style="list-style-type: none"> • Water Pollution Control Ordinance • TM-DSS 	Implemented
S6.9.1.5	W4	<u>Groundwater from Potential Contaminated Area:</u> <ul style="list-style-type: none"> • No direct discharge of groundwater from contaminated areas should be adopted. 	To minimize groundwater quality impact from contaminated area	Contractor	Excavation areas where contamination is found	Construction stage	<ul style="list-style-type: none"> • Water Pollution Control Ordinance • TM-DSS 	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<ul style="list-style-type: none"> • A discharge license under the WPCO through the Regional Office of EPD for groundwater discharge should be applied. Prior to the excavation works within these potentially contaminated areas, the groundwater quality should be reviewed during the process of discharge license application. The compliance to the Technical Memorandum on Standards for Effluents Discharged into Drainage on Sewerage Systems, Inland and Coastal Waters (TM-DSS) and the existence of prohibited substance should be confirmed. If the review results indicated that the groundwater to be generated from the excavation works would be contaminated, the contaminated groundwater should be either properly treated in compliance with the requirements of the TM-DSS or properly recharged into the ground. • If wastewater treatment is deployed, the wastewater treatment unit shall deploy suitable treatment process (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (e.g. TPH) to undetectable range. All treated effluent from wastewater treatment plant shall meet the requirements as stated in TM-DSS and should be discharged into the foul sewers. • If groundwater recharging wells are deployed, recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in the Section 2.3 of TM-DSS. The baseline groundwater quality shall be determined prior to the selection of the recharge wells, and submit a working plan (including the laboratory analytical results showing the quality of groundwater at the proposed recharge location(s) as well as the 					<ul style="list-style-type: none"> • TM-EIAO 	

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		pollutant levels of groundwater to be recharged) to EPD for agreement. Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Prior to recharge, any prohibited substances such as TPH products should be removed as necessary by installing the petrol interceptor.						
S6.9.1.6	W6	<p><u>Accidental Spillage</u></p> <p>In order to prevent accidental spillage of chemicals, the following is recommended:</p> <ul style="list-style-type: none"> All the tanks, containers, storage area should be bunded and the locations should be locked as far as possible from the sensitive watercourse and stormwater drains; The Contractor should register as a chemical waste producer if chemical wastes would be generated. Storage of chemical waste arising from the construction activities should be stored with suitable labels and warnings. <p>Disposal of chemical wastes should be conducted in compliance with the requirements as stated in the Waste Disposal (Chemical Waste) (General) Regulation.</p>	To minimize water quality impact from accidental spillage	Contractor	All construction site where practicable	Construction stage	<ul style="list-style-type: none"> Water Pollution Control Ordinance ProPECC PN 2/23 TM-EIAO TM-DSS 	<p>Implemented after observation for 1st bullet.</p> <p>Implemented for other bullet.</p>
Waste Management (Construction Waste)								
S7.4.1	WM1	<p><u>On-site sorting of C&D material</u></p> <ul style="list-style-type: none"> Geological assessment should be carried out by competent persons on site during excavation to identify materials which are not suitable to use as aggregate in structural concrete (e.g. volcanic rock, Aplite dyke rock, etc.). Volcanic rock and Aplite dyke rock should be separated at the source sites as far as practicable and stored at designated stockpile area preventing them from delivering to crushing facilities. The crushing plant operator should also be reminded to set up 	Separation of unsuitable rock from ending up at concrete batching plants and be turned into concrete for structural use	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> DEVB (W) No. 6/2010 	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		measures to prevent unsuitable rock from ending up at concrete batching plants and be turned into concrete for structural use. Details regarding control measures at source site and crushing facilities should be submitted by the Contractor for the Engineer to review and agree. In addition, site records should also be kept for the types of rock materials excavated and the traceability of delivery will be ensured with the implementation of Trip Ticket System and enforced by site supervisory staff as stipulated under DEVB TC(W) No. 6/2010 for tracking of the correct delivery to the rock crushing facilities for processing into aggregates. Alternative disposal option for the reuse of volcanic rock and Aplite Dyke rock, etc. should be explored.						
S7.5.1	WM2	<u>Construction and Demolition Material</u> <ul style="list-style-type: none"> • Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement; • Carry out on-site sorting; • Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; • Adopt 'selective demolition' technique to demolish the existing structures and facilities with a view to recovering broken concrete effectively for recycling purpose, where possible; • Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials is properly documented and verified; and • Implement an enhanced Waste Management Plan similar to ETWBTC (Works) No. 19/2005 – "Environmental Management on Construction Sites" to encourage on-site sorting of C&D materials and to minimize their generation during the course of construction. 	<p>Good site practice to minimize the waste generation and recycle the C&D materials as far as practicable so as to reduce the amount for final disposal</p>	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> • Land (Miscellaneous Provisions) Ordinance • Waste Disposal Ordinance • ETWB TCW No. 19/2005 	<p>Implemented for the 1st, 2nd, 3rd, 5th, 6th bullets</p> <p>N/A for other bullets</p>

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S7.5.1	WM3	<p><u>C&D Waste</u></p> <ul style="list-style-type: none"> Standard formwork or pre-fabrication should be used as far as practicable in order to minimize the arising of C&D materials. The use of more durable formwork or plastic facing for the construction works should be considered. Use of wooden hoardings should not be used, as in other projects. Metal hoarding should be used to enhance the possibility of recycling. The purchasing of construction materials will be carefully planned in order to avoid over ordering and wastage; The Contractor should recycle as much of the C&D materials as possible on-site. Public fill and C&D waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. Where practicable, concrete and masonry can be crushed and used as fill. Steel reinforcement bar can be used by scrap steel mills. Different areas of the sites should be considered for such segregation and storage. 	Good site practice to minimize the waste generation and recycle the C&D materials as far as practicable so as to reduce the amount for final disposal	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> Land (Miscellaneous Provisions) Ordinance Waste Disposal Ordinance ETWB TCW No. 19/2005 	N/A
S7.5.1	WM4	<p><u>Excavated Contaminated Soils</u></p> <ul style="list-style-type: none"> Details of the mitigation measures on handling of the contaminated soil shall be referred to Section on Land Contamination below. 	The contaminated soil will be excavated for on-site reuse	Contractor	PBH4	Prior to commencement of construction works within the contaminated area	<ul style="list-style-type: none"> Practice Guide (PG) for Investigation and Remediation of Contaminated Land GN/GM for land contamination 	N/A
S7.5.1	WM5	<p><u>Land-based Sediment</u></p> <ul style="list-style-type: none"> All construction plant and equipment shall be designed and maintained to minimize the risk of silt, sediments, contaminants or other pollutants being released into the water column or deposited in the locations other than designated location; 	To control pollution due to marine sediment	Contractor	Along CKR alignment	Construction stage	<ul style="list-style-type: none"> ETWB TCW No. 34/2002 	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<ul style="list-style-type: none"> • All vessels shall be sized such that adequate draft is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; • Before moving the vessels which are used for transporting dredged material, excess material shall be cleaned from the decks and exposed fittings of vessels and the excess materials shall never be dumped into the sea except at the approved locations; • Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action. • The Contractors shall monitor all vessels transporting material to ensure that no dumping outside the approved location takes place. The Contractor shall keep and produce logs and other records to demonstrate compliance and that journeys are consistent with designated locations and copies of such records shall be submitted to the engineers; • The Contractors shall comply with the conditions in the dumping license. • All bottom dumping vessels (Hopper barges) shall be fitted with tight fittings seals to their bottom openings to prevent leakage of material; • The material shall be placed into the disposal pit by bottom dumping; • Contaminated marine mud shall be transported by spit barge of not less than 750m³ capacity and capable of rapid opening and discharge at the disposal site; • Discharge shall be undertaken rapidly, and the hoppers shall be closed immediately. Material adhering to the sides of the hopper shall not be washed out of the hopper and the hopper shall remain closed until the barge returns to the disposal site. 						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<ul style="list-style-type: none"> For Type 3 special disposal treatment, sealing of contaminant with geosynthetic containment before dropping designated mud pit would be a possible arrangement. A geosynthetic containment method is a method whereby the sediments are sealed in geosynthetic containers and, the containers would be dropped into the designated contaminated mud pit where they would be covered by further mud disposal and later by the mud pit capping at the disposal site, thereby fulfilling the requirements for fully confined mud disposal. 						
S7.5.1	WM6	<p><u>Chemical Waste</u></p> <ul style="list-style-type: none"> Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes; Containers used for the storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed, have a capacity of less than 450 L unless the specification has been approved by EPD, and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the regulation; The storage area for chemical wastes should be clearly labelled and used solely for the storage of chemical waste, enclosed on at least 3 sides, have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20% of the total volume of waste stored in that area, whichever is the greatest, have adequate ventilation, covered to prevent rainfall entering, and arranged so that incompatible materials are adequately separated; 	Control the chemical waste and ensure proper storage, handling and disposal	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Waste 	<p>Implemented for the 2nd and 3rd bullet.</p> <p>N/A for other bullet.</p>

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<ul style="list-style-type: none"> Disposal of chemical waste should be via a licensed waste collector, be to a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Centre which also offers a chemical waste collection service and can supply the necessary storage containers, or be to a reuser of the waste, under approval from EPD. 						
S7.5.1	WM7	<p><u>General Refuse</u></p> <ul style="list-style-type: none"> General refuse generated on-site should be stored in enclosed bins or compaction units separately from construction and chemical wastes; A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimize odour, pest and litter impacts. Burning of refuse on construction sites is prohibited by law. Aluminium cans are often recovered from the waste stream by individual collectors if they are segregated and made easily accessible. Separate labelled bins for their deposit should be provided if feasible; Office wastes can be reduced through the recycling of paper if volumes are large enough to warrant collection. Participation in a local collection scheme should be considered by the Contractor. 	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> Waste Disposal Ordinance 	Implemented.
Hazard to Life								
S9.18	H8	The driver and his assistant should be physically healthy, experienced and have good safe driving records. The driver should hold a proper driving licence for the approved transport truck. Dedicated training programme and regular road safety briefing sessions/ workshops should be provided to enhance their safe driving attitude and practice. Smoking should be strictly prohibited.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	N/A
S9.18	H9	Emergency response plans in case of road accident should be prepared and implemented.	To reduce the risk during	Contractor	Works areas at which	Construction stage	-	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		The driver and his assistant should be familiar with the emergency procedures including evacuation, and proper communication/ fire-fighting equipment should be provided to the driver and his assistant.	explosives transport		explosives would be used			
Landscape & Visual								
S10.10.1 Table 10.11	LV3	<u>Good Site Management</u> <ul style="list-style-type: none"> Large temporary stockpiles of excavated material shall be covered with unobtrusive sheeting to prevent dust and dirt spreading to adjacent landscape areas and vegetation, and to create a neat and tidy visual appearance. Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance. 	Minimize visual impact	Contractor	Within Project site	Construction stage	-	N/A
S10.10.1 Table 10.11	LV4	<u>Screen Hoarding</u> <ul style="list-style-type: none"> Decorative screen hoarding should be erected to screen the public from the construction area. It should be designed to be compatible with the existing urban context. 	Minimize visual impact	Contractor	Within Project site	Construction stage	-	N/A
S10.10.1 Table 10.11	LV5	<u>Lighting Control during Construction</u> <ul style="list-style-type: none"> All lighting in the construction site shall be carefully controlled to minimize light pollution and night-time glare to nearby residencies and GIC. The Contractor shall consider other security measures, which shall minimize the visual impacts. 	Minimize visual impact	Contractor	Within Project site	Construction stage	-	N/A
S10.10.1 Table 10.11	LV6	<u>Erosion Control</u> <ul style="list-style-type: none"> The potential for soil erosion shall be reduced by minimizing the extent of vegetation disturbance on site and by providing a protective cover over newly exposed soil. 	Minimize landscape impact	Contractor	Within Project site	Construction stage	-	N/A
S10.10.1 Table 10.11	LV7	<u>Tree Protection & Preservation</u> <ul style="list-style-type: none"> Carefully protected during construction. Tree protection measures will be detailed at the Tree Removal Application stage and plans submitted to the relevant Government Department for approval in due course in accordance with ETWB TC No. 3/2006. 	Minimize landscape and visual impact	Contractor	Within Project site	Construction stage	<ul style="list-style-type: none"> 'Guidelines for Tree Risk Management and Assessment Arrangement on an Area 	N/A

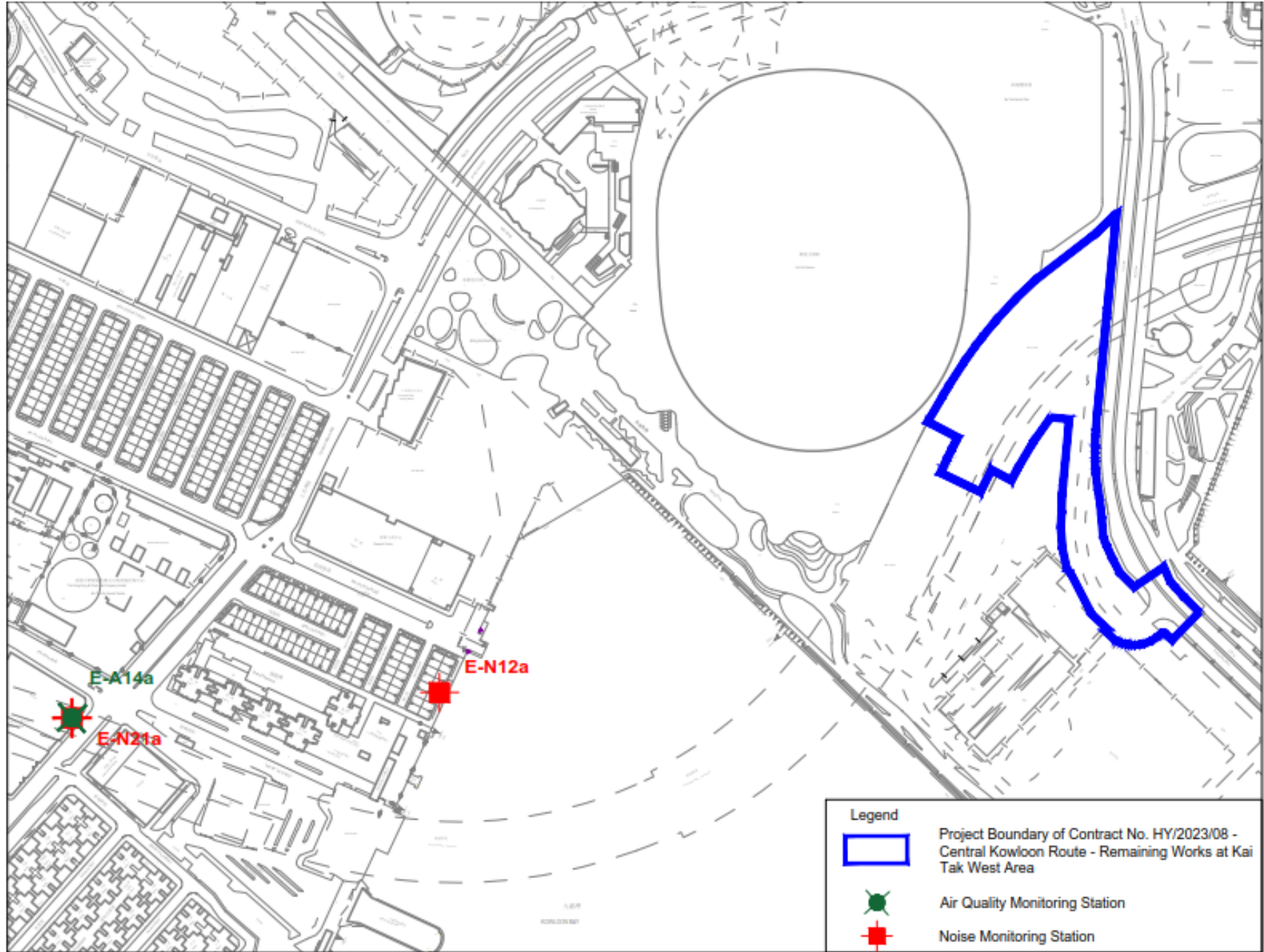
EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
							Basis and on a Tree Basis', Greening, Landscape and Tree Management (GLTM) Section, DEVB <ul style="list-style-type: none"> • Latest recommended horticultural practices from GLTM Section, DEVB 	
S10.10.1 Table 10.11	LV8	<u>Tree Transplantation</u> <ul style="list-style-type: none"> • For trees unavoidably affected by the Project that have to be removed, where practical transplantation will be chosen as the top priority method of removal. If this is not possible or practical compensatory planting will be provided for trees unavoidably felled (See LV10). For trees unavoidably affected by the Project works that are transplanted, transplantation must be carried out in accordance with ETWB TCW 2/2004 and 3/2006. 	Minimize landscape and visual impact	Contractor	Within Project site and designated off-site locations	Prior to Construction stage	<ul style="list-style-type: none"> • ETWB TCW 3/2006 • Latest recommended horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB • ETWB TCW 2/2004 	N/A
S10.10.1 Table 10.11	LV9	<u>Compensatory Planting</u> <ul style="list-style-type: none"> • For trees unavoidably affected by the Project that have to be removed, where practical transportation will be chosen as the top priority method of removal but if this is not possible or practical compensatory planting will be provided for trees unavoidably felled. All felled trees shall be compensated for by planting trees to the satisfaction of relevant Government projects. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the 	Minimize visual impact and also enhance landscape	Contractor	Within Project site	Construction stage	<ul style="list-style-type: none"> • ETWB TCW 3/2006 • Latest recommended horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB 	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		<p>Tree Felling Application process under ETWB TC 3/2006.</p> <ul style="list-style-type: none"> Compensatory tree planting may be incorporated into public open spaces and along roadside amenity areas affected by the construction works and therefore be part of the bigger wider planting plans. Onsite compensation planting is preferred but, if necessary, additional receptor sites outside the Works Area shall be agreed separately with the Government during the Tree Felling Application process. 					<ul style="list-style-type: none"> ETWB TCW 2/2004 	
S10.10.1 Table 10.11	LV10	<p><u>Screen Planting</u></p> <ul style="list-style-type: none"> Tall screen/buffer trees, shrubs and climbers should be planted, in so far as is possible, to soften and screen proposed structures such as roads and central strip, vertical edges and buildings and to enhance streetscape greening effect where appropriate. Indiscriminate use of trees for screening must be avoided and the principle of 'right tree for the right place' must be followed. This detail will be provided at the Detailed Design stage. This measure may additionally form part of the compensatory planting and will improve and create a pleasant pedestrian environment. 	<p>Minimize visual impact and also enhance landscape.</p>	Contractor	Within Project Site	Construction Phase	<ul style="list-style-type: none"> Guidelines on Greening of Noise Barriers, issued April 2012, GLTMS, DevB ETWB TCW 2/2004 	N/A
S10.10.1 Table 10.11	LV12	<p><u>Reinstatement</u></p> <ul style="list-style-type: none"> All works areas, excavated areas and disturbed areas for tunnel construction and temporary road diversion or any other proposed works shall be reinstated to former conditions or better, with reasonable landscape treatment and to the satisfaction of the relevant Government departments. (Specific mitigation for disturbance to public open space is detailed separately under LV14.) 	<p>Minimize landscape impact</p>	Contractor	Within Project Site	Construction Phase	<ul style="list-style-type: none"> N/A 	N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
Cultural Heritage Impact (Construction Phase)								
S11.4.4	CH1	The contractor should be alerted during the construction on the possibility of locating archaeological remains and as a precautionary measure, AMO shall be informed immediately in case of discovery of antiquities or supposed antiquities in the subject sites.	To preserve any cultural heritage items which may be removed and damaged by the excavation	Contractor	During construction works for cut and cover tunnels	Construction stage	<ul style="list-style-type: none"> • AMOs requirements 	N/A
EM&A Project								
S13.2	EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual	Control EM&A Performance	Highways Department	All construction sites	Construction stage	<ul style="list-style-type: none"> • EIAO Guidance Note No. 4/2010 • TM-EIAO 	Implemented
S13.2-13.4	EM2	<ul style="list-style-type: none"> • An Environmental Team needs to be employed as per the EM&A Manual; • Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation measures; • An environmental impact monitoring needs to be implemented by the Environmental Team to ensure all the requirements given in the EM&A Manual are fully complied with. 	Perform environmental monitoring & auditing	Highways Department/ Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> • EIAO Guidance Note No. 4/2010 • TM-EIAO 	Implemented

Appendix G

Location Plan of Air Quality and Noise Monitoring Station



Appendix H

Monitoring Schedule for the Reporting Month and Coming Month

Monitoring Schedule for the Reporting Month (April 2026)

Impact Monitoring Schedule for CKR RMW						
April-2026						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
1			1	2	3	4
				Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a		
5	6	7	8	9	10	11
			Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a			
12	13	14	15	16	17	18
		Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a				
19	20	21	22	23	24	25
	Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a					Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a
26	27	28	29	30		
				Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a		

Monitoring Schedule for the Coming Month (May 2026)

Impact Monitoring Schedule for CKR RMW						
May-2026						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
					1	2
3	4	5 Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a	6	7	8	9
10	11 Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a	12	13	14	15	16 Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a
17	18	19	20	21	22 Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a	23
24	25	26	27	28 Impact Dust Monitoring for E-A14a Impact Noise Monitoring for E-N12a, E-N21a	29	30
31						

Appendix I

Calibration Certificates for Air Quality Monitoring Equipment



HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	Merit Industrial Centre (Block B)	Site ID:	CKR-RMW E-A14a	Date:	28-Mar-2026
Serial No.:	1087	Model:	TE-5170X		

Ambient Condition

Actual Pressure during Calibration (P _a) (mm Hg):	738.9	Actual Temperature during Calibration (T _a) (deg K):	297.0
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Calibration Orifice

Model:	TE-5028A	Slope (m _c):	1.65389
Serial No.:	3702	Intercept (b _c):	0.00237
Calibration Due Date:	2-Jan-27	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	ΔH ₂ O (in)	Q _a , X-Axis (m ³ /min)	I, CFM (chart)	IC, Y-Axis (corrected)
1	1.10	0.633	22.0	22.00
2	2.20	0.895	28.0	28.00
3	2.80	1.010	32.0	32.00
4	3.20	1.080	34.0	34.00
5	3.80	1.177	38.0	38.00

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

m = 28.8977 b = 3.0823 Corr. Coeff = 0.9923

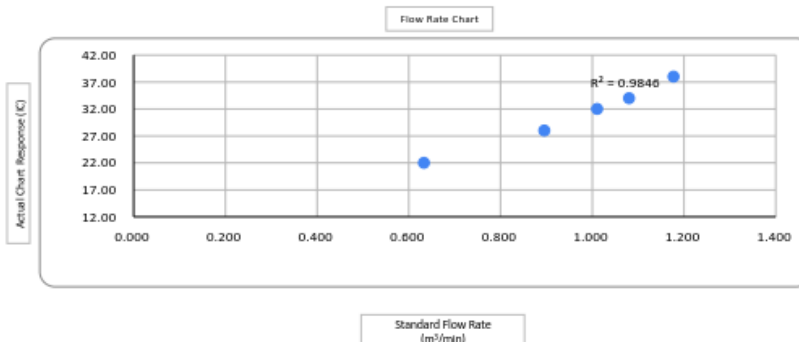
Calculations

$$Q_a = 1/m_c \cdot [\text{Sqrt}(\Delta H_2O \cdot (P_a/P_{std}) \cdot (T_{std}/T_a)) - b_c]$$

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

Q_a = actual flow rate
 IC = corrected chart response
 I = actual chart response
 m_c = calibrator slope
 b_c = calibrator intercept

m = sampler slope
 b = sampler intercept
 T_{std} = 298 deg K
 P_{std} = 760 mm Hg
 T_a = actual temperature during calibration (deg K)
 P_a = actual pressure during calibration (mm Hg)



Checked by: Joe Ho
 Lead Consultant, Environmental

Date: 28-Mar-2026

Certificate of Calibration

Calibration Certification Information			
Cal. Date: January 2, 2026	Rootsmer S/N: 438320	Ta: 294 °K	
Operator: Jim Tisch		Pa: 747.52 mm Hg	
Calibration Model #: TE-5028A	Calibrator S/N: 3702		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (In H2O)
1	1	2	1	1.3400	4.2	1.50
2	3	4	1	1.0400	6.6	2.50
3	5	6	1	0.9450	7.9	3.00
4	7	8	1	0.8720	9.3	3.50
5	9	10	1	0.6600	16.2	6.00

Data Tabulation					
Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H \left(\frac{Ta}{Pa} \right)}$ (y-axis)
0.9914	0.7398	1.2229	0.9944	0.7421	0.7681
0.9882	0.9502	1.5787	0.9912	0.9530	0.9916
0.9864	1.0438	1.7294	0.9894	1.0470	1.0862
0.9846	1.1291	1.8680	0.9876	1.1325	1.1733
0.9754	1.4778	2.4458	0.9783	1.4823	1.5362
QSTD	m=	1.65389	QA	m=	1.03564
	b=	0.00237		b=	0.00149
	r=	0.99998		r=	0.99998

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

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

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

Certification of Calibration

Information of Unit-under-test (UUT)

Date of Calibration:	24-Mar-26	Next Calibration Date:	24-Mar-27
UUT Manufacturer:	Sibata Scientific Technology Ltd.	UUT Model No.:	LD-5R
UUT Serial No.:	2Y6548	Report Reference No.:	RPT-26-KTN-0016
Calibration Location:	Man Cheong Building		

Information of Reference Equipment

Reference Equipment Manufacturer:	Tisch Environmental	Tisch Environmental
Reference Equipment Model No.:	TE-5170X	TE-5028A
Reference Equipment Serial No.:	1087	3702
Last Calibration Date:	24-Mar-26	03-Jan-26
Next Calibration Date:	24-May-26	03-Jan-27

Calibration of 1-Hour TSP Result

Calibration Point	Results from UUT	Results from Standard Equipment
	Mass Concentration ($\mu\text{g}/\text{m}^3$)	Reference Concentration ($\mu\text{g}/\text{m}^3$)
	X-axis	Y-axis
1	49	55
2	45	51
3	22	26
4	20	22
5	40	43
6	31	33
Average	35	38

Linear Regression of Y on X

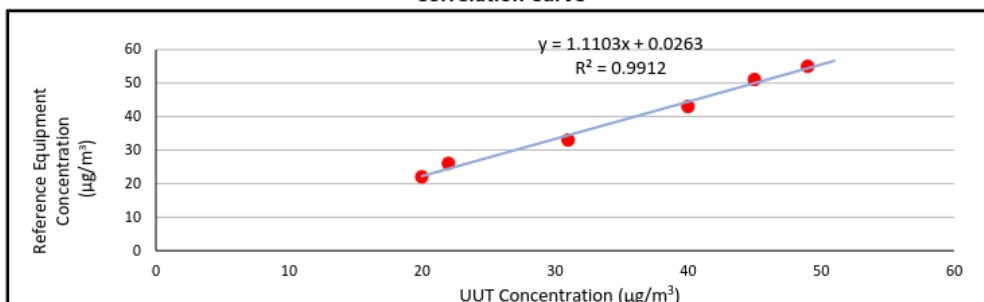
Slope, mv: 1.1103	Intercept: 0.0263	*Correlation Coefficient: 0.9956
Verification Test Result: Strong Correlation, Results were accepted.		

* If the Correlation Coefficient < 0.90, check and recalibrate.

Set Calibration Factor

Particulate Concentration by Reference Equipment ($\mu\text{g}/\text{m}^3$):	38
Particulate Concentration by UUT ($\mu\text{g}/\text{m}^3$):	35
Measuring Time, (min):	60
K Factor = High Volume Sampler / UUT, ($\mu\text{g}/\text{m}^3$):	<u>1.11</u>

Correlation Curve



Operated By: Kate Wong
 Consultant,
 Environmental

Signature: Kate

Date: 27-03-2026

Certification of Calibration

Information of Unit-under-test (UUT)

Date of Calibration:	24-Mar-26	Next Calibration Date:	24-Mar-27
UUT Manufacturer:	Sibata Scientific Technology Ltd.	UUT Model No.:	LD-5R
UUT Serial No.:	356840	Report Reference No.:	RPT-26-KTN-0014
Calibration Location:	Man Cheong Building		

Information of Reference Equipment

Reference Equipment Manufacturer:	Tisch Environmental	Tisch Environmental
Reference Equipment Model No.:	TE-5170X	TE-5028A
Reference Equipment Serial No.:	1087	3702
Last Calibration Date:	24-Mar-26	03-Jan-26
Next Calibration Date:	24-May-26	03-Jan-27

Calibration of 1-Hour TSP Result

Calibration Point	Results from UUT	Results from Standard Equipment
	Mass Concentration ($\mu\text{g}/\text{m}^3$)	Reference Concentration ($\mu\text{g}/\text{m}^3$)
	X-axis	Y-axis
1	44	55
2	41	51
3	21	26
4	17	22
5	36	43
6	25	33
Average	31	38

Linear Regression of Y on X

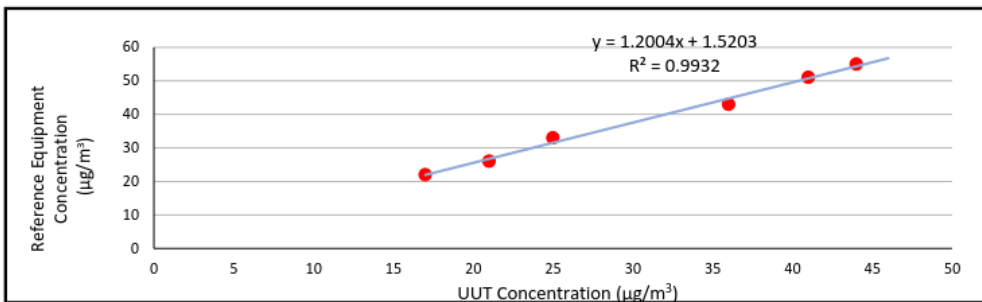
Slope, mv: 1.2004	Intercept: 1.5203	*Correlation Coefficient: 0.9966
Verification Test Result: Strong Correlation, Results were accepted.		

* If the Correlation Coefficient < 0.90, check and recalibrate.

Set Calibration Factor

Particulate Concentration by Reference Equipment ($\mu\text{g}/\text{m}^3$):	38
Particulate Concentration by UUT ($\mu\text{g}/\text{m}^3$):	31
Measuring Time, (min):	60
K Factor = High Volume Sampler / UUT, ($\mu\text{g}/\text{m}^3$):	1.25

Correlation Curve



Operated By: Kate Wong
 Consultant,
 Environmental

Signature: *Kate*

Date: 27-03-2026

Certification of Calibration

Information of Unit-under-test (UUT)

Date of Calibration:	24-Mar-26	Next Calibration Date:	24-Mar-27
UUT Manufacturer:	Sibata Scientific Technology Ltd.	UUT Model No.:	LD-5R
UUT Serial No.:	356841	Report Reference No.:	RPT-26-KTN-0012
Calibration Location:	Man Cheong Building		

Information of Reference Equipment

Reference Equipment Manufacturer:	Tisch Environmental	Tisch Environmental
Reference Equipment Model No.:	TE-5170X	TE-5028A
Reference Equipment Serial No.:	1087	3702
Last Calibration Date:	24-Mar-26	03-Jan-26
Next Calibration Date:	24-May-26	03-Jan-27

Calibration of 1-Hour TSP Result

Calibration Point	Results from UUT	Results from Standard Equipment
	Mass Concentration ($\mu\text{g}/\text{m}^3$)	Reference Concentration ($\mu\text{g}/\text{m}^3$)
	X-axis	Y-axis
1	43	55
2	42	51
3	24	26
4	21	22
5	38	43
6	34	33
Average	34	38

Linear Regression of Y on X

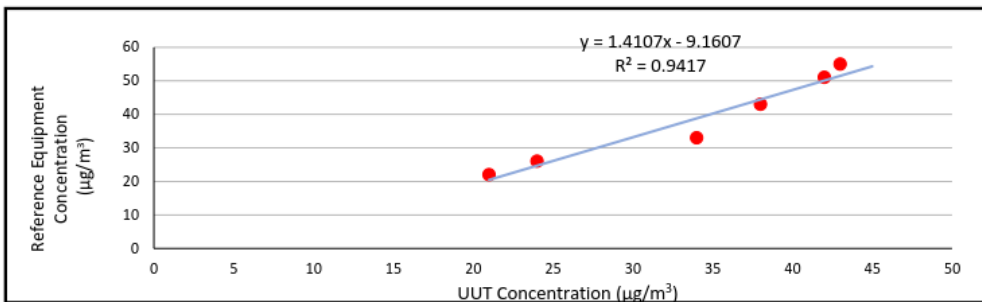
Slope, mv: 1.4107	Intercept: -9.1607	*Correlation Coefficient: 0.9704
Verification Test Result: Strong Correlation, Results were accepted.		

* If the Correlation Coefficient < 0.90, check and recalibrate.

Set Calibration Factor

Particulate Concentration by Reference Equipment ($\mu\text{g}/\text{m}^3$):	38
Particulate Concentration by UUT ($\mu\text{g}/\text{m}^3$):	34
Measuring Time, (min):	60
K Factor = High Volume Sampler / UUT, ($\mu\text{g}/\text{m}^3$):	1.14

Correlation Curve



Operated By: Kate Wong
 Consultant,
 Environmental

Signature: *Kate*

Date: 27-03-2026

Certification of Calibration

Information of Unit-under-test (UUT)

Date of Calibration:	24-Mar-26	Next Calibration Date:	24-Mar-27
UUT Manufacturer:	Sibata Scientific Technology Ltd.	UUT Model No.:	LD-5R
UUT Serial No.:	467361	Report Reference No.:	RPT-26-KTN-0017
Calibration Location:	Man Cheong Building		

Information of Reference Equipment

Reference Equipment Manufacturer:	Tisch Environmental	Tisch Environmental
Reference Equipment Model No.:	TE-5170X	TE-5028A
Reference Equipment Serial No.:	1087	3702
Last Calibration Date:	24-Mar-26	03-Jan-26
Next Calibration Date:	24-May-26	03-Jan-27

Calibration of 1-Hour TSP Result

Calibration Point	Results from UUT	Results from Standard Equipment
	Mass Concentration ($\mu\text{g}/\text{m}^3$)	Reference Concentration ($\mu\text{g}/\text{m}^3$)
	X-axis	Y-axis
1	49	55
2	48	51
3	24	26
4	19	22
5	39	43
6	36	33
Average	36	38

Linear Regression of Y on X

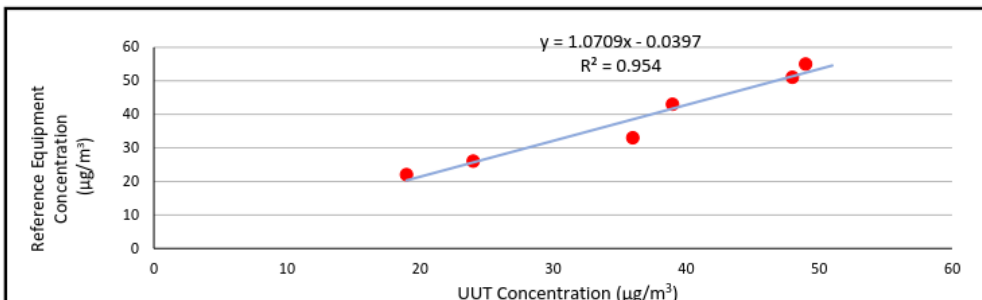
Slope, mv: 1.0709	Intercept: -0.0397	*Correlation Coefficient: 0.9767
Verification Test Result: Strong Correlation, Results were accepted.		

* If the Correlation Coefficient < 0.90, check and recalibrate.

Set Calibration Factor

Particulate Concentration by Reference Equipment ($\mu\text{g}/\text{m}^3$):	38
Particulate Concentration by UUT ($\mu\text{g}/\text{m}^3$):	36
Measuring Time, (min):	60
K Factor = High Volume Sampler / UUT, ($\mu\text{g}/\text{m}^3$):	1.07

Correlation Curve



Operated By: Kate Wong
 Consultant,
 Environmental

Signature: *Kate*

Date: 27-03-2026

Appendix J

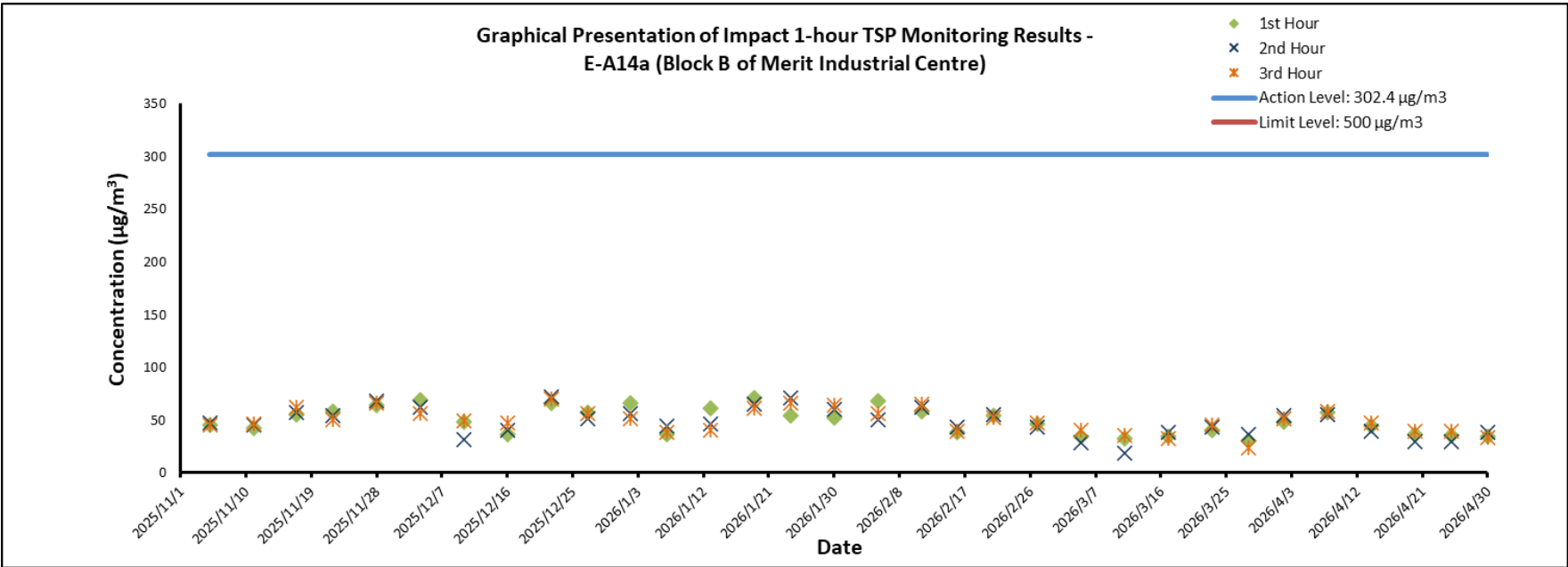
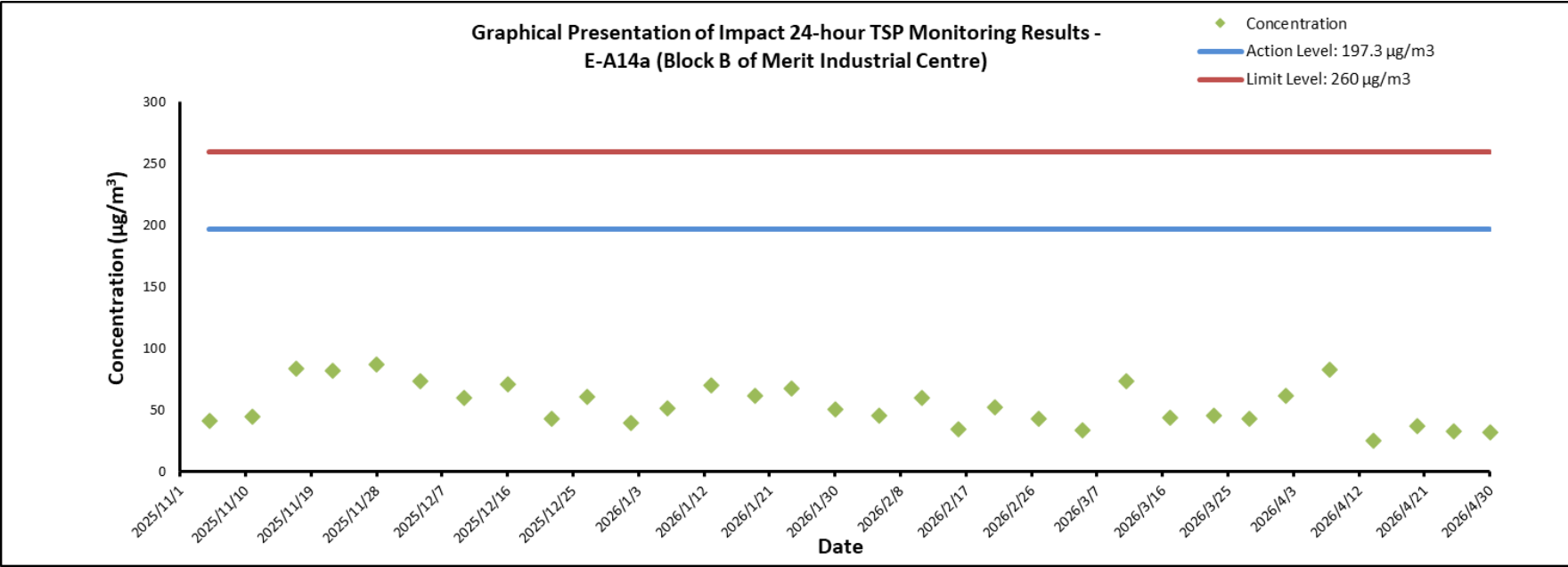
Air Quality Monitoring Results and their Graphical Presentations

Summary of 24-hour TSP Monitoring Results at Location E-A14a (Block B of Merit Industrial Centre)

Start Date	Weather Condition	Elapse Time			Chart Reading			Avg Air Temp (°C)	Avg Atmospheric Pressure (hPa)	Flow Rate (m ³ /min)	Standard Air Volume (m ³)	Filter Weight (g)		Particulate weight (g)	Conc. (µg/m ³)		
		Initial	Final	Actual (min)	Min	Max	Avg					Initial	Final				
2026-04-02	Cloudy	6905.01	6929.01	1440.0	38	38	38.0	23.0	1013.5	1.31	1892	2.6833	2.8003	0.1170	62		
2026-04-08	Cloudy	6929.07	6953.07	1440.0	38	40	39.0	23.4	1012.6	1.34	1930	2.5985	2.7584	0.1599	83		
2026-04-14	Sunny	6953.07	6977.07	1440.0	38	40	39.0	27.1	1011.1	1.33	1918	2.6222	2.6695	0.0473	25		
2026-04-20	Sunny	6977.59	7001.59	1440.0	38	38	38.0	26.7	1011.7	1.31	1880	2.6098	2.6786	0.0688	37		
2026-04-25	Fine	7003.95	7027.95	1440.0	38	38	38.0	23.2	1014.8	1.31	1893	2.6680	2.7309	0.0629	33		
2026-04-30	Fine	7028.79	7052.79	1440.0	36	38	37.0	22.7	1014.5	1.29	1853	2.6932	2.7528	0.0596	32		
												Maximum:	83	µg/m³	Minimum:	25	µg/m³

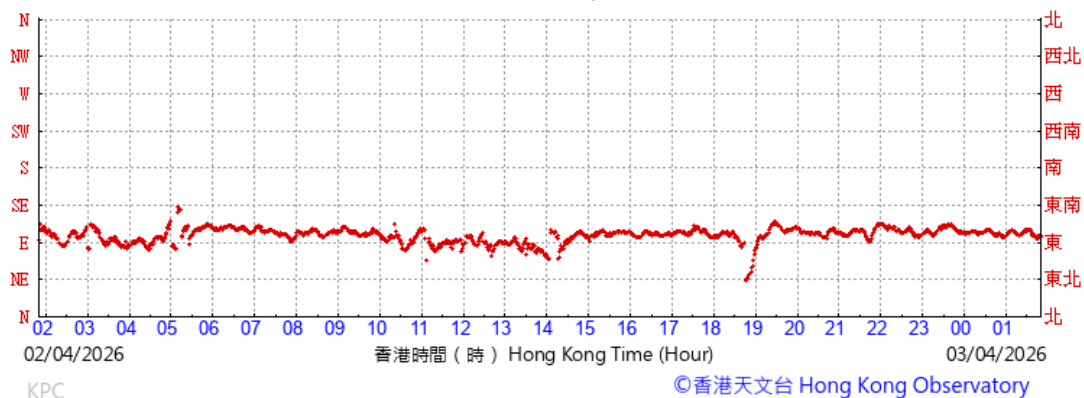
Summary of 1-hour TSP Monitoring Results at Location E-A14a (Block B of Merit Industrial Centre)

Date	Weather	1 st Hour	2 nd Hour	3 rd Hour	1 st Hour	2 nd Hour	3 rd Hour
		Sampling Time	Sampling Time	Sampling Time	Conc. (µg/m ³)	Conc. (µg/m ³)	Conc. (µg/m ³)
2026-04-02	Cloudy	9:05	10:05	11:05	48	54	51
2026-04-08	Cloudy	9:16	10:16	11:16	57	55	58
2026-04-14	Sunny	8:41	9:41	10:41	44	40	47
2026-04-20	Sunny	8:19	9:19	10:19	37	30	40
2026-04-25	Fine	8:08	9:08	10:08	36	30	40
2026-04-30	Fine	9:11	10:11	11:11	35	39	34
					Maximum	58	µg/m³
					Minimum	30	µg/m³

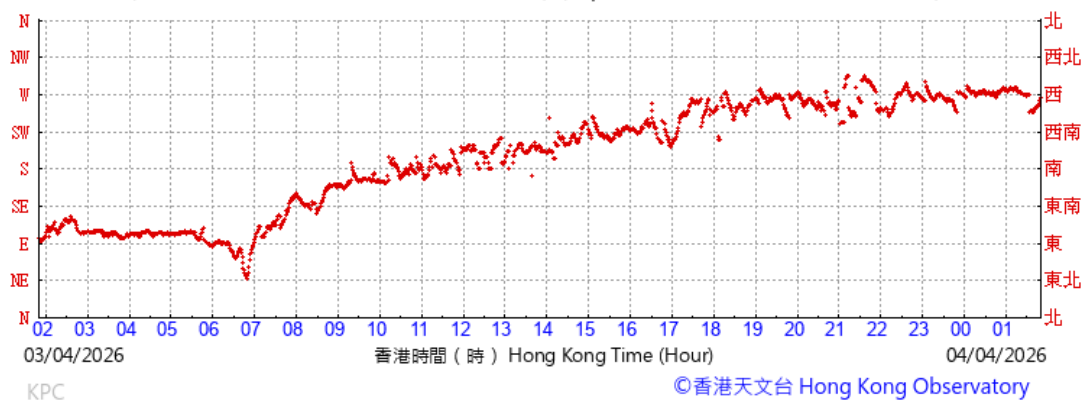


Data of Wind Direction Extracted from King's Park Wind Station of the Hong Kong Observatory

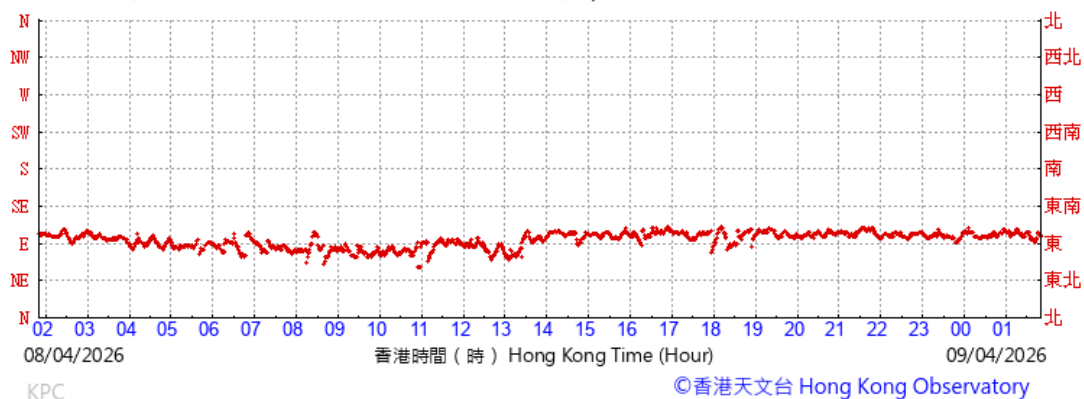
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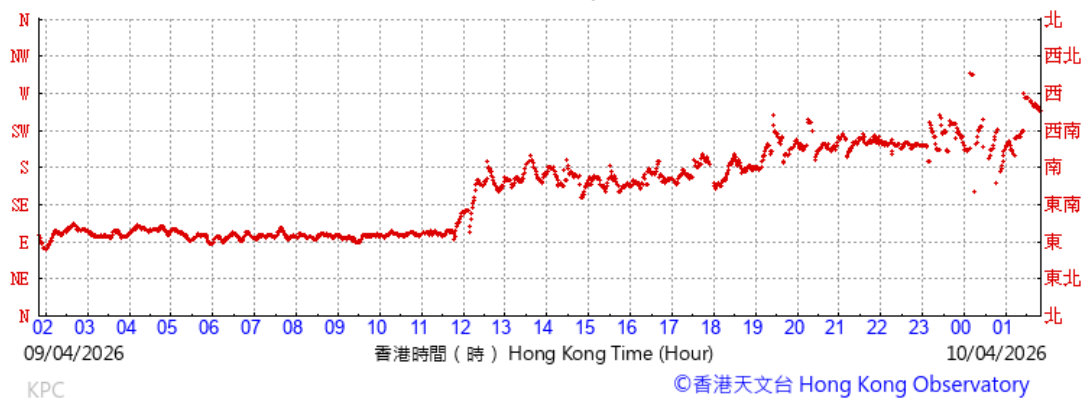
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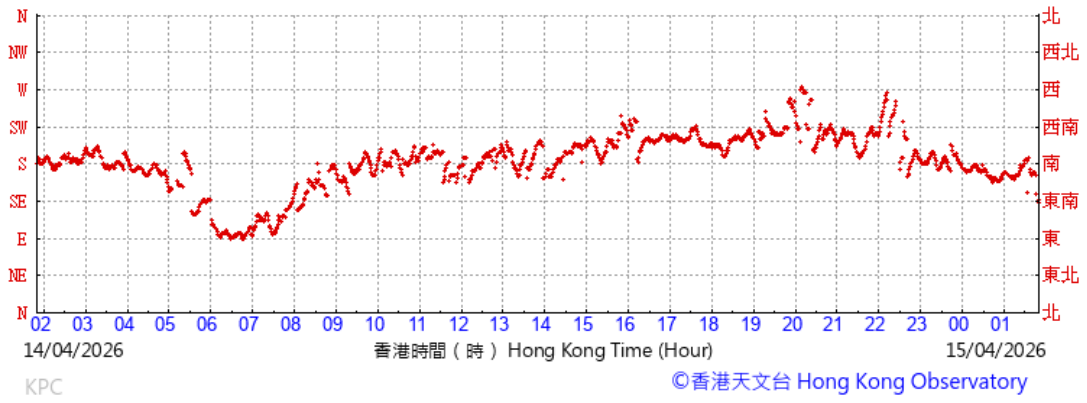
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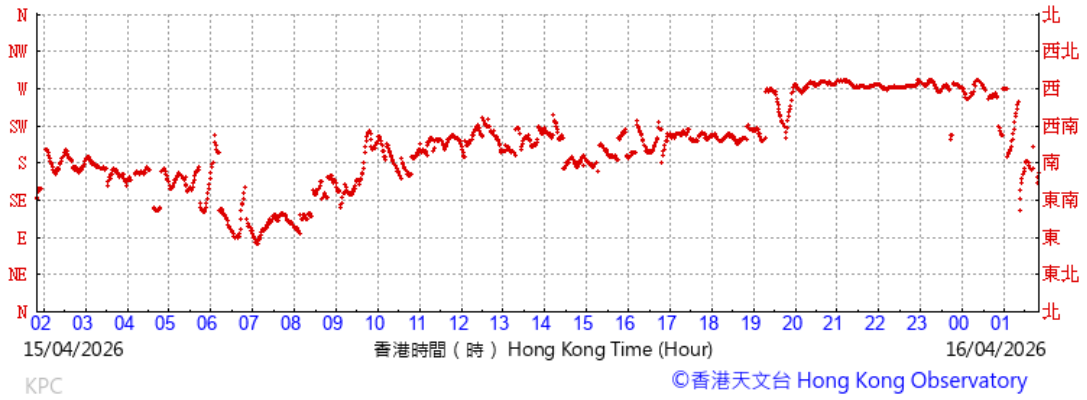
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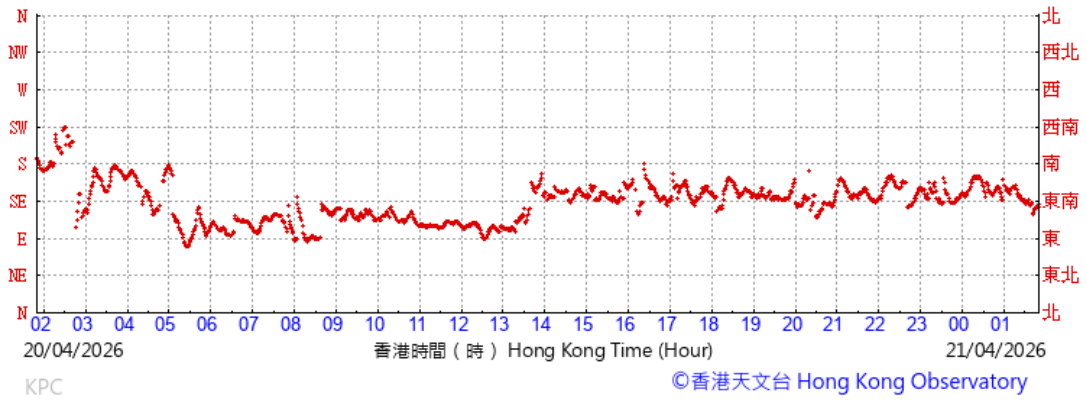
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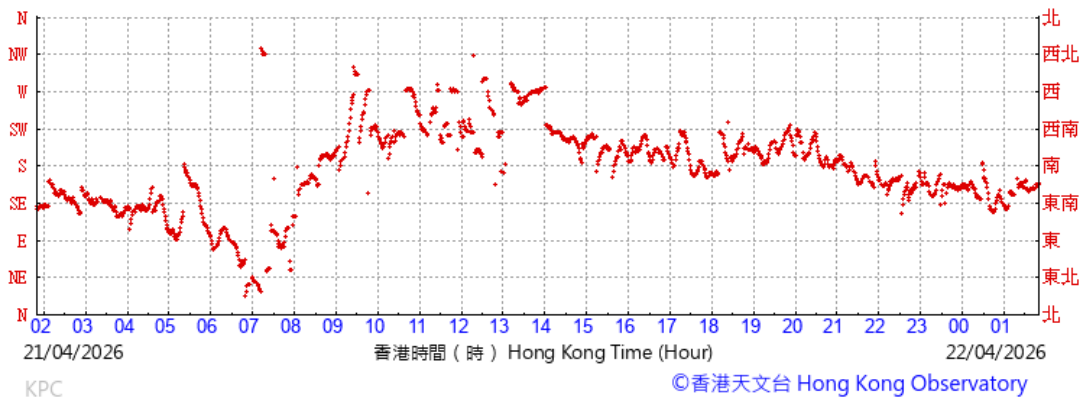
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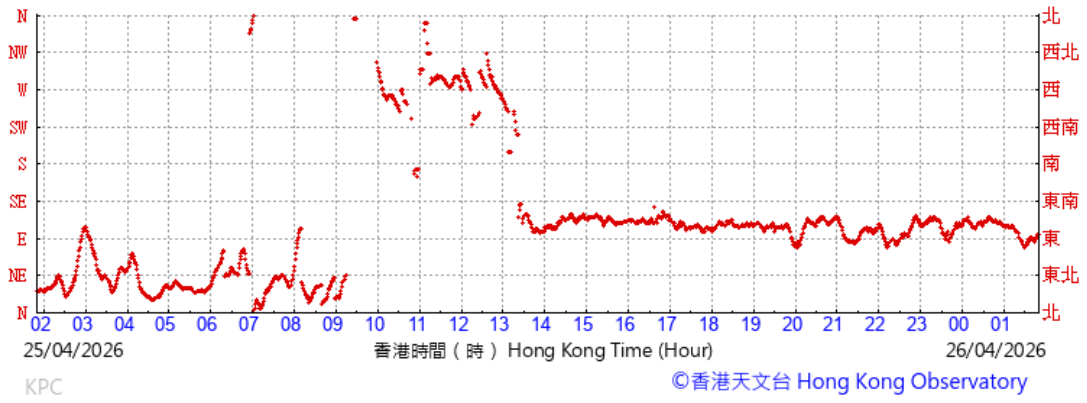
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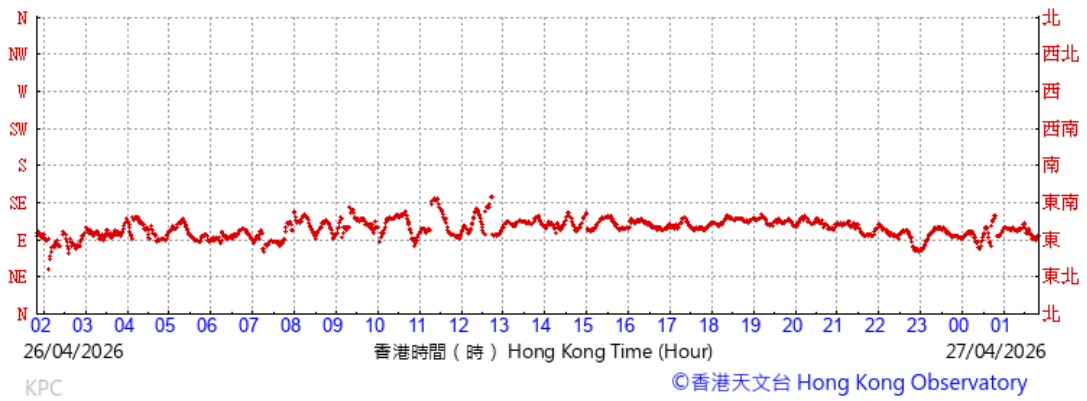
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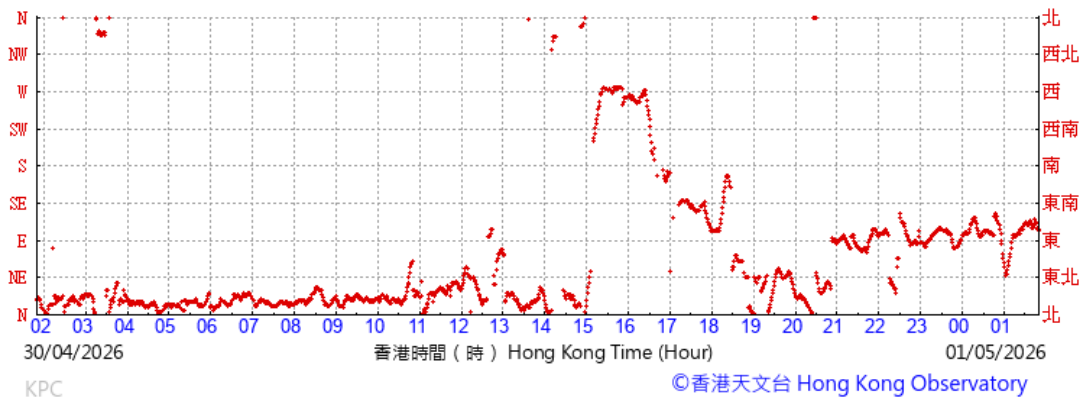
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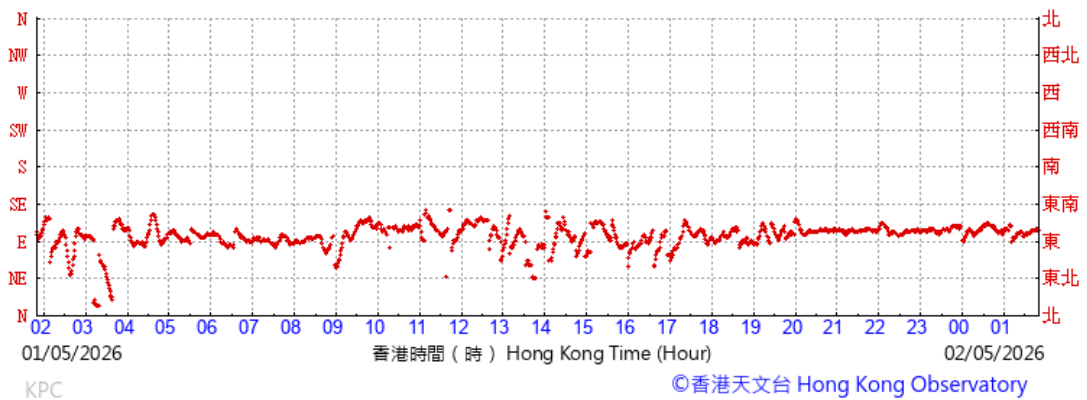
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(於香港時間01/05/2026 01 時 50 分更新) (Updated at 01:50H on 01/05/2026)



(於香港時間02/05/2026 01 時 50 分更新) (Updated at 01:50H on 02/05/2026)



Data of Wind Speed Extracted from King's Park Wind Station of the Hong Kong Observatory

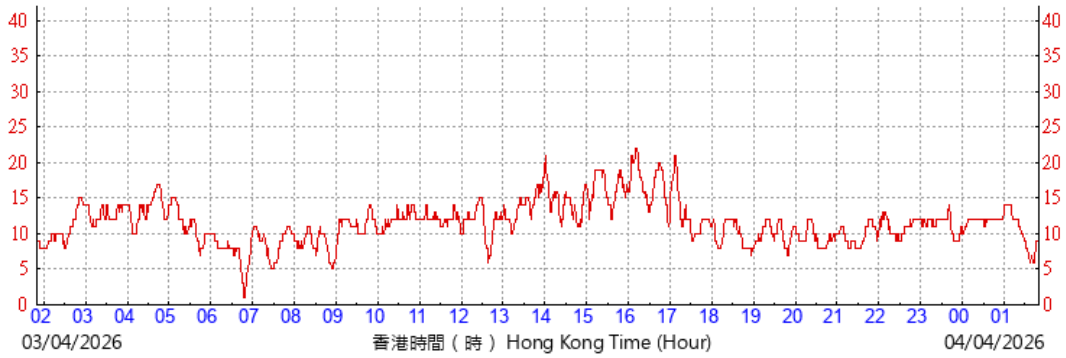
(公里/小時) (於香港時間03/04/2026 01 時 50 分更新) (Updated at 01:50H on 03/04/2026) (km/h)



KPC

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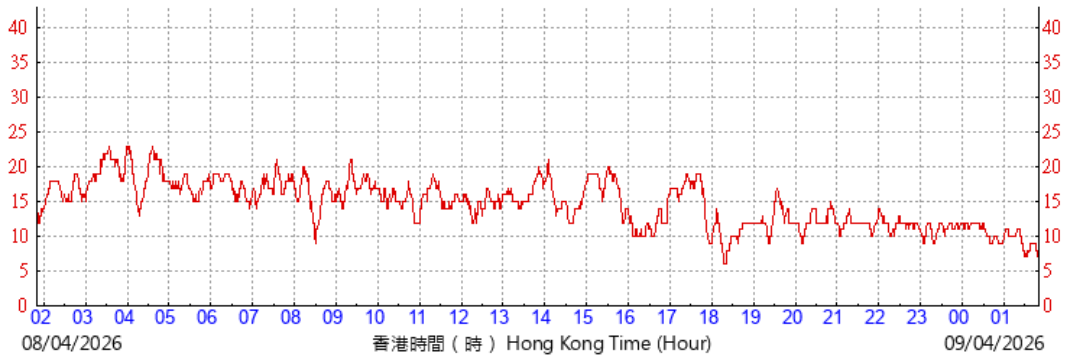
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KPC

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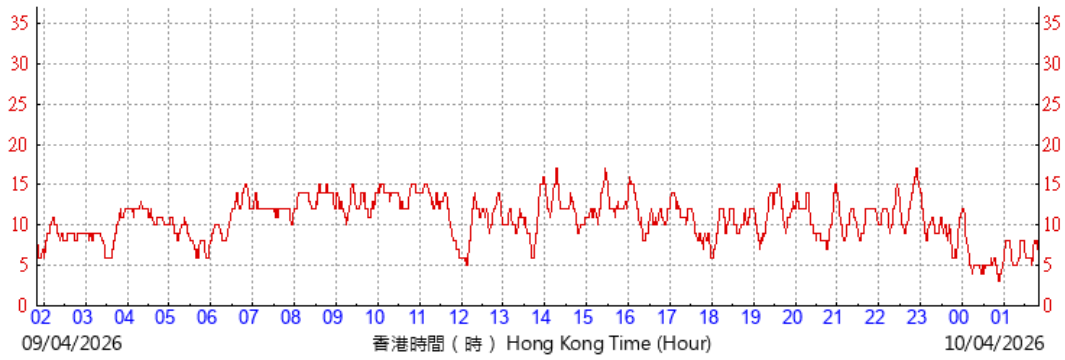
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KPC

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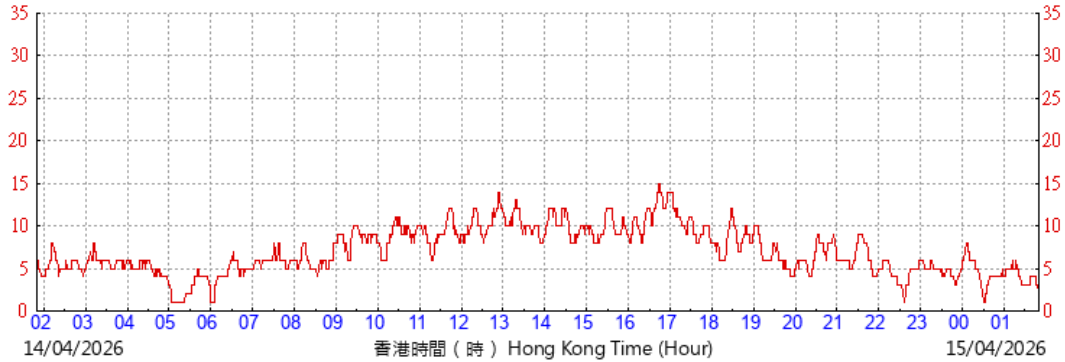
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KPC

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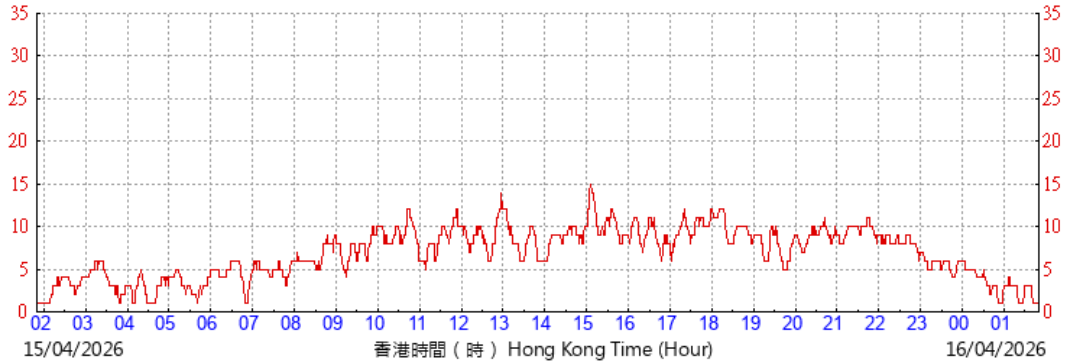
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KPC

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(公里/小時) (於香港時間16/04/2026 01 時 50 分更新) (Updated at 01:50H on 16/04/2026) (km/h)



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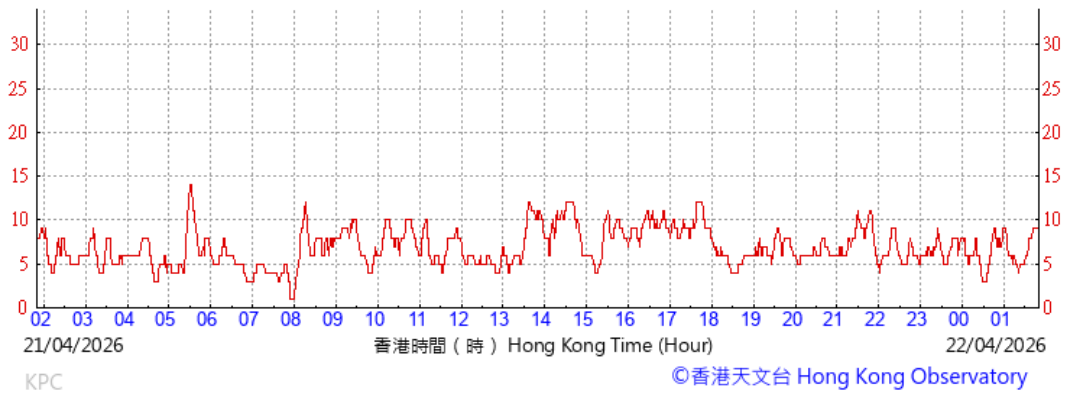
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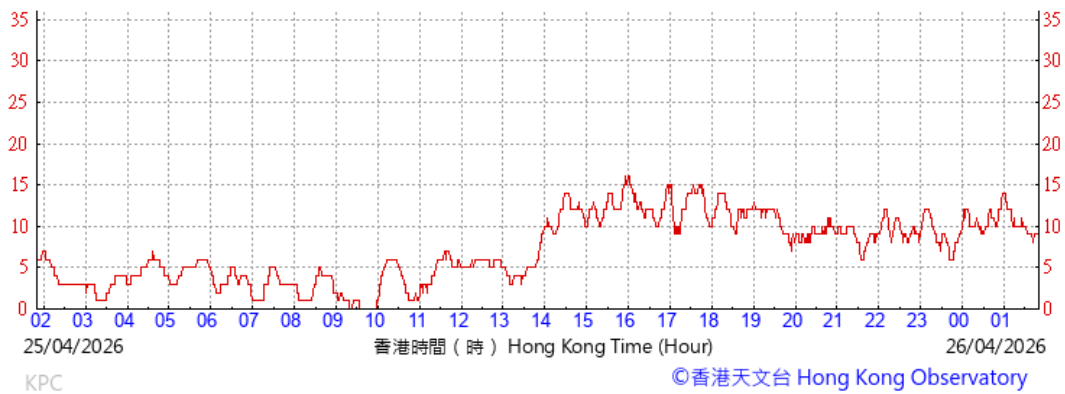
KPC

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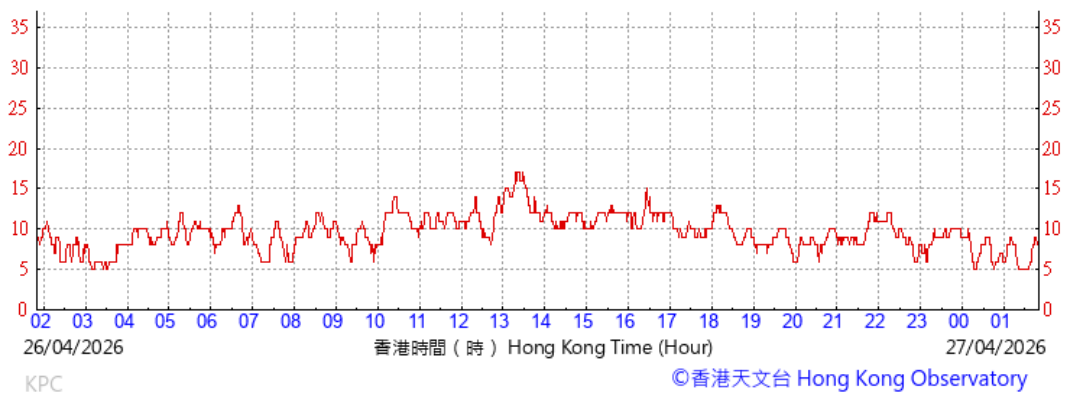
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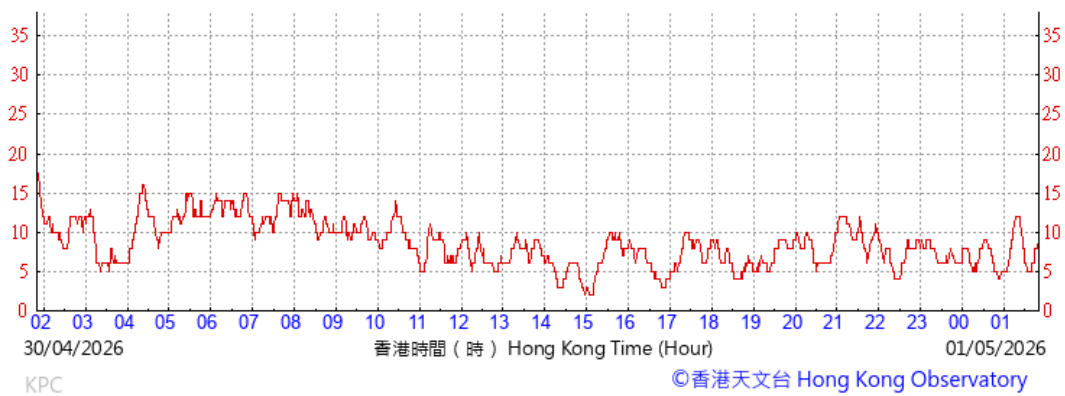
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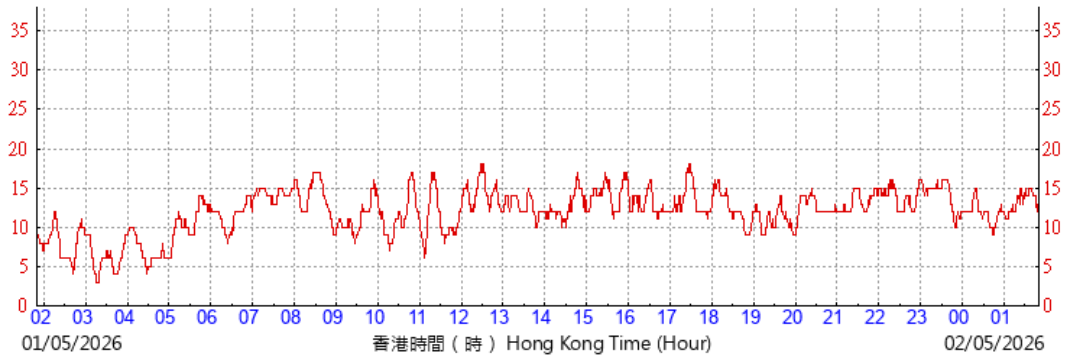
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(公里/小時) (於香港時間02/05/2026 01 時 50 分更新) (Updated at 01:50H on 02/05/2026) (km/h)



KPC

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Appendix K

Calibration Certificates for Noise Monitoring Equipment

Certificate of Calibration

for

Description: *Sound Level Meter*
Manufacturer: *NTi*
Type No.: *XL3 (Serial No.: A3A-01229-F0)*
Microphone: *MC230A (Serial No.: A28290)*
Preamplifier: *MA230 (Serial No.:1794)*

Submitted by:

Customer: *Aurecon Hong Kong Limited*
Address: *Unit 1608, 16/F, Tower B,
Manulife Financial Centre,
223-231 Wai Yip Street, Kwun Tong,
Kowloon, Hong Kong*

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

- Within (31.5Hz – 8kHz)**
 Outside

the allowable tolerance.

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

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

Date of receipt: 23 July 2025

Date of calibration: 24 July 2025

Date of NEXT calibration: 23 July 2026

Calibrated by: 
Calibration Technician

Certified by: 
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 24 July 2025

Certificate No.: APJ25-046-CC001



Page 1 of 4

1. Calibration Precaution:

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

2. Calibration Conditions:

Air Temperature: 24.6 °C
 Air Pressure: 1006 hPa
 Relative Humidity: 57.8 %

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	IEC 61672 Class 1
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
20-120	dBA SPL	Fast	94	1000	94.0	±0.4

Linearity

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
20-120	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	IEC 61672 Class 1
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
20-120	dBA SPL	Fast	94	1000	94.0	Ref
		Slow			94.0	±0.3

Certificate No.: APJ25-046-CC001



Page 2 of 4

Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
20-120	dB	SPL	Fast	94	31.5	94.3	±2.0
					63	94.2	±1.5
					125	94.2	±1.5
					250	94.1	±1.4
					500	94.1	±1.4
					1000	94.0	Ref
					2000	94.0	±1.6
					4000	93.9	±1.6
					8000	91.7	+2.1; -3.1

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
20-120	dBA	SPL	Fast	94	31.5	54.9	-39.4±2.0
					63	68.0	-26.2±1.5
					125	78.1	-16.1±1.5
					250	85.5	-8.6±1.4
					500	90.9	-3.2±1.4
					1000	94.0	Ref
					2000	95.2	+1.2±1.6
					4000	94.9	+1.0±1.6
					8000	90.5	-1.1+2.1; -3.1

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
20-120	dBC	SPL	Fast	94	31.5	91.3	-3.0±2.0
					63	93.4	-0.8±1.5
					125	94.0	-0.2±1.5
					250	94.1	-0.0±1.4
					500	94.2	-0.0±1.4
					1000	94.0	Ref
					2000	93.9	-0.2±1.6
					4000	93.1	-0.8±1.6
					8000	88.6	-3.0+2.1; -3.1

5. Calibration Results Applied

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

Uncertainties of Applied Value:

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

The uncertainties are evaluated for a 95% confidence level.

Note:

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

Certificate No.: APJ25-046-CC001



Page 4 of 4

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

Certificate of Calibration

for

Description: Sound Level Meter
Manufacturer: NTi
Type No.: XL3 (Serial No.: A3A-01220-F0)
Microphone: MC230A (Serial No.: A30051)
Preamplifier: MA230 M2340 (Serial No.:1895)

Submitted by:

Customer: Aurecon Hong Kong Limited
Address: Unit 1608, 16/F, Tower B,
Manulife Financial Centre,
223-231 Wai Yip Street, Kwun Tong,
Kowloon, Hong Kong

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

- Within (31.5Hz – 8kHz)
 Outside

the allowable tolerance.


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

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

Date of receipt: 15 October 2025

Date of calibration: 22 October 2025

Date of NEXT calibration: 21 October 2026

Calibrated by: 
Calibration Technician

Certified by: 
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 22 October 2025

Certificate No.: APJ25-046-CC011



Page 1 of 4

1. Calibration Precaution:

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

2. Calibration Conditions:

Air Temperature: 25.5 °C
 Air Pressure: 1008 hPa
 Relative Humidity: 61.5 %

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,	IEC 61672 Class 1
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
20-120	dBA SPL	Fast	94	1000	94.0	±0.4

Linearity

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
20-120	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,	IEC 61672 Class 1
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
20-120	dBA SPL	Fast	94	1000	94.0	Ref
		Slow			94.0	±0.3

Certificate No.: APJ25-046-CC011



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Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
20-120	dB	SPL	94	Fast	31.5	93.9	±2.0
					63	94.1	±1.5
					125	93.9	±1.5
					250	93.8	±1.4
					500	93.8	±1.4
					1000	94.0	Ref
					2000	93.9	±1.6
					4000	94.2	±1.6
					8000	93.0	+2.1; -3.1

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
20-120	dBA	SPL	94	Fast	31.5	54.6	-39.4±2.0
					63	68.0	-26.2±1.5
					125	77.8	-16.1±1.5
					250	85.2	-8.6±1.4
					500	90.6	-3.2±1.4
					1000	94.0	Ref
					2000	95.1	+1.2±1.6
					4000	95.1	+1.0±1.6
					8000	91.8	-1.1±2.1; -3.1

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
20-120	dBC	SPL	94	Fast	31.5	90.9	-3.0±2.0
					63	93.3	-0.8±1.5
					125	93.7	-0.2±1.5
					250	93.8	-0.0±1.4
					500	93.9	-0.0±1.4
					1000	94.0	Ref
					2000	93.8	-0.2±1.6
					4000	93.4	-0.8±1.6
					8000	89.9	-3.0 +2.1; -3.1

Certificate No.: APJ25-046-CC011



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5. Calibration Results Applied

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

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.05
	63 Hz	± 0.05
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	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.

Certificate No.: APJ25-046-CC011



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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

Certificate of Calibration

for

Description: Sound Level Meter
Manufacturer: NTi
Type No.: XL3 (Serial No.: A3A-01231-F0)
Microphone: MC230A (Serial No.: A28695)
Preamplifier: MA230 (Serial No.:1813)

Submitted by:

Customer: Aurecon Hong Kong Limited
Address: Unit 1608, 16/F, Tower B,
Manulife Financial Centre,
223-231 Wai Yip Street, Kwun Tong,
Kowloon, Hong Kong

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

- Within (31.5Hz – 8kHz)
 Outside

the allowable tolerance.

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

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

Date of receipt: 09 June 2025

Date of calibration: 10 June 2025

Date of NEXT calibration: 09 June 2026

Calibrated by: 
Calibration Technician

Certified by: 
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 10 June 2025

Certificate No.: APJ25-035-CC001



Page 1 of 4

1. Calibration Precaution:

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

2. Calibration Conditions:

Air Temperature: 26.1 °C
 Air Pressure: 1006 hPa
 Relative Humidity: 61.2 %

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		
40-140	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		
40-140	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		
40-140	dBA SPL	Fast	94	1000	94.0	Ref
		Slow			94.0	±0.3

Certificate No.: APJ25-035-CC001



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Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
40-140	dB	SPL	Fast	94	31.5	94.3	±2.0
					63	94.1	±1.5
					125	94.1	±1.5
					250	94.1	±1.4
					500	94.1	±1.4
					1000	94.0	Ref
					2000	93.8	±1.6
					4000	93.5	±1.6
				8000	96.1	+2.1; -3.1	

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
40-140	dBA	SPL	Fast	94	31.5	54.9	-39.4±2.0
					63	68.0	-26.2±1.5
					125	78.0	-16.1±1.5
					250	85.5	-8.6±1.4
					500	90.8	-3.2±1.4
					1000	94.0	Ref
					2000	95.0	+1.2±1.6
					4000	94.4	+1.0±1.6
				8000	94.9	-1.1±2.1; -3.1	

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB	
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz			
40-140	dBC	SPL	Fast	94	31.5	91.3	-3.0±2.0
					63	93.4	-0.8±1.5
					125	94.0	-0.2±1.5
					250	94.1	-0.0±1.4
					500	94.1	-0.0±1.4
					1000	94.0	Ref
					2000	93.7	-0.2±1.6
					4000	92.7	-0.8±1.6
				8000	93.0	-3.0 +2.1; -3.1	

Certificate No.: APJ25-035-CC001



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5. Calibration Results Applied

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

Uncertainties of Applied Value:

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

The uncertainties are evaluated for a 95% confidence level.

Note:

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

Certificate No.: APJ25-035-CC001



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Certificate of Calibration

for

Description: *Sound Level Calibrator*
Manufacturer: *RION*
Type No.: *NC-75*
Serial No.: *34724244*

Submitted by:

Customer: *Aurecon Hong Kong Limited*
Address: *Unit 1608, 16/F, Tower B,
Manulife Financial Centre,
223-231 Wai Yip Street, Kwun Tong,
Kowloon, Hong Kong*

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

- Within**
 Outside

the allowable tolerance.

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

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

Date of receipt: 10 July 2025

Date of calibration: 11 July 2025

Date of NEXT calibration: 10 July 2026

Calibrated by: 
Calibration Technician

Certified by: 
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 11 July 2025

Certificate No.: APJ25-045-CC001



Page 1 of 2

1. Calibration Precautions:

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

2. Calibration Specifications:

Calibration check

3. Calibration Conditions:

Air Temperature: 24.6 °C
Air Pressure: 1006 hPa
Relative Humidity: 57.5 %

4. Calibration Equipment:

Test Equipment	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV240081	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV240109	HOKLAS

5. Calibration Results

5.1 Sound Pressure Level

Nominal value dB	Accept lower level dB	Accept upper level dB	Measured value dB
94.0	93.6	94.4	94.0

Note:

The values given in this certification only related to the values measured at the time of the calibration.



Certificate No.: APJ25-045-CC001

Page 2 of 2

Certificate of Calibration

for

Description: *Sound Level Calibrator*
Manufacturer: *RION*
Type No.: *NC-75*
Serial No.: *35124527*

Submitted by:

Customer: *Aurecon Hong Kong Limited*
Address: *Unit 1608, 16/F, Tower B, Manulife Financial Centre,
223-231 Wai Yip Street, Kwun Tong,
Kowloon, Hong Kong*

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

- Within**
 Outside

the allowable tolerance.

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

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

Date of receipt: 7 January 2026

Date of calibration: 13 January 2026

Date of NEXT calibration: 12 January 2027

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 13 January 2026

Certificate No.: APJ25-045-CC007



Page 1 of 2

1. Calibration Precautions:

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

2. Calibration Specifications:

Calibration check

3. Calibration Conditions:

Air Temperature: 22.5 °C
Air Pressure: 1006 hPa
Relative Humidity: 34.6 %

4. Calibration Equipment:

Test Equipment	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV240081	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV250138	HOKLAS

5. Calibration Results

5.1 Sound Pressure Level

Nominal value dB	Accept lower level dB	Accept upper level dB	Measured value dB
94.0	93.6	94.4	94.2

6. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 60942 Class 1.

Note:

The values given in this certification only related to the values measured at the time of the calibration.



Certificate No.: APJ25-045-CC007

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Appendix L

Noise Monitoring Results and their Graphical Presentations

Daytime Noise Monitoring Results at Location E-N12a (Hing Yan Street No.19)

Date	Time			Weather	Noise Level for 30-min, dB(A) ⁽¹⁾			Limit Level, dB(A)
					L _{eq}	L ₁₀	L ₉₀	
2026-04-02	10:00	-	10:30	Cloudy	55.6	57.0	54.3	75.0
2026-04-08	10:14	-	10:44	Cloudy	56.1	56.9	55.4	75.0
2026-04-14	9:33	-	10:03	Sunny	56.5	57.3	54.3	75.0
2026-04-20	9:18	-	9:48	Sunny	54.2	55.6	51.4	75.0
2026-04-25	8:54	-	9:24	Fine	53.0	54.3	51.1	75.0
2026-04-30	10:11		10:41	Fine	54.9	56.1	53.7	75.0

Remark:

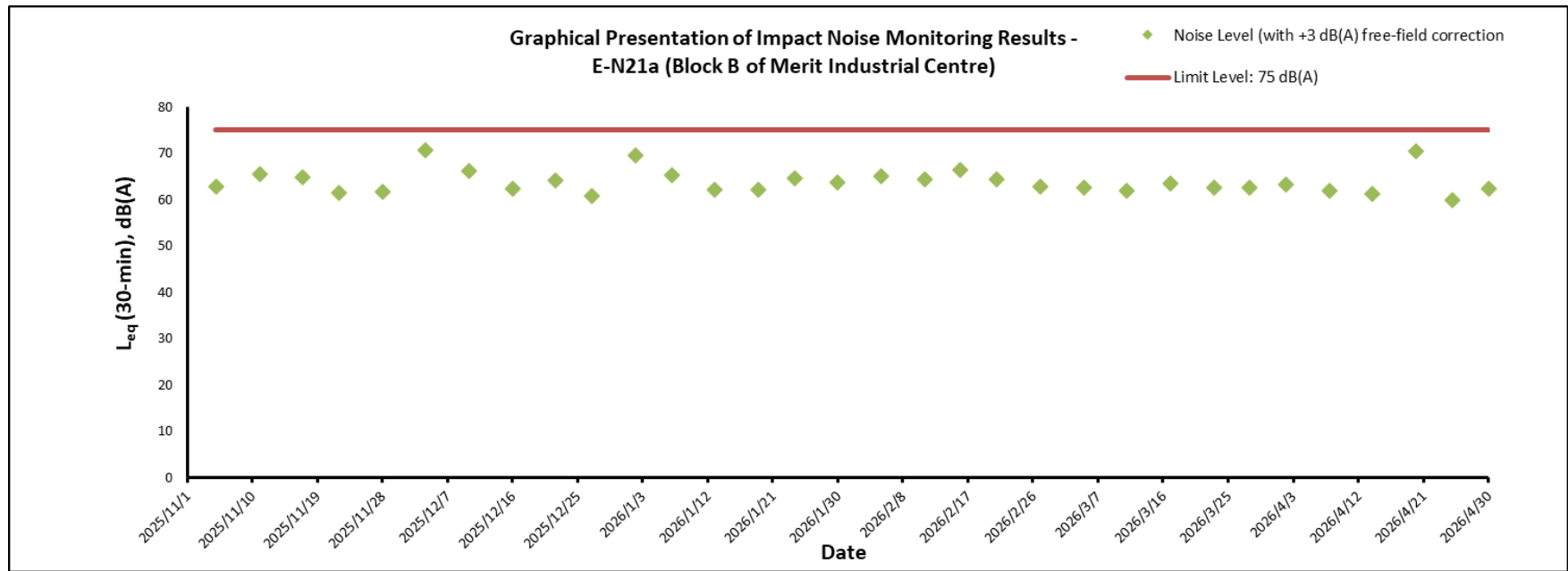
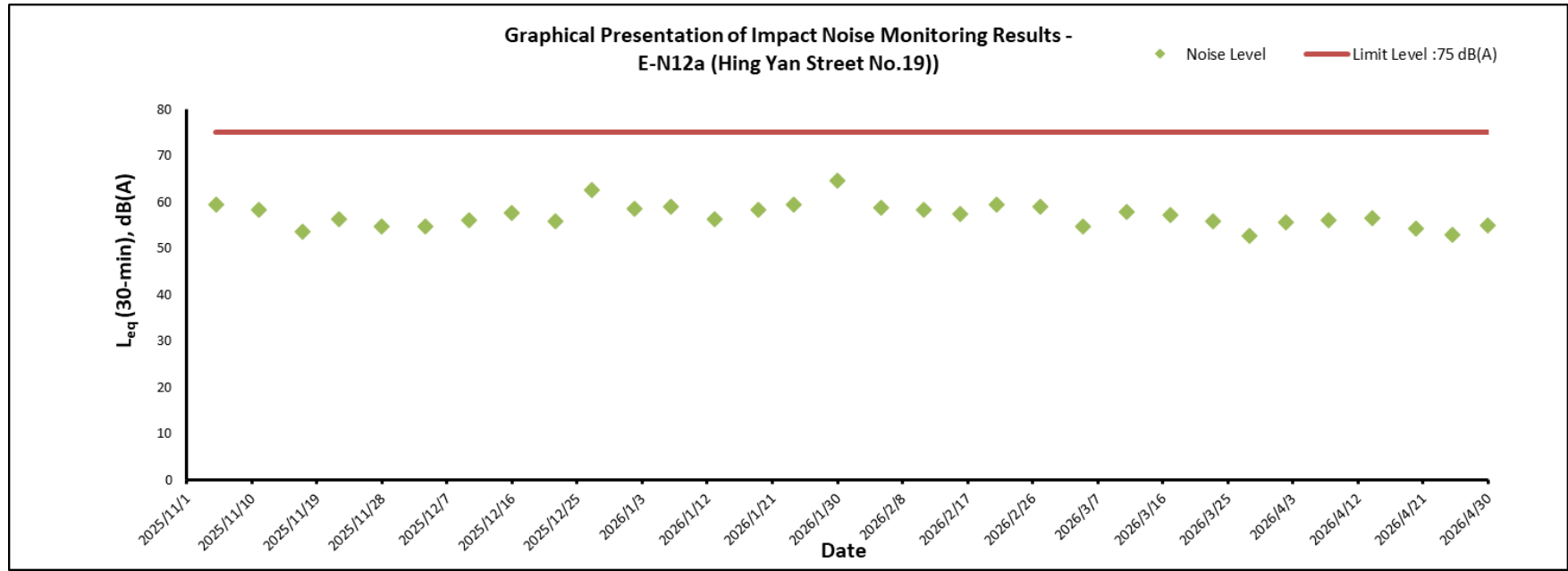
- 1) Type of measurement: Façade measurement
- 2) Major noise source: Traffic noise and construction noise from near by construction

Daytime Noise Monitoring Results at Location E-N21a (Block B of Merit Industrial Centre)

Date	Time			Weather	Noise Level for 30-min, dB(A) ⁽¹⁾			Limit Level, dB(A)
					L _{eq}	L ₁₀	L ₉₀	
2026-04-02	9:07	-	9:37	Cloudy	63.2	64.6	62.0	75.0
2026-04-08	9:18	-	9:48	Cloudy	62.0	61.0	56.6	75.0
2026-04-14	8:38	-	9:08	Sunny	61.2	62.1	60.1	75.0
2026-04-20	8:17	-	8:47	Sunny	70.5	72.8	60.1	75.0
2026-04-25	8:04	-	8:34	Fine	59.9	61.1	58.3	75.0
2026-04-30	9:14		9:44	Fine	62.4	63.3	61.1	75.0

Remark:

- 1) A correction of +3.0 dB(A) was made to the free-field measurement.
- 2) Major noise source: Traffic noise and construction noise from near by construction



Appendix M

Waste Flow Table

Appendix N
Statistics on Complaint, Notifications of Summons and
Successful Prosecution

Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics		
	Frequency	Cumulative	Complaint Nature
1 April 2026 - 30 April 2026	0	0	N/A

Statistical Summary of Environmental Non-compliance

Reporting Period	Environmental Non-compliance Statistics		
	Frequency	Cumulative	Details
1 April 2026 - 30 April 2026	0	0	N/A

Statistical Summary of Environmental Summons

Reporting Period	Environmental Summons Statistics		
	Frequency	Cumulative	Details
1 April 2026 - 30 April 2026	0	0	N/A

Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Details
1 April 2026 - 30 April 2026	0	0	N/A

Document prepared by

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