

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

Monthly EM&A Report for June 2023

July 2023

Culture, Sports and Tourism Bureau 1/F, Block A, Kai Tak Sports Park Site Office, Muk Tai Street, Kai Tak, Kowloon

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

Monthly EM&A Report for June 2023

July 2023





Environmental Permit No. EP-544/2017

Kai Tak Sports Park - Investigation

Independent Environmental Checker Verification

Reference Document/Plan

Document/Plan to be Certified/ Verified: Monthly EM&A Report No. 51 (June 2023)

6 July 2023 Date of Report:

Date received by IEC: 6 July 2023

Reference EP Condition

Environmental Permit Condition: 3.4

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

IEC Verification

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

Ms Mandy To

Mondy 20.

10 July 2023 Date:

Independent Environmental Checker

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Environmental Permit No. EP- 544/2017

Kai Tak Sports Park - Investigation

Environmental Team Leader Certification

Reference Document /Plan

Document/Plan to be Certified: Monthly EM&A Report for June 2023

Date of Report: 10 July 2023

Date received by ETL: 10 July 2023

Reference EP Condition

Environmental Permit Condition:

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

3.4

ETL Certification

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

Mr Sunny Chan

Environmental Team Leader Date: 10 July 2023

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Executive summary

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

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

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

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

This is the 51st Monthly EM&A Report for the construction phase of the Project which summaries findings of the EM&A programme during the reporting period from 1 to 30 June 2023.

Key Construction Works in the Reporting Period

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

KTSP

- Mobilization and lifting;
- Concreting;
- Excavation; and
- Main Stadium pre-cast material delivery.

H/O Development

- Excavation; and
- Concreting.

Environmental Monitoring and Audit Progress

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

| Activity | Monitoring Locations | Date |
|--|----------------------|---------------------------|
| Air Quality Monitoring (1-hour TSP) | AMS1-T, AMS2, AMS4 | 5, 9, 15, 21, 27 Jun 2023 |
| Noise Monitoring (L _{eq (30 min)}) | NMS1-T, NMS2, NMS4 | 5, 15, 21, 27 Jun 2023 |
| Weekly environmental site inspections | - | 7, 14, 20, 28 Jun 2023 |
| Landscape and visual site inspections | - | 7, 20 Jun 2023 |

^{*}Note:

During the reporting period, monitoring station, Hong Kong Society for the Blind Workshop (AMS1 and NMS1), was no longer open for impact monitoring from 1 September 2022, due to relocation of the Hong Kong Society for the Blind Workshop.

Agriculture, Fisheries and Conservation Department Kowloon Animal Management Centre (AMS1-T and NMS1-T) were proposed to conduct dust and noise impact monitoring during the reporting period. Details of temporary alternative monitoring locations are presented in Temporary Alternative Proposal for Monitoring Station as proposed by ET and agreed by IEC dated 6 January 2021. The details of temporary monitoring station are described in Section 2 and Section 3 respectively.

Breaches of Action and Limit Levels

Air Quality

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

Noise

One noise-related complaint was received during the reporting month. One Action Level exceedance for noise was triggered during the reporting month.

No Limit Levels exceedance of noise level was recorded during the reporting month.

Complaint Log

There was one complaint in relation to the environmental impact received during the reporting month.

Summary of Complaints in the Reporting Month

| Date of Notification from EPD | Date of Complaint | Description of Complaint | Recommendations / Actions | Close-Out Date / Status |
|-------------------------------------|-------------------|---|---|----------------------------|
| 5 Jun 2023 | 31 May 2023 | - Complaint of construction noise (piling work) from construction sites near Sung Wong Toi Road starting around 08:00am on weekdays - Please take necessary environmental measures to minimize the environmental nuisance arising from the construction site. | 1. Power Mechanical Equipment with Quality Power Mechanical Equipment (QPME) labels were used at site to lower the noise nuisance to the nearby residents. 2. All subcontractors are reminded to observe the latest Construction Noise Permit Requirement and the latest Construction Noise Permit had been provided to subcontractor for their observation. 3. Notice was provided to all subcontractors to follow the latest Construction Noise Permit Requirement. 4. Implementation of noise mitigation measures recommended in EIA's Environmental Mitigation Implementation Schedule. | 7 Jun 2023 |

Notifications of Summons and Successful Prosecutions

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

Reporting Changes

There was no reporting change during the reporting period.

Future Key Issues

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

KTSP

- Mobilization and lifting;
- Concreting;
- Excavation;
- Main Stadium pre-cast material delivery; and
- Public Sports Ground drainage layer construction

H/O Development

- Excavation; and
- Concreting.

1 Introduction

1.1 Background

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

The key construction works of the Project include:

(i) KTSP project

- a. a multi-purpose Main Stadium with a spectator capacity of around 50,000;
- b. a Public Sports Ground, with a spectator capacity of around 5,000;
- c. an Indoor Sports Centre with a multi-purpose main arena with a seating capacity of up to 10,000 and an ancillary sports hall with a seating capacity of 500;
- d. retail and dining outlets with a gross floor area (GFA) of about 57,000 square metres (m²), a bowling centre with 40 lanes and a health and wellness centre with about 2,500 m² GFA;
- e. more than 8 hectares of public open space including landscaped deck structures across Shing Kai Road, passive amenities and park features, outdoor ball courts; and
- f. ancillary facilities such as car parks, toilets, changing rooms, etc.

(ii) H/O Development

- g. an office development;
- h. a 300-room hotel with a GFA of about 16,000 m²; and
- i. ancillary facilities such as retails, car parks, etc.

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

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

This is the 51st Monthly EM&A Report summarising the key findings of the construction phase EM&A programme from 1 to 30 June 2023 (the "reporting period") and is submitted to fulfil Condition 3.4 of the EP.

1.2 Project Organisation

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

Table 1.1: Contact Information of Key Personnel

| Party | Position | Name | Telephone | Fax |
|--|---|--------------|-----------|-----------|
| Project Proponent (Culture, Sports and Tourism Bureau) | Project Director (Sports Park) | Edwin Wong | 3586 3403 | 3586 0591 |
| Supervising Officer's Representative (Home Affairs Bureau) | Senior Engineer | Keith Man | 3586 3149 | 3586 0591 |
| Environmental Team | Environmental Team Leader | Sunny Chan | 2828 5962 | 2827 1823 |
| (Mott MacDonald Hong Kong Limited) | Deputy Environmental Team Leader | Ken Wong | 2828 5757 | 2827 1823 |
| Independent Environmental Checker (ERM Hong Kong Limited) | Independent Environmental Checker | Mandy To | 2271 3000 | 3015 8052 |
| Contracted Party (Kai Tak Sports | Assistant Contract Manager | Eric Chung | 3552 5003 | 2845 9295 |
| Park Limited) | Environmental Officer | Gary Yim | 3552 5013 | 3552 5099 |
| Hotel and Office De | velopment | | | |
| Project Manager (Sanon Limited) | Senior Group Project Director | David Lee | 2910 8368 | 2815 9949 |
| , | Project Manager | William Chan | 2910 8363 | 2815 9949 |
| Project Architect (P&T Architects & Engineers Limited) | Project Architect | Patrick Chan | 2832 7205 | - |
| Contractor (Hip Hing Construction Co., Ltd. | Project Manager | lan Ku | 6099 9686 | - |
| 24-hour Community Liaison Hotline | - | - | 5587 6112 | - |

1.3 Works Area and Construction Programme

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

1.4 Construction Works undertaken during the Reporting Period

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

KTSP

- Mobilization and lifting;
- Concreting;
- Excavation; and
- Main Stadium pre-cast material delivery.

H/O Development

- Excavation; and
- Concreting.

2 Air Quality Monitoring

2.1 Introduction

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

2.2 Monitoring Parameters, Frequency and Duration

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

Table 2.1: Air Quality Monitoring Parameters, Frequency and Duration

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

2.3 Monitoring Locations

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

Table 2.2 describes the impact air quality monitoring stations and <u>Figure 2.1</u> shows their locations.

Table 2.2: Construction Dust Monitoring Locations

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

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

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

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

Temporary air quality monitoring station, AMS1-T, was used to conduct dust monitoring during the reporting period. Details of temporary alternative monitoring location was presented in Temporary Alternative Proposal for Monitoring Station as proposed by ET and agreed by IEC

dated 6 January 2021. The details of temporary monitoring station are described in **Table 2.3** and the location of temporary monitoring station is shown in **Figure 2.1**.

Table 2.3: Temporary Construction Dust Monitoring Location

| Monitoring Station | Location | Status |
|---------------------------|---------------------------------|---------------------------------|
| AMS1-T | Agriculture, Fisheries and | Existing Air Sensitive Receiver |
| | Conservation Department Kowloon | |
| | Animal Management Centre, 102 | |
| | Sung Wong Toi Road | |

2.4 Monitoring Action and Limit Levels

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

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

| Monitoring Station | Action Level, μg/m ³ | Limit Level, µg/m³ |
|---|---------------------------------|--------------------|
| AMS1 – Hong Kong Society for the Blind Workshop, Roof Floor | 283 | 500 |
| AMS2 – Sky Tower, Podium of Tower 7 | 280 | 500 |
| AMS3 - Kai Tak Area 2B Site 4 (2B4) (residential use) | 287* | 500 |
| AMS4 - Kai Tak Area 1K Site 3 (1K3) (residential use) | 287* | 500 |
| AMS5 - Kai Tak Area 1L Site 3 (1L3) (residential use) | 287* | 500 |

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

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

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

2.5 Monitoring Schedule for the Reporting Period

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

2.6 Monitoring Equipment

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

Table 2.5: 1-hour TSP Monitoring Equipment

| Equipment | Brand | Model No. |
|------------------------------------|-----------------------------|--|
| Portable direct reading dust meter | Sibata Digital Dust Monitor | LD-3B (S/N: 235780, 326285, 436553) |

2.7 Monitoring Methodology

Field Monitoring

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

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

Maintenance and Calibration

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

2.8 Monitoring Results

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

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

| Monitoring Station | Average, μg/m³ | Min, μg/m³ | Max, μg/m³ | Action Level, μg/m³ | Limit Level, µg/m³ |
|--------------------|-------------------|------------|------------|------------------------|-----------------------|
| AMS1-T | 60 | 48 | 74 | 283 | 500 |
| AMS2 | 54 | 38 | 74 | 280 | 500 |
| AMS4 | 56 | 29 | 86 | 287 | 500 |
| | | | | | |

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

2.9 Wind Data

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

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

3 Noise Monitoring

3.1 Introduction

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

3.2 Monitoring Parameters, Frequency and Duration

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

Table 3.1: Noise Monitoring Parameters, Frequency and Duration

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

3.3 Monitoring Locations

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

Table 3.2: Construction Noise Monitoring Locations

| Monitoring Station | Location Description | Status |
|---------------------------|---|--|
| NMS1 | Hong Kong Society for the Blind | Existing Noise Sensitive |
| | Workshop, Roof Floor | Receiver |
| | | (not accessible from 1 September 2022) |
| NMS2 | Sky Tower, Podium of Tower 7 | Existing Noise Sensitive |
| | • | Receiver |
| NMS4 | Retail Building in front of The Henley, Rooftop | Existing Noise Sensitive Receiver |
| NMS1A | Sung Wong Toi Road Public | Planned Noise Sensitive |
| | Housing Site | Receiver |
| NMS2A | MS2A Sung Wong Toi Road CDA Site | |
| | (mixed use) | Receiver |
| NMS3 | Kai Tak Area 2B Site 4 (2B4) | Planned Noise Sensitive |
| | (residential use) | Receiver |
| NMS5 | Kai Tak Area 1L Site 3 (1L3) | Planned Noise Sensitive |
| | (residential use) | Receiver |
| | | |

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

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

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

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

During the reporting period, monitoring station NMS1 was no longer open for impact monitoring from 1 September 2022, due to relocation of the Hong Kong Society for the Blind Workshop. Temporary noise monitoring station, NMS1-T, was used to conduct noise monitoring during the reporting period. Details of temporary alternative monitoring locations are presented in Temporary Alternative Proposal for Monitoring Station as proposed by ET and agreed by IEC dated 6 January 2021. The details of temporary monitoring station are described in **Table 3.3** and the location of noise monitoring station is shown in **Figure 3.1**

Table 3.3: Temporary Construction Noise Monitoring Location

| Monitoring Station | Location Description | Status | Type of Measurement |
|--------------------|---|-------------------------------------|------------------------|
| NMS1-T | Agriculture, Fisheries and Conservation Department Kowloon Animal Management Centre, 102 Sung Wong Toi Road | Exiting Noise Sensitive Receiver | Façade |

3.4 Action and Limit Levels

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

Table 3.4: Action and Limit Level for Construction Noise

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

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

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

3.5 Monitoring Schedule for the Reporting Period

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

3.6 Monitoring Equipment

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

Table 3.5: Noise Monitoring Equipment

| Equipment | Brand | Model No. |
|------------------------------|--------------|----------------------|
| Integrated Sound Level Meter | Rion | NL-52 (S/N 00643040) |
| Acoustic Calibrator | LARSON DAVIS | CAL200 (S/N 16878) |

3.7 Monitoring Methodology

- Façade and Free Field measurements were made at the monitoring locations.
- For Façade measurement, the microphone head of the sound level meter was positioned 1m exterior of the noise sensitive façade and lowered sufficiently so that the building's external wall acts as a reflecting surface.
- For free field, the microphone of the Sound Level Meter was set at least 1.2 m above the ground.
- A correction of +3dB(A) was made for free field measurement.
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - frequency weighting: A
 - time weighting: Fast
 - time measurement: 30-minute intervals (between 0700-1900 on normal weekdays)
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94 dB at 1 kHz. If the difference in the calibration level before and after measurement was more than 1 dB, the measurement would be considered invalid and repeated after the recalibration or repair of the equipment.
- During the monitoring period, the L_{eq}, L₁₀ and L₉₀ were recorded. In addition, any site observations and noise sources were recorded on a standard record sheet.
- Noise measurements were not made in presence of fog, rain, wind with a steady speed exceeding 5m/s or wind with gusts exceeding 10m/s.

Maintenance and Calibration

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

3.8 Monitoring Results

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

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

| | ı | Measured Noise Le | vel Leq (30 mins), dB(A | A) |
|-----------------------|---------|-------------------|-------------------------|-------------|
| Monitoring Station | Average | Min | Max | Limit Level |
| NMS1-T | 71 | 70 | 72 | 75 |
| NMS2 | 69 | 69 | 70 | 75 |
| NMS4 | 64 | 64 | 65 | 75 |

No noise exceedances were recorded at stations NMS1-T, NMS2 and NMS4 by ET during the reporting period.

4 Environmental Site and Audit

4.1 Site Inspection

Site inspections were carried out by ET on a weekly basis to monitor the implementation of proper environmental pollution control mitigation measures for the Project. Key observations were recorded in the site inspection checklist and passed to the Contracted Party together with the appropriate recommended mitigation measures where necessary. During the reporting period, site inspections were carried out on 7, 14, 20 and 28 June 2023. Joint IEC site inspections were carried out on 14 and 20 June 2023.

Bi-weekly landscape and visual site audit was carried out on 7 and 20 June 2023. The landscape and visual audit have been audited by Registered Landscape Architect (RLA). No major observations of landscape and visual impact were identified. The result findings were summarised in **Appendix K.**

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

Table 4.1: Summary of Site Inspections and Recommendations

| Inspection Date | e Key Observations Recommendations / Actions | | Close-Out Date / Status |
|---------------------|---|--|----------------------------|
| Kai Tak Sports Park | | | |
| 7 Jun 2023 | Accumulation of general refuse without covering was observed at northern site. | The contractor was reminded to dispose of the general refuse properly. | 14 Jun 2023 |
| 14 Jun 2023 | Accumulation of stagnant water at the chemical drip tray was observed at southern site. | The contractor was reminded to clear the stagnant water at the chemical drip tray. | 20 Jun 2023 |
| 14 Jun 2023 | Accumulation of general refuse along corridor at southern site was observed. | The contractor was reminded to dispose of the general refuse properly. | 20 Jun 2023 |
| 20 Jun 2023 | Chemical container without drip tray was observed at southern site. | The contractor was reminded to provide drip tray for chemical container on site. | 28 Jun 2023 |
| 20 Jun 2023 | Accumulation of stagnant water was observed at northern site. | The contractor was reminded to clear the stagnant water. | 28 Jun 2023 |
| 20 Jun 2023 | Accumulation of general refuse on ground was observed at northern site. | The contractor was reminded to dispose of the general refuse properly. | 28 Jun 2023 |
| 28 Jun 2023 | Accumulation of general refuse on ground was observed at northern site. | The contractor was reminded to dispose of the general refuse properly. | 5 Jul 2023 |
| 28 Jun 2023 | Accumulation of general refuse was observed at northern site | The contractor was reminded to clear the general refuse regularly. | 5 Jul 2023 |

| Inspection Date | Key Observations Recommendations / Actions | | Close-Out Date / Status | |
|---------------------------------|---|--|----------------------------|--|
| Hotel and Office Development | | | | |
| 7 Jun 2023 | The construction noise permit on the notice board has been expired. | The contractor was reminded to display the updated construction noise permit | 14 Jun 2023 | |
| 7 Jun 2023 | The chemical waste storage area without chemical waste producer license was observed. | The contractor was reminded to display the chemical waste producer license at the chemical waste storage area. | 14 Jun 2023 | |
| 14 Jun 2023 | Accumulation of mud at vehicle entrance was observed. | | | |
| 28 Jun 2023 | Breaking work without The contractor was 5 water spraying was reminded to provide observed. water spraying for the breaking work. | | 5 Jul 2023 | |
| 28 Jun 2023 | General refuse on the ground was observed. | The contractor was reminded to provide covered rubbish bin for proper disposal of general refuse. | 5 Jul 2023 | |

4.2 Advice on the Solid and Liquid Waste Management Status

KTSP

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

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

H/O Development

Construction and demolition (C&D) material sorting was carried out on site. Sufficient numbers of receptacles were provided for general refuse collection and sorting. Excavated inert C&D materials were designated for on temporary site storage and collected for the disposal to public fill.

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

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

4.3 Environmental Licenses and Permits

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

4.4 Implementation Status of Environmental Mitigation Measures

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

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

4.5 Summary of Exceedance of the Environmental Quality Performance Limit

Air Quality

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

Noise

No Action and Limit Level exceedances for noise levels was recorded at NMS1-T, NMS2 and NMS4 during the reporting month.

4.6 Summary of Complaints, Notification of Summons and Successful Prosecution

Complaints

There was one complaint received in relation to the environmental impact during the reporting month.

Table 4.2: Summary of Complaints in the Reporting Month

| Date of Notification from EPD | Date of Complaint | Description of Complaint | Recommendations / Actions | Close-Out Date / Status |
|-------------------------------------|----------------------|---|---|----------------------------|
| 5 Jun 2023 | 31 May 2023 | - Complaint of construction noise (piling work) from construction sites near Sung Wong Toi Road starting around 08:00am on weekdays - Please take necessary environmental measures to minimize the environmental nuisance arising from the construction site. | 1. Power Mechanical Equipment with Quality Power Mechanical Equipment (QPME) labels were used at site to lower the noise nuisance to the nearby residents. 2. All subcontractors are reminded to observe the latest Construction Noise Permit Requirement and the latest Construction Noise Permit had been provided to subcontractor for their observation. 3. Notice was provided to all subcontractors to follow the latest Construction Noise Permit Requirement. 4. Implementation of noise mitigation measures recommended in EIA's Environmental Mitigation Implementation Schedule. | 7 Jun 2023 |

Notification of Summons and Successful Prosecution

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

Statistics on notifications of summons and successful prosecutions are summarized in ${\color{red}{\bf Appendix}}\ {\color{red}{\bf L}}.$

5 Future Key Issues

5.1 Construction Programme for the Coming Months

As informed by the Contracted Party, the major construction activities for the next reporting period (July 2023) are summarized in **Table 5.1**.

Table 5.1: Construction Activities for the Next Reporting Period

| Site Area | Description of Activities |
|------------------------------|--|
| Kai Tak Sports Park | Mobilization and lifting; |
| | Concreting; |
| | Excavation; |
| | Main Stadium pre-cast material delivery; and |
| | Public Sports Ground drainage layer construction |
| Hotel and Office Development | Excavation; and |
| | Concreting. |

The tentative schedule for weekly site inspection and monitoring for air quality and noise for the next reporting period is provided in **Appendix E**.

6 Conclusions

6.1 Conclusions

General

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

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

Breaches of Action and Limit Levels

Air Quality

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

Noise

One noise-related complaint was recorded during the reporting month. One Action Level exceedance for noise was triggered during the reporting month.

No Limit Level exceedances of noise level was recorded during the reporting period.

Environmental Site Inspections

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

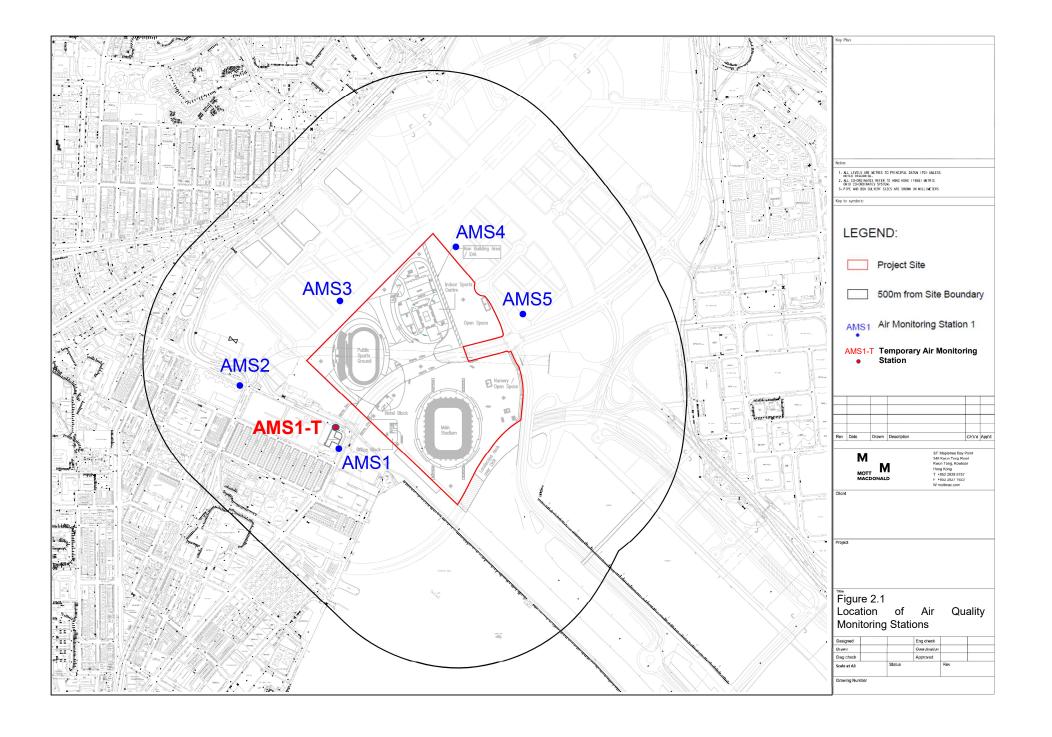
Complaints

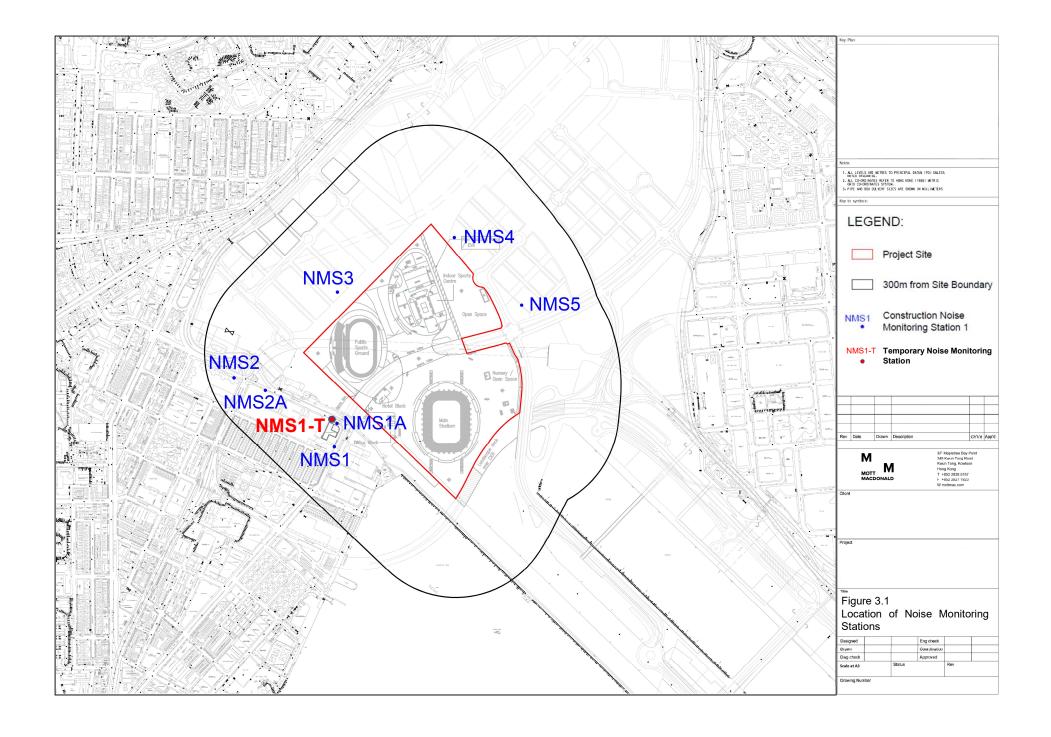
There was one complaint received in relation to the environmental impact during the reporting period. Complaint investigation was conducted and mitigation measures were implemented.

Notifications of Summons and Successful Prosecutions

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

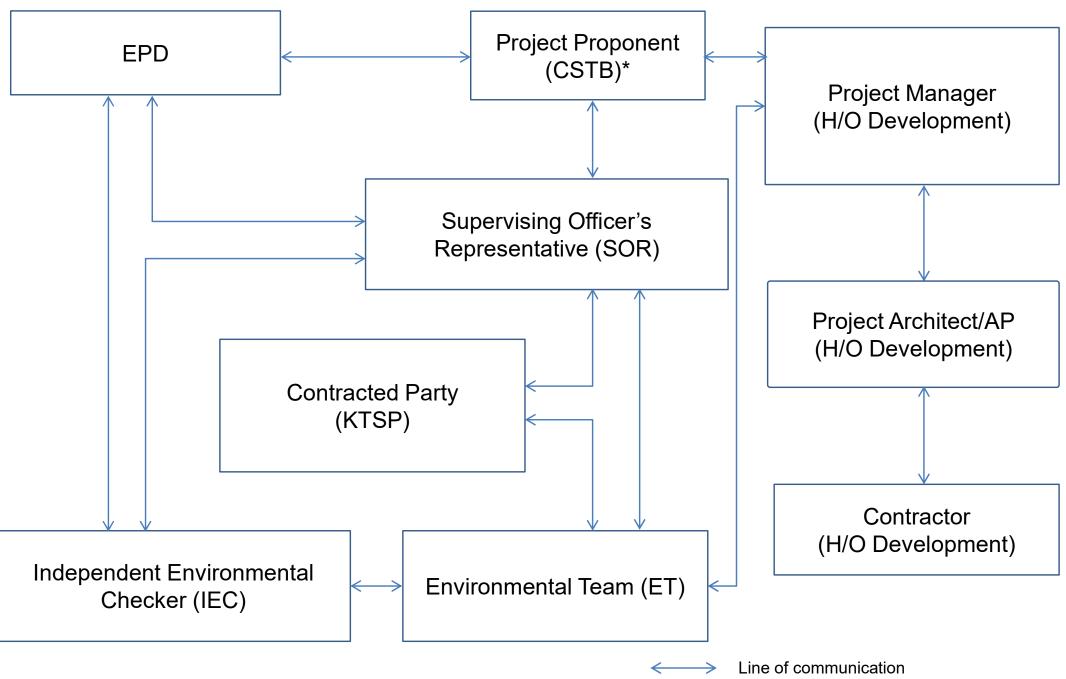
Figures





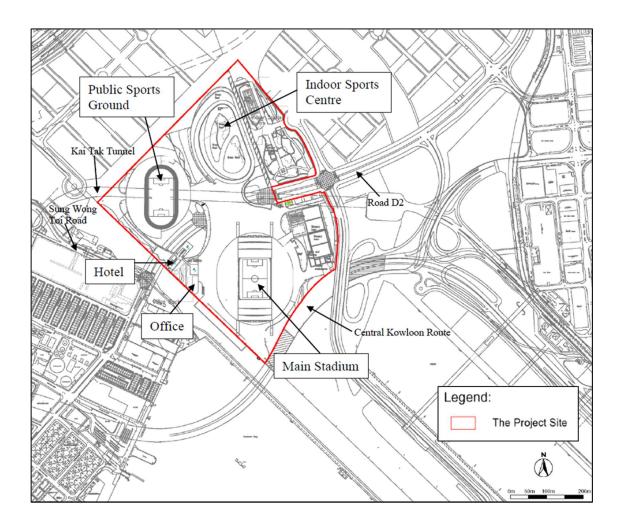
Appendix A. Project Organization for Environmental Works

Project Organisation for Environmental Works



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

Appendix B. Location of Works Areas



Appendix C. Construction Programme

Construction Programme (Jun 2023 to Sep 2023)

Kai Tak Sports Park

| | | | | | | | 2023 | | | | | |
|---|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|
| Construction Activities | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Plants Mobilization | | | | | | | | | | | | |
| Loading/ Unloading of Materials | | | | | | | | | | | | |
| Excavation | | | | | | | | | | | | |
| C&D Waste Disposal | | | | | | | | | | | | |
| Concreting | | | | | | | | | | | | |
| Lifting | | | | | | | | | | | | |
| C&D Materials Internal Transportation | | | | | | | | · · | ļ. | | | |
| Main Stadium Pre-cast Material Delivery | | | | | | | - | | | | | |
| Construction of drainage layer (PSG) | | | | | | | | | | | | |
| Landscape Work | | | | | | | | | | | | |

Hotel and Office Development

| | | 2023 | | | | | | | | | | |
|--------------------------------|-----|------|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|
| Construction Activities | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Loading/Unloading of Materials | | | | | | | | 2 | | | | |
| Excavation | | | | | | | | | | | | |
| Concreting | | | | | | N. C. | | | | | | |
| C&D Waste Disposal | | | | | | | | | | | | |

Appendix D. Event and Action Plan

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

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

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

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

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

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

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

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

Appendix E. Environmental Site Inspection and Monitoring Schedule

Table E.1: Site Inspection and Monitoring Schedule for June 2023

| Impact Environmental Monitoring Schedu | e fo | r June | 2023 |
|--|------|--------|------|
|--|------|--------|------|

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|--------------------|--|----------------------------|--|--------------------|-----|
| | | | | 1 | 2 | ; |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 4 | 5 | 6 | 7 | 8 | 9 | 1 |
| | AMS1-T, AMS2, AMS4 | l . | site inspection | | AMS1-T, AMS2, AMS4 | |
| | NMS1-T, NMS2, NMS4 | | landscape and visual audit | | | |
| 2 | | i. | | | | |
| | | | | | | |
| 11 | 12 | 13 | 14 | 15 | 16 | 1 |
| | | | site inspection | AMS1-T, AMS2, AMS4 | | |
| | | | | NMS1-T, NMS2, NMS4 | | |
| | | | | | | |
| | | | | | | |
| 18 | 19 | The second secon | 21 | 22 | 23 | 2- |
| | | site inspection | | | | |
| | | landscape and visual audit | | Tuen Ng Festival | | |
| | | | AMS1-T, AMS2, AMS4 | The state of the s | | |
| | | | NMS1-T, NMS2, NMS4 | | | v. |
| 25 | 26 | 27 | 28 | 29 | 30 | |
| | | AMS1-T, AMS2, AMS4 | site inspection | | | |
| | | NMS1-T, NMS2, NMS4 | | ** | | |
| | | | | | | |
| | | | | | | |

Air Quality/Noise Monitoring

Remark: Joint site walk with IEC on 14 and 20 June 2023

Table E.2: Tentative Site Inspection and Monitoring Schedule for July 2023

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|--------------------|--------------------|----------------------------|---------------------|--------------------|---|
| | | | | | | |
| | | | | | | Hong Kong Special Administrative Region Establishment Day |
| 2 | 3 | 4 | 5 | 6 | 7 | |
| | AMS1-T, AMS2, AMS4 | | site inspection | | AMS1-T, AMS2, AMS4 | |
| | NMS1-T, NMS2, NMS4 | | landscape and visual audit | | | |
| 0 | 10 | 44 | 10 | 40 | 93 | |
| 9 | 10 | 11 | 12 site inspection | AMS1-T, AMS2, AMS4 | 14 | 1 |
| | | | site inspection | NMS1-T, NMS2, NMS4 | | |
| | | | | 14863-1,14862,14864 | 8 | |
| 16 | 17 | 18 | 19 | 20 | 21 | 2 |
| | | | site inspection | | | |
| | | | landscape and visual audit | | | |
| | | | AMS1-T, AMS2, AMS4 | | | |
| | | | NMS1-T, NMS2, NMS4 | | | |
| 23 | 24 | 25 | 26 | 27 | 28 | 2 |
| | | AMS1-T, AMS2, AMS4 | site inspection | | | |
| | | NMS1-T, NMS2, NMS4 | | | | |
| | | | | e. | | |
| 30 | 31 | | | | | |
| | AMS1-T, AMS2, AMS4 | | | | | |
| | NMS1-T, NMS2, NMS4 | | | | | |

Air Quality/Noise Monitoring

Remark: The schedule is subject to change due to unforeseeable circumstances (e.g. adverse weather, etc)

Appendix F. Calibration Certificates

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



SUB-CONTRACTING REPORT

CONTACT

: MR K.W. FAN

WORK ORDER

HK2247804

CLIENT

: ENVIROTECH SERVICES CO.

SUB-BATCH

: 1

ADDRESS

: RM 712, 7/F, MY LOFT 9 HOI WING ROAD,

DATE RECEIVED: 30-NOV-2022

TUEN MUN, N.T., HK

DATE OF ISSUE : 9-DEC-2022

PROJECT

NO. OF SAMPLES : 1

CLIENT ORDER

General Comments

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

Signatories

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

Signatories

Position

Richard Fung

Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

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

: HK2247804

SUB-BATCH

PROJECT

CLIENT

: 1 : ENVIROTECH SERVICES CO.

: ---



| ALS Lab ID | Client's Sample ID | Sample Type | Sample Date | External Lab Report No. | |
|---------------|--------------------|----------------|-------------|-------------------------|--|
| HK2247804-001 | S/N: 235780 | Equipments | 30-Nov-2022 | S/N: 235780 | |

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:

Laser Dust monitor

Manufacturer:

Sibata LD - 3B

Serial No.

235780

Equipment Ref:

NA

Job Order

HK2247804

Standard Equipment:

Standard Equipment:

Higher Volume Sampler (TSP)

Location & Location ID:

AUES office (calibration room)

Equipment Ref:

HVS 018

Last Calibration Date:

13 September 2022

Equipment Verification Results:

Verification Date:

6 December 2022

| Hour | Time | Mean Temp °C | Mean Pressure (hPa) | Concentration in ug/m³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/min) |
|-----------|---------------|-----------------|---------------------------|---|---------------------------------------|-----------------------------------|
| 2hr01mins | 09:37 ~ 11:38 | 17.1 | 1019.7 | 18.8 | 1451 | 12.0 |
| 2hr01mins | 11:42 ~ 13:43 | 17.1 | 1019.7 | 20.7 | 1543 | 12.8 |
| 2hr01mins | 13:48 ~ 15:49 | 17.1 | 1019.7 | 28.0 | 1605 | 13.3 |

Linear Regression of Y or X

Slope (K-factor):

1.8054 (µg/m³)/CPM

Correlation Coefficient (R)

0.9651

Date of Issue

7 December 2022

Remarks:

- 1. Strong Correlation (R>0.8)
- Factor 1.8054 (µg/m³)/CPM should be applied for TSP monitoring

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

Operator :

Fai So

Signature:

Date:

7 December 2022

10

y = 1.8054x - 0.3341

 $R^2 = 0.9315$

15

OC Reviewer

Ben Tam

Signature

Date

30 25

20

15

10

0 .

Date: 7 December 2022

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



SUB-CONTRACTING REPORT

CONTACT

: MR MAGNUM FAN

WORK ORDER

SUB-BATCH

HK2312358

CLIENT

: ENVIROTECH SERVICES CO.

ADDRESS

: RM 712, 7/F, MY LOFT 9 HOI WING ROAD,

DATE RECEIVED : 31-MAR-2023

TUEN MUN, N.T., HK

DATE OF ISSUE : 11-APR-2023

NO. OF SAMPLES : 1

PROJECT

CLIENT ORDER

General Comments

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

Signatories

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

Signatories

Position

Richard Fung

Managing Director

WORK ORDER

: HK2312358

SUB-BATCH

CLIENT

: 1 : ENVIROTECH SERVICES CO.

PROJECT



| ALS Lab | Client's Sample ID | Sample Type | Sample Date | External Lab Report No. | |
|---------------|--------------------|----------------|-------------|-------------------------|--|
| HK2312358-001 | Sibata (326285) | Equipments | 18-Mar-2023 | S/N: 326285 | |



Envirotech Services Co.

Rm. 712, 7/F My Loft, 9 Hoi Wing Road, Yuan Mun, H.K. Tel : 2560 8450 Fax : 2560 6553

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:

Laser Dust Monitor

Manufacturer:

Sibata LD-3B

Serial No.:

326285

Equipment Ref.:

Job Order:

N/A

HK2311344

Standard Equipment

Standard Equipment:

High Volume Sampler (TSP)

Location & Location ID:

Envirotech Room (Calibration Room)

Equipment Ref.:

HVS 8162

Last Calibration Date:

28-Feb-2023

Equipment Verification Results:

Verification Date:

17 & 18 March 2023

| Hour | Time | Mean Temp°C | Mean Pressure (hpa) | Concentration in µg/m ³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count / Minute (Total Count/min) |
|------------|-----------|----------------|---------------------|---|---------------------------------------|-------------------------------------|
| 1hr 00mins | 1410-1510 | 24.2 | 1018.2 | 100 | 3910 | 65 |
| 1hr 00mins | 0810-0910 | 22.2 | 1021.5 | 67 | 2218 | 37 |
| 1hr 00mins | 1510-1610 | 25.0 | 1022.4 | 68 | 2350 | 39 |

Linear Regression of Y or X

Slope (K-factor):

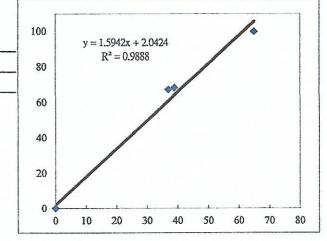
 $1.5942(\mu g/m^3)/CPM$

Correlation Coefficient (R):

0.9944

Date of Issue:

29-Mar-2023



Remarks:

- 1. Strong Correlation (>0.8)
- 2. Factor 1.5942 (µg/m³)/CPM should be applied for TSP monitoring

Operator:

P.F.Yeung

Signature

Date: 29 March 2023

QC Reviewer:

K.F.Ho

Signature

Date: 29 March 2023

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

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



SUB-CONTRACTING REPORT

CONTACT

: MR K.W. FAN

WORK ORDER

HK2241670

CLIENT

: ENVIROTECH SERVICES CO.

TUEN MUN, N.T., HK

ADDRESS

PROJECT

: RM 712, 7/F, MY LOFT 9 HOI WING ROAD,

SUB-BATCH

DATE RECEIVED : 21-OCT-2022

DATE OF ISSUE : 1-NOV-2022

NO. OF SAMPLES : 1

CLIENT ORDER

General Comments

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

Signatories

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

Signatories

Position

Richard Fung

Managing Director

This is the Final Report and supersedes any preliminary report with this batch number.

All pages of this report have been checked and approved for release

ALS Technichem (HK) Pty Ltd Part of the ALS Laboratory Group WORK ORDER SUB-BATCH

: HK2241670

: 1

CLIENT

: ENVIROTECH SERVICES CO.

PROJECT



| ALS Lab | Client's Sample ID | Sample Type | Sample Date | External Lab Report No. | |
|---------------|--------------------|----------------|-------------|-------------------------|--|
| HK2241670-001 | S/N: 436553 | Equipments | 21-Oct-2022 | S/N: 436553 | |

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:

Laser Dust monitor

Manufacturer:

Sibata LD - 3B

Serial No.

436553

Equipment Ref:

NA

Job Order

HK2241670

Standard Equipment:

Standard Equipment:

Higher Volume Sampler (TSP)

Location & Location ID:

AUES office (calibration room)

Equipment Ref:

HVS 018

Last Calibration Date:

13 September 2022

Equipment Verification Results:

Verification Date:

25 October 2022

| Hour | Time | Mean Temp °C | Mean Pressure (hPa) | Concentration in ug/m³ (Standard Equipment) | Total Count (Calibrated Equipment) | Count/Minute (Total Count/min) |
|-----------|---------------|-----------------|---------------------------|--|---------------------------------------|-----------------------------------|
| 2hr01mins | 09:20 ~ 11:21 | 23.8 | 1018.2 | 33.7 | 2401 | 19.9 |
| 2hr02mins | 11:23 ~ 13:25 | 23.8 | 1018.2 | 27.9 | 2303 | 18.9 |
| 2hr04mins | 13:27 ~ 15:31 | 23.8 | 1018.2 | 43.6 | 2703 | 21.9 |

50

40 35

30

25 20

15

10

0

y = 1.7854x - 0.7811

 $R^2 = 0.9466$

20

Linear Regression of Y or X

Slope (K-factor):

1.7854 (µg/m³)/CPM

Correlation Coefficient (R)

0.9729

Date of Issue

26 October 2022

Remarks:

- 1. Strong Correlation (R>0.8)
- 2. Factor 1.7854 (µg/m³)/CPM should be applied for TSP monitoring

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

QC Reviewer : Ben Tam Signature : Date : 26 October 2022



Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.:

C224774

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號: IC22-1518)

Date of Receipt / 收件日期: 1 August 2022

Description / 儀器名稱

Precision Acoustic Calibrator

Manufacturer / 製造商

LARSON DAVIS

Model No. / 型號

CAL200

Serial No. / 編號

16878

Supplied By / 委託者

Envirotech Services Co.

Room 712, 7/F, My Loft, 9 Hoi Wing Road, Tuen Mun,

New Territories, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 :

 $(23 \pm 2)^{\circ}$ C

Relative Humidity / 相對濕度 :

 $(50 \pm 25)\%$

Line Voltage / 電壓 :

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期

20 August 2022

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

The results do not exceed manufacturer's specification.

The results are detailed in the subsequent page(s).

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

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試

HT Wong

Assistant Engineer

Certified By

Engineer

Date of Issue 簽發日期

23 August 2022

核證

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory



Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration

Certificate No.:

C224774

Certificate No.

證書編號

校正證書

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- 2. The results presented are the mean of 3 measurements at each calibration point.
- 3. Test equipment:

Equipment ID CL130 CL281 TST150A

Description Universal Counter

Multifunction Acoustic Calibrator

C223647 AV210017 C221705 Measuring Amplifier

4. Test procedure: MA100N.

5. Results:

5.1 Sound Level Accuracy

| UUT Nominal Value | Measured Value (dB) | Mfr's Spec. (dB) | Uncertainty of Measured Value (dB) |
|----------------------|---------------------|---------------------|------------------------------------|
| 94 dB, 1 kHz | 93.9 | ± 0.2 | ± 0.2 |
| 114 dB, 1 kHz | 113.9 | | |

Frequency Accuracy

| UUT Nominal Value | Measured Value | Mfr's | Uncertainty of Measured Value |
|-------------------|----------------|-------------|-------------------------------|
| (kHz) | (kHz) | Spec. | (Hz) |
| 1 | 1 000 | 1 kHz ± 1 % | ± 1 |

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

Note:

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

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

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

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



Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration

校正證書

Certificate No.: C224775

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號: IC22-1518)

Date of Receipt / 收件日期: 1 August 2022

Description / 儀器名稱

Sound Level Meter

Manufacturer / 製造商

Rion

Model No. / 型號

NL-52 00643040

Serial No. / 編號

Supplied By / 委託者

Envirotech Services Co.

Room 712, 7/F, My Loft, 9 Hoi Wing Road, Tuen Mun,

New Territories, Hong Kong

TEST CONDITIONS/測試條件

Temperature / 溫度

Relative Humidity / 相對濕度 :

 $(50 \pm 25)\%$

Line Voltage / 電壓

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST/測試日期

20 August 2022

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

The results do not exceed manufacturer's specification.

The results are detailed in the subsequent page(s).

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

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By

測試

Assistant Engineer

Certified By

核證

K C Lee Engineer Date of Issue

簽發日期

23 August 2022

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.



Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration

校正證書

Certificate No.: C2

C224775

證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.

2. Self-calibration was performed before the test.

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

4. Test equipment:

Equipment ID

Description

Certificate No.

CL280 CL281 40 MHz Arbitrary Waveform Generator

C220381

Multifunction Acoustic Calibrator

AV210017

5. Test procedure: MA101N.

6. Results:

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

| | UUT Setting | | | | Applied Value | | IEC 61672 |
|---------------|----------------|------------------------|-------------------|------------|----------------|--------------|--------------------|
| Range (dB) | Function | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | Reading (dB) | Class 1 Spec. (dB) |
| 30 - 130 | L _A | A | Fast | 94.00 | 1 | 94.3 | ± 1.1 |

6.1.2 Linearity

| | UU | T Setting | Applied Value | | UUT | |
|---------------|----------|------------------------|-------------------|------------|----------------|--------------|
| Range (dB) | Function | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | Reading (dB) |
| 30 - 130 | L_{A} | A | Fast | 94.00 | 1 | 94.3 (Ref.) |
| | | | | 104.00 | | 104.5 |
| | | | | 114.00 | | 114.6 |

IEC 61672 Class 1 Spec. : \pm 0.6 dB per 10 dB step and \pm 1.1 dB for overall different.

6.2 Time Weighting

| | UUT Setting | | | | Applied Value | | IEC 61672 | |
|----------|-------------|------------------------|-------------------|---------------|---------------|--------------|--------------------|--|
| 0 | | Frequency Weighting | Time Weighting | Level (dB) | Freq. (kHz) | Reading (dB) | Class 1 Spec. (dB) | |
| 30 - 130 | L_{A} | A | Fast | 94.00 | 1 | 94.3 | Ref. | |
| | | | Slow | | | 94.3 | ± 0.3 | |

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Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.:

C224775

證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

| 71 Weighting | | Setting | | Applied Value | | UUT | IEC 61672 |
|--------------|----------------|------------------------|-------------------|---------------|--------|--------------|-----------------------------|
| Range (dB) | Function | Frequency Weighting | Time Weighting | Level (dB) | Freq. | Reading (dB) | Class 1 Spec. (dB) |
| 30 - 130 | L _A | A | Fast | 94.00 | 63 Hz | 68.1 | -26.2 ± 1.5 |
| | | | | | 125 Hz | 78.1 | -16.1 ± 1.5 |
| | | | | | 250 Hz | 85.6 | -8.6 ± 1.4 |
| | | | | | 500 Hz | 91.0 | -3.2 ± 1.4 |
| | | | | | 1 kHz | 94.3 | Ref. |
| | | | | | 2 kHz | 95.5 | $+1.2 \pm 1.6$ |
| | | | | | 4 kHz | 95.3 | $+1.0 \pm 1.6$ |
| | | | | | 8 kHz | 93.3 | -1.1 (+2.1; -3.1) |
| | | | | | 16 kHz | 86.3 | - 6.6 (+3.5 ; -17.0) |

6.3.2 C-Weighting

| | UUT | Setting | | Applied Value | | UUT | IEC 61672 |
|----------|----------|-----------|-----------|---------------|--------|---------|--------------------|
| Range | Function | Frequency | Time | Level | Freq. | Reading | Class 1 Spec. |
| (dB) | | Weighting | Weighting | (dB) | | (dB) | (dB) |
| 30 - 130 | L_{C} | С | Fast | 94.00 | 63 Hz | 93.4 | -0.8 ± 1.5 |
| | | | | | 125 Hz | 94.1 | -0.2 ± 1.5 |
| | | | | | 250 Hz | 94.3 | 0.0 ± 1.4 |
| | | | | | 500 Hz | 94.3 | 0.0 ± 1.4 |
| | | | | | 1 kHz | 94.3 | Ref. |
| | | | | | 2 kHz | 94.1 | -0.2 ± 1.6 |
| | | | | | 4 kHz | 93.5 | -0.8 ± 1.6 |
| | | | | | 8 kHz | 91.4 | -3.0 (+2.1; -3.1) |
| | | | | | 16 kHz | 84.4 | -8.5 (+3.5; -17.0) |

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Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.: C224775

證書編號

Remarks: - UUT Microphone Model No.: UC-59 & S/N: 10446

- Mfr's Spec. : IEC 61672 Class 1

- Uncertainties of Applied Value : 94 dB : 63 Hz - 125 Hz : \pm 0.35 dB

250 Hz - 500 Hz : $\pm 0.30 \text{ dB}$ 1 kHz : $\pm 0.20 \text{ dB}$ 2 kHz - 4 kHz : $\pm 0.35 \text{ dB}$ 8 kHz : $\pm 0.45 \text{ dB}$ 16 kHz : $\pm 0.70 \text{ dB}$

104 dB : 1 kHz : \pm 0.10 dB (Ref. 94 dB) 114 dB : 1 kHz : \pm 0.10 dB (Ref. 94 dB)

Note:

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

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

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

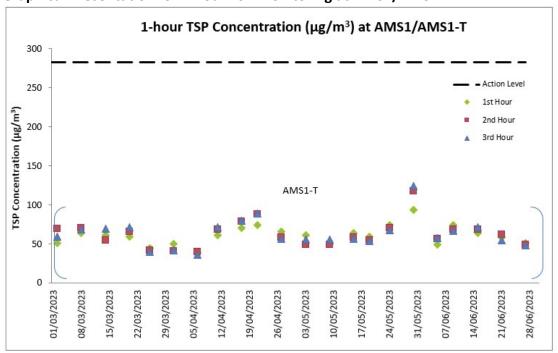
Appendix G. Monitoring Data and Graphical Plots (Air Quality and Noise)

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

| | Date | Start Time | Finish Time | Weather | Wind Speed (m/s) | Wind Direction (deg) | 1-hour TSP (μg/m³) |
|-----|-----------|------------|-------------|---------|---------------------|-------------------------|-----------------------|
| * | 05-Jun-23 | 9:03 | 10:03 | Fine | 6.1 | 133 | 49 |
| * | 05-Jun-23 | 10:03 | 11:03 | Fine | 5.3 | 131 | 57 |
| * | 05-Jun-23 | 11:03 | 12:03 | Fine | 5.0 | 129 | 58 |
| * | 09-Jun-23 | 8:30 | 9:30 | Cloudy | 0.8 | 145 | 74 |
| * | 09-Jun-23 | 9:30 | 10:30 | Cloudy | 2.2 | 151 | 69 |
| * _ | 09-Jun-23 | 10:30 | 11:30 | Cloudy | 0.6 | 308 | 67 |
| * | 15-Jun-23 | 9:03 | 10:03 | Cloudy | 1.4 | 151 | 64 |
| * | 15-Jun-23 | 10:03 | 11:03 | Cloudy | 1.1 | 144 | 69 |
| * | 15-Jun-23 | 11:03 | 12:03 | Cloudy | 1.7 | 135 | 72 |
| * | 21-Jun-23 | 9:05 | 10:05 | Fine | 2.8 | 245 | 59 |
| * | 21-Jun-23 | 10:05 | 11:05 | Fine | 3.3 | 252 | 62 |
| * | 21-Jun-23 | 11:05 | 12:05 | Fine | 3.3 | 262 | 55 |
| * | 27-Jun-23 | 9:54 | 10:54 | Fine | 2.2 | 165 | 51 |
| * | 27-Jun-23 | 10:54 | 11:54 | Fine | 2.2 | 161 | 49 |
| * | 27-Jun-23 | 11:54 | 12:54 | Fine | 3.3 | 157 | 48 |

^{*} During the reporting period, monitoring station AMS1 was no longer open for impact monitoring from 1 September 2022, due to the relocation of the Hong Kong Society for the Blind Workshop. Temporary air quality monitoring station, AMS1-T was used to conduct dust monitoring in September 2022. Details of temporary alternative monitoring locations are presented in Temporary Alternative Proposal for Monitoring Station as proposed by ET and agreed by IEC dated 6 January 2021.

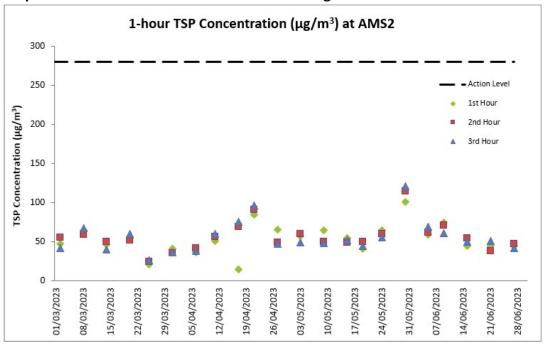
Graphical Presentation for 1-hour TSP Monitoring at AMS1/AMS1-T



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

| Date | Start Time | Finish Time | Weather | Wind Speed (m/s) | Wind Direction (deg) | 1-hour TSP (μg/m³) |
|-----------|------------|-------------|---------|---------------------|----------------------|-----------------------|
| 05-Jun-23 | 8:20 | 9:20 | Fine | 5.3 | 129 | 59 |
| 05-Jun-23 | 9:20 | 10:20 | Fine | 5.0 | 127 | 62 |
| 05-Jun-23 | 10:20 | 11:20 | Fine | 5.8 | 134 | 69 |
| 09-Jun-23 | 8:20 | 9:20 | Cloudy | 0.8 | 143 | 74 |
| 09-Jun-23 | 9:20 | 10:20 | Cloudy | 1.7 | 151 | 71 |
| 09-Jun-23 | 10:20 | 11:20 | Cloudy | 0.8 | 349 | 61 |
| 15-Jun-23 | 8:20 | 9:20 | Cloudy | 0.8 | 173 | 44 |
| 15-Jun-23 | 9:20 | 10:20 | Cloudy | 1.7 | 141 | 54 |
| 15-Jun-23 | 10:20 | 11:20 | Cloudy | 1.1 | 138 | 50 |
| 21-Jun-23 | 8:22 | 9:22 | Fine | 2.2 | 268 | 44 |
| 21-Jun-23 | 9:22 | 10:22 | Fine | 1.7 | 248 | 38 |
| 21-Jun-23 | 10:22 | 11:22 | Fine | 3.1 | 249 | 51 |
| 27-Jun-23 | 9:02 | 10:02 | Fine | 3.3 | 116 | 44 |
| 27-Jun-23 | 10:02 | 11:02 | Fine | 2.2 | 165 | 47 |
| 27-Jun-23 | 11:02 | 12:02 | Fine | 2.5 | 138 | 42 |

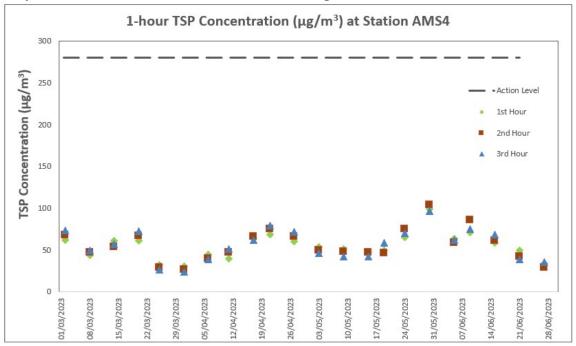
Graphical Presentation for 1-hour TSP Monitoring at AMS2



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

| Date | Start Time | Finish Time | Weather | Wind Speed (m/s) | Wind Direction (deg) | 1-hour TSP (μg/m³) |
|-----------|------------|-------------|---------|---------------------|-------------------------|-----------------------|
| 05-Jun-23 | 9:55 | 10:55 | Fine | 5.3 | 131 | 64 |
| 05-Jun-23 | 10:55 | 11:55 | Fine | 4.4 | 132 | 59 |
| 05-Jun-23 | 11:55 | 12:55 | Fine | 5.0 | 139 | 62 |
| 09-Jun-23 | 8:50 | 9:50 | Cloudy | 1.4 | 145 | 71 |
| 09-Jun-23 | 9:50 | 10:50 | Cloudy | 2.5 | 149 | 86 |
| 09-Jun-23 | 10:50 | 11:50 | Cloudy | 0.3 | 330 | 75 |
| 15-Jun-23 | 9:55 | 10:55 | Cloudy | 1.7 | 149 | 59 |
| 15-Jun-23 | 10:55 | 11:55 | Cloudy | 1.4 | 133 | 61 |
| 15-Jun-23 | 11:55 | 12:55 | Cloudy | 0.3 | 160 | 69 |
| 21-Jun-23 | 9:56 | 10:56 | Fine | 2.8 | 252 | 50 |
| 21-Jun-23 | 10:56 | 11:56 | Fine | 2.5 | 254 | 42 |
| 21-Jun-23 | 11:56 | 12:56 | Fine | 3.3 | 246 | 39 |
| 27-Jun-23 | 10:55 | 11:55 | Fine | 1.1 | 175 | 34 |
| 27-Jun-23 | 11:55 | 12:55 | Fine | 2.5 | 162 | 29 |
| 27-Jun-23 | 12:55 | 13:55 | Fine | 3.3 | 155 | 36 |

Graphical Presentation for 1-hour TSP Monitoring at AMS4

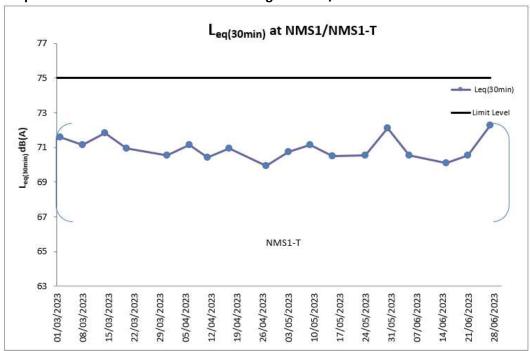


Data for Noise Monitoring at Station NMS1/NMS1-T during the Reporting Month

| | Date | Time | Weather | L _{eq(5min)} | L ₁₀ | L ₉₀ | Measured L _{eq(30min)} |
|---|-----------|-------|---------|-----------------------|-----------------|-----------------|---------------------------------|
| * | 05-Jun-23 | 09:06 | Fine | 70.0 | 73.1 | 65.2 | |
| * | 05-Jun-23 | 09:11 | Fine | 69.4 | 72.2 | 64.3 | 70.6 |
| * | 05-Jun-23 | 09:16 | Fine | 69.1 | 72.9 | 64.4 | |
| * | 05-Jun-23 | 09:21 | Fine | 71.6 | 73.5 | 65.6 | |
| * | 05-Jun-23 | 09:26 | Fine | 71.8 | 73.7 | 65.9 | |
| * | 05-Jun-23 | 09:31 | Fine | 70.7 | 73.6 | 65.8 | |
| * | 15-Jun-23 | 09:06 | Cloudy | 70.4 | 73.6 | 65.7 | |
| * | 15-Jun-23 | 09:11 | Cloudy | 69.6 | 72.8 | 64.5 | 70.1 |
| * | 15-Jun-23 | 09:16 | Cloudy | 69.9 | 72.4 | 64.2 | |
| * | 15-Jun-23 | 09:21 | Cloudy | 70.3 | 73.2 | 65.9 | |
| * | 15-Jun-23 | 09:26 | Cloudy | 69.1 | 72.0 | 64.6 | |
| * | 15-Jun-23 | 09:31 | Cloudy | 71.0 | 74.7 | 65.0 | |
| * | 21-Jun-23 | 09:08 | Fine | 69.0 | 72.1 | 64.2 | |
| * | 21-Jun-23 | 09:13 | Fine | 69.9 | 72.7 | 64.3 | |
| * | 21-Jun-23 | 09:18 | Fine | 70.4 | 73.4 | 65.5 | 70.5 |
| * | 21-Jun-23 | 09:23 | Fine | 70.1 | 73.6 | 65.9 | 70.5 |
| * | 21-Jun-23 | 09:28 | Fine | 71.7 | 74.8 | 65.8 | |
| * | 21-Jun-23 | 09:33 | Fine | 71.5 | 74.6 | 66.2 | |
| * | 27-Jun-23 | 09:57 | Fine | 73.3 | 76.9 | 62.8 | |
| * | 27-Jun-23 | 10:02 | Fine | 72.7 | 76.0 | 63.5 | |
| * | 27-Jun-23 | 10:07 | Fine | 71.6 | 74.9 | 63.1 | 72.3 |
| * | 27-Jun-23 | 10:12 | Fine | 72.7 | 77.0 | 62.5 | 72.3 |
| * | 27-Jun-23 | 10:17 | Fine | 71.6 | 73.8 | 63.0 | |
| * | 27-Jun-23 | 10:22 | Fine | 71.4 | 75.1 | 62.0 | |

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

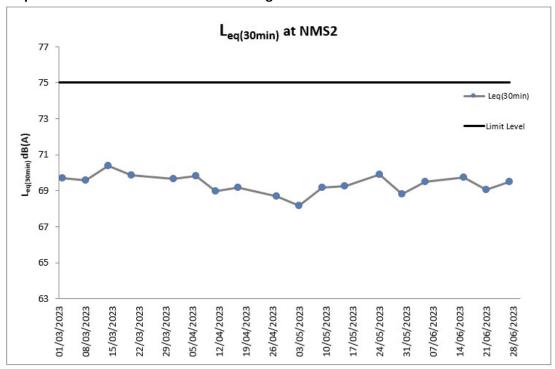
Graphical Presentation for Noise Monitoring at NMS1/NMS1-T



Data for Noise Monitoring at Station NMS2 during the Reporting Month

| Date | Time | Weather | L _{eq(5min)} | L ₁₀ | L ₉₀ | Measured L _{eq(30min)} |
|-----------|-------|---------|-----------------------|-----------------|-----------------|---------------------------------|
| 05-Jun-23 | 08:23 | Fine | 68.4 | 70.6 | 66.4 | |
| 05-Jun-23 | 08:28 | Fine | 68.5 | 70.5 | 66.3 | 69.5 |
| 05-Jun-23 | 08:33 | Fine | 69.6 | 71.2 | 67.7 | |
| 05-Jun-23 | 08:38 | Fine | 70.9 | 72.8 | 68.1 | |
| 05-Jun-23 | 08:43 | Fine | 70.1 | 72.0 | 68.9 | |
| 05-Jun-23 | 08:48 | Fine | 69.0 | 71.3 | 67.2 | |
| 15-Jun-23 | 08:23 | Cloudy | 69.1 | 71.0 | 67.2 | |
| 15-Jun-23 | 08:28 | Cloudy | 68.9 | 70.3 | 66.4 | 69.8 |
| 15-Jun-23 | 08:33 | Cloudy | 69.7 | 71.5 | 67.8 | |
| 15-Jun-23 | 08:38 | Cloudy | 70.6 | 72.7 | 67.7 | |
| 15-Jun-23 | 08:43 | Cloudy | 70.1 | 72.9 | 68.1 | |
| 15-Jun-23 | 08:48 | Cloudy | 69.9 | 71.6 | 67.6 | |
| 21-Jun-23 | 08:25 | Fine | 68.5 | 70.6 | 66.7 | 69.1 |
| 21-Jun-23 | 08:30 | Fine | 69.4 | 71.3 | 67.6 | |
| 21-Jun-23 | 08:35 | Fine | 68.9 | 70.2 | 66.9 | |
| 21-Jun-23 | 08:40 | Fine | 68.1 | 70.8 | 66.2 | |
| 21-Jun-23 | 08:45 | Fine | 69.0 | 71.7 | 67.6 | |
| 21-Jun-23 | 08:50 | Fine | 70.2 | 72.1 | 68.0 | |
| 27-Jun-23 | 09:05 | Fine | 69.1 | 71.7 | 64.4 | 69.5 |
| 27-Jun-23 | 09:10 | Fine | 69.3 | 72.0 | 65.1 | |
| 27-Jun-23 | 09:15 | Fine | 68.7 | 71.1 | 65.4 | |
| 27-Jun-23 | 09:20 | Fine | 70.6 | 73.7 | 66.1 | |
| 27-Jun-23 | 09:25 | Fine | 69.1 | 71.4 | 65.6 | |
| 27-Jun-23 | 09:30 | Fine | 70.0 | 72.7 | 66.2 | |

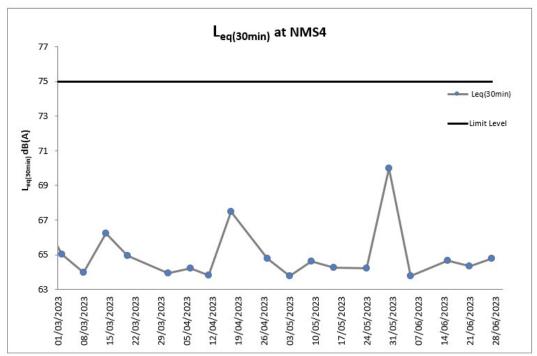
Graphical Presentation for Noise Monitoring at NMS2



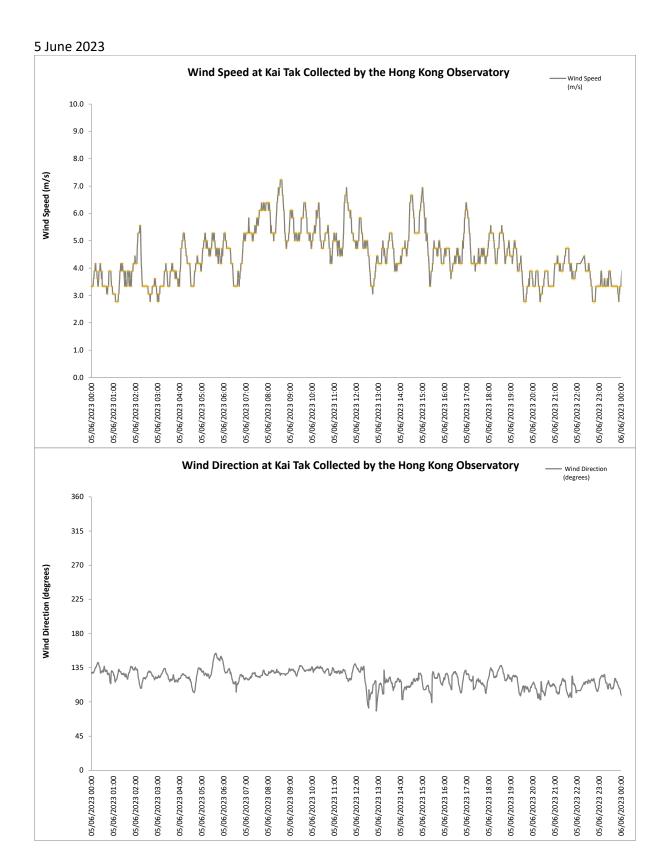
Data for Noise Monitoring at Station NMS4 during the Reporting Month

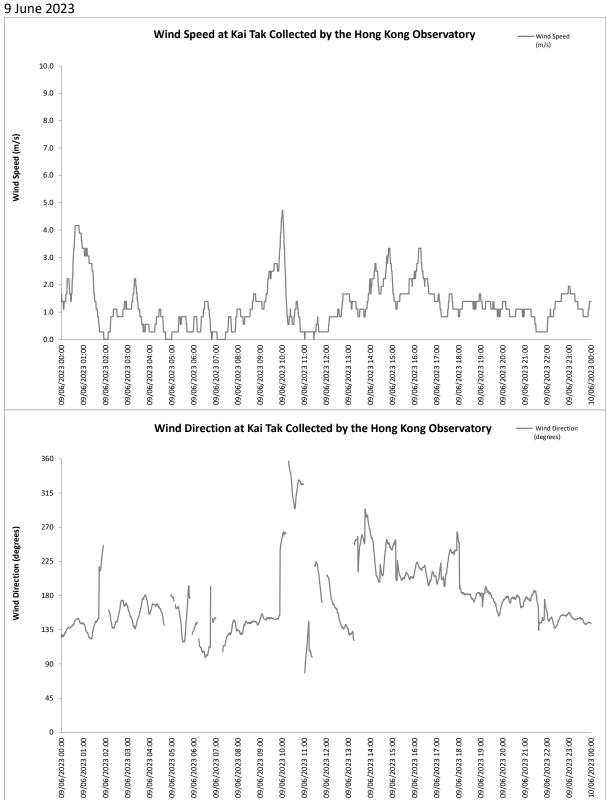
| Date | Time | Weather | $L_{eq(5min)}$ | L ₁₀ | L ₉₀ | Measured L _{eq(30min)} |
|-----------|-------|---------|----------------|-----------------|-----------------|---------------------------------|
| 05-Jun-23 | 08:23 | Fine | 63.5 | 65.4 | 61.5 | |
| 05-Jun-23 | 08:28 | Fine | 62.9 | 64.6 | 60.3 | 63.8 |
| 05-Jun-23 | 08:33 | Fine | 64.7 | 66.2 | 62.8 | |
| 05-Jun-23 | 08:38 | Fine | 64.1 | 66.9 | 62.4 | |
| 05-Jun-23 | 08:43 | Fine | 63.1 | 65.0 | 61.5 | |
| 05-Jun-23 | 08:48 | Fine | 64.0 | 66.7 | 62.2 | |
| 15-Jun-23 | 08:23 | Cloudy | 65.0 | 67.1 | 63.2 | |
| 15-Jun-23 | 08:28 | Cloudy | 64.4 | 66.3 | 62.4 | |
| 15-Jun-23 | 08:33 | Cloudy | 63.9 | 65.5 | 61.8 | 647 |
| 15-Jun-23 | 08:38 | Cloudy | 64.6 | 66.7 | 62.7 | 64.7 |
| 15-Jun-23 | 08:43 | Cloudy | 64.7 | 66.9 | 62.1 | |
| 15-Jun-23 | 08:48 | Cloudy | 65.2 | 67.0 | 63.6 | |
| 21-Jun-23 | 08:25 | Fine | 63.4 | 65.9 | 61.8 | |
| 21-Jun-23 | 08:30 | Fine | 64.6 | 66.7 | 62.1 | 64.4 |
| 21-Jun-23 | 08:35 | Fine | 65.5 | 67.4 | 63.6 | |
| 21-Jun-23 | 08:40 | Fine | 64.3 | 66.2 | 62.4 | |
| 21-Jun-23 | 08:45 | Fine | 64.1 | 66.0 | 62.7 | |
| 21-Jun-23 | 08:50 | Fine | 63.9 | 65.2 | 61.1 | |
| 27-Jun-23 | 09:05 | Fine | 64.8 | 66.7 | 62.5 | |
| 27-Jun-23 | 09:10 | Fine | 66.6 | 67.0 | 63.0 | 64.8 |
| 27-Jun-23 | 09:15 | Fine | 64.1 | 66.5 | 61.4 | |
| 27-Jun-23 | 09:20 | Fine | 63.3 | 65.3 | 61.0 | |
| 27-Jun-23 | 09:25 | Fine | 64.1 | 66.3 | 61.6 | |
| 27-Jun-23 | 09:30 | Fine | 65.1 | 67.4 | 61.7 | |

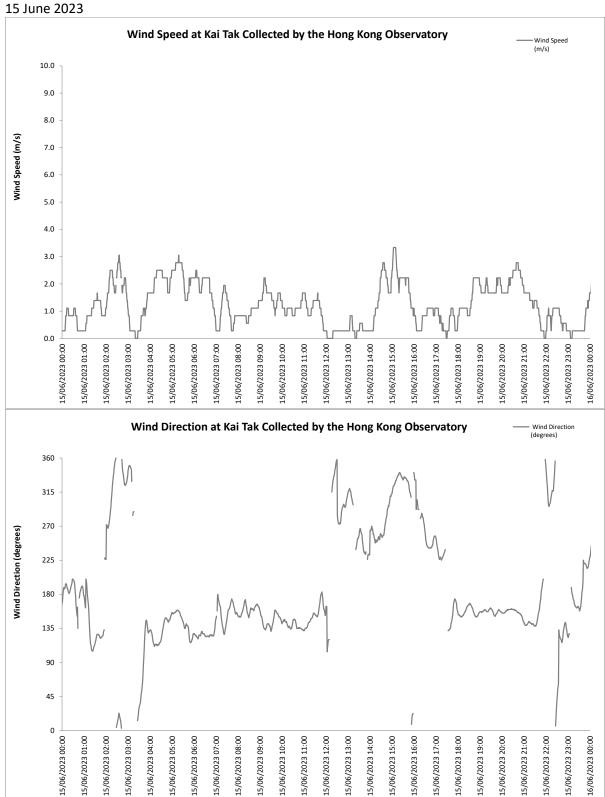
Graphical Presentation for Noise Monitoring at NMS4

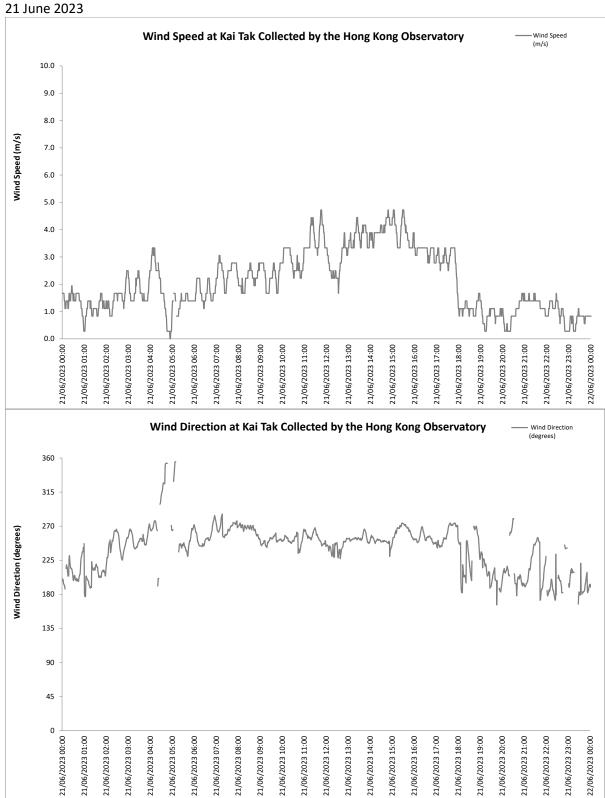


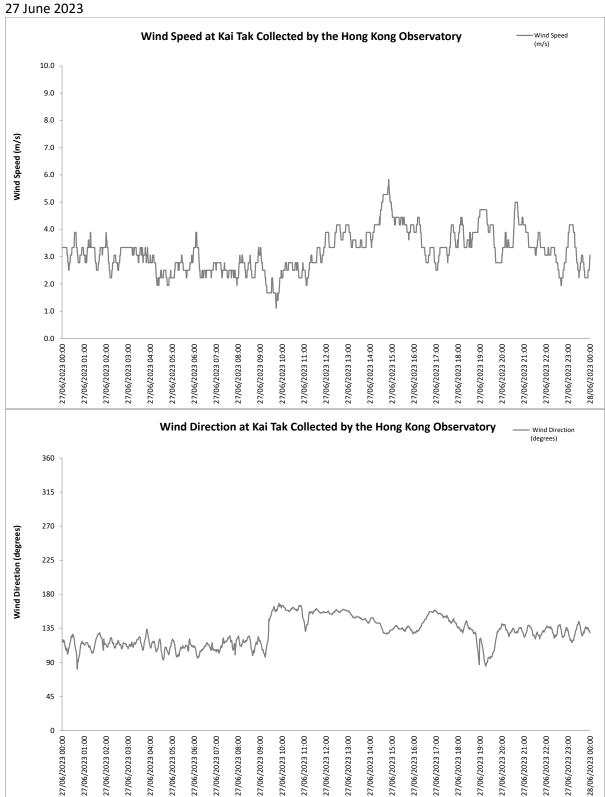
Appendix H. Wind Data











Appendix I. Waste Flow Table

Project: Kai Tak Sport Park
Contract No.: HAB/ KTSP/ 01

Contract Title: Design, Construction and Operation of the Kai Tak Sports Park at Kai Tak, Kowloon City District, Hong Kong

Year of Record: 2019-2023



Monthly Waste Flow Table

| Month | Total Quantity | Total | | Δ | ctual Quantitie | s of Inert C&C | Materials Ge | nerated Mont | hly | | Δct | ıal Quantiti | as of C&D M | Natorials Go | nerated Mo | nerated Monthly | | | |
|--------|----------------|--|----------------------------|--------------------------------------|--------------------------|---|---------------------------|--------------------------|----------------------------|--------------------------------------|---|--------------|---------------------------------------|--------------|--|------------------------|---------|--|--|
| Wionan | Generated | Quantity | Eve | avated Mate | | 3 Of Incit Odd | | excavated Mat | , | | Metals | Metals | Paper / | Plastics | Chemical | Other. | Remarks | | |
| | | Generated (Excluded Excavated Material) | Disposed in Public Fill | Disposed in Sorting Facilities | Others (e.g Reused in | Broken Concrete or Construction Waste Collected by Recycled Company | Reused in the Contract | Reused in other Projects | Disposed in Public Fill | Disposed in Sorting Facilities | (steel bar / metal strip) ⁽¹⁾ | (aluminum | cardboard packaging ⁽¹⁾ | (1) & (4) | waste (wasted lubricant oil/ oil container) | e.g. general refuse | | | |
| | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | (in '000kg) | | | |
| | a1 | a2 | b | b | b | C | d | е | f | g | h | i | j | k | 1 | m | | | |
| 2019 | 43517.88 | 8326.30 | 35191.58 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 166.07 | 0.00 | 2.05 | 7.92 | 2.00 | 8148.27 | | | |
| 2020 | 811029.24 | 6341.58 | 49326.08 | 0.00 | 755361.58 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3170.12 | 0.47 | 10.10 | 20.71 | 2.20 | 3137.98 | | | |
| Jan-21 | 78129.57 | 1315.84 | 4253.06 | 0.00 | 72560.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 393.38 | 0.05 | 2.68 | 1.96 | 0.00 | 917.77 | | | |
| Feb-21 | 70013.03 | 912.17 | 10767.60 | 0.00 | 58333.26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 386.46 | 0.07 | 1.24 | 0.64 | 0.00 | 523.76 | | | |
| Mar-21 | 51743.64 | 1314.81 | 18740.08 | 0.00 | 31688.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 320.13 | 0.12 | 2.08 | 2.45 | 0.00 | 990.03 | | | |
| Apr-21 | 16431.34 | 1411.19 | 0.00 | 0.00 | 15020.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 467.54 | 0.02 | 1.84 | 1.70 | 0.00 | 940.09 | | | |
| May-21 | 39675.06 | 1610.42 | 0.00 | 0.00 | 38064.64 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 442.35 | 0.00 | 1.31 | 2.81 | 0.00 | 1163.95 | | | |
| Jun-21 | 56589.31 | 1812.39 | 0.00 | 0.00 | 54776.92 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 353.07 | 0.02 | 1.10 | 1.37 | 0.00 | 1456.83 | | | |
| Jul-21 | 18264.19 | 2544.22 | 0.00 | 0.00 | 15719.97 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 383.64 | 0.00 | 1.55 | 3.36 | 0.00 | 2155.67 | | | |
| Aug-21 | 7959.53 | 2028.39 | 4150.75 | 0.00 | 1780.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 326.91 | 0.00 | 1.28 | 1.40 | 0.00 | 1698.80 | | | |
| Sep-21 | 32389.58 | 2259.89 | 30129.69 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 269.75 | 0.00 | 1.99 | 2.68 | 0.00 | 1985.47 | | | |
| Oct-21 | 34559.10 | 2034.74 | 17144.35 | 0.00 | 15380.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 289.21 | 0.00 | 1.04 | 2.83 | 0.00 | 1741.66 | | | |
| Nov-21 | 34821.07 | 2353.58 | 6551.45 | 0.00 | 25916.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 164.09 | 0.00 | 1.27 | 3.80 | 0.60 | 2183.82 | | | |
| Dec-21 | 10648.02 | 2282.17 | 8365.85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 125.27 | 0.00 | 1.54 | 0.69 | 0.00 | 2154.67 | | | |
| Jan-22 | 6238.85 | 2367.85 | 3871.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 130.89 | 0.00 | 1.43 | 1.76 | 0.00 | 2233.77 | | | |
| Feb-22 | 6654.84 | 1294.33 | 5360.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 158.11 | 0.00 | 0.51 | 0.00 | 0.00 | 1135.71 | | | |
| Mar-22 | 27279.95 | 1820.78 | 25459.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 162.33 | 0.00 | 0.81 | 0.85 | 0.00 | 1656.79 | | | |
| Apr-22 | 15402.21 | 1792.21 | 13610.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 36.78 | 0.00 | 0.62 | 3.11 | 0.00 | 1751.70 | | | |
| May-22 | 8425.54 | 2151.70 | 6273.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 83.12 | 0.00 | 0.61 | 1.47 | 0.00 | 2066.50 | | | |
| Jun-22 | 8171.01 | 2700.44 | 5470.57 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 192.21 | 0.00 | 1.66 | 1.91 | 0.00 | 2504.66 | | | |
| Jul-22 | 5804.34 | 2575.55 | 3228.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 238.36 | 0.00 | 1.56 | 4.87 | 0.00 | 2330.75 | | | |
| Aug-22 | 11860.09 | 2557.97 | 9302.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 138.66 | 0.00 | 0.92 | 4.03 | 0.00 | 2414.36 | | | |
| Sep-22 | 14721.29 | 2391.62 | 12329.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 155.67 | 0.00 | 0.52 | 5.72 | 0.00 | 2229.71 | | | |
| Oct-22 | 12307.08 | 2428.20 | 9878.88 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.57 | 0.00 | 0.50 | 0.73 | 0.00 | 2411.40 | | | |
| Nov-22 | 16034.69 | 2332.38 | 13702.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 83.73 | 0.00 | 1.07 | 1.24 | 0.00 | 2246.34 | | | |
| Dec-22 | 21702.52 | 1944.12 | 19758.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.41 | 0.00 | 0.81 | 1.96 | 0.00 | 1926.94 | | | |
| Jan-23 | 14065.32 | 1261.42 | 12803.90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.66 | 1.54 | 0.00 | 1259.22 | | | |
| Feb-23 | 17813.51 | 1729.85 | 16083.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.43 | 1.83 | 0.00 | 1726.59 | | | |
| Mar-23 | 14767.87 | 2148.99 | 12618.88 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.96 | 3.68 | 0.00 | 2144.35 | | | |
| Apr-23 | 13579.71 | 1411.83 | 12167.88 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.80 | 3.06 | 0.00 | 1407.97 | | | |
| May-23 | 9704.79 | 1744.90 | 7959.89 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.05 | 0.00 | 0.32 | 4.02 | 0.00 | 1733.51 | | | |
| Jun-23 | 8426.09 | 1558.40 | 6867.69 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.74 | 0.00 | 1.17 | 2.17 | 0.00 | 1544.32 | | | |
| Total | 1538730.25 | 72760.22 | 381367.65 | 0.00 | 1084602.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8685.62 | 0.75 | 47.42 | 98.27 | 4.80 | 63923.36 | | | |

Total C&D waste generated

Total C&D waste generated (excluding excavated materials)

Total recycled C&D waste

% of recycled C&D waste for BEAM Plus MA10 or MA11

1538730.25 tonne 72760.22 tonne 8832.07 tonne 12.14 %

a1=b+c+d+e+f+g+h+i+j+k+l+m a2=c+d+e+f+g+h+i+j+k+l+m a3=c+d+e+h+i+j+k

a4=a3/a2 x 100%

(1) Metal, paper & plastic were collected by recycler.

- (2) The performance target of waste recycling are specified in the Contract.
- (3) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (4) Plastics refer to plastic bottles/ containers, plastic/ foam from packaging material.
- (5) Broken concrete for recycling into aggregates.
- (6) Excavated materials/waste will NOT be considered as part of construction waste. It should be excluded in the calculation.
- (7) Disposal of inert waste to public fill or sorting facilities will NOT be considered as recycled waste.
- (8) Disposal record for April 2023 and May 2023 have been updated according to the latest information from contractor in June 2023.
- (9) Recycling record for metals, papers and plastics have been updated according to the latest information from contractor in June 2023.

Project: Proposed Composite Development at NKIL 6607, Shing Kai Road, Kai Tak, Kowloon

Company: Hip Hing Construction Co., Ltd. Monthly Summary Waste Flow Table

| _ | - | | Accumul | ated Quantities | of Inert C&D N | Materials Gene | erated Monthly | | Accı | ımulated Qua | ntities of Non-in | ert C&D Was | tes Generate | d Monthly |
|--------|----------------------------------|--|--------------------------------|--|---|--|--|---|--------------------|--|-----------------------------------|----------------------|--------------------------------|--|
| | | Total | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (I) |
| Month | Total Quantities Generated | Quantities Generated (excluded excavated material) | Broken Concrete Recycled | Broken Concrete Diverted to Public Fill | Excavated Materials Reused in this Project | Excavated Materials Reused in other Projects | Excavated Materials Disposed as Public Fill | Mixed Wastes Diverted to Sorting Facility | Metals Recycled | Paper/ Cardboard Packaging Recycled | Timber/Wood Pallet Recycled | Plastics Recycled | Chemical Waste Collected | Others, e.g. General Refuse Disposed at Landfill |
| | | | (in'000 kg) | (in'000 kg) | (in'000 kg) | (in'000 kg) | (in'000 kg) | (in'000 kg) | (in'000 kg) | (in'000 kg) | (in'000 kg) | (in'000 kg) | (in'000 kg) | (in'000 kg) |
| Aug-21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| Sep-21 | 1550.68 | 0.00 | 0 | 0 | 0 | 1550.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0.00 |
| Oct-21 | 3691.90 | 28.13 | 0 | 0 | 0 | 3663.77 | 0.00 | 0.00 | 13.17 | 0.00 | 0 | 0 | 0 | 14.96 |
| Nov-21 | 5447.65 | 68.57 | 0 | 0 | 0 | 5309.20 | 69.88 | 6.05 | 32.40 | 0.00 | 0 | 0 | 0 | 30.12 |
| Dec-21 | 400.90 | 180.45 | 0 | 0 | 0 | 63.20 | 157.25 | 0.00 | 138.58 | 0.00 | 0 | 0 | 0 | 41.87 |
| Jan-22 | 1454.58 | 288.36 | 0 | 0 | 0 | 493.40 | 672.82 | 27.52 | 245.57 | 0.00 | 0 | 0 | 0 | 15.27 |
| Feb-22 | 241.23 | 207.42 | 0 | 0 | 0 | 0.00 | 33.81 | 4.65 | 177.65 | 0.05 | 0 | 0 | 0 | 25.07 |
| Mar-22 | 1717.06 | 373.58 | 0 | 0 | 0 | 0.00 | 1343.48 | 89.56 | 265.79 | 0.00 | 0 | 0 | 0 | 18.23 |
| Apr-22 | 1657.01 | 788.84 | 0 | 0 | 0 | 0.00 | 868.17 | 87.83 | 684.33 | 0.00 | 0 | 0 | 0 | 16.68 |
| May-22 | 1260.80 | 124.46 | 0 | 0 | 0 | 0.00 | 1136.34 | 102.49 | 21.97 | 0.00 | 0 | 0 | 0 | 0.00 |
| Jun-22 | 464.11 | 77.27 | 0 | 0 | 0 | 0.00 | 386.84 | 55.75 | 21.43 | 0.09 | 0 | 0 | 0 | 0.00 |
| Jul-22 | 813.76 | 98.52 | 0 | 0 | 0 | 0.00 | 715.24 | 58.30 | 32.29 | 0.00 | 0 | 0 | 0 | 7.93 |
| Aug-22 | 442.84 | 55.11 | 0 | 0 | 0 | 0.00 | 387.73 | 54.95 | 0.00 | 0.16 | 0 | 0 | 0 | 0.00 |
| Sep-22 | 786.99 | 91.80 | 0 | 0 | 0 | 0.00 | 695.19 | 91.80 | 0.00 | 0.00 | 0 | 0 | 0 | 0.00 |
| Oct-22 | 1428.67 | 157.88 | 0 | 0 | 0 | 0.00 | 1270.79 | 154.05 | 0.00 | 0.00 | 0 | 0 | 0 | 3.83 |
| Nov-22 | 2134.86 | 174.01 | 0 | 0 | 0 | 0.00 | 1960.85 | 147.07 | 0.00 | 0.63 | 0 | 0 | 0 | 26.31 |
| Dec-22 | 864.13 | 212.59 | 0 | 0 | 0 | 0.00 | 651.54 | 198.44 | 0.00 | 0.00 | 0 | 0 | 0 | 14.15 |
| Jan-23 | 885.60 | 135.88 | 0 | 0 | 0 | 0.00 | 749.72 | 133.59 | 0.00 | 0.00 | 0 | 0 | 0 | 2.29 |
| Feb-23 | 1286.59 | 225.50 | 0 | 0 | 0 | 0.00 | 1061.09 | 181.53 | 24.35 | 0.52 | 0 | 0 | 0 | 19.10 |
| Mar-23 | 691.22 | 253.47 | 0 | 0 | 0 | 0.00 | 437.75 | 149.17 | 71.86 | 0.16 | 0 | 0 | 0 | 32.28 |
| Apr-23 | 3744.20 | 56.11 | 0 | 0 | 0 | 0.00 | 3688.09 | 30.39 | 0.00 | 0.28 | 0 | 0 | 0 | 25.44 |
| May-23 | 2229.07 | 11.84 | 0 | 0 | 0 | 0.00 | 2217.23 | 5.92 | 0.00 | 0.00 | 0 | 0 | 0 | 5.92 |
| Jun-23 | 97.56 | 84.02 | 0 | 0 | 0 | 0.00 | 13.54 | 82.67 | 0.00 | 0.00 | 0 | 0 | 0 | 1.35 |
| Total | 33291.41 | 3693.81 | 0 | 0 | 0 | 11080.25 | 18517.35 | 1661.73 | 1729.39 | 0.93 | 0.00 | 0.00 | 0.00 | 300.80 |

Total C&D Waste generated

Total C&D waste generated (Excluded excavated materials)

Total C&D waste recycled

Total C&D waste recycled

(a) + (g) + (h) + (i) + (j)

Waste Recycling Rate = $\frac{(a) + (g) + (h) + (i) + (j)}{(a) + (h) + (j) + (h) + (j) + (j)}$ X 100% = 46.84%

Note:

For BEAM Plus certification scheme, excavated materials are excluded from the calculation of the waste reduction rate Record with <u>Underlined</u> indicated updated content

Appendix J. Environmental Licences and Permits

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

| Item No. | Type of Permit / Licence | Reference No. | Application Date | Valid from | Valid until | Remark |
|----------|--|--------------------------|---------------------|-------------|-------------|--------|
| 1 | Environmental Permit under EIAO | EP-544/2017 | 21 Aug 2017 | 8 Sep 2017 | N/A | Issued |
| 2 | Construction Dust Notification under APCO | 441733 | 25 Jan 2019 | 29 Jan 2019 | N/A | N/A |
| 3 | Construction Waste Disposal Account (Main) | 7033182 | 12 Feb 2019 | 12 Feb 2019 | N/A | N/A |
| 4 | Construction Waste Disposal Account (Vessel) | 7033555 | 11 Jul 2022 | 10 Aug 2022 | 10 Nov 2022 | Issued |
| 5 | Registration as a Chemical Waste Producer | WPN5213- 286-H3906-02 | 29 Jan 2019 | 12 Feb 2019 | N/A | N/A |
| 6 | Discharge Licence under WPCO | WT00034082- 2019 | 12 Jun 2019 | 26 Jun 2019 | 30 Jun 2024 | Issued |
| 7 | Construction Noise Permit (Special Truss Delivery Port) | GW-RE0236- 23 | 27 Feb 2023 | 6 Apr 2023 | 5 Jul 2023 | Issued |
| 8 | Construction Noise Permit (Special Shing Kai Road) | GW-RE0348- 23 | 21 Mar 2023 | 2 May 2023 | 29 Jul 2023 | Issued |
| 9 | Construction Noise Permit (Construction Works, Northern Site) | GW-RE0400- 23 | 23 Mar 2023 | 30 Apr 2023 | 29 Jul 2023 | Issued |
| 10 | Construction Noise Permit (Construction Works, Southern Site) | GW-RE0425- 23 | 11 Apr 2023 | 24 May 2023 | 23 Aug 2023 | Issued |
| 11 | Construction Noise Permit (Construction Works, Barging Point) | GW-RE0522- 23 | 27 Apr 2023 | 21 May 2023 | 20 Nov 2023 | Issued |

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

| Item No. | Type of Permit / Licence | Reference No. | Application Date | Valid from | Valid until | Remark |
|----------|--|------------------------------|------------------|-------------|-------------|---|
| 1 | Environmental Permit under EIAO | EP-544/2017 | 21 Aug 2017 | 8 Sep 2017 | N/A | Issued |
| 2 | Construction Dust | 458255 | 17 Jul 2020 | 17 Jul 2020 | N/A | N/A |
| | Notification under APCO | 470045 | 29 Jul 2021 | 29 Jul 2021 | N/A | N/A |
| 3 | Construction Waste Disposal Account (Main) | 7041267 | 29 Jul 2021 | 11 Aug 2021 | N/A | Issued |
| 4 | Registration as a Chemical Waste Producer | WPN5211- 286-H1103- 23 | 29 Jul 2021 | 24 Aug 2021 | N/A | Issued |
| 5 | Discharge Licence under WPCO | WT00039490 -2021 | 6 Aug 2021 | 9 Nov 2021 | 30 Nov 2026 | Issued |
| 6 | Construction Noise Permit | GW-RE1321- 22 | 22 Nov 2022 | 2 Jan 2023 | 1 Jun 2023 | Superseded by GW- RE0494-23 on 2 Jun 2023 |
| 7 | Construction Noise Permit | GW-RE0494- 23 | 14 Apr 2023 | 2 Jun 2023 | 1 Nov 2023 | Issued |

Appendix K. Environmental Mitigation Measures Implementation Status

Air Quality - Recommended Mitigation Measures

| Air Quality Mitigation Measures during construction | - | entation itus |
|---|----------|------------------|
| | KTSP | H/O |
| Good housekeeping to minimize dust generation, e.g. by properly handling and storing dusty materials | ✓ | ✓ |
| Store cement in shelter with 3 sides and the top covered by impervious materials if the stack exceeds 20 bags | ✓ | ✓ |
| Cement delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed | N/A | N/A |
| Loading, unloading, transfer, handling or storage of bulk cement should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system | √ | ✓ |
| Dusty materials (e.g. debris) should be wetted by misting / water-spraying before any loading, unloading, transfer or transport operation | ✓ | ✓ |
| Any skip hoist for material transport should be fully enclosed by impervious sheeting | ✓ | ✓ |
| Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously | ✓ | Р |
| Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities to maintain the entire surface wet | ✓ | ✓ |
| Excavation area should be minimized as far as possible | ✓ | ✓ |
| Stockpile of dusty materials should not be extended beyond the pedestrian barriers, fencing or traffic cones | ✓ | ✓ |
| Excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet, and then removed, backfilled or reinstated where practicable within 24 hours of the excavation or unloading | ✓ | ✓ |
| Dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads | ✓ | ✓ |
| Properly fitted side and tail boards are necessary for any vehicle with open load area | ✓ | ✓ |
| While transporting materials that potentially create dust (e.g. debris), materials should not be loaded higher than side and tail boards, and should be fully covered by tarpaulin or similar materials which extent at least 300 mm over the edges of the side and tail boards to prevent leakage. | ✓ | ✓ |
| Limit the maximum vehicle speed within the site to 10km/hr | ✓ | ✓ |
| Haulage and delivery vehicles should be confined to designated roads | ✓ | ✓ |
| Every main haul road should either be1.) paved with concrete and kept clear of dusty materials, or2.) sprayed or watered to maintain the entire road surface wet | ✓ | ✓ |
| All on-site unpaved roads should be compacted and kept free of lose materials as possible | ✓ | ✓ |
| Provide vehicle washing (e.g. wheel washing bay & high pressure water jet where practicable) at every vehicle exit point for cleaning vehicle body and wheels | ✓ | ✓ |
| The vehicle washing area and the road between washing area and site exit should be paved with concrete, bituminous or other hardcores | ✓ | ✓ |
| The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials. | ✓ | ✓ |
| Dusty materials on every vehicle's body and wheels should be removed in washing area before leaving the site | ✓ | ✓ |

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

Noise - Recommended Mitigation Measures

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

Water Quality - Recommended Mitigation Measures

| | ater Quality Mitigation Measures during construction | Impleme Stat | |
|-------------------------|---|---------------------------------------|---------------------------------------|
| | | KTSP | H/O |
| • F | Practices outlined in ProPECC PN 1/94 Construction Site Drainage should be adopted. | ✓ | ✓ |
| | nstall perimeter channels in the works areas to intercept runoff from boundary prior to the commencement of any earthwork | ✓ | ✓ |
| | To prevent storm runoff from washing across exposed soil surfaces, intercepting channels should be provided. | ✓ | ✓ |
| C | Orainage channels are required to convey site runoff to sand/silt traps and oil interceptors. Provision of regular cleaning and maintenance to ensure the normal operation of these facilities throughout the construction period. | √ | ✓ |
| | Any practical options for the diversion and realignment of drainage should comply with both engineering and environmental requirements | ✓ | ✓ |
| | Minimum distances of 100 m should be maintained between the discharge points of construction site runoff and the existing WSD saltwater intake and EMSD cooling water intake. | ✓ | ✓ |
| r 9 | The following good site measures should be adopted for the use of the existing barging facilities being operated by the MTR SCL Project: - All vessels should be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash. All hopper barges should be fitted with tight fitting seals to their bottom openings to prevent leakage of material. | N/A | N/A |
| - t | Construction activities should not cause foam, oil, grease, scum, litter or other objectionable matter o be present on the water within the site. | | |
| | Loading of barges and hoppers should be controlled to prevent splashing of material into the surrounding water. | | |
| - | Barreditating water. Barges or hoppers should not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation. | | |
| | The runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. | ✓ | ✓ |
| • | Reuse and recycling of the treated effluent from construction site runoff. | ✓ | ✓ |
| | Weekly site audit should be carried out to check the implementation status of the recommended water quality impact mitigation measures throughout construction period. | ✓ | |
| ٧ | | • | ✓ |
| • | The construction programme should be properly planned to minimise soil excavation, if any, in rainy seasons. | √ | √ √ |
| • 5 | 1 0 1 1 1 1 | · | ✓ |
| • s | seasons. | √ | |
| • F | Any exposed soil surfaces should be properly protected to minimise dust emission. In areas where a large amount of exposed soils exist, earth bunds or sand bags should be provided. | ✓ ✓ | ✓ |
| • F | Any exposed soil surfaces should be properly protected to minimise dust emission. In areas where a large amount of exposed soils exist, earth bunds or sand bags should be provided. Exposed stockpiles should be covered with tarpaulin or impervious sheets at all times. The stockpiles of materials should be placed at locations away from any stream courses so as to | √ √ | √ ✓ |
| • s • H • E | Any exposed soil surfaces should be properly protected to minimise dust emission. In areas where a large amount of exposed soils exist, earth bunds or sand bags should be provided. Exposed stockpiles should be covered with tarpaulin or impervious sheets at all times. | ✓ ✓ ✓ | ✓ ✓ |
| • F | Any exposed soil surfaces should be properly protected to minimise dust emission. In areas where a large amount of exposed soils exist, earth bunds or sand bags should be provided. Exposed stockpiles should be covered with tarpaulin or impervious sheets at all times. The stockpiles of materials should be placed at locations away from any stream courses so as to avoid releasing materials into the water bodies. | ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ | ✓ ✓ ✓ |
| • F | Any exposed soil surfaces should be properly protected to minimise dust emission. In areas where a large amount of exposed soils exist, earth bunds or sand bags should be provided. Exposed stockpiles should be covered with tarpaulin or impervious sheets at all times. The stockpiles of materials should be placed at locations away from any stream courses so as to avoid releasing materials into the water bodies. Final surfaces of earthworks should be compacted and protected by permanent work. Haul roads should be paved with concrete and the temporary access roads protected using crushed | ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ | ✓ ✓ ✓ |
| • F F S | Any exposed soil surfaces should be properly protected to minimise dust emission. In areas where a large amount of exposed soils exist, earth bunds or sand bags should be provided. Exposed stockpiles should be covered with tarpaulin or impervious sheets at all times. The stockpiles of materials should be placed at locations away from any stream courses so as to avoid releasing materials into the water bodies. Final surfaces of earthworks should be compacted and protected by permanent work. Haul roads should be paved with concrete and the temporary access roads protected using crushed stone or gravel, wherever practicable. Wheel washing facilities should be provided at all site exits to ensure that earth, mud and debris | ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ | |
| • E E • F • F • V | Any exposed soil surfaces should be properly protected to minimise dust emission. In areas where a large amount of exposed soils exist, earth bunds or sand bags should be provided. Exposed stockpiles should be covered with tarpaulin or impervious sheets at all times. The stockpiles of materials should be placed at locations away from any stream courses so as to avoid releasing materials into the water bodies. Final surfaces of earthworks should be compacted and protected by permanent work. Haul roads should be paved with concrete and the temporary access roads protected using crushed stone or gravel, wherever practicable. Wheel washing facilities should be provided at all site exits to ensure that earth, mud and debris would not be carried out of the works areas by vehicles. Good site practices should be adopted to keep the site dry and tidy, such as clean the rubbish and | ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ ✓ ✓ ✓ P |
| • E E • T • F • F • V V | Any exposed soil surfaces should be properly protected to minimise dust emission. In areas where a large amount of exposed soils exist, earth bunds or sand bags should be provided. Exposed stockpiles should be covered with tarpaulin or impervious sheets at all times. The stockpiles of materials should be placed at locations away from any stream courses so as to avoid releasing materials into the water bodies. Final surfaces of earthworks should be compacted and protected by permanent work. Haul roads should be paved with concrete and the temporary access roads protected using crushed stone or gravel, wherever practicable. Wheel washing facilities should be provided at all site exits to ensure that earth, mud and debris would not be carried out of the works areas by vehicles. Good site practices should be adopted to keep the site dry and tidy, such as clean the rubbish and litter on the construction sites. | ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ |

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

Waste Management – Recommended Mitigation Measures

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

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

Ecology – Recommended Mitigation Measures

| ignate areas for placement of equipment, building materials and wastes away from drainage nnels y out weekly site inspection to check the implementation status and the effectiveness of the | Implemer State | |
|---|-------------------|----------|
| | KTSP | H/O |
| Erection of hoarding, fencing or provision of clear demarcation of work zone | ✓ | ✓ |
| Designate areas for placement of equipment, building materials and wastes away from drainage channels | ✓ | √ |
| Carry out weekly site inspection to check the implementation status and the effectiveness of the proposed mitigation measures | ✓ | √ |

Landscape and Visual – Recommended Mitigation Measures

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

Other - Recommended Mitigation Measures

| Relevant environmental permits/licences should be posted at all vehicle entrances/exits. | \checkmark | Р |
|--|--------------|---|
|--|--------------|---|

Legend:

Implemented Not implemented Partially implemented N/A Not applicable

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

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

| Reporting Period | Complaints | Notifications of Summons | Successful Prosecutions |
|--|------------|-----------------------------|----------------------------|
| This reporting period (Jun 2023) | 1 | 0 | 0 |
| From commencement data of construction to end of reporting month | 29 | 0 | 0 |

Appendix M. Complaint Investigation Report



Complaint Investigation Report

RECEIPT OF COMPLAINT Ref: COM_0029 Date: 5 June 2023 Time: 10:16 From: public complaint referred by EPD (EPD Ref.: K19/RE/00013539-23) Via: email by contractor representative Contact no .: COMPLAINANT Name: Address: Contact no.:

DETAILS OF COMPLAINT

Date: 31 May 2023

Time:

Parameter:* Dust Noise Water Other (specify):

Description:

- Complaint of construction noise (piling work) from construction sites near Sung Wong Toi Road starting around 08:00am on weekdays
- Please take necessary environmental measures to minimize the environmental nuisance arising from the construction site.

INVESTIGATION RESULT & RESPONSE

ET, IEC and SOR notified on: 5 June 2023 Investigation conducted on: 5 June 2023

Result of investigation:

Complaint investigation was carried out with contractor on 5 June 2023, the results of investigation were summarized as following:

According to the contractor information, no piling work were scheduled at 08:00am along Sung Wong Toi Road during the complaint period. All construction works carried out on site have been strictly followed the Construction Noise Permit requirement. The CNP for the construction works at northern site (site area closest to the Sung Wong Toi Road) is attached for information. (Photos 5a and 5b)

ET and contractor carried out regular site inspections at Kai Tak Sports Park on 23 May 2023. (Photo 1) Noise mitigation measures recommended in EIA's Environmental Mitigation Implementation Schedule were generally implemented during the time of inspection.

According to the contractor information, noise mitigation control measures maintained on site included:

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

In conclusion, noise control mitigation measures at the Kai Tak Sports Park have been implemented and maintained. All construction works carried out have been fulfilling the relevant environmental legislations and CNP requirement during the concerned period.



RECOMMENDATIONS / MITIGATION MEASURES / ACTIONS

Environmental mitigation measures have been maintained as follow:

- 1. Power Mechanical Equipment with Quality Power Mechanical Equipment (QPME) labels were used at site to lower the noise nuisance to the nearby residents (Photo 2)
- 2. All subcontractors are reminded to observe the latest Construction Noise Permit Requirement and the latest Construction Noise Permit had been provided to subcontractor for their observation. (Photo 3)
- 3. Notice was provided to all subcontractors to follow the latest Construction Noise Permit Requirement. (Photo 4)
- 4. Implementation of noise mitigation measures recommended in EIA's Environmental Mitigation Implementation Schedule.

| Prepared by: | Sunny Chan | Title: | Environmental Team Leader |
|--------------|------------|--------|---------------------------|
| Signature: | Sumy Chan | Date: | 7 June 2023 |

| Attachment: | |
|------------------|--|
| 1. Photo Records | |

Photo Records:



Photo 1: Photo of regular site inspection on 23 May 2023. (site area close to the Sung Wong Toi Road)

Environmental Measure Implemented:



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



Photo 3: All subcontractors are reminded to observe the latest Construction Noise Permit Requirement and the latest Construction Noise Permit had been provided to subcontractor for their observation.



備忘錄

致 : 各分判商 日 期: 02/05/2023

由 : 鍾偉克 工程編號: KT201901

地 盤: 故徳體育園項目 構業編號: S23404/KT201901-Y03/WKC/SYY

有關北區建築噪音許可證更新事宜

環境保護署已於 2023 年 04 月 06 日更新北區建築噪音許可證,並於 2023 年 04 月 30 日晚 7 時正起生效,有效至 2023 年 07 月 29 日晚上 12 時正。現特意提醒 責司必須嚴格 遵守有關要求,尤其注意必須遵守機動設備之組合以及許可建築工程所包括之範圍。

為確保 費司遵守相關要求。如 費司需於假日工作,請於星期三或前向 我司工地 總管提交假日工作許可證,於假日工作許可證案填寫施工日期、公司名稱、當天工作之員 工姓名及職位、負責人姓名及電話、施工位置及工作、施工時使用之機械及其數量。在遞 交申請表後,當前往環保部參加噪音許可證專題訓練。且簽署表示遵守許可證內條款。 我司工地總管、環保部及管理層會檢查當日施工活動有否抵觸建篡噪音許可證內的條款及 按工地實際需要作出審批,而已審批假日工作許可證會存放於工地出入口更亭內,於施工 當日只容許已獲批分判商員工進入工地,未獲批准之員工將禁止進入工地。

請 責司務必提醒所有工地人員切實遵守《噪音管制條例》,並確保進行的工序、所 使用機動設備顯形、數量及其使用位置符合建築噪音許可證內的條款。根據分判合約附錄 (分判商對環境保護的責任),在分判合約有效期間,政府所修定之新法例及分判合約所 遺漏並已實行之法例,分判商亦須一律遵守。如有違反相關條例而等效總承建商遭受檢控 或等致任何損失,一切費用及罰款將由分判商承擔。

協與工程有限公司

錘偉克 助理合約經理

附件: 北區建築噪音許可證 (GW-RE0400-23)

副本抄送:工程項目照理/工地總管/環保部/工料測量部

WKCISTY/CHK/wms

音楽力展現を影響人性共主要集中心十一世 11.8 Chanalier Commercial Control, E Wang Holl Road, Komboon Eag Hong Kom 度間 1d: (852) 2525 9251 原系 Fac (852) 2845 9295 号景 Email: small@hiphing.com.bi. 原則 Website: www.hiphing.com.bi.

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Photo 4: Notice was provided to all subcontractors to follow the latest Construction Noise Permit Requirement.



FORM 3 NOISE CONTROL ORDINANCE (Chapter 400) SECTION 8(9)

[reg.5(a)]

CONSTRUCTION NOISE PERMIT FOR THE USE OF POWERED

| CC | NST | TRUCTION NOISE PERMIT N | O. GW-RE0400-23 | | | | |
|-------------|-----------------|---|---|---|-------------------|------------------|--|
| То | : н | IP HING ENGINEERING COMPA | ANY LIMITED | | | | |
| pov pres | vered scribe | struction noise permit is issued in acco mechanical equipment for the purpos d construction work, subject to the co- conditions may result in the permit bein | e of carrying out construction work additions set out below. The carryin | k other than percuss ng out of constructio | ive piling and/or | the carrying out | |
| | | | CONDITIONS | | | | |
| 1. | Con | struction site where the powered mecha | mical equipment and/or prescribed of | construction work ma | sy be employed: | | |
| | Full | address: Construction site of Kai T | ak Sports Park (North), Kai Tak | , Kowloon. | | | |
| | | · | | 4.0 | Lot No.: | *** | |
| | cons | site boundary, that is, the boundary of struction work may be carried out is del | ineated on the attached plan which t | | | | |
| 2. | * P. | ART/WHOLE of the site falls * WITHII | N/OUTSIDE a designated area. | | | | |
| 3. | Pow | vered Mechanical Equipment | | | | | |
| | a. | Items of powered mechanical equipme | nt which may be used inside the site | boundary: | | | |
| | | Identification code of item of powered mechanical equipment (if applicable) | 100000000000000000000000000000000000000 | tion of item of chanical equipment | 7/ -63 | No. of uni | |
| | | 10 | Refer to attached sheet | | | | |
| | ь. | Validity of the construction noise perm | it for the use of the powered mechan | nical equipment: | | | |
| | | Date and time of commencement : | 30 April 2023 | at | 0000 hours | | |
| | | Days and hours: 0000-2400 hours | on general holiday (including Sund | ay), 0000-0700 hour | s and 1900-2400 | hours on any day | |
| | | being a general holiday [but note | condition 3.d.1. below for the op | erating hours within | n which the use | of the above 1 | |
| | | powered mechanical equipment is allo | owed). | | | 90 | |
| | | This part of the permit expires on : | 29 July 2023 | at | 2400 hours | | |
| | c. | c. One photograph, endorsed by the Authority, of each item of powered mechanical equipment described in this construction nois 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 | of the powered mechanical equipmen | st: | | | |
| | | Refer to attached sheet. | | | | | |
| | | | | | | | |
| | | | 9 921 | | | | |
| | | | | | N | | |
| | | | | | | | |
| | EPD76 | (A/e) | -1- | | | | |
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