Vol. 3 of 5

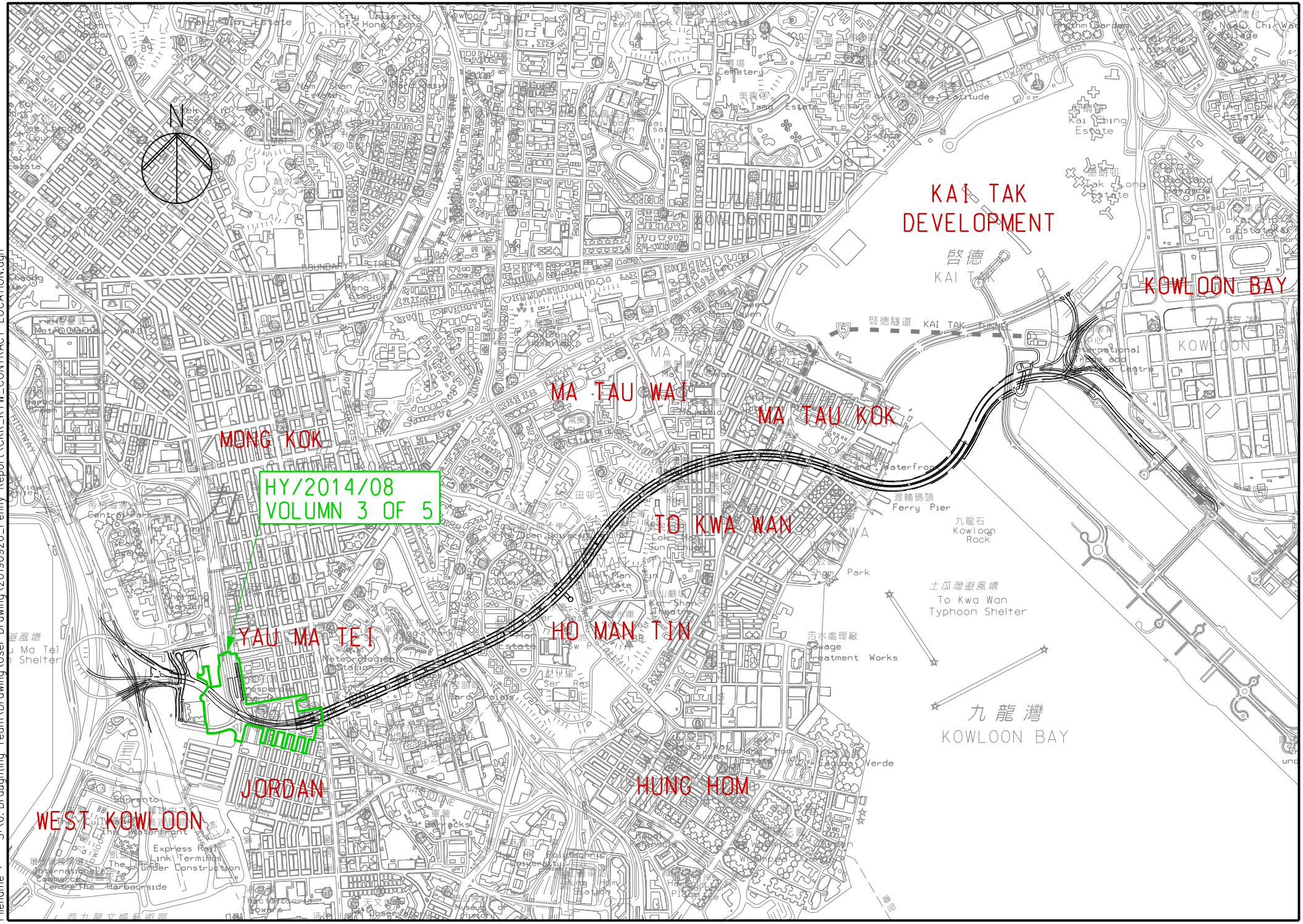
FEP-03/457/2013/D

Central Kowloon Route

Yau Ma Tei East

Contract No. HY/2014/08

October 2022



Printed on : 26-Sep-19 11:47:42 AM by mh.leung
Filename : S:\6.Draughting Team\Drawing\User Drawing\20190926_Penny Report\CKR_KTW_CONTRACT LOCATION.dgn

路政署
HIGHWAYS DEPARTMENT
主要工程管理處
MAJOR WORKS PROJECT MANAGEMENT OFFICE

ERM

Environmental Permit No. EP-457/2013/D

Central Kowloon Route

Independent Environmental Checker Verification

Works Contract:	**Yau Ma Tei East (HY/2014/08)**

Reference Document/Plan

Document/~~Plan~~ to be ~~Certified~~/ Verified:	Monthly EM&A Report No.55 (October 2022)
Date of Report:	9 November 2022 (Rev.1)
Date received by IEC:	9 November 2022

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: 9 November 2022

Independent Environmental Checker

Our ref: 0436942_IEC Verification Cert_YMTE_Monthly EM&A Rpt No.55.docx

Build King – SK ecoplant Joint Venture

Central Kowloon Route Contract HY/2014/08

Section of Yau Ma Tei East

Monthly EM&A Report No. 55

(Period from 1 to 31 October 2022)

Rev. 1

(9 November 2022)

	Name	**Signature**
Prepared by	Janice K.C. Lee (Environmental Consultant)	
Checked & Reviewed by	Y.H. Law (Senior Environmental Consultant)	
Approved & Certified by	Kevin W. M. Li (Environmental Team Leader)	

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1. BASIC PROJECT INFORMATION 7
2. ENVIRONMENTAL STATUS 11
3. MONITORING RESULTS 13
4. SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS 21
5. EM&A SITE INSPECTION 23
6. FUTURE KEY ISSUES 24
7. CONCLUSION AND RECOMMENDATIONS 25

LIST OF APPENDICES

A. Alignment and Works Area for the Contract No. HY/2014/08
B. Construction Programme
C. Project Organization Chart
D. Dust Event-Action Plan (EAP)
E. Noise Event-Action Plan (EAP)
F. Environmental Mitigation Implementation Schedule (EMIS)
G. Monitoring Schedules of the Reporting Month
H. Calibration Certificate (Air Monitoring)
I. Calibration Certificate (Noise)
J. The Certification of Laboratory with HOKLAS Accredited Analytical Tests
K. Location Plan of Noise and Air Quality Monitoring Station
L. Monitoring Data (Air Monitoring)
M. Monitoring Data (Noise)
N. Waste Flow Table
O. Statistics on Complaint, Notifications of Summons and Successful Prosecutions
P. Monitoring Schedule of the Coming Month
Q. Interim Report for the Complaint

EXECUTIVE SUMMARY

A.1 Build King – SK ecoplant Joint Venture ("Contractor") commenced the construction works of Highway Department (HyD) Central Kowloon Route Contract No. HY/2014/08 – Section of Yau Ma Tei East ("The Project") on 20 April 2018. This is the 55th monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the period from 1 October 2022 to 31 October 2022.

A.2 A summary of the construction works reported by Main Contractor for the Project during the reporting month is listed below.

Construction Activities undertaken

- Construct D-wall panels, pumping test, excavation to roof slab & construct roof slab at Zone B
- Install Underground Utilities hanger support, excavation to roof slab and construct roof slab at Zone B
- Install Underground Utilities hanger support, excavation to roof slab and construct roof slab at Zone C
- Install Underground Utilities hanger support, excavation to roof slab and construct roof slab at Zone D
- Underground Utilities diversions, CLP Cable Tunnel A demolition, Jet Grouting, Pre-boring, D-wall construction, install kingposts/recharge well/observation well/pumping well and Pumping Test at Zone F
- Underground Utilities diversion, Jet Grouting, Preboring, Pipe Piles / D-wall construction, install king posts/ recharge well/observation well/pumping well and Pumping Test at Zone G
- Construct portal frame across, demolish existing Gascogine Road Flyover beams and construct end span at Portion 21
- Construct bridge deck for spans P2 to P6 at Gascogine Road Flyover
- Construct socketed H-piles, pile caps, ground beams, reinforced concrete columns and erect steel posts of Noise Enclosure at Zone 3
- Underground Utilities diversion, construct permanent & temporary pipe piles, barrette walls for Noise Enclosure at Zone 2

A.3 A summary of regular construction noise and construction dust monitoring activities in this reporting period is listed below:

Regular construction noise monitoring during normal working hours

W-N1A, W-P11, W-N18, W-N25A	5 times

Construction dust (24-hour TSP) monitoring

W-A1	5 times
W-A6	5 times

Construction dust (1-hour TSP) monitoring

W-A1, W-A6	15 times

A.4 Bi-weekly inspection of the implementation of landscape and visual mitigation measures was conducted on 13 and 27 October 2022. Details of the audit findings and implementation status are presented in Section 5.

A.5 Joint weekly site inspections were conducted by representatives of Environmental Team (ET), Contractor and Engineer on 6, 13, 20 and 27 October 2022. One joint site inspection with IEC was also undertaken on 13 October 2022. Details of the audit findings and implementation status are presented in Section 5.

A.6 Details of waste management are presented in Section 3.

A.7 One Action Level of construction noise weas triggered during the reporting period as a documented complaint was received on 26 October 2022 related to construction noise from works areas at Zone 3 Noise Enclosure. No exceedance of Limit Level of construction noise was recorded in the reporting month. No exceedance of the Action and Limit Level of 24-hour TSP and 1-hour TSP was recorded in the reporting month.

A.8 One noise related complaint was received on 26 October 2022. After investigation with Contractor, precautionary measures had been proposed to the Contractor by ET. The interim report for the complaint is shown in Appendix Q.

A.9 No non-compliance was reported in the reporting month.

A.10 No notification of summon or prosecution was received in this reporting month.

A.11 A summary of the construction activities provided by Main Contractor in the next reporting month is listed below:

Construction Activities to be undertaken

- Excavation and construction of bottom slab at Zone A
- Installation of Underground Utilities Hanger Support, exposure of box culvert and plugging of abandoned pipe at Zone B
- Exposure and install hanger support for existing Underground Utilities under traffic deck in Zone B, C and D
- Pre-boring works and D-wall construction at Zone B3
- Complete reinstatement of partial demolition works of Cable Tunnel A, Pre-boring works and commence D-wall construction at Zone F
- Pre-drilling works, Pipe piling works, underground utilities diversion work and ground improvement (TAM Grouting) works at Zone G
- Works for reprovisioning of Gascogine Road Flyover at HKAA area: Temporary footing and falsework erection for P7 end span construction
- Bridge Works:
  i. FT1- complete bridge deck construction for P4L and relocate FT1 to pier P3.
  ii. FT2- complete bridge deck construction for P6L and relocate FT2 to P2
  iii. Portal and End-span Deck Construction for P1
  iv. Pier Head Segment including Cross Beam construction for P2
- Continue socketed H-pile works for middle/east foundation and west side of Noise Enclosure in Zone 3, Excavation and Lateral Support and construction works for pile caps and ground beams construction for middle/east foundation for Zone 3 Noise Enclosure

Construction Activities to be undertaken

- Erection of Y columns and side columns for Noise Enclosure in Zone 3 (night works)
- Works at Zone 2 Noise Enclosure scheduled as the following:
    i. Column E – Excavation and Lateral Support works and pile cap construction;
    ii. Column G – Permanent diversion of uncharted 1200mm dia. drainage pipe;
    iii. Columns A1 – Construct temporary reinforced concrete pile cap and erect steel tower;
    iv. Column C – Complete design and fabrication of steel footing and install steel footing.
- Noise Enclosure steelworks fabrication at Fabrication Yard in Zhuhai, China
- Erection of Y columns and side columns for Noise Enclosure in Zone 3 west side
- Monitoring of instrumentation for all areas

1. BASIC PROJECT INFORMATION

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.

1.2. 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 applied for and the EP (EP-457/2013/C) was issued by EPD on 16 January 2017. Variations of EP (VEP) was subsequently applied for and the latest EP (EP-457/2013/D) was issued by EPD on 15 June 2021. A Further EP (FEP-03/457/2013/D) was issued by EPD on 5 November 2021.

1.3. The construction of the CKR had been divided into different sections. This Contract No. HY/2014/08 – Section of Yau Ma Tei East (YMTE) covers part of the construction activities located at Yau Ma Tei under the EP and FEP which includes:

- Section of Yau Ma Tei East

i. Construction of Cut-and-Cover Tunnel in compliance with all statutory requirements and the requirements specified under the Contract while maintaining the traffic with all necessary provisions

ii. Construction and subsequent handover of Yau Ma Tei Access Shaft for facilitating the access and use by the contractor of Central Kowloon Route - Central Tunnel contract

iii. Demolition of existing buildings including Yau Ma Tei Multi-storey Carpark Building, Yau Ma Tei Specialist Clinic Extension Building and Yau Ma Tei Jade Hawker Bazaars

iv. Demolition and re-provisioning of Gascoigne Road Flyover and the underpinning works for the existing Ferry Street Flyover and Yau Ma Tei Police Station New Wing Building

v. Construction of civil provisions and coordination with the contractor of Central Kowloon Route - Tunnel Electrical & Mechanical contract

vi. Design and construction of Noise Barrier Works

vii. Prepare temporary traffic arrangement proposals, discuss at Traffic Management Liaison Group meeting and obtain its agreement and approval/ endorsement from relevant authorities at suitable times to enable the execution of the Works

The alignment and works area for the Contract No. HY/2014/08 - are shown in Appendix A.

1.4. A summary of the major construction activities undertaken in this reporting period is shown in Table 1.1. The construction programme is presented in Appendix B.

Table 1.1 Summary of the Construction Activities reported by Main Contractor during the Reporting Month

Construction Activities undertaken
● Construct D-wall panels, pumping test, excavation to roof slab & construct roof slab at Zone B ● Install Underground Utilities hanger support, excavation to roof slab and construct roof slab at Zone B ● Install Underground Utilities hanger support, excavation to roof slab and construct roof slab at Zone C ● Install Underground Utilities hanger support, excavation to roof slab and construct roof slab at Zone D ● Underground Utilities diversions, CLP Cable Tunnel A demolition, Jet Grouting, Pre-boring, D-wall construction, install kingposts/recharge well/observation well/pumping well and Pumping Test at Zone F ● Underground Utilities diversion, Jet Grouting, Preboring, Pipe Piles / D-wall construction, install king posts/ recharge well/observation well/pumping well and Pumping Test at Zone G ● Construct portal frame across, demolish existing Gascogine Road Flyover beams and construct end span at Portion 21 ● Construct bridge deck for spans P2 to P6 at Gascogine Road Flyover ● Construct socketed H-piles, pile caps, ground beams, reinforced concrete columns and erect steel posts of Noise Enclosure at Zone 3 ● Underground Utilities diversion, construct permanent & temporary pipe piles, barrette walls for Noise Enclosure at Zone 2

1.5. The project organisational chart specifying management structure and contact details are shown in Appendix C.

1.6. A summary of the valid permits, licences, and /or notifications on environmental protection for this Project is presented in Table 1.2.

Table 1.2 Summary of the Status of Valid Environmental Licence

Notification, Permit and Documentations

Permit/ Licences/ Notification /Reference No.	**Valid Period**		**Status**	**Remark**
	From	To		
Environmental Permit				
EP-457/2013/D	15 Jun 2021	End of Project	Valid	-
Further Environmental Permit				
FEP-03/457/2013/D	5 Nov 2021	End of Project	Valid	
Wastewater Discharge License				
WT00030660-2018	28 Mar 2018	31 Mar 2023	Valid	-
Notification of Construction Works under the Air Pollution Control (Construction Dust) Regulation				
471691	14 Sep 2021	End of Project	Notified	-
Chemical Waste Producer Registration				
WPN5213-225-B2526-01	14 Mar 2018	End of Project	Valid	-
Billing Account for Disposal of Construction Waste				
7029997	1 Feb 2018	End of Project	Valid	-
Construction Noise Permit				

Permit/ Licences/ Notification /Reference No.	Valid Period		Status	Remark
	From	To		
GW-RE0492-22	20 May 2022	19 Nov 2022	Valid	Construction Noise Permit at P6
GW-RE0529-22	31 May 2022	26 Nov 2022	Supersede by GW-RE1124-22	Construction Noise Permit at Zone A & B1
GW-RE1124-22	22 Oct 2022	19 Apr 2023	Valid	
GW-RE0716-22	15 Jul 2022	14 Jan 2023	Valid	Construction Noise Permit at Zone 3
GW-RE0804-22	12 Aug 2022	11 Nov 2022	Valid	Construction Noise Permit at Zone D & P4
GW-RE0839-22	16 Aug 2022	29 Oct 2022	CNP renewal is under application	Construction Noise Permit for Central Divider Removal at GRF
GW-RE0966-22	25 Sep 20022	30 Oct 2022	Completed	Construction Noise Permit for TTA Implementation at Sai Kung Street
GW-RE1003-22	1 Oct 2022	31 Oct 2022	CNP renewal is under application	Construction Noise Permit at P2
GW-RE1009-22	6 Oct 2022	30 Nov 2022	Valid	Construction Noise Permit for disassembly, assembly and lanching of Form Traveller at Kansu Street between Shanghai Street and Canton Road
GW-RE1015-22	6 Oct 2022	31 Dec 2022	Valid	Construction Noise Permit for Inspection and Maintenance (Road Resurfacing)
GW-RE1017-22	1 Oct 2022	31 Dec 2022	Valid	Construction Noise Permit for Erection of Enclosure at Zone 3
GW-RE1109-22	20 Oct 2022	30 Nov 2022	Valid	Construction Noise Permit at GRF for Temporary Erection of Bridge Decking
GW-RE1111-22	21 Oct 2022	19 Jan 2023	Valid	Construction Noise Permit at Zone B3 & F
GW-RE1116-22	21 Oct 2022	20 Jan 2023	Valid	Construction Noise Permit at Zone B2 & C

Permit/ Licences/ Notification /Reference No.	Valid Period		Status	Remark
Marine Dumping Permit				
EP/MD/23-016	23 Jun 2022	22 Dec 2022	Valid	Type 1 – Open Sea Disposal
EP/MD/23-049	25 Oct 2022	24 Nov 2022	Valid	Dumping at Sea Permit (Type 1 – Open Sea Disposal (Dedicated Site) & Type 2 - Confined Marine Disposal)

2. ENVIRONMENTAL STATUS

2.1. 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) and FEP (FEP-03/457/2013/D) as of 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 and FEP-03/457/2013/D for the Project

EP/FEP Condition (EP-457/2013/D) (FEP-03/457/2013/D)	**Submission**	**Submission date**
Condition 3.4	Monthly EM&A Report (Sep 2022)	14 Oct 2022

2.2. Details of the major construction activities reported by Main Contractor in this reporting period are shown in Table 2.2.

Table 2.2 Summary of the Construction Activities reported by Main Contractor during the Reporting Month

Construction activities undertaken	**Remarks on progress**
● Construct D-wall panels, pumping test, excavation to roof slab & construct roof slab at Zone B	● 92% completion
● Install Underground Utilities hanger support, excavation to roof slab and construct roof slab at Zone B	● 15% completion
● Install Underground Utilities hanger support, excavation to roof slab and construct roof slab at Zone C	● 15% completion
● Install Underground Utilities hanger support, excavation to roof slab and construct roof slab at Zone D	● 15% completion
● Underground Utilities diversions, CLP Cable Tunnel A demolition, Jet Grouting, Pre-boring, D-wall construction, install kingposts/ recharge well/observation well/pumping well and Pumping Test at Zone F	● 32% completion
● Underground Utilities diversion, Jet Grouting, Preboring, Pipe Piles / D-wall construction, install king posts/ recharge well/observation well/pumping well and Pumping Test at Zone G	● 29% completion
● Construct portal frame across, demolish existing Gascoigne Road flyover beams and construct end span at Portion 21	● 80% completion
● Construct bridge deck for spans P2 to P6 at Gascoigne Road flyover	● 62% completion
● Construct socketed H-piles, pile caps, ground beams, reinforced concrete columns and erect steel posts of Noise Enclosure at Zone 3	● 71% completion
● Underground Utilities diversion, construct permanent & temporary pipe piles, barrette walls for Noise Enclosure at Zone 2	● 60% completion

2.3. The drawing showing the project layout and the location of the monitoring station and environmental sensitive receivers are attached in Appendix A and Appendix K. Co-ordinates of the monitoring location are shown in Table 2.3.

Table 2.3 Summary for the location of the monitoring station

Monitoring Location	Location ID	Latitude	Longitude
Yau Ma Tei Catholic Primary School (Hoi Wang Road)*	W-A1/ W-N1A	22.31345	114.16409
Man Cheong Building	W-A6	22.308185	114.166033
Hydan Place	W-N18	22.30858	114.170185
Prosperous Garden Block 1	W-N25A	22.309846	114.168072
The Coronation Tower 1	W-P11	22.309824	114.165616

Remark: *The High Volume Sampler (HVS) at dust impact monitoring location W-A1 had been relocated on 6 Sep 2022 due to installation work of PV panel at Yau Ma Tei Catholic Primary School. The relocation of HVS was approved by ER and agreed with IEC.

3. MONITORING RESULTS

3.1. Monitoring Parameters

Air Quality

3.1.1. The impact monitoring had been carried out in accordance with section 5.8 of the approved EM&A Manual to determine the 1-hour and 24-hour total suspended particulates (TSP) levels at the monitoring locations in the reporting month.

3.1.2. The sampling frequency of at least once in every 6 days, shall be strictly observed at the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least 3 times in every 6 days should be undertaken when the highest dust impact occurs.

3.1.3. General meteorological conditions (wind speed, direction and precipitation) and notes regarding any significant adjacent dust producing sources had also been recorded throughout the impact monitoring period.

Noise

3.1.4. Construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}). Leq (30min) shall be used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays.

3.1.5. For all other time periods, Leq (5min) shall be employed for comparison with the Noise Control Ordinance (NCO) criteria.

3.1.6. As supplementary information for data auditing, statistical results such as L_{10} and L_{90} shall also be obtained for reference.

3.2. Monitoring Equipment

Air Quality

3.2.1. 1-hour TSP levels and 24-hour TSP had been measured with direct reading dust meter and High Volume Samplers respectively. It has been demonstrated its capability in achieving comparable results with high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50).

3.2.2. The 1-hour TSP meter was calibrated by the manufacturer prior to purchasing. Zero response of the instrument was checked before and after each monitoring event. Operation of the 1-hour TSP meter followed manufacturer's Operation and Service Manual. The 24-hour TSP meter was calibrated against firmware 80570-8100-V1.0.4, annually. Operation of the 24-hour TSP meter followed manufacturer's Operation and Service Manual. Valid calibration certificates of dust monitoring equipment are attached in Appendix H.

3.2.3. A summary of the equipment that was deployed for the 24- hour averaged monitoring is shown in Table 3.1. The TSP monitoring was conducted as per the schedule presented in Appendix G.

3.2.4. The equipment used for 1-hour TSP and 24-hour TSP measurement and calibration are summarised in Table 3.1

Table 3.1 Construction Dust Monitoring Equipment

Monitoring Parameter	Monitoring Equipment	Serial Number	Date of Calibration
1-hour TSP	LD-5R Digital Dust Indicator	0Z4545	3 Apr 2022
	LD-5R Digital Dust Indicator	992820	3 Apr 2022
24-hour TSP	TE-5170X High Volume Sampler	1084	30 Sep 2022 and 15 Oct 2022
	TE-5170X High Volume Sampler	1050	30 Sep 2022 and 15 Oct 2022
	TE-5025A Calibration Kit	3465	28 Jun 2022

Noise

3.2.5. Sound level meter in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications has been used for carrying out the noise monitoring. The sound level meter has been checked using an acoustic calibrator. The wind speed and other metrological data 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 are not available from HKO.

3.2.6. Acoustic calibrators and sound level meters using for the monitoring is within the valid period and were calibrated per year. Valid calibration certificate of noise monitoring equipment is attached in Appendix I.

3.2.7. The details of equipment using for monitoring are listed in Table 3.2, as below:

Table 3.2 Monitoring Equipment Used in Monitoring

Monitoring Equipment	Serial Number	Date of Calibration
Nti XL2 Sound Level Meter	A2A-13548-E0	3 Jan 2022
Lutron SL-4033SD Sound Level Meter	I.491835	3 Jan 2022
Rion NC-74 Sound Level Calibrator	34504770	11 Feb 2022

3.3. Monitoring Methodology and QA/QC results

Air Quality

3.3.1. The 1-hour TSP monitor, portable dust meters (Sibata Digital Dust Indicator Model LD-5R) was used for the impact monitoring. The 1-hour TSP meters provides a real time 1-hour TSP measurement based on 90^{o} light scattering. Three 1-hour TSP level were logged per every six days.

3.3.2. The 24-hour TSP monitor, High Volume Samplers (Tisch TE-5170X High Volume Air Sampler) were used for the impact monitoring. The 24-hour TSP monitoring consists of the following:

- The HVS was set at the monitoring location, with electricity supply connected and secured;
- HVS was calibrated before commencing the 1st measurement;
- The filter paper was weight and provided by HOKLAS lab (Acumen Laboratory and Testing Limited and ALS Technichem (HK) Pty Ltd) before and after the sampling. Certificate of HOKLAS accredited laboratory can be referred to Appendix J;
- The airflow over time during sampling process was recorded by the HVS.

3.3.3. HVSs were free-standing with no obstruction. The following criteria were considered in the installation of the HVS:

- Appropriate support to secure the samples against gusty wind needed to be provided the monitoring station;
- A minimum of 2m separation from walls, parapets and penthouses was required for rooftop samplers;
- No furnace or incinerator flues was nearby;
- Airflow around the sampler was unrestricted; and
- Permission could be obtained to set up the samplers and gain access to the monitoring station.

3.3.4. Preparation of Filter Papers

- Glass fiber filters 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℃ and not varied by more than ±3℃; the relative humidity (RH)was 40%; and
- Acumen Laboratory and Testing Limited and ALS Technichem (HK) Pty Limited, as HOKLAS accredited laboratory, implemented comprehensive quality assurance and quality control programmes on the filters.

3.3.5. Field Monitoring

- The power supply was checked to ensure that the HVS was working properly;
- The filter holder and area surrounding the filter were cleaned;
- The filter holder was removed by loosening the foul 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 should be sufficient to avoid air leakage at the edges;
- The shelter lid was closed and secured with an aluminum strip;
- The HVS was warmed- up for about 5 minutes to establish run- temperature conditions;
- A new flow rate record sheet was inserted into the flow recorder;
- The flow rates of the HVS was checked and adjusted to between 0.64-1.52m^3min^{-1}, which was within the range specified in the EM&A Manual (i.e. 0.6- 1.7m^3min^{-1});

- The programmable timer was set for a sampling period of 24 hours, and the starting time, weather condition and filter number were recorded;
- The initial elapsed time was recorded;
- At the end of sampling, the sampled filter was removed carefully and folded in half so that only surfaces with collected particulate matter were in contact;
- The filter paper was placed in a clean plastic envelope and sealed; all monitoring information was recorded on a standard data sheet and
- The filters were sent to (Acumen Laboratory and Testing Ltd and ALS Technichem (HK) Pty Ltd) for analysis.

3.3.6. Maintenance and Calibration

- The HVS and their accessories were maintained in a good working condition. For example, motor brushes were replaced routinely and electrical wiring was checked to ensure a continuous power supply; and
- The flow rate of each HVS with mass flow controller was calibrated using an orifice calibrator, Initial calibrations of the dust monitoring equipment were conducted upon installation and prior to commissioning. Five- point calibration was carried out for HVS using TE-5025 Calibration Kit. HVS is calibrated bimonthly. The calibration records for the HVS is given in Appendix H.

3.3.7. 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 are not available from HKO.

Noise

3.3.8. All noise measurements by the meter were set to FAST response and on the A-weighted equivalent continuous sound pressure level (L_{eq}) in decibels dB(A). $L_{Aeq(30min)}$ was used as the monitoring metric for the time period between 0700 –1900 hours on normal weekdays. The measured noise levels were logged every 5 minutes throughout the monitoring period.

3.3.9. Prior to the noise measurement, the accuracy of the sound level meter was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Checking was conducted before and after the monitoring. The calibration level before and after the noise measurement is agreed to within 1.0 dB(A).

3.3.10. Noise measurements should not be made in presence of fog, rain, wind with a steady speed exceeding 5 ms^{-1} or wind with gusts exceeding 10 ms^{-1}. The wind speed was checked with a portable wind speed meter capable of measuring with speeds in ms^{-1}.

3.4. Monitoring Locations

Air Quality

3.4.1. During the site visit, both of the original proposed dust monitoring locations were rejected due to the condition at The Coronation was not favourable for monitoring and the access was declined by the management office of Hong Kong Community College (HKCC) of PolyU. Two alternative air monitoring stations Yau Ma Tei Catholic Primary School (Hoi Wang Road) and Man Cheong Building had been proposed by ET and approved by IEC. 2 designated air monitoring locations were identified and agreed with IEC and EPD. Details of air monitoring stations are described in Table 3.3. The location plan of air quality monitoring stations is shown in Appendix K.

Table 3.3 Location of the Dust Monitoring Stations

Air Quality Monitoring Station	Dust Monitoring Station
W-A1	Yau Ma Tei Catholic Primary School (Hoi Wang Road)
W-A6	Man Cheong Building

Noise

3.4.2. During the site visit, one of the original proposed noise monitoring locations Tak Cheong Building was rejected by the president of the owner's corporation. Alternative noise monitoring station Hydan place had been proposed by ET and approved by IEC. 4 noise sensitive receivers designated noise monitoring locations were identified and agreed with IEC and EPD. The designated monitoring stations are identified and access was granted by the premises. The details of noise monitoring stations are described in Table 3.4 and the location plan of noise monitoring station is shown in Appendix K.

Table 3.4 Noise Monitoring Stations

Noise Monitoring Station	Identified Noise Monitoring Station	Type of Measurement
W-N1A	Yau Ma Tei Catholic Primary School (Hoi Wang Road)	Façade
W-N18	Hydan Place	Façade
W-N25A	Prosperous Garden Block 1	Façade
W-P11	The Coronation Tower 1	Façade

3.5. Monitoring date, time, frequency and duration

3.5.1. A summary of impact monitoring duration, sampling parameter and frequency is presented in Table 3.5.

Table 3.5 Summary of Impact Monitoring Programme

Impact Monitoring	Duration	Sampling Parameter	Frequency
Dust	1-hour continuous measurement	1-hour TSP	3 times per six days
Dust	24-hour continuous sampling	24-hour TSP	Once per six days
Noise	30-minute continuous measurement	$L_{eq\ 30\ min}$, L_{10} and L_{90} as reference.	Once per week (0700 – 1900)

3.6. Result Summary

Air Quality

3.6.1. According to our field observations, the major dust source identified at the designated air quality monitoring stations in the reporting month are summarised in Table 3.6.

Table 3.6 Observation at Dust Monitoring Stations

Monitoring Station	Major Dust Source
W-A1	Nearby traffic
W-A6	Nearby traffic

3.6.2. Air quality impact monitoring for the reporting month was carried out on 3, 8, 14, 20 and 26 October 2022.

3.6.3. The results for 1-hour TSP and 24-hour TSP are summarized in Table 3.7 and Table 3.8. The measurement data and details of influencing factors such as weather conditions and site observation are presented in Appendix L.

Table 3.7 Summary of 1-hour TSP Monitoring Results

Monitoring Location	Range(μg/m^3)	Action Level(μg/m3)	Limit Level(μg/m3)
W-A1	52 - 68	319	500
W-A6	62 - 77	306	500

Table 3.8 Summary of 24-hour TSP Monitoring Results

Monitoring Location	Range(μg/m^3)	Action Level(μg/m3)	Limit Level(μg/m3)
W-A1	16 - 37	167	260
W-A6	12 - 32	166	260

Noise

3.6.4. According to our field observations, the major noise source identified at the designated noise monitoring station in the reporting month are summarised in Table 3.9:

Table 3.9 Observation at Noise Monitoring Stations

Monitoring Station	Major Noise Source
W-N1A	Nearby traffic
W-N18	Nearby traffic
W-N25A	Nearby traffic
W-P11	Nearby traffic

3.6.1. The construction noise impact monitoring for the reporting month was carried out on 3, 8, 14, 20 and 26 October 2022.

3.6.2. The result for noise monitoring is summarized in Table 3.10. The measurement data are shown in Appendix M.

Table 3.10 Summary of Noise Monitoring Results

Time Period	**Monitoring location**	**Parameter**	**Range, dB(A)**				
			L_{eq}	**L_{10}**	**L_{90}**	**Action Level**	**Limit Level#**
Normal working hour from 0700-1900	W-N1A	Leq 30min	58.5 – 61.0	60.3 – 63.7	55.5 – 58.3	When one documented complaint is received	70dB(A) or 65 dB(A) during examination
	W-N18		68.9 – 72.8	72.3 – 73.9	65.8 – 67.3		75dB(A)#
	W-N25A		68.6 – 71.3	71.1 – 74.5	64.8 – 67.3		
	W-P11		66.3 – 68.9	67.1 – 71.1	64.3 – 65.5		

Remarks: 1. # If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit by the Noise Control Authority have to be followed.

Waste management

3.6.3. The 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. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in Table 3.11. Details of cumulative waste management data are presented as a waste flow table in Appendix N.

Table 3.11 Quantities of waste generated from the Project

Reporting period	Quantity					
	Inert C&D Materials (in 'tonnes)	Chemical Waste (in'000 Kg)	Non-inert C&D Materials			
			Others, e.g. General Refuse disposed at Landfill (in 'tonnes)	Recycled materials		
				Paper/card board (in '000 Kg)	Plastics (in '000 Kg)	Metals (in '000 Kg)
October-2022	14167.60	0.00	72.00	0.10	0.00	0.00

4. SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

4.1. The Environmental Complaint Handling Procedure is shown in below Table 4.1:

Table 4.1 Environmental Complaint Handling Procedure

Complaint Received via Project Hotline	Complaint Received via 1823 or from other government departments
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 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 time frame 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	

4.2. 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.

4.3. One Action Level of construction noise weas triggered during the reporting period as a documented complaint was received on 26 October 2022 related to construction noise from works areas at Zone 3 Noise Enclosure. No exceedance of Limit Level of construction noise was recorded in the reporting month. No exceedance of the Action and Limit Level of 24-hour TSP and 1-hour TSP was recorded in the reporting month.

4.4. One noise related complaint was received on 26 October 2022. After investigation with Contractor, precautionary measures had been proposed to the Contractor by ET. The interim report for the complaint is shown in Appendix Q.

4.5. No non-compliance was reported in the reporting month.

4.6. No notification of summon and prosecution was received in the reporting period.

4.7. Statistics on complaints, notifications of summons and successful prosecutions are summarized in Appendix O.

5. EM&A SITE INSPECTION

5.1. 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, four (4) site inspections were carried out on 6, 13, 20 and 27 October 2022, along with bi-weekly inspection of the implementation of landscape and visual mitigation measures conducted on 13 and 27 October 2022.

5.2. One joint site inspection with IEC also undertaken on 13 October 2022. Minor deficiencies were observed during weekly site inspection. Key observations during the site inspections are summarized in Table 5.1.

Table 5.1 Site Observations

Date	Environmental Observations	Follow-up Status
6 October 2022	1. The cement bags at Zone G should be covered with impervious sheeting at 3 sides. 2. NRMM labels should be placed properly on the plants at Zone D2 & C.	1. Cement bags had been covered with impervious sheeting. 2. NRMM labels had been posted properly.
13 October 2022	1. The stockpile of dusty materials at Zone B3 should be sprayed with water. 2. Tree protection zone at Zone B3 should be clear of construction materials. 3. The cement bags at Zone F should be covered with impervious sheeting at least 3 sides.	1. The stockpile of dusty materials had been covered with impervious sheeting. 2. Tree protection zone had been clear of construction materials. 3. Cement bags had been covered with impervious sheeting.
20 October 2022	No major observation was found during site inspection.	NA
27 October 2022	1. The cement bags at Zone F should be covered with impervious sheeting at 3 sides. 2. The NRMM label of the equipment at Zone B2 & P6 should be placed properly. 3. Regular water spraying should be implemented on the exposed earth at Zone G.	1. Cement bags had been covered with impervious sheeting. 2. The NRMM labels had been posted properly. 3. Regular water spraying had been implemented on the exposed earth.

5.3. The Contractor had rectified all observation identified during environmental site inspection in the reporting period.

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

6. FUTURE KEY ISSUES

6.1. The construction activities provided by Main Contractor in the next reporting month are:

Construction Activities to be undertaken

- Excavation and construction of bottom slab at Zone A
- Installation of Underground Utilities Hanger Support, exposure of box culvert and plugging of abandoned pipe at Zone B
- Exposure and install hanger support for existing Underground Utilities under traffic deck in Zone B, C and D
- Pre-boring works and D-wall construction at Zone B3
- Complete reinstatement of partial demolition works of Cable Tunnel A, Pre-boring works and commence D-wall construction at Zone F
- Pre-drilling works, Pipe piling works, underground utilities diversion work and ground improvement (TAM Grouting) works at Zone G
- Works for reprovisioning of Gascoigne Road Flyover at HKAA area: Temporary footing and falsework erection for P7 end span construction
- Bridge Works:
  i. FT1- complete bridge deck construction for P4L and relocate FT1 to pier P3.
  ii. FT2- complete bridge deck construction for P6L and relocate FT2 to P2
  iii. Portal and End-span Deck Construction for P1
  iv. Pier Head Segment including Cross Beam construction for P2
- Continue socketed H-pile works for middle/east foundation and west side of Noise Enclosure in Zone 3, Excavation and Lateral Support and construction works for pile caps and ground beams construction for middle/east foundation for Zone 3 Noise Enclosure
- Erection of Y columns and side columns for Noise Enclosure in Zone 3 (night works)
- Works at Zone 2 Noise Enclosure scheduled as the following:
  i. Column E – Excavation and Lateral Support works and pile cap construction;
  ii. Column G – Permanent diversion of uncharted 1200mm dia. drainage pipe;
  iii. Columns A1 – Construct temporary reinforced concrete pile cap and erect steel tower;
  iv. Column C – Complete design and fabrication of steel footing and install steel footing.
- Noise Enclosure steelworks fabrication at Fabrication Yard in Zhuhai, China
- Erection of Y columns and side columns for Noise Enclosure in Zone 3 west side
- Monitoring of instrumentation for all areas

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

6.3. The tentative schedule of regular construction noise, 1-hour TSP and 24-hour TSP monitoring in the next reporting period is presented in Appendix P.

6.4. The construction programme for the Project for the next reporting month is presented in Appendix B.

7. CONCLUSION AND RECOMMENDATIONS

7.1. This 55th monthly EM&A Report presents the EM&A works undertaken during the period from 1 October 2022 to 31 October 2022 in accordance with the EM&A Manual and the requirement under EP- 457/2013/D and FEP-03/457/2013/D.

7.2. One Action Level of construction noise weas triggered during the reporting period as a documented complaint was received on 26 October 2022 related to construction noise from works areas at Zone 3 Noise Enclosure. No exceedance of Limit Level of construction noise was recorded in the reporting month. No exceedance of the Action and Limit Level of 24-hour TSP and 1-hour TSP was recorded in the reporting month.

7.3. Weekly environmental site inspections were conducted during the reporting period. Joint site inspection with IEC were carried out on 13 October 2022. Minor deficiency was observed during site inspection and was rectified within the specified deadlines. The environmental performance of the Project was therefore considered satisfactory.

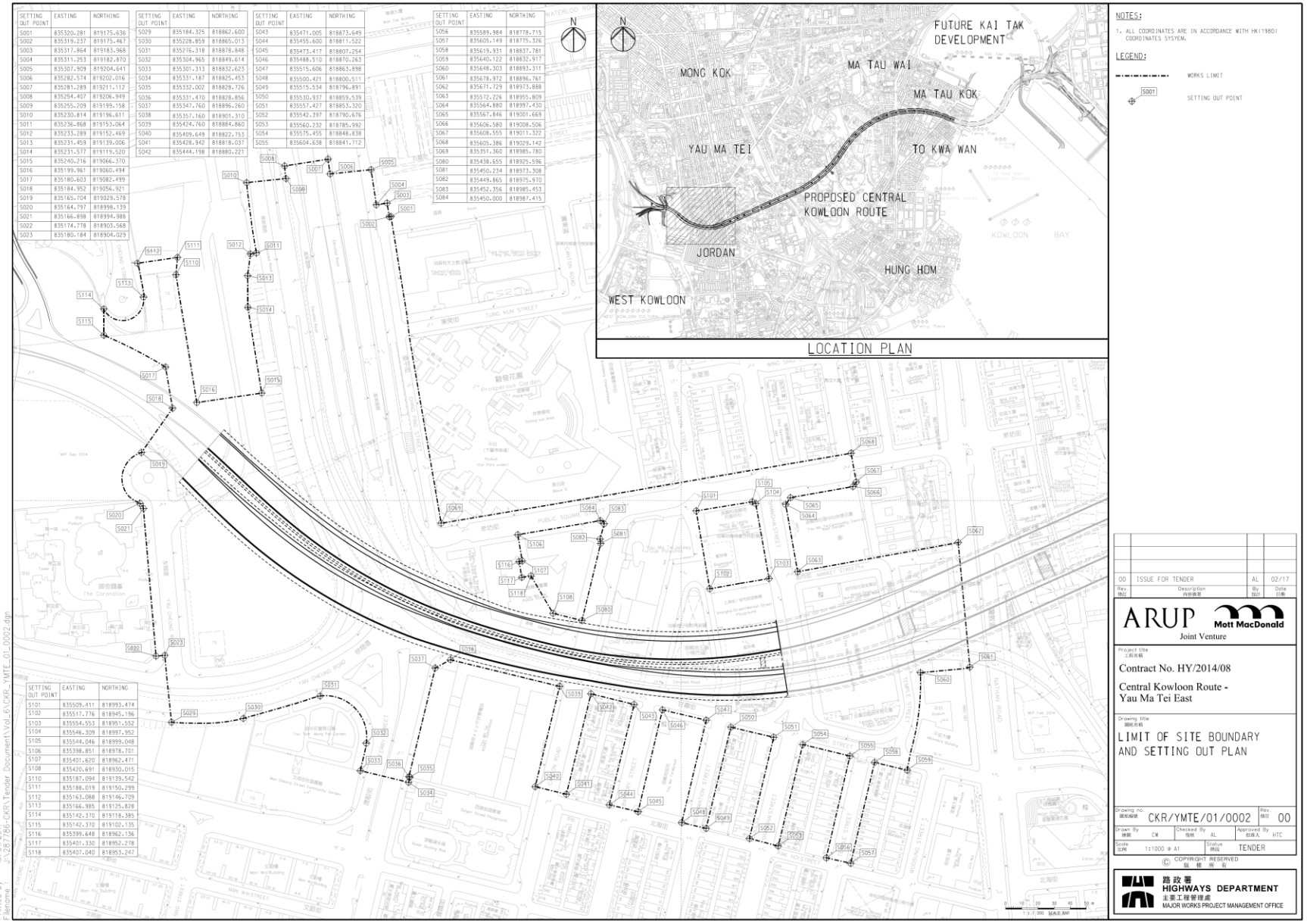
7.4. One noise related complaint was received on 26 October 2022. After investigation with Contractor, precautionary measures had been proposed to the Contractor by ET. The interim report for the complaint is shown in Appendix Q.

7.5. No non-compliance was reported in the reporting month.

7.6. No notification of summons or prosecution was received in the reporting month.

7.7. The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

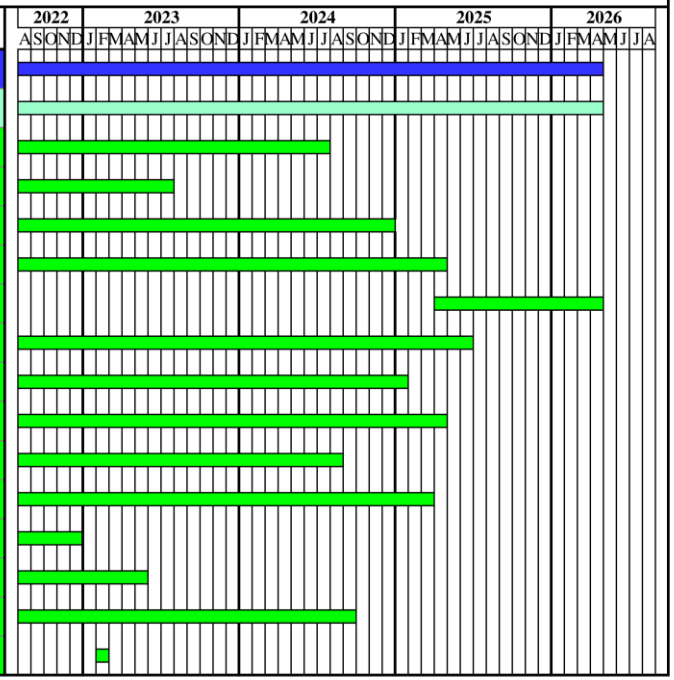
Appendix A
Alignment and Works Area For the Contract No. HY/2014/08


LOCATION PLAN
FUTURE KAI TAK DEVELOPMENT
MONG KOK
MA TAU WAI
MA TAU KOK
YAU MA TEI
TO KWA WAN
PROPOSED CENTRAL KOWLOON ROUTE
JORDAN
HUNG HOM
WEST KOWLOON
KOWLOON BAY
NOTES:
1. ALL COORDINATES ARE IN ACCORDANCE WITH HK1980 COORDINATES SYSYEM.
LEGEND:
WORKS LIMIT
SETTING OUT POINT
ARUP
Mott MacDonald
Joint Venture
Contract No. HY/2014/08
Central Kowloon Route - Yau Ma Tei East
LIMIT OF SITE BOUNDARY AND SETTING OUT PLAN
CKR/YMTE/01/0002
TENDER
HIGHWAYS DEPARTMENT
MAJOR WORKS PROJECT MANAGEMENT OFFICE

Appendix B
Construction Programme

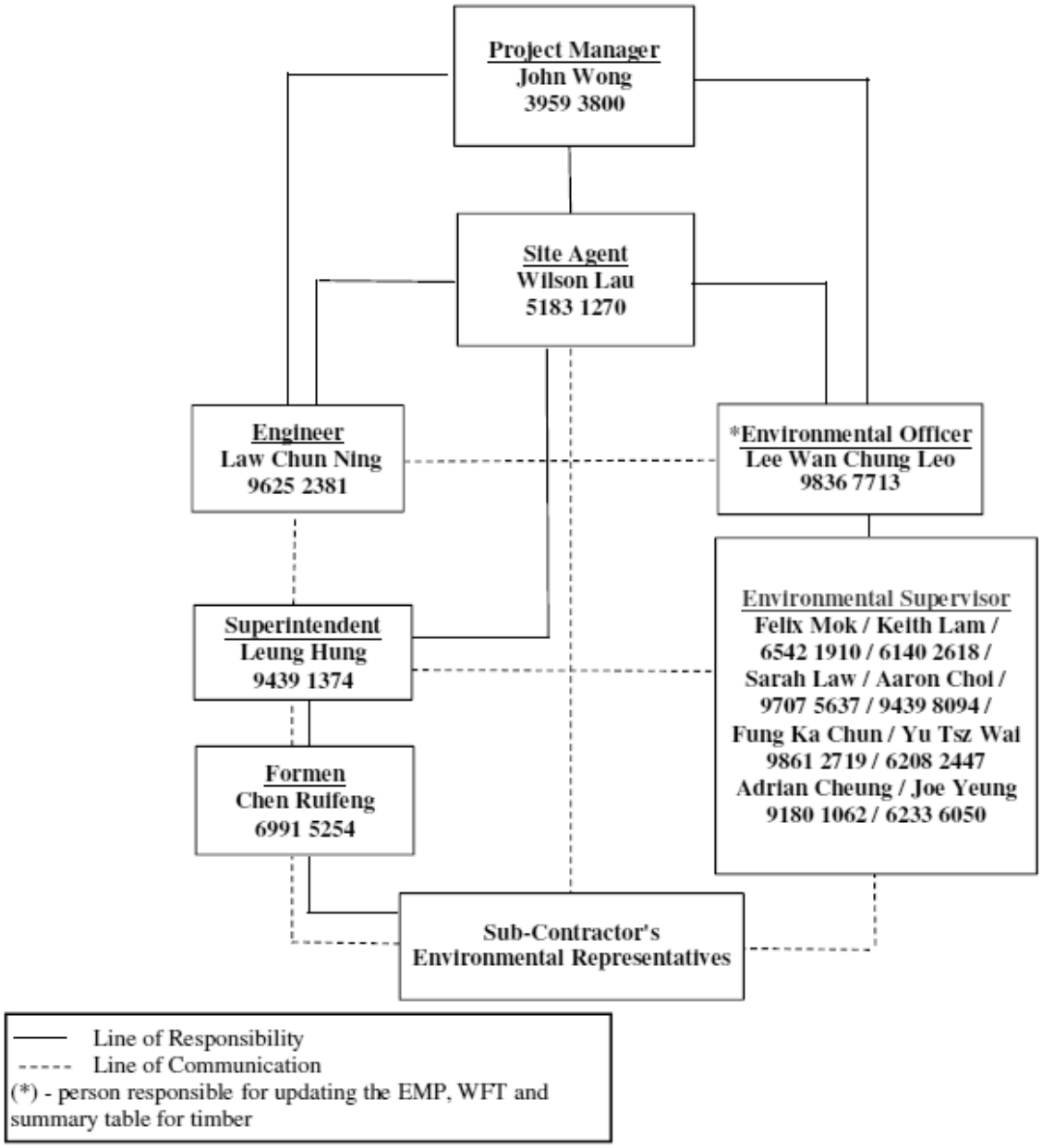
Construction Programme

Activity Name	Duration	Start	Finish
HY/2014/08 Central Kowloom Route - Yau Ma Tei East	**3034**	**8-Jan-18**	**29-Apr-26**
Construction Works	**3025**	**17-Jan-18**	**29-Apr-26**
Temporary Traffic Management in Underground (Portion 11 & 12)	1763	29-Sep-19	26-Jul-24
Works on Northern & Southern Parts of YMT Multi-Storey Car Park Building	688	1-Sep-21	20-Jul-23
All Works within TMTSC, Maintenance Depot Area, Public Square St/Kansu St Rest Garden, Access Road	2530	17-Jan-18	20-Dec-24
Preservation and Protection of Existing Trees	2660	17-Jan-18	29-Apr-25
Establishment Works	0	30-Apr-26	29-Apr-26
All Works in Underground	1213	14-Feb-22	10-Jun-25
Completion of Noise Enclosure	1595	26-Aug-20	6-Jan-25
All Remaining Works not Covered in Other Section	2520	6-Jun-18	29-Apr-25
Construction of C&C Tunnel Eastbound	2400	17-Jan-18	12-Aug-24
Construction of C&C Tunnel Westbound	2615	17-Jan-18	15-Mar-25
C&C Tunnel Works within Portion 13 & 20A, Cul-de-sac at Portion 20B & 24	1729	7-Apr-18	30-Dec-22
Demolition of Southern Part of Ex. YMT Multi-Storey Car Park Building	135	14-Jan-23	28-May-23
GRF Reprovisioning	1750	16-Dec-19	29-Sep-24
Completion of Diaphragm Walls and Roof Slabs of C&C Tunnels within Portion 27 and 28	1	23-Feb-23	23-Feb-23



Appendix C
Project Organization Chart

Project O-Chart



Appendix D
Dust Event-Action Plan (EAP)

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
ACTION LEVEL				
1.Exceedance for one sample	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.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate.
2.Exceedance for two or more consecutive samples	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.	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.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.
LIMIT LEVEL				
1.Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and	1. Check monitoring data submitted by ET; 2. Check Contractor's working method;	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor;	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
	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.	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.	3. Ensure remedial measures properly implemented.	within 3 working days of notification; Implement the agreed proposals; 4. Amend proposal if appropriate.
2.Exceedance for two or more consecutive samples	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.	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.	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.	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.

Note:

ET – Environmental Team ER – Engineer's Representative

IEC – Independent Environmental Checker

Appendix E
Noise Event-Action Plan (EAP)

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
Action Level	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.	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.	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	1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.
Limit Level	1. Identify source; 2. Inform IEC, ER, EPD and Contractor; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	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 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	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.

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
	and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.		abated.	

Note:

ET – Environmental Team

IEC – Independent Environmental Checker

ER – Engineer's Representative

Appendix F
Environmental Mitigation Implementation Schedule (EMIS)

Environmental Mitigation Implementation Schedule – Contract No. HY/2014/08 (Yau Ma Tei East)

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	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	• APCO • To control the dust impact To meet HKAQO and TM-EIA criteria	• Implemented, deficiency rectified after observation
S4.3.10	D2	• 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/m^2 to achieve the dust removal efficiency.	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	• APCO • To control the dust impact To meet HKAQO and TM-EIA criteria	• Implemented
S4.3.10	D3	• 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	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	• APCO • To control the dust impact To meet HKAQO and TM-EIA criteria	• Implemented, deficiency rectified after observation

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		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 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; • 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						

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		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 • 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)								

Environmental Mitigation Implementation Schedule – Contract No. HY/2014/08 (Yau Ma Tei East)

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
S5.4.1	N1	Implement the following good site practices: • 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
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 through partial screening	Contractor	All construction sites	Construction stage	• Annex 5, TM-EIAO	• Implemented
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,	Sreen the noisy plant items to be used at all construction	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM-EIAO	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		screen the noisy plants including air compressors, generators and handheld breakers, etc.	sites					
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	• Implemented
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	• Implemented
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)								

Environmental Mitigation Implementation Schedule – Contract No. HY/2014/08 (Yau Ma Tei East)

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
S6.9.1.1	W1	In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN1/94), construction phase mitigation measures shall include the following: <u>Construction Runoff</u> • 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 sand bag 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 1/94, which states that the retention time for silt/ sand traps should be 5 minutes under	To minimize water quality impact from the construction site runoff and general construction activities	Contractor	All construction sites where practicable	Construction stage	• Water Pollution Control Ordinance • ProPECC PN 1/94 • TM-EIAO • TM-DSS	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		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; • 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						

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		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 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes; • 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						

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		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 October) as far as practicable.						

Environmental Mitigation Implementation Schedule – Contract No. HY/2014/08 (Yau Ma Tei East)

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>Tunneling Works and Underground Works</u> • Cut-&-cover tunneling work should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to October) 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 the 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 1/94 should be adhered to in the handling and disposal of bentonite slurries.	To minimize construction water quality impact from tunneling works	Contractor	All tunneling portion	Construction stage	• Water Pollution Control Ordinance • ProPECC PN 1/94 • TM-DSS • TM-EIAO	• Implemented
S6.9.1.3	W3	<u>Sewage Effluent</u> • 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	To minimize water quality from sewage effluent	Contractor	All construction sites where practicable	Construction stage	• Water Pollution Control Ordinance • TM-DSS	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		responsible for appropriate disposal and maintenance.						
S6.9.1.5	W4	<u>Groundwater from Potential Contaminated Area:</u> • No direct discharge of groundwater from contaminated areas should be adopted. • 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	To minimize groundwater quality impact from contaminated area	Contractor	Excavation areas where contamination is found	Construction stage	• Water Pollution Control Ordinance • TM-DSS • TM-EIAO	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		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 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	<u>Accidental Spillage</u> In order to prevent accidental spillage of chemicals, the following is recommended:	To minimize water quality impact from accidental	Contractor	All construction site where practicable	Construction stage	• Water Pollution Control Ordinance	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		• 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. Disposal of chemical wastes should be conducted in compliance with the requirements as stated in the Waste Disposal (Chemical Waste) (General) Regulation.	spillage				• ProPECC PN 1/94 • TM-EIAO • TM-DSS	
Waste Management (Construction Waste)								
S7.4.1	WM1	<u>On-site sorting of C&D material</u> • 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 measures to prevent unsuitable rock from ending up at concrete	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	• DEVB (W) No. 6/2010	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		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> • 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 are properly documented and verified; and	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	• Land (Miscellaneous Provisions) Ordinance • Waste Disposal Ordinance • ETWB TCW No. 19/2005	• Implemented

Environmental Mitigation Implementation Schedule – Contract No. HY/2014/08 (Yau Ma Tei East)

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
		• 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.						
S7.5.1	WM3	<u>C&D Waste</u> • 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	• Land (Miscellaneous Provisions) Ordinance • Waste Disposal Ordinance • ETWB TCW No. 19/2005	• Implemented

Environmental Mitigation Implementation Schedule – Contract No. HY/2014/08 (Yau Ma Tei East)

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	WM5	Land-based Sediment • 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; • 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 licence.	To control pollution due to marine sediment	Contractor	Along CKR alignment	Construction stage	• ETWB TCW No. 34/2002	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		• 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. • 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	<u>Chemical Waste</u> • Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in	Control the chemical waste and ensure proper storage,	Contractor	All construction sites	Construction stage	• Waste Disposal (Chemical Waste)	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		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; • 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.	handling and disposal				(General) Regulation • Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	

Environmental Mitigation Implementation Schedule – Contract No. HY/2014/08 (Yau Ma Tei East)

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	WM7	<u>General Refuse</u> • 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. • Aluminum 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	• Waste Disposal Ordinance	• Implemented
Land Contamination								
S8.9 & Appendix 8.4	LC2	<u>Excavation of the Contaminated Soil</u> • Prior to commencement of the excavation works at the contamination zone, the zone should be clearly marked out on site and the surface levels recorded. Excavation of contaminated material should be undertaken using dedicated earth-moving plant. • The excavated contaminated soils would be stockpiled at designated area on site and covered by sheet to prevent dispersion of contamination	The contaminated soil will be excavated for on-site reuse	Contractor	PBH4	Prior to commencement of construction works within the contaminated area	• Practice Guide (PG) for Investigation and Remediation of Contaminated Land	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

<table>
<tr><th>EIA Ref.</th><th>EM&A Log Ref.</th><th>Recommended Mitigation Measures</th><th>Objectives of the Recommended Measures & Main Concerns to address</th><th>Implementation Agent</th><th>Location / Timing</th><th>Implementation Stage</th><th>Requirements and/ or standards to be achieved</th><th>Implementation Status</th></tr>
<tr><td></td><td></td><td>during stockpiling.
• The Contractor should pay attention to the selection of suitable groundwater lowering schemes and discharge points if the groundwater table is higher than the contaminated soils during excavation. The Contractor should also obtain a valid Water Pollution Control Ordinance (WPCO) discharge licence from EPD where applicable.</td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2">• Guidance Notes for Contaminated Land Assessment and Remediation
• Guidance Manual for Use of Risk-Based Remediation Goals (RBRGs) for Contaminated Land Management</td><td></td></tr>
<tr><td>S8.9 & Appendix 8.4</td><td>LC3</td><td>• Following completion of the excavation to the specified depth, at least one sample from the base of the excavation and four samples evenly distributed along the boundary of the excavation shall be taken for a closure assessment testing. The acceptance criterion is shown below:
<table><tr><th>Locations</th><th>Testing requirement</th><th>Acceptance Criteria</th></tr><tr><td>PBH4</td><td>PCBs</td><td>RBRGs (Public Park)</td></tr></table>• If the results of analysis below the RBRGs (Public Park), no further excavation will be required.

If the analysis indicates presence of contamination (i.e. noncompliance of the acceptance criteria), further excavation shall be carried out in 0.5m increment vertically and/or horizontally depending on the location(s) of the sample(s) which has exceeded the acceptance criteria. Further sampling shall also be conducted for compliance testing. The process of</td><td>• Implemented</td></tr>
</table>

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		excavation, sampling and compliance testing should continue until all contaminated materials are removed and should be supervised by a Land Contamination Specialist.						
Appendix 8.4	LC4	A Remediation Report (RR) to demonstrate adequate clean-up shall be prepared and submitted to EPD for endorsement prior to the commencement of any construction/development works within the sites. No construction/development works shall be carried out prior to the endorsement of the RR by EPD.						• Implemented
Hazard to Life								
S9.18	H1	Blasting activities regarding transport and use of explosives should be supervised and audited by competent site staff to ensure full compliance with the blasting permit conditions.	To ensure that the risks from the proposed explosives handling and transport would be acceptable	Contractor	Works areas at which explosives would be used	Construction stage	• Dangerous Goods Ordinance	• N/A
S9.6, para.4	H2	Detonators shall not be transported in the same vehicle with other Category 1 Dangerous Goods.	To reduce the risk of explosion during the transport of cartridged emulsion	Contractor	-	Construction stage	• Dangerous Goods Ordinance	• N/A
S9.6, para.8	H3	The explosives delivery trucks should be approved by Mines Division and should meet the regulatory requirements for transport of explosives.	To comply with the requirements for approval of an explosives	Contractor	-	Construction stage	• Dangerous Goods Ordinance	• N/A

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
			delivery vehicle					
S9.10, para.7 and S9.18	H4	Blast cover should be provided for shaft at HMT, and kept closed during blasting. Provision of blast doors or heavy duty blast curtains should be implemented at the shaft to prevent flyrock and control the air overpressure.	To ensure safe use of explosives	Contractor	Shaft	Construction stage	-	• N/A
S9.16	H5	Only the required quantity of explosives for a particular blast should be transported to avoid the return.	To reduce risks during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H7	The approved truck dedicated for transport of explosives should comply with the "Guidance Note on Requirements for Approval of an Explosives Delivery Vehicle" issued by CEDD Mines Division. The truck should be periodically inspected and properly maintained in good operation conditions. The fuel carried in the fuel tank should be minimized to reduce the duration of fire. Adequate fire fighting equipment shall be provided, inspected and replaced periodically (e.g. fire extinguishers).	To reduce the risk during explosives transport	Contractor	Works areas of which explosives would be used	Construction stage	• Dangerous Goods Ordinance	• N/A
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	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		sessions/ workshops should be provided to enhance their safe driving attitude and practice. Smoking should be strictly prohibited.						
S9.18	H9	Emergency response plans in case of road accident should be prepared and implemented. 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.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H10	Close liaison and communication among Mines Division, Contractors for transport of explosives, and working staff of the blasting should be established. In case of any change of work schedule leading to cancellation or variation of explosives required, relevant parties should be informed in time to avoid unused explosives at the work sites.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H11	Close liaison and communication with Fire Services Department should be established to reduce the accidental detonation escalated from a fire. The contractors for transport of explosives should use the preferred transport routes as far as practicable.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H12	Contingency plan should be prepared for transport of explosives under severe weather conditions such as rainstorms and thunderstorms.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A

Environmental Mitigation Implementation Schedule – Contract No. HY/2014/08 (Yau Ma Tei East)

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
S9.18	H13	For explosive transport, all packages of explosives on the truck should be properly stored in the truck compartment as required. Packaging of the explosives should remain intact (i.e. damage free) until they are transferred to the blasting site.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H14	Availability of a parking space should be ensured before commencement of transport of explosives. Location for loading and unloading of explosives should be as close as possible to the shaft. No hot work should be performed in the vicinity during the time of loading and unloading.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H22	It is recommended to explore to minimize the use of the cartridged emulsion explosives and maximize the use of bulk emulsion explosive as far as practicable.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H24	It is recommended to explore to use smaller explosive charges such as 'cast boosters' or 'mini-cast booster' instead of cartridged emulsion as primers for bulk emulsion. This option reduces the quantity of explosives required for transportation for the sections where bulk emulsion will be used.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
Landscape & Visual								
S10.10.1 Table 10.11	LV3	<u>Good Site Management</u> • 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.	Minimize visual impact	Contractor	Within Project site	Construction stage	-	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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 plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance.						
S10.10.1 Table 10.11	LV4	<u>Screen Hoarding</u> • 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	-	• Implemented
S10.10.1 Table 10.11	LV5	<u>Lighting Control during Construction</u> • 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	-	• Implemented
S10.10.1 Table 10.11	LV6	<u>Erosion Control</u> • 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> • 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	• 'Guidelines for Tree Risk Management and Assessment Arrangement on an Area Basis and on a Tree Basis', Greening,	• Implemented, deficiency rectified after observation

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
							Landscape and Tree Management (GLTM) Section, DEVB • Latest recommended horticultural practices from GLTM Section, DEVB	
S10.10.1 Table 10.11	LV8	<u>Tree Transplantation</u> • 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	• ETWB TCW 3/2006 • Latest recommended horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB • ETWB TCW	• N/A

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
							2/2004	
S10.10.1 Table 10.11	LV9	<u>Compensatory Planting</u> • 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 Tree Felling Application process under ETWBTC 3/2006. • 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 Government during the Tree Felling Application process.	Minimize visual impact and also enhance landscape	Contractor	Within Project site	Construction stage	• ETWB TCW 3/2006 • Latest recommended horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB • ETWB TCW 2/2004	• N/A
Cultural Heritage Impact (Construction Phase)								

Environmental Mitigation Implementation Schedule – Contract No. HY/2014/08 (Yau Ma Tei East)

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
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	• AMOs requirements	• Implemented
S12.6.1	CH3	• Protective covering should be provided for the buildings in the form of plastic sheeting; • Buffer zones should be provided between the construction works and the external walls of the buildings and should be as large as site restrictions allow and be marked out by temporary fencing or hoarding; • An underpinning scheme is required to transfer the existing column loadings to a deeper rock stratum. The supporting system includes cutting the existing ground floor slab to expose the existing pile caps and then construct transfer beams at both sides of the pile caps. The transfer beams will tie up with the existing caps. Loadings of the transfer beams will be transferred to the rock socket piles installed at the two ends of the beams; • The AAA settlement and tilting limit should be 6/8/10 mm and1/2000, 1/1500 and 1/1000; • Monitoring of vibration levels will be undertaken during the construction phase and the Alert, Alarm and Action (AAA) vibration limit will be set at 5/6/7.5 mm/s. The monitoring proposal should be sent to AMO for comment;.	Protect the building from damage from construction works	Contractor	Yau Ma Tei Police Station (Old Wing) (CKR-01)	Prior to commencement of and during the construction phase	• Guidelines for Cultural Heritage Impact Assessment • EIAO-TM Annex 10 and Annex 19 • AMO Proposed Vibration Limits	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
		• Regular site inspections and monitoring works will be carried out by the contractor and the monitoring results will be submitted to the resident site staff of HyD to ensure compliance.						
S12.6.1		• Adopting diaphragm wall construction method; • Grout curtain should be provided in front of the building; • Recharging system should be installed as a contingency measure to mitigate the fluctuation of water table; • the AAA settlement and tilting limit should be 6/8/10 mm and 1/2000, 1/1500 and 1/1000; • Monitoring of vibration levels will be undertaken during the construction phase and the Alert, Alarm and Action (AAA) vibration limit will be set at 5/6/7.5 mm/s. The monitoring proposal should be sent to AMO for comment;. • Regular site inspections and monitoring works will be carried out by the contractor and the monitoring results will be submitted to the resident site staff of HyD to ensure compliance.	Protect the building from damage from construction works	Contractor	Yau Ma Tei Police Station (Old Wing) (CKR-01)	Prior to commencement of and during the construction phase	• Guidelines for Cultural Heritage Impact Assessment • EIAO-TM Annex 10 and Annex 19 • AMO Proposed Vibration Limits	• Implemented
S12.6.1 Table 12.2		• The Alert, Alarm and Action (AAA) vibration limit will be set at 3/4/5 mm/s and a condition survey shall be carried out by the project proponent prior to the construction phase to confirm this assessment • Vibration monitoring of the structure shall be employed during the construction phase to ensure that the level is not exceeded. The monitoring proposal should be sent to AMO for comment.	Protect the building from damage from construction works	Contractor	Tin Hau Temple (CKR-02)	Prior to commencement of and during the construction phase	• Guidelines for Cultural Heritage Impact Assessment • EIAO-TM Annex 10 and Annex 19 • AMO	• Implemented

Environmental Mitigation Implementation Schedule –
Contract No. HY/2014/08 (Yau Ma Tei East)

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
							Proposed Vibration Limits	
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	• EIAO Guidance Note No. 4/2010 • TM-EIAO	• Implemented
S13.2-13.4	EM2	• 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	• EIAO Guidance Note No. 4/2010 • TM-EIAO	• Implemented

Appendix G
Monitoring Schedule of the Reporting Month

Impact Monitoring Schedule for YMTE

Oct-22

Sun	Mon	Tue	Wed	Thur	Fri	Sat
						1
2	3 Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A	4	5	6	7	8 Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A
9	10	11	12	13	14 Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A	15
16	17	18	19	20 Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A	21	22
23	24	25	26 Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A	27	28	29
30	31					

Appendix H
Calibration Certificates
(Air Monitoring)

ACUITY SUSTAINABILITY CONSULTING LIMITED
Website: www.acuityhk.com
Unit E, 12/F, Ford Glory Plaza
Nos. 37-39 Wing Hong Street,
Cheung Sha Wan, Kowloon.
Tel.: (852) 2698 6833
Fax.: (852) 2698 9383

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

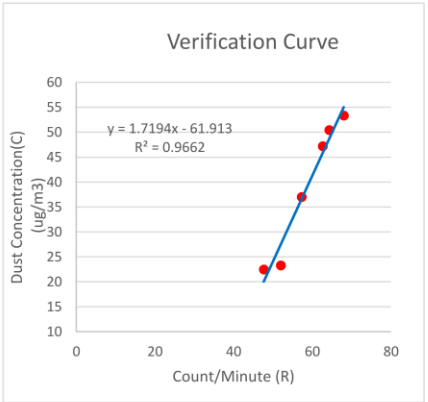
Verification Test Date: 27-Mar-22 to 3-Apr-22
Next Verification Test Date: 4-Apr-23
Unit-under-Test- Model No. Sibata LD-5R
Unit-under-Test Serial No. 0Z4545
Our Report Refrence No. RPT-22-HVS-0006

Standard Equipment Information			
Verification Equipment Type		Tisch's TSP HVS	Tish HVS Calibrator
Standard Equipment Model No.		TE-5170X	TE-5028A
Equipment serial no.	MFC	1049	3702
Last Calibration Date		22-Mar-22	3-Aug-21
Next Calibration Date		21-Jun-22	4-Aug-22

Verification Test No.	Date	Time			K-Factor	Counts/ Minute (R)	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C)
		Start-time	End-time	Elapsed Time (in min)	K-Factor (K=C/R)	x-axis			y axis
1	27/3/2022	4945.81	4949.09	196.80	0.00078	64	12661	R220486/1	50
2	27/3/2022	4949.09	4952.83	224.40	0.00078	68	15259	R220486/2	53
3	27/3/2022	4952.83	4956.42	215.40	0.00075	63	13498	R220486/3	47
4	3/4/2022	4991.80	4995.40	216.00	0.00047	48	10296	R220538/1	22
5	3/4/2022	4995.40	4998.79	203.40	0.00045	52	10577	R220538/2	23
6	3/4/2022	4998.79	5002.26	208.20	0.00065	57	11937	R220538/3	37
					0.00065				

K-Factor to be inputted in LD-5R (corrected 1 decimal point): 0.6

By Linear Regression of y on x:
slope, mh= 1.7194
intercept,ch= -61.9131
*Correlation Coefficient,R= 0.9829
Verification Test Result: Strong Correlation, Results were accepted.
* If the Correlation Coefficient, R is <0.5. Checking and Re-verification are required.



Verified By: _____ Date: 14-04-2022
Field Supervisor

ACUITY SUSTAINABILITY CONSULTING LIMITED
Website: www.acuityhk.com
Unit E, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon.
Tel.: (852) 2698 6833
Fax.: (852) 2698 9383

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

Verification Test Date:	27-Mar-22	to	3-Apr-22
Next Verification Test Date:	4-Apr-23		
Unit-under-Test- Model No.	Sibata LD-5R		
Unit-under-Test Serial No.	992820		
Our Report Refrence No.	RPT-22-HVS-0004		

Standard Equipment Information			
Verification Equipment Type		Tisch's TSP HVS	Tish HVS Calibrator
Standard Equipment Model No.		TE-5170X	TE-5028A
Equipment serial no.	MFC	1049	3702
Last Calibration Date		22-Mar-22	3-Aug-21
Next Calibration Date		21-Jun-22	4-Aug-22

Verification Test No.	Date	Time			K-Factor	Counts/ Minute (R)	Total Counts (TC)	TSP Sample ID No.	Dust Concentration (ug/m3), (C)
		Start-time	End-time	Elapsed Time (in min)	K-Factor (K=C/R)	x-axis			y axis
1	27/3/2022	4945.81	4949.09	196.80	0.00083	61	12005	R220486/1	50
2	27/3/2022	4949.09	4952.83	224.40	0.00082	65	14586	R220486/2	53
3	27/3/2022	4952.83	4956.42	215.40	0.00081	58	12493	R220486/3	47
4	3/4/2022	4991.80	4995.40	216.00	0.00047	48	10296	R220538/1	22
5	3/4/2022	4995.40	4998.79	203.40	0.00047	50	10102	R220538/2	23
6	3/4/2022	4998.79	5002.26	208.20	0.00067	56	11590	R220538/3	37
					0.00068				

K-Factor to be inputted in LD-5R (corrected 1 decimal point): 0.7

By Linear Regression of y on x:

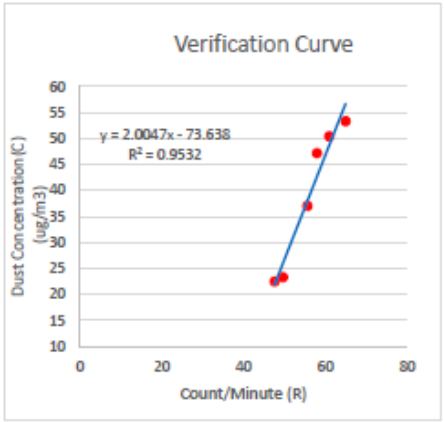
slope, mh= 2.0047

intercept,ch= -73.6384

*Correlation Coefficient,R= 0.9763

Verification Test Result: Strong Correlation, Results were accepted.

* If the Correlation Coefficient, R is <0.5. Checking and Re-verification are required.



Verified By: _____ Date: 14-04-2022

Field Supervisor

TISCH Environmental

RECALIBRATION DUE DATE:
June 28, 2023

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	June 28, 2022	**Rootsmeter S/N:** 438320	**Ta:** 296	°K
Operator:	Jim Tisch		**Pa:** 755.1	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** 3465		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4290	3.2	2.00
2	3	4	1	1.0130	6.4	4.00
3	5	6	1	0.9050	7.9	5.00
4	7	8	1	0.8590	8.8	5.50
5	9	10	1	0.7110	12.8	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9961	0.6970	1.4144	0.9958	0.6968	0.8854
0.9918	0.9791	2.0003	0.9915	0.9788	1.2522
0.9899	1.0938	2.2364	0.9895	1.0934	1.4000
0.9887	1.1509	2.3456	0.9883	1.1506	1.4683
0.9834	1.3831	2.8289	0.9830	1.3826	1.7708
QSTD	**m=**	**2.05924**	**QA**	**m=**	**1.28946**
	b=	**-0.01929**		**b=**	**-0.01207**
	r=	**0.99998**		**r=**	**0.99998**

Calculations

Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime

For subsequent flow rate calculations:

Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$

Qa= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg

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

RECALIBRATION

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

Tisch Environmental, Inc.
145 South Miami Avenue
Village of Cleves, OH 45002

www.tisch-env.com
TOLL FREE: (877)263-7610
FAX: (513)467-9009

InnoTech Instrumentation Co. Ltd.
創 新 科 儀 有 限 公 司

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	YMT Catholic Primary School	Site ID:	W-A1	Date:	30-Sep-2022
Serial No:	1084	Model:	TE-5170X	Operator:	Andy

Ambient Condition

Corrected Pressure (mm Hg):	764.0	Temperature (deg K):	302.5

Calibration Orifice

Model:	TE-5025A	Slope:	1.28946
Serial No.:	3465	Intercept:	-0.01207
Calibration Due Date:	28-Jun-23	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	In,H2O (in)	Qa, X-Axis (m3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
1	1.19	0.851	38.1	37.92
2	2.28	1.175	39.3	39.11
3	3.18	1.386	40.2	40.01
4	3.64	1.482	40.6	40.41
5	4.13	1.578	41.0	40.80

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

m= 3.9863 b= 34.4904 Corr. Coeff= 0.9995

Sampler set point(SSP) 40 CFM

Calculations

Qstd = 1/m[Sqrt(H2O(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart response
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pa = actual pressure during calibration (mm Hg)
Tstd = 298 deg K
Pstd = 760 mm Hg

For subsequent calculation of sampler flow:
(1.21*m+b)/[Sqrt(298/Tav)(Pav/760)]

m = sampler slope
b = sampler intercept
I = chart response
Tav = average temperature
Pav = average pressure

Checked by: _____ Date: 30-Sep-22

InnoTech Instrumentation Co. Ltd.
創 新 科 儀 有 限 公 司

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location: Man Cheong Building	Site ID: W-A6	Date:	30-Sep-2022
Serial No: 1050	Model: TE-5170X	Operator:	Andy

Ambient Condition

Corrected Pressure (mm Hg):	764.0	Temperature (deg K):	299.5

Calibration Orifice

Model:	TE-5025A	Slope:	1.28946
Serial No.:	3465	Intercept:	-0.01207
Calibration Due Date:	28-Jun-23	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	In,H2O (in)	Qa, X-Axis (m3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
1	1.26	0.880	37.5	37.51
2	2.01	1.109	38.3	38.31
3	2.35	1.198	38.6	38.61
4	3.11	1.377	39.3	39.31
5	3.76	1.513	39.8	39.81

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

m= 3.6463 b= 34.2752 Corr. Coeff= 0.9996

Sampler set point(SSP) 39 CFM

Calculations

Qstd = 1/m[Sqrt(H2O(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart response
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pa = actual pressure during calibration (mm Hg)
Tstd = 298 deg K
Pstd = 760 mm Hg

For subsequent calculation of sampler flow:
(1.21*m+b)/[Sqrt(298/Tav)(Pav/760)]

m = sampler slope
b = sampler intercept
I = chart response
Tav = average temperature
Pav = average pressure

Checked by: _____ Date: 30-Sep-22

InnoTech Instrumentation Co. Ltd.
創 新 科 儀 有 限 公 司

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	YMT Catholic Primary School	Site ID:	W-A1	Date:	15-Oct-2022
Serial No:	1084	Model:	TE-5170X	Operator:	Andy

Ambient Condition

Corrected Pressure (mm Hg):	763.6	Temperature (deg K):	301.0

Calibration Orifice

Model:	TE-5025A	Slope:	1.28946
Serial No.:	3465	Intercept:	-0.01207
Calibration Due Date:	28-Jun-23	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	In,H2O (in)	Qa, X-Axis (m3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
1	2.12	1.136	37.8	37.70
2	2.48	1.227	38.1	38.00
3	3.12	1.376	38.6	38.50
4	3.72	1.501	39.1	39.00
5	4.03	1.562	39.3	39.20

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

m= 3.5414 b= 33.6623 Corr. Coeff= 0.9994

Sampler set point(SSP) 38 CFM

Calculations

Qstd = 1/m[Sqrt(H2O(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart response
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pa = actual pressure during calibration (mm Hg)
Tstd = 298 deg K
Pstd = 760 mm Hg
For subsequent calculation of sampler flow:
(1.21*m+b)/[Sqrt(298/Tav)(Pav/760)]

m = sampler slope
b = sampler intercept
I = chart response
Tav = average temperature
Pav = average pressure

Checked by: _____ Date: 15-Oct-22

InnoTech Instrumentation Co. Ltd.
創 新 科 儀 有 限 公 司

HIVOL SAMPLER CALIBRATION DATA SHEET (TSP)

Site Information

Location:	Man Cheong Building	Site ID:	W-A6	Date:	15-Oct-2022
Serial No:	1050	Model:	TE-5170X	Operator:	Andy

Ambient Condition

Corrected Pressure (mm Hg):	763.6	Temperature (deg K):	301.0

Calibration Orifice

Model:	TE-5025A	Slope:	1.28946
Serial No.:	3465	Intercept:	-0.01207
Calibration Due Date:	28-Jun-23	Corr. Coeff:	0.99998

Calibration Data

Plate or Test #	In,H2O (in)	Qa, X-Axis (m3/min)	I, CFM (chart)	IC, Y-Axis (corrected)
1	1.21	0.860	38.1	38.00
2	2.34	1.193	39.0	38.90
3	3.26	1.406	39.6	39.50
4	3.81	1.519	39.9	39.80
5	4.23	1.600	40.2	40.10

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

m= 2.7928 b= 35.5839 Corr. Coeff= 0.9994

Sampler set point(SSP) 39 CFM

Calculations

Qstd = 1/m[Sqrt(H2O(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart response
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pa = actual pressure during calibration (mm Hg)
Tstd = 298 deg K
Pstd = 760 mm Hg

m = sampler slope
b = sampler intercept
I = chart response
Tav = average temperature
Pav = average pressure

For subsequent calculation of sampler flow:
(1.21*m+b)/[Sqrt(298/Tav)(Pav/760)]

Checked by: Date: 15-Oct-22

Appendix I
Calibration Certificates (Noise)

(A+A)*L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

Certificate of Calibration

for

Description:	***Sound Level Meter***
Manufacturer:	***NTi Audio***
Type No.:	***XL2 (Serial No.: A2A-13548-E0)***
Microphone:	***ACO 7052 (Serial No.:73912)***
Preamplifier:	***NTi Audio M2211 MA220 (Serial No.:5735)***

Submitted by:

Customer:	***Acuity Sustainability Consulting Limited***
Address:	***Unit C, 11/F., Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon***

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

☑ **Within**
☐ **Outside**

the allowable tolerance.

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

Date of receipt: 30 December 2021

Date of calibration: 3 January 2022

Calibrated by: _____
Calibration Technician

Certified by: _____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 3 January 2022

Certificate No.: APJ21-132-CC001

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

Page 1 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

(A+A)*L Acoustics and Air Testing Laboratory Co. Ltd.
聲學及空氣測試實驗室有限公司

1. *Calibration Precaution:*

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

2. *Calibration Conditions:*

Air Temperature:	22.6 °C
Air Pressure:	1006 hPa
Relative Humidity:	53.6 %

3. *Calibration Equipment:*

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV200041	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
30-130	dBA SPL	Fast	94	1000	94.1	±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
30-130	dBA SPL	Fast	94	1000	94.1	Ref
			104		104.1	±0.3
			114		114.1	±0.3

Time Weighting

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

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

Frequency Response

Linear Response

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dB SPL	Fast	94	31.5	94.1	±2.0
				63	94.1	±1.5
				125	94.1	±1.5
				250	94.1	±1.4
				500	94.1	±1.4
				1000	94.1	Ref
				2000	94.5	±1.6
				4000	95.2	±1.6
				8000	94.6	+2.1; -3.1

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBA SPL	Fast	94	31.5	54.7	-39.4 ±2.0
				63	67.9	-26.2 ±1.5
				125	78.0	-16.1 ±1.5
				250	85.4	-8.6 ±1.4
				500	90.9	-3.2 ±1.4
				1000	94.1	Ref
				2000	95.7	+1.2 ±1.6
				4000	96.2	+1.0 ±1.6
				8000	93.4	-1.1+2.1; -3.1

C-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading, dB	IEC 61672 Class 1 Specification, dB
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz		
30-130	dBC SPL	Fast	94	31.5	91.1	-3.0 ±2.0
				63	93.3	-0.8 ±1.5
				125	93.9	-0.2 ±1.5
				250	94.1	-0.0 ±1.4
				500	94.2	-0.0 ±1.4
				1000	94.1	Ref
				2000	94.3	-0.2 ±1.6
				4000	94.4	-0.8 ±1.6
				8000	91.5	–3.0 +2.1: –3.1

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

5. *Calibration Results Applied*

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

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.05
	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.

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

(A+A)*L Acoustics and Air Testing Laboratory Co. Ltd.
聲學及空氣測試實驗室有限公司

Certificate of Calibration

for

Description:	*Sound Level Meter*
Manufacturer:	*Lutron*
Type No.:	*SL-4033SD (Serial No.: I.491835)*

Submitted by:

Customer:	*Acuity Sustainability Consulting Limited*
Address:	*Unit C, 11/F., Ford Glory Plaza, No. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon*

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

☑ **Within (A-Weighting, 31.5Hz to 2000Hz)**
☐ **Outside**

the allowable tolerance.

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

Date of receipt: 30 December 2021

Date of calibration: 3 January 2022

*Calibrated by:*_____
Calibration Technician

*Certified by:*_____
Mr. Ng Yan Wa
Laboratory Manager

Date of issue: 3 January 2022

Certificate No.: APJ21-132-CC002

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

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

1. *Calibration Precaution:*

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

2. *Calibration Conditions:*

Air Temperature:	22.6 °C
Air Pressure:	1006 hPa
Relative Humidity:	53.6 %

3. *Calibration Equipment:*

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV200041	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
30-130	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
30-130	dBA SPL	Fast	94	1000	94.0	Ref
			104		104.1	±0.3
			114		113.8	±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
30-130	dBA SPL	Fast	94	1000	94.0	Ref
		Slow			94.0	±0.3

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

Frequency Response

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. Weighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA SPL	Fast	94	31.5	55.4	-39.4 ±2.0
				63	67.9	-26.2 ±1.5
				125	77.9	-16.1 ±1.5
				250	85.3	-8.6 ±1.4
				500	91.0	-3.2 ±1.4
				1000	94.0	Ref
				2000	94.4	+1.2 ±1.6

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	± 0.10
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	1000 Hz	± 0.05
	2000 Hz	± 0.05
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

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

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

MAXLAB

CALIBRATION CERTIFICATE

Certificate Information

Date of Issue	11-Feb-2022	**Certificate Number**	MLCN220284S

Customer Information

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

Equipment-under-Test (EUT)

Description	Sound Level Calibrator
Manufacturer	Rion
Model Number	NC-74
Serial Number	34504770
Equipment Number	--

Calibration Particular

Date of Calibration	11-Feb-2022		
Calibration Equipment	4231(MLTE008) / AV200063 / 23-Jun-23 1357(MLTE190) / MLEC21/05/02 / 26-May-22		
Calibration Procedure	MLCG00, MLCG15		
Calibration Conditions	Laboratory	Temperature	23 °C ± 5 °C
		Relative Humidity	55% ± 25%
	EUT	Stabilizing Time	Over 3 hours
		Warm-up Time	Not applicable
		Power Supply	Internal battery
Calibration Results	Calibration data were detailed in the continuation pages. Calibration result was within EUT specification.		

Approved By & Date

K.O. Lo 11-Feb-2022

Statements

* Calibration equipment used for this calibration are traceable to national / international standards.
* The results on this Calibration Certificate only relate to the values measured at the time of the calibration and the uncertainties quoted will not include allowance for the EUT long term drift, variation with environmental changes, vibration and shock during transportation, overloading, mishandling, misuse, and the capacity of any other laboratory to repeat the measurement.
* MaxLab Calibration Centre Limited shall not be liable for any loss or damage resulting from the use of the EUT.
* The copy of this Certificate is owned by MaxLab Calibration Centre Limited. No part of this Certificate may be reproduced without the prior written approval of MaxLab Calibration Centre Limited.

萬儀校正中心有限公司
MaxLab Calibration Centre Limited
香港新界葵涌華星街16-18號保盈工業大廈9樓B室
Unit B, 9/F., Boldwin Industrial Bldg., 16-18 Wah Sing Street, Kwai Chung, N.T., Hong Kong Tel: (852) 2116 1380 Fax: (852) 2264 6480 Email: info@maxlab.com.hk

MAXLAB

Certificate No. MLCN220284S

Calibration Data

EUT Setting	Standard Reading	EUT Error from Setting	Calibration Uncertainty	EUT Specification
94 dB	94.0 dB	0.0 dB	0.20 dB	± 0.3 dB

- END -

Calibrated By : Dan
Date : 11-Feb-22

Checked By : K.O. Lo
Date : 11-Feb-22

Page 2 of 2

萬儀校正中心有限公司
MaxLab Calibration Centre Limited
香港新界葵涌華星街 16-18 號保盈工業大廈 9 樓 B 室
Unit B, 9/F., Boldwin Industrial Bldg., 16-18 Wah Sing Street, Kwai Chung, N.T., Hong Kong Tel: (852) 2116 1380 Fax: (852) 2264 6480 Email: info@maxlab.com.hk

Appendix J
The Certification of Laboratory with HOKLAS Accredited Analytical Tests

Hong Kong Accreditation Service
香港認可處

Certificate of Accreditation
認可證書

This is to certify that
特此證明

ACUMEN LABORATORY AND TESTING LIMITED
浩科檢測中心有限公司

Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong
香港九龍長沙灣永康街37-39號福源廣場12樓D室

is accredited by the Hong Kong Accreditation Service (HKAS) to ISO/IEC 17025:2017
for performing specific laboratory activities as listed in the scope of accreditation within the test category of
獲香港認可處根據ISO/IEC 17025:2017認可
進行載於認可範圍內下述測試類別中的指定實驗所活動

Environmental Testing
環境測試

This accreditation to ISO/IEC 17025:2017 demonstrates technical competence for a defined scope and the implementation of a management system relevant to laboratory operation (see joint IAF-ILAC-ISO Communiqué).
此項 ISO/IEC 17025:2017 的認可資格證明此實驗所具備指定範疇內所須的技術能力並實施一套與實驗所運作相關的管理體系（見國際認可論壇、國際實驗所認可合作組織及國際標準化組織的聯合公報）。

The common seal of HKAS is affixed hereto by the authority of the HKAS Executive
現經香港認可處執行幹事授權在此蓋上香港認可處的印章

SHUM Wai-leung, Executive Administrator
執行幹事 沈偉良
Issue Date : 15 November 2021
簽發日期：二零二一年十一月十五日

Registration Number : HOKLAS 241
註冊號碼：

Date of First Registration : 16 July 2014
首次註冊日期：二零一四年七月十六日

This certificate is issued subject to the terms and conditions laid down by HKAS
本證書按照香港認可處訂立的條款及條件發出

L002316

Hong Kong Accreditation Service
香港認可處

Certificate of Accreditation
認可證書

This is to certify that
特此證明

ALS TECHNICHEM (HK) PTY LIMITED

11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, New Territories, Hong Kong
香港新界葵涌永業街1-3號忠信針織中心11樓

is accredited by the Hong Kong Accreditation Service (HKAS) to ISO/IEC 17025:2017
for performing specific laboratory activities as listed in the scope of accreditation within the test category of
獲香港認可處根據ISO/IEC 17025:2017認可
進行載於認可範圍內下述測試類別中的指定實驗所活動

Environmental Testing
環境測試

This accreditation to ISO/IEC 17025:2017 demonstrates technical competence for a defined scope and the implementation of a management system relevant to laboratory operation (see joint IAF-ILAC-ISO Communiqué).
此項 ISO/IEC 17025:2017 的認可資格證明此實驗所具備指定範疇內所須的技術能力並實施一套與實驗所運作相關的管理體系
(見國際認可論壇、國際實驗所認可合作組織及國際標準化組織的聯合公報)。

The common seal of HKAS is affixed hereto by the authority of the HKAS Executive
現經香港認可處執行機關授權在此蓋上香港認可處的印章

SHUM Wai-leung, Executive Administrator
執行幹事 沈偉良
Issue Date : 28 February 2020
簽發日期：二零二零年二月二十八日

Registration Number : HOKLAS 066
註冊號碼：

Date of First Registration : 15 September 1995
首次註冊日期：一九九五年九月十五日

This certificate is issued subject to the terms and conditions laid down by HKAS
本證書按照香港認可處訂立的條款及條件發出

L001934

Appendix K
Location Plan of Noise and Air Quality Monitoring Station


NATHAN ROAD
WYLIE ROAD
QUEEN ELIZABETH HOSPITAL
CASCOIGNE ROAD
YAU MA TEI
W-A1/W-N1A
W-P11
W-N25A
W-N18
W-A6
LEGEND:
WORKS LIMIT
DUST MONITORING L
NOISE MONITORING
RELOCATION OF DUST IMPACT MONITORING OF HVS AT W-A1
00 ISSUE FOR TENDER
ARUP
Joint Venture
Contract No. HY/2014/08
Central Kowloon Route - Yau Ma Tei East
APPENDIX A
LOCATION PLAN OF N
DUST MONITORING ST
CKR/YMTE/02/0
HIGHWAYS DE
MAJOR WORKS PROJECT
Printed by : 03/04/2018
Filename : E:\0 YMTE\Wa\For Others\Leo\180403 02_0001 Edit\E-CKR_YMTE_02_0001_DRG-00-edited A.dgn

Appendix L
Monitoring Data (Air Monitoring)

Location: Yau Ma Tei Catholic Primary School (Hoi Wang Road) (W-A1)
Monitoring date: 3, 8, 14, 20 and 26 October 2022
Parameter : TSP 1-hour
Other Factors Nearby traffic

Date	1-hour TSP (μg/m³)				
	Weather	Start Time	1st Hour (μg/m³)	2nd Hour (μg/m³)	3rd Hour (μg/m³)
03/10/2022	Sunny	15:27	60	65	53
08/10/2022	Sunny	15:10	62	66	61
14/10/2022	Sunny	9:31	52	59	61
20/10/2022	Fine	12:10	55	61	68
26/10/2022	Sunny	13:01	62	57	55
Minimum: 52 μg/m³			Maximum: 68 μg/m³		

Location: Man Cheong Building (W-A6)
Monitoring date: 3, 8, 14, 20 and 26 October 2022
Parameter : TSP 1-hour
Other Factors Nearby traffic

Date	1-hour TSP (μg/m³)				
	Weather	Start Time	1st Hour (μg/m³)	2nd Hour (μg/m³)	3rd Hour (μg/m³)
03/10/2022	Sunny	15:08	64	70	73
08/10/2022	Sunny	15:01	69	62	64
14/10/2022	Sunny	11:15	66	71	75
20/10/2022	Fine	13:17	63	77	76
26/10/2022	Sunny	11:07	73	69	66
Minimum: 62 μg/m³			Maximum: 77 μg/m³		

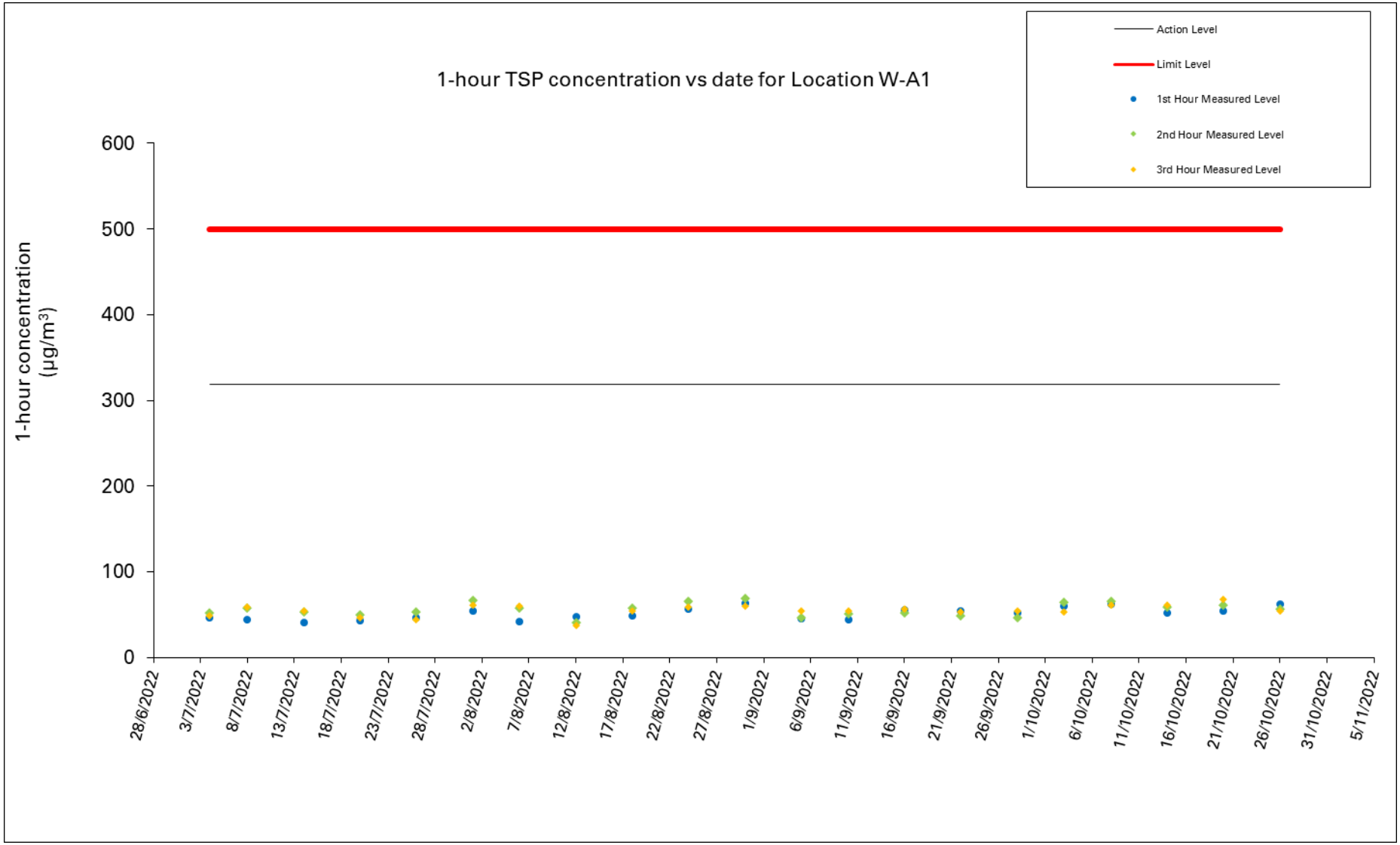


Figure 1: Graphical Illustration of Measured 1-hour TSP (µg/m^3) Levels at W-A1

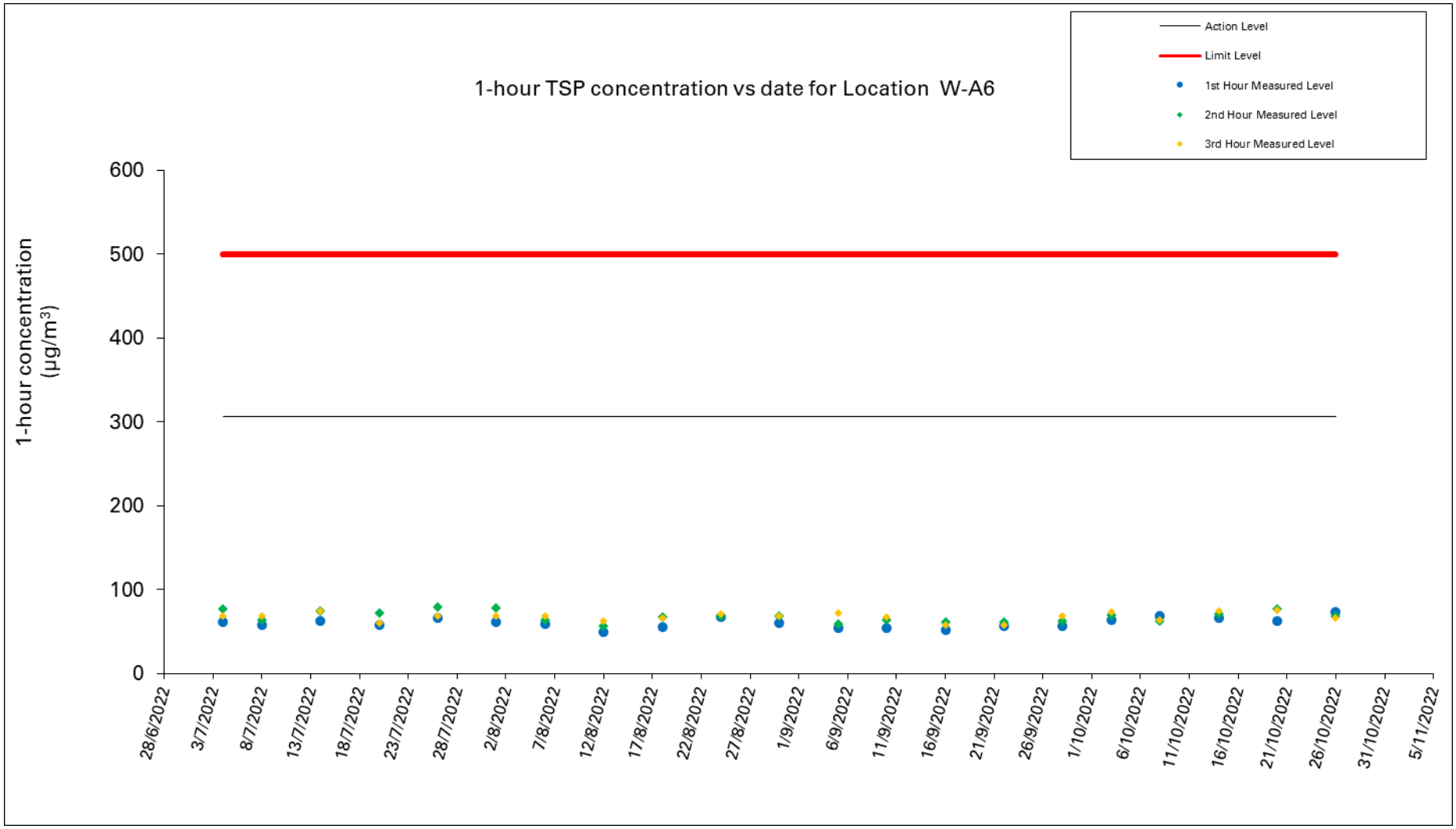


Figure 2: Graphical Illustration of Measured 1-hour TSP (µg/m^3) Levels at W-A6

Location: Yau Ma Tei Catholic Primary School (Hoi Wang Road) (W-A1)
Monitoring date: 3, 8, 14, 20 and 26 October 2022
Parameter : TSP 24-hour
Other Factors Nearby traffic

											Date of Calibration:	30-Sep-22			Slope =	3.9863
											Calibration due date:	15-Oct-22			Intercept =	34.4904
											Date of Calibration:	15-Oct-22			Slope =	3.5414
											Calibration due date:	30-Oct-22			Intercept =	33.6623
Start Date	**Weather Condition**	**Elapse Time**			**Chart Reading**			**Avg Air Temp**	**Avg Atmospheric Pressure**	**Flow Rate**	**Standard Air Volume**	**Filter Weight (g)**		**Particulate weight**	**Conc.**	
		Initial	**Final**	**Actual (min)**	**Min**	**Max**	**Avg**	**(^oC)**	**(hPa)**	**(m^3/min)**	**(m^3)**	**Initial**	**Final**	**(g)**	**($\mu g/m^3$)**	
3/10/2022	Sunny	7252.1	7276.1	1440.0	42	44	43.0	29.5	1013.5	2.06	2962	2.7735	2.8222	0.0487	16	
8/10/2022	Sunny	7276.1	7300.1	1440.0	42	43	42.5	27.7	1015.4	1.98	2857	2.7560	2.8479	0.0919	32	
14/10/2022	Sunny	7300.1	7324.1	1440.0	41	42	41.5	26.9	1012.1	1.71	2468	2.7514	2.8434	0.0920	37	
20/10/2022	Sunny	7324.6	7348.6	1440.0	43	45	44.0	24.3	1017.5	2.99	4300	2.7479	2.8373	0.0894	21	
26/10/2022	Sunny	7348.6	7372.6	1440.0	41	42	41.5	26.7	1017.2	2.23	3205	2.7639	2.8594	0.0955	30	
										Maximum:	37 $\mu g/m^3$		Minimum:	16 $\mu g/m^3$		

Location: Man Cheong Building (W-A6)
Monitoring date: 3, 8, 14, 20 and 26 October 2022
Parameter : TSP 24-hour
Other Factors Nearby traffic

										Date of Calibration:	30-Sep-22			Slope =	3.6463
										Calibration due date:	15-Oct-22			Intercept =	34.2752
										Date of Calibration:	15-Oct-22			Slope =	2.7928
										Calibration due date:	30-Oct-22			Intercept =	35.5839
Start Date	**Weather Condition**	**Elapse Time**			**Chart Reading**			**Avg Air Temp**	**Avg Atmospheric Pressure**	**Flow Rate**	**Standard Air Volume**	**Filter Weight (g)**		**Particulate weight**	**Conc.**
		Initial	**Final**	**Actual (min)**	**Min**	**Max**	**Avg**	**(^oC)**	**(hPa)**	**(m^3/min)**	**(m^3)**	**Initial**	**Final**	**(g)**	**($\mu g/m^3$)**
3/10/2022	Sunny	6840.5	6864.5	1440.00	46	49	47.5	29.5	1013.5	3.53	5087	2.7643	2.8265	0.0622	12
8/10/2022	Sunny	6864.5	6888.5	1440.00	47	48	47.5	27.7	1015.4	3.60	5178	2.7816	2.9299	0.1483	29
14/10/2022	Sunny	6888.5	6912.5	1440.00	45	48	46.5	26.9	1012.1	3.30	4749	2.7667	2.8848	0.1181	25
20/10/2022	Sunny	6912.9	6936.9	1440.00	45	47	46.0	24.3	1017.5	3.82	5498	2.7584	2.8673	0.1089	20
26/10/2022	Sunny	6936.9	6960.9	1440.00	42	43	42.5	26.7	1017.2	2.49	3589	2.7547	2.8695	0.1148	32
										Maximum:	32 $\mu g/m^3$		Minimum:	12 $\mu g/m^3$	

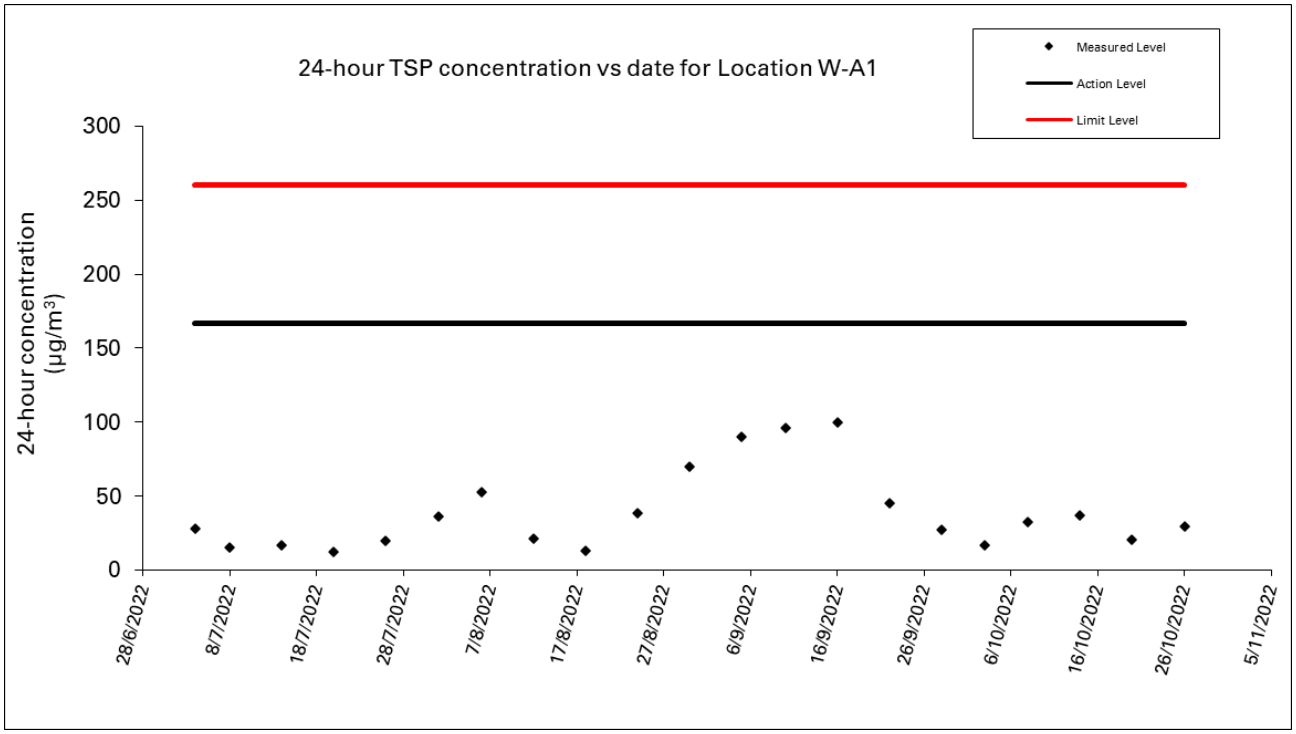


Figure 3: Graphical Illustration of Measured 24-hour TSP (µg/m^3) Levels at W-A1

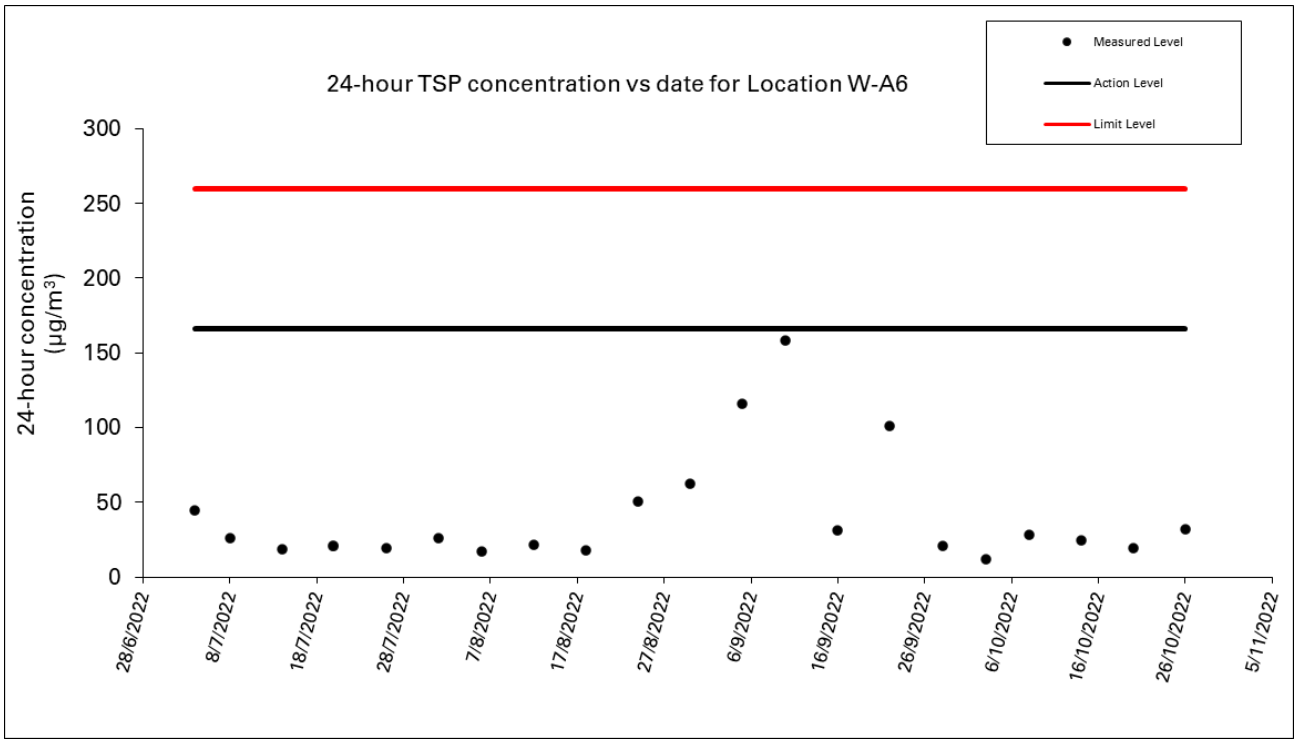
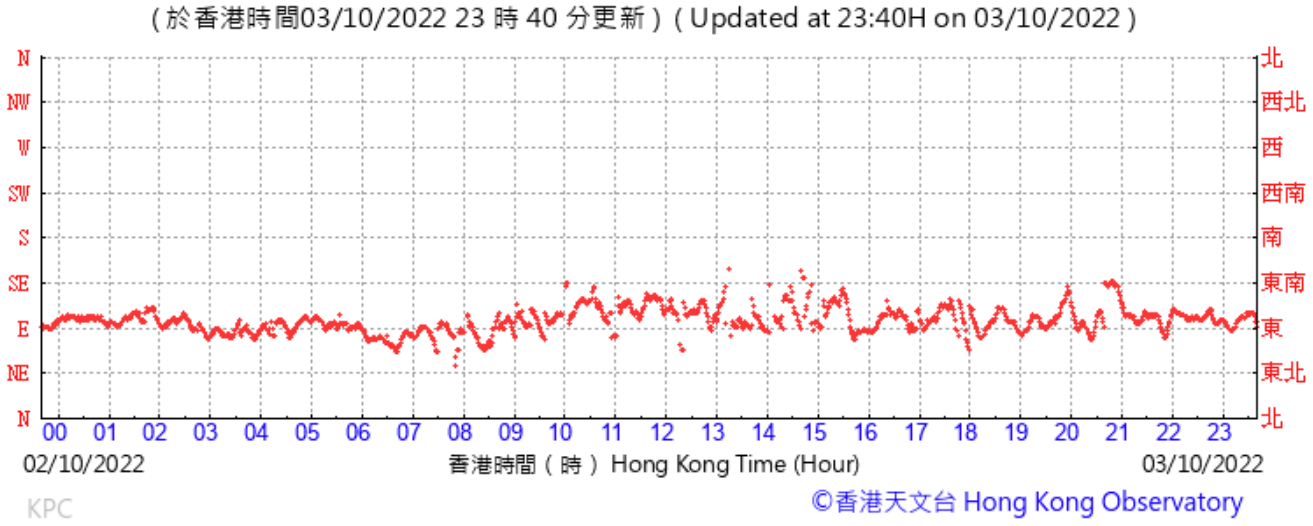
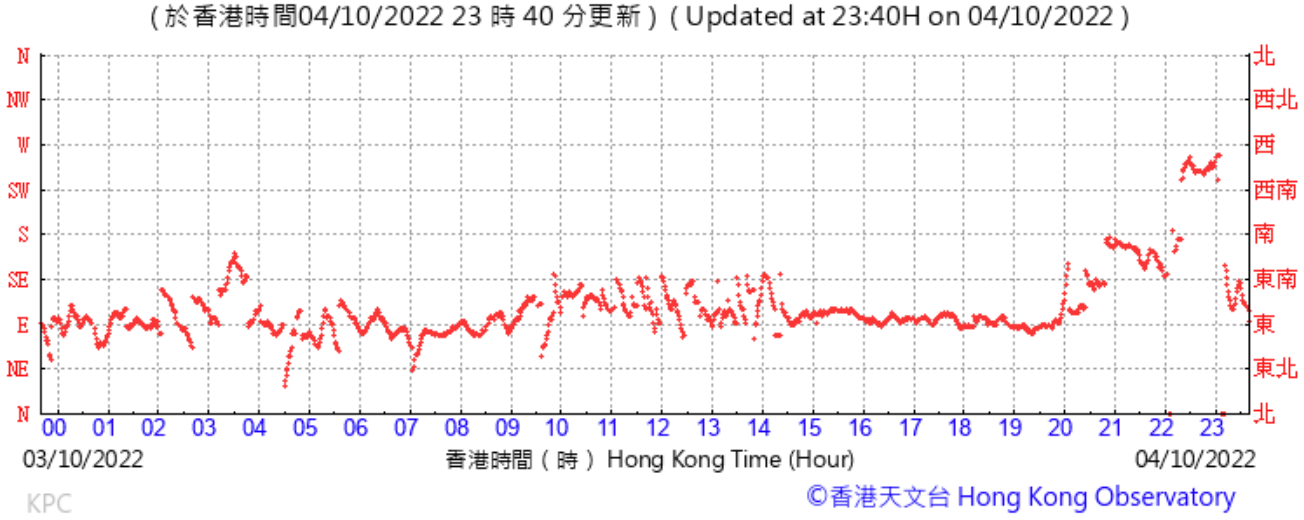
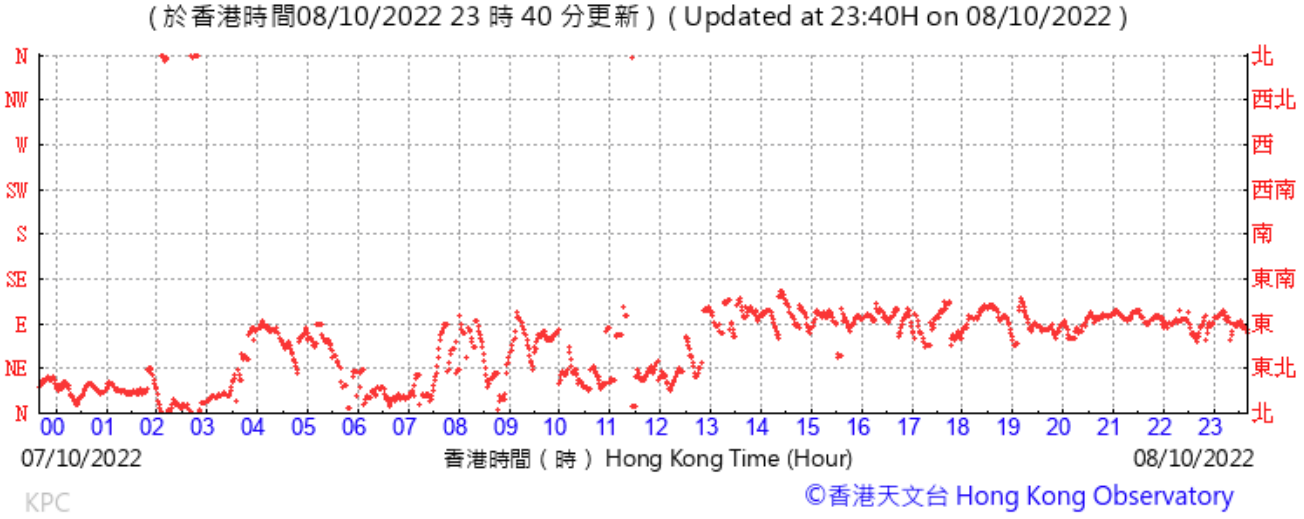


Figure 4: Graphical Illustration of Measured 24-hour TSP (µg/m^3) Levels at W-A6

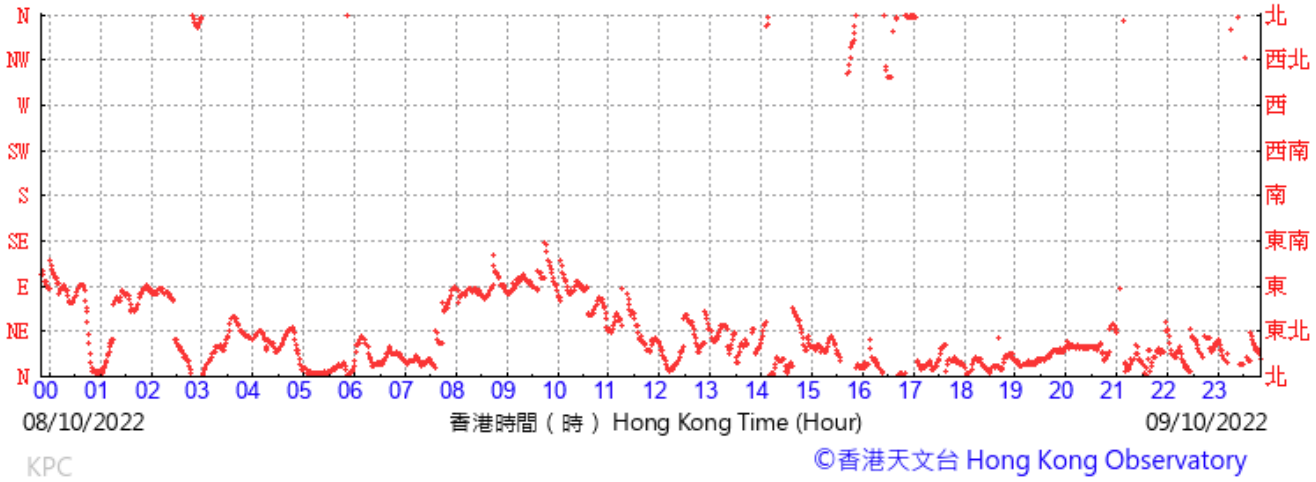
Wind direction data for 3, 4, 8, 9, 14, 15, 20, 21, 26 and 27October 2022



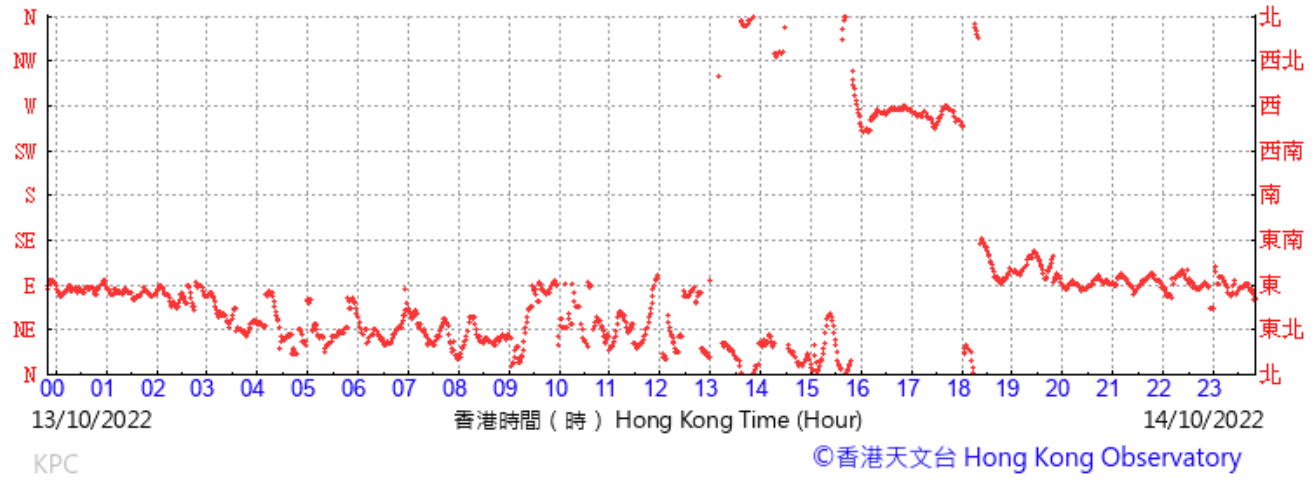




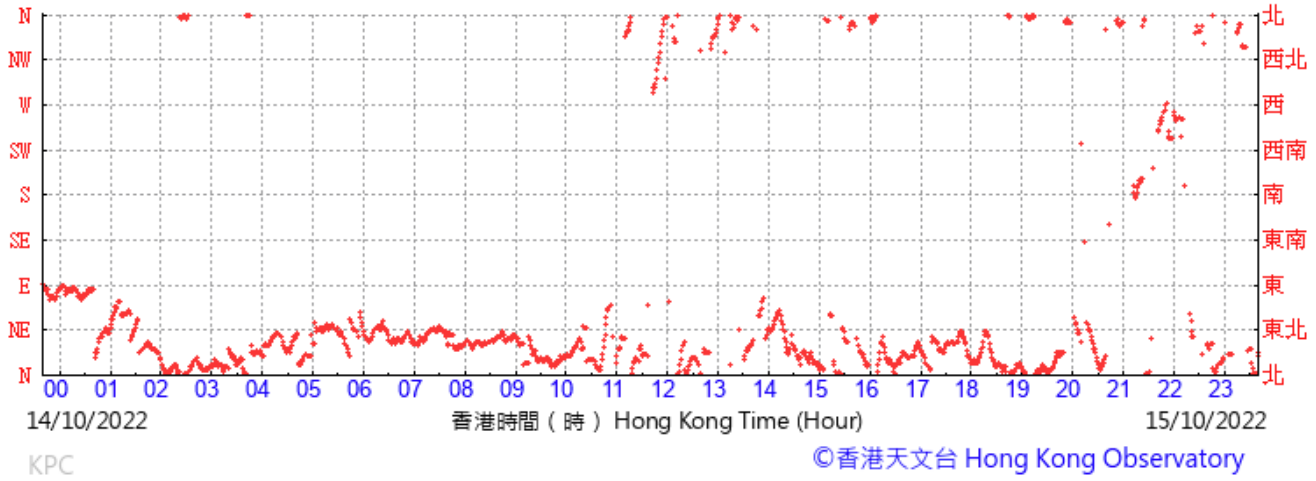
(於香港時間09/10/2022 23 時 50 分更新) (Updated at 23:50H on 09/10/2022)

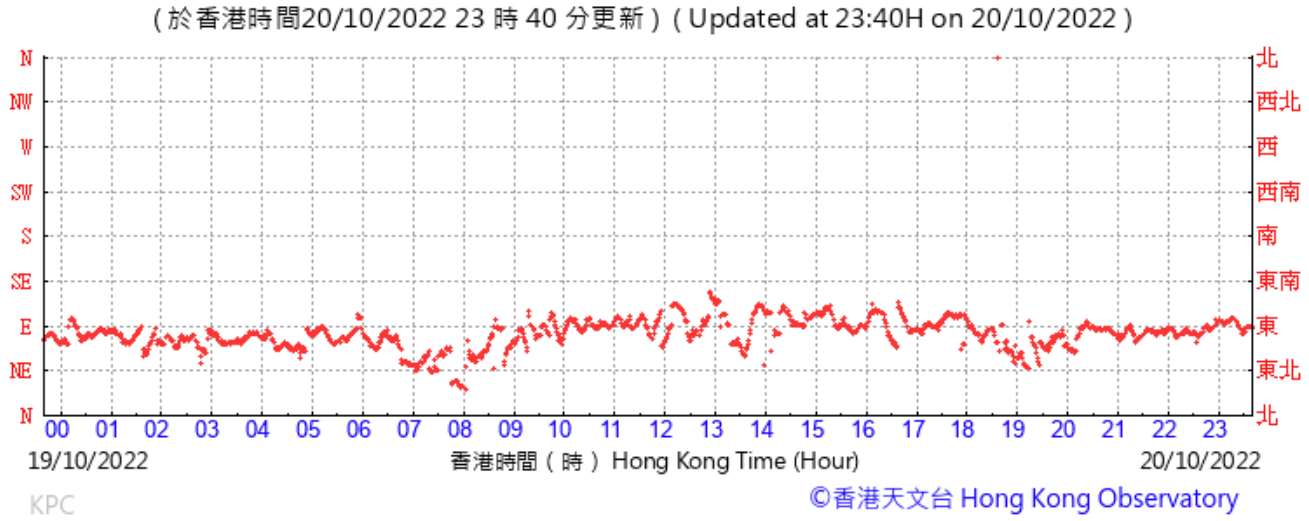


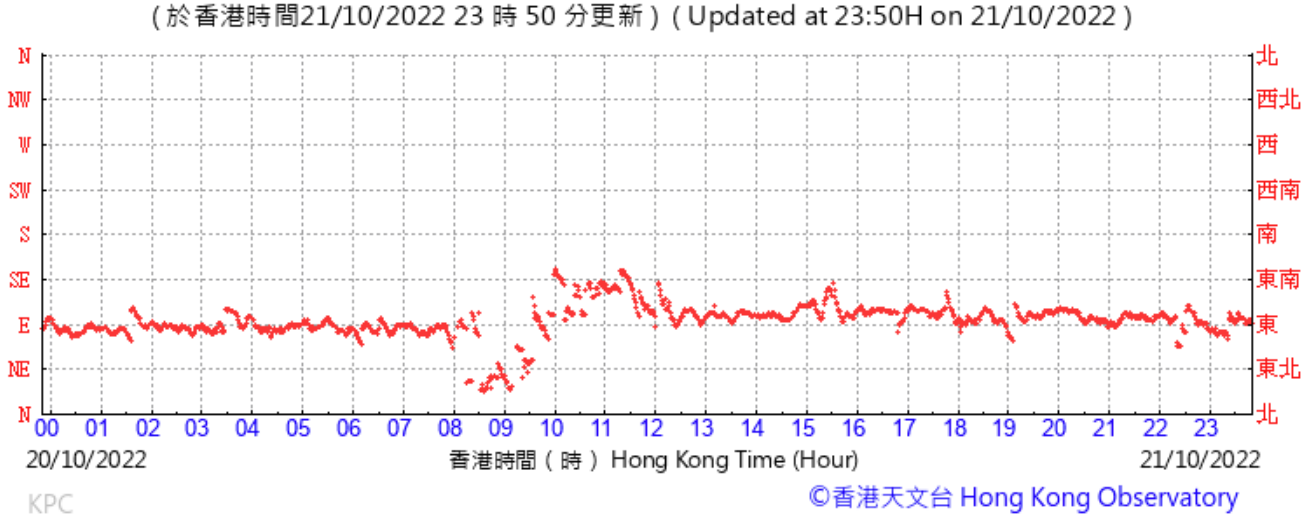
(於香港時間14/10/2022 23 時 50 分更新) (Updated at 23:50H on 14/10/2022)

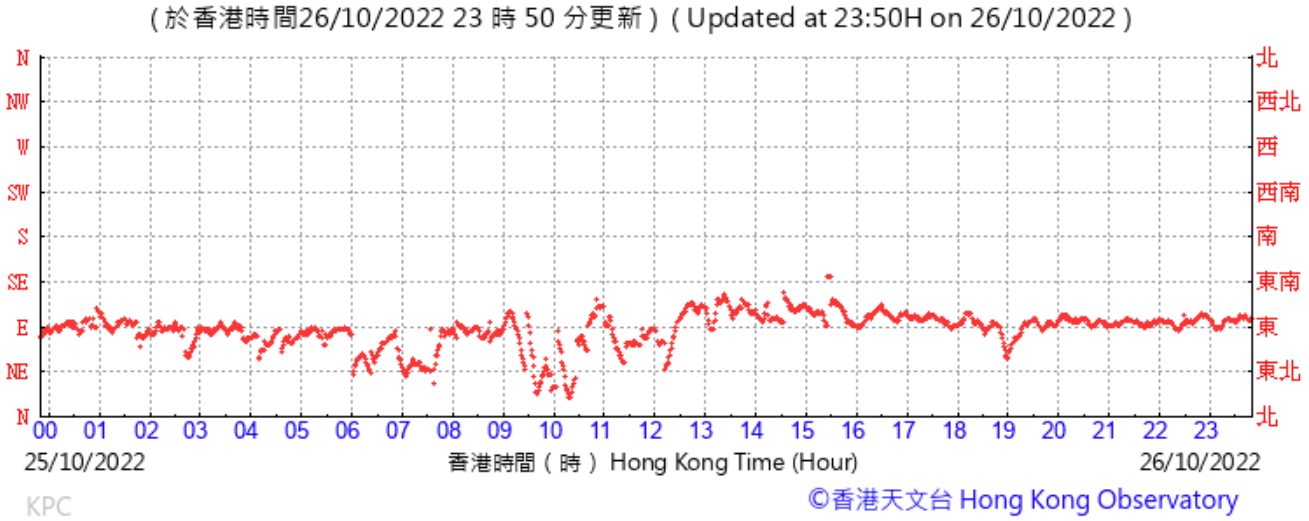


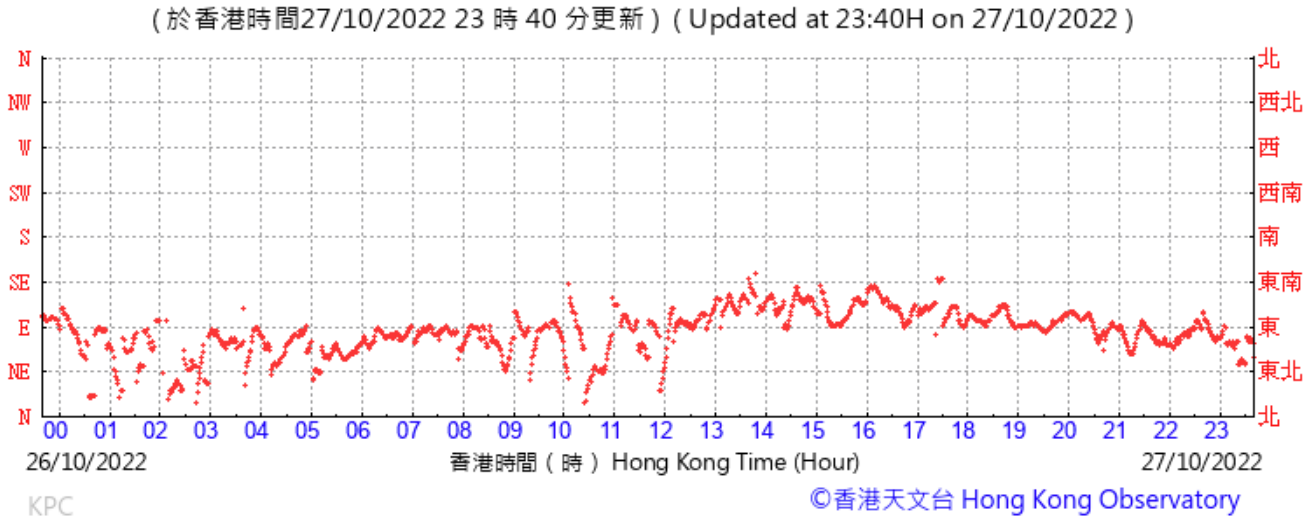
(於香港時間15/10/2022 23 時 40 分更新) (Updated at 23:40H on 15/10/2022)



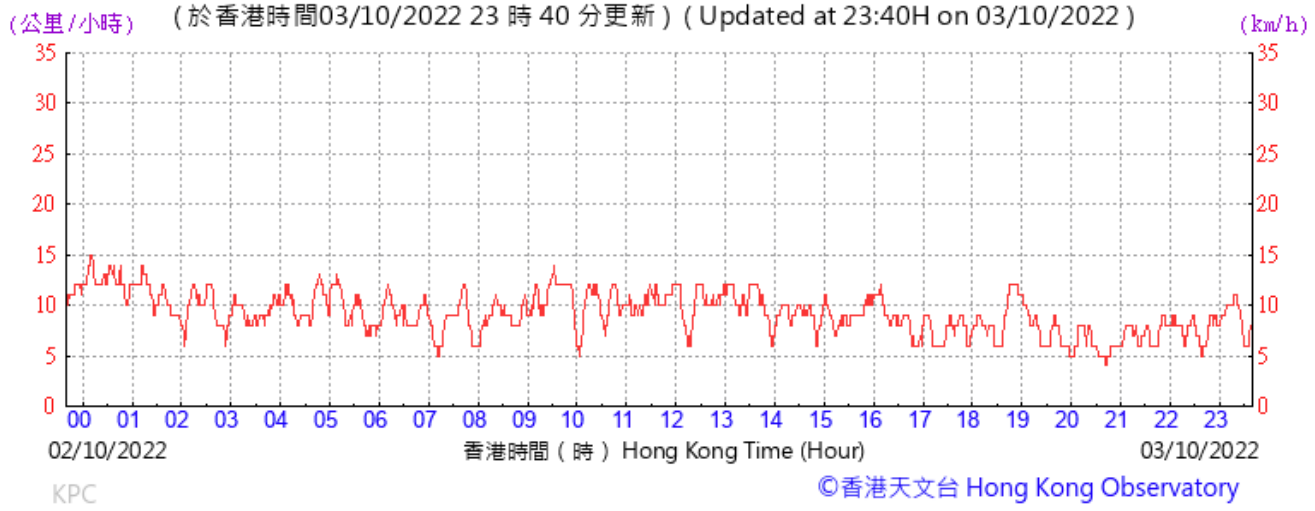

(於香港時間20/10/2022 23 時 40 分更新) (Updated at 23:40H on 20/10/2022)
N NW W SW S SE E NE N
北 西北 西 西南 南 東南 東 東北 北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
19/10/2022
香港時間 (時) Hong Kong Time (Hour)
20/10/2022
KPC
©香港天文台 Hong Kong Observatory

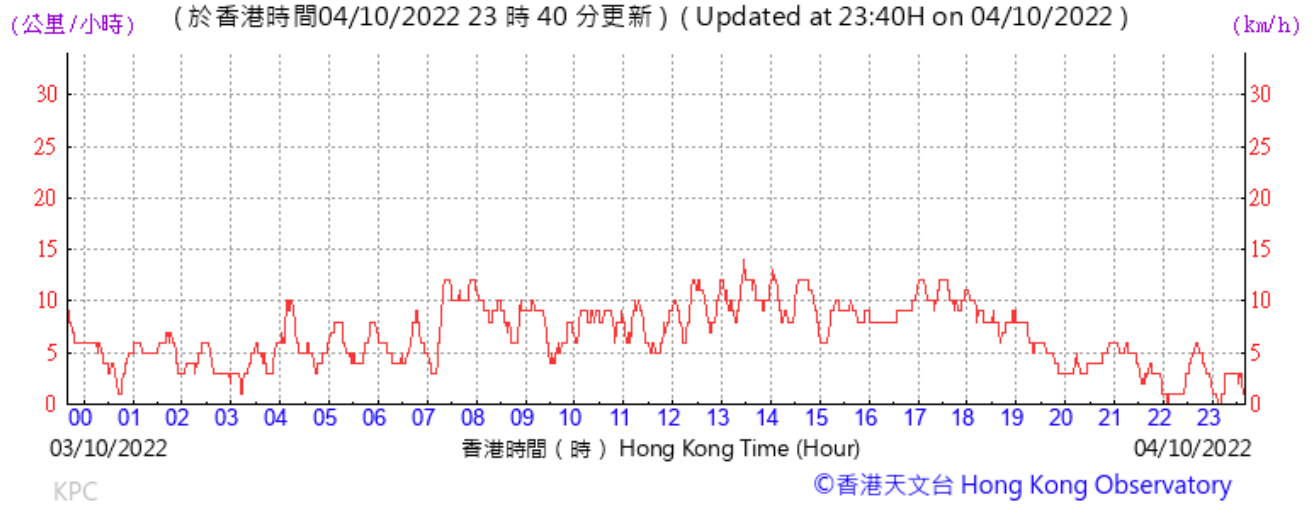

(於香港時間21/10/2022 23 時 50 分更新) (Updated at 23:50H on 21/10/2022)
N NW W SW S SE E NE N
北 西北 西 西南 南 東南 東 東北 北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
20/10/2022
香港時間 (時) Hong Kong Time (Hour)
21/10/2022
KPC
©香港天文台 Hong Kong Observatory

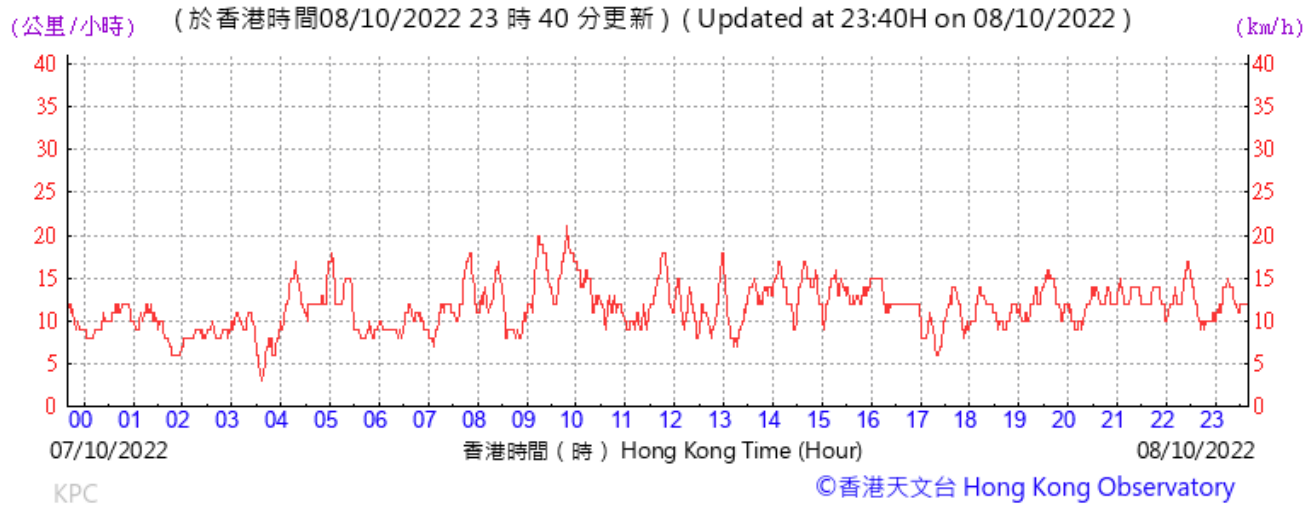

(於香港時間26/10/2022 23 時 50 分更新) (Updated at 23:50H on 26/10/2022)
N NW W SW S SE E NE N
北 西北 西 西南 南 東南 東 東北 北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
25/10/2022
香港時間 (時) Hong Kong Time (Hour)
26/10/2022
KPC
©香港天文台 Hong Kong Observatory

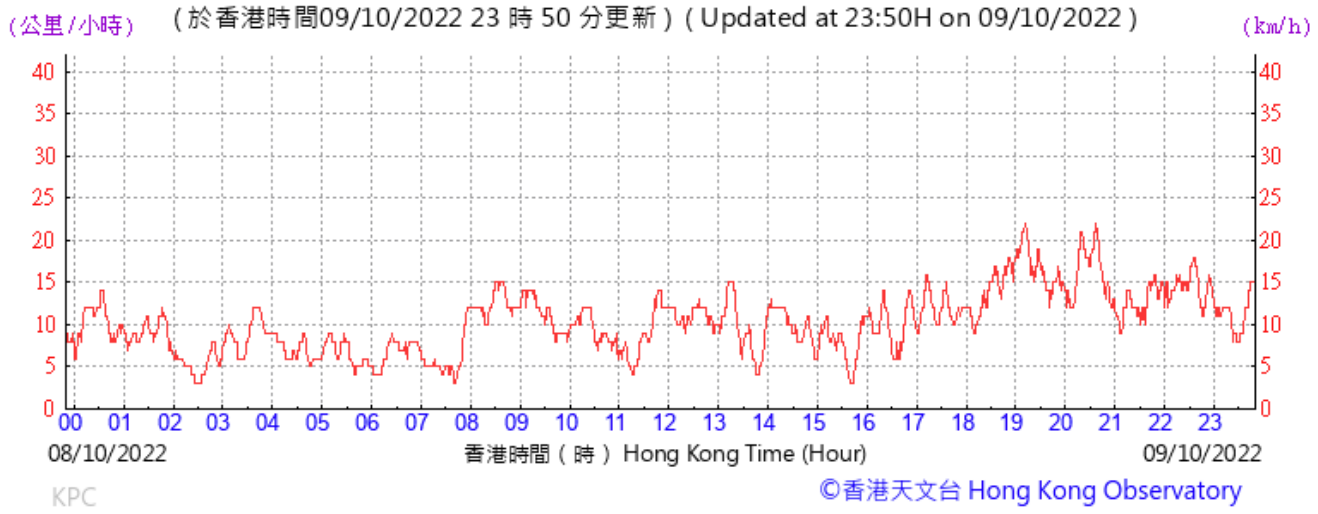

(於香港時間27/10/2022 23 時 40 分更新) (Updated at 23:40H on 27/10/2022)
N
NW
W
SW
S
SE
E
NE
N
北
西北
西
西南
南
東南
東
東北
北
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
26/10/2022
香港時間 (時) Hong Kong Time (Hour)
27/10/2022
KPC
©香港天文台 Hong Kong Observatory

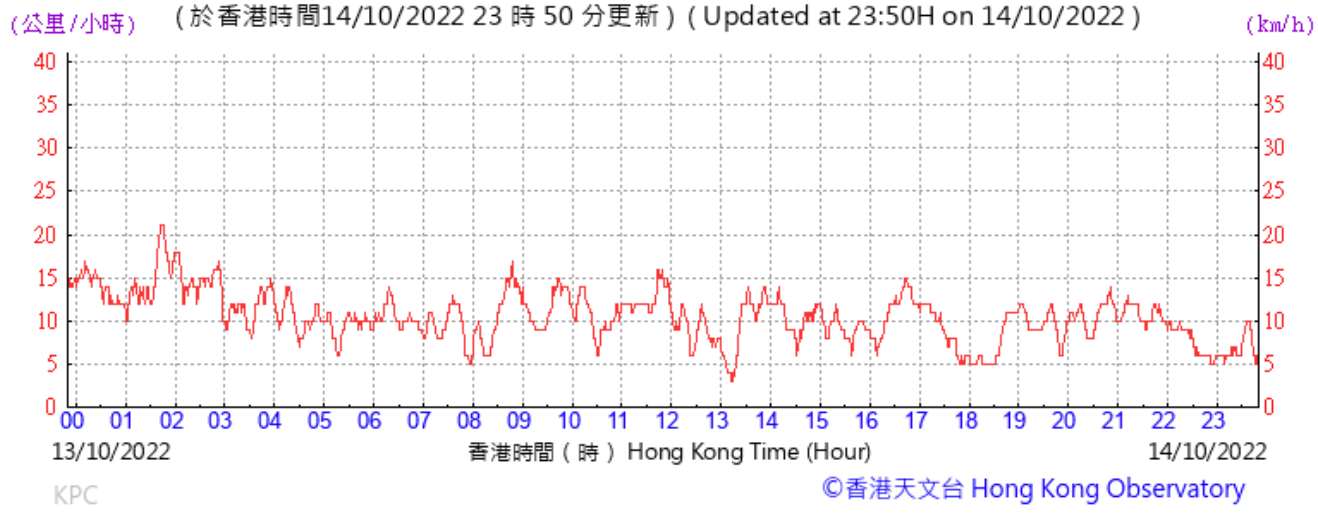
Wind speed data for 3, 4, 8, 9, 14, 15, 20, 21, 26 and 27October 2022

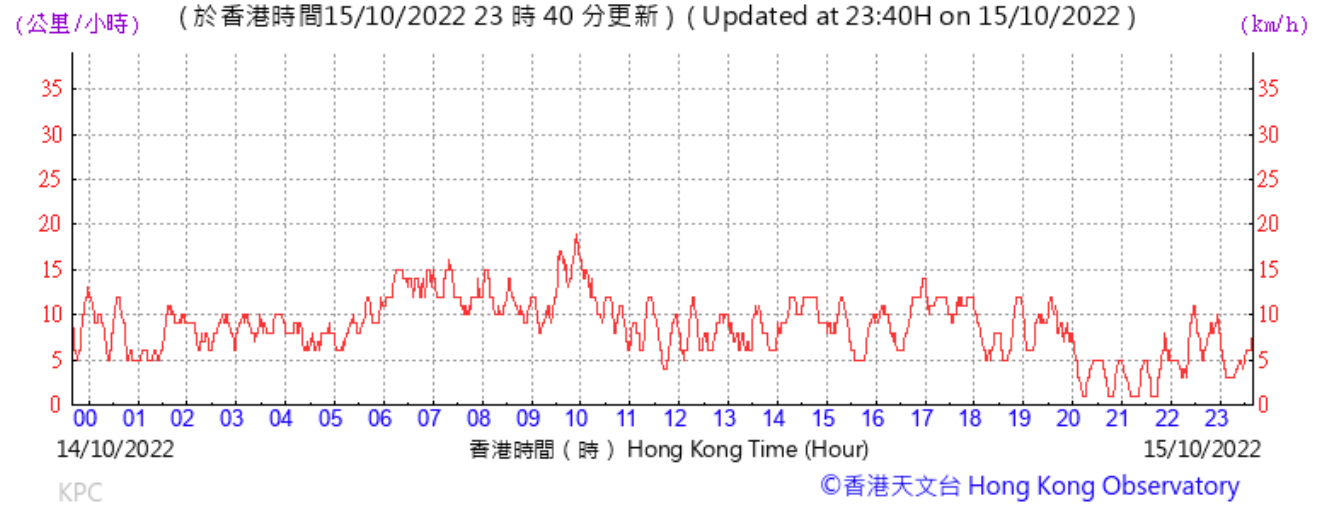




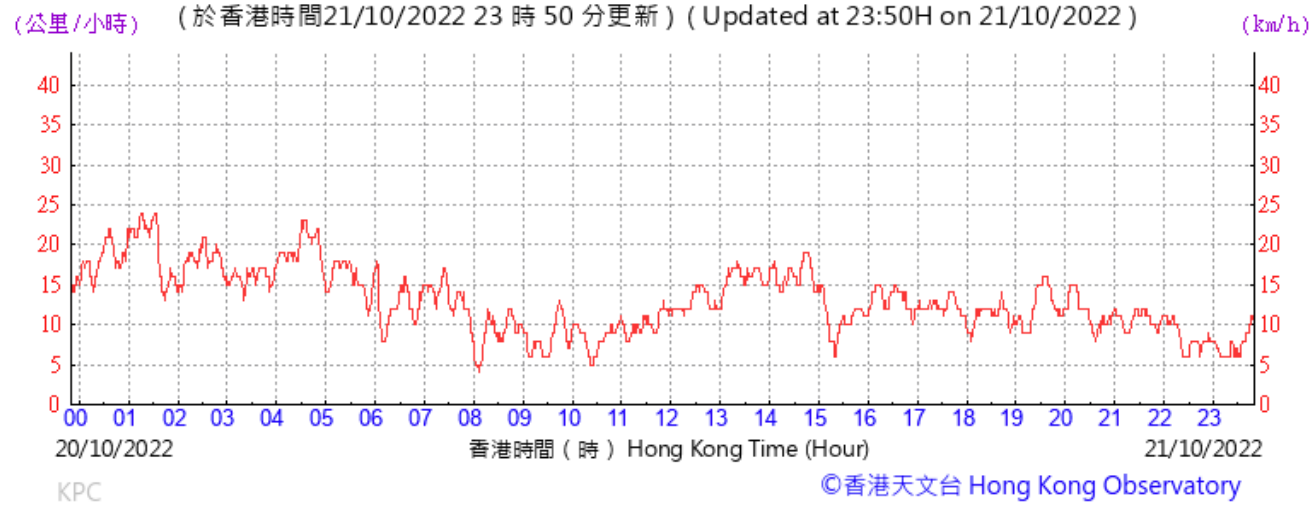


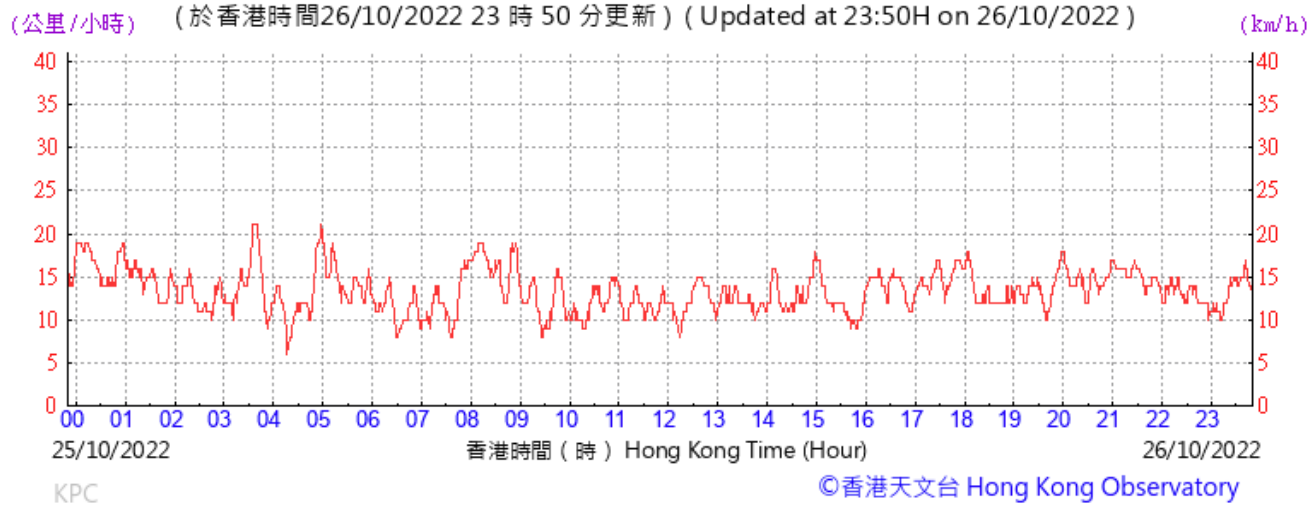

(公里/小時)
(於香港時間09/10/2022 23 時 50 分更新) (Updated at 23:50H on 09/10/2022)
(km/h)
08/10/2022
香港時間 (時) Hong Kong Time (Hour)
09/10/2022
©香港天文台 Hong Kong Observatory
KPC

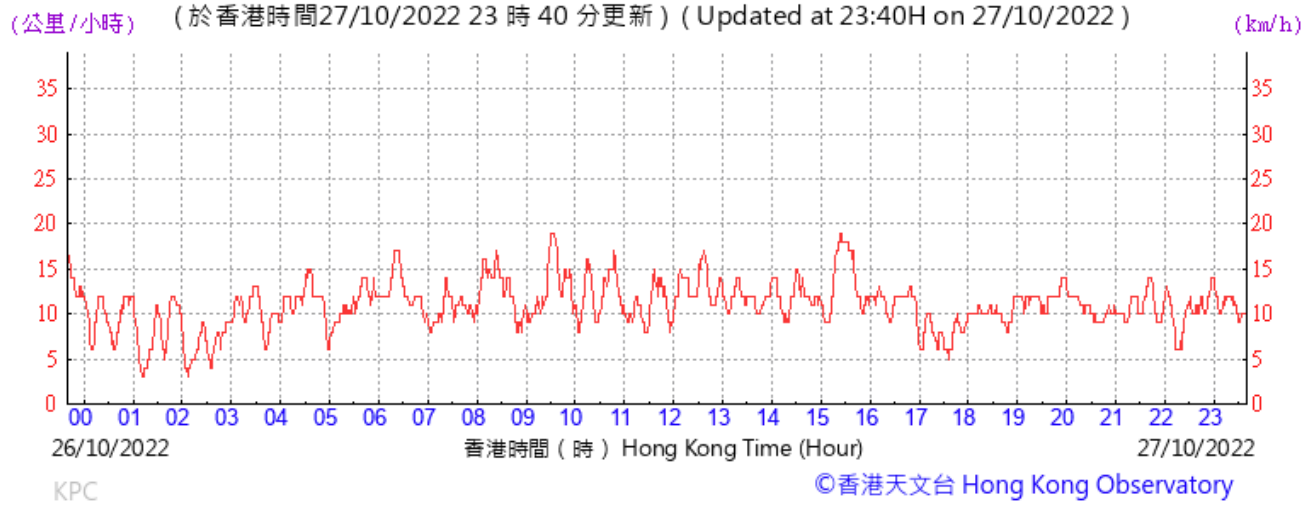

(公里/小時)
(於香港時間14/10/2022 23 時 50 分更新) (Updated at 23:50H on 14/10/2022)
(km/h)
13/10/2022
香港時間 (時) Hong Kong Time (Hour)
14/10/2022
©香港天文台 Hong Kong Observatory
KPC


(公里/小時)
(於香港時間15/10/2022 23 時 40 分更新) (Updated at 23:40H on 15/10/2022)
(km/h)
14/10/2022
香港時間 (時) Hong Kong Time (Hour)
15/10/2022
©香港天文台 Hong Kong Observatory
KPC


(公里/小時)
(於香港時間20/10/2022 23 時 40 分更新) (Updated at 23:40H on 20/10/2022)
(km/h)
50
40
30
20
10
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
19/10/2022
香港時間 (時) Hong Kong Time (Hour)
20/10/2022
KPC
©香港天文台 Hong Kong Observatory


(公里/小時)
(於香港時間21/10/2022 23 時 50 分更新) (Updated at 23:50H on 21/10/2022)
(km/h)
40
35
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
20/10/2022
香港時間 (時) Hong Kong Time (Hour)
21/10/2022
KPC
©香港天文台 Hong Kong Observatory


(公里/小時)
(於香港時間26/10/2022 23 時 50 分更新) (Updated at 23:50H on 26/10/2022)
(km/h)
40
35
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
25/10/2022
香港時間 (時) Hong Kong Time (Hour)
26/10/2022
KPC
©香港天文台 Hong Kong Observatory


(公里/小時)
(於香港時間27/10/2022 23 時 40 分更新) (Updated at 23:40H on 27/10/2022)
(km/h)
35
30
25
20
15
10
5
0
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
26/10/2022
香港時間 (時) Hong Kong Time (Hour)
27/10/2022
KPC
©香港天文台 Hong Kong Observatory

Appendix M
Monitoring Data (Noise)

Location: Yau Ma Tei Catholic Primary School (Hoi Wang Road) (W-N1A)

Monitoring date: 3, 8, 14, 20 and 26 October 2022

Parameter : L_{eq}, L_{10}, L_{90}

Other Factors Nearby traffic

Noise Monitoring data:

Date	Weather	Start Time	-	End Time	L_{eq}	L_{10}	L_{90}	Wind speed (m/s)
03/10/2022	Sunny	15:30	-	16:00	60.1	62.5	55.5	2.6
08/10/2022	Sunny	15:36	-	16:06	60.0	63.7	56.2	3.7
14/10/2022	Sunny	9:33	-	10:03	61.0	62.2	57.5	3.5
20/10/2022	Fine	12:11	-	12:41	58.5	60.3	56.1	3.3
26/10/2022	Sunny	13:04	-	13:34	60.6	62.2	58.3	1.1

Location: Hydan Place (W-N18)

Monitoring date: 3, 8, 14, 20 and 26 October 2022

Parameter : $L_{eq,}$ $L_{10,}$ L_{90}

Other Factors Nearby traffic

Noise Monitoring data:

Date	Weather	Start Time	-	End Time	L_{eq}	L_{10}	L_{90}	Wind speed (m/s)
03/10/2022	Sunny	13:35	-	14:05	68.9	73.2	65.8	2.8
08/10/2022	Sunny	13:42	-	14:12	70.1	72.3	67.0	3.9
14/10/2022	Sunny	11:32	-	12:02	70.6	73.0	67.0	3.2
20/10/2022	Fine	9:51	-	10:21	70.9	73.7	66.6	4.1
26/10/2022	Sunny	10:23	-	10:53	72.8	73.9	67.3	3.9

Location: Prosperous Garden Block 1 (W-N25A)

Monitoring date: 3, 8, 14, 20 and 26 October 2022

Parameter : L_{eq}, L_{10}, L_{90}

Other Factors Nearby traffic

Noise Monitoring data:

Date	Weather	Start Time	-	End Time	L_{eq}	L_{10}	L_{90}	Wind speed (m/s)
03/10/2022	Sunny	12:50	-	13:20	68.6	72.3	64.8	3.2
08/10/2022	Sunny	12:57	-	13:27	70.8	72.2	66.3	4.6
14/10/2022	Sunny	13:01	-	13:31	69.5	71.9	66.8	1.7
20/10/2022	Fine	9:05	-	9:35	68.6	71.1	65.9	3.6
26/10/2022	Sunny	9:25	-	9:55	71.3	74.5	67.3	2.7

Location: The Coronation Tower 1 (W-P11)

Monitoring date: 3, 8, 14, 20 and 26 October 2022

Parameter : L_{eq}, L_{10}, L_{90}

Other Factors Nearby traffic

Noise Monitoring data:

Date	Weather	Start Time	-	End Time	L_{eq}	L_{10}	L_{90}	Wind speed (m/s)
03/10/2022	Sunny	14:19	-	14:49	68.1	71.1	64.3	2.4
08/10/2022	Sunny	14:26	-	14:56	68.3	70.4	65.5	2.7
14/10/2022	Sunny	10:32	-	11:02	66.3	67.1	64.8	2.3
20/10/2022	Fine	10:59	-	11:29	68.9	71.0	65.3	4.7
26/10/2022	Sunny	11:47	-	12:17	67.0	68.5	64.4	3.4

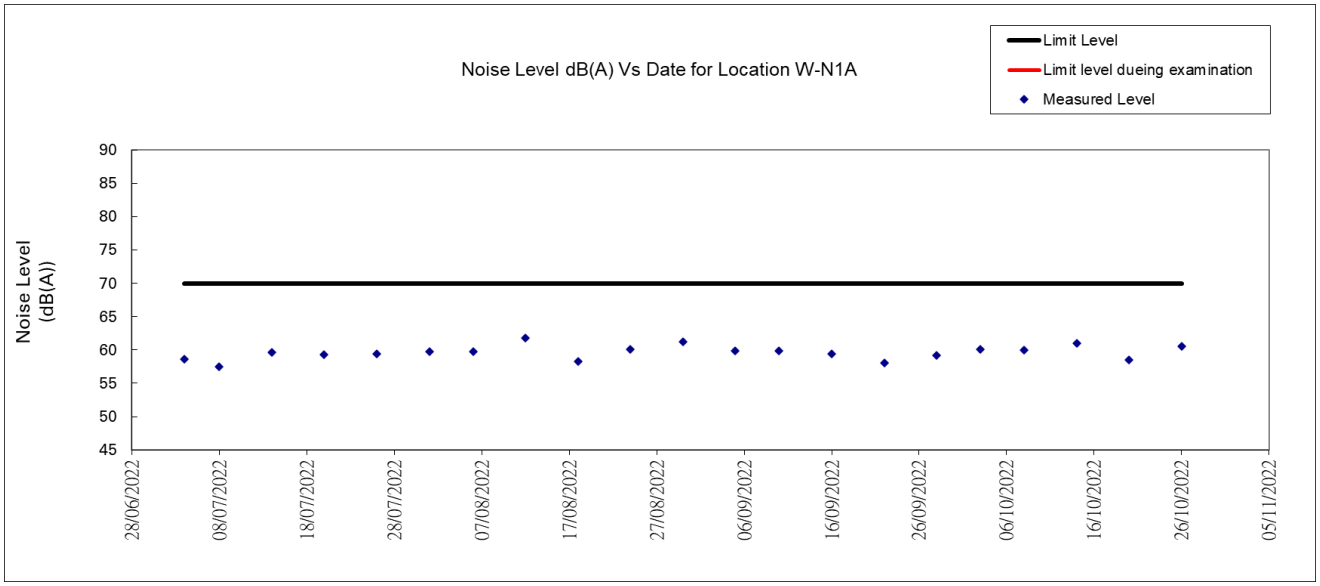


Figure 1: Graphical Illustration of Measured Noise Levels at W-N1A

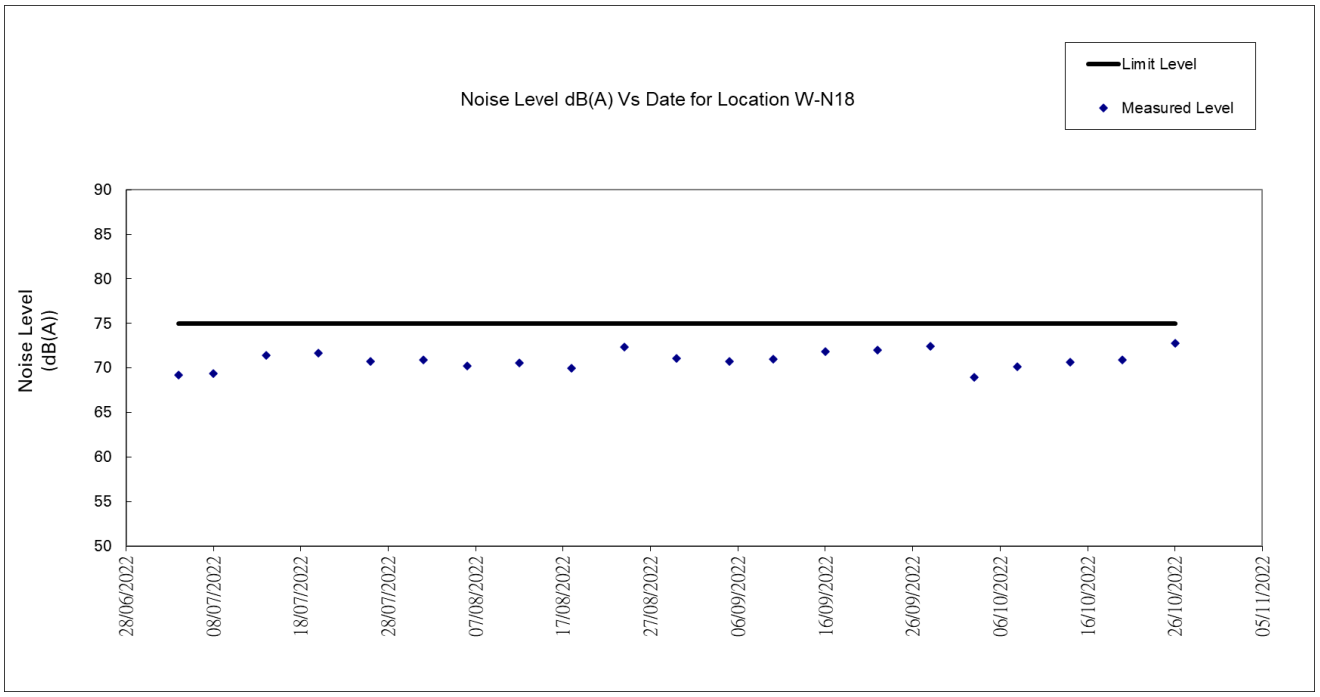


Figure 2: Graphical Illustration of Measured Noise Levels at W-N18

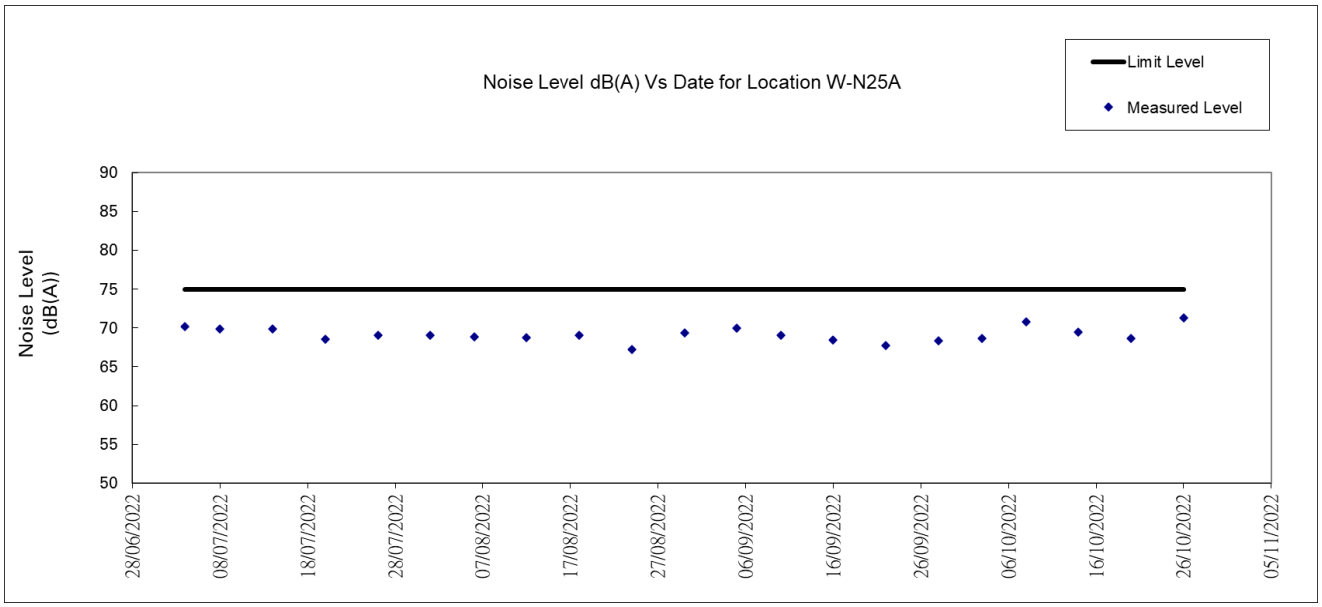


Figure 3: Graphical Illustration of Measured Noise Levels at W-N25A

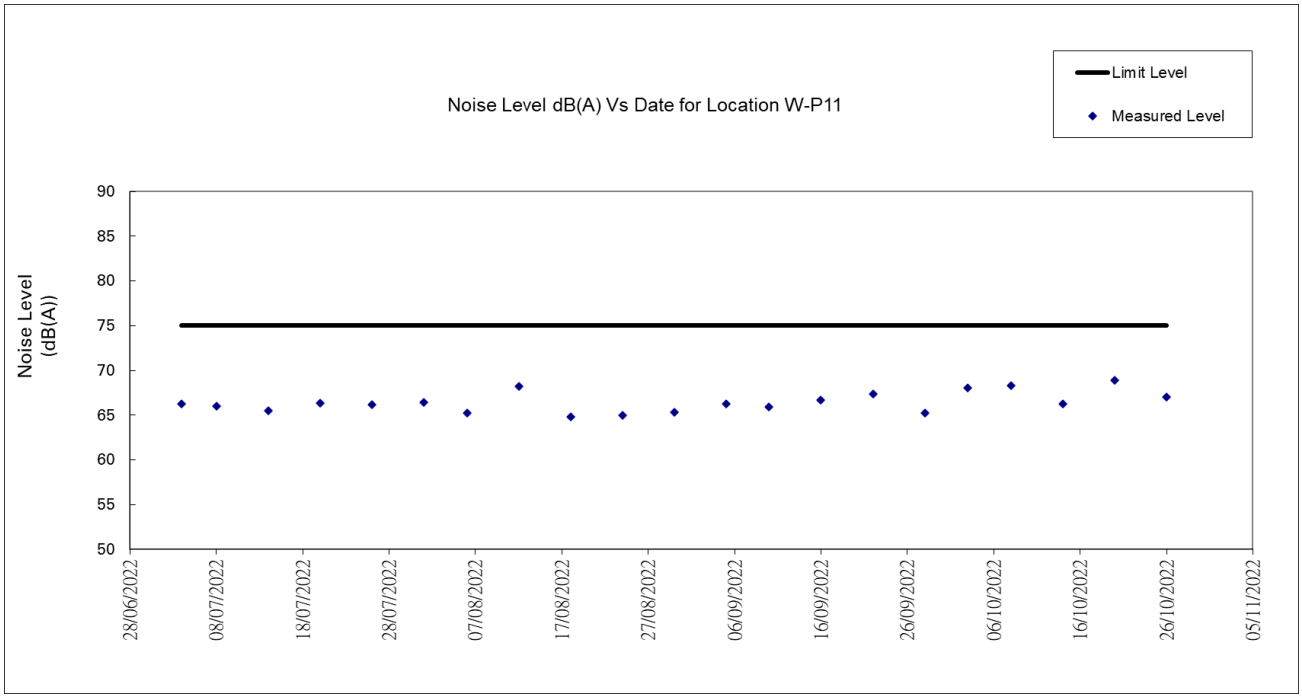


Figure 4: Graphical Illustration of Measured Noise Levels at W-P11

Appendix N
Waste Flow Table

Monthly Summary Waste Flow Table

Name of Department: Highways Department **Contract No. / Works Order No.: HY/2014/08**

Monthly Summary Waste Flow Table for October 2022

[to be submitted not later than the 15th day of each month following reporting month] (All quantities shall be rounded off to 1 decimal place.)

Month		Actual Quantities of Inert Construction Waste Generated Monthly				
	(a)=(b)+(c)+(d)+(e)+ (f)+ (g)+ (h)+ (i)+ (j)+ (k) Total Quantity Generated	(b) Hard Rock and Large Broken	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill	(f) Imported Fill
	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)
Jan-22	7033.91	116.10	232.40	4412.20	2227.40	0.00
Feb-22	1808.80	157.80	435.30	590.60	557.10	0.00
Mar-22	4333.20	39.20	99.00	1114.20	3043.30	0.00
Apr-22	15700.00	214.50	995.80	9387.70	4998.00	0.00
May-22	11192.90	55.20	42.00	2335.40	8719.30	0.00
Jun-22	8364.90	378.70	0.00	0.00	7942.70	0.00
Sub-total	48433.71	961.50	1804.50	17840.10	27487.80	0.00
Jul-22	5848.70	444.30	0.00	0.00	5359.40	0.00
Aug-22	13080.81	1222.40	0.00	0.00	11768.20	0.00
Sep-22	14957.00	298.60	0.00	0.00	14596.30	0.00
Oct-22	14239.70	531.10	0.00	0.00	13636.50	0.00
Nov-22						
Dec-22						
Total	96559.92	3457.90	1804.50	17840.10	72848.20	0.00
2018	51057.90	0.00	0.00	0.00	47715.60	2877.40
2019	112830.10	541.00	1523.80	13525.00	93132.90	3155.60
2020	193021.92	58778.00	1205.60	19108.60	112556.80	0.00
2021	104679.02	6461.30	1393.70	1144.70	92950.20	1542.90
Accumulated Total	558148.86	69238.20	5927.60	51618.40	419203.70	7575.90

Month	Actual Quantities of Non-inert Construction Waste Generated Monthly								
	(g) Metals		(h) Paper/ cardboard packaging		(i) Plastics		(j) Chemical Waste		(k) Others, e.g. General Refuse disposed at Landfill
	(in '000kg)		(in '000kg)		(in '000kg)		(in '000kg)		(in 'tonnes)
	generated	recycled	generated	recycled	generated	recycled	generated	recycled	generated
Jan-22	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	45.80
Feb-22	43.90	0.00	0.60	0.00	0.00	0.00	0.00	0.00	23.50
Mar-22	0.00	0.00	0.20	0.00	0.00	0.00	0.80	0.00	36.50
Apr-22	64.70	0.00	0.60	0.00	0.00	0.00	0.00	0.00	38.70
May-22	0.00	0.00	0.20	0.00	0.00	0.00	0.40	0.00	40.40
Jun-22	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	43.00
Sub-total	108.60	0.00	2.10	0.00	0.01	0.00	1.20	0.00	227.90
Jul-22	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	44.70
Aug-22	0.00	0.00	0.70	0.00	0.01	0.00	0.00	0.00	89.50
Sep-22	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	61.90
Oct-22	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	72.00
Nov-22									
Dec-22									
Total	108.60	0.00	3.30	0.10	0.02	0.00	1.20	0.00	496.00
2018	28.40	0.00	0.00	0.00	0.00	0.00	2.00	0.00	434.50
2019	0.00	9.10	3.40	6.80	0.00	0.00	5.20	0.00	927.30
2020	69.20	0.00	3.30	0.00	0.02	0.00	25.30	0.00	1275.10
2021	30.20	0.00	4.80	0.00	0.02	0.00	25.50	0.00	1125.70
Accumulated Total	236.40	9.10	14.80	6.90	0.06	0.00	59.20	0.00	4258.60

Appendix O
Statistics on Complaint, Notifications of Summons and Successful Prosecutions

Statistical Summary of Exceedances

Air Quality		
Reporting Period	**Action Level**	**Limit Level**
1 October 2022- 31 October 2022	0	0
Noise		
Reporting Period	**Action Level**	**Limit Level**
1 October 2022- 31 October 2022	1	0

Statistical Summary of Environmental Complaints

Reporting Period	**Environmental Complaint Statistics**		
	Frequency	**Cumulative**	**Complaint Nature**
1 October 2022- 31 October 2022	1	42	Construction noise

Statistical Summary of Environmental Non-compliance

Reporting Period	**Environmental Non-compliance Statistics**		
	Frequency	**Cumulative**	**Details**
1 October 2022- 31 October 2022	0	1	N/A

Statistical Summary of Environmental Summons

Reporting Period	**Environmental Summons Statistics**		
	Frequency	**Cumulative**	**Details**
1 October 2022- 31 October 2022	0	1	N/A

Statistical Summary of Environmental Prosecution

Reporting Period	**Environmental Prosecution Statistics**		
	Frequency	**Cumulative**	**Details**
1 October 2022- 31 October 2022	0	0	N/A

Appendix P
Monitoring Schedule of the Coming Month

Impact Monitoring Schedule for YMTE						
Nov-22						
Sun	Mon	Tue	Wed	Thur	Fri	Sat
		1	2	3	4	5
		Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A				
6	7	8	9	10	11	12
	Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A					Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A
13	14	15	16	17	18	19
					Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A	
20	21	22	23	24	25	26
				Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A		
27	28	29	30			
			Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A			

Appendix Q
Interim Report for the Complaint

Interim Report on Environmental Complaint

Project	Central Kowloon Route, Yau Ma Tei East Section
Complaint Code	EC044-CKRYMTE20221101_001
Complaint description	The complainant complained about the 24-hour construction noise from the site area near Gascoigne Road Flyover noise enclosures installation works and relevant maintenance works recently.
Parameter	Construction Noise
Investigation finding	The complainant made the complaint on 26 October 2022 and was concerned about the construction noise from Central Kowloon Route near the Prosperous Garden during daytime and Gascoigne Road Flyover noise enclosures installation works, and relevant maintenance works during nighttime. The complainant did not specify the concerning date and therefore we assume the investigation period would be between 1 to 26 October 2022. Regarding construction works at nighttime, Gascoigne Road Flyover noise enclosures installation work was conducted at Zone 3 Noise Enclosure[1] in the investigation period, whereas Gascoigne Road Flyover maintenance works were not contracted in this project. To avoid traffic congestion during the daytime period, the installation could only be conducted during the restricted hours at Zone 3 Noise Enclosure. The noise enclosure installation works at Gascoigne Road Flyover is governed by Construction Noise Permit (CNP) (Permit No:GW-RE1017-22)[2], which was issued by Environmental Protection Department (EPD) on 28 September 2022 with coverage of construction area from road sections of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road). CNP allows contractor to conduct the installation work at the concerned construction area in the period from 01:00am to 06:00am with Powered Mechanical Equipment (PME) and prescribed construction work (PCW) listed in the issued CNP. As noted by the contractor, all PME used and PCW carried out for the noise enclosure installation works were in compliance with the CNP. Quieter equipment was used to alleviate noise emission such as Mobile Crane[3] with Quality Powered Mechanical Equipment (QPME) label. As noted by the contractor, noise enclosure installation works in restricted hours have been carried out on 5, 6, 10, 17, 21 and 24 October at Zone 3 Noise Enclosure during the investigation period. All works carried out in restricted hours have been notified to EPD[4] by main contractor via online system before the 48 hours of the commencement of works to comply with permit condition. Notice[5] regarding the noise enclosure installation works at nighttime had been notified to the nearby residents by the contractor prior to the commencement of the construction works. All noise mitigation measures required in the granted CNP GW-RE1017-22 were properly implemented. Regarding construction works during the daytime, proper noise mitigation measures have been well-implemented by the contractor in the investigation period with reference to the suggestion listed in the approved EM&A manual which includes: a) All PME used was maintained regularly to ensure proper function and reduce noise impacts. b) All machines and plant were planned to locate as far as the surrounding Noise Sensitive Receivers (NSRs) to avoid disturbance. c) Quieter equipment was selected to minimize noise nuisance such as generator[6] with QPME label. Weekly environmental inspection site walks were carried out and no environmental deficiency regarding to construction noise at Zone 3 Noise Enclosure was observed in the investigation period. Weekly noise impact monitoring was conducted at Prosperous Garden (W-N25A). The results of noise impact monitoring at W-N25A ranged from 68.6 to 71.3 dB(A) in the investigation period, which were below the limit level 75 dB(A). No exceedance in noise impact monitoring at W-N25A was observed in the investigation period.

	Considering the fulfillment of stipulated requirements by the Contractor for CNP (Permit No.: GW-RE1017-22) and EM&A manual, it is concluded that there was no non-compliance to the EM&A requirement of the Project regarding noise impact from construction site.	
Actions taken / to be taken	The Contractor had followed EM&A Manual strictly to implement mitigation measures in order to minimize nuisance to the public.	
Remarks (Shown in next page)	1. Works location at Zone 3 Noise Enclosure 2. CNP (Permit No:GW-RE1017-22) 3. QPME label of Mobile Crane 4. Notification to EPD 5. Notice to the nearby residents 6. QPME label of generator	
Prepared by ET (Acuity Sustainability Consulting Limited)	Janice Lee	
Reviewed by ETL (Acuity Sustainability Consulting Limited)	Kelvin Li	
Verified by IEC (ERM-Hong Kong, Limited)	Mandy To	
Date	4 November 2022	

Remark 1: Works location at Zone 3 Noise Enclosure:

Remark 2: CNP (Permit No:GW-RE1017-22)

本署檔案
OUR REF : (5) in EP631/K02/RE484263-22
來函檔案
YOUR REF : HY-2014-08/1802/03.09.00.00/L09247
電 話
TEL. NO : 2150 8017
圖文傳真
FAX NO : 2402 8275
網 址
HOMEPAGE : http://www.epd.gov.hk/

Environmental Protection Department
Environmental Compliance Division
Regional Office (East)
8/F., Cheung Sha Wan Government Offices
303 Cheung Sha Wan Road
Kowloon

環境保護署
環保法規管理科
區域辦事處(東)
九龍長沙灣道 303 號
長沙灣政府合署 8 樓

Registered Post

28 September 2022

To: BUILD KING - SK ECOPLANT JOINT VENTURE (BUILD KING CONSTRUCTION LIMITED and SK ECOPLANT CO., LTD. as partners)
Units 601-605A, Tower B, 6/F
Manulife Financial Centre
223 Wai Yip Street
Kwun Tong, Kowloon

Dear Sirs,

Advance notification to nearby residents in respect of works carried out under Construction Noise Permit No. GW-RE1017-22
Construction site: Road Sections of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road), Kowloon (HyD Contract No. HY/2014/08)

In connection with our Notice of Issue ref. (4) in EP631/K02/RE484263-22 dated 28 September 2022 of the captioned construction noise permit, please be advised that the permit was issued under a consideration of unavoidable constraints on working hours at the construction site concerned. Notwithstanding the noise control measures specified in the permit, the noise produced by the works is expected to exceed the statutory noise limit, thus causing disturbance to the nearby residents. This may result in noise complaints which may affect the image of your company.

As a measure to alert the affected persons, and to help maintain good public relations and reduce noise complaints, you are strongly advised to notify the nearby residents by providing details such as dates and hours of operation, location and nature of works, and contact telephone numbers to them a few days in advance of the construction (sample notice enclosed).

By copy of this letter, Highways Department is requested to ensure your contractor to notify the nearby residents of the information mentioned above and comply with the permit conditions. A copy of the construction noise permit is available for your attention at the EPD website: https://epic.epd.gov.hk/EFORMUPD/main/epic/apps-construct?lang=en.

Your cooperation in this matter is highly appreciated.

Yours faithfully,

(WONG Mei-chi)
Environmental Protection Officer
for Director of Environmental Protection

Encl.: Notice to Affected Resident (Sample)
c.c. : Director of Highways
[Attn.: Mr. LAW Yuk Fat, Robin / Sr Engr 7/Central Kowloon Route] (Fax No.: 2714 5198)

(5) in EP631/K02/RE484263-22

HY-2014-08/1802/03.09.00.00/L09247

2150 8017

2402 8275

掛號函件

致： 九龍 觀塘
偉業街 223 號
宏利金融中心
6 樓 B 座 601-605A 室
BUILD KING - SK ECOPLANT JOINT VENTURE (BUILD KING CONSTRUCTION LIMITED 及 SK ECOPLANT CO., LTD. 為合伙人)

執事先生：

根據「建築噪音許可證第 GW-RE1017-22 號」
進行有關工程前預先知會附近居民
建築地盤：九龍渡船街 (窩打老道至甘肅街)至西九龍走廊及加士居道天橋 (界限街至衛理道)(路政署合約編號 HY/2014/08)

本辦事處在二零二二年九月二十八日發信（檔號 (4) in EP631/K02/RE484263-22) 通知你上述「建築噪音許可證」已經發出。就此再函說明，我們是鑑於貴方在有關工地的施工有無可避免的工作時間限制，因而簽發該許可證。儘管許可證上已明列各項噪音控制措施，但工程產生的噪音，預計仍會超出法定噪音規限，滋擾鄰近住戶，或有可能引起噪音滋擾投訴，影響貴公司的形象。

為使受影響的人士知道有關工程的情況，維持貴公司與公眾良好的公共關係及減少噪音滋擾投訴，本署籲請你在施工前數天知會鄰戶，說明工程的詳情(例如：進行工程的日期和時間、工程的地點和性質)，及提供查詢的電話號碼(隨信附上通知書樣本)。

請路政署收到此信件後，確保你的承建商必須預先通知鄰戶，有關上述施工詳情及遵照許可證內載的條款。建築噪音許可證的副本可在環境保護署網頁查閱：https://epic.epd.gov.hk/EFORMUPD/main/epic/apps-construct?lang=zh_HK.

多謝合作。

環境保護署署長

(王美枝 代行)

附件 ： 致受影響居民的通知書(樣本)
副本送： 路政署署長
[經辦人：羅郁發先生 / 高級工程師 7/中九龍幹線]
(傳真號碼：2714 5198)

二零二二年九月二十八日

NOTICE TO AFFECTED RESIDENT

(SAMPLE) (Date)

Dear Residents:

I am writing to let you know that we will be carrying out_____

(NATURE OF WORKS:

_____in the vicinity of_____

e.g. drainage maintenance works) (LOCATION: e.g. XYZ Street

_____during the hours of_____.

between ABC Road and DEF Road) e.g. 10:00 p.m. to 1:00 a.m.)

from_____to_____

(PERIOD: e.g. 15 January to 18 January 2007)

I wish to apologize for the inconvenience that this may cause you while I am sure you will understand that such works are an integral part of providing essential services to you and other residents in your neighborhood.

You may like to note that it is not possible for us to conduct the works during the day time hours due to_____. Please be assured that we

(REASONS: e.g. traffic conditions)

will carry out the works as quickly as possible with due regard to the noise intrusion which may result. We will also be adopting noise mitigation measures such as_____

_____.

(e.g. low noise generator enclosed by an acoustical enclosure)

If you have any enquiries regarding the works, please feel free to contact our

_____

(REPRESENTATIVE: e.g. works supervisor, Mr. A.B.Cee at (MOBILE PHONE NO. or

_____

PAGER NO.) OR Mr. E.F.Gee, engineer at phone : xxxx-yyyy

Your truly,

_____

(NAME)

_____

(POST)

_____

(NAME OF COMPANY)

c.c. EPD (ATTN)

(Attn: HOTLINE in CSW/EPD, Fax No. 24028275)

致受影響居民的通知書

(樣本)

各位居民：

現來信通知由_____年____月____日至_____年____月____日_____

(時期：例如 97 年 1 月 15 日至 1 月 18 日) (例如晚上 10 時

_____時在_____附近進行_____

至零晨 1 時) (位置：例如 ABC 道與 DEF 道之間的 XYZ 街) (工作

_____。

性質：例如排水渠維修工程)

本公司對因這些工程造成的不便表示歉意，而深信閣下明白這些工程是爲閣下及其他鄰近居民提供重要服務中的重要一環。

在日間由於_____，本公司無法進行上述工程。但本公司

(理由：例如交通情況)

保證盡快進行上述工程，並注意可能造成的噪音。本公司亦會採取噪音紓緩措施如_____。

(例如由隔聲圍封物圍封低噪音產生器)

如對上述工程有任何疑問，請聯絡_____

(代表：例如工程主管，ABC 先生

_____。

(手提電話號碼或傳呼號碼)或工程師 EFG 先生，電話號碼：xxxx-yyyy)

_____

公司名稱

_____

職位

_____

姓名

副本送：環保署收啓

(HOTLINE in CSW - 傳真號碼: 24028275)

本署檔案
OUR REF : (4) in EP631/K02/RE484263-22
來函檔案
YOUR REF : HY-2014-08/1802/03.09.00.00/L09247
電 話
TEL. NO : 2150 8017
圖文傳真
FAX NO : 2402 8275
網 址
HOMEPAGE : http://www.epd.gov.hk/

Environmental Protection Department
Environmental Compliance Division
Regional Office (East)
8/F., Cheung Sha Wan Government Offices
303 Cheung Sha Wan Road
Kowloon

環境保護署
環保法規管理科
區域辦事處(東)
九龍長沙灣道 303 號
長沙灣政府合署 8 樓

Registered Post

28 September 2022

To: BUILD KING - SK ECOPLANT JOINT VENTURE (BUILD KING CONSTRUCTION LIMITED and SK ECOPLANT CO., LTD. as partners)
Units 601-605A, Tower B, 6/F
Manulife Financial Centre
223 Wai Yip Street
Kwun Tong, Kowloon

Dear Sirs,

Notice of Issue of Construction Noise Permit pursuant to section 8(6) of the Noise Control Ordinance (Cap. 400)

I write to inform you that, under section 8(6) of the Noise Control Ordinance, the Authority has decided to issue a construction noise permit in respect of your application, which was received by the Authority on 14 September 2022, for the use of powered mechanical equipment for carrying out construction work and performing prescribed construction work at **Road Sections of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road), Kowloon (HyD Contract No. HY/2014/08).**

The construction noise permit No. **GW-RE1017-22** is enclosed.

Please note that a condition concerning **online submission of advance notification of work** to the Authority has been incorporated into this construction noise permit. You are strongly advised to read the conditions of the permit carefully and to ensure compliance with these conditions. Any breaching of the conditions may lead to cancellation of the permit, **subsequent prosecution action** and/or the Authority's refusal to issue further permit for the above construction site.

Yours faithfully,

(WONG Mei-chi)
for Authority

Encl.

Note:
Electronic submission of application for construction noise permit is available at Environmental Protection Department's website. File attachments with total size not exceeding 20 MB in acceptable format are allowed for electronic submission. Electronic application form can be downloaded from our website (https://epic.epd.gov.hk/eForm/ChangeLanguage.do?language=eng&url=/pages/datadownload/downloadMain.jsp) and an overview of application submission (https://epic.epd.gov.hk/eForm/introduce.html) is provided for more information.

(4) in EP631/K02/RE484263-22

HY-2014-08/1802/03.09.00.00/L09247

2150 8017

2402 8275

掛號函件

致： 九龍 觀塘
偉業街 223 號
宏利金融中心
6 樓 B 座 601-605A 室
BUILD KING - SK ECOPLANT JOINT VENTURE (BUILD KING CONSTRUCTION LIMITED 及 SK ECOPLANT CO., LTD. 為合伙人)

執事先生：

根據《噪音管制條例》(第 400 章)第 8(6)條
發出的通知書 — 簽發「建築噪音許可證」

本監督在二零二二年九月十四日接獲你擬於**九龍渡船街 (窩打老道至甘肅街)至西九龍走廊及加士居道天橋(界限街至衛理道)(路政署合約編號 HY/2014/08)**，使用機動設備進行建築工程及進行訂明建築工程而提出的「建築噪音許可證」申請，現根據《噪音管制條例》第 8(6)條的規定通知你，上述的申請已被批准。

隨函附上「第 **GW-RE1017-22** 號建築噪音許可證」。

請注意，有關**施工前於網上預先通知**本監督的要求已納入本建築噪音許可證的條件。請細閱及確保遵守許可證各項條件。如有違反，本監督可撤銷許可證、**提出檢控**及/或拒絕再就上述地盤簽發任何「建築噪音許可證」。

監 督

(王美枝 代行)

連附件

二零二二年九月二十八日

注意:
環境保護署提供網上申請「建築噪音許可證」服務。網上申請容許上傳檔案總容量不大於 20 MB 的有關文件。可於本署網頁下載電子表格 (https://epic.epd.gov.hk/eForm/ChangeLanguage.do?language=eng&url=/pages/datadownload/downloadMain.jsp)及參閱電子表格提交服務概覽(https://epic.epd.gov.hk/eForm/introduce.html)，了解更多資料。

FORM 3 [reg.5(a)]
NOISE CONTROL ORDINANCE
(Chapter 400)
SECTION 8(9)

CONSTRUCTION NOISE PERMIT FOR THE USE OF POWERED MECHANICAL EQUIPMENT FOR THE PURPOSE OF CARRYING OUT CONSTRUCTION WORK OTHER THAN PERCUSSIVE PILING AND/OR THE CARRYING OUT OF PRESCRIBED CONSTRUCTION WORK

CONSTRUCTION NOISE PERMIT NO. GW-RE1017-22

To : BUILD KING - SK ECOPLANT JOINT VENTURE (BUILD KING CONSTRUCTION LIMITED and SK ECOPLANT CO., LTD. as partners)

This construction noise permit is issued in accordance with section 8 of the Noise Control Ordinance. Permission is granted for the use of powered mechanical equipment for the purpose of carrying out construction work other than percussive piling and/or the carrying out of prescribed construction work, subject to the conditions set out below. The carrying out of construction work otherwise than in accordance with the conditions may result in the permit being cancelled and in a prosecution for an offence.

CONDITIONS

1. Construction site where the powered mechanical equipment and/or prescribed construction work may be employed:

   Full address: Road Sections of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road), Kowloon (HyD Contract No. HY/2014/08) Lot No.: ---

   The site boundary, that is, the boundary of the area within which the powered mechanical equipment may be used and the prescribed construction work may be carried out is delineated on the attached plan which forms part of this construction noise permit.

2. ~~* PART~~/WHOLE of the site falls * WITHIN/~~OUTSIDE~~ a designated area.

3. Powered Mechanical Equipment

   a. Items of powered mechanical equipment which may be used inside the site boundary :

Identification code of item of powered mechanical equipment (if applicable)	*Description of item of powered mechanical equipment*	*No. of units*
	Refer to attached sheet.	

   b. Validity of the construction noise permit for the use of the powered mechanical equipment:

      Date and time of commencement: 1 October 2022 at 0100 hours

      Days and hours : 0000-2400 hours on general holidays (including Sundays), 0000-0700 hours and 1900-2400 hours on any day not being a general holiday [but note condition 3.d.1. below for the operating hours within which the use of the above listed powered mechanical equipment is allowed].

      This part of the permit expires on : 31 December 2022 at 0600 hours

   c. One photograph, endorsed by the Authority, of each item of powered mechanical equipment described in this construction noise permit is required to be kept on the construction site and made available for inspection by the Authority.

   d. Other conditions imposed on the use of the powered mechanical equipment:

      Please refer to attached sheet for conditions imposed for this construction noise permit which is issued as a **special case** due to constraints on working hours to **avoid causing serious interruption to road transport**.

4. Prescribed Construction Work

a. Type of prescribed construction work which may be carried out inside the site boundary:

Identification code of type of prescribed construction work	*Description of type of prescribed construction work*
PCW 002	Loading, unloading or handling of steel bars.
PCW 003	Hammering

b. Validity of the construction noise permit for the carrying out of the prescribed construction work:

Date and time of commencement : 1 October 2022 at 0100 hours

Date and hours : 0000-2400 hours on general holidays (including Sundays), 0000-0700 hours and 1900-2400 hours on any day not being a general holiday [but note condition 4.d.1. below for the operating hours within which the carrying out of the above listed prescribed construction work is allowed]..

This part of the permit expires on : 31 December 2022 at 0600 hours

c. ~~Site layout plan(s), endorsed by the Authority, may be attached with the permit to indicate the locations permitted for the carrying out of prescribed construction work described in this permit. The layout plan(s) is(are) required to be kept on the construction site and made available for inspection by the Authority.~~

d. Other conditions imposed on the carrying out of the prescribed construction work:

Please refer to attached sheet for conditions imposed for this construction noise permit which is issued as a **special case** due to constraints on working hours to **avoid causing serious interruption to road transport**.

Dated this 28th day of September 2022

Signed :

(WONG Mei-chi)
for Authority

* Delete as necessary

表格3 [第5(a)條]

噪音管制條例
(第400章)
第8(9)條

建築噪音許可證
為進行建築工程(撞擊式打樁除外)
而使用機動設備及／或進行訂明建築工程

建築噪音許可證編號：GW-RE1017-22

致：BUILD KING - SK ECOPLANT JOINT VENTURE (BUILD KING CONSTRUCTION LIMITED 及 SK ECOPLANT CO., LTD. 為合伙人)

本建築噪音許可證是按照《噪音管制條例》第8條的規定而發出的。現准予使用機動設備以進行撞擊式打樁工程以外的建築工程及／或進行訂明建築工程，但須受以下條件規限。若不按照該等條件進行建築工程，許可證可遭撤銷，而且會受到檢控。

條 件

1. 可使用機動設備及／或進行訂明建築工程的建築地盤：

詳細地址：九龍渡船街(窩打老道至廿肅街)至西九龍走廊及加士居道天橋(界限街至衛理道)(路政署合約編號 HY/2014/08)。地段編號：---

地盤範圍(即可使用機動設備及進行訂明建築工程的地方範圍)已描劃於夾附的圖則上，而該圖則是本建築噪音許可證的一部分。

2. 該地盤~~部分~~／全部*位於指定範圍之內／~~外~~*。

3. 機動設備

a. 在地盤範圍內可使用的各項機動設備：

各項機動設備的識辨代碼 (如適用的話)	*各項機動設備的說明*	*數目*
	參見附頁。	

b. 可使用機動設備的建築噪音許可證有效期：

生效日期及時間：二零二二年十月一日 凌晨一時

日期及時間：公眾假日(包括星期日)的凌晨零時至晚上十二時，公眾假日以外的任何一日凌晨零時至上午七時及下午七時至晚上十二時【但須注意條件3.d.1.有關可以使用上列機動設備的時間】。

此部分許可證屆滿日期及時間：二零二二年十二月三十一日 上午六時
日期 時間

c. 建築地盤須備有本建築噪音許可證所述每件機動設備的照片各一幀，供監督隨時查看；該等照片須經監督認可。

d. 規限使用機動設備的其他條件：

請參見附頁有關本建築噪音許可證的規限條件。該條件是鑒於本建築噪音許可證屬**特別個案**而註明的，而該特別個案是為**避免**於其他時段施工時引致**嚴重妨礙道路交通**的情況而處理的。

4. 訂明建築工程

a. 在地盤範圍內可進行的訂明建築工程：

訂明建築工程的識辨代碼	*訂明建築工程的類別的說明*
PCW 002 PCW 003	裝卸或處理鋼條。 敲擊

b. 可進行訂明建築工程的建築噪音許可證有效期：

生效日期及時間：二零二二年十月一日 凌晨一時

日期及時間：公眾假日(包括星期日)的凌晨零時至晚上十二時，公眾假日以外的任何一日凌晨零時至上午七時及下午七時至晚上十二時【但須注意條件4.d.1.有關可進行上列訂明建築工程的時間】。

此部分許可證屆滿日期及時間：二零二二年十二月三十一日 上午六時
日期 時間

c. ~~本許可證可夾附經監督認可的地盤圖則，以顯示本許可證准予進行訂明建築工程的地點。該地盤圖則須存放於建築地盤供監督隨時查看。~~

d. 規限進行訂明建築工程的其他條件：

請參見附頁有關本建築噪音許可證的規限條件。該條件是鑒於本建築噪音許可證屬**特別個案**而註明的，而該特別個案是為**避免**於其他時段施工時引致**嚴重妨礙道路交通**的情況而處理的。

5. 本建築噪音許可證或其副本必須展示於建築地盤的道路前後兩端所豎立的適當告示牌上，給予公眾人士參閱。

日期：2022 年 9 月 28 日

簽署：

監督
(王美枝代行)

* 刪去不適用者

SPECIAL CASE – avoid causing serious interruption to road transport
特別個案 – 避免引致嚴重妨礙道路交通

Sheet attached to Construction Noise Permit
No. GW-RE1017-22

3.a. Items of powered mechanical equipment which may be used inside the site boundary:

Identification code of item of powered mechanical equipment (if applicable)	*Description of item of powered mechanical equipment*	*No. of units*	*Working Zone (refer to attached plan)*
--- --- ---	Welding machine (electric) Tractor with trailer Crane, mobile (diesel) , with Quality Powered Mechanical Equipment Label showing a Sound Power Level of ≦107dB(A)	Two Two Two	B+C
--- CNP 065 --- ---	Cherry picker Grinder, hand-held (electric) Drill, hand-held (battery) Generator, with Quality Powered Mechanical Equipment Label showing a Sound Power Level of ≦94 dB(A)	Six Two Two Three	B
--- ---	Lorry with crane, 5.5 tonne<gross vehicle weight≦38 tonne Lorry with flashing directional sign, 5.5 tonne<gross vehicle weight≦38 tonne	Two One	A+B

3.d. Other conditions imposed on the use of the powered mechanical equipment:

1. The powered mechanical equipment listed in condition 3.a. shall only be operated during the hours shown below:

Any day	0100 – 0600 hours

2. All care shall be taken to ensure that the construction work is carried out as quickly as possible with due regard for the potential noise intrusion which may result.

3. The powered mechanical equipment listed in condition 3.a. shall only be operated within their respective Working Zones as marked on the attached plans.

4. The power generating part of (i) Crane, mobile (diesel), with Quality Powered Mechanical Equipment Label showing a Sound Power Level of ≦105dB(A), (ii) Lorry with crane, 5.5 tonne<gross vehicle weight≦38 tonne and (iii) Cherry picker shall be covered by an acoustic shed comprised of minimum 50 mm thick sound absorbing lining and 10mm thick plywood (or 1mm thick steel) housing. Acoustic shed comprising alternative materials shall have equivalent acoustic screening effect.

5. (i) Welding machine (electric); (ii) Grinder, hand-held (electric) (CNP 065); (iii) Drill, hand-held (battery) and (iv) Generator, with Quality Powered Mechanical Equipment Label showing a Sound Power Level of ≦ 94 dB(A) shall only be operated inside the acoustic enclosure so that no part of such equipment is visible from any nearby noise sensitive receiver. The acoustic enclosure shall be comprised of four side-panels and one top-panel. The panels shall be made of minimum 50mm thick sound absorbing lining, and 10mm thick plywood (or 1mm thick steel) backing. Acoustic enclosure comprising alternative materials shall have equivalent acoustic screening effect.

Signed: _____
(WONG Mei Chi)
for Authority

SPECIAL CASE – avoid causing serious interruption to road transport
特別個案 – 避免引致嚴重妨礙道路交通

Sheet attached to Construction Noise Permit
No. GW-RE1017-22

6. Portable phones or walkie talkies with headphones shall be used for site communication. No whistles, horns and loudspeakers shall be used. No shouting shall be allowed.

7. All idling powered mechanical equipment shall be switched off.

8. The construction work in relation to this Construction Noise Permit shall only be carried out with prior notification to the Authority of the location, date and time of the work as well as the details of work program (including the date and time for carrying out different phases or sequence of work) etc. Such notification shall be made by logging in the following webpage (http://cnp-advancenotification.hk) and submitting all information required. Such notification shall be made within 14 days but no less than 48 hours before commencement of work for every work location.

4.d. Other conditions imposed on the carrying out of the prescribed construction work:

1. The prescribed construction work listed in condition 4.a. shall only be carried out during the hours shown below:

Any day	0100 – 0600 hours

2. All care shall be taken to ensure that the prescribed construction work is carried out as quickly as possible with due regard for the potential noise intrusion which may result.

3. Hammering (PCW003) shall only be carried out using a hammer with non-metallic tip (i.e. nylon or wood) or covering the work-object with damping materials (e.g. sacks, cloths, timber, etc.) to reduce the impact noise.

4. Rubber paddings (or sheeting of appropriate resilient materials) of minimum 10mm thick shall be placed on hard surfaces when carrying out the loading, unloading or handling of steel bars.

5. Portable phones or walkie talkies with headphones shall be used for site communication. No whistles, horns and loudspeakers shall be used. No shouting shall be allowed.

6. The prescribed construction work in relation to this Construction Noise Permit shall only be carried out with prior notification to the Authority of the location, date and time of the work as well as the details of work program (including the date and time for carrying out different phases or sequence of work) etc. Such notification shall be made by logging in the following webpage (http://cnp-advancenotification.hk) and submitting all information required. Such notification shall be made within 14 days but no less than 48 hours before commencement of work for every work location.

Signed: _____
(WONG Mei Chi)
for Authority

SPECIAL CASE – avoid causing serious interruption to road transport
特別個案 – 避免引致嚴重妨礙道路交通

建築噪音許可證
編號 GW-RE1017-22 的附頁

3.a. 在地盤範圍內可使用的各項機動設備：

各項機動設備的識辨代碼 (如適用的話)	*各項機動設備的說明*	*數目*	*工作區域 (參閱附圖)*
--- --- ---	焊接機 (電動) 拖拉機附加拖車 起重機，流動 (油渣) ，備有優質機動設備標籤顯示聲功率級≦107 分貝(A)	貳 貳 貳	B+C
--- CNP 065 --- ---	移動升降台 磨機，手提型 (電動) 鑽，手提型(乾電池) 發電機，備有優質機動設備標籤顯示聲功率級≦94 分貝(A)	陸 貳 貳 叁	B
--- ---	吊臂貨車，5.5 噸<總重量≦38 噸 貨車附加方向指示燈，5.5 噸<總重量≦38 噸	貳 壹	A+B

3. d. 規限使用機動設備的其他條件：

1. 祇可於以下時間內使用列在條件3.a.內的機動設備：

任何一日	凌晨一時至上午六時

2. 本許可證持有人必須確保竭力從速完成該等建築工程，並小心防範會引起的噪音干擾。

3. 列在條件3.a.內的機動設備**祇**准在附圖上標示其各自的工作區域內操作。

4. (i) 起重機，流動 (油渣) ，備有優質機動設備標籤顯示聲功率級≦105分貝(A)、(ii) 吊臂貨車，5.5噸<總重量≦38噸 及 (iii) 移動升降台的動力發動部份必須以隔音屏障完全覆蓋，該隔音屏障必須以不少於50毫米厚的吸音襯墊及10毫米厚的夾板(或1毫米厚的鋼板)造成，以替代材料造成的隔音屏障須具有等效的隔聲功能。

5. (i) 焊接機 (電動)、(ii) 磨機，手提型 (電動) (CNP 065)、(iii) 鑽，手提型(乾電池) 及 (iv) 發電機，備有優質機動設備標籤顯示聲功率級≦94分貝(A) 使用時，祇可在隔音罩內使用，使該設備的任何部份均無法在任何鄰近噪音感應強的地方內見到。該隔音罩必須由四件側板障及一件上板障所組成。該隔音板障必須以不少於50毫米厚的吸音襯墊及10毫米厚的夾板或(1毫米厚的鋼板)造成。以替代材料造成的隔音罩須具有等效的隔聲功能。

簽署：

監督
(王美枝 代行)

SPECIAL CASE – avoid causing serious interruption to road transport
特別個案 – 避免引致嚴重妨礙道路交通

建築噪音許可證
編號 GW-RE1017-22 的附頁

6. 地盤通訊必須使用手提電話或連耳筒對講機，不准使用哨子、號角及擴音器，不准喧嘩。

7. 關掉所有空轉的機動設備。

8. 在進行此建築噪音許可證內所載列的建築工程時，必須確保就每個施工地點於施工前48小時至施工前14日內，登入以下網上平台 (http://cnp-advancenotification.hk/tc) 並就每個施工地點於施工前48小時至施工前14日內填妥及提交有關施工地點、日期及時間、及施工程序安排(包括不同階段或工序施工日期及時間的安排)等所需資料。

4. d. 規限進行訂明建築工程的其他條件：

1. 祇可於以下時間內進行列在條件 4. a. 內的訂明建築工程：

任何一日	凌晨一時至上午六時

2. 本許可證持有人必須確保竭力從速完成該等訂明建築工程，並小心防範會引起的噪音干擾。

3. 敲擊(PCW003)的工序祇可以用非鐵頭槌(尼龍或木)或用減震的物料(袋、布、木等)遮蓋工件以消減噪音。

4. 當進行裝卸或處理鋼條的工程時，必須將不少於 10 毫米厚的膠墊 (或彈性襯墊)墊在堅硬表面上。

5. 地盤通訊必須使用手提電話或連耳筒對講機，不准使用哨子、號角及擴音器，不准喧嘩。

6. 在進行此建築噪音許可證內所載列的訂明建築工程時，必須確保就每個施工地點於施工前 48 小時至施工前 14 日內，登入以下網上平台 (http://cnp-advancenotification.hk/tc) 並就每個施工地點於施工前 48 小時至施工前 14 日內填妥及提交有關施工地點、日期及時間、及施工程序安排(包括不同階段或工序施工日期及時間的安排)等所需資料。

簽署：

監督
(王美枝 代行)

Photograph(s) attached to Construction Noise Permit No. GW-RE1017-22
建築噪音許可證編號 GW-RE1017-22的照片

Cherry picker
移動升降台

Lorry with crane, 5.5 tonne < gross vehicle weight ≦ 38 tonne
吊臂貨車，5.5 噸 < 總重量 ≦ 38 噸

Photograph(s) attached to Construction Noise Permit No. GW-RE1017-22
建築噪音許可證編號 GW-RE1017-22的照片

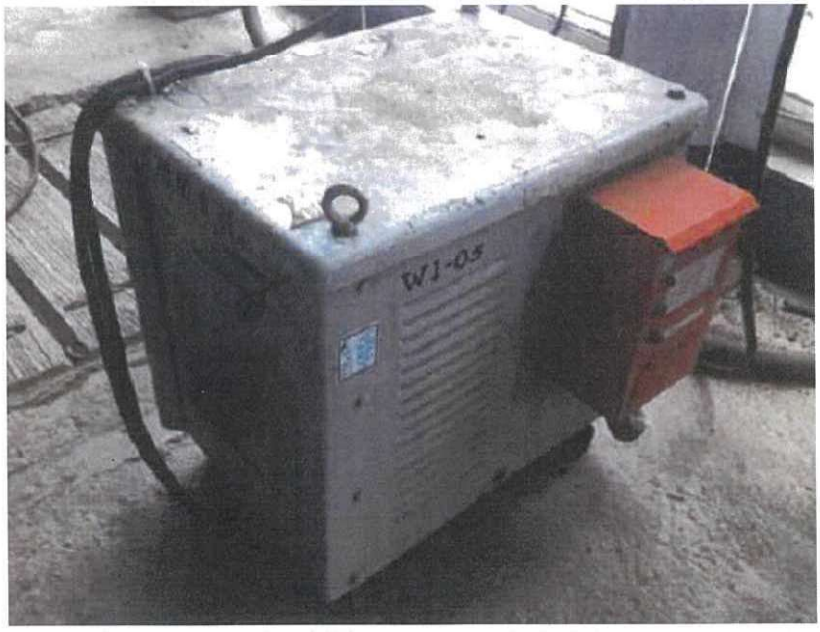
Tractor with trailer
拖拉機附加拖車

類別 Type	流動起重機 Crane, mobile	
製造商 / 牌子 Manufacturer / Trade Name	Liebherr	
型號 Model	LTM 1230-5.1	
生產日期(月/年) Date of Manufacture of equipment(m/y)	06/2022	
編號 Serial Number	094470	
聲功率級 Sound Power Level	107	分貝(A) dB(A)
識別號碼 QPME ID Code	EPD-12521	
本標籤簽發日期(日/月/年) Date of Issue (d/m/y) of this Label	05/07/2022	
本標籤屆滿日期(月/年) Expiry Date (m/y) of this Label	07/2028	
環境保護署簽發 Issued by Environmental Protection Department		

Crane, mobile (diesel), with Quality Powered Mechanical Equipment Label showing a Sound Power Level of ≦107dB(A)
起重機，流動 (油渣) ，備有優質機動設備標籤顯示聲功率級≦107 分貝(A)

Photograph(s) attached to Construction Noise Permit No. GW-RE1017-22
建築噪音許可證編號 GW-RE1017-22的照片

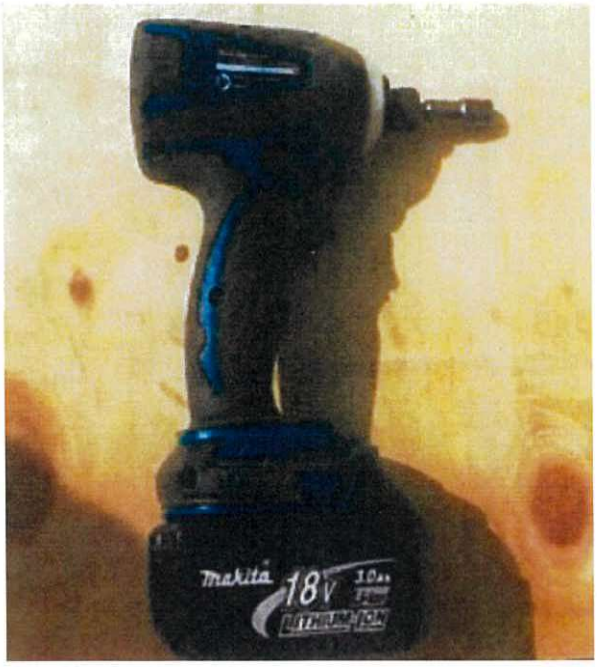
Lorry with flashing directional sign, 5.5 tonne < gross vehicle weight ≦38 tonne
貨車附加方向指示燈，5.5 噸＜總重量≦38 噸



Welding machine (electric)
焊接機 (電動)

Photograph(s) attached to Construction Noise Permit No. GW-RE1017-22
建築噪音許可證編號 GW-RE1017-22的照片

CNP 065 Grinder, hand-held (electric)
磨機，手提型 (電動)



Drill, hand-held (battery)
鑽，手提型(乾電池)

Photograph(s) attached to Construction Noise Permit No. GW-RE1017-22
建築噪音許可證編號 GW-RE1017-22的照片

類別 Type	發電機 Generator
製造商 / 牌子 Manufacturer / Trade Name	DENYO
型號 Model	DCA-220LSIE2
生產日期(月/年) Date of Manufacture of equipment(m/y)	12/2021
編號 Serial Number	3967527
聲功率級 Sound Power Level	94 分貝(A) dB(A)
識別號碼 QPME ID Code	EPD-11922
本標籤簽發日期(日/月/年) Date of Issue (d/m/y) of this Label	07/02/2022
本標籤屆滿日期(月/年) Expiry Date (m/y) of this Label	02/2028

環境保護署簽發
Issued by Environmental Protection Department

類別 Type	發電機 Generator
製造商 / 牌子 Manufacturer / Trade Name	AIRMAN
型號 Model	SDG220S-7B1
生產日期(月/年) Date of Manufacture of equipment(m/y)	04/2017
編號 Serial Number	1577B10164
聲功率級 Sound Power Level	94 分貝(A) dB(A)
識別號碼 QPME ID Code	EPD-05442
本標籤簽發日期(日/月/年) Date of Issue (d/m/y) of this Label	08/06/2017
本標籤屆滿日期(月/年) Expiry Date (m/y) of this Label	06/2023

環境保護署簽發
Issued by Environmental Protection Department

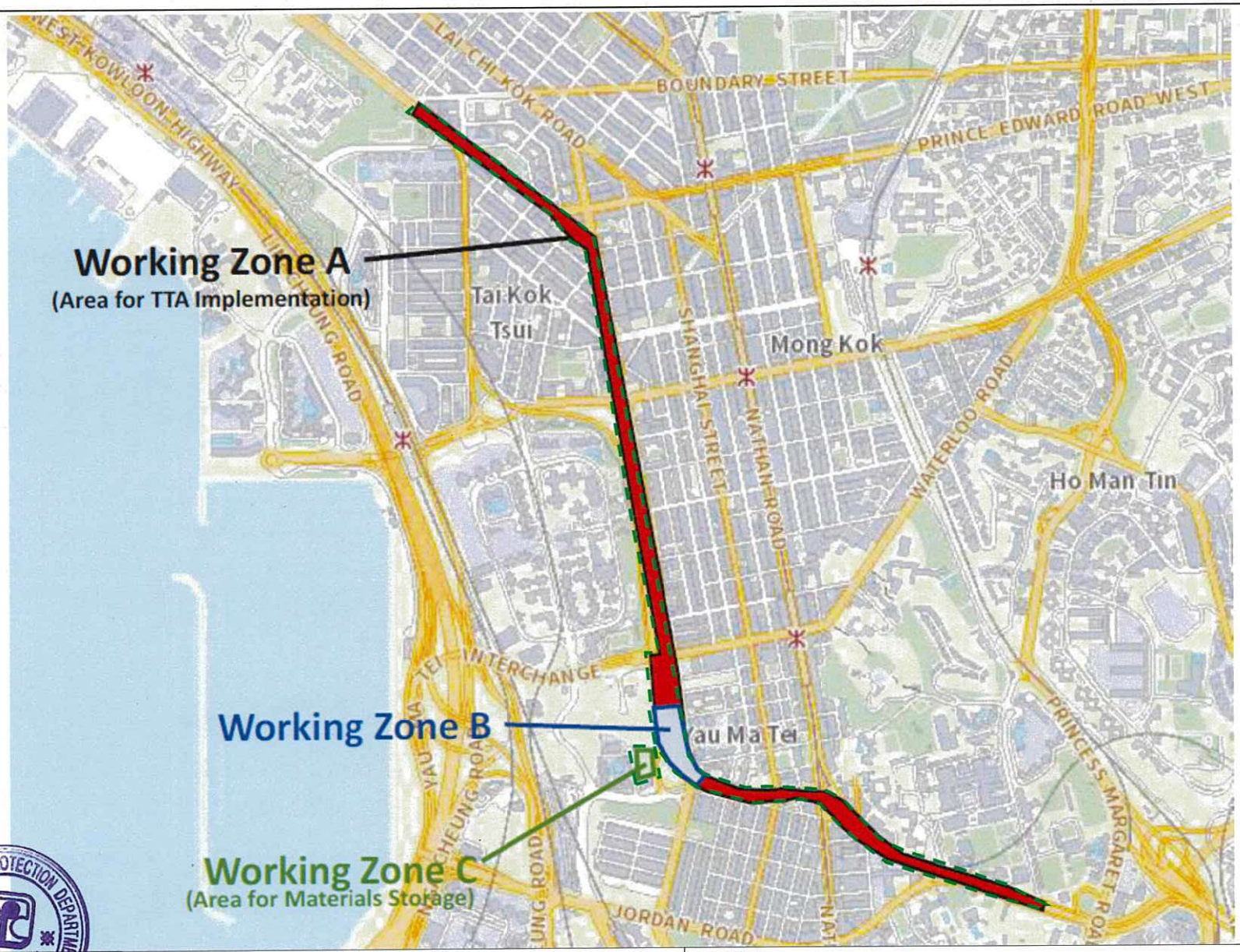
類別 Type	發電機 Generator
製造商 / 牌子 Manufacturer / Trade Name	NIPPON SHARYO
型號 Model	NES220TI
生產日期(月/年) Date of Manufacture of equipment(m/y)	09/2018
編號 Serial Number	FM036800
聲功率級 Sound Power Level	94 分貝(A) dB(A)
識別號碼 QPME ID Code	EPD-07662
本標籤簽發日期(日/月/年) Date of Issue (d/m/y) of this Label	07/11/2018
本標籤屆滿日期(月/年) Expiry Date (m/y) of this Label	11/2024

環境保護署簽發
Issued by Environmental Protection Department

ENVIRONMENTAL PROTECTION DEPARTMENT
環保處
HONG KONG

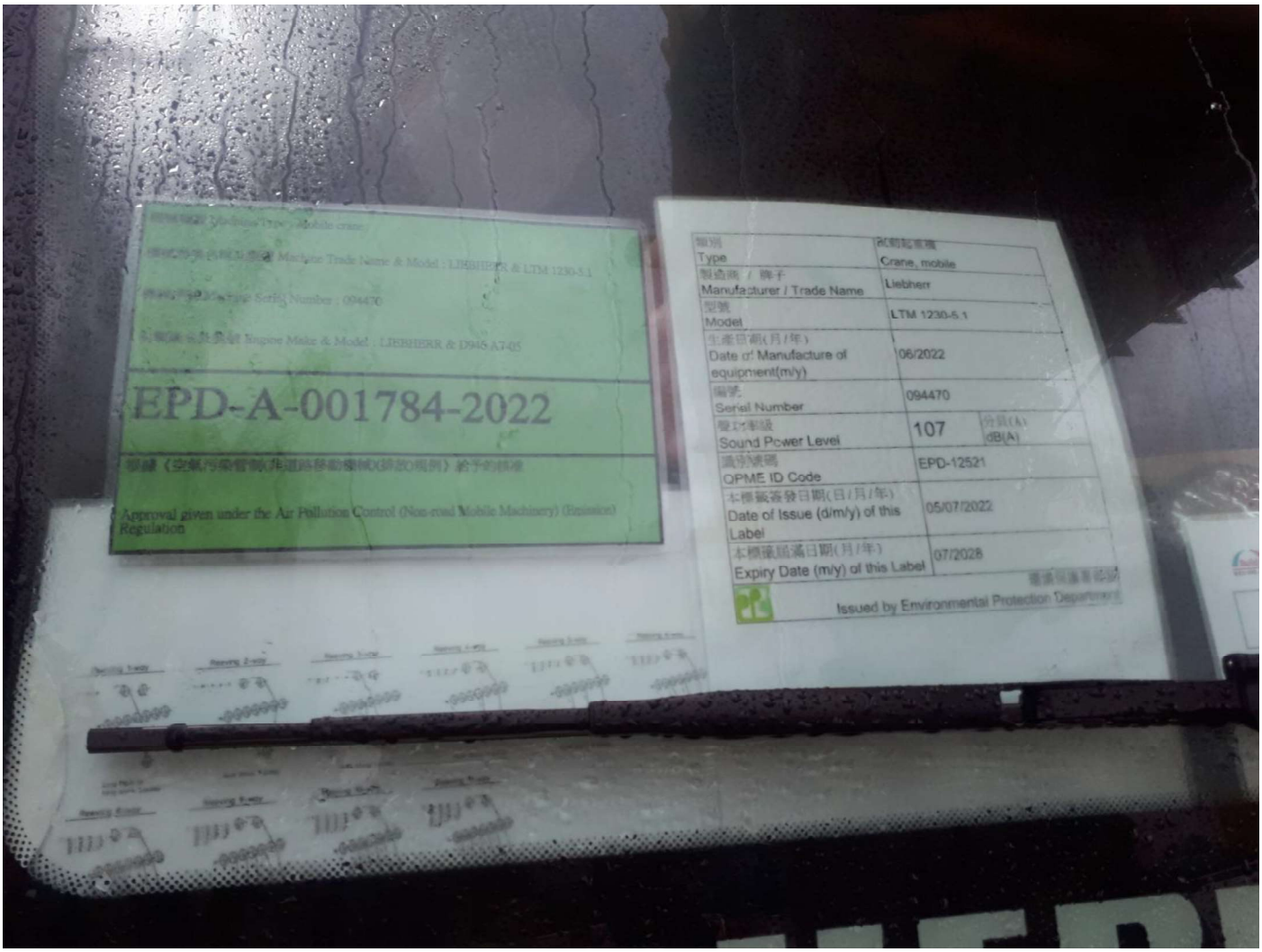
Generator, with Quality Powered Mechanical Equipment Label showing a Sound Power Level of ≤94 dB(A)

發電機，備有優質機動設備標籤顯示聲功率級≤94 分貝(A)



環境保護署 Environmental Protection Department	噪音管制監督 Noise Control Authority	圖例 Legend 建築地盤 Construction Site
建築噪音許可證編號 GW-RE1017-22 的附圖 Plan attached to Construction Noise Permit No. GW-RE1017-22		比例 Scale

Remark 3: QPME label of Mobile Crane



Remark 4: Notification to EPD

[Acknowledgement] GW-RE1017-22 Yau Tsim Mong

Online Submission for Advance Notification of CNPs <admin@nco-emergencywork.hk>
Thu 9/29/2022 5:05 PM

To: Lee Wan Chung, Leo <leo.lee@buildking.hk>

This email acknowledges your advance notification submitted at 29/09/2022 on 17:04.
Information appended below:

CNP No. :	GW-RE1017-22
Date and time of receiving notification :	29/09/2022 17:04:29
Notification Ref :	GW-RE1017-22-001
CNP holder :	Build King - SK ecoplant Joint Venture
Location of Work :	
- District :	Yau Tsim Mong
- Affected TPUs :	221,225,226,228,229,252,253

Details of work :

Details Location of Work	Date & Time	Details of work program
Road Sections of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road), Kowloon	Start:: 05/10/2022 01:00 End:: 05/10/2022 06:00	1. TTA Implementation 2. Construction Activities 3. Road Reinstatement

Company Details (Contact) :	
Name of company conducting the work :	Build King - SK ecoplant Joint Venture
Name & title of responsible person :	Bosco Lee/ Construction Manager
Fax number :	
Telephone number :	98363402
Email :	leo.lee@buildking.hk

[Acknowledgement] GW-RE1017-22 Yau Tsim Mong

Online Submission for Advance Notification of CNPs <admin@nco-emergencywork.hk>

Thu 9/29/2022 5:19 PM

To: Lee Wan Chung, Leo <leo.lee@buildking.hk>

This email acknowledges your advance notification submitted at 29/09/2022 on 17:18.
Information appended below:

CNP No. :	GW-RE1017-22
Date and time of receiving notification :	29/09/2022 17:18:45
Notification Ref :	GW-RE1017-22-002
CNP holder :	Build King - SK ecoplant Joint Venture
Location of Work :	
- District :	Yau Tsim Mong
- Affected TPUs :	221,225,226,228,229,252,253

Details of work :

Details Location of Work	Date & Time	Details of work program
Road Sections of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road), Kowloon	Start:: 06/10/2022 01:00 End:: 06/10/2022 06:00	1. TTA Implementation 2. Construction Activities 3. Road Reinstatement

Company Details (Contact) :	
Name of company conducting the work :	Build King - SK ecoplant Joint Venture
Name & title of responsible person :	Bosco Lee/ Construction Manager
Fax number :	
Telephone number :	98363402
Email :	leo.lee@buildking.hk

[Acknowledgement] GW-RE1017-22 Yau Tsim Mong

Online Submission for Advance Notification of CNPs <admin@nco-emergencywork.hk>

Fri 10/7/2022 2:27 PM

To: Lee Wan Chung, Leo <leo.lee@buildking.hk>

This email acknowledges your advance notification submitted at 07/10/2022 on 14:26.
Information appended below:

CNP No. :	GW-RE1017-22
Date and time of receiving notification :	07/10/2022 14:26:25
Notification Ref :	GW-RE1017-22-003
CNP holder :	Build King - SK ecoplant Joint Venture
Location of Work :	
- District :	Yau Tsim Mong
- Affected TPUs :	221,225,226,228,229,252,253

Details of work :

Details Location of Work	Date & Time	Details of work program
Road Sections of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road), Kowloon	Start:: 10/10/2022 01:00 End:: 10/10/2022 06:00	1. TTA Implementation 2. Construction Activities 3. Road Reinstatement

Company Details (Contact) :	
Name of company conducting the work :	Build King - SK ecoplant Joint Venture
Name & title of responsible person :	Bosco Lee/ Construction Manager
Fax number :	
Telephone number :	98363402
Email :	leo.lee@buildking.hk

[Acknowledgement] GW-RE1017-22 Yau Tsim Mong

Online Submission for Advance Notification of CNPs <admin@nco-emergencywork.hk>

Fri 10/14/2022 9:03 AM

To: Lee Wan Chung, Leo <leo.lee@buildking.hk>

This email acknowledges your advance notification submitted at 14/10/2022 on 09:03.
Information appended below:

CNP No. :	GW-RE1017-22
Date and time of receiving notification :	14/10/2022 09:03:09
Notification Ref :	GW-RE1017-22-004
CNP holder :	Build King - SK ecoplant Joint Venture
Location of Work :	
- District :	Yau Tsim Mong
- Affected TPUs :	221,225,226,228,229,252,253

Details of work :

Details Location of Work	Date & Time	Details of work program
Road Sections of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road), Kowloon	Start:: 17/10/2022 01:00 End:: 17/10/2022 06:00	1. TTA Implementation 2. Construction Activities 3. Road Reinstatement

Company Details (Contact) :	
Name of company conducting the work :	Build King - SK ecoplant Joint Venture
Name & title of responsible person :	Bosco Lee/ Construction Manager
Fax number :	
Telephone number :	98363402
Email :	leo.lee@buildking.hk

[Acknowledgement] GW-RE1017-22 Yau Tsim Mong

Online Submission for Advance Notification of CNPs <admin@nco-emergencywork.hk>

Fri 10/14/2022 9:45 AM

To: Lee Wan Chung, Leo <leo.lee@buildking.hk>

This email acknowledges your advance notification submitted at 14/10/2022 on 09:45.
Information appended below:

CNP No. :	GW-RE1017-22
Date and time of receiving notification :	14/10/2022 09:45:06
Notification Ref :	GW-RE1017-22-005
CNP holder :	Build King - SK ecoplant Joint Venture
Location of Work :	
- District :	Yau Tsim Mong
- Affected TPUs :	221,225,226,228,229,252,253

Details of work :

Details Location of Work	Date & Time	Details of work program
Road Sections of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road), Kowloon	Start:: 21/10/2022 01:00 End:: 21/10/2022 06:00	1. TTA Implementation 2. Construction Activities 3. Road Reinstatement

Company Details (Contact) :	
Name of company conducting the work :	Build King - SK ecoplant Joint Venture
Name & title of responsible person :	Bosco Lee/ Construction Manager
Fax number :	
Telephone number :	98363402
Email :	leo.lee@buildking.hk

[Acknowledgement] GW-RE1017-22 Yau Tsim Mong

Online Submission for Advance Notification of CNPs <admin@nco-emergencywork.hk>

Thu 10/20/2022 5:21 PM

To: Lee Wan Chung, Leo <leo.lee@buildking.hk>

This email acknowledges your advance notification submitted at 20/10/2022 on 17:21.
Information appended below:

CNP No. :	GW-RE1017-22
Date and time of receiving notification :	20/10/2022 17:21:18
Notification Ref :	GW-RE1017-22-006
CNP holder :	Build King - SK ecoplant Joint Venture
Location of Work :	
- District :	Yau Tsim Mong
- Affected TPUs :	221,225,226,228,229,252,253

Details of work :

Details Location of Work	Date & Time	Details of work program
Road Sections of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road), Kowloon	Start:: 24/10/2022 01:00 End:: 24/10/2022 06:00	1. TTA Implementation 2. Construction Activities 3. Road Reinstatement

Company Details (Contact) :	
Name of company conducting the work :	Build King - SK ecoplant Joint Venture
Name & title of responsible person :	Bosco Lee/ Construction Manager
Fax number :	
Telephone number :	98363402
Email :	leo.lee@buildking.hk

Remark 5: Notice to the nearby residents

BUILD KING – SK ecoplant JOINT VENTURE

本函編號/ Our ref: HY-2014-08/1802/08.01.00.00/L09363

(合約編號: HY/2014/08)

中九龍幹線 - 油麻地東工程

通告 –渡船街天橋的隔音罩組裝工程

為配合中九龍幹線-油麻地東工程，我們將在渡船街天橋(近油蔴地天主教小學)進行隔音罩組裝工程。有關工程將於以下時間進行：

– 2022 年 10 月 5 日(星期三) 凌晨 1 時 至 早上 6 時

– 2022 年 10 月 6 日(星期四) 凌晨 1 時 至 早上 6 時

為避免導致日間交通擠塞的情況，以上工程需要在上述時間進行。我們保證盡快完成上述工程，以減低對公眾的影響。我們會採取聲音紓緩措施，例如使用手提電話或連耳筒對講機，確保不使用哨子、號角、擴音器，以減低有機會產生的聲音。

對於上述臨時交通改道安排所造成的任何不便，我們謹此致歉。如有任何查詢，請致電**夜間當值工程師熱線 9636 3793 或 24 小時熱線 9129 2027**。

利基 - SK ecoplant 聯營

地盤代表

劉維遜

2022 年 9 月 29 日

BUILD KING – SK ecoplant JOINT VENTURE

本函編號/ Our ref: HY-2014-08/1802/08.01.00.00/L09363

29 September 2022

(Contract No: HY/2014/08)

Central Kowloon Route – Yau Ma Tei East

Notice – Installation of Noise Enclosure at Ferry Street Flyover

To facilitate the works of the Central Kowloon Route - Yau Ma Tei East contract, installation of noise enclosure at Ferry Street Flyover (near Yau Ma Tei Catholic Primary School) will be carried out during the below period:

- From 5 October 2022 (Wed) 01:00am to 06:00am
- From 6 October 2022 (Thu) 01:00am to 06:00am

In order to avoid traffic congestion during the day time hours, the works need to be carried out in the aforesaid period. Please be assured that we will carry out the works as soon as possible to minimize the inconvenience caused to the public. We will adopt noise mitigation measures such as using mobile phones or walkie-talkie with headphones for site communication, and make sure that no whistles, horns and loudspeakers will be used.

We apologize for any inconvenience caused by the above temporary traffic arrangement. Should you have any queries, please contact our **night works on-site engineer hotline at 9636 3793 or 24-hr hotline at 9129 2027.**

Wilson Lau
Site Agent
Build King - SK ecoplant Joint Venture

BUILD KING – SK ecoplant JOINT VENTURE

本函編號/ Our ref: HY-2014-08/1802/08.01.00.00/L09397

(合約編號: HY/2014/08)

中九龍幹線 - 油麻地東工程

通告 –渡船街天橋的隔音罩組裝工程

為配合中九龍幹線-油麻地東工程，我們將在渡船街天橋(近油蔴地天主教小學)進行隔音罩組裝工程。有關工程將於以下時間進行：

– 2022 年 10 月 10 日(星期一) 凌晨 1 時 至 早上 6 時

為避免導致日間交通擠塞的情況，以上工程需要在上述時間進行。我們保證盡快完成上述工程，以減低對公眾的影響。我們會採取聲音紓緩措施，例如使用手提電話或連耳筒對講機，確保不使用哨子、號角、擴音器，以減低有機會產生的聲音。

對於上述臨時交通改道安排所造成的任何不便，我們謹此致歉。如有任何查詢，請致電**夜間當值工程師熱線 9636 3793 或 24 小時熱線 9129 2027。**

利基 - SK ecoplant 聯營

地盤代表

劉維遜

2022 年 10 月 6 日

BUILD KING – SK ecoplant JOINT VENTURE

本函編號/ Our ref: HY-2014-08/1802/08.01.00.00/L09397

6 October 2022

(Contract No: HY/2014/08)

Central Kowloon Route – Yau Ma Tei East

Notice – Installation of Noise Enclosure at Ferry Street Flyover

To facilitate the works of the Central Kowloon Route - Yau Ma Tei East contract, installation of noise enclosure at Ferry Street Flyover (near Yau Ma Tei Catholic Primary School) will be carried out during the below period:

– From 10 October 2022 (Mon) 01:00am to 06:00am

In order to avoid traffic congestion during the day time hours, the works need to be carried out in the aforesaid period. Please be assured that we will carry out the works as soon as possible to minimize the inconvenience caused to the public. We will adopt noise mitigation measures such as using mobile phones or walkie-talkie with headphones for site communication, and make sure that no whistles, horns and loudspeakers will be used.

We apologize for any inconvenience caused by the above temporary traffic arrangement. Should you have any queries, please contact our **night works on-site engineer hotline at 9636 3793 or 24-hr hotline at 9129 2027.**

Build King - SK ecoplant Joint Venture * Contract No. HY/2014/08

Wilson Lau
Site Agent
Build King - SK ecoplant Joint Venture

BUILD KING – SK ecoplant JOINT VENTURE

本函編號/ Our ref: HY-2014-08/1802/08.01.00.00/L09434

(合約編號: HY/2014/08)

中九龍幹線 - 油麻地東工程

通告 –渡船街天橋的隔音罩組裝工程

為配合中九龍幹線-油麻地東工程，我們將在渡船街天橋(近油蔴地天主教小學)進行隔音罩組裝工程。有關工程將於以下時間進行：

- 2022 年 10 月 17 日(星期一) 凌晨 1 時 至 早上 6 時
- 2022 年 10 月 21 日(星期五) 凌晨 1 時 至 早上 6 時

為避免導致日間交通擠塞的情況，以上工程需要在上述時間進行。我們保證盡快完成上述工程，以減低對公眾的影響。我們會採取聲音紓緩措施，例如使用手提電話或連耳筒對講機，確保不使用哨子、號角、擴音器，以減低有機會產生的聲音。

對於上述臨時交通改道安排所造成的任何不便，我們謹此致歉。如有任何查詢，請致電**夜間當值工程師熱線 9636 3793 或 24 小時熱線 9129 2027。**

利基 - SK ecoplant 聯營

地盤代表

劉維遜

2022 年 10 月 13 日

BUILD KING – SK ecoplant JOINT VENTURE

本函編號/ Our ref: HY-2014-08/1802/08.01.00.00/L09434

13 October 2022

(Contract No: HY/2014/08)

Central Kowloon Route – Yau Ma Tei East

Notice – Installation of Noise Enclosure at Ferry Street Flyover

To facilitate the works of the Central Kowloon Route - Yau Ma Tei East contract, installation of noise enclosure at Ferry Street Flyover (near Yau Ma Tei Catholic Primary School) will be carried out during the below period:

- From 17 October 2022 (Mon) 01:00am to 06:00am
- From 21 October 2022 (Fri) 01:00am to 06:00am

In order to avoid traffic congestion during the day time hours, the works need to be carried out in the aforesaid period. Please be assured that we will carry out the works as soon as possible to minimize the inconvenience caused to the public. We will adopt noise mitigation measures such as using mobile phones or walkie-talkie with headphones for site communication, and make sure that no whistles, horns and loudspeakers will be used.

We apologize for any inconvenience caused by the above temporary traffic arrangement. Should you have any queries, please contact our **night works on-site engineer hotline at 9636 3793 or 24-hr hotline at 9129 2027.**

Build King - SK ecoplant Joint Venture * Contract No. HY/2014/08

Wilson Lau
Site Agent
Build King - SK ecoplant Joint Venture

BUILD KING – SK ecoplant JOINT VENTURE

本函編號/ Our ref: HY-2014-08/1802/08.01.00.00/L09454

(合約編號: HY/2014/08)

中九龍幹線 - 油麻地東工程

通告 –渡船街天橋的隔音罩組裝工程

為配合中九龍幹線-油麻地東工程，我們將在渡船街天橋(近油蔴地天主教小學)進行隔音罩組裝工程。有關工程將於以下時間進行：

– 2022 年 10 月 24 日(星期一) 凌晨 1 時 至 早上 6 時

為避免導致日間交通擠塞的情況，以上工程需要在上述時間進行。我們保證盡快完成上述工程，以減低對公眾的影響。我們會採取聲音紓緩措施，例如使用手提電話或連耳筒對講機，確保不使用哨子、號角、擴音器，以減低有機會產生的聲音。

對於上述臨時交通改道安排所造成的任何不便，我們謹此致歉。如有任何查詢，請致電**夜間當值工程師熱線 9636 3793 或 24 小時熱線 9129 2027。**

利基 - SK ecoplant 聯營

地盤代表

劉維遜

2022 年 10 月 20 日

BUILD KING – SK ecoplant JOINT VENTURE

本函編號/ Our ref: HY-2014-08/1802/08.01.00.00/L09454

20 October 2022

(Contract No: HY/2014/08)

Central Kowloon Route – Yau Ma Tei East

Notice – Installation of Noise Enclosure at Ferry Street Flyover

To facilitate the works of the Central Kowloon Route - Yau Ma Tei East contract, installation of noise enclosure at Ferry Street Flyover (near Yau Ma Tei Catholic Primary School) will be carried out during the below period:

– From 24 October 2022 (Mon) 01:00am to 06:00am

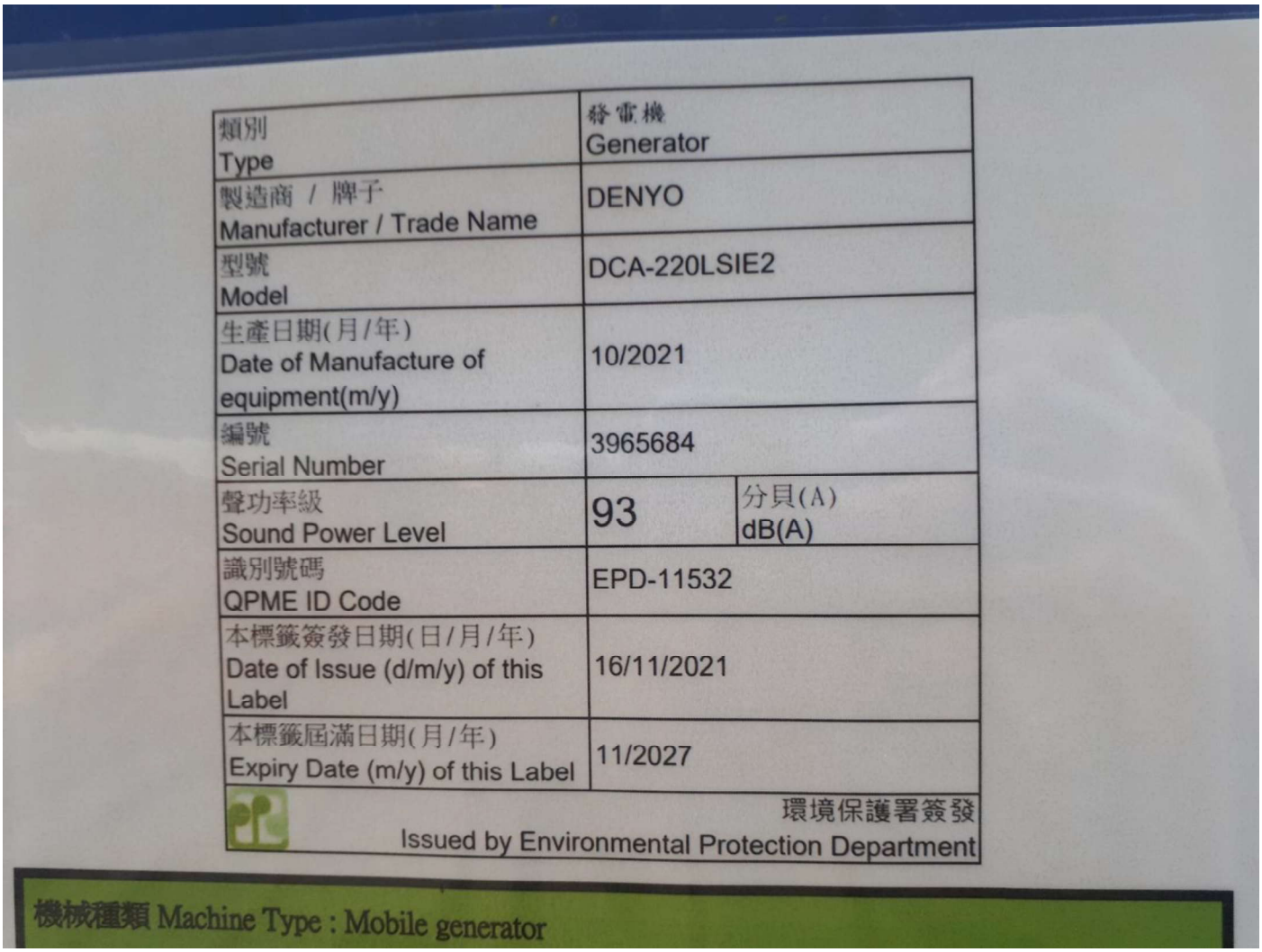
In order to avoid traffic congestion during the day time hours, the works need to be carried out in the aforesaid period. Please be assured that we will carry out the works as soon as possible to minimize the inconvenience caused to the public. We will adopt noise mitigation measures such as using mobile phones or walkie-talkie with headphones for site communication, and make sure that no whistles, horns and loudspeakers will be used.

We apologize for any inconvenience caused by the above temporary traffic arrangement. Should you have any queries, please contact our **night works on-site engineer hotline at 9636 3793 or 24-hr hotline at 9129 2027.**

Build King - SK ecoplant Joint Venture Contract No. HY/2014/08

Wilson Lau
Site Agent
Build King - SK ecoplant Joint Venture

Remark 6: QPME label of generator



類別 Type	發電機 Generator	
製造商 / 牌子 Manufacturer / Trade Name	DENYO	
型號 Model	DCA-220LSIE2	
生產日期(月/年) Date of Manufacture of equipment(m/y)	10/2021	
編號 Serial Number	3965684	
聲功率級 Sound Power Level	93	分貝(A) dB(A)
識別號碼 QPME ID Code	EPD-11532	
本標籤簽發日期(日/月/年) Date of Issue (d/m/y) of this Label	16/11/2021	
本標籤屆滿日期(月/年) Expiry Date (m/y) of this Label	11/2027	
環境保護署簽發 Issued by Environmental Protection Department		

機械種類 Machine Type : Mobile generator