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August 2023

By Registered Post

Food and Environmental Hygiene Department

Environmental Impact Assessment (EIA) Ordinance, Cap.499 **Application for EIA Study Brief**

Project Title: Provision of Crematorium at Wo Hop Shek Cemetery (Application No. ESB-362/2023)

I refer to your above application received on 19 July 2023 for an EIA Study Brief under Section 5(1)(a) of the EIA Ordinance.

In accordance with Section 5(7)(a) of the EIA Ordinance and after public inspection of the project profile, I issue the attached EIA Study Brief (No. ESB-362/2023) for your preparation of an EIA report.

Under Section 15 of the EIA Ordinance, the EIA Study Brief will be placed on the EIA Ordinance Register. It will also be placed on the EIA Ordinance website (http:// www.epd.gov.hk/eia/).

You may submit an application for approval of the EIA report in accordance with Section 6(2) of the EIA Ordinance after its completion. Upon receipt of your application. this department will decide under Section 6(3) of the EIA Ordinance whether the EIA report meets the requirements of the EIA Study Brief and Technical Memorandum on EIA Process, and accordingly advise you under Section 6(4) of the EIA Ordinance whether a submission to the Advisory Council on the Environment (ACE) or its subcommittee is required. In this connection, you are required to provide sufficient copies of the Executive Summary of the EIA report to the Secretariat of the EIA Subcommittee of the Council for selection for submission when you submit the EIA report to this department for approval. Please liaise with Ms. Sally SHEK (Tel: 2594 6324) regarding the details in due course.

If the EIA report is selected by ACE for submission and presentation, you are expected to provide ACE with an account of the environmental issues arising from the project, major conclusions and recommendations of the EIA study. In particular, the main environmental concerns of the general public and interest groups who may be affected by the Project should be identified and addressed in the EIA study. As such, you are strongly advised to engage the public and interest groups during the course of the EIA study. Please find attached a copy of the "Modus Operandi of the EIA Subcommittee of the Advisory Council on the Environment" (Attachment 1) for your reference.

Please note that if you are aggrieved by any of the content of this EIA Study Brief, you may appeal under Section 17 of the EIA Ordinance within 30 days of receipt of this EIA Study Brief.

Should you have any queries on the above application, please contact my colleague Dr. Billy MA at 2835 1142.

Yours sincerely,

(Ms. Clara K. W. U)

Acting Principal Environmental Protection Officer for Director of Environmental Protection

Encl.

c.c. (w/o encl.)

ACE EIA Subcommittee Secretariat

(Attn.: Ms. Sally SHEK) Fax: 2872 0603

MODUS OPERANDI OF THE ENVIRONMENTAL IMPACT ASSESSMENT SUBCOMMITTEE OF THE ADVISORY COUNCIL ON THE ENVIRONMENT

Purpose

This paper sets out the *modus operandi* of the Environmental Impact Assessment (EIA) Subcommittee of the Advisory Council on the Environment (ACE) so as to facilitate smooth proceedings of subcommittee meetings. The current *modus operandi* was last updated and endorsed by ACE in July 2009.

Background

- 2. ACE is the Government's principal advisory body on matters relating to environmental protection and nature conservation. The terms of reference of ACE are
 - (a) to keep under review the state of the environment in Hong Kong; and
 - (b) to advise the Government, through the Secretary for Environment and Ecology, on appropriate measures which might be taken to combat pollution of all kinds, and to protect and sustain the environment.
- 3. The EIA Subcommittee is set up under ACE to study EIA reports of major development projects. It also comments on strategic environmental assessment reports of major planning projects. The terms of reference of the EIA Subcommittee are
 - (a) to receive and study EIA reports of major development projects; and
 - (b) to report on its deliberations and findings and make recommendations to ACE.

EIA Process

4. ACE and the EIA Subcommittee are involved in three main stages of the EIA process, namely commenting on the project profiles for designated projects, selection of EIA reports for submission to ACE and commenting on selected EIA reports. In accordance with ETWB Technical Circular (Works) No. 13/2003, the statutory gazetting of a project under the relevant ordinances can be done in parallel with the EIA process. Separately, consultation with District Councils and other relevant parties may proceed in advance of or in parallel with the submission of EIA reports to the EIA Subcommittee.

Project Profiles

5. Under section 5 of the EIA Ordinance, ACE and members of the public may comment on the project profile of a designated project within 14 days of it being advertised. It is hence not necessary for the EIA Subcommittee to present to the Director of Environmental Protection (DEP) the collective view of the EIA Subcommittee on project profiles. To ensure that comments on project profiles, if any, are given to DEP within the statutory time limit, individual ACE Members would write to DEP directly. Where necessary, the ACE Member may copy his/her comments to the Chairman and Members for information.

Selection of EIA Reports

- 6. Project proponents of designated projects will have to present their EIA reports to ACE if they are required to submit the reports to the Council. Members of the EIA Subcommittee will be asked to select those projects which they consider should require a presentation to the EIA Subcommittee by the project proponent. The selection outcome is for internal planning of the schedule of the EIA Subcommittee and will not be divulged to the project proponent. Only those projects selected by half or more of EIA Subcommittee Members will be selected. The project proponent concerned will be notified of the selection outcome only after DEP has decided that the EIA report is ready for public inspection and submission to ACE for advice.
- 7. During the project selection process, if individual EIA Subcommittee Member has special concerns/comments on a certain project, he/she could draw the EIA Subcommittee Chairman's attention to his/her concerns/comments and the Chairman would consider the need to review the decision on selection of the EIA report for submission to ACE.

8. For projects not selected, the project proponent will be required to send the Executive Summary of the EIA report to the EIA Subcommittee. Members would pass their comments, if any, to DEP directly within the prescribed public inspection period and if necessary, copy his/her comments to the Chairman and Members of the EIA Subcommittee for information. At the ACE meeting immediately following the issue of the Executive Summaries of the EIA reports, the EIA Subcommittee Chairman will report to ACE about the submission of these Executive Summaries for information of Members and record as projects not selected for discussion.

Meeting Arrangements

- 9. The EIA Subcommittee will basically meet on a monthly basis. Meetings will be held when there is submission of EIA report(s) or issue(s) to be discussed.
- To facilitate focused discussion, the EIA Subcommittee will generally 10. consider no more than two EIA reports in each meeting. EPD will prepare a paper on each EIA report to be submitted to the EIA Subcommittee highlighting the key environmental issues and major findings of the EIA study. Upon expiry of the report inspection period by the general public, EPD will summarize all public comments received during the period for consideration of the EIA The project proponent, where applicable, will provide the EIA Subcommittee. Subcommittee with a report on the site selection process of the project, setting out the alternative sites that have been considered and the reasons of the selection of the particular site when such information is not provided in the EIA report. The paper, the EIA report and the site report, if any, will normally be issued to EIA Subcommittee Members two weeks before the scheduled meeting. summary of public comments will also be given to Members before the meeting. Members will be asked to indicate whether it is necessary for the project proponent to attend the meeting or the report could be considered by circulation. Project proponents will be informed accordingly before the scheduled meeting.
- 11. Summary of the public comments will also be provided to non-EIA Subcommittee Members for reference to facilitate their discussion of the EIA Subcommittee's recommendations at the next ACE meeting before the Council tenders its comments to DEP on the EIA report as provided for under the EIA Ordinance.
- 12. Members of the EIA Subcommittee may raise questions in writing on an EIA report before the scheduled meeting and the project proponent should provide written response to the Secretariat at least three working days before the meeting.

- 13. Each discussion item on an EIA report would include a Presentation Session by the project proponent, a Question-and-Answer Session and Internal Discussion Sessions. The Presentation Session and the Question-and-Answer Session are open up for broadcasting and members of the public can view the sessions real time in the public viewing room. The EIA Subcommittee would allocate as much time to the Question-and-Answer Session as possible.
- 14. The presentation by the project proponent should cover, inter alia, the major conclusions and recommendations of the EIA study. In addition, the project proponent should provide a concise and objective account of the main concerns of the general public and interest groups made known during the EIA study and the public inspection stages, and explain how these concerns are addressed in the EIA study.

Criteria for Assessing EIA Reports

15. EIA reports will be assessed by the EIA Subcommittee according to the requirements of the Technical Memorandum on the EIA Process and the study brief of the individual projects issued by DEP.

Recommendations to the Full Council

- 16. The EIA Subcommittee can make one of the following recommendations to the full Council
 - (i) endorse the EIA report without condition; or
 - (ii) endorse the EIA report with condition(s); or
 - (iii) reject the EIA report and inform the proponent the right to go to the full Council.
- 17. If the EIA Subcommittee cannot reach a consensus (i.e. if two or more Members do not agree with the conclusion of the EIA Subcommittee) during the meeting, it may
 - (i) ask for a second submission to the EIA Subcommittee; or
 - (ii) defer the decision to the full Council and highlight issues or reasons for not reaching a consensus for the full Council's deliberation.
- 18. Other than the scenario in paragraph 17 above or the EIA Subcommittee Chairman considers it appropriate, the recommendations of the EIA Subcommittee will not be discussed in detail in the full Council.

Other Rules that apply to EIA Subcommittee Meetings

- 19. Apart from the procedures mentioned above, the following rules also apply to EIA Subcommittee meetings
 - (i) the quorum for EIA Subcommittee meetings should be <u>half</u> of the number of EIA Subcommittee Members, including the Chairman;
 - (ii) ACE Members who are not EIA Subcommittee Members may attend EIA Subcommittee meetings and participate in the discussion of the meetings but they shall not vote when votes are taken;
 - (iii) Council Members and EIA Subcommittee Members should declare direct and indirect interest before deliberating on agenda items so that the EIA Subcommittee Chairman could decide whether they should take part in the discussion or in the case of EIA Subcommittee Members to vote;
 - (iv) the confirmed minutes of the EIA Subcommittee (with Members' names deleted) are uploaded on the ACE's website for public inspection;
 - (v) the Presentation Session and Question-and-Answer Session of a discussion item on an EIA report at the EIA Subcommittee meeting requiring the attendance of the project proponent team will be opened to the public. The opening up of these sessions is an administrative arrangement only. The open meeting arrangements are not applicable to internal discussion sessions of a discussion item on an EIA report and all other sessions of the meetings of the EIA Subcommittee;
 - (vi) special meetings may be called to consider urgent items. The EIA Subcommittee will consider each case individually should there be requests for direct submissions to the full Council;
 - (vii) there will not be a limit on the number of professionals/experts to be invited to each EIA Subcommittee meeting for items requiring their assistance. In these cases and where votes are taken, these professionals/experts shall not vote; and
 - (viii) to facilitate effective deliberation at meetings of the EIA Subcommittee, the EIA Subcommittee may appoint Members to

advise the EIA Subcommittee on specific subject areas of EIA reports. The appointed Members would consider the assigned subjects of an EIA report, and seek advice from the relevant authorities designated under the EIAO as necessary before EIA Subcommittee meetings.

20. The revised *modus operandi* of the EIA Subcommittee has taken effect in April 2013 upon endorsement of ACE.

[Note: Government official title in paragraph 2 is updated as a result of the organisational changes in the Government with effect from 1 July 2022.]

EIA Subcommittee Secretariat April 2013

Environmental Impact Assessment Ordinance (Cap. 499), Section 5(7)

Environmental Impact Assessment Study Brief No. ESB-362/2023

Project Title: <u>Provision of Crematorium at Wo Hop Shek Cemetery</u> (hereinafter known as the "Project")

Name of Applicant: <u>Food and Environmental Hygiene Department</u> (hereinafter known as the "Applicant")

1. BACKGROUND

- 1.1 An application (No. ESB-362/2023) for an Environmental Impact Assessment (EIA) study brief under Section 5(1)(a) of the Environmental Impact Assessment Ordinance (EIAO) was submitted by the captioned Applicant on 19 July 2023 with a project profile (No. PP-657/2023) (the Project Profile).
- 1.2 The Project is to develop a new crematorium within the existing Wo Hop Shek Cemetery to meet the projected demand for cremation service in Hong Kong. The Project site area is approximately 20,000m². The location of the Project is shown in **Appendix A** of this EIA study brief. The scope of the Project covers the following:

Crematorium

- (a) Site clearance, site formation and superstructure works including provision of ten new coffin cremators (comprising nine standard cremators and one large cremator with air treatment system;
- (b) Provision of a full range of ancillary facilities including:
 - (i) six service halls;
 - (ii) office accommodation for Food and Environmental Hygiene Department (FEHD) staff and reception area;
 - (iii) six Eco-joss paper burners;
 - (iv) mortuary;
 - (v) ash storage room;
 - (vi) pulverization room;
 - (vii) office accommodation for Electrical and Mechanical Services Department (EMSD) staff;
 - (viii) EMSD maintenance workshop and spare part store;
 - (ix) refuse storage chamber;
 - (x) passenger lifts and goods lifts;
 - (xi) public toilets including accessible unisex toilets and universal toilet, as well as baby care room;
 - (xii) layby for hearses;

- (c) Control room equipped with Closed-Circuit Television (CCTV) system;
- (d) Separate control room inside cremation plant room equipped with CCTV system; and
- (e) Landscaping.
- 1.3 The Project is a Designated Project by virtue of Item N.4 of Schedule 2, Part I of the EIAO, which specifies "*A crematorium*".
- 1.4 Pursuant to Section 5(7)(a) of the EIAO, the Director of Environmental Protection (the Director) issues this EIA study brief to the Applicant to carry out an EIA study.
- 1.5 The purpose of this EIA study brief is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the Project and associated works that will take place concurrently. This information will contribute to decisions by the Director on:
 - (i) the overall acceptability of any adverse environmental consequences that are likely to arise as a result of the Project;
 - (ii) the conditions and requirements for the detailed design, construction and operation of the Project to mitigate against adverse environmental consequences wherever practicable; and
 - (iii) the acceptability of residual impacts after the proposed mitigation measures are implemented.

2. OBJECTIVES OF THE EIA STUDY

- 2.1 The objectives of the EIA study are as follows:
 - (i) to describe the Project and associated works together with the requirements and environmental benefits for carrying out the Project;
 - (ii) to identify and describe the elements of community and environment likely to be affected by the Project and/or likely to cause adverse impacts to the Project, including both the natural and man-made environment and the associated environmental constraints;
 - (iii) identify and quantify emission sources and determine the significance of impacts on sensitive receivers and potential affected uses, and to proposed measures to mitigate this impact;
 - (iv) to identify and quantify any potential ecological impact arising from the

August 2023

construction and operation of the project and to propose measures to mitigate the impact;

- (v) to identify and quantify any potential impacts from point and non-point pollution sources on the identified water systems and sensitive receivers and to proposed measures to mitigate these impacts;
- (vi) to propose the provision of infrastructure or mitigation measures so as to minimize pollution, environmental disturbance and nuisance during construction and operation of the Project;
- (vii) to investigate the feasibility, effectiveness and implications of the proposed mitigation measures;
- (viii) to identify, predict and evaluate the residual environmental impacts (i.e. after practicable mitigation) and the cumulative effects expected to arise during the construction and operation phases of the Project in relation to the sensitive receivers and potentially affected uses;
- (ix) to identify, assess and specify methods, measures and standards, to be included in the detailed design, construction and operation of the Project which are necessary to mitigate these residual environmental impacts and cumulative effects and reduce them to acceptable levels;
- (x) to investigate the extent of the secondary environmental impacts that may arise from the proposed mitigation measures and to identify constraints associated with the mitigation measures recommended in the EIA study, as well as the provision of any necessary modification;
- (xi) to design and specify the environmental monitoring and audit requirements; and
- (xii) to identify any additional studies necessary to implement the mitigation measures or monitoring and proposals recommended in the EIA report.

3. DETAILED REQUIREMENTS OF THE EIA STUDY

3.1 The Purpose

3.1.1 The purpose of this EIA study brief is to set out the purposes and objectives of the EIA study, the scope of environmental issues which shall be addressed, the requirements that the EIA study shall need to fulfil, and the necessary procedural and reporting requirements. The Applicant shall demonstrate in the EIA report

whether the criteria in the relevant sections of the Technical Memorandum on the Environmental Impact Assessment Process of the Environmental Impact Assessment Ordinance (hereinafter referred to as "the TM"), are fully complied with.

3.2 The Scope

- 3.2.1 The scope of this EIA study shall cover the Project and associated works mentioned in Section 1.2 of this EIA study brief. For the purpose of assessing whether the environmental impacts shall comply with the criteria of the TM, the EIA study shall address the key issues described below, together with any other key issues identified during the course of the EIA study:
 - (i) potential air quality impacts on existing and planned air sensitive receivers (ASRs) due to construction and operation of the Project;
 - (ii) potential noise impacts during construction and operation of the Project, in particular the potential noise impact associated with off-site traffic induced by the Project, if any;
 - (iii) potential water quality impacts on water system(s) including the Deep Bay Water Control Zone and relevant water sensitive receivers (e.g. seasonal watercourses near the Project site, Water Gathering Grounds, etc.), during construction and operation of the Project;
 - (iv) potential waste management issues and impacts during construction and operation of the Project, in particular arising from handling and disposal of construction & demolition materials, chemical waste from regular maintenance of air pollution control system and other mechanical systems;
 - (v) potential terrestrial and aquatic ecological impacts, in particular impacts on natural streams, grassland, woodland, species and habitats of conservation importance, arising from the construction and operation of the Project;
 - (vi) potential cumulative impacts of the Project, through interaction or in combination with other existing, committed and planned projects in the vicinity of the Project.
 - (vii) identification of individual DPs proposed under the Project that fall under Schedule 2 of the EIAO, in addition to those mentioned in Section 1.3 of this EIA study brief to ascertain whether the findings of this EIA study have adequately assessed and addressed the environmental impacts of those DPs; and where necessary to identify the outstanding issues that need to be assessed

and addressed in any further studies.

3.3 Description of the Project

3.3.1 <u>Purpose(s) and Objectives of the Project</u>

3.3.1.1 The Applicant shall provide information on the Project, including purpose(s), objectives and environmental benefits of the Project, and describe the scenarios with and without the Project.

3.3.2 Details of the Project

The Applicant shall indicate the nature and status of Project decision(s) for which 3.3.2.1 the EIA study is undertaken. The Applicant shall describe Project details that may give rise to potential environmental impacts, including the siting, proposed land uses, scale/size of site, site facilities, design and layout of plants and air pollution control systems, processes, scale/height and visual treatment of the structures and facilities / chimneys with layout plan and photomontages, the capacity and operational mode of the cremators, the operating capacity of cremators in full load operation and contingency situation (if any), fuel and technology, construction methods, sequence of construction works and other major activities involved in the Project, using diagrams, plans, photomontages, and/or maps as necessary. The estimated duration of the construction phase and operational phase of the Project together with the programme within these phases shall be given. The land to be taken by the Project, construction sites, and any associated access arrangements, auxiliary facilities, landscaping areas, and on-site/off-site compensation planting shall be shown on a scaled map.

3.3.3 Background and History of the Project

3.3.3.1 The Applicant shall provide information on the site location and site history of the Project, interactions with other projects, and the consideration of different development options, taking into account the principles of avoidance, minimizing and control of adverse environmental impacts. The options might include consideration of alternative design, scale/size of the above-ground structures, construction methods and sequence of construction works, selection of cremators and any lessons learned from other similar projects. The key reasons for selecting the preferred development option(s), other factors or constraints affecting the design and layout of the Project and the part environmental factors played in the selection shall be described. The main environmental impacts of different development options shall be compared with those of the Project and with the likely future environmental conditions in the absence of the Project.

3.4 Technical Requirements

- 3.4.1 The Applicant shall conduct the EIA study to address all environmental aspects of the activities as described in the scope as set out above. The assessment shall be based on the best and latest information available during the course of the EIA study.
- 3.4.2 The Applicant shall include in the EIA report details of the construction programme and methodologies. The Applicant shall clearly state in the EIA report the time frame and work programmes of the Project and associated works and other concurrent projects, and assess the cumulative environmental impacts from the Project and associated works with all interacting projects, including staged implementation of the Project and associated works.
- 3.4.3 The EIA study shall follow the technical requirements specified below and in the Appendices of this EIA study brief.

3.4.4 Air Quality Impact

- 3.4.4.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing air quality impact as stated in Section 1 of Annex 4 and Annex 12 of the TM respectively.
- 3.4.4.2 The assessment area for air quality impact assessment shall be defined by a distance of 500 metres from the boundary of the Project Area and the works of the Project as identified in the EIA study, which shall be extended to include major existing, committed and planned air pollutant emission sources identified to have a bearing on the environmental acceptability of the Project. The assessment shall include the existing, committed and planned sensitive receivers within the assessment area as well as areas where air quality may be potentially affected by the Project. The assessment shall be based on the best available information at the time of the assessment. The assessment shall also take into account the impacts of emission sources from nearby concurrent projects, if any.
- 3.4.4.3 The assessment of air quality impact arising from the construction and operation of the Project shall follow the detailed technical requirements given in **Appendix B** of this EIA study brief.

3.4.5 Noise Impact

3.4.5.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing noise impact as stated in Annexes 5 and 13 of the TM respectively.

- 3.4.5.2 The Applicant shall review in the EIA study the need for a noise impact assessment associated with the construction and operation of the Project including, but not limited to, noise generated from the operation of the crematorium facilities, and noise generated from off-site traffic due to the Project. The assessment area for the noise impact assessment shall generally include areas within 300 metres from the boundary of the Project and the works of the Project.
- 3.4.5.3 If a noise impact assessment is needed, the Applicant shall submit a methodology statement to provide, with justifications, the scope, approach and methodology to be adopted for noise impact assessment for the agreement of the Director prior to the commencement of assessment.

3.4.6 Water Quality Impact

- 3.4.6.1 The Applicant shall follow the criteria and guidelines for evaluating and assessing water pollution as stated in Annexes 6 and 14 of the TM respectively.
- 3.4.6.2 The assessment area for the water quality impact assessment shall include areas within 500 metres from the boundary of the Project and shall cover the Deep Bay Water Control Zone as designated under the Water Pollution Control Ordinance (Cap. 358) and other areas, if the water sensitive receivers within these areas are found also being impacted by the Project during the course of the EIA study and have a bearing on the environmental acceptability of the Project.
- 3.4.6.3 The water quality impact assessment for the construction and operation of the Project shall follow the detailed technical requirements given in **Appendix C** of this EIA study brief.

3.4.7 Waste Management Implications

- 3.4.7.1 The Applicant shall follow the relevant criteria and guidelines for evaluating and assessing waste management implications arising from the construction and operation of the Project.
- 3.4.7.2 The assessment of the waste management implications arising from the construction and operation of the Project shall follow the detailed technical requirements given in **Appendix D** of this EIA study brief.

3.4.8 Ecological Impact (Terrestrial and Aquatic)

3.4.8.1 The Applicant shall follow the relevant criteria and guidelines for evaluating and assessing ecological impacts.

- 3.4.8.2 The assessment area for the purpose of the terrestrial ecological impact assessment shall include areas within 500 metres distance from the boundary of the Project and any other areas, likely to be impacted by the Project. For aquatic ecology, the assessment area shall be the same as the water quality impact assessment described in section 3.4.6 of this EIA study brief.
- 3.4.8.3 The ecological impact assessment for construction and operation of the Project shall follow the detailed technical requirements given in **Appendix E** of this EIA study brief.

3.5 Environmental Monitoring and Audit (EM&A) Requirements

- 3.5.1 The Applicant shall identify and justify in the EIA study whether there is any need for EM&A activities during the construction and operation phases of the Project and, if affirmative, to define the scope of the EM&A requirements for the Project in the EIA study.
- 3.5.2 The Applicant shall prepare a Project Implementation Schedule (in the form of a checklist as shown in **Appendix F**) containing all the EIA study recommendations and mitigation measures with reference to the implementation programme.

3.6 Presentation of Summary Information

3.6.1 Summary of Environmental Outcomes

The EIA report shall contain a summary of key environmental outcomes arising from the EIA study, including estimated population protected from various environmental impacts, environmentally sensitive areas protected, environmentally friendly options considered and incorporated in the preferred option, environmental designs recommended, key environmental problems avoided, compensation areas included and the environmental benefits of environmental protection measures recommended.

3.6.2 Summary of Environmental Impacts

To facilitate effective retrieval of pertinent key information, the EIA report shall contain a summary table of environmental impacts showing the assessment points, results of impact predictions, relevant standards or criteria, extents of exceedances predicted, impact avoidance measures considered, mitigation measures proposed and residual impacts (after mitigation). This summary shall cover each individual impact and shall also form an essential part of the executive summary of the EIA report.

3.6.3 <u>Documentation of Key Assessment Assumptions, Limitation of Assessment Methodologies and related Prior Agreement(s) with the Director</u>

The EIA report shall contain a summary including the assessment methodologies and key assessment assumptions adopted in the EIA study, the limitations of these assessment(s) methodologies/assumptions, if any, plus relevant prior agreement(s) with the Director or other Authorities on individual environmental media assessment components. The proposed use of any alternative assessment tool(s) or assumption(s) have to be justified by the Applicant, with supporting documents based on cogent, scientific and objectively derived reason(s) before seeking the Director's agreement. The supporting documents shall be provided in the EIA report.

3.6.4 <u>Summary of Alternative Options and Mitigation Measures</u>

The EIA report shall contain a summary of alternative development options and measures considered during the course of EIA study, including size/scale, design, construction methods and sequence of works for the Project, with a view to avoiding or minimizing and mitigating adverse environmental impacts. A comparison of the environmental benefits and dis-benefits of applying different development options, and/or mitigation measures shall be made. This summary shall cover the key impacts and shall also form an essential part of the executive summary of the EIA report.

3.6.5 Documentation of Public Concerns

The EIA report shall contain a summary of the main concerns of the general public, special interest groups and the relevant statutory or advisory bodies received and identified by the Applicant during the course of the EIA study, and describe how the relevant concerns have been taken into account.

4. DURATION OF VALIDITY

4.1 The Applicant shall notify the Director of the commencement of the EIA study. If the EIA study does not commence within 36 months after the date of issue of this EIA study brief, the Applicant shall apply to the Director for a fresh EIA study brief before commencement of the EIA study.

5. REPORTING REQUIREMENTS

In preparing the EIA report, the Applicant shall refer to Annex 11 of the TM for the contents of an EIA report. The Applicant shall also refer to Annex 20 of the TM, which stipulates the guidelines for the review of an EIA report. When submitting the EIA report to the Director, the Applicant shall provide a summary, pointing out

where in the EIA report the respective requirements of this EIA study brief and the TM (in particular Annexes 11 and 20) have been addressed and fulfilled.

- 5.2 To facilitate the updating of the ecological information of the Centralised Environmental Database, the Applicant shall provide the raw data of the ecological habitat maps including the project location and boundary, types and locations of habitats, findings of ecological field surveys and species of conservation interest in the assessment area in shapefile or GeoJSON or other format as agreed with the Director. The data shall be submitted in 3 copies of CD-ROM, DVD±R or other suitable means as agreed with the Director.
- The Applicant shall supply the Director with hard and electronic copies of the EIA report and the executive summary in accordance with the requirements given in **Appendix G** of this EIA study brief. The Applicant shall, upon request, make additional copies of the above documents available to the public, subject to payment by the interested parties of full costs of printing.
- To facilitate enhanced public engagement in the EIA process, the Applicant shall 5.4 produce 3-dimensional electronic visualisations of the findings of the EIA report, including baseline environmental information, the environmental situations with or without the Project, associated works, supporting facilities and essential infrastructures, key mitigated and unmitigated environmental impacts, and key recommended environmental mitigation measures so that the public can better understand the Project and the associated environmental issues. The visualisations shall be based on the EIA report findings and shall be developed and constructed such that they can be accessed and viewed by the public through an internet browser and/or other tools of 3-dimensional electronic visualisations (i.e. Virtual Reality, Augmented Reality, Mixed Reality) at a reasonable speed and without the need for software license requirement at the user's end. The visualisations and the corresponding raw data with necessary setting(s) that enable full migration into EPD's platform shall be submitted in 10 copies of CD-ROM, DVD±R or other suitable means as agreed with the Director.

6. OTHER PROCEDURAL REQUIREMENTS

- 6.1 If there is any change in the name of the Applicant for this EIA study brief during the course of EIA study, the Applicant must notify the Director immediately.
- 6.2 If there is any key change in the scope of the Project mentioned in Sections 1.2 of this EIA study brief and in Project Profile (No. PP-657/2023), the Applicant must seek confirmation from the Director in writing on whether or not the scope of issues covered by this EIA study brief can still cover the key changes, and the additional issues, if any, that the EIA study must also address. If the changes to the Project

fundamentally alter the key scope of the EIA study brief, the Applicant shall apply to the Director for a fresh EIA study brief.

7. LIST OF APPENDICES

7.1 This EIA study brief includes the following appendices:

Appendix A – Project Location Plan

<u>Appendix B</u> – Requirements for Air Quality Impact Assessment

Appendix C – Requirements for Water Quality Impact Assessment

Appendix D – Requirements for Assessment of Waste Management Implications

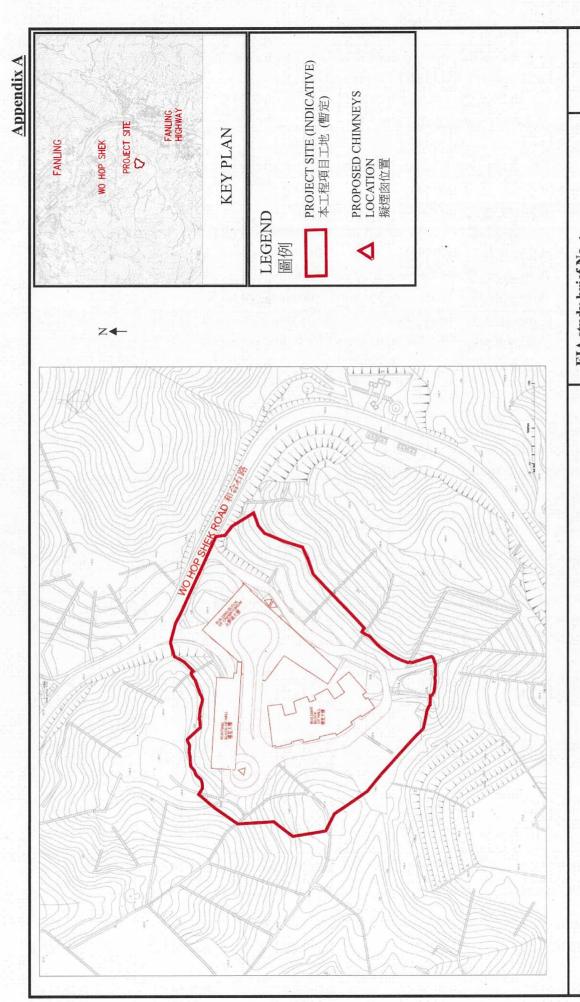
Appendix E – Requirements for Ecological Impact Assessment

Appendix F – Implementation Schedule of Recommended Mitigation Measures

Appendix G – Requirements for EIA report Documents

--- END OF EIA STUDY BRIEF ---

August 2023 Environmental Assessment Division Environmental Protection Department August 2023



Project Title: Provision of Crematorium at Wo Hop Shek Cemetery (This figure is prepared based on Figure 1.1 of Project Profile No.: PP-657/2023)

工程項目名稱 : 在和合石墳場興建火葬場 (本圖是根據工程項目簡介 BP-651/2023 圖則編號 Figure 1.1 編製)

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EIA study brief No.: 環評研究概要編號: ESB-362/2023

Appendix A: Project Location Plan 附錄 A: 工程項目位置圖



Appendix B

Requirements for Air Quality Impact Assessment

The air quality impact assessment shall include the following:

1. Background and Analysis of Activities

- (i) Provision of background information relating to air quality issues relevant to the Project, e.g. description of the types of activities of the Project that may affect air quality during construction and operation stages of the Project.
- (ii) Provision of an account, where appropriate, of the consideration/ measures that have been taken into consideration during the planning of the Project to avoid and minimize the air pollution impact. The Proponent shall consider alternative design of the cremators, cremation processes, modes and hours of operation, construction methods or fuel(s) to minimize the air quality impact during construction and operation stages of the Project.
- (iii) Provision of background air quality levels in the study area. Projection of future year background air quality can be extracted from "Pollutants in the Atmosphere and their Transport over Hong Kong" (PATH) model released by the Director with necessary modification according to the emission scenarios(s) of the assessment year(s). If a modification to the emission sources is to be adopted in the PATH model to update the projection of future year background air quality, details of the emission sources adopted in the modification should be clearly presented.

2. <u>Identification of Air Sensitive Receivers (ASRs) and Examination of Emission/Dispersion Characteristics</u>

(i) Identification and description of existing, committed and planned ASRs that would likely be affected by the Project, including those earmarked on the relevant Outline Zoning Plans, Development Permission Area Plans, Outline Development Plans and Layout Plans and other relevant published land use plans, including plans and drawings published by Lands Department and any land use and development applications approved by the Town Planning Board. The Proponent shall select the assessment points of the identified ASRs that represent the worst impact point of these ASRs. A map clearly showing the location and description such as name of buildings, their uses and height of the selected assessment points and the separation distances of these ASRs from the nearest emission sources shall be given.

- (ii) Provision of a list of air pollution emission sources, including any nearby emission sources which are likely to have impact related to the Project based on the analysis of the construction and operation activities in Section 1 above. Confirmation regarding the validity of the assumptions adopted and the magnitude of the activities (e.g. volume of construction material to be handled, etc.) shall be obtained from the relevant government departments/authorities, where applicable, and documented. Validity of the traffic flow, vehicle fleet mix and traffic speed prediction shall be confirmed with Transport Department.
- (iii) Identification of existing and potential chimneys and obtainment of relevant chimney emission data in the assessment area, where appropriate, by carrying out a survey for assessing the cumulative air quality impact of air pollutants through chimneys. The Proponent shall ensure and confirm the validity of the emission data used in their assessment. Any errors found in their emission data used may render the submission invalid.
- (iv) The emissions from any concurrent projects identified as relevant during the course of the EIA study shall be taken into account as contributing towards the overall cumulative air quality impact. The impact as affecting the existing, committed and planned ASRs within the study area shall be assessed, based on the best information available at the time of assessment.

3. Construction Phase Air Quality Impact

- (i) The Proponent shall follow the requirements stipulated under the Air Pollution Control (Construction Dust) Regulation to ensure that construction dust impacts are are effectively controlled. Construction dust assessment should be conducted qualitatively to ensure that the Air Pollution Control (Construction Dust) Regulation is complied with.
- (ii) The Proponent shall consider and evaluate direct mitigation measures, including but not limited to water-spraying, re-scheduling construction programme to minimise concurrent dust impact arising from different construction sites, for fugitive dust control. The Proponent shall also consider connecting construction plant and equipment to mains electricity supply and avoid use of diesel generators and diesel-powered equipment as far as practicable to minimize air quality impact arising from the equipment. The Proponent shall describe the means of transportation and their routings involved, with a view to addressing potential dust nuisance caused by transportation activities. Any mitigation measures recommended for fugitive dust control should be well documented in the EIA report.

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(iii) A monitoring and audit programme for the construction phase of the Project shall be devised to verify the effectiveness of the proposed control measures so as to ensure proper control of fugitive dust emission.

4. Operational Phase Air Quality Impact

- (i) The Proponent shall assess the expected air pollutant impacts at the identified ASRs based on an assumed reasonably worst-case scenario under normal operating conditions. If the assessment indicates likely exceedances of the recommended limits in the TM at the development and the nearby ASRs, a quantitative assessment should be carried out to evaluate the operational phase air quality impacts at the identified ASRs. The Proponent shall follow the methodology set out in Section 5 below when carrying out the quantitative assessment.
- (ii) In addition to preparing a list of emission sources required in Section 2 (ii) above, the Proponent shall state the target emission levels for the cremators, and compare them with the standards specified in the Guidance Note on the Best Practicable Means for Incinerators (Crematoria) issued by EPD, and other relevant overseas standards. The target emission levels for the cremators, including but not limited to that for dioxins, should be agreed with the Director prior to the carrying out of the quantitative assessment of operational air quality impact.
- (iii) The Proponent shall calculate the expected pollutant concentrations at the identified ASRs based on an assumed reasonably worst-case scenario under testing stage and normal operating conditions for the full operation of the crematorium (i.e. total 10 cremators). The evaluation shall be based on the strength of the emission sources identified in sub-section 2 (ii) above, and shall follow methodology set out in Section 5 below when carrying out the quantitative assessment.
- (iv) Potential human health impacts during operation of the Project shall be identified and assessed based on established practices in countries around the world. Pollutants to be assessed should include Hydrogen chloride (HCI), Mercury (Hg), Ammonia (NH₃), Dioxins and Total Organic Carbon (TOC) or as agreed with the Director.
- A monitoring and audit programme for the operational stage shall be devised (v) to verify the effectiveness of the control measures proposed so as to ensure proper control of operational air quality impacts.

5. Quantitative Assessment Methodology

- (i) The Proponent shall conduct the quantitative assessment by applying the general principles enunciated in the modeling guidelines in Appendix B-1 while making allowance for the specific characteristic of the Project. This specific methodology must be documented in such level of details, preferably assisted with tables and diagrams, to allow the readers of the EIA report to grasp how the model has been set up to simulate the situation under study without referring to the model input files.
- (ii) Detailed calculations of air pollutant emission rates for input to the model showing road links and emission sources shall be presented in the EIA report. A summary table of the emission rates shall be presented in the EIA report. The Proponent must ensure consistency between the text description and the model files at every stage of submissions for review. In case of doubt, prior agreement between the Proponent and the Director on the specific modelling details should be sought.
- (iii) The Proponent shall identify the key/representative air pollution parameters (types of pollutants and averaging time concentrations) to be evaluated and provide explanation for selecting such parameters for assessing the impact from the Project.
- (iv) The air pollution impacts of future road traffic shall be calculated based on the highest emission strength from the road vehicles in the assessment area within the next 15 years upon commissioning of the Project. The Proponent shall demonstrate that the selected year of assessment represents the highest emission scenario given the combination of vehicular emission factors and traffic flow for the selected year. The Proponent may use EMFAC-HK model released by the Director to determine the Fleet Average Emission Factors, taking into account vehicle fleet mix and other necessary data. Unless otherwise agreed by the Director, the latest version of the EMFAC-HK model shall be used. Use of any alternatives to the EMFAC-HK model shall be agreed with the Director. The traffic flow data and assumptions, such as the exhaust technology fractions, vehicle age/population distribution, traffic forecast and speed fractions, etc. that are used in the assessment shall be presented.
- (v) For projection of future background air quality, the Proponent may use the PATH model released by the Director, taking into consideration the major air pollutant emission sources projected for Hong Kong and nearby regions. Unless otherwise agreed by the Director, the latest version of the PATH model shall be used. If any modification is made to the emission sources in PATH

model or an alternative model is used, details of the emission sources adopted should be clearly presented. In general, major point sources (referred in Section 2.3 of EPD's "Guidelines on Assessing the 'TOTAL' Air Quality Impacts") located within 4 kilometres from the identified ASRs shall be reviewed if they have direct contributions of air quality impacts to the ASRs on the concerned pollutants of the assessment. In such case, these point sources shall be simulated by dispersion model to account for their induced sub-grid scale spatial variations in background air quality. The exact approach shall be determined according to the case specific situation and subject to the agreement by the Director.

- (vi) Ozone Limiting Method (OLM) or other appropriate method shall be used to estimate the conversion ratio of NOx to NO₂ if NO₂ has been identified as a key/representative air pollutant.
- (vii) The Proponent shall calculate the overall cumulative air quality impact at the ASRs identified under Section 2 above and compare these results against the criteria set out in Section 1 of Annex 4 in the TM. The predicted air quality impacts (both unmitigated and mitigated) shall be presented in the form of summary table(s) and pollution contours, to be evaluated against the relevant air quality standards and on any effect they may have on the land use implications. Plans of a suitable scale should be used to present pollution contours to allow buffer distance requirements to be determined properly.
- (viii) For the quantitative assessment of the odour emission impact upon the identified ASRs, the odour emission strength/ rates shall be based on the results of odorous air sampling/ measurement conducted directly at the odour emission sources within the assessment area as defined in Section 3.4.4.2. The details of such odorous air sampling/ measurement, including the methodology and calculation of the odour emission strength/rates, shall be presented in the EIA report.
- 6. Mitigation Measures for Air Quality Impact
- 6.1 Consideration for Mitigation Measures
- 6.1.1 When the predicted air quality impact exceeds the criteria set in Section 1 of Annex 4 in the TM, the Proponent shall consider mitigation measures to reduce the air quality impact on the identified ASRs. The feasibility, practicability, programming and effectiveness of the recommended mitigation measures shall be assessed and documented in the EIA report. Specific reasons for not adopting certain workable mitigation measures to reduce the air quality to a level meeting the criteria in the TM or to maximize the protection of the ASRs as far as possible should be clearly

substantiated and documented in the EIA report.

- 6.2 Evaluation of Residual Air Quality Impact
- 6.2.1 Upon consideration of mitigation measures, if the mitigated air quality impact still exceeds the relevant criteria in Annex 4 of the TM, the Proponent shall identify, predict, and evaluate the residual air quality impact in accordance with Section 4.4.3 and Section 4.5.1(d) of the TM.
- 7. Submission of Emission Calculation Details and Model Files
- 7.1 All input and output file(s) of the model run(s), including those files for the generation of pollution contours as well as the emissions calculation worksheets, shall be submitted to the Director in electronic format together with the submission of the EIA report.

Appendix B-1

Air Quality Modelling Guidelines

[The information contained in this Appendix is meant to assist the Applicant in performing the air quality assessment. The Applicant must exercise professional judgment in applying this general information.]

The air quality modelling guidelines refer to the latest version of guidelines as published on the website of the Environmental Protection Department "Guidelines for Local-Scale Air Quality Assessment Using Models":

(https://www.epd.gov.hk/epd/english/environmentinhk/air/guide ref/guide aqa model.html):

Appendix C

Requirements for Water Quality Impact Assessment

- 1. The Applicant shall identify and analyse physical, chemical and biological disruptions of the water system(s) arising from the construction and operation of the Project.
- 2. The Applicant shall predict, quantify and assess any water quality impacts arising from the construction and operation of the Project.
- 3. The Applicant shall take into account different construction stages or sequences and operational stages of the Project in the assessment. Essentially, the assessment shall address the following:
 - (i) collect and review background information on affected existing and planned water systems, their respective catchments and sensitive receivers which might be affected by the Project;
 - (ii) characterize water quality of the water systems and sensitive receivers, which might be affected by the Project based on existing best available information and through appropriate site survey and tests when existing data are insufficient;
 - (iii) identify and analyse relevant existing and planned future activities, beneficial uses and water sensitive receivers related to the affected water system(s). The Applicant should refer to, *inter alia*, those developments and uses earmarked on the relevant Outline Zoning Plans, Development Permission Area Plans, Outline Development Plans and Layout Plans, and any other relevant published land use plans, including plans and drawings published by Lands Department and any land use and development applications approved by the Town Planning Board;
 - (iv) identify pertinent water quality objectives and establish other appropriate water quality criteria or standards for the water system(s) and the sensitive receivers identified in (i), (ii) & (iii) above;
 - (v) review the specific construction methods and configurations, and operation of the Project to identify and predict the likely water quality impacts arising from the Project;

- (vi) identify any alteration of any water courses, natural streams, ponds, wetlands; change in flow regimes of water bodies, change of catchment types or areas; erosion or sedimentation due to the Project and any other hydrological changes in the assessment area;
- (vii) identify and quantify all existing and future water pollution sources, including point discharges and non-point sources to the water systems, sewage and wastewater from the construction and operation stages and any other polluted discharge generated from the Project;
- (viii) provide an emission inventory on the quantities and characteristics of those existing and future pollution sources in the assessment area. Field investigation and laboratory test, shall be conducted as appropriate to fill relevant information gaps;
- (ix) predict and quantify the water quality impacts arising from those alterations and changes and pollution sources identified in (vi) to (viii) above. The prediction shall take into account and include possible different construction and operation stages of the Project;
- (x) assess the cumulative impacts due to other related concurrent and planned projects, activities or pollution sources within the assessment area that may have a bearing on the environmental acceptability of the Project;
- (xi) analyze the provision and adequacy of existing and planned future facilities to handle or reduce pollution arising from the point and non-point sources identified in (vii) above;
- (xii) develop effective infrastructure upgrading or provision, contingency plan, water pollution prevention and mitigation measures to be implemented during construction and operation stages, so as to reduce the water quality impacts to within standards. Effluent generated from the Project shall require appropriate collection, treatment and disposal in considering the Deep Bay catchment. Requirements to be incorporated in the Project contract document shall also be proposed;
- (xiii) investigate and develop best management practices and mitigation measures to reduce storm water, non-point source pollution, first flush pollution and silty runoff during construction and operation as appropriate; and

evaluate and quantify residual impacts on water system(s) and the sensitive receivers with regard to the appropriate water quality objectives, criteria, standards or guidelines. If the mitigated water quality impact still exceeds the relevant criteria in Annex 6 of TM, the Applicant shall identify, predict and evaluate the residual water quality impact in accordance with Section 4.4.3 of the TM and estimate the significance of the residual impact to the water system(s) and the water sensitive receivers.

Appendix D

Requirements for Assessment of Waste Management Implications

The assessment of waste management implications shall cover the following:

1. Analysis of Activities and Waste Generation

- (i) The Applicant shall identify the quantity, quality and timing of the wastes arising as a result of the construction and operation activities of the Project based on the sequence and duration of these activities, method and process of these activities, e.g. any construction and demolition (C&D) materials, ash and non-combustible residues from the cremator operation, chemical waste from regular maintenance of the air pollution control system and other mechanical systems and other wastes which would be generated during construction and operation stages.
- (ii) The Applicant shall adopt appropriate design, general layout, construction methods and programme to minimize the generation of public fill/inert C&D materials and maximize the use of public fill/inert C&D materials for other construction works.

2. Proposal for Waste Management

- (i) Prior to considering the disposal options for various types of wastes, opportunities for reducing waste generation, on-site or off-site re-use and recycling shall be evaluated. Measures which can be taken in the planning and design stages (e.g. by modifying the design approach) and in the construction stage for maximizing waste reduction shall be separately considered;
- (ii) After considering the opportunities for reducing waste generation and maximizing re-use, the types and quantities of the wastes required to be disposed of as a consequence shall be estimated and the disposal methods/options for each type of wastes shall be described in detail. The disposal methods/options recommended for each type of wastes shall take into account the result of the assessment in sub-section (iv) below;
- (iii) The EIA report shall state the transportation routings and the frequency of the trucks/vessels involved, any barging point or conveyor system to be used, the stockpiling areas and the disposal outlets for the wastes identified; and
- (iv) The impact caused by handling (including stockpiling, labelling, packaging & storage), collection, transportation and re-use/disposal of wastes shall be addressed in detail and appropriate mitigation measures shall be proposed.

Appendix E

Requirements for Ecological Impact Assessment (Terrestrial and Aquatic)

1. In the ecological impact assessment, the Applicant shall examine the flora, fauna and other components of the ecological habitats within the assessment area. The aim shall be to protect, maintain or rehabilitate the natural environment. In particular, the Project shall avoid or minimize impacts on recognised sites of conservation importance and other ecologically sensitive areas such as the areas zoned as "Conservation Area" on the relevant Outline Zoning Plan and watercourses in the vicinity. The assessment shall identify and quantify as far as possible the potential ecological impacts to the natural environment and the associated wildlife groups and habitats/species arising from the Project directly by physical disturbance and indirectly by potential impacts such as change of water quality and hydrodynamic regime to the natural environment and the associated wildlife groups and habitats/ species, during its construction and operation phases as well as the subsequent management and maintenance of the proposals.

2. The assessment shall include the followings:

- (i) Review of the findings of relevant studies/surveys, including the approved EIA report no. AEIAR-119/2008 for the project "Provision of Cremators at Wo Hop Shek Crematorium" kept in the EIAO Register, and collection of the available information regarding the ecological characters of the assessment area;
- (ii) Evaluation of information collected and identification of any information gap relating to the assessment of potential ecological impact, and determine the ecological field surveys and investigations that are needed for an impact assessment as required in the following sections;
- (iii) Carrying out necessary field surveys of at least 6 months covering both the wet and dry seasons, and investigations to verify the information collected in (ii) above, to fill the information gaps identified and to fulfill the objectives of the EIA study. The field surveys shall cover flora, fauna and any other habitats/ species of conservation importance;
- (iv) Establishment of the general ecological profile of the assessment area based on data of relevant previous studies/surveys and results of the ecological field surveys, if any, and description of the characteristics of each habitat found. The data set should be comprehensive and representative covering the variations of the wet and dry seasons, and is up to date and valid for the purpose of this assessment. Major information to be provided shall include:

- (a) description of the physical environment, including all recognized sites of conservation importance and other ecologically sensitive areas, and assessment of whether these sites/areas will be affected by the Project or not;
- (b) habitat maps of suitable scale (1:1000 to 1:5000) showing the types and locations of habitats and species of conservation importance in the assessment area;
- (c) ecological characteristics of each habitat type such as size, vegetation, type, species present, dominant species found, species diversity and abundance, community structure, seasonal pattern, ecological value and inter-dependence of the habitats and species, and presence of any features of ecological importance;
- (d) representative colour photos of each habitat type and any important ecological features identified; and
- (e) species found that are rare, endangered and/or listed under local legislation, international conventions for conservation of wildlife/habitats or red data books.
- (v) Investigation and description of the existing wildlife uses of the various habitats with special attention to those wildlife groups and habitats with conservation importance, including but not limited to:
 - (a) woodland, grassland and plantations;
 - (b) natural and man-made wetland habitats including watercourses (both seasonal and non-seasonal), freshwater ponds and others, and associated riparian habitats;
 - (c) Vertebrates;
 - (d) Macroinvertebrates; and
 - (e) any other habitats or species identified as having conservation importance by this study.
- (vi) Description of all recognised site of conservation importance in the assessment area and in its vicinity;
- (vii) Using suitable methodology and considering also other projects in the vicinity of the Project area reasonably likely to occur at the same time, identification and quantification as far as possible of any direct, indirect, on-site, off-site, primary, secondary and cumulative ecological impacts, such as destruction of habitats, reduction of species abundance/diversity, loss of roosting, breeding

and/or feeding grounds, reduction of ecological carrying capacity, loss in ecological linkage and function, habitat fragmentation and any other possible disturbance caused by the Project, and in particular the followings:

- (a) loss of habitats such as those mentioned in 2 (v), and disturbance to wildlife;
- (b) impacts arising from and/or associated with the proposed works (e.g. impacts on birds due to collision to buildings);
- (c) noise, glare, dust and other human disturbance to wildlife, freshwater crabs and sensitive wetland habitats in the vicinity such as fishponds / freshwater ponds and watercourses during construction and operation phases;
- (d) indirect ecological impacts due to changes in the water quality, hydrodynamics properties, hydrology and alterations to riparian habitats, as a result of surface run-off in the watercourses, drainage channels, fishponds, freshwater ponds and other habitats mentioned in 2 (v) above in the assessment area during construction and operation phases; and
- (e) cumulative impacts due to other planned and committed concurrent development projects at or near the Project area.
- (viii) Evaluation of ecological impact based on the best and latest information available during the course of the EIA study, using quantitative approach as far as practicable and covering construction and operation phases of the Project as well as the subsequent management and maintenance requirement of the Project;
- (ix) Recommendations for possible alternatives and practicable mitigation measures, such as restriction of works at specified season or time, adoption of appropriate construction methods and/or programme, to avoid, minimize and/or compensate for the adverse ecological impacts identified during construction and operation of the Project;
- Evaluation of the feasibility and effectiveness of the recommended mitigation measures and definition of the scope, type, location, implementation arrangement, resources requirement, subsequent management and maintenance of such measures;
- (xi) Determination and quantification as far as possible of the residual ecological impacts after implementation of the proposed mitigation measures;
- (xii) Evaluation of the significance and acceptability of the residual ecological impacts by making reference to the criteria in Annex 8 of the TM, and

determine if off-site mitigation measures are necessary to mitigate the residual impacts and if affirmative, guidelines and requirements laid down in Annex 16 of the TM should be followed; and

(xiii) Review of the need for and recommendation on any ecological monitoring programme required.

Appendix F

Implementation Schedule of Recommended Mitigation Measures

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main Concerns to address	Who to implement the measure?	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve
* Y							
		,					

Appendix G

Requirements for EIA report Documents

- 1. The Applicant shall supply the Director with the following number of copies of the EIA report and the executive summary:
 - (i) 30 copies of the EIA report and 30 copies of the bilingual (in both English and Chinese) executive summary as required under section 6(2) of the EIAO to be supplied at the time of application for approval of the EIA report.
 - (ii) When necessary, addendum to the EIA report and the executive summary submitted in item (i) above as required under section 7(1) of the EIAO, to be supplied upon advice by the Director for public inspection.
 - (iii) 20 copies of the EIA report and 50 copies of the bilingual (in both English and Chinese) executive summary with or without Addendum as required under section 7(5) of the EIAO, to be supplied upon advice by the Director for consultation with the Advisory Council on the Environment.
- 2. To facilitate public inspection of EIA report via EIAO Internet Website, the Applicant shall provide electronic copies of both the EIA report and the executive summary prepared in HyperText Markup Language (HTML) and in Portable Document Format (PDF), unless otherwise agreed by the Director. For both of the HTML and PDF versions, a content page capable of providing hyperlink to each section and sub-section of the EIA report and the executive summary shall be included in the beginning of the document. Hyperlinks to figures, drawings and tables in the EIA report and the executive summary shall be provided in the main text from where respective references are made. The EIA report, including drawings, tables, figures and appendices shall be viewable by common web-browsers including Internet Explorer 8, Firefox 23, Chrome and Safari 8 or later versions as agreed by the Director, and support languages including Traditional Chinese, Simplified Chinese and English.
- 3. The electronic copies of the EIA report and the executive summary shall be submitted to the Director at the time of application for approval of the EIA report.
- 4. When the EIA report and the executive summary are made available for public inspection under section 7(1) of the EIAO, the content of the electronic copies of the EIA report and the executive summary must be the same as the hard copies and the Director shall be provided with the most updated electronic copies.
- 5. To promote environmentally friendly and efficient dissemination of information, both hardcopies and electronic copies of future EM&A reports recommended by the EIA study shall be required and their format shall be agreed by the Director.