
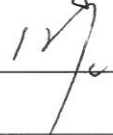


Food and Environmental Hygiene Department

Quotation Contract No.: CPM301_02/14

**Mui Wo Lai Chi Yuen
Cemetery Extension****Environmental Monitoring and Audit Manual**

March 2017

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1 INTRODUCTION

1.1 Background

- 1.1.1 With a growing and aging population in Hong Kong, the numbers of deaths and cremations have been rising gradually year by year, leading to a corresponding increase in the demand for public niches. There is currently no public columbarium facility on Lantau Island. Local villagers and residents in Lantau Island of Islands District can only choose from public niches in Peng Chau or Lamma Island (in addition to NT/Urban niches) if cremation is adopted, although there are two public cemeteries on the Island, namely, Tai O Cemetery and Lai Chi Yuen Cemetery where only coffin burial or urn burial are available. It is against this background that Members of Islands District Council and Mui Wo Rural Committee strongly requested public niches be provided on Lantau Island to cope with the need of local villagers and residents.
- 1.1.2 In this regard, the Food and Environmental Hygiene Department (FEHD) proposed an extension of the Mui Wo Lai Chi Yuen Cemetery (hereafter referred to as “the Project”) to construct an elevated platform of around 225m² within the existing Lai Chi Yuen Cemetery boundary to accommodate the outdoor niches and the ancillary facilities including one joss paper burner (with a fresh water tank and a sewage holding tank for supporting its operation) and planters. Also, a site access of 7.5m², which is indispensable for the development, will be constructed just outside the cemetery boundary due to lack of suitable space for accommodating it in the cemetery. Location and works boundary of the Project are shown in **Figure 1.1**.
- 1.1.3 The Project is classified as a Designated Project (DP) under Category Q.1 – the Project is wholly within an existing country park, Part I in Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO).
- 1.1.4 An application for an Environmental Impact Assessment (EIA) Study Brief under Section 5(1) of the EIAO was made to Environmental Protection Department (EPD) and the EIA Study Brief No. ESB-288/2015 for the Project was issued under the EIAO. AECOM Asia Company Limited (AECOM) was commissioned by ArchSD as the Consultant to conduct this EIA study for the Project.

1.2 Project Description

- 1.2.1 The Project site is located at a slope next to the entrance staircase of the existing Lai Chi Yuen Cemetery with a total area of 232.5m². An elevated platform of around 225m² supported by structural columns will be constructed to accommodate some 790 niches. All the niches will be in outdoor setting. The ancillary facilities like a joss paper burner (with a fresh water tank and a sewage holding tank for supporting its operation) and planters will be provided as well.
- 1.2.2 A site access of 7.5m² will be constructed just outside the cemetery boundary. The site access area has however been minimized to allow only pedestrian access without compromising the wheelchair access requirement.
- 1.2.3 Construction of the Project will commence tentatively in February 2018 with completion in September 2019.

1.3 Purpose of the Manual

- 1.3.1 The purpose of this EM&A Manual (hereinafter refer to as the “Manual”) is to guide the setup of an EM&A programme to ensure compliance with the recommendations in the EIA study covering the provision of the new columbarium at Lai Chi Yuen Cemetery in Mui Wo, Lantau, to assess the effectiveness of the recommended mitigation measures and to identify any further need for additional mitigation measures or remedial action. This Manual outlines the monitoring and audit programme for both construction and operational phases of the Project. It aims to provide systematic procedures for monitoring, auditing and minimizing environmental impacts associated with the construction and operational phases.

1.3.2 The Manual provides specific information, guidance and instruction to personnel in charged with environmental responsibilities and undertaking environmental monitoring and auditing works for the Project. It also provides systematic procedures for monitoring, auditing and minimizing environmental impacts associated with the construction activities.

1.3.3 The EM&A programme contain the following information:

- Project organisation for the Project;
- Responsibilities of the Contractor, the Engineer or Engineer's Representative (ER), Environmental Team (ET) and Independent Environmental Checker (IEC) with respect to the environmental monitoring and audit requirements during the course of the Project;
- The basis for, and description of the broad approach underlying the EM&A programme;
- Requirements with respect to the construction programme schedule and the necessary environmental monitoring and audit programme to track the varying environmental impact;
- Details of the methodologies to be adopted, including all field laboratories and analytical procedures, and details on quality assurance and quality control programme;
- Definition of Action and Limit levels;
- Establishment of Event and Action plans;
- Requirements for reviewing pollution sources and working procedures required in the event of non-compliance with the environmental criteria and complaints;
- Requirements for presentation of environmental monitoring and audit data and appropriate reporting procedures; and
- Requirements for review of EIA predictions and the effectiveness of the mitigation measures / environmental management systems and the EM&A programme.

1.4 Project Organisation

1.4.1 Involvement of relevant parties in a collaborative and interactive manner is essential for the implementation of the recommended EM&A programme. The following sections outline the primary responsibilities and duties of the key EM&A programme participants. The proposed project organisation and lines of communication with respect to EM&A works are shown in **Appendix A**.

The Contractor

1.4.2 The Contractor shall report to the ER. The duties and responsibilities of the Contractor comprise the following:

- Work within the scope of the contraction contract and other tender conditions with respect to environmental requirements;
- Operate and strictly adhere to the guidelines and requirements in this EM&A programme and contract specifications;
- Provide assistance to ET in carrying out monitoring and auditing;
- Participate in the site inspections undertaken by ET as required, and undertake correction actions;
- Provide information / advice to ET regarding works activities which may contribute, or be continuing to the generation of adverse environmental conditions;
- Submit proposals on mitigation measures in case of exceedance of Action and Limit levels in accordance with the Event / Action Plans;
- Implement measures to reduce impact where Action and Limit levels are exceeded; and
- Adhere to the procedures for carrying out complaint investigation.

1.4.3 The Contractor shall also participate in the environmental performance review undertaken by the ER and undertaken any corrective actions as instructed by the ER.

Environmental Team (ET)

- 1.4.4 The ET Leader and the ET shall be employed to conduct the EM&A programme and ensure the Contractor's compliance with the project's environmental performance requirements during construction. The ET Leader or the ET shall be an independent party from the IEC and have relevant professional qualifications, or have sufficient relevant EM&A experience subject to approval of the ER and the Environmental Protection Department (EPD). The ET shall be led and managed by the ET leader. The ET leader shall possess at least 7 years' experience in EM&A and/or environmental management.
- 1.4.5 The duties and responsibilities of the ET are:
- Monitor various environmental parameters as required in this EM&A Manual;
 - Analyse the environmental monitoring and audit data and review the success of EM&A programme to cost-effectively confirm the adequacy of mitigation measures implemented and the validity of the EIA predictions and to identify any adverse environmental impacts arising;
 - Carry out regular site inspection to investigate and audit the Contractors' site practice, equipment and work methodologies with respect to pollution control and environmental mitigation, and effect proactive action to pre-empt problems; carry out ad hoc site inspections if significant environmental problems are identified;
 - Audit and prepare monitoring and audit reports on the environmental monitoring data and site environmental conditions;
 - Report on the environmental monitoring and audit results to the IEC, Contractor, the ER and EPD or its delegated representative;
 - Recommend suitable mitigation measures to the Contractor in the case of exceedance of Action and Limit levels in accordance with the Event and Action Plans;
 - Advice to the Contractor on environmental improvement, awareness, enhancement matters, etc. on site; and
 - Adhere to the procedures for carrying out complaint investigation in accordance with Section 9 of this Manual.

Engineer's Representative (ER)

- 1.4.6 The ER shall appoint an appropriate member of the resident site staff, who shall:
- Monitor the contractor's compliance with the contract specifications, including the EM&A programme, and the effective implementation and operation of environmental mitigation measures in a timely manner;
 - Ensure that impact monitoring is conducted at the correct locations at the correct frequency as identified in the EM&A programme;
 - Instruct the Contractor to follow the agreed protocols or those in the Contract Specifications in the event of exceedances or complaints;
 - Review the programme of works with a view to identifying any potential environmental impacts before they arise;
 - Check that mitigation measures that have been recommended in the EIA Report, this document and contract documents, or as required, are correctly implemented in a timely manner, when necessary;
 - Report the findings of site audits and other environmental performance reviews to the ArchSD;
 - Verify the environmental acceptability of permanent and temporary works, relevant design plans and submissions; and
 - Comply with the agreed Event Contingency Plan in the event of any exceedance.

Independent Environmental Checker (IEC)

- 1.4.7 The IEC shall advise the ER on environmental issues related to the Project. The IEC shall not be in any way an associated body of the ER, the Contractor or the ET for the Project. The IEC shall be empowered to audit from an independent viewpoint the environmental performance during the construction of the Project. The IEC shall be a person who has relevant professional qualifications in environmental control and at least 7 years' experience in EM&A and environmental management.
- 1.4.8 The IEC shall be responsible for the duties defined in this Manual, and shall audit the overall EM&A programme, including the implementation of all environmental mitigation measures, submissions required in this Manual, as well as any other relevant submissions required under the Environmental Permit (EP). The IEC shall be responsible for verifying the environmental acceptability of permanent and temporary works, relevant design plans and submissions under the EP. The IEC shall verify the logbook prepared and kept by the ET Leader. The IEC shall notify EPD by fax, within 24 hours of receipt of notification from the ET Leader of any such instance or circumstance or change of circumstances or non-compliance with the EIA Report or the EP, which might affect the monitoring or control of adverse environmental impact.
- 1.4.9 The main duties of the IEC are to carry out independent environmental audit of the Project. This shall include, inter alias, the followings:
- Review and audit in an independent, objective and professional manner in all aspects of the EM&A programme;
 - Validate and confirm the accuracy of monitoring results, appropriateness of monitoring equipment, monitoring locations with reference to the locations of the nearby sensitive receivers, and monitoring procedures;
 - Carry out random sample check and audit on monitoring data and sampling procedures, etc.;
 - Conduct random site inspection (at least once a month);
 - Audit the EIA recommendations and EP requirements against the status of implementation of environmental protection measures on site;
 - Review the effectiveness of environmental mitigation measures and Project environmental performance;
 - On an as needed basis, verify and certify the environmental acceptability of the construction methodology (both temporary and permanent works), relevant design plans and submissions under the EP. When necessary, the IEC agree in consultation with the ET Leader and the Contractor the least impact alternative;
 - Verify investigation results of complaint cases and the effectiveness of corrective measures;
 - Verify EM&A reports submitted and verified by the ET Leader; and
 - Feedback audit results to ER / ET by signing accordingly to the Event / Action Plans specified in the Manual.

2 AIR QUALITY

2.1 Introduction

- 2.1.1 Potential air quality impacts arising from the construction and operational phases of the Project were assessed in the EIA Report. Based on the assessment results, no adverse air quality impact from the Project would be anticipated with the implementation of dust suppression measures during construction phase and the incorporation of flue gas treatment system, good operational practices and administrative measures to the proposed joss paper burner during operational phase. No air quality monitoring is therefore deemed necessary. Nevertheless, regular site environmental audit is recommended to ensure the implementation of the recommended mitigation measures during construction phase.

2.2 Mitigation Measures

- 2.2.1 Mitigation measures for construction phase and operational phase air quality impacts have been recommended in the EIA Report. All the recommended mitigation measures are detailed in the implementation schedule in **Appendix B**. The Contractor should be responsible for the design and implementation of the mitigation measures.

2.3 Audit Requirements

- 2.3.1 Regular site inspection and audit at least once per week should be conducted during the construction phase of the Project to ensure the recommended mitigation measures are properly implemented.

3 NOISE

3.1 Introduction

- 3.1.1 Potential noise impacts arising from the construction and operational phases of the Project were assessed in the EIA Report. The assessment results indicated that no adverse noise impact from the construction and operation of the Project. No specific noise monitoring is therefore considered necessary for both construction and operational phases.

3.2 Mitigation Measures

Construction Phase

- 3.2.1 Since exceedance of the noise criteria from the construction of the Project was not predicted in the EIA Report, no specific noise mitigation measure was proposed. Nonetheless, good site practice and the noise control requirements stated in EPD's "Recommended Pollution Control Clauses for Construction Contracts" were recommended to minimise the potential noise nuisance during construction phase. Details of the recommended good site practices are presented in **Appendix B**.

Operational Phase

- 3.2.2 The fixed noise sources of the Project include two water pumps and a joss paper burner. The maximum permissible sound power levels of the identified fixed noise sources were predicted in the EIA Report. To ensure that the noise impact associated with the fixed plant operations would comply with the noise standards stipulated in the EIAO-TM and Noise Control Ordinance (NCO), the specified sound power levels should be implemented and refined by the Contractor as appropriate. The mitigation measures as recommended in the EIA Report for the fixed plant noise arising from the operation of the Project is presented in **Appendix B**.

3.3 Audit Requirements

- 3.3.1 Regular site environmental audit at least once per week during the construction phase of the Project should be conducted to ensure good site practices as listed in **Appendix B** and the noise control requirements stated in EPD's "Recommended Pollution Control Clauses for Construction Contracts" are implemented to further minimise the potential noise nuisance during construction phase.

4 HAZARD TO LIFE

4.1 Introduction

- 4.1.1 Potential hazard to life impacts arising from the construction and operational phases of the Project were addressed in Section 5 of the EIA Report. No specific monitoring or auditing requirement is deemed necessary for both construction and operational phases.

4.2 Mitigation Measures

Construction Phase

- 4.2.1 A number of good practices are proposed at construction stage to minimize the risk to the construction workers of the proposed Project. Details of the recommended good site practices and mitigation measures are presented in **Appendix B**.

Operational Phase

- 4.2.2 The Cost-Benefit Analysis demonstrates that proposed Project is compliant with the As Low As Reasonably Practicable (ALARP) principle. Nonetheless, good practice for operator is recommended to minimize the impact in case of chlorine accident as presented in **Appendix B**.

5 WATER QUALITY

5.1 Introduction

- 5.1.1 Potential water quality impacts arising from the construction and operational phases of the Project were identified and assessed in the EIA Report.
- 5.1.2 Construction site runoff, wastewater generated from general construction activities, accidental spillage of chemicals, and sewage effluent produced by on-site workforce would be the potential sources of water quality impacts arising from the construction of the Project. The identified potential source of impact on water quality during the operational phase of the Project would be the sewage generated from the visitors as well as other site runoff from the Project. The EIA concluded that with the implementation of the recommended mitigation measures and Best Management Practices, no significant water quality impact would be anticipated during construction and operational phases. No specific water quality monitoring is therefore considered necessary.

5.2 Mitigation Measures

Construction Phase

- 5.2.1 Water quality arising from construction activities would be well-controlled by implementing practices outlined in *ProPECC PN 1/94 Construction Site Drainage* and good management practices as detailed in **Appendix B**.

Operational Phase

- 5.2.2 Best Management Practices (BMPs) as detailed in **Appendix B** to reduce storm water and non-point source pollution have been proposed for the operation of the Project.

5.3 Audit Requirements

- 5.3.1 Weekly site audit should be conducted to ensure that the recommended mitigation measures for water quality impacts are fully implemented during construction phase of the Project.

6 WASTE MANAGEMENT IMPLICATION

6.1 Introduction

- 6.1.1 Potential waste management implication arising from the construction and operational phases of the Project were addressed in the EIA Report. Waste management during the construction phase will mainly be the responsibility of the Contractor, who should implement the mitigation measures recommended in the EIA report in order to minimise waste or resolve the issues associated with the management of wastes. The Contractor should also ensure that all wastes produced during the construction phase are handled, stored and disposed of in accordance with good waste management practices, relevant legislation and waste management guidelines.

6.2 Mitigation Measures

- 6.2.1 With the proper handling, storage and disposal of wastes arising from the construction of the Project, it is anticipated that the potential adverse environmental impacts would be avoided or minimised. During site inspections, the ER and ET should pay special attention to the issues relating to the waste management and check whether the Contractor has implemented the recommended good site practices and other mitigation measures as listed in **Appendix B**. The Contractor should submit a Waste Management Plan (WMP) prior to the commencement of construction work, in accordance with the ETWB TC(W) No. 19/2005 so as to provide an overall framework of Waste Management and Reduction.

6.3 Audit Requirements

- 6.3.1 Regular audits and site inspection at least once per week should be carried out by the ET to ensure that the recommended good site practices and other mitigation measure are implemented by the Contractor. The audits should look at all aspects of on-site waste management practices including the waste generation, storage, recycling, transportation and disposal. Apart from site inspections, documents including licenses, permits, disposal and recycling records should be reviewed and audited for the compliance with the legislation and contract requirements. The requirements of the environmental audit programme are set out in this EM&A Manual. The audit programme should verify the implementation status and evaluate the effectiveness of the mitigation measures.
- 6.3.2 During operational phase, only limited amount of wastes would be generated and no adverse waste impact would be anticipated with the implementation of the good waste management practices. No monitoring or audit is required during operational phase.

7 ECOLOGY

7.1 Introduction

- 7.1.1 Potential ecological impacts arising from the construction and operational phases of the Project were assessed in the EIA Report. Mitigation measures have been recommended to minimize potential direct and indirect impacts to ecological resources. With the implementation of appropriate mitigation measures, no unacceptable ecological impact would be anticipated.

7.2 Mitigation Measures

- 7.2.1 Mitigation measures for ecological impacts have been recommended in the EIA Report to minimize potential direct and indirect impacts. The recommended mitigation measures for construction phase include retaining plantations, restricting works area, transplantation of a plant of conservation importance, and good site practices to minimise disturbance to the flora and fauna near the works area. During operational phase, adequate litter bins, a joss paper burner of proper function and fire-fighting gears should be provided. Regular patrol should be conducted at the open niche area during the Ching Ming Festival and Chung Yeung Festival to ensure no uncontrolled burning occurs.
- 7.2.2 The Contractor should be responsible for the design and implementation of these measures. The implementation schedule of the mitigation measures is given in **Appendix B**.

7.3 Monitoring and Audit Requirements

- 7.3.1 During the construction period, implementation of the recommended mitigation measures should be regularly inspected and audited monthly by ET throughout the construction phase to ensure proper implementation.
- 7.3.2 All flora species of conservation importance (e.g. *Aquilaria sinensis*) should be protected as far as practicable. As a mitigation measure, all the unavoidably affected individual(s) should be transplanted to nearby suitable habitat(s) prior to the commencement of site clearance. A Detailed Vegetation Survey should be conducted by a suitably qualified botanist / ecologist to identify and record the affected individuals prior to the commencement of any site clearance works. A Transplantation Proposal should be prepared by a qualified ecologist / botanist, including detailed findings of the vegetation survey (i.e. number and locations of the affected individuals, assessment of the suitability and / or practicality of the transplantation) and locations of receptor site(s), transplantation methodology, implementation programme of transplantation, post-transplantation monitoring and maintenance programme. The proposal should be submitted to and approved by AFCD prior to commencement of any works (including ground investigation). The approved transplantation works should be carried out before the commencement of any site clearance works and should be supervised by the qualified botanist / horticulturist / Certified Arborist.

8 LANDSCAPE & VISUAL IMPACT

8.1 Introduction

- 8.1.1 Potential landscape and visual impacts arising from the construction and operational phases of the Project were assessed and landscape and visual mitigation measures were recommended in the EIA Report. This section defines the audit requirements to confirm the recommended landscape and visual impact mitigation measures in the EIA Report are effectively implemented.

8.2 Mitigation Measures

- 8.2.1 The landscape and visual mitigation measures proposed recommended in the EIA Report are listed in **Table 8.1** and **8.2**. The implementation schedule of the measures is given in **Appendix B**.

Table 8.1 Landscape and Visual Impacts Mitigation Measures for Construction Phase

ID No.	Landscape and Visual Mitigation Measures	Funding Agency	Implementation Agency
CM1	Preservation of existing vegetation All the existing Trees to be retained and not to be affected by the Project within the site shall be carefully protected during construction accordance with DEVB TCW No. 7/2015 - Tree Preservation and the latest Guidelines on Tree Preservation during Development issued by GLTM Section of DevB. Any existing vegetation on existing man-made slope and natural terrain not to be affected by the Project shall be carefully preserved.	ArchSD	ArchSD
CM2	Compensatory tree planting Any trees to be felled under the Project shall be compensated in accordance with DEVB TCW No. 7/2015 - Tree Preservation. Native species will be proposed.	ArchSD	ArchSD
CM3	Control of night-time lighting glare Any lighting provision of the construction works at night shall be carefully control to prevent light overspill to the nearby VSRs and into the sky.	ArchSD	ArchSD
CM4	Erection of screen hoarding in visually unobtrusive colour Screen hoarding in visually unobtrusive colour, which is compatible with the surrounding settings, shall be erected during construction to minimize the potential landscape and visual impacts due to the construction works and activities.	ArchSD	ArchSD
CM5	Management of construction activities and facilities The facilities and activities at works sites and areas, which include site office, temporary storage areas, temporary works etc., shall be carefully managed and controlled on the height, deposition and arrangement to minimize any potential adverse landscape and visual impacts.	ArchSD	ArchSD
CM6	Reinstatement of temporarily disturbed landscape areas All hard and soft landscape areas disturbed temporarily during construction due to temporary excavations, temporary works sites and works areas shall be reinstated to equal or better quality, to the satisfaction of the relevant Government Departments.	ArchSD	ArchSD

Table 8.2 Landscape and Visual Impacts Mitigation Measures for Operational Phase

ID No.	Landscape and Visual Mitigation Measures	Funding Agency	Implementation Agency	Maintenance/ Management Agency
OM1	Aesthetically pleasing design of aboveground structures The Aboveground Structures of the Project including proposed elevated platform, structural columns, niches and ancillary facilities in the regard of layouts, forms, materials and finishes shall be sensitively designed so as to blend in the structures to the adjacent landscape and visual context.	ArchSD	ArchSD	ArchSD
OM2	Amenity tree and shrub planting Amenity tree and shrub planting shall be provided at the edge of the platform to provide green transition between the proposed extension and the existing natural terrain.	ArchSD	ArchSD	ArchSD
OM3	Screen Planting to soften the Structural Columns of the elevated platform Shade Tolerant species will be selected carefully. Screen planting on slope and vertical screen planting in the form of climbers on wire mesh are proposed in front of the structural columns of the elevated platform to minimize the potential adverse visual impact.	ArchSD	ArchSD	ArchSD

8.3 Baseline Monitoring

- 8.3.1 Prior to the commencement of construction works, a baseline report shall be prepared to check, record and report the status of the landscape resources (LRs) and landscape character areas (LCAs) within the works areas and the visually sensitive receivers (VSRs) within the visual envelope. Any significant changes to the status of LR, LCAs and VSRs since the approval of the EIA Report should be identified. The recommended landscape and visual mitigation measures should be reviewed if such change warrants a change in the design of the landscape and visual mitigation measures.

8.4 Audit Requirements

- 8.4.1 Site audits should be undertaken during the construction phase of the Project to check that the proposed landscape and visual mitigation measures are properly implemented and maintained as per their intended objectives. Site inspections should be undertaken by the ET at least once every two weeks during the construction period. Inspection findings shall be logged in a site monitoring report with any discrepancies or concerns regarding the implementation and effectiveness of mitigation measures highlighted.

9 SITE INSPECTION / AUDIT

9.1 Site Inspection Requirements

- 9.1.1 Site inspections/audits provide a direct means to trigger and enforce the specified environmental protection and pollution control measures. They shall be undertaken routinely, at least once per week, to inspect/audit the construction activities in order to ensure that appropriate environmental protection and pollution control mitigation measures are properly implemented. With reference to the Project's contractual environmental requirements, pollution control and mitigation specifications and a well-established site inspection/audit, deficiency and action reporting system in accordance with the event contingency plan of the EM&A programme, the site inspection/audit would be one of the most effective tools used to enforce the environmental protection requirements on the construction site. A site inspection/audit checklist, to be used for undertaking site inspection/audit, will be prepared by the ET and submitted to the ER for approval.
- 9.1.2 The ET is responsible for formulation of the environmental site inspection/audit, deficiency and action reporting system, and for carrying out the site inspection/audit works.
- 9.1.3 Regular site inspections/audits shall be carried out at least once per week. All observations and results will be recorded in the data record sheets, which will pass to the Contractor. If non-compliance is found on site, the Event / Action Plan will be implemented.
- 9.1.4 The areas of inspection/audit shall not be limited to the environmental situation, pollution control and mitigation measures within the site; it will also review the environmental situation outside the site area which is likely to be affected, directly or indirectly, by the site activities. The ET shall make reference to the following information in conducting the inspection/audit.
- The EIA recommendations on environmental protection and pollution control
 - mitigation measures;
 - Works progress and programme;
 - Individual works methodology proposals (which shall include proposal on associated pollution control measures);
 - The contract specifications on environmental protection;
 - The relevant environmental protection and pollution control laws; and
 - Previous site inspection/audit results.
- 9.1.5 The Contractor shall update the ET Leader with all relevant information of the construction contract for him to carry out the site inspections/audits. The inspection/audit results and its associated recommendations on improvements to the environmental protection and pollution control works shall be submitted to the ER and the Contractor within 24 hours, for reference and for taking immediate action. The Contractor shall follow the procedures and time-frame as stipulated in the environmental site inspection/audit, deficiency and action reporting system formulated by the ET to report on any remedial measures subsequent to the site inspections/audits. Weekly site audit should be carried out to check the implementation status of the recommended air quality impact mitigation measures throughout construction period.
- 9.1.6 Ad hoc site inspections/audits shall also be carried out if significant environmental problems are identified. Inspections/audits may also be required subsequent to receipt of an environmental complaint, or as part of the investigation/audit work, as specified in Action Plan for environmental monitoring and audit.

9.2 Compliance with Legal and Contractual Requirements

- 9.2.1 There are contractual environmental protection and pollution control requirements as well as environmental protection and pollution control laws in Hong Kong, which the construction activities shall comply with.

- 9.2.2 In order that the works are in compliance with the contractual requirements, all the works method statements submitted by the Contractor to the ER for approval shall be sent to ET Leader of vetting to see whether sufficient environmental protection and pollution control measures have been included.
- 9.2.3 The ET Leader shall also review the progress and programme of the works to check that relevant environmental laws have not been violated and that the any foreseeable potential for violating the laws can be prevented.
- 9.2.4 The Contractor shall regularly copy relevant documents to the ET Leader so that the checking work can be carried out. The document shall at least include the updated Work Progress Reports, the updated Works Programme, the application letters for different licence/permits under the environmental protection laws, and all the valid licence/permit. The site diary shall also be available for the ET Leader's inspection upon his request.
- 9.2.5 The ET Leader shall advise the ER and the Contractor of any non-compliance with the contractual and legislative requirements on environmental protection and pollution control for them to take follow-up actions. If the ET Leader's review concludes that the current status on licence/permit application and any environmental protection and pollution control preparation works may not cope with the works programme or may result in potential violation of environmental protection and pollution control requirements by the works in due course, he shall also advise the Contractor and the ER accordingly.
- 9.2.6 Upon receipt of the advice, the Contractor shall undertake immediate action to remedy the situation. The ER shall follow up to ensure that appropriate action has been taken by the Contractor in order that the environmental protection and pollution control requirements are fulfilled.

9.3 Environmental Complaints

- 9.3.1 Complaints shall be referred to the ET Leader for carrying out complaint investigation procedures. The ET Leader shall undertake the following procedures upon receipt of the complaints:
- Log complaint and date of receipt and inform the ER immediately;
 - Investigate the complaint to determine its validity, and to assess whether the source of the problem is due to works activities;
 - If a complaint is valid and due to works, identify mitigation measures;
 - If mitigation measures are required, advise the Contractor accordingly;
 - Review the Contractor's response on the identified mitigation measures, and the updated situation;
 - If the complaint is a referral from EPD, submit interim report to EPD after endorsement by ER on status of the complaint investigation and follow-up action within the time frame assigned by EPD;
 - Undertake additional monitoring and audit to verify the situation if necessary, and review that any valid reason for complaint does not recur,.
 - Report the investigation results and the subsequent actions to the source of complaint for responding to complainant (If the source of complain is a referral from EPD, the result should be reported within the time frame assigned by the EPD); and
 - Record the complaint, investigation, the subsequent actions and the results in the monthly EM&A reports.
- 9.3.2 During the complaint investigation works, the Contractor and ER shall cooperate with the ET Leader in providing all necessary information and assistance for completion of the investigation. If mitigation measures are identified in the investigation, the Contractor shall promptly carry out the mitigation. The ER shall ensure that the measures have been carried out by the Contractor.

10 REPORTING

10.1 Baseline Monitoring Report

10.1.1 The baseline monitoring results, their interpretation and proposals for the Action / Limit level parameters should be presented in the form of a report which will be submitted to the ER for agreement. The report should be supported by the baseline monitoring data in electronic format prepared in HTML or PDF format, along with information from the covering monitoring locations, equipment and protocols. The agreed baseline report will then be reissued as a standalone report.

10.1.2 The baseline monitoring report shall include (but not limited to) the following elements:

- (i) Up to half a page of Executive Summary;
- (ii) Project background information;
- (iii) Drawings showing the locations of the baseline monitoring stations;
- (iv) Monitoring results (in both hard and diskette copies) including graphical plots, together with the following information:
 - Monitoring methodology
 - Name of the laboratory and types equipment used and calibration details;
 - Parameters monitored;
 - Monitoring locations (and depths);
 - Monitoring date, time, frequency and duration; and
 - QA/QC results and detection limits
- (v) Interpretation of the significance of monitoring results and explanation of influencing factors, including:
 - Major activities, if any, being carried out in the Project site during the period;
 - Weather conditions during the period; and
 - Other factors which might affect the monitoring results
- (vi) Determination of the Action and Limit levels for each monitoring parameter and statistical analysis of the baseline data;
- (vii) Revisions for inclusion in the EM&A programme; and
- (viii) Comments and conclusions.

10.2 Monthly EM&A Reports

10.2.1 The results and finding of all EM&A work required in the EM&A programme shall be recorded in the monthly EM&A reports prepared by the ET Leader. Monthly EM&A Reports shall be submitted to the ER within 10 working days of the end of each reporting month, the first report will be submitted in the month after construction works commence. Each monthly EM&A report shall be submitted to the parties: the Contractor, the IEC, the ER and EPD. Before submission of the first EM&A report, the ET Leader shall liaise with the parties on the required number of copies and format of the monthly reports in both hard copy and electronic medium.

10.2.2 The first monthly EM&A Report shall be included at least the following:

- (i) 1-2 pages executive summary:
 - Breaches of Action and Limit levels;

- Compliant log;
 - Notifications of any summons and successful prosecutions;
 - Reporting changes; and
 - Future key issues.
- (ii) Basic project information including a synopsis of the project organization, programme, management structure, and the works undertaken during the month;
- (iii) Environmental status:
- Advice on the status of statutory environmental compliance such as the status of compliance with the EP conditions under the EIAO, submission status under the EP and implementation status of mitigation measures;
 - Works undertaken during the month with illustrations (such as location of works, daily excavation rate, etc.); and
 - Drawings showing the Project area, any environmental sensitive receivers and the locations of the monitoring and control stations (with co-ordinates of the monitoring locations).
- (iv) Brief summary of EM&A requirement:
- All monitoring parameters;
 - Environmental quality performance limits (Action and Limit Levels);
 - Event/Action Plan;
 - Environmental mitigation measures as recommended in the EIA Report; and
 - Environmental requirements in contract documents.
- (v) Implementation Status:
- Advice on the implementation status of environmental protection and pollution control/mitigation measures, as recommended in the EIA Report;
- (vi) Monitoring results (in both hard and diskette copies) together the following information:
- Monitoring methodology;
 - Name of laboratory and equipment used and calibration details;
 - Parameter monitored;
 - Monitoring location (and depth); and
 - Monitoring date, time, frequency and duration.
- (vii) Graphical plots of monitored trends over the past four reporting periods and the following information:
- Major activities being carried out on site during the period;
 - Weather condition during the period; and
 - Other factor which might affect the monitoring results.
- (viii) Report on non-compliance, complaints, and notifications of summons and successful

prosecutions:

- Record of all non-compliance (exceedances) of the environmental quality performance limits (Action and Limit levels);
- Record of all complaints received (written or verbal) for each media, including locations and nature of complaints investigation, liaison and consultation undertaken, actions and follow-up procedures taken, results and summary;
- Record of all notification of summons and successful prosecutions for breaches of current environmental protection / pollution control legislation, including locations and nature of the breaches, investigation, follow-up actions taken, results and summary;
- Review of the reasons for and the implications of non-compliances, complaints, summons and prosecutions including review of pollution sources and working procedures; and
- Description of the actions taken in the event of non-compliance and deficiency reporting and any follow-up procedures related to earlier non-compliance.

(ix) Others

- An account of the future key issues as reviewed from the works programme and work method statements;
- Advice on the solid and liquid waste management status;
- Record of any project changes from the originally proposed as described in the EIA Report (e.g. construction methods, mitigation proposals, design changes, etc.); and
- Comments (for example, effectiveness and efficiency of the mitigation measures), recommendations (for examples, any improvement in the EM&A programme) and conclusions.

10.2.3 The subsequent EM&A Reports shall include at least the following:

(x) 1-2 pages executive summary;

- Breaches of Action / Limit Levels;
- Complaint log;
- Notifications of any summons and successful prosecutions;
- Reporting changes; and
- Future key issues.

(xi) Basic project information:

- Project organisation including key personnel contact names and telephone numbers;
- Programme;
- Management structure;
- Works undertaken during the month; and
- Any updates as needed to the scope of works and construction methodologies.

(xii) Environmental Status

- Advice on the status of statutory environmental compliance such as the status of compliance with the EP conditions under the EIAO, submission status under the EP and implementation status of mitigation measures;
 - Works undertaken during the month with illustrations (such as location of works, daily excavation rate, etc.); and
 - Drawings showing the project are, any environmental sensitive receivers and the locations of the monitoring and control stations.
- (xiii) Implementation status
- Advice on the implementation status of environmental protection and pollution control / mitigation measures, as recommended in the project EIA Report.
- (xiv) Monitoring results (in both hard and diskette copies) together with the following information:
- Monitoring methodology;
 - Name of laboratory and types of equipment used and calibration details;
 - Monitoring parameters;
 - Monitoring locations;
 - Monitoring date, time, frequency, and duration;
 - Weather conditions during the period;
 - Any other factors which might affect the monitoring results; and
 - QA / QC results and detection limits.
- (xv) Report on non-compliance, complaints, and notifications of summons and successful prosecutions:
- Record of all non-compliance (exceedances) of the environmental quality performance limits (Action and Limit levels);
 - record of all complaints received (written or verbal) for each media, including locations and nature of complaints investigation, liaison and consultation undertaken, actions and follow-up procedures taken, results and summary;
 - Record of all notification of summons and successful prosecutions for breaches of current environmental protection / pollution control legislation, including locations and nature of the breaches, investigation, follow-up actions taken, results and summary;
 - Review of the reasons for and the implications of non-compliances, complaints, summons and prosecutions including review of pollution sources and working procedures; and
 - Description of the actions taken in the event of non-compliance and deficiency reporting and any follow-up procedures related to earlier non-compliance.
- (xvi) Others
- An account of the future key issues as reviewed from the works programme and work method statements;
 - Advice on the solid and liquid waste management status;

- Record of any project changes from the originally proposed as described in the EIA (e.g. construction methods, mitigation proposals, design changes, etc.); and
 - Comments (for examples, effectiveness and efficiency of the mitigation measures), recommendations (for examples, any improvement in the EM&A programme) and conclusions.
- (xvii) Appendices
- Action and Limit levels;
 - Graphical plots of trends of the monitoring parameters at key stations over the past four reporting periods for representative monitoring stations annotated against the following:
 - (a) Major activities being carried out on site during the period;
 - (b) Weather conditions during the period; and
 - (c) Any other factors that might affect the monitoring results.
 - Monitoring schedule for the present and next reporting period;
 - Cumulative statistics on complaints, notifications of summons and successful prosecutions; and
 - Outstanding issues and deficiencies.

10.3 Final Summary EM&A Report

General

- 10.3.1 The EM&A programme for construction stage should be terminated upon the completion of the construction activities, while the EM&A programme for operation stage should be terminated upon the completion of operation monitoring.
- 10.3.2 The proposed termination should only be implemented after the proposal has been endorsed by the IEC and the Project Proponent followed by approval from the Director of Environmental Protection.

Final EM&A Review Report for Construction Stage

- 10.3.3 The final EM&A review report for construction stage (to be submitted after completion of construction activities) should contain at least the following information:
- (i) Executive summary (1-2 pages);
 - (ii) Drawings showing the project area, any environmental sensitive receivers and the locations of the monitoring and control stations;
 - (iii) Basic project information including a synopsis of the project organisation, contacts of key management, and a synopsis of work undertaken during the course of the project or past twelve months;
 - (iv) A brief summary of EM&A requirements including:
 - Environmental mitigation measures for construction stage, as recommended in the project EIA Report;
 - Environmental impact hypotheses tested;
 - Environmental quality performance limits (Action and Limit levels);
 - All monitoring parameters; and

- Event and Action Plans.
- (v) A summary of the implementation status of environmental protection and pollution control / mitigation measures for construction stage, as recommended in the project EIA Report and summarised in the updated implementation schedule;
- (vi) Graphical plots and the statistical analysis of the trends of monitoring parameters over the course of the project, including:
 - The major activities being carried out on site during the period;
 - Weather conditions during the period; and
 - Any other factors which might affect the monitoring results;
- (vii) A summary of non-compliance (exceedances) of the environmental quality performance limits (Action and Limit levels);
- (viii) A review of the reasons for and the implications of non-compliance including review of pollution sources and working procedures as appropriate;
- (ix) A description of the actions taken in the event of non-compliance;
- (x) A summary record of all complaints received (written or verbal) for each media, liaison and consultation undertaken, actions and follow-up actions taken and results;
- (xi) A review of the validity of EIA predictions for construction stage and identification of shortcomings in EIA recommendations;
- (xii) Comments (for example, a review of the effectiveness and efficiency of the mitigation measures, the performance of the environmental management system, and the overall EM&A programme for construction stage); and
- (xiii) Recommendations and conclusions (for example, a review of success of the overall EM&A programme for construction stage to cost-effectively identify deterioration and to initiate prompt effective mitigatory action when necessary).

Final EM&A Review Report for Operation Stage

10.3.4 The final EM&A review report for operation stage (to be submitted after completion of operation monitoring) should contain at least the following information:

- (i) Executive summary (1-2 pages);
- (ii) Drawings showing the project area, any environmental sensitive receivers and the locations of the monitoring and control stations;
- (iii) Basic project information including a synopsis of the project organisation, contacts of key management, and a synopsis of work undertaken during the course of the project or past twelve months;
- (iv) A brief summary of EM&A requirements including:
 - Environmental mitigation measures for operation stage, as recommended in the project EIA Report;
 - Environmental impact hypotheses tested;
 - Environmental quality performance limits (Action and Limit levels);
 - All monitoring parameters;
 - Event and Action Plans;
- (v) A summary of the implementation status of environmental protection and pollution control / mitigation measures for operation stage, as recommended in the project EIA Report

and summarised in the updated implementation schedule;

- (vi) Graphical plots and the statistical analysis of the trends of monitoring parameters over the course of the project, including:
 - The major activities being carried out on site during the period;
 - Weather conditions during the period; and
 - Any other factors which might affect the monitoring results;
- (vii) A summary of non-compliance (exceedances) of the environmental quality performance limits (Action and Limit levels);
- (viii) A review of the reasons for and the implications of non-compliance including review of pollution sources and working procedures as appropriate;
- (ix) A description of the actions taken in the event of non-compliance;
- (x) A summary record of all complaints received (written or verbal) for each media, liaison and consultation undertaken, actions and follow-up actions taken and results;
- (xi) A review of the validity of EIA predictions for operation stage and identification of shortcomings in EIA recommendations;
- (xii) Comments (for example, a review of the effectiveness and efficiency of the mitigation measures, the performance of the environmental management system, and the overall EM&A programme for operation stage); and
- (xiii) Recommendations and conclusions (for example, a review of success of the overall EM&A programme for operational stage to cost-effectively identify deterioration and to initiate prompt effective mitigatory action when necessary).

10.4 Data Keeping

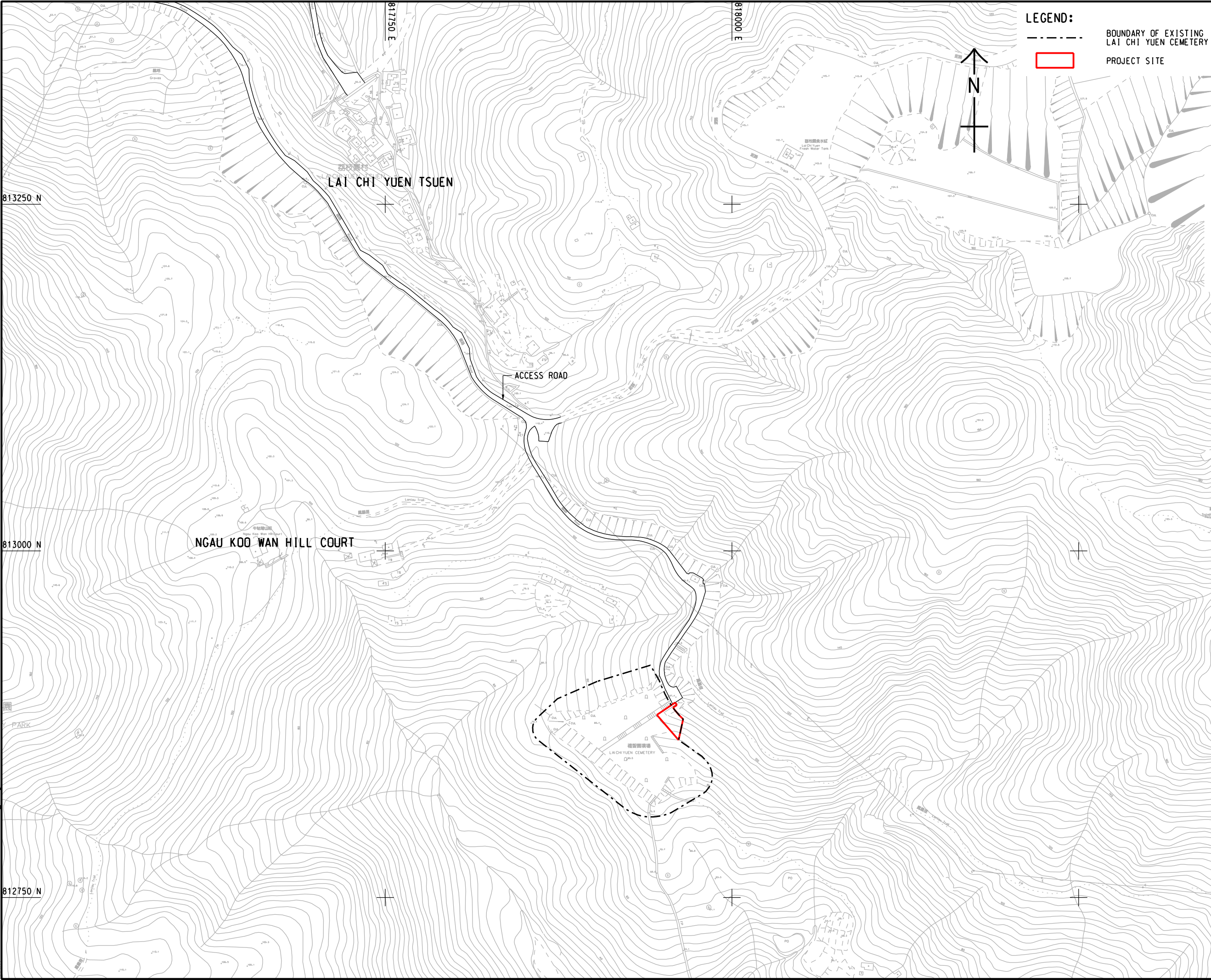
- 10.4.1 The site document such as the monitoring field records, site inspection forms etc. are not required to be included in the monthly EM&A reports for submission. However, all documents and records shall be well kept by the ET and be ready for inspection upon request. All documents and data shall be kept for at least one year after completion of the construction contract.

10.5 Interim Notifications of Environmental Quality Limit Exceedances

- 10.5.1 With reference to the Event and Action Plans, when the environmental quality performance limits are exceeded and if they are proven to be valid, the ET should immediately notify the IEC and EPD, as appropriate. The notification should be followed up with advice to the IEC and EPD on the results of the investigation, proposed actions and success of the actions taken, with any necessary follow-up proposals. A sample template for the interim notification is presented in **Appendix C**.

FIGURE

ISO A1 594mm x 841mm
Approved:
Checked:
Designer:
Project Management Initials:
Pld File by: PENGW 2016/4/8
PATH P:\PROJECTS\60453162\DRAWING\REPORT\EA\EA_721.dgn



LEGEND:
--- BOUNDARY OF EXISTING LAI CHI YUEN CEMETERY
[Red Box] PROJECT SITE

AECOM
PROJECT
MUI WO LAI CHI YUEN CEMETERY EXTENSION

CLIENT
食物環境衛生署
Food and Environmental Hygiene Department

CONSULTANT
AECOM Asia Company Ltd.
www.aecom.com

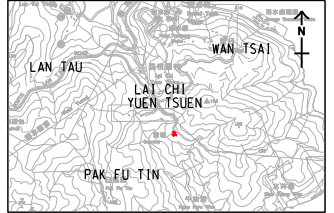
SUB-CONSULTANTS
分判工程顧問公司

ISSUE/REVISION			
修訂			
I/R	DATE	DESCRIPTION	CHK.
修訂	日期	內容摘要	校核

STATUS
備註

SCALE
比例
A3 1 : 2500
DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖
A3 1 : 50000



PROJECT NO.
項目編號
60453162
CONTRACT NO.
合約編號
CPM301_02/14

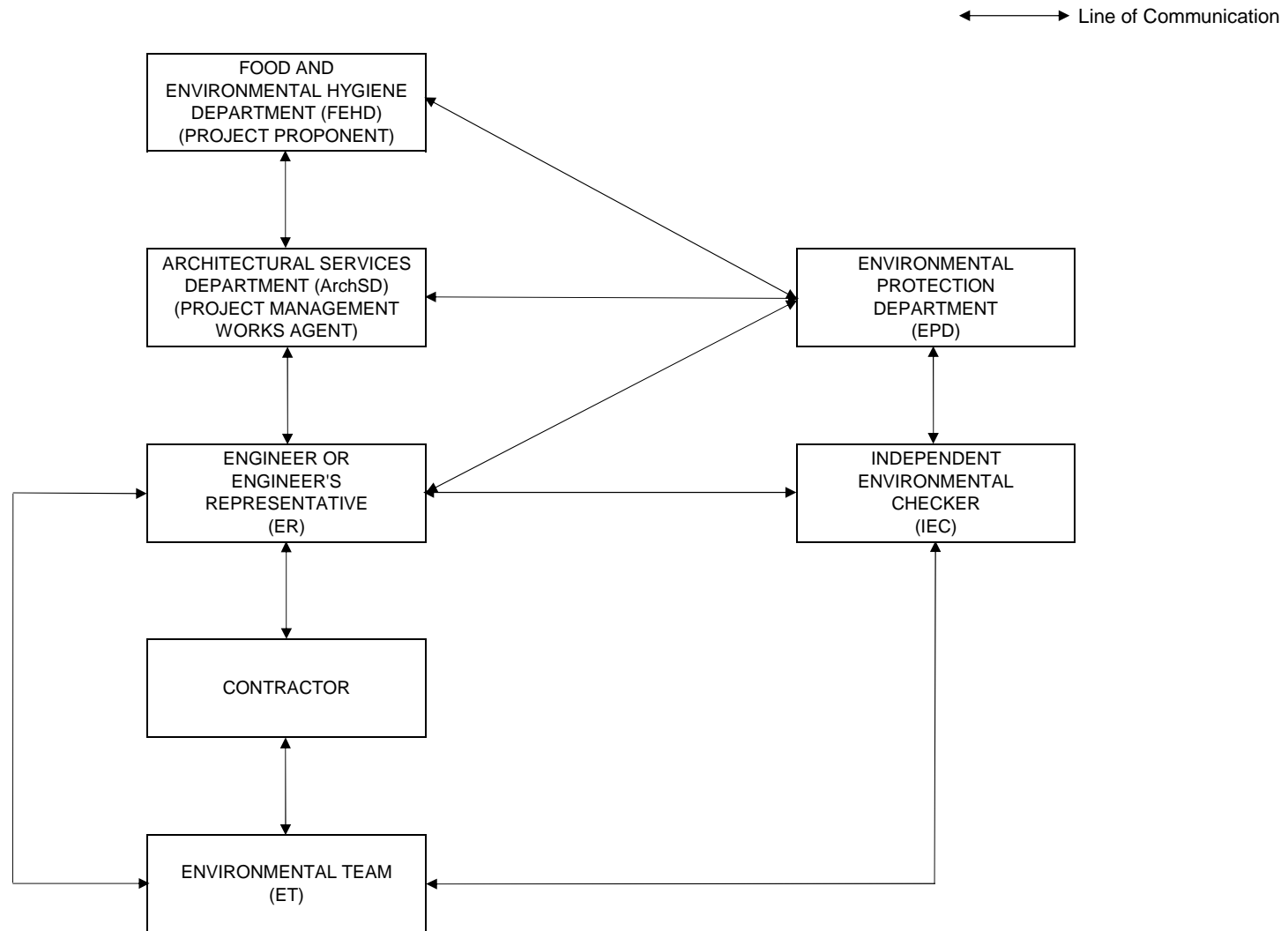
SHEET TITLE
圖紙名稱
SITE LOCATION PLAN

SHEET NUMBER
圖紙編號
60453162/EIA/FIGURE 1.1

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APPENDIX A
Project Organisation for Environmental Works

Appendix A Project Organisation for Environmental Works



APPENDIX B
Implementation Schedule of Mitigation Measures

APPENDIX B IMPLEMENTATION SCHEDULE AND RECOMMENDED MITIGATION MEASURES

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
Air Quality Impact (Construction Phase)									
3.5.1	A1	<p>Sufficient dust suppression measures as stipulated under the <i>Air Pollution Control (Construction Dust) Regulation</i> and good site practices should be properly implemented.</p> <p>a) Use of regular watering, to reduce dust emissions from exposed site surfaces and unpaved roads particularly during dry weather;</p> <p>b) Use of frequent watering of particular dusty construction areas close to ASRs;</p> <p>c) Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering should be applied to aggregate fines;</p> <p>d) Open temporary stockpiles should be avoided or covered. Prevent placing dusty material storage plies near ASRs;</p> <p>e) Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations;</p> <p>f) Establishment and use of vehicle wheel and body washing facilities at the exit point of the site;</p> <p>g) Imposition of speed control for vehicles on unpaved site roads. 8 km/hr is the recommended limit;</p> <p>h) Routing of vehicles and positioning of construction plant should be at the maximum possible distance from ASRs.</p>	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			EIAO-TM, AQOs

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
Air Quality Impact (Operational Phase)									
3.4.5	A2	The proposed joss paper burner will adopt the Best Available Technology (BAT), including a water scrubber, an electrostatic precipitator and an exhaust fan connected in series to effectively remove the air pollutants in the emissions. Adequate air flow will be supplied to the furnace chamber in order to allow sufficient oxygen for complete combustion and avoid production of carbon monoxide (CO) and soot. Upon the multi-stage air treatment, the smokeless clean air would be discharged via an extraction fan to the atmosphere.	Joss paper burner / throughout the design stage of the joss paper burner / upon completion of design of the joss paper burner	Project proponent (FEHD/ArchSD)	✓		✓		EIAO-TM, AQOs, Guideline on Air Pollution Control for Joss Paper Burning at Chinese Temples, Crematoria and Similar Places
3.5.2	A3	<p>Apart from the adoption of BAT to the proposed joss paper burner, the following good operational practices and administrative measures as well as good maintenance practices as stipulated in EPD's <i>Guideline on Air Pollution Control for Joss Paper Burning at Chinese Temples, Crematoria and Similar Places</i> should be strictly followed:</p> <p><u>Good Operational Practices and Administrative Measures</u></p> <p>(i) Before burning joss paper, the operator should make sure that the air pollution control equipment has been turned on and running normally. Joss paper burning should never be carried out without operation of the air pollution control equipment.</p> <p>(ii) The operator should ensure only offerings made with paper materials are burnt in the furnace. Other wrapping materials, in particular plastic materials, should be removed.</p> <p>(iii) It is essential to employ trained operators to control the feeding rate of joss paper to the furnaces. In case visible emissions are observed at the flue gas discharge, the feeding</p>	Lai Chi Yuen Cemetery Extended Areas / throughout the operation of the Cemetery Extended Areas / upon decommissioning of the Cemetery Extended Areas	Operator (FEHD)			✓		EIAO-TM, AQOs, Guideline on Air Pollution Control for Joss Paper Burning at Chinese Temples, Crematoria and Similar Places

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
		<p>rate should be reduced as appropriate, and if visible emissions persist, the operator should immediately stop the burning activities and call for maintenance of the air pollution control equipment if necessary.</p> <p>(iv) Whenever there is a sign of deterioration in performance of the electrostatic precipitator, the operator should arrange cleaning of the electrostatic precipitator. For those electrostatic precipitators with automatic self-cleaning function, the operator should ensure self-cleanings are carried out at frequencies recommended by manufacturers.</p> <p>(v) The operator should regularly clean the burning chamber and clear away ash remains inside the burning chamber, preferably at least once a day. To prevent emissions during ash clearing process, the ash should be wetted sufficiently by water spraying.</p> <p><u>Good Maintenance Practices</u></p> <p>(i) Maintenance and repair of air pollution control equipment should only be carried out by competent personnel with sufficient training and relevant skills in accordance with manufacturer's recommendations.</p> <p>(ii) Air pollution control equipment should be maintained regularly to ensure optimum performance. All components should also be inspected, cleaned and serviced regularly.</p> <p>(iii) Any defective parts of the air pollution control equipment should be replaced as soon as possible. To facilitate immediate replacement, sufficient stock of spare parts should be kept on-site.</p> <p>(iv) Operators should keep a copy of the operation and maintenance manual and should maintain</p>							

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
		a proper log of maintenance records on-site to facilitate maintenance of the equipment.							
Noise Impact (Construction Phase)									
4.7.1	N1	<p>Good site practice listed below and the noise control requirements stated in EPD's "Recommended Pollution Control Clauses for Construction Contracts" is recommended:</p> <ul style="list-style-type: none"> Only well-maintained plant to be operated on-site and plant should be serviced regularly during construction works; Machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; Plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; Mobile plant should be sited as far away from NSRs as possible; and Material stockpiles and other structures to be effectively utilized, where practicable, to screen noise from on-site construction activities. 	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			EIAO-TM, NCO, EPD's "Recommended Pollution Control Clauses for Construction Contracts"
Noise Impact (Operational Phase)									
4.6.3	N2	Properly design the water pumps and joss paper burner to meet the total maximum permissible sound power level of 94 dB(A).	Water pumps and joss paper burner / throughout the design stage of the water pumps and joss paper burner / upon completion of design of the water pumps and joss paper burner	Project proponent (FEHD / ArchSD)	✓		✓		EIAO-TM, NCO

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
Hazard to Life (Construction Phase)									
5.16.12	H1	<p>There are a number of measures recommended during construction stage, which include:</p> <ul style="list-style-type: none">• Sufficient number of face masks should be purchased so that the construction workers can be protected during accidental chlorine release• The number of workers on site during construction stage should be kept within the level as assessed in this report.• FEHD/ArchSD/the responsible personnel of the construction site should keep effective communication with Police or relevant authorities to ensure a proper evacuation/emergency response in case of a gas release incident. FEHD/ArchSD/the responsible personnel of the construction site should ensure all workers on site to be familiar with the route to escape. Diagram showing the escape routes to a safe place should be posted in the site notice boards and at the entrance/exit of site.• Specific means of providing a rapid and direct warning (e.g. Siren and Flashing Light) to construction workers in the event of chlorine gas release in the SMBWTW should be determined and made known to the construction workers.• The construction site officer should establish a communication channel with the SMBWTW operation personnel during construction stage. Upon receiving the notice of an external gas leak at the SMBWTW, the construction site officer should direct the workers to evacuate by following the instructions of Police or relevant authorities as appropriate.	Works area / Entire construction stage / upon completion of construction works	Project proponent (FEHD / ArchSD) and contractor		✓			EIAO-TM

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
		<ul style="list-style-type: none"> Induction Training should be provided to any staff before working on site. The responsible officer of the construction site should ensure all construction staff are familiar with the evacuation routes and /or location of the protective gears (if available). 							
Hazard to Life (Operational Phase)									
5.16.14	H2	<ul style="list-style-type: none"> FEHD should keep effective communication with Police or relevant authorities to ensure a proper emergency response in case of a gas release incident. 	Entire project site / Operation stage / Whole operation stage	Project Proponent (FEHD)			✓		EIAO-TM
Water Quality Impact (Construction Phase)									
6.8.1	W1	<u>Construction Site Runoff</u> The following measures are recommended to be implemented: <ul style="list-style-type: none"> Surface run-off from construction sites should be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels or earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided on site boundaries where necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks. Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. 	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			EIAO-TM, WQOs, ProPECC PN 1/94 Construction Site Drainage, WDO

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
		<ul style="list-style-type: none"> Construction works should be programmed to minimize soil excavation works in rainy seasons (April to September). If excavation in soil cannot be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. Arrangements should always be in place in such a way that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm. Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary. Construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms. Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system. 							

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
6.8.2	W2	<u>General Construction Activities</u> <ul style="list-style-type: none"> Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis. 	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			EIAO-TM, WQOs, ProPECC PN 1/94 Construction Site Drainage, WDO
6.8.3	W3	<u>Site Effluent</u> <p>There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimise water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the sites is required during the construction phase of the Project, the monitoring should be carried out in accordance with the relevant WPCO licence which is under the ambit of regional office (RO) of EPD.</p>	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			EIAO-TM, WQOs, ProPECC PN 1/94 Construction Site Drainage, WDO
6.8.4 – 6.8.6	W4	<u>Accidental Spillage of Chemicals</u> <p>Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The <i>Waste Disposal Ordinance (Cap 354)</i> (WDO) and its subsidiary regulations in particular the <i>Waste Disposal (Chemical Waste) (General) Regulation</i>, should be observed and complied with for control of chemical wastes.</p>	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			EIAO-TM, WQOs, ProPECC PN 1/94 Construction Site Drainage, WDO

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
		<p>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.</p> <p>Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. <i>The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes</i> published under the WDO details the requirements to deal with chemical wastes. General requirements are given as follows:</p> <ul style="list-style-type: none"> • Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport; • Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents; and • Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area. 							
6.8.7- 6.8.8	W5	<p><u>Sewage Arising from Workforces</u></p> <p>The construction workforce on site will generate sewage. It is recommended to provide sufficient portable toilets in the works areas. Contractual desludging service should be deployed to clean the portable toilets on a regular basis.</p> <p>Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment.</p>	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			EIAO-TM, WQOs, ProPECC PN 1/94 Construction Site Drainage , WDO

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
		Regular environmental audit of the construction site will provide an effective control of any malpractices and can encourage continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the project would not cause water pollution problem after undertaking all required measures.							
Water Quality Impact (Operational Phase)									
6.8.9 to 6.8.10	W6	<p>Following the current practice of the existing Lai Chi Yuen Cemetery, sanitary facilities such as portable toilets should be provided for the visitors and staff during operation of the Project. Sewage generated from the sanitary facilities should be collected and disposed of to a sewage treatment works for proper treatment by contractual desludging service employed by FEHD for handling sewage from the existing sanitary facilities.</p> <p>Best Management Practices (BMPs) to reduce storm water and non-point source pollution have been proposed for the Project as follows:</p> <p><u>Design Measures</u></p> <ul style="list-style-type: none"> Exposed surface shall be avoided within the Project site to minimize soil erosion. The development site shall be either hard paved or covered by landscaping area where appropriate. The streams and channelized nullahs near the Project site should be retained to maintain the original flow path. The drainage system should be designed to avoid flooding. Evergreen trees species, which in general generate relatively smaller amount of fallen leaves, should be selected where possible. 	Lai Chi Yuen Cemetery Extended Areas / throughout the operation of the Cemetery Extended Areas / upon decommissioning of the Cemetery Extended Areas	Operator (FEHD)	✓		✓		EIAO-TM, WQOs, ProPECC PN 1/94 Construction Site Drainage, WDO

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
		<u>Devices/ Facilities to Control Pollution</u> <ul style="list-style-type: none"> Screening facilities such as standard gully grating and trash grille, with spacing which is capable of screening off large substances such as fallen leaves and rubbish should be provided at the inlet of drainage system. Road gullies with standard design and silt traps and oil interceptors should be incorporated during the detailed design to remove particles present in stormwater runoff, where appropriate. <u>Administrative Measures</u> <ul style="list-style-type: none"> Good management measures such as regular cleaning and sweeping of road surface/ open areas are suggested. The open area cleaning should also be carried out prior to occurrence rainstorm. Manholes, as well as stormwater gullies, ditches provided at the Project site should be regularly inspected and cleaned (e.g. monthly). Additional inspection and cleansing should be carried out before forecast heavy rainfall. 							
Waste Management (Construction Phase)									
7.6.1 to 7.6.2	WM1	<u>Good Site Practices</u> <ul style="list-style-type: none"> Appropriate waste handling, transportation and disposal methods for all waste arising generated during the construction works for the Project should be implemented Adverse impacts from waste management are not anticipated, provided that good site practices are strictly followed. Recommendations for good site practices during the construction activities include: The contractor shall prepare a Waste 	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			ETWB TC(W) 19/2005, TC(W) 6/2010, WDO, Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
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		<p>Management Plan (WMP) in accordance with the requirements set out in the ETWB TC(W) 19/2005, Waste Management on Construction Site, for the Engineer's Representative approval.</p> <ul style="list-style-type: none"> Nomination of approved personnel, such as a site manager, to be responsible for good site practices, and making arrangements for collection of all wastes generated at the site and effective disposal to an appropriate facility. Training of site personnel in proper waste management and chemical waste handling procedures. Provision of sufficient waste reception/ disposal points, of a suitable vermin-proof design that minimizes windblown litter. Arrangement for regular collection of waste for transport off-site and final disposal. Appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers. Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors. A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be proposed. 							
7.6.3	WM2	<p><u>Waste Reduction Measures</u></p> <p>Good management and control of construction site activities/ processes can minimise the generation of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices.</p>	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			ETWB TC(W) 19/2005, TC(W) 6/2010, WDO, Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes

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		<p>Recommendations to achieve waste reduction include:</p> <ul style="list-style-type: none"> • Prior to disposal of C&D waste, wood, steel and other materials should be separated for reuse, recycling to minimize the quality of waste to be disposed of at landfill site. • Minimize use of wood and reuse non-timber formwork to reduce C&D waste • As far as practicable, segregate and store different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal. • Encourage collection of aluminum cans, plastic bottles and packaging material and office paper. 							
7.6.4 – 7.6.7	WM3	<p><u>C&D Materials</u></p> <p>With good site management, it can reduce over-ordering of C&D materials such as concrete and mortars. Alternatives such as still frameworks and plastic fencing can be considered to increase the chances for reuse.</p> <p>In order to minimize the potential impacts resulting from collection and transportation of C&D materials for off-site disposal, the excavated materials comprising fill materials should be reused on-site as backfilling materials or for landscaping as far as practicable to avoid disposal off-site.</p> <p>C&D waste, such as wood, plastic, steels and other metals should be reused or recycled and, as a last resort, disposal of to the Outlying Islands Transfer Facilities - Mui Wo Station. A suitable area should be designated within the site for temporary stockpiling of C&D materials and to facilitate the sorting process. In order to monitor the disposal of C&D materials at the</p>	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			ETWB TC(W) 19/2005, TC(W) 6/2010, WDO, Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
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		designated public fill reception facility and landfill and to control fly-tipping, a trip ticket system should be included, with reference to Development Bureau TC(W) 6/2010 for details. The inert C&D materials to be disposed of at public fill reception facilities shall be materials only consists of brick, concrete, cement plaster, soil and inert building debris. The materials shall be free from plastics, chemical waste, industrial metals and other materials that are considered unsuitable at the facility.							
7.6.8	WM4	<u>General Refuse</u> General refuse should be stored in covered bins or compaction units separate from C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site regularly, separately from C&D materials. An enclosed and covered area is preferred to reduce the occurrence of "wind blown" light materials. In addition, a sufficient number of covered bins shall be provided on site for containment of general refuse to prevent visual impacts and nuisance to the sensitive surrounding. The Contractor should carry out an education programme for workers in avoiding, reducing, reusing and recycling of materials generation. Posters and leaflets advising on the use of the bins should also be provided in the site as reminders.	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			ETWB TC(W) 19/2005, TC(W) 6/2010, WDO, Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
7.6.10	WM5	<u>Chemical Waste</u> For disposal of chemical wastes produced at the construction site, the Contractor is required for register with the EPD as a Chemical Waste Producer and to follow the requirements stated in the <i>Code of</i>	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			ETWB TC(W) 19/2005, TC(W) 6/2010, WDO, Code of Practice on the Packaging, Labelling and

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
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		<i>Practice on the Packaging, Labelling and Storage of Chemical Wastes.</i> Good quality containers compatible with the chemical wastes should be used. Appropriate labels should be securely attached on each chemical waste container indicating the chemical characteristics of the chemical waste, such as explosives, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall also use a licensed waste collector engaged to transport and dispose of the chemical wastes to the Chemical Waste Treatment Centre at Tsing Yi (CWTY) or other licensed facility, in accordance with the <i>Waste Disposal (Chemical Waste) (General) Regulation</i> .							Storage of Chemical Wastes
Waste Management (Operational Phase)									
7.6.11 to 7.6.13	WM6	<p><u>Ash and non-combustible Residues</u></p> <p>The ash and non-combustible residues generated from the joss paper burning should be collected and stored in a properly covered refuse containers to avoid dust emission, and final disposed of at landfill site.</p> <p><u>General Refuse</u></p> <p>To promote recycling of waste paper, aluminum cans and plastic bottles by the visitors, it is recommended to place clearly labeled recycling bins (such as those available from EPD) at convenient locations within the area of new niches or Lai Chi Yuen Cemetery. The recyclable waste materials should then be collected by reliable waste recycling agents on a regular basis.</p> <p>The general refuse (other than those segregated recyclable wastes) should be separated from any chemical wastes and stored in cover waste skips. FEHD should remove general refuse from the site, separately from chemical wastes, on daily basis to</p>	Lai Chi Yuen Cemetery Extended Areas / throughout the operation of the Cemetery Extended Areas / upon decommissioning of the Cemetery Extended Areas	Operator (FEHD)	✓		✓		ETWB TC(W) 19/2005, TC(W) 6/2010, WDO, Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
		minimize odour, pest and litter impacts. Burning of refuse must be strictly prohibited.							
Ecological Impact (Construction Phase)									
8.7.2	E1	In order to avoid woodland of higher ecological value and minimize the loss of woodland / plantation, the currently proposed option has confined the new niches to be built within the existing Lai Chi Yuen Cemetery and only minimal area (about 7.5m ²) outside the cemetery boundary is required for the proposed barrier-free site access, which is indispensable for the development.	Active works areas / throughout the construction period / upon completion of all construction activities	Project proponent (FEHD / ArchSD) & Contractor	✓				DEVB TCW No. 7/2015, EIAO-TM
8.7.3 to 8.7.4	E2	<ul style="list-style-type: none"> Habitat loss could be minimized in the first instance by retaining existing vegetation wherever possible, particularly mature and semi-mature trees present within the works areas. Any trees retained should be adequately protected during the construction phase to promote their health and longevity. Areas which would be temporarily affected by construction activities should be reinstated after completing the construction works. Hoarding or fencing should be erected around the works areas during the construction phase to restrict access to natural habitats adjacent to works areas by site workers to reduce human disturbance. Provision of compensatory native tree and shrub planting. 	Active works areas / throughout the construction period / upon completion of all construction activities	Project proponent (FEHD / ArchSD) & Contractor		✓			DEVB TCW No. 7/2015, EIAO-TM
8.7.5 to 8.7.6	E3	An individual of <i>Aquilaria sinensis</i> located within the project site would be subject to direct impacts. As such, prior to the commencement of the construction works, a vegetation survey should be conducted by a	Active works areas / throughout the construction period /	Contractor		✓			DEVB TCW No. 7/2015, EIAO-TM

EIA* Ref.	EM&A Log Ref.	Environmental Protection Measures*	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Implementation Stage**				Relevant Legislation and Guidelines
					Des	C	O	Dec	
		<p>qualified ecologist / botanist within the project site boundary to:</p> <ul style="list-style-type: none"> Ascertains the presence of, as well as update the conditions, number and locations of the flora species of conservation importance identified. Determine the number and location of the affected individual of flora species of conservation importance and evaluate the suitability and / or practicality of the transplantation. <p>A Transplantation Proposal should be prepared by a qualified ecologist / botanist with detailed findings of the vegetation survey (i.e. number and locations of the affected individuals, assessment of the suitability and / or practicality of the transplantation) and locations of receptor site(s), transplantation methodology, implementation programme of transplantation, post-transplantation monitoring and maintenance programme. The proposal should be submitted to and approved by AFCD prior to commencement of any works (including ground investigation). The approved transplantation works should be carried out before the commencement of construction works and should be supervised by a qualified botanist / horticulturist / Certified Arborist with relevant experience in transplanting flora species of conservation importance.</p>	upon completion of all construction activities						
8.7.8 to 8.7.12	E4	<p>Construction dust should be suppressed to avoid and minimize the dust covering leaves of plants that would affect their photosynthesis, and thus their health and growth:</p> <ul style="list-style-type: none"> Regular watering, to reduce dust emissions from exposed site surfaces and unpaved roads. 	Active works areas / throughout the construction period / upon completion of all construction activities	Contractor		✓			EIAO-TM

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					Des	C	O	Dec	
		<ul style="list-style-type: none"> • Proper storage of construction materials. • Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. <p>Noise impact during construction phase should be avoided and minimized to reduce the disturbance to the habitats adjacent to the works areas:</p> <ul style="list-style-type: none"> • Machines and plant (e.g. trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum. • Machines and plants known to emit strong directional noise should, wherever possible, be orientated so that the noise is directed away from the nearby habitats. • Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities. <p>With reference to ETWB TCW No. 5/2005 on "Protection of natural streams/ rivers from adverse impacts arising from construction works" and good site practices, the following good site practices/water control measures should be adopted to minimize any pollution entering the watercourse nearby:</p> <ul style="list-style-type: none"> • General refuse and construction wastes should be collected and disposed of in a timely and appropriate manner. • Drainage arrangements should include sediment traps to collect and control construction run-off. • All works and storage area should be restricted to the site boundary. • Covering of any exposed soil or other loose 							

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		<p>materials with tarpaulins to prevent erosion.</p> <ul style="list-style-type: none"> Exposed soil to be covered as quickly as possible following formation works, then seeded and covered with a biodegradable geotextile blanket for erosion control purposes. A temporary sewage treatment system or portable chemical toilets should be designed and installed to collect wastewater and prevent it from entering nearby habitats. The proposed works site inside or in the proximity of nearby habitats should be temporarily isolated, such as by placing of sandbags or silt curtains with a lead edge at the bottom and properly supported props, to prevent adverse impacts on these areas. Other protective measures should also be taken to ensure that no pollution or siltation occurs in the water gathering grounds of the works site. Construction debris and spoil should be covered up and/or properly disposed of as soon as possible to avoid being washed into nearby habitats by rain. Contractors should adhere to a strict "clean site" policy, with all construction waste transported to predetermined sites for safe disposal. Under no circumstances should there be any disposal of waste oil or other materials on site. Vehicles and other plant should be carefully maintained and properly used to minimise the chance for accidental spillage. <p>Prior to the commencement of any works, the appointed Contractor / Construction Manager should conduct a formal briefing to the workforce to reinforce the message that the works are being conducted within Lantau South Country Park adjacent to environmentally sensitive areas. Workers should also</p>							

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		<p>be informed about the locations of any identified rare/protected plant species adjacent to the project site, concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling.</p> <p>The workforce should be reminded of the need for environmental diligence throughout the duration of works, and in particular to avoid littering, improper disposal of construction waste, avoid unnecessarily damage to vegetation or cause noise or visual disturbance during the works.</p>							
Ecological Impact (Operational Phase)									
8.7.13	E5	During operational phase, adequate litter bins, a joss paper burner of proper function and fire-fighting gears should be provided. Regular patrol shall be conducted at the open niche area during the Ching Ming Festival and Chung Yeung Festival to ensure no uncontrolled burning occurs.	Lai Chi Yuen Cemetery Extended Areas / throughout the operation of the Cemetery Extended Areas / upon decommissioning of the Cemetery Extended Areas	Operator (FEHD)	✓		✓		EIAO-TM
Landscape and Visual Impact (Construction Phase)									
Table 9.3	LV1	<p><u>CM1 Preservation of Existing Vegetation</u></p> <p>All the existing trees to be retained within the site and not to be affected by the Project shall be carefully protected during construction accordance with DEVB TCW No. 7/2015 - Tree Preservation and the latest Guidelines on Tree Preservation during Development issued by GLTM Section of DevB. Any existing vegetation on existing man-made slope and natural terrain not to be affected by the Project shall be carefully preserved.</p>	Active works areas / throughout the construction period / upon completion of all construction activities	Project proponent (FEHD / ArchSD) & Contractor		✓			EIAO-TM, DEVB TCW No. 7/2015

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					Des	C	O	Dec	
		<p><u>CM2 Compensatory Tree Planting</u></p> <p>Any trees to be felled under the Project shall be compensated in accordance with DEVB TCW No. 7/2015 - Tree Preservation. Native species will be proposed.</p> <p><u>CM3 Control of Night-time Lighting Glare</u></p> <p>Any lighting provision of the construction works at night shall be carefully control to prevent light overspill to the nearby VSRs and into the sky.</p> <p><u>CM4 Erection of Screen Hoarding in Visually Unobtrusive Colour</u></p> <p>Screen hoarding in visually unobtrusive colour, which is compatible with the surrounding settings, shall be erected during construction to minimize the potential landscape and visual impacts due to the construction works and activities.</p> <p><u>CM5 Management of Construction Activities and Facilities</u></p> <p>The facilities and activities at works sites and areas, which include site office, temporary storage areas, temporary works etc., shall be carefully managed and controlled on the height, deposition and arrangement to minimize any potential adverse landscape and visual impacts.</p> <p><u>CM6 Reinstatement of Temporarily Disturbed Landscape Areas</u></p> <p>All hard and soft landscape areas disturbed temporarily during construction due to temporary excavations, temporary works sites and works areas shall be reinstated to equal or better quality, to the</p>							

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					Des	C	O	Dec	
		satisfaction of the relevant Government Departments.							
Landscape and Visual Impact (Operational Phase)									
Table 9.4	LV2	<p><u>OM1 Aesthetically pleasing design of Aboveground Structures</u></p> <p>The aboveground structures of the Project including proposed elevated platform, structural columns, niches and ancillary facilities in the regard of layouts, forms, materials and finishes shall be sensitively designed so as to blend in the structures to the adjacent landscape and visual context.</p> <p><u>OM2 Amenity Tree and Shrub Planting</u></p> <p>Amenity tree and shrub planting shall be provided at the edge of the platform to provide green transition between the proposed extension and the existing natural terrain.</p> <p><u>OM3 Screen Planting to soften the Structural Columns of the elevated platform</u></p> <p>Shade Tolerant species will be selected carefully. Screen planting on slope and vertical screen planting in the form of climbers on wire mesh are proposed in front of the structural columns of the elevated platform to minimize the potential adverse visual impact.</p>	Lai Chi Yuen Cemetery Extended Areas / throughout the operation of the Cemetery Extended Areas / upon decommissioning of the Cemetery Extended Areas	Project proponent (FEHD / ArchSD)	✓		✓		EIAO-TM

Notes:

* All recommendations and requirements resulted during the course of EIA Process, including ACE and/or accepted public comment to the proposed project.

** Des = Design; C = Construction; O = Operation; Dec = Decommissioning

APPENDIX C
Sample Template for Interim Notifications of
Environmental Quality Limits Exceedances

Sample Template for Interim Notifications of Environmental Quality Limits Exceedances

Incident Report on Action Level or Limit Level Non-compliance

Project	
Date	
Time	
Monitoring Location	
Parameter	
Action & Limit Levels	
Measured Level	
Possible reason for Action or Limit Level Non-compliance	
Action taken / to be taken	
Remarks	

Location Plan

Prepared by:

Designation:

Signature:

Date: