



**Provision of Environmental Team consultancy
for Design and Construction of Kong Nga Po Police
Training Facilities (Programme No. 279LP)**

Monthly Environmental Monitoring and Audit Report for July 2026

(Version 1.1)

Disclaimer

The information provided in this report is for presentation. All information in the report is provided in good faith, and every effort has been made for the information contained herein at the time of publication. However, our company disclaims all responsibilities and liabilities for incompleteness within this report.

Our ref: 25-8-2026

25-8-2026

By email: kwokhw@archsd.gov.hk

Architectural Services Department
40/F, High Block, Queensway Government Offices,
66 Queensway, Hong Kong
(Attn: Mr. Vincent Kwok)

Dear Mr. Kwok,

Re: Quotation No. PMB202/8480/2022/A01/A

Provision of Environmental Team consultancy for Design and Construction of Kong Nga Po Police Training Facilities (Programme no. 279LP)

-Submission of the monthly EM&A report in July 2026

We refer to the Environmental Permit No. FEP-01/510/2016 for the captioned project.

Subject to the accuracy and authenticity of all the information provided to us, we hereby certify, in accordance with Conditions 3.4 of Environmental Permit No. FEP-01/510/2016, that the information is a representation of what it signifies.

Thank you very much for your attention and please feel free to contact Mr. Lee at 9382 4204 should you require further information.

Yours faithfully,

For and on behalf of

Ka Shing Management Consultant Limited



Mr. W. H. Lee

Environmental Team Leader

cc Acuity Sustainability Consulting Limited
China State Joint Venture

Mr. Law
Ms. Marian Kong

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EXECUTIVE SUMMARY

Introduction

- E1. This document represents the 40th monthly report detailing the Environmental Monitoring and Audit (EM&A) activities for the Kong Nga Po Police Facilities Project, which operates under Environmental Permit No. FEP-01/510/2016. This report was prepared by Ka Shing Management Consultant Ltd. (Ka Shing) under “Service Contract Quotation No. PMB202/8480/2022/A01/A Provision of Environmental Team consultancy for Design and Construction of Kong Nga Po Police Training Facilities” (hereinafter called the “Service Contract”). The report encapsulates the EM&A activities and findings carried out between the 1st and 31st of July 2026.
- E2. On the 23rd of December 2022, a section of the construction site was transferred to the Architectural Services Department (ArchSD), which assumed responsibility for the building's construction. Furthermore, ArchSD has taken on the role of maintenance agent for the Hong Kong Police Force (HKPF) throughout the operational phase.
- E3. In the month covered by this report, the Project of Police Facilities at Kong Nga Po, which operates under Environmental Permit No. FEP-01/510/2016, engaged in the following contractual work: Contract No. SSK509, which encompasses the design and construction of the Kong Nga Po Police Training Facilities.

Environmental Monitoring and Audit Progress

- E4. A summary of the EM&A activities in this reporting month is listed in **Table I** below:

Table I Summary Table for EM&A Activities in the Reporting Month

EM&A Activities	Date
Noise Monitoring	3, 9, 18, 21, 27 July 2026
Air Quality Monitoring	3, 9, 15, 21, 27 July 2026
Environmental Site Inspection	3, 9, 18, 21 July 2026
Ecological Monitoring	27, 31 July 2026
Landscape & Visual Inspection	3, 9, 18, 21 July 2026

Breaches of Action and Limit Levels

- E5. Summary of the environmental exceedances of the reporting month is tabulated in **Table II**.

Construction Noise

E6. During the reporting month, the planned noise monitoring for construction took place as scheduled, with no recorded incidents of the Action/Limit Levels being exceeded.

Air Quality

E7. Throughout the reporting period, all planned air quality monitoring associated with construction was executed, and there were no recorded instances where the Action/Limit Levels were surpassed.

Table II Summary Table for Events Recorded in the Reporting Month

Environmental Monitoring	Parameter	No. of Non-Project related Exceedances		No. of Exceedance related to the Construction Works of the Contract		Action Taken
		Action Level	Limit Level	Action Level	Limit Level	
Noise	L _{eq} (30min)	0	0	0	0	N/A
Air Quality	1-hr TSP	0	0	0	0	N/A

Ecological Monitoring

E8. The ecological monitoring slated for the reporting month was conducted according to schedule. Details of the findings from this ecological monitoring for the respective period are available in **Appendix H**.

Environmental Non-Compliance

E9. During the reporting month, no environmental compliance violations were documented.

Environmental Complaint

E10. No environmental complaints were recorded during the reporting period. In the event of any complaints, they would be documented in the Complaint Log found in **Appendix M**.

Notification of Summons and Successful Prosecutions

E11. Throughout the month covered in this report, there were no instances of receiving notifications regarding summons or confirmations of successful prosecutions.

Reporting Changes

E12. On the 23rd of December 2022, a section of the construction site was handed over to the Architectural Services Department (ArchSD). ArchSD has taken on the task of overseeing the

construction activities for the building. This Monthly Environmental Monitoring and Audit (EM&A) Report offers a summary of the site operations and the status of the environmental safeguards being implemented under the contract with ArchSD.

Future Key Issues

E13. The major site activities for the coming three months include:

1. Open cut excavation
2. Removal of soil
3. Construction of substructure and superstructure
4. Backfilling
5. U.U. Lead in and Pipe Duct Connection
6. E&M installation

E14. The aforementioned construction activities could potentially lead to environmental impacts, with the primary concerns centered around construction dust, noise, water quality, and waste management. For detailed information, please refer to **Appendix A** regarding the anticipated major impacts from the construction works and corresponding recommended mitigation measures.

1 INTRODUCTION

- 1.1 The ArchSD has commissioned Ka Shing Management Consultant Ltd. (Ka Shing) as the Environmental Team (ET) to conduct the Environmental Monitoring and Audit (EM&A) activities for the Kong Nga Po Police Facilities Project, as dictated by Environmental Permit No. FEP-01/510/2016.
- 1.2 The main construction activities for the Project began on the 3rd of July, 2020, and the primary location at Kong Nga Po was handed over to the ArchSD on the 23rd of December, 2022. The ArchSD has assumed control over the building construction tasks and will serve as the maintenance representative for the Hong Kong Police Force (HKPF) once the project is operational.

Purpose of the report

- 1.3 This document constitutes the 40th EM&A Report, offering a consolidated overview of the monitoring outcomes for impacts and the audit results from the EM&A program over the reporting interval spanning from the 1st and 31st of July 2026.

Structure of the report

- 1.4 The structure of the report is as follows:

Section 1:	Introduction
Section 2:	Project Information
Section 3:	Noise Monitoring
Section 4:	Air Quality Monitoring
Section 5:	Landscape and Visual Monitoring
Section 6:	Ecological Monitoring
Section 7:	Environmental Site Inspection.
Section 8:	Environmental Non-conformance
Section 9:	Future Key Issues
Section 10:	Conclusions and Recommendations

2 PROJECT INFORMATION

Background

- 2.1 The Project mainly includes construction and operation of various police facilities. The police facilities include:
- (i) a helipad;
 - (ii) two firing ranges; and
 - (iii) other facilities, associated infrastructure & utilities, etc.
- 2.2 The Project falls under the category of a Designated Project as defined by the Environmental Impact Assessment Ordinance (EIAO). In October 2016, an Environmental Impact Assessment (EIA) Report (Report No.: AEIAR-201/2016) was approved for the Project in accordance with the EIA Study Brief (No. ESB-276/2014) and the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM). The corresponding Environmental Permit (EP no.: FEP-01/510/2016) was issued by the Director of Environmental Protection (DEP).
- 2.3 As per the approved Environmental Monitoring and Audit (EM&A) Manual, a comprehensive air quality and noise monitoring program is recommended during the construction phases of the Project to assess and monitor potential dust and noise nuisances. Prior to the commencement of the Project's construction works, baseline air quality and noise monitoring were conducted by the previous Environmental Team (Wellab Limited) from 14th March, 2020, to 2nd April, 2020, to establish the pre-existing conditions at designated sensitive receivers.
- 2.4 **Figure 1** displays the site layout plan for the Project.

Project Organization

- 2.5 Various stakeholders with varying degrees of participation are part of the Project's organizational structure under Environmental Permit number: FEP-01/510/2016, which includes:
- Project Proponent – Architectural Services Department (ArchSD)
 - Contractor– China State JV
 - Environmental Team (ET) – Ka Shing Management Consultant Ltd.
 - Independent Environmental Checker (IEC) – Acuity Sustainability Consulting Limited
- 2.6 **Table 2.1** summarizes the contact information for key personnel associated with Quotation No. PMB202/8480/2022/A01/A and additional contacts linked with the ArchSD Contract No. SSK509.

Table 2.1 Key Contacts of the Project

Party	Role	Contact Person	Phone No.	Fax No.
Architectural Services Department	Project Proponent	Mr. Vincent Kwok	2867 3939	3542 5223
Contractor (China State JV)	Site Agent	Mr. Kelvin Chan	6272 8828	2866 6325
	Environmental Officer	Ms. Marian Kong	6174 9735	
		Mr. LuLu Mar	5998 8852	
Ka Shing Management Consultant Ltd.	ETL	Mr. W.H. Lee	2618 2166	2120 7752
Acuity Sustainability Consulting Limited	IEC	Ir. Y.H. Law	2698 6833	2698 9383

Summary of Construction Works Undertaken During Reporting Month

2.7 Significant site activities conducted on-site during the reporting month comprised:

1. Open cut excavation
2. Removal of soil
3. Construction of substructure and superstructure
4. Backfilling
5. U.U. Lead in and Pipe Duct Connection
6. E&M installation

Construction Programme

2.8 **Appendix A** contains a version of the Contractors' construction schedules. The primary site activities planned by the Contractor for the upcoming three months have been examined. In **Appendix O**, the expected environmental impacts' potential severity and the deployment of equipment have been evaluated. This appendix additionally provides the Contractor with recommendations and insights on alternative approaches aimed at raising environmental consciousness, refining practices on the construction site, and fostering environmental improvements.

2.9 **Table 2.2** presents a consolidated overview of the pertinent environmental protection permits, licenses, and/or notifications associated with this Project.

Table 2.2 Status of Environmental Licences, Notifications and Permits

Permit / Licence No.	Valid Period		Status
	From	To	
Further Environmental Permit (FEP)			
FEP-01/510/2016	N/A	N/A	Valid
Construction Noise Permit (CNP)			
GW-RN0315-26	10-03-2026	09-08-2026	Valid
Notification pursuant to Air Pollution Control (Construction Dust) Regulation			
EPD Ref no.: 487864	N/A	N/A	N/A
Billing Account for Construction Waste Disposal			
Account No. 7046289	18-01-2023	N/A	Valid
Registration of Chemical Waste Producer			
WPN5213-641-C4770-01	18-01-2023	N/A	Valid
Effluent Discharge Licence under Water Pollution Control Ordinance			
WT00043663-2023	21-04-2023	30-04-2028	Valid

Summary of EM&A Requirement

2.10 The Environmental Monitoring and Audit (EM&A) program includes the monitoring of construction noise, air quality, ecological conditions, and regular environmental site audits. The specific requirements for the EM&A program are outlined in the following sections:

- Environmental requirements in contract documents;
- Event / Action Plans;
- Environmental mitigation measures, as recommended in the Project EIA study final report;
- All monitoring parameters; and
- Action and Limit levels for all environmental parameters.

Status of Compliance with Environmental Permits Conditions

2.11 **Table 2.3** provides a summary of the adherence to Environmental Permit (EP) No. FEP-01/510/2016 and the necessary submissions connected to this Project as stipulated by the EP.

Table 2.3 Summary Table for Status of Compliance / Required Submission under FEP No. FEP-01/510/2016

FEP Conditions	Submission	Submission Date	Approval Status
1.12	Commencement date of construction of the Project	30/3/2023	*
2.7	Proposal on the Reporting Mechanism and Curriculum Vitae of the IEC	20/3/2023	*
2.10	The date of setting up the Community Liaison Hotline and the contact details	27/2/2023	*
2.11	Management Organization of Main Construction Companies, at least an organization chart, names of responsible persons and their contact details	10/3/2023	*
2.12	Construction Works Schedule and Location Plans	10/3/2023	*
2.13	Layout plan for permeable pavings.	Submitted to EPD on 29/3/2023. Supplementary information submitted to EPD on 23/3/2024. R1 was submitted to ET & IEC on 11/9/2025. R-to-C of ET was submitted thru email on 27/11/2025. Revision was submitted to ET on 23/12/2025. Submitted to EPD on 6/1/2026. R2 was submitted to ET & IEC on 7/7/2026 by email.	For approval
2.14	Landscape and visual mitigation plan	Submitted to EPD on 24/3/2025. R2 was submitted to ArchSD for review on 19/9/2025. R2 was submitted to ET & IEC on 25/11/2025. R2 was submitted to ET & IEC on 13/1/2026. R2 was submitted to EPD on 11/3/2026 thru email. Hardcopy was submitted on 16/3/2026. R3 was submitted to ET & IEC on 10/7/2026 by email.	For approval
2.16	Plan for perimeter walls/ boundary wall sat project site and sidewalls of firing range	6/12/2024 Supplementary information submitted to EPD by email on 2/5/2025.	For approval
2.19	Submission of Helicopter Flight Plan	1 month before commencement of operation of Helipad	Notification
3.3	Baseline Air Quality and Noise Monitoring Report	30/3/2023	Deposit
4.2	Internet address of a dedicated web site	13/4/2023	*

Remarks: * Approval not required in FEP-01/510/2016

3 NOISE MONITORING

Monitoring Requirements

- 3.1 Following the EM&A Manual, monitoring of construction noise was performed by measuring the A-weighted equivalent continuous sound pressure level (Leq) to track noise generated by construction operations. Each monitoring station is scheduled for weekly noise assessments, with one set of readings to be taken from 0700 to 1900 hours on typical weekdays. The predefined Action/Limit Levels for the environmental monitoring activities are presented in **Appendix B**.

Monitoring Location

- 3.2 As per Section 3.2.3 of the EM&A Manual, impact noise monitoring took place at fourteen specified noise monitoring stations. Following the guidelines of the Project's Environmental Impact Assessment (EIA) report, noise monitoring stations situated within a 300-meter radius of the Project's boundary were taken into account. Consequently, six noise monitoring stations identified as relevant monitoring locations are depicted in Figure 3. The specific locations of these noise monitoring stations are detailed in **Table 3.1**.

Table 3.1 Location of Noise Monitoring Stations

Monitoring Station	Location of Measurement
NM9	Village House, Kong Nga Po
NM10	Village House, Kong Nga Po
NM11	Village House, Kong Nga Po
NM12	Village House, Kong Nga Po
NM13	Village House, Kong Nga Po
NM14	Village House, near Man Kam To Road

Monitoring Equipment

- 3.3 Impact noise monitoring was carried out using Integrating Sound Level Meters. These meters, classified as Type 1, are capable of providing continuous readings of noise levels, including the equivalent continuous sound pressure level (Leq) and percentile sound pressure level (Lx), and they conform to the specifications of International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1). The noise monitoring equipment utilized is summarized in **Table 3.2**. The calibration certificates for these devices can be found in **Appendix C**.

Table 3.2 Noise Monitoring Equipment

Equipment	Model	Quantity
Sound Level Meter	BSWA 308	5
Sound Level Meter	Rion NL53	1
Sound Calibrator	SOUNDTEK ST-120	1

Monitoring Parameters, Frequency and Duration

3.4 **Table 3.3** encapsulates the variables monitored, the frequency of monitoring, and the total time span of the noise monitoring activities. The schedule for noise monitoring can be located in **Appendix D**.

Table 3.3 Noise Monitoring Parameters, Duration and Frequency

Monitoring Stations	Parameter	Duration	Frequency	Measurement
NM9	L10(30 min.) dB(A) ^[2]	0700-1900 hrs on normal weekdays	Once per week	Free field ^[1]
NM10	L90(30 min.) dB(A) ^[2]			Free field ^[1]
NM11	Leq(30 min.) dB(A) ^[2]			Façade
NM12	Leq(30 min.) dB(A) ^[2]			Façade
NM13	(as six consecutive Leq, 5min readings)			Free field ^[1]
NM14				Free field ^[1]

Remarks:

[1]: Correction of +3dB (A) for Free-field Measurement.

[2]: A-weighted equivalent continuous sound pressure level (Leq). It is the constant noise level which, under a given situation and time period, contains the same acoustic energy as the actual time-varying noise level.

L10 is the level exceeded for 10% of the time. For 10% of the time, the sound or noise has a sound pressure level above L10.

L90 is the level exceeded for 90% of the time. For 90% of the time, the noise level is above this level.

Monitoring Methodology and QA/QC Procedures

3.5 The procedures for noise monitoring were conducted in this manner:

- The sound level meter was mounted on a tripod, positioned 1 meter away from the outside of the noise-sensitive facade and at a height of 1.2 meters above ground level;
- To achieve free field measurement conditions, the meter was placed at a distance from any reflective surfaces, and the measured noise levels were then corrected by adding +3 dB(A);
- The battery's condition was examined to guarantee the proper operation of the meter;
- The settings for parameters like frequency weighting, time weighting, and measurement duration were established as detailed below:
 - frequency weighting: A
 - time weighting: Fast
 - time measurement: Leq(30 min.) dB(A)
- Noise levels were measured as six consecutive Leq, 5-minute readings during the hours when restrictions did not apply (specifically, from 0700 to 1900 hrs on normal weekdays).

- Calibration of the meter was performed before and after each noise measurement session using a Calibrator set to 94.0 dB at 1000 Hz. Should there be a discrepancy greater than 1.0 dB in calibration levels pre- and post-measurement, the data would be deemed invalid. A repeat measurement would then be necessary following recalibration or repair of the equipment.
- Throughout the monitoring period, parameters such as Leq, L90, and L10 were documented. Observations regarding site conditions and noise origins were also noted on a standard recording form.
- Noise measurements were temporarily halted during instances of significant intrusive noise (for example, barking dogs or helicopter sounds), where feasible. An observation record for the measurement period was to be provided.
- Noise monitoring was suspended in conditions of fog, rain, or when wind speeds were consistently above 5 m/s, or during gusts surpassing 10 m/s. Wind speeds were verified using a portable anemometer capable of measuring speed in meters per second (m/s).

Maintenance and Calibration

- 3.6 Every three months, the microphone head of the sound level meter and the calibrator was gently wiped clean using a soft fabric.
- 3.7 Annually the sound level meter and calibrator underwent inspection and calibration.
- 3.8 Before and after conducting each noise measurement, the precision of the sound level meter must be verified with an acoustic calibrator that produces a set sound pressure level at a specific frequency. Only when the pre- and post-measurement calibration levels are within a 1.0 dB range of each other will the measurements be considered valid.

Results and Observations

- 3.9 **Table 3.4** provides a summary of the noise monitoring outcomes. For an in-depth account and visual depiction of the noise monitoring, refer to **Appendix F**. A summary of the meteorological data for the reporting period is compiled in **Appendix G**.

Table 3.4 Summary Table of Noise Monitoring Results during the Reporting Month

Monitoring Station	Average	Range	Baseline Level	Limit Level
	Leq (30 min) dB(A)	Leq (30 min) dB(A)	dB(A)	dB(A)
NM9 ^[1]	60.1	48.5-67.5	55.9	75
NM10 ^[1]	57.1	40.0-66.6	52.8	
NM11	60.3	47.7-70.2	46.4	
NM12	58.3	47.5-62.9	54.7	
NM13 ^[1]	59.1	39.3-69.4	61.3	

NM14 ^[1]	61.4	41.6-72.7	59.6	
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Remarks: [1]: Correction of +3dB (A) for Free-field Measurement.

- 3.10 Noise monitoring related to construction activities took place according to the planned schedule for the month reported. There were no instances where the Action/Limit Levels were surpassed. A summary of exceedance records for the reporting month can be found in **Appendix J**.
- 3.11 Based on observations made in the field, the primary sources of noise detected at the allocated noise monitoring stations during the reporting month are as outlined below:

Table 3.5 Observation at Noise Monitoring Stations

Monitoring Station	Major Noise Source
NM9	Loading & unloading, Road traffic, Excavation works
NM10	Loading & unloading, Road traffic, Excavation works
NM11	Road traffic
NM12	Loading & unloading, Road traffic
NM13	Loading & unloading, Road traffic
NM14	Dog barking, Road traffic

Event and Action Plan

- 3.12 If any non-compliance with the criteria related to the project arises, measures will be taken following the procedures outlined in the Event Action Plan provided in **Appendix I**.

4 AIR QUALITY MONITORING

Monitoring Requirements

- 4.1 As per the EM&A Manual, 1-hour Total Suspended Particulates (TSP) monitoring was carried out to keep track of the air quality associated with the Works Contracts. The predetermined Action/Limit Levels for the air quality monitoring activities are detailed in **Appendix B**.
- 4.2 Monitoring for 1-hour Total Suspended Particulates (TSP) impacts was performed at a minimum of three times within each six-day period at a designated air quality monitoring station.

Monitoring Location

- 4.3 In line with Section 2.2.5 of the EM&A Manual, impact air quality monitoring took place at two specified monitoring stations for the Project, as depicted in Figure 2. The positions of the air quality monitoring stations are detailed in **Table 4.1**.

Table 4.1 Location for Air Quality Monitoring Stations

Monitoring Station	Location of Measurement
AM1	Village House, Kong Nga Po
AM2	Village House, Kong Nga Po

Monitoring Equipment

- 4.4 Due to the denial by local villagers to set up a High-Volume Sampler (HVS) for 1-hour Total Suspended Particulates (TSP) monitoring at the chosen locations and the inability to secure an electricity supply for the HVS, direct-reading dust meters were utilized instead to conduct the 1-hour TSP monitoring. Direct-reading dust meters are widely accepted instruments for measuring 1-hour TSP levels and have been used in the same infrastructure project. The issue to use direct-reading dust meters was presented to the Independent Environmental Checker (IEC). The application of the direct-reading dust meter allows for immediate and straightforward results, facilitating timely EM&A reporting and the execution of the event and action plan. To ensure the validity and accuracy of the readings obtained by the direct-reading method, the HVS performed 1-hour sampling on a bi-monthly schedule.
- 4.5 **Table 4.2** provides a summary of the apparatus employed in the impact air quality monitoring program. The calibration was conducted by Aquality Testconsult Limited. Copies of the calibration certificates for the equipment can be found in **Appendix C**.

Table 4.2 Air Quality Monitoring Equipment

Equipment	Model and Serial No.	Quantity	The valid period is until
Dust Monitor	AEROCET-831/ F 12045	1	10 May 2027
Dust Monitor	AEROCET-831/ F12258	1	2 Jun 2027

4.6 Weather data was sourced from the "Hong Kong Observatory - General Weather Conditions during the Monitoring Period (July 2026)" detailed in **Appendix G**, which was used as a substitute approach to acquire representative wind data.

4.7 During the monitoring days, the field staff also documented the prevailing weather conditions, such as whether it was sunny, cloudy, fine or rainy.

Monitoring Parameters, Frequency and Duration

4.8 **Table 4.3** encapsulates the monitoring variables and the regularity of impact dust assessments conducted throughout the Works Contracts operations. The schedule for air quality observation for the month in question is presented in **Appendix D**.

Table 4.3 Impact Dust Monitoring Parameters, Frequency and Duration

Parameters	Frequency
1-hr TSP	Three times/ 6 days

Monitoring Methodology and QA/QC Procedure

1-hour TSP Air Quality Monitoring

Instrumentation

4.9 The air quality monitoring utilized a direct reading dust meter, as indicated in **Table 4.2**.

4.10 The procedures for operating the dust meter adhere to the guidelines set forth in the Manufacturer's Instruction Manual, as described below:

- The 1-hour dust meter is placed at least 1.3 meters above ground.
- Press and hold the Power key momentarily to power on the unit and make sure that the battery level was not flash or in low level.
- Allow the instrument to stand for about 3 second to display the Sample Screen minutes.
- Press the START / STOP key to run the internal vacuum pump for 1 minute and ready to use.
- Use the select dial to select the PM range and press the START / STOP key to start a measurement.
- Finally, push the START/STOP key to stop the measuring after 3-hour sampling.

-Information such as sampling date, time, value and site condition were recorded during the monitoring period.

-All data were recorded in the data logger for further data processing.

Maintenance/Calibration

4.11 The dust meter required the following maintenance and calibration:

- The dust meter must be checked and calibrated against a High Volume Sampler (HVS) to validate the precision and accuracy of the readings obtained through the direct reading method.
- The correlation between the dust meter and HVS in measuring TSP was established by directly comparing the mass of dust particles collected on a filter paper by the HVS against the dust meter's reading. For accurate calibration, both the dust meter and the HVS should be turned on and off at the same location and at the same time.
- The correlation coefficient was verified to confirm the relationship between the readings from the dust meter and the HVS. This correlation factor was ascertained by comparing the outcomes from both the HVS and the dust meter.
- Prior to the initiation of dust monitoring, a check must be conducted to verify that all equipment is operational and has the necessary power supply. A zero count test was performed before and after each monitoring session to ensure accuracy.

Results and Observations

4.12 The outcomes of the 1-hour TSP monitoring are condensed in **Table 4.4**. For a comprehensive view, detailed results and graphical representations of the 1-hour TSP monitoring data can be found in **Appendix E**.

Table 4.4 Summary Table of 1-hour TSP Monitoring Results during the Reporting Month

Monitoring Station	Concentration		Action Level, µg/m³	Limit Level, µg/m³
	(µg/m³)			
	Average	Range		
AM1	136	17-236	308	500
AM2	108	29-229	311	

4.13 The 1-hour TSP monitoring took place according to the planned timetable for the reporting month, and there were no instances of exceeding the established Action/Limit Levels.

4.14 Based on field observations, the primary sources of dust at the specified air quality monitoring stations during the reporting month are listed in **Table 4.5**.

Table 4.5 Observation at Dust Monitoring Stations

Monitoring Station	Major Dust Source
AM1	Equipment operation and movement / road traffic, exposed site area, site vehicle
AM2	Road traffic, exposed site area, site vehicle / equipment operation and movement, vehicle / equipment operation and movement at warehouse nearby

Event and Action Plan

- 4.15 In the event of a project-related violation of the criteria, measures will be taken as specified by the Event Action Plan detailed in **Appendix I**.

5 LANDSCAPE AND VISUAL MONITORING

Monitoring Requirements

- 5.1 The EIA Report recommends implementing strategies to mitigate impacts on landscape and visual resources throughout both the construction and operational phases of the Project.
- 5.2 The execution and upkeep of compensatory planting for landscaping are critical components of this process and must be monitored to confirm their complete fulfillment. It is essential to promptly address any potential clashes between the proposed landscaping efforts and other Project tasks or operational needs to ensure that the mitigation measures' objectives are not compromised. Furthermore, the enforcement of the mitigation measures advised by the EIA will be tracked continuously through the site audit program for the construction phase.
- 5.3 The Environmental Team (ET) carried out a fortnightly review of the execution of measures aimed at mitigating landscape and visual impacts as part of the weekly site audits. The findings and observations from these audit sessions are encapsulated in **Table 5.1**, while the status of implementation can be found detailed in **Appendix K**.

6 ECOLOGICAL MONITORING

Monitoring of Flora Species of Conservation Interest

- 6.1 In line with Section 8.3.2 of the EM&A Manual, a temporary protective barrier must be installed around the plant species of conservation significance identified in the detailed vegetation survey throughout the construction phase. This barrier should be well-maintained and regularly checked to ensure its effectiveness. Monthly checks of each plant species of conservation interest, as pinpointed in the detailed vegetation survey, are required during the construction phase to ensure that these species remain unaffected by the project's construction activities.
- 6.2 The monitoring aims to oversee the prompt execution of suitable environmental management practices and the application of mitigation measures concerning the preserved and relocated specimens of flora species of conservation interest. The correct setup and upkeep of the temporary protective fence surrounding these specimens were examined to assess its efficacy. The protective measures outlined in the approved transplantation proposal's implementation schedule were supervised.
- 6.3 As per the sanctioned detailed vegetation survey report and transplantation proposal, it was determined that 71 *Brainea insignis* specimens, 41 *Spiranthes sinensis* specimens, and 3 *Aquilaria sinensis* specimens should be relocated to the designated receiving site. Additionally, it was decided to preserve in situ 51 *Keteleeria fortunei* specimens, along with 26 small seedlings of *Keteleeria fortunei* and 7 small seedlings of *Aquilaria sinensis*, in the vicinity of Kong Nga Po Road near the Police Dog Unit and the Force Search Unit Training School.

Post-Transplantation Monitoring and Maintenance Programme

- 6.4 In line with the accepted transplantation proposal, the Contractor is mandated to carry out post-transplantation monitoring weekly for the first three months, and then monthly for the remainder of the 12-month establishment phase as well as the subsequent post-establishment phase, continuing until the construction phase of the Project concludes. This routine monitoring is critical for promptly identifying the growth condition of the transplanted species, any signs of construction work within or in the vicinity of the receptor site, and any changes in the environmental conditions of the receptor site.
- 6.5 For the initial year of acclimatization, it was advised to carry out maintenance activities to promote the robust growth of the transplanted species. Considering the state of the transplanted organisms following the 12-month establishment period, it was advised that maintenance activities continue through the Post-establishment Period until the completion of the Construction Phase. It was recommended to water the transplants daily for the first three months following the move, as well as throughout periods of drought, to maintain soil moisture. Additional maintenance tasks, such as mulching and weeding, should be performed as necessary.

Results and Observations

6.6 During the reporting month, the Contractor carried out monthly evaluations of the flora species of conservation interest on the 31 July 2026. The enforcement of the protective measures detailed in the approved transplantation proposal was reviewed, along with the maintenance of the temporary protective fencing. **Appendix H** contains the photographic documentation and checklists from the monthly assessments. The health of the transplanted and retained species was generally observed to be average to poor. The Contractor was urged to keep a vigilant eye on the transplanted species and to implement the protective measures as specified in the approved transplantation proposal to safeguard these species. Furthermore, the Contractor was given the following directives:

- 1) To provide new identification tags for any *Brainea insignis* that were missing them;
- 2) To substitute any plant labels at the receptor site that had become illegible due to fading;
- 3) To refer to the soil improvement guidelines published by the Greening, Landscape and Tree Management Section (GLTMS) of the Development Bureau (2022) for application in the monitoring and upkeep of the transplanted plant species;
- 4) To set up shade nets;
- 5) To ensure the soil remains moist by adhering to the necessary daily watering schedule.

Transplanted *Brainea insignis* and *Spiranthes sinensis*

6.7 From May 21st to 28th, 2020, 71 *Brainea insignis* specimens and 41 *Spiranthes sinensis* specimens were relocated to the receptor site. The detailed account of the transplantation process was compiled in a Transplantation Report and forwarded to ET(Wellab), IEC(Acuity), and the Supervisor (AECOM) for their examination and documentation. Monitoring after transplantation took place weekly for the initial three months (from June to August 2020) and then monthly throughout the subsequent 12-month establishment period, as well as the post-establishment phase, culminating with the conclusion of the construction phase of the Project. The Contractor was responsible for tracking the health of the transplanted species and carried out maintenance measures such as watering, mulching, and weeding during the first year to nurture the transplanted species' healthy development. Monitoring of the transplanted *Brainea insignis* and *Spiranthes sinensis* took place on the 31 July 2026, within the reporting period, with the findings documented in **Appendix H**. Particular attention was given to the transplanted *Brainea insignis* specimens that were impacted by a bushfire on February 2nd, 2021, with their progress detailed in the post-transplantation monitoring records. The health of the preserved species was noted to be generally fair. The Contractor was advised to maintain vigilant monitoring of these species and to enforce the stipulated protective measures to ensure their continued preservation.

6.8 During the monthly checks, it was observed that there were no construction operations or storage of equipment taking place within the receptor site. The temporary protective barrier had been correctly installed and was being well-maintained to safeguard the transplanted species.

Precautionary Measure for Butterfly Species of Conservation Interest

- 6.9 As stipulated by FEP Condition 2.17, to reduce the impact on butterfly species of conservation concern, efforts shall be made to improve the new grassland habitats within the Project site. This enhancement shall be achieved by cultivating suitable plant species that serve as the larval food source for butterflies of conservation interest, like the Small Three-Ring, thereby supporting the well-being of these species.
- 6.10 The restoration of grassland zones within the Project must be completed prior to the initiation of the Project's operational phase. Information regarding the plant species to be used as larval food plants for butterflies, along with the design and execution details, will be subsequently provided under the building works contract of ArchSD.

Precautionary Measures to Minimize Indirect Disturbance on Ecology

- 6.11 As outlined in Section 9.7.3 of the EIA Report, implementing mitigation strategies for air, noise, water, waste, and landscaping can serve as preventative actions to avert and lessen any secondary effects of disturbance or pollution resulting from construction activities on the surrounding ecology and habitats outside the site. The Environmental Team (ET) conducted weekly site audits to oversee the prompt adoption of appropriate environmental management practices and the execution of mitigation measures at the Project site. The findings from these audits are consolidated in Section 7.3.

7 ENVIRONMENTAL SITE INSPECTION

Site Audits

- 7.1 The Environmental Team (ET) conducted site audits weekly to oversee the prompt adoption of appropriate environmental management practices and the execution of mitigation measures at the Contract site.
- 7.2 The Environmental Team (ET), along with representatives from the Client and the Contractor, conducted site audits on 3, 9, 18, 21 July 2026 of the reported month in 2026.
- 7.3 In the site inspections conducted over the reporting period, there were no particular environmental concerns noted. It should be recognized that these observations pertain solely to the moments of inspection. The findings and advice from these audits are compiled in **Table 5.1**. The absence of identified environmental issues during the joint site inspections does not exempt the Contractor from their obligation to adhere strictly to all legal requirements, the Particular Specifications, and the Environmental Monitoring and Audit (EM&A) Manual.

Table 5.1 Observations of Weekly site Inspection and advice

Parameters	Date	Observations	Advice
Air Quality Impact Construction Phase	3-7-2026	The construction activity is situated near a forested area. The exposed soil may generate fugitive dust during windy conditions or on dry days. This dust can settle on nearby leaves, potentially impairing photosynthesis	The exposed soil is covered by sufficient impervious sheets.
Noise Impact Construction Phase	9-7-2026	QPME label missed	QPME label shown
Waste Management Implications Construction Phase	18-7-2026	The accumulation of cement has resulted in the formation of hardened cement waste.	Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste
Water Quality Impact Construction Phase	21-7-2026	Gray water may flow into the gullies during rainfall	To prevent the ingress of gray water, the gullies shall be fully covered

Implementation Status of Environmental Mitigation Measures

- 7.4 In accordance with the EIA Report and the Project's EM&A Manual, the outlined mitigation measures are recommended to be implemented throughout the construction phase. An overview of the Environmental Mitigation Implementation Schedule (EMIS) is available in **Appendix K**.

Solid and Liquid Waste Management Status

- 7.5 Pursuant to the EM&A Manual, waste management practices were reviewed in the weekly site audits to assess compliance with the Project's Waste Management Plan (WMP) and pertinent legal and contractual obligations. The auditing process encompassed the examination of waste handling, storage, transport, and disposal methods.
- 7.6 The Contractor has appointed Environmental Officers on-site to manage environmental aspects, implement pollution control strategies, maintain proper site conduct, and educate workers on waste management. Efforts to reduce waste production include actively using Construction and Demolition (C&D) materials. Excavated materials have been sorted and screened on-site to salvage any recyclables. Non-reactive C&D materials were utilized on-site for backfill and to construct the haul road surface. Furthermore, inert materials from excavation activities were repurposed as fill in other local projects. Excess inert C&D materials were sent to the Government's public fill reception facilities (PFRFs) for use in other projects. To oversee the disposal of inert and non-inert C&D materials and prevent illegal dumping, a system is in place where all materials are weighed by a weighbridge before leaving the site, and the Trip Ticket System is rigorously enforced.
- 7.7 Contractor is encouraged to reduce waste production by recycling or reusing materials. It is imperative that all the mitigation strategies outlined in the EM&A Manual and the waste management plans be thoroughly executed. A summary of the progress in implementing waste management and reduction strategies is provided in **Appendix K**.
- 7.8 This Project produces inert Construction and Demolition (C&D) materials as well as non-inert C&D materials. The non-inert variety consists of general refuse and other waste materials that cannot be repurposed or recycled, necessitating disposal at assigned landfill locations. Data detailing the volume of waste resulting from the Project's construction activities over the reporting period can be found in **Appendix L**.

8 ENVIRONMENTAL NON-CONFORMANCE

Summary of Exceedances

- 8.1 During the reporting month, there were no instances where the air quality exceeded the established Action and Limit Levels.
- 8.2 There were no instances of construction noise surpassing the designated Action and Limit Levels in the reporting period.
- 8.3 If the monitoring data from any specific stations reveal that environmental parameters have surpassed the Action/Limit Levels, then the procedures outlined in the Event and Action Plans in **Appendix I** should be executed. A summary of any exceedance records for the reporting month can be found in **Appendix J**.

Summary of Environmental Non-Compliance

- 8.4 There were no records of environmental compliance breaches during the reported month.

Summary of Environmental Complaint

- 8.5 In the month under review, no complaints were registered. A log of all complaints accumulated since the start of the Project is compiled in **Appendix M**.

Summary of Environmental Summon and Successful Prosecution

- 8.6 Since the beginning of the Project, there have been no instances of successful environmental prosecution or receipt of summons. A comprehensive record of all environmental summonses and successful prosecutions since the Project's inception is documented in **Appendix N**.

9 FUTURE KEY ISSUES

Key Issues in the Coming Three Months

- 9.1 **Appendix A** contains the provisional construction schedules for the Project. Over the next three months, the principal construction tasks to be carried out will include:
1. Open cut excavation
 2. Removal of soil
 3. Construction of substructure and superstructure
 4. Backfilling
 5. U.U. Lead in and Pipe Duct Connection
 6. E&M installation
- 9.2 Referring to the site layout plan found in **Appendix A**, which details the expected construction activities for the next three months, the primary environmental concerns related to these activities are likely to be construction dust, noise, water quality, waste management, landscape and visual aesthetics, and ecological impacts. The anticipated environmental effects have been factored into the mitigation strategies planned for the upcoming months.
- 9.3 The Contractor has advised mitigation measures for the next three months, which the Environmental Team (ET), Independent Environmental Checker (IEC), and the Client's Representative have reviewed through email correspondence during site audits. The Proactive Environmental Protection Proforma, which outlines the key site activities, potential environmental impacts, and advised mitigation strategies, has been examined and verified by the IEC and is displayed in **Appendix A**.
- 9.4 During construction and in periods of dry weather, dust can arise from work activities and uncovered site areas. To mitigate dust emissions that could affect nearby villages, the Contractor is advised to diligently apply air quality control measures as outlined in the layout plan in **Appendix A**, to the greatest extent possible. Moreover, the Contractor is reminded to adhere to the Project Implementation Schedule detailed in the approved EIA report/EM&A Manual, implementing suitable dust suppression tactics to curb emissions from intensive construction tasks such as ground excavation and earth moving. This includes managing all active work areas, bare site surfaces, and unpaved roads, especially under dry conditions, by covering 80% of stockpiled materials with impervious coverings and by moistening dusty substances with water just before loading and transfer activities. This ensures materials remain damp during handling in stockpile regions. Additionally, the Contractor must adhere to the prescribed dust control methods under the Air Pollution Control (Construction Dust) Regulation to prevent negative dust impacts from the Project's construction activities.
- 9.5 Furthermore, construction noise represents a significant environmental concern during the Project's development. It is important to implement noise reduction strategies, such as utilizing

quiet machinery and installing noise barriers where relevant. The Contractor has been prompted to regularly inspect and upkeep the sound-dampening materials on noisy sections of plant and machinery, ensuring there are no openings in the noise barriers. They should also actively recognize any potential construction noise impacts to Noise Sensitive Receivers (NSRs) and introduce adequate mitigation measures when required. Additionally, residents in the nearby Kong Nga Po village should be informed in advance about any potentially noisy activities at the work site.

- 9.6 The Contractor is advised to uphold measures that protect water quality throughout the construction process. This includes constructing barriers such as dikes or embankments to prevent flooding around the perimeters of areas where soil is being moved or excavated. Provision should be made for temporary channels to direct runoff effectively into a designated watercourse via a trap designed to capture sediment from the site. These sediment/silt traps should also be integrated into the permanent drainage systems to improve the settling of particulates. It is essential to utilize effective silt removal systems to ensure that the effluent treated by the wastewater treatment plant complies with the standards specified in the WPCO licenses. The Wastewater Discharge Layout Plan, as shown in **Appendix Q** and provided by the Contractor, outlines the specific pathways through which wastewater is to be conveyed from its source to a treatment facility or point of discharge

Monitoring Schedule for the Next Month

- 9.7 **Appendix D** displays the provisional schedule for environmental monitoring activities planned for the upcoming month.

10 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 10.1 This Monthly EM&A Report details the environmental monitoring and audit (EM&A) activities conducted in July 2026, following the guidelines set out in the EM&A Manual.
- 10.2 During the month in question, air quality monitoring did not register any instances of surpassing the Action/Limit Levels.
- 10.3 No instances of construction noise exceeding the established Action/Limit Levels were documented in the reporting month's monitoring records.
- 10.4 Site inspections focusing on environmental aspects took place on the on 3, 9, 18, 21 July 2026. Additionally, monitoring of landscape and visual impacts was performed on 3, 9, 18, 21 July 2026, and ecological monitoring was conducted on the 27 July 2026 by ETL within the reporting month. The Contractor also conducted monitoring on 31 July 2026. There were no records of environmental non-compliance for the reporting month. It should be noted that the absence of any particular environmental issues during the joint site inspections does not exempt the Contractor from their obligation to adhere fully to all legal requirements, the specifications outlined in the contract, and the procedures in the EM&A Manual.
- 10.5 During the reporting month, there were no complaints lodged, nor were there any notices of summons or records of successful legal actions received.
- 10.6 The Environmental Team (ET) will persist in overseeing the Environmental Monitoring and Audit (EM&A) program. All environmental obligations are fulfilled, and the necessary mitigation measures are properly executed.

Recommendations

- 10.7 Based on the environmental audits conducted during the reporting month, the subsequent advice was put forward:

Air Quality Impact

- To enhance the dust suppression measures including watering for the dust generation works, exposed site area and haul road;
- To minimize the indirect impacts on air quality resulting from the operation of machineries on the construction site, one of the measures to be adopted is the use of biodiesel B100; and
- To regular check the valid NRMM labels are properly displayed on the regulated machines and non-road vehicles

Construction Noise

- To refer to the ISO 12001:1996 or other comprehensive practices and subsequently develop a thorough inspection and maintenance protocol for the plant and equipment, maintaining a focus on Noise Control; and
- To maintain temporary noise barriers for operations of noisy equipment near the noise sensitive receivers, if necessary.

Water Impact

- To maintain the cover for open stockpile of and exposed slope;
- To keep reviewing and updating temporary drainage system;
- To maintain the earth bunds or sand bag barriers on site to direct stormwater to silt removal facilities; and
- To divert the muddy water at the retention pond to the wetsep for treatment before discharging out.

Waste/Chemical Management

- To check for any accumulation of waste materials or rubbish on site; and
- To avoid improper handling, storage and dispose of oil drums or chemical containers on site.

Ecology

- To maintain soil moisture, daily watering is required;
- To install a shaded net;
- To refer to the Guidelines on Soil Improvement issued by the Greening, Landscape and Tree Management Section (GLTMS) of the Development Bureau (2022) for the effective monitoring and maintenance of transplanted flora species; and
- The wild plants that are growing in undesirable areas should be removed, as they compete with the cultivated flora species of conservation interest.

Landscape and Visual

- To remove the construction materials within the tree protection zone; and
- To keep the tree protection zone large enough to protect the trees.