本署檔號

OUR REF:

() in EP 2/N5/O/69 Pt.2

來函檔號 YOUR REF:

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Environmental Protection Department Branch Office

28th Floor, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong.



環境保護署分處 香港灣仔 一百三十號 修頓中心廿八樓

20 September 2019

Sha Lo Tung Development Company Limited

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

Project Title: Shuen Wan Golf Course (Application No. AEP-571/2019)

I refer to your above application received on 11 September 2019 for an environmental permit under Section 10(1) of the EIA Ordinance.

Pursuant to Section 10(5) of the EIA Ordinance, I now issue the attached Environmental Permit (No. EP-571/2019) for your use.

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

Please note that if you are aggrieved by any of the conditions imposed in this Permit, you may appeal under Section 17 of the EIA Ordinance within 30 days of receipt of this Permit.

Should you have any queries on the above application, please contact my colleague Mr. Steve LI at 2835 1142.

Yours sincerely,

(K.H. TO)

Principal Environmental Protection Officer for Director of Environmental Protection



ENVIRONMENTAL IMPACT ASSESSMENT ORDINANCE (CHAPTER 499) SECTION 10 環境影響評估條例 (第 499 章) 第 10 條

ENVIRONMENTAL PERMIT TO CONSTRUCT AND OPERATE A DESIGNATED PROJECT

建造及營辦指定工程項目的環境許可證

PART A (MAIN PERMIT) A 部 (許可證主要部分)

Pursuant to Section 10 of the Environmental Impact Assessment Ordinance (EIAO), the Director of Environmental Protection (the Director) grants this environmental permit to the <u>Sha Lo Tung Development Company Limited</u> (hereinafter referred to as the "Permit Holder") to construct and operate the designated project described in <u>Part B</u> subject to the conditions specified in <u>Part C</u>. The issue of this environmental permit is based on the documents, approvals or permissions described below:

根據《環境影響評估條例》(環評條例) 第 10 條的規定,環境保護署署長(署長)將本環境許可證 批予<u>沙螺洞發展有限公司</u>(下稱"許可證持有人") 以建造及營辦 <u>B 部</u> 所說明的指定工程項目,但 須遵守 C 部 所列明的條件。本環境許可證是依據下列文件、批准或許可而簽發:

須遵守 <u>C 部</u> 所列明的條件。本環境許可證是依據下列文件、批准或許可而簽發:		
Application No. 申請書編號	AEP-571/2019	
Document in the Register: 登記冊上的文件:	(1) Shuen Wan Golf Course (Register No. AEIAR-221/2019): - Environmental Impact Assessment Report [Hereafter referred to as "the EIA Report"] - Environmental Monitoring and Audit Manual [Hereafter referred to as "the EM&A Manual"] - EIA Executive Summary [Hereafter referred to as "EIA Executive Summary"] 船灣高爾夫球場 (登記冊檔號:AEIAR-221/2019): - 環境影響評估報告 [下稱「環評報告」] - 環境影響評估報告 [下稱「環監手冊」] - 環境影響評估報告行政摘要 [下稱「環評行政摘要」] (2) The Director's letter of approval of the EIA Report dated 5 July 2019 (Reference: (47) in EP 2/N5/O/69 Pt.2) 署長於 2019 年 7 月 5 日發出批准環評報告的信件 (檔案編號: (47) in EP 2/N5/O/69 Pt.2)	
	571/2019) 許可證持有人於 2019 年 9 月 11 日提交的環境許可證 申請文件(申請書編號: AEP-571/2019)	

20 September 2019 2019年9月20日

> Date 日期

(K. H. TO)

Principal Environmental Protection Officer for Director of Environmental Protection 環境保護署署長

(首席環境保護主任 杜景浩 代行)



PART B (DESCRIPTION OF DESIGNATED PROJECT) B 部 (指定工程項目的說明)

Hereunder is the description of the designated project mentioned in $\underline{Part\ A}$ of this environmental permit (hereinafter referred to as the "Permit"):

下列為本環境許可證(下稱"許可證") A部 所提述的指定工程項目的說明:

Title of Designated Project 指定工程項目的名稱	Shuen Wan Golf Course [This designated project is hereafter referred to as "the Project"]		
	船灣高爾夫球場 [本指定工程項目下稱"工程項目"]		
Nature of Designated Project 指定工程項目的性質	An outdoor golf course and all managed turf areas 戶外高爾夫球場及全部受管理的草地範圍		
Location of Designated Project 指定工程項目的地點	The Project is located at Shuen Wan Restored Landfill in Tai Po. The location of the Project is shown in <u>Figure 1</u> of this Permit. 工程項目位於大埔船灣已修復堆填區。工程項目的位置載於本許可證 <u>圖 1</u> 。		
Scale and Scope of Designated Project 指定工程項目的規模和範圍	The Project scope comprises construction and operation of the following key elements: 工程項目的範圍包括建造及營辦以下主要部份: - An 18-hole golf course and its ancillary facilities (under development scenario 2); and —個 18 洞高爾夫球場及其附屬設施(按發展方象 2); 及 - Associated infrastructure such as drainage system sewerage system, irrigation system, etc. to support the daily operations of the golf course. 支持高爾夫球場日常運作的基建配備,包括排水系統、污水系統、灌溉系統等。		

PART C (PERMIT CONDITIONS)

1. General Conditions

- 1.1 The Permit Holder and any person working on the Project shall comply with all conditions set out in this Permit. Any non-compliance by any person may constitute a contravention of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) and may become the subject of appropriate action being taken under the EIAO.
- 1.2 The Permit Holder shall ensure full compliance with all legislation from time to time in force including, without limitation to, the Air Pollution Control Ordinance (Cap. 311), Waste Disposal Ordinance (Cap. 354), Water Pollution Control Ordinance (Cap. 358) and Noise Control Ordinance (Cap. 400). This Permit does not of itself constitute any ground of defence against any proceedings instituted under any legislation or imply any approval under any legislation.
- 1.3 The Permit Holder shall make copies of this Permit together with all documents referred to in this Permit and the documents referred to in Part A of the Permit readily available at all times for inspection by the Director or his authorised officers at all sites/offices covered by this Permit. Any reference to the Permit shall include all documents referred to in the Permit and also the relevant documents in the Register.
- 1.4 The Permit Holder shall give a copy of this Permit to the person(s) in charge of the site(s) and ensure that such person(s) fully understands all conditions and all requirements incorporated in the Permit. The site(s) refers to site(s) of construction and operation of the Project and shall mean the same hereafter.
- 1.5 The Permit Holder shall display conspicuously a copy of this Permit on the Project Site(s) at all vehicular site entrances/exits or at a convenient location for public's information at all times. The Permit Holder shall ensure that the most updated information about the Permit, including any amended Permit, is displayed at such locations. If the Permit Holder surrenders a part or the whole of the Permit, the notice he sends to the Director shall also be displayed at the same locations as the original Permit. The suspended, varied or cancelled Permit shall be removed from display at the Project Site(s).
- 1.6 The Permit Holder shall construct and operate the Project in accordance with the project description in Part B of this Permit.
- 1.7 The Permit Holder shall ensure that the Project is designed, constructed and operated in accordance with the information and recommendations described in the approved EIA Report (Register No: AEIAR-221/2019); the application document for environmental permit; the information or mitigation measures described in this Permit; mitigation measures to be recommended in submissions that shall be deposited with or approved by the Director as a result of permit conditions contained in this Permit, and mitigation measures to be recommended under on-going surveillance and monitoring activities during all stages of the Project; and other relevant documents in the Register. Where recommendations referred to in the documents of the Register are not expressly referred to in this Permit, such recommendations are nevertheless to be implemented unless expressly excluded or impliedly amended in this Permit.
- 1.8 All submissions, as required under this Permit, shall be rectified and resubmitted in accordance with the comments, if any, made by the Director within one month of the receipt of the Director's comments or otherwise as specified by the Director.

- 1.9 All submissions to the Director, all submissions deposited without comments by the Director, and all submissions rectified in accordance with comments by the Director under this Permit shall be construed as part of the permit conditions described in Part C of this Permit. Any variation of the submissions shall be approved by the Director in writing or as prescribed in the relevant permit conditions. Any non-compliance with the submissions may constitute a contravention of the Environmental Impact Assessment Ordinance (Cap. 499). All submissions or any variation of submissions shall be certified by the Environmental Team (ET) Leader and verified by the Independent Environmental Checker (IEC) referred to in Conditions 2.1 and 2.6 below before submitting to the Director under this Permit.
- 1.10 The Permit Holder shall release all finalised submissions as required under this Permit to the public by depositing copies in the Environmental Impact Assessment Ordinance Register Office, or in any other places, or any internet websites as specified by the Director, or by any means as specified by the Director, for public inspection. For this purpose, the Permit Holder shall provide sufficient copies of the submissions.
- 1.11 All submissions to the Director required under this Permit shall be delivered either in person or by registered mail to the Environmental Impact Assessment Ordinance Register Office (currently at 27/F, Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong). Electronic copies of all finalised submissions required under this Permit shall be prepared in Hyper Text Markup Language (HTML) (version 4.0 or later) and in Portable Document Format (PDF version 1.3 or later), unless otherwise agreed by the Director and shall be submitted at the same time as the hard copies.
- 1.12 The Permit Holder shall notify the Director in writing the commencement dates of construction and operation of the Project no later than three months prior to the commencement of construction and operation of the Project respectively. The Permit Holder shall notify the Director in writing immediately if there is any change of the commencement dates of construction and operation.
- 1.13 For the purpose of this Permit, "commencement of construction" does not include works related to site investigation, clearance and preparation, or other works as agreed by the Director.

2. Special Conditions

Employments and Submissions before Construction of the Project

Employment of Environmental Team (ET)

An ET, unless otherwise approved by the Director, shall be established by the Permit Holder no later than four months before the commencement of construction of the Project. The ET shall be directly supervised by the Engineer's Representative (ER) of the Permit Holder and shall not be in any way an associated body of the Contractor, the Specialist Contractor, the IEC, or the Independent Landfill Consultant for the Project or the Shuen Wan Landfill Restoration Contractor. The Permit Holder shall provide a site office to the ET for use. The ET shall be headed by an ET Leader and supported by relevant specialists including Ecologist and Registered Landscape Architect. The ET

Leader shall be a person who has at least 7 years of experience in environmental monitoring and auditing (EM&A) or environmental management. The minimum on-site time for the ET leader and ET shall be proposed with justifications, having regard to the potential environmental impacts arising from activities on site at various stages of the Project, for the approval of the Director. The qualifications of the ET Leader and specialists in the ET shall be proposed with justifications for the approval of the Director.

- 2.2 The ET and the ET Leader shall be responsible for:
 - (i) implementing the EM&A programme in accordance with the EM&A requirements as contained in the EM&A Manual of the Project as mentioned in Condition 3.1 below;
 - (ii) certifying the environmental acceptability of permanent and temporary works, relevant plans and submissions required in the EM&A Manual and under this Permit;
 - (iii) carrying out site inspections to audit the Contractor's site practice and work methodologies with respect to environmental mitigation measures contained in the EM&A Manual of the Project and to take pro-active actions to pre-empt environmental problems;
 - (iv) notifying the IEC within one working day of the occurrence of each and every instance or circumstance or change of circumstances, which may affect the compliance with the recommendations of the approved EIA Report (Register No. AEIAR-221/2019) and this Permit; and
 - (v) keeping a contemporaneous log-book of any such instance or circumstance or change of circumstances. The log-book shall be kept readily available for inspection by all persons assisting in supervision of the implementation of the recommendations of the approved EIA Report (Register No. AEIAR-221/2019) and this Permit or by the Director or his authorised officers.
- 2.3 Failure to maintain records in the log-book, failure to discharge the duties of the ET Leader as defined in the EM&A Manual would entitle the Director to require the Permit Holder by notice in writing to replace the ET Leader. Failure by the Permit Holder to make replacement, or further failure to keep contemporaneous records in the log-book despite the employment of a new ET Leader may render the Permit liable to suspension, cancellation or variation.

Employment of Ecologist

The Permit Holder shall, no later than four months before the commencement of the construction of the Project, appoint an Ecologist to form part of the ET to carry out work relating to ecological aspects including but not limited to preparing submission of Tree Preservation, Transplantation and Compensation Plan (TPTCP), Construction Phasing Plan (CPP), and Powered Mechanical Equipment Restriction Zones Review Report (PMERZRR) for the Project as required under Conditions 2.14, 2.15, and 2.18 of this Permit respectively, and to audit the implementation of ecological mitigation measures to ensure compliance with the recommendations of the approved TPTCP, CPP, PMERZRR and the approved EIA Report (Register No. AEIAR-221/2019). The Ecologist shall be a person who has at least 5 years of relevant experience in avifauna survey. The

qualification and experience of the Ecologist shall be certified by the ET Leader, and verified by the IEC for the approval of the Director.

Employment of Registered Landscape Architect

2.5 The Permit Holder shall, no later than four months before the commencement of the construction of the Project, appoint a Registered Landscape Architect to form part of the ET to carry out work relating to landscape aspects including but not limited to preparing submissions of Tree Survey Report and Landscape and Visual Mitigation Plan (LVMP) for the Project as required under Conditions 2.13 and 2.23 of this Permit respectively, and to audit the implementation of landscape mitigation measures to ensure compliance with the recommendations of the approved LVMP and the approved EIA Report (Register No. AEIAR-221/2019). The qualification and experience of the Registered Landscape Architect shall be certified by the ET Leader and verified by the IEC for the approval of the Director.

Employment of Independent Environmental Checker (IEC)

- An IEC with a supporting team, unless otherwise approved by the Director, shall be employed by the Permit Holder no later than four months before the commencement of construction of the Project. The IEC and the supporting team including the Independent Landfill Consultant as required in Condition 2.10 of this Permit, shall not be in any way an associated body of the ER, the Contractor or the ET for the Project. The IEC and the Independent Landfill Consultant shall be approved by the Director before appointment by the Permit Holder. The Permit Holder shall provide a site office to the IEC and the supporting team for use. The IEC shall be a person who has at least 7 years of experience in EM&A or environmental management. The minimum on-site time for the IEC and the supporting team shall be proposed with justifications for the approval of the Director. The qualification and experience of the IEC and the Independent Landfill Consultant shall be proposed with justifications for the approval of the Director.
- 2.7 The IEC shall report directly to the Director on matters relating to the EM&A programme and environmental impacts from the Project and shall submit to the Director for approval, no later than one month before the commencement of the construction of the Project, a proposal on the reporting mechanism covering the approaches for the IEC and the team to report to the Director on:
 - (i) how to discharge all the duties specified under the EM&A programme and this Permit, taking into account the construction activities and programme of the Project;
 - how to handle each and every change of circumstances, emergency events relating to violation of environmental legislation (such as illegal dumping relating to the Project) or non-compliance (including suspected non-compliance) with the recommendations (such as construction methods, mitigation measures, and environmental standards) of the approved EIA Report (Register No. AEIAR-221/2019), the EM&A Manual and this Permit, which might affect the monitoring and/or control of adverse environmental impacts from the Project; and
 - (iii) how to keep proper records in order to respond to questions and enquiries from the Director on the EM&A programme and duties discharged by the IEC.



- 2.8 The IEC shall be responsible for duties defined in the EM&A Manual and this Permit, including but not limited to the following:
 - (i) to audit the overall EM&A performance, including the implementation of all environmental mitigation measures and monitoring activities on site;
 - (ii) to verify the environmental acceptability of permanent and temporary works, relevant plans and submissions required in the EM&A Manual and under this Permit:
 - (iii) to verify the log-book(s) mentioned in Condition 2.2(v);
 - (iv) to notify the Director by fax or email, within one working day of receipt of notification from the ET Leader, or identification by the IEC and his / her team, of each and every change of circumstances and emergency events mentioned in Condition 2.7(ii);
 - (v) to liaise closely with the Director;
 - (vi) to accompany the Director in carrying out site inspections and attending meetings when requested;
 - (vii) to offer objective and professional advice on environmental issues, when requested, and to respond to questions and enquiries from the Director on the EM&A programme and duties discharged by the IEC, with the support of relevant information, documents and records as appropriate; and
 - (viii) to allocate adequate resources, including any necessary specialist support, for discharging the duties required in this Permit and the EM&A Manual.
- 2.9 If the Director considers the IEC fails to discharge the duties of the IEC as defined in the EM&A Manual or in this Permit, the Director may require the Permit Holder by notice in writing to replace the IEC. Failure to replace the IEC as directed or further failure to discharge the duties of the IEC despite employment of a new IEC may render the Permit liable to suspension, cancellation or variation.

Employment of Independent Landfill Consultant

2.10 The Permit Holder shall, no later than four months before the commencement of the construction of the Project, appoint an Independent Landfill Consultant to form part of the IEC supporting team to verify the submissions of Design Plan and Works Plan for the Project as required under Conditions 2.20 and 2.21 of this Permit respectively and to audit the modification works of existing landfill restoration facilities to ensure compliance with the recommendations of the approved Design Plan, the approved Works Plan and the approved EIA Report (Register No. AEIAR-221/2019). The Independent Landfill Consultant shall not be in any way an associated body of the ER, the ET, the Contractor, or the Specialist Contractor for the Project or the Shuen Wan Landfill Restoration Contractor. The Independent Landfill Consultant shall be approved by the Director before appointment by the Permit Holder. The Independent Landfill Consultant shall be a company experienced in the geotechnical, landfill gas and leachate design aspects of landfill restoration and aftercare and employing at least two professional engineers who are members of the Hong Kong Institution of



Engineers or of equivalent professional qualification as approved by the Director. Among those two professional engineers, one shall be a geotechnical engineer with the qualification of Registered Geotechnical Engineer and one shall be a landfill designer. Each of the professional engineers shall have not less than 8 years post-qualification experience specialising in the geotechnical, landfill gas and leachate design aspects of landfill restoration and aftercare. If the Director considers the Independent Landfill Consultant fails to discharge the duties of the Independent Landfill Consultant as defined in this Permit, the Director may require the Permit Holder by notice in writing to replace the Independent Landfill Consultant. Failure to replace the Independent Landfill Consultant as directed or further failure to discharge the duties of the Independent Landfill Consultant despite employment of a new Independent Landfill Consultant may render the Permit liable to suspension, cancellation or variation.

Employment of Specialist Contractor

2.11 The Permit Holder shall, no later than four months before the commencement of the construction of the Project, appoint a Specialist Contractor with landfill restoration experience for the approval by the Director. The Specialist Contractor shall prepare the Works Plan under Condition 2.21 of this Permit, supervise and construct modification, demolition and/or reprovision works of existing landfill restoration facilities, conduct landfill gas hazard monitoring and implement mitigation measures in compliance with the recommendations of the approved Design Plan and Works Plan and the approved EIA Report (Register No. AEIAR-221/2019). The Specialist Contractor shall be a company which has completed within the 5 years prior to the date of this Permit, or on the date of this Permit have in hand, at least one landfill restoration and/or aftercare contract with a total contract sum of not less than HK\$100 million, solely under the name of the Specialist Contractor company. In the case where the Special Contractor company is a shareholder of a Joint Venture company, its share of the Joint Venture in terms of landfill restoration and/or aftercare contract sum shall be not less than HK\$100 million, or otherwise approved by the Director. experience of the Specialist Contractor gained in the capacity as a sub-contractor shall not be counted. Any change or replacement of the Specialist Contractor approved by the Director shall be subject to the prior written approval of the Director.

Submission of Management Organisations

- 2.12 The Permit Holder shall, no later than four months before the commencement of construction of the Project, inform the Director in writing with the following information which shall include at least an organisation chart, names of responsible persons and their contact details:
 - (i) the management organisation of the main construction companies and / or any form of joint ventures associated with the construction of the Project;
 - (ii) the management organisation of the ET;
 - (iii) the management organisation of the IEC and the supporting team;
 - (iv) the management organisation of the Specialist Contractor; and
 - (v) the management organisation of the Independent Landfill Consultant.



Submission of Tree Survey Report

2.13 The Permit Holder shall conduct a comprehensive tree survey on the existing trees of the Project Site to assess the condition of the trees proposed to be retained. The Permit holder shall, no later than four months before the commencement of construction of the Project, submit 4 hard copies and 1 electronic copy of a Tree Survey Report to the Director for approval. The Tree Survey Report shall be prepared by the Registered Landscape Architect, certified by the ET Leader and verified by the IEC for approval by the Director.

Submission of Tree Preservation, Transplantation and Compensation Plan

- 2.14 The Permit Holder shall, no later than two months before the commencement of construction of the Project, submit 5 hard copies and 1 electronic copy of a Tree Preservation, Transplantation and Compensation Plan (TPTCP) to the Director for approval. The TPTCP shall be prepared making reference to the conceptual layout plan in Figure 1 of this Permit and based on the findings of the approved Tree Survey Report under Condition 2.13 of this Permit and shall provide details of measures for mitigation of the impact of the Project on night roosting of Collared Crow and Black Kite, including:
 - (i) Preservation of no less than 6.1 ha of existing tree groups within the Project Site, including the 1.2 ha core roosting area as shown in <u>Figure 1</u> of this Permit; and
 - (ii) Compensatory planting of no less than 10 ha of new trees within the Project Site.

The TPTCP shall include the location and species of any individual trees that would be directly affected by the proposed works, recommending protective measures for identified individuals of each species where in situ preservation is feasible, in particular the two individuals of *Aquilaria sinensis* as shown in Figure 1 of this Permit, assessing the suitability and/or practicability of the transplantation of those individuals that would be directly affected, and the location and species of individual trees to be compensated for the loss of roosting sites.

The TPTCP shall be prepared by the Ecologist, certified by the ET Leader and verified by the IEC as conforming to the findings and recommendations of the approved EIA Report (Register No. AEIAR-221/2019) for approval of the Director. Recommendations on tree preservation, transplantation and compensation in the approved TPTCP shall be fully implemented and maintained during construction and operation phases of the Project. No felling or pruning of trees in core roosting area at any time during construction and operation phases, except for those recommended in the approved TPTCP.

Submission of Construction Phasing Plan

2.15 The Permit Holder shall review the phasing of the construction activities and, no later than four months before the commencement of construction of the Project, submit 4 hard copies and 1 electronic copy of a Construction Phasing Plan (CPP) to the Director for approval. The CPP shall be based on the recommendations of the approved Tree Preservation, Transplantation and Compensation Plan under Condition 2.14 of this Permit, and shall be designed with a view to minimising the potential adverse impacts on the Collared Crow including fragmentation on the roosting habitats, and to achieve the objectives of tree preservation and compensation as stated

in Condition 2.14 (i) and (ii) of this Permit. The CPP shall take into account the trees to be retained and the species and density of the new trees to be planted for roosting habitats upon completion of site formation at each phase. The CPP shall be prepared by the Ecologist, certified by the ET Leader and verified by the IEC as conforming to the findings and recommendations of the approved EIA Report (Register No. AEIAR-221/2019) for approval of the Director. The phasing of construction activities recommended in the approved CPP shall be fully implemented during construction phase of the Project.

Submission of Construction Phase Water Quality Mitigation Measures and Monitoring Plan

The Permit Holder shall, no later than two months before the commencement of construction of the Project, submit 4 hard copies and 1 electronic copy of a Water Quality Mitigation Measures and Monitoring Plan (WQMMMP) to the Director for approval. The WQMMMP shall be based on the approved Construction Phasing Plan under Condition 2.15 of this Permit, and shall address potential water quality impact on Tolo Harbour during construction phase of the Project, and shall include comprehensive information on measures to reduce soil erosion, deployment of temporary sedimentation tanks as well as other measures to intercept any surface runoff and water quality monitoring requirements during the construction phase. The WQMMMP shall be certified by the ET Leader and verified by the IEC as conforming to the findings and recommendations of the approved EIA Report (Register No. AEIAR-221/2019) for approval of the Director. All measures recommended in the approved WQMMMP shall be fully implemented during construction phase of the Project.

Submission of Construction Dust Management Plan

2.17 The Permit Holder shall, no later than two months before the commencement of construction of the Project or otherwise approved by the Director, submit 4 hard copies and 1 electronic copy of a Construction Dust Management Plan (CDMP) to the Director for approval. The CDMP shall be based on the approved Construction Phasing Plan under Condition 2.15 of this Permit, and shall include an updated dust impact assessment and details of implementation programme of the required construction dust mitigation measures for the Project. The CDMP shall be certified by the ET Leader and verified by the IEC as conforming to the findings and recommendations of the approved EIA Report (Register No. AEIAR-221/2019) for approval of the Director. All measures recommended in the approved CDMP shall be fully implemented during construction phase of the Project.

Submission of Powered Mechanical Equipment Restriction Zones Review Report

2.18 To minimise potential disturbance to Collared Crow and Black Kite night roosts, the Permit Holder shall, based on the approved Construction Phasing Plan under Condition 2.15 of this Permit, review the geographical location of Restriction Zones as indicated in Figure 2 of this Permit, within which powered mechanical equipment (PME) shall not be used during the restriction hours in different months of the year as per Annex 1 of this Permit. If there is any change to geographical location of the Restriction Zones, the Permit Holder shall, no later than two months before the commencement of construction of the Project, submit 4 hard copies and 1 electronic copy of a Powered Mechanical Equipment Restriction Zones Review (PMERZRR), detailing the updated geographical location of the Restriction Zones, to the Director for approval. The PMERZRR shall be prepared by the Ecologist, certified by the ET Leader and verified by the IEC as conforming to the findings and recommendations.

of the approved EIA Report (Register No. AEIAR-221/2019) for approval of the Director. The restriction on operation hours of PME detailed in <u>Annex 1</u> of this Permit in the Restriction Zones detailed in <u>Figure 2</u> of this Permit or as stated in the approved PMERZR shall be fully implemented during construction phase of the Project.

Submission for Land Contamination Assessment

2.19 The Permit Holder shall carry out site re-appraisal and detailed assessment of land contamination before the commencement of construction works at the existing storage/ workshop area of the Project Site as shown in Figure 3 of this Permit. After site re-appraisal is completed, the Permit Holder shall submit 4 hard copies and 1 electronic copy of Land Contamination Review (LCR), including Contamination Assessment Plan (CAP) where site investigation (SI) is required, to the Director for approval. If required under the approved LCR, the Permit Holder shall conduct the site investigation (SI) in accordance with the approved CAP and submit 4 hard copies and 1 electronic copy of a Contamination Assessment Report (CAR) to document the findings of the SI to the Director for approval. If contamination is confirmed and remediation is deemed necessary, the CAR shall include a Remediation Action Plan (RAP). If remediation is required, the Permit Holder shall conduct the remediation in accordance with the approved RAP and submit 4 hard copies and 1 electronic copy of a Remediation Report (RR) to document the remediation work done to the Director for approval. No construction work at the existing storage/ workshop area shall be commenced before the approval of LCR if no SI is required, before approval of CAR if SI is required but no remediation is required, or before approval of RR if remediation is required. The LCR/CAP, and where required, the CAR, RAP and RR shall be certified by the ET Leader and verified by the IEC for approval by the Director.

Submission for Design Plan and Works Plan

- 2.20 The Permit Holder shall, no later than three months before the commencement of construction of the Project or otherwise approved by the Director, submit 5 hard copies and 1 electronic copy of a Design Plan with details on the interfacing works including all demolition, relocation, reprovision and modification works of the existing landfill restoration facilities to the Director for approval. The Design Plan shall be based on the approved Construction Phasing Plan under Condition 2.15 of this Permit, and shall include but not limited to the following:
 - (i) the objectives of the design and works;
 - (ii) landfill facilities affected by the design and the works;
 - (iii) the location of affected facilities;
 - (iv) drawings to show the design of new facilities proposed;
 - (v) a summary table detailing the affected facilities and the proposed modification works involved, and the mitigation measures to be employed;
 - (vi) potential environmental impacts of the design and works;
 - (vii) any safety precaution and monitoring required, and
 - (viii) impact assessment on waste excavated, if any, as well as its disposation



The Design Plan shall be prepared in consultation with the Shuen Wan Landfill Restoration Contractor. The Design Plan shall be certified by the ET Leader, verified by Independent Landfill Consultant, and then verified by the IEC for approval by the Director.

- 2.21 The Permit Holder shall, no later than one month before the commencement of construction of the Project or otherwise approved by the Director, submit 4 hard copies and 1 electronic copy of a Works Plan prepared based on the approved Design Plan under Condition 2.20 of this Permit. The Works Plan shall provide details for implementing the interfacing works including all demolition, relocation, reprovision and modification works of the existing landfill restoration facilities and shall include but not limited to the following information:
 - (i) Works areas;
 - (ii) Construction phasing;
 - (iii) Number of operatives;
 - (iv) Experience and special skills of operatives;
 - (v) Supervisors responsibilities;
 - (vi) Plant and equipment;
 - (vii) Method statement, procedures and sequencing of the works;
 - (viii) Measures to address the interfacing issues and to avoid any impacts to the existing operations of the landfill;
 - (ix) Emergency procedures, including fire fighting;
 - (x) Storage and use of safety equipment;
 - (xi) Proposed landfill gas monitoring requirements;
 - (xii) Safety precaution; and
 - (xiii) Signs, barriers and guarding.

The Works Plan shall be prepared in consultation with the Shuen Wan Landfill Restoration Contractor. The Works Plan shall be prepared by the Specialist Contractor, certified by the ET Leader, verified by the Independent Landfill Consultant, and then verified by the IEC for approval by the Director. All works and measures described in the approved Works Plan shall be fully implemented during construction phase of the Project.

Submission of Updated Construction Phase Landfill Gas Hazard Assessment

2.22 The Permit Holder shall, at least three months before the commencement of construction of the Project, submit to the Director for approval four hard copies and one electronic copy of an Updated Construction Phase Landfill Gas Hazard Assessment (Updated CPLFGHA), which shall include a review of the qualitative landfill gas hazard assessment in the approved EIA report (Register No. AEIAR).

221/2019), preparation of a detailed and updated qualitative landfill gas hazard assessment and associated mitigation measures related to the interfacing and modification works of the existing landfill restoration facilities, preparation of detailed design of gas protection measures and the establishment of maintenance and monitoring programmes to ensure the continued performance of the proposed control measures for construction phase of the Project. The Updated CPLFGHA shall take into account the recommendations of the approved Design Plan and the approved Works Plan in Conditions 2.20 and 2.21 of this Permit respectively. The Updated CPLFGHA shall be certified by ET Leader and verified by the IEC as conforming to the findings and recommendations of the approved EIA Report (Register No. AEIAR-221/2019) for approval of the Director. All recommendations in the approved Updated CPLFGHA shall be fully implemented during construction phase of the Project.

Submission of Landscape and Visual Mitigation Plan

2.23 The Permit Holder shall, no later than one month before the commencement of construction of the Project or otherwise approved by the Director, submit 5 hard copies and 1 electronic copy of a Landscape and Visual Mitigation Plan (LVMP) to the Director for approval. The LVMP shall be prepared making reference to the conceptual layout plan in Figure 1 of this Permit, and based on the approved Tree Preservation, Transplantation and Compensation Plan under Condition 2.14 of this Permit and shall include details of tree treatment proposal, implementation programme, maintenance and management schedules, and drawings in an appropriate scale of the required landscape and visual mitigation measures, including lighting design to avoid glare impact, for the Project. Before submission to the Director, the LVMP shall be prepared by the Registered Landscape Architect, certified by the ET Leader, and verified by the IEC as conforming to the relevant information and recommendations on landscape and visual mitigation measures contained in the approved EIA report (Register No. AEIAR-221/2019) or otherwise approved by the Director. All recommendations in the approved LVMP shall be fully implemented and maintained during construction and operation phases of the Project.

Submissions or Measures to be Implemented during Construction of the Project

Submission of As-built Drawings of Modification Works of Existing Landfill Restoration Facilities

2.24 The Permit Holder shall deposit 4 hard copies and 1 electronic copy of the as-built drawings of the modification works of existing landfill restoration facilities carried out under the approved Works Plan under Condition 2.21 of this Permit to the Director no later than two months before commencement of operation of the Project. The drawings shall be prepared by the Specialist Contractor, certified by the ET Leader and verified by Independent Landfill Consultant and then verified by the IEC before submission to the Director.

Submission of Updated Operation Phase Landfill Gas Hazard Assessment

2.25 The Permit Holder shall, at least one month before the commencement of operation of the Project, submit to the Director for approval four hard copies and one electronic copy of an Updated Operation Phase Landfill Gas Hazard Assessment (Updated OPLFGHA), which shall include a review of the qualitative landfill gas hazard assessment in the approved EIA report (Register No. AEIAR-221/2019), preparation of a detailed and updated qualitative landfill gas hazard assessment and the

establishment of maintenance and monitoring programmes to ensure the continued performance of the proposed control measures for operation phase of the Project. The Updated OPLFGHA shall take into account the recommendations of the approved Design Plan, the approved Works Plan and as-built drawings of modification works of existing landfill restoration facilities under in Conditions 2.20, 2.21 and 2.24 of this Permit respectively. The Updated OPLFGHA shall be certified by ET Leader and verified by the IEC as conforming to the findings and recommendations of the approved EIA Report (Register No. AEIAR-221/2019) for approval by the Director. All recommendations in the approved Updated OPLFGHA shall be fully implemented and maintained during operation phase of the Project.

Submission of Turfgrass Management Plan

2.26 The Permit Holder shall, at least three months before commencement of laying of turfgrass of the Project, submit 6 hard copies and 1 electronic copy of a Turfgrass Management Plan (TMP) to the Director for approval. The TMP shall make reference to the agrochemicals application rates and application area as assumed in the approved EIA Report (Register No. AEIAR-221/2019) and shown in Annex 2 of this Permit, and include information on the turfgrass species, usage of agrochemicals, management methodology, as well as worst-case assessments on the water quality impacts resulting from landfill leachate and the possible discharge from the Project into Tolo Harbour. The TMP shall be certified by the ET Leader and verified by the IEC as conforming to the findings and recommendations of the approved EIA Report (Register No. AEIAR-221/2019) for approval by the Director. All details and measures recommended in the approved TMP shall be fully implemented and maintained during construction and operation phases of the Project.

Submission of Noise Mitigation Plan

2.27 The Permit Holder shall, no later than two months before the commencement of operation of the Project, submit 4 hard copies and 1 electronic copy of a Noise Mitigation Plan (NMP) to the Director for approval. The NMP shall include Commissioning Test Report to confirm the compliance with the maximum sound power levels for all plants and equipment considered in the approved EIA Report (Register No. AEIAR-221/2019), including golf course machinery such as tractors, mowers and aerators. The NMP shall be certified by the ET Leader and verified by the IEC as conforming to the findings and recommendations of the approved EIA Report (Register No. AEIAR-221/2019) for approval by the Director. All recommendations in the approved NMP shall be fully implemented and maintained during operation phase of the Project.

Implementation of Construction Phasing Plan

2.28 The phasing of construction activities recommended in the approved Construction Phasing Plan under Condition 2.15 of this Permit shall be fully implemented during construction phase of the Project.

Measures for Mitigation of Construction Dust Impact

2.29 All measures recommended in the approved Construction Dust Management Plan under Condition 2.17 of this Permit shall be fully implemented during construction phase of the Project.

Measures for Mitigation of the Impact on Night Roosting of Collared Crow and Black Kite during Construction

- 2.30 The restriction on operation hours of PME detailed in <u>Annex 1</u> of this Permit in the Restriction Zones detailed in <u>Figure 2</u> of this Permit or as stated in the approved Powered Mechanical Equipment Restriction Zones Review under Condition 2.18 of this Permit shall be fully implemented during construction phase of the Project.
- 2.31 No felling of trees shall be carried out in the Project Site during construction phase prior to the approval of Tree Preservation, Transplantation and Compensation Plan under Condition 2.14 of this Permit.
- 2.32 No felling or pruning of trees in core roosting area as shown in <u>Figure 1</u> at any time during construction phase of the Project, except for those recommended in the approved Tree Preservation, Transplantation and Compensation Plan under Condition 2.14 of this Permit.
- 2.33 All recommendations in the approved Tree Preservation, Transplantation and Compensation Plan under Condition 2.14 of this Permit shall be fully implemented and maintained during construction phase of the Project.

Measures to Minimise Impact on Restored Landfill during Construction

2.34 No excavation on the existing landfill and no modification, relocation, reprovision or demolition of landfill restoration facilities shall be allowed during construction phase of the Project other than those stated in the approved Design Plan and Works Plan under Conditions 2.20 and 2.21 of this Permit.

Measures to Minimise Landfill Gas Hazards during Construction

- 2.35 All measures, maintenance and monitoring programmes detailed in the approved Updated Construction Phase Landfill Gas Hazard Assessment under Condition 2.22 of this Permit shall be fully implemented and maintained during construction phase of the Project.
- 2.36 No smoking and no naked flame shall be allowed within the Project Site during construction phase of the Project.

Measures to Minimise Marine Water Quality Impact during Construction

- 2.37 All measures recommended in the approved Construction Phase Water Quality Mitigation Measures and Monitoring Plan under Condition 2.16 of this Permit shall be fully implemented during construction phase of the Project.
- 2.38 No marine works, including modification of the existing seawall, marine dredging works on existing seabed, and use of construction barges, shall be allowed during construction phase of the Project.
- 2.39 Underground storage tank(s) with a total capacity of not less than 30,000 m³ shall be constructed before commencement of operation of the Project for collection of surface runoff at the Project Site during operation phase of the Project.
- 2.40 Underground storage tank(s) shall be constructed prior to the construction of access road in each of the construction phases to collect surface runoff for sedimentation.

Measures to Minimise Hazard to Life due to Dangerous Goods during Construction

2.41 No more than 50 construction workers shall be allowed within the Project Site area that falls within the consultation zone of Tai Po Gas Production Plant as shown in Figure 4 of this Permit during construction phase of the Project.

Measures against Potential Land Contamination Impact

2.42 No construction work at the existing storage/ workshop area as shown in Figure 3 of this Permit shall be commenced before the approval of Land Contamination Review under Condition 2.19 of this Permit if no site investigation (SI) is required, before approval of Contamination Assessment Report if SI is required but no remediation is required, or before the approval of the Remediation Report under Condition 2.19 of this Permit if remediation is required.

Measures to be Implemented during Operation of the Project

Operation Hours

- 2.43 The operation hours of the outdoor golf playing area shall be restricted to 07:00 to 18:00 between the months of March and August inclusive.
- 2.44 The operation hours of the outdoor golf playing area shall be restricted to 07:00 to 17:00 between the months of September and February inclusive.
- 2.45 The operation hours of the outdoor driving range shall be restricted to 07:00 to 22:00 throughout the year.

Measures to Minimise Water Quality Impact during Operation

- 2.46 Underground storage tanks with a total capacity of not less than 30,000 m³ shall be properly maintained during operation phase of the Project for collection of surface runoff at the Project Site. All surface runoff and water collected in the drainage system shall be stored in the underground storage tanks for re-use on-site, unless when the storage tank(s) are full, upon which time the surface runoff and water collected in the drainage system may bypass the underground storage tanks and, after passing through the requisite grease traps and silt traps, and flow into Tolo Harbour. Such bypass into Tolo Harbour shall cease once the water storage tanks system has recovered its storage capacity.
- 2.47 All sewage from toilets shall be discharged to the public sewerage system.

Measures to Minimise Hazard to Life due to Dangerous Goods during Operation

- 2.48 No permanent working or residential population shall be allowed within the Project Site area that falls within the consultation zone of Tai Po Gas Production Plant as shown in <u>Figure 4</u> of this Permit during operation phase of the Project.
- 2.49 No more than 20 transient workers and 20 transient visitors shall be allowed at any time within the Project Site area that falls within the consultation zone of Tai Po Gas Production Plant as shown in <u>Figure 4</u> of this Permit during operation phase of the Project.

Measures for Mitigation of the Impact on Night Roosting of Collared Crow and Black Kite during Operation

- 2.50 No felling or pruning of trees in core roosting area as shown in <u>Figure 1</u> at any time during operation phase of the Project, except for those recommended in the approved Tree Preservation, Transplantation and Compensation Plan under Condition 2.14 of this Permit.
- 2.51 All recommendations in the approved Tree Preservation, Transplantation and Compensation Plan under Condition 2.14 of this Permit shall be fully maintained during operation phase of the Project.
- 2.52 All lightings installed at the Project Site, in particular those at the driving range, shall be directed away from the core roosting area as shown in <u>Figure 1</u> of this Permit to minimise glare impact on the night roosting of Collared Crow and Black Kite during operation phase of the Project.

Measures to Minimise Impact on Restored Landfill during Operation

2.53 No excavation on the existing landfill and no modification, relocation, reprovision or demolition of landfill restoration facilities shall be allowed during operation phase of the Project, unless otherwise approved by the Director.

Measures for Mitigation of Landfill Gas Hazard during Operation

- 2.54 All measures, maintenance and monitoring programmes detailed in the approved Updated OPLFGHA under Condition 2.25 of this Permit shall be fully implemented and maintained during operation phase of the Project.
- 2.55 No smoking and no naked flame shall be allowed within the Project Site during operation phase of the Project.

Measures for Landscape and Visual Impacts during Operation

2.56 All recommendations in the approved Landscape and Visual Mitigation Plan under Condition 2.23 of this Permit shall be fully implemented and maintained during operation phase of the Project.

Implementation of Turfgrass Management Plan during Operation

2.57 All recommendations in the approved Turfgrass Management Plan under Condition 2.26 of this Permit shall be fully implemented and maintained during operation phase of the Project.

Measures to Minimise Noise Impact during Operation

2.58 All recommendations in the approved Noise Mitigation Plan under Condition 2.27 of this Permit shall be fully implemented and maintained during operation phase of the Project.

3. Environmental Monitoring and Audit (EM&A) Requirements

3.1 The Permit Holder shall implement the EM&A programme in accordance with the procedures and requirements as set out in the EM&A Manual. Any major changes to the programme shall be justified by the ET leader and verified by the IEC as conforming to the requirements set out in the EM&A Manual, and shall seek the prior approval from the Director before implementation.

- 3.2 The EM&A programme shall include a 1-year period of water quality impact monitoring during operation phase as detailed in the EM&A Manual, and Annex 3 and Figure 5 of this Permit. The Permit Holder shall, no later than two months before the end of the monitoring period, submit a Review Report on the need, if any, of extending the operation phase water quality monitoring programme with full justifications. The Review Report shall be certified by the ET leader and verified by the IEC for the approval by the Director. Details of the extended operation phase water quality monitoring programme in the approved Review Report shall be fully implemented.
- 3.3 The Permit Holder shall take samples, measurements and necessary remedial actions in accordance with the requirements of the EM&A Manual by:
 - (i) conducting baseline environmental monitoring;
 - (ii) conducting impact monitoring;
 - (iii) carrying out remedial actions described in the Event/Action Plans of the EM&A Manual in accordance with the time frame set out in the Event/Action Plans, or as agreed by the Director, in case where specified criteria in the EM&A Manual are exceeded; and
 - (iv) logging and keeping records of the details of (i) to (iii) above for all parameters within 3 working days of the collection of data or completion of remedial action(s), for the purpose of preparing and submitting the monthly EM&A Reports and to make available the information for inspection on site.
- 3.4 The Permit Holder shall submit 4 hard copies and 1 electronic copy of relevant Baseline Monitoring Report(s) to the Director at least one month before the commencement of construction of the Project. The submission(s) shall be certified by the ET Leader and verified by the IEC as having complied with the requirements as set out in the EM&A Manual before submission to the Director. Additional copies of the Baseline Monitoring Report(s) shall be provided upon request by the Director.
- 3.5 The Permit Holder shall submit 1 hard copy and 1 electronic copy of Monthly EM&A Reports for the construction and operation phases of the Project to the Director, within 2 weeks after the end of the reporting month. The monthly EM&A Reports shall include an executive summary of all environmental audit results, together with actions taken in the event of non-compliance (exceedances) of the environmental quality performance limits (Action and Limit Levels), complaints received and emergency events relating to violation of environmental legislation (such as illegal dumping). The submissions shall be certified by the ET Leader and verified by the IEC as having complied with the requirements as set out in the EM&A Manual before submission to the Director. Additional copies of the Monthly EM&A Reports shall be provided upon request by the Director.
- 3.6 All environmental monitoring and audit data submitted under this Permit shall be true, valid and correct.

4. Electronic Reporting of EM&A Information

4.1 To facilitate public inspection of the Baseline Monitoring Report(s) and Monthly EM&A Reports via the EIAO Internet Website and at the EIAO Register Office, electronic copies of these Reports shall be prepared in Hyper Text Markup Language

(HTML) (version 4.0 or later) and in Portable Document Format (PDF version 1.3 or later), unless otherwise agreed by the Director and shall be submitted at the same time as the hard copies as described in Conditions 3.4 and 3.5 above. For the HTML version, a content page capable of providing hyperlink to each section and subsection of these Reports shall be included in the beginning of the document. Hyperlinks to all figures, drawings and tables in these Reports shall be provided in the main text from where the respective references are made. All graphics in these Reports shall be in interlaced GIF, JPEG or PDF format unless otherwise agreed by the Director. The content of the electronic copies of these Reports must be the same as the hard copies

- The Permit Holder shall, within 6 weeks after the commencement of construction of 4.2 the Project, set up a dedicated Internet website and notify the Director in writing the Internet address where the environmental monitoring data and project information is to be placed. All environmental monitoring data described in Condition 4.1 above shall be made available to the public via the abovementioned dedicated Internet website in the shortest possible time and in any event no later than 2 weeks after the relevant environmental monitoring data are collected or become available, unless otherwise agreed with the Director. All finalised submissions and plans required in this Permit shall be made available to the public via the dedicated Internet website in the shortest possible time and in any event no later than 2 weeks after the submissions and plans are approved by or deposited with the Director, unless otherwise agreed with the Director. The Permit Holder shall maintain the dedicated website for public access of the environmental monitoring data, reports and finalised submissions and plans throughout the entire construction period and during the first 3-year period after commencement of operation of the Project, or otherwise as agreed by the Director.
- 4.3 The Internet website as described in Condition 4.2 above shall enable user-friendly public access to the environmental monitoring data and project information including the Project Profile, EIA Report, environmental permit(s) and finalised submissions and plans required under this Permit. Unless otherwise agreed by the Director, the Internet website shall have features capable of:
 - (i) providing access to all environmental monitoring data of this Project collected since the commencement of construction;
 - (ii) providing access to all finalised submissions as required under this Permit;
 - (iii) searching by date;
 - (iv) searching by types of monitoring data; and
 - (v) hyperlinking to relevant monitoring data after searching.



Notes:

- 1. This Permit consists of three parts, namely, <u>Part A</u> (Main Permit), <u>Part B</u> (Description of Designated Project) and <u>Part C</u> (Permit Conditions). Any person relying on this permit should obtain independent legal advice on the legal implications under the EIAO, and the following notes are for general information only.
- 2. If there is a breach of any condition of this Permit, the Director or his authorised officer may, with the consent of the Secretary for the Environment, order the cessation of associated work until the remedial action is taken in respect of the resultant environmental damage, and in that case the Permit Holder shall not carry out any associated works without the permission of the Director or his authorised officer.
- 3. The Permit Holder may apply under Section 13 of the EIAO to the Director for a variation of the conditions of this Permit. The Permit Holder shall replace the original permit displayed on the Project site by the amended permit.
- 4. A person who assumes the responsibility for the whole or a part of the Project may, before he assumes responsibility of the Project, apply under Section 12 of the EIAO to the Director for a further environmental permit.
- 5. Under Section 14 of the EIAO, the Director may with the consent of the Secretary for the Environment, suspend, vary or cancel this Permit. The suspended, varied or cancelled Permit shall be removed from display at the Project site.
- 6. If this Permit is cancelled or surrendered during construction or operation of the Project, another environmental permit must be obtained under the EIAO before the Project could be continued. It is an offence under Section 26(1) of the EIAO to construct or operate a designated project listed in Part I of Schedule 2 of the EIAO without a valid environmental permit.
- 7. Any person who constructs or operates the Project contrary to the conditions in the Permit, and is convicted of an offence under the EIAO, is liable:
 - (i) on a first conviction on indictment to a fine of \$2 million and to imprisonment for 6 months;
 - (ii) on a second or subsequent conviction on indictment to a fine of \$5 million and to imprisonment for 2 years;
 - (iii) on a first summary conviction to a fine at level 6 and to imprisonment for 6 months:
 - (iv) on a second or subsequent summary conviction to a fine of \$1 million and to imprisonment for 1 year; and
 - (v) in any case where the offence is of a continuing nature, the court or magistrate may impose a fine of \$10,000 for each day on which he is satisfied the offence continued.
- 8. The Permit Holder may appeal against any condition of this Permit under Section 17 of the EIAO within 30 days of receipt of this Permit.
- 9. The Notes are for general reference only and that the Permit Holder should refer to the EIAO for details and seek independent legal advice.

Environmental Permit No. EP-571/2019 環境許可證編號 EP-571/2019



Annex 1 Restriction Hours for Powered Mechanical Equipment within Restriction Zones

Month	Restriction Hours for Powered Mechanical Equipment to be stopped within Restriction Zones (starting time until 07:00 of the following day)		
January	16:30		
February	17:00		
March	17:30		
April	17:30		
May	17:30		
June	18:00		
July	18:00		
August	17:30		
September	17:00		
October	16:30		
November	16:30		
December	16:30		

[This annex was prepared based on Table 10.9.1 of the approved EIA Report (Register No.: AEIAR-221/2019)]

Annex 2 Application Rates and Area of Agrochemicals

Proposed agrochemicals and corresponding application area

A1 !1 - [1]	Turf ^[3]			
Agrochemicals [1]	Green	Tee	Fairway	Rough
Fungicides [4][5]				
Daconil	✓	✓	✓	✓
Bayleton	✓	✓	✓	✓
Herbicides [4]				
Monosodium Methanearsonate (MSMA)	✓	✓	✓	✓
Roundup/ Glyphosate			[2]	[2]
Monument	✓	√	✓	✓
Ronstar (Pre-emergence)	✓	√	1	✓
Insecticides [5]	•		4	
Chlorpyrifos	✓	√	✓	✓
Fipronil	✓	√	1	✓
Fertilizers				
Anderson 18-9-18	✓	✓		
Gypsum/ Dolomite	√	√	✓	✓
Ferrous Sulfate	√	√	1	✓
Nitrophoska 12:12:17:2		√	1	✓

Notes:

- [1] The selection of agrochemicals shall be reviewed by the Permit Holder and stated in Turfgrass Management Plan under Condition 2.26 of this Permit.
- [2] Spot spray, hence the application area is not fixed.
- [3] Percentage of green: 3%, tee:2%, fairway: 35% and rough: 60%.
- [4] The use of salt water will also be explored as fungi control or weed control.
- [5] Fungicides/ insecticides will be applied to at most one of the golf course parts Green, Tee, Fairway or Rough at a time. The use of fungicides/ insecticides in Fairway may be sub-divided into multiple times according to the turfgrass species and it is anticipated that fungicides/ insecticides will seldom be used in Rough.

Application rates of agrochemicals

Agrochemicals	Application Rate in Each Application (kg/ha)	Application Frequency	
Fungicides			
Daconil	8.2	Weekly	
Bayleton	3.0	Biweekly	
Herbicides			
Monosodium Methanearsonate (MSMA)	[1]	[4]	
Roundup/ Glyphosate	[2]	[4]	
Monument	[1]	[4]	
Ronstar	[1]	[4]	
Insecticides			
Chlorpyrifos	3.0	[5]	
Fipronil	0.014	Annually	

Agrochemicals	Application Rate in Each Application (kg/ha)	Application Frequency
Fertilizers		
Anderson 18-9-18	54.3	Monthly
Gypsum/ Dolomite	Soil pH dependent	Monthly
Ferrous Sulfate	[3]	Monthly
Nitrophoska 12:12:17:2	100.0	Monthly

Notes:

- [1] Rate of application dependent on: (a) target weeds, (b) turfgrass mix with types of weed, and (c) product type.
- [2] Spot spray, strength dependent on target weeds and their stage of growth.
- [3] Rate dependent on turf grass species and their acceptable level of injury symptoms.
- [4] Herbicides will only be applied, when needed.
- [5] Apply when pests appear.

[This annex was prepared based on Tables 2.8 and 2.9 of the approved EIA Report (Register No.: AEIAR-221/2019)]

Annex 3 Water Quality Monitoring Programme for Impact Monitoring during Operation Phase

Item	Details			
Monitoring Period	First year of the operation phase. The Permit Holder shall, no later than two months before the end of the monitoring period, submit a Review Report on the need, if any, of extending the operation phase water quality monitoring programme with full justifications under Condition 3.2 of this Permit.			
Monitoring Frequency	Bi-weekly			
	Monitoring Description Station ID		Easting	Northing
	WM-1	South of Project Site near Coral Sites	838145	834573
Monitoring Locations	WM-2	West of Yim Tin Tsai Fish Culture Zone	839362	834856
	WM-3	Water storage tanks	838444	835279
	WM-4	Bypass point at Tolo Harbour		834786
	WM-5	Southeast of the bypass point	839362	833994
The location of the monitoring stations are shown in Figure 5 of this Peri				s Permit.
Monitoring Parameters	The monitoring parameters shall be based on the approved Turfgrass Management Plan under Condition 2.26 of this Permit, and should include Total inorganic nitrogen (TIN), total phosphorus (TP), specific fungicide (e.g. chlorothalonil (active ingredient of Daconil)) and specific insecticide (e.g. chlorpyrifos).			

[This annex was prepared based on EM&A Manual Tables 7.6 and 7.7 of the approved EIA Report (Register No.: AEIAR-221/2019)]









