

本署檔號
OUR REF: (38) in EP2/N1/F/54 Pt.3
來函檔號
YOUR REF: SP/8/4399DS/CE3014(DS)/17
電話
TEL. NO.: 2835 1122
圖文傳真
FAX NO : 2591 0558
電子郵件
E-MAIL:
網址
HOMEPAGE: <http://www.epd.gov.hk>

**Environmental Protection Department
Branch Office**

27th Floor, Southorn Centre,
130 Hennessy Road,
Wan Chai, Hong Kong.



環境保護署分處

香港灣仔
軒尼詩道
一百三十號
修頓中心廿七樓

31 March 2017

By Registered Post & Fax

Drainage Services Department

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

**Project Title: Sha Tin Cavern Sewage Treatment Works
(Application No. AEP-533/2017)**

I refer to your above application received on 9 March 2017 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-533/2017) 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. Wang YUEN at 2835 1843.

Yours sincerely,

(Tony W.H. CHEUNG)

Acting 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 **Drainage Services Department** (hereinafter referred to as the “Permit Holder”) to construct and operate the designated project described in **Part B** subject to the conditions specified in **Part C**. 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渠務署(下稱“許可證持有人”)以建造及營辦 **B 部** 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：

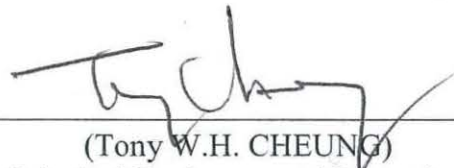
Application No. 申請書編號:	AEP-533/2017
Document in the Register: 登記冊上的文件:	(1) Sha Tin Cavern Sewage Treatment Works (Register No. AEIAR-202/2016) - Environmental Impact Assessment Report [Hereinafter referred to as the “EIA Report”] - Environmental Impact Assessment Executive Summary [Hereinafter referred to as the “EIA Executive Summary”] - Environmental Monitoring and Audit Manual [Hereinafter referred to as the “EM&A Manual”] 沙田岩洞污水處理廠 (登記冊編號: AEIAR-202/2016) - 環境影響評估報告 [下稱「環評報告」] - 環境影響評估報告行政摘要 [下稱「環評行政摘要」] - 環境監察及審核手冊 [下稱「環監手冊」] (2) The Director’s letter of approval of the EIA Report dated 28 November 2016 (Reference: (32) in EP2/N1/F/54 Pt.3) 署長於 2016 年 11 月 28 日發出批准環評報告的信件 (檔案編號: (32) in EP2/N1/F/54 Pt.3)



	<p>(3) Application for environmental permit submitted by the Permit Holder on 9 March 2017 (Application No. AEP-533/2017) 許可證持有人於 2017 年 3 月 9 日提交的環境許可證申請 (申請書編號: AEP- 533/2017)</p>
--	---

31 March 2017
2017 年 3 月 31 日

Date
日期



(Tony W.H. CHEUNG)

Acting Principal Environmental Protection Officer
for Director of Environmental Protection
環境保護署署長
(署理首席環境保護主任張偉雄代行)



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 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:

<p>Title of Designated Project 指定工程項目的名稱</p>	<p>Sha Tin Cavern Sewage Treatment Works [This designated project is hereinafter referred to as “the Project”] 沙田岩洞污水處理廠 [本指定工程項目下稱「工程項目」]</p>
<p>Nature of Designated Project 指定工程項目的性質</p>	<p>(i) Sewage treatment works with an installed capacity of more than 15,000 m³ per day; 裝置的污水處理能力超過每天15,000立方米的污水處理廠;</p> <p>(ii) Sewage treatment works with an installed capacity of more than 5,000 m³ per day; and a boundary of which is less than 200m from the nearest boundary of an existing or planned residential area, educational institution and health care institution; 污水處理廠，而其裝置的處理能力超過每天5,000立方米；及其一條界線距離一個現有的或計劃中的住宅區、教育機構和健康護理機構的最近界線少於200米；</p> <p>(iii) An activity for the reuse of treated sewage effluent from a treatment plant; 對從處理廠流出並經處理的污水進行再使用的活動；</p> <p>(iv) Underground rock caverns; 地下石洞；</p> <p>(v) An explosives depot in a stand-alone, purpose built building; and 在某一單獨、特建的建築物內的爆炸品倉庫；及</p> <p>(vi) Decommissioning of an explosives depot. 爆炸品倉庫的解除運作。</p>
<p>Location of Designated Project 指定工程項目的地點</p>	<p>The location of the Project is shown in <u>Figure 1</u> of this Permit. 工程項目的地點見本許可證圖1。</p>
<p>Scale and Scope of Designated Project 指定工程項目的規模和範圍</p>	<p>The Project mainly includes: 工程項目主要包括以下各項：</p> <p>1. Construction of caverns at Nui Po Shan for housing the Cavern Sewage Treatment Works (CSTW);</p>



	<p>在女婆山建造岩洞，用以裝設岩洞污水處理廠；</p> <p>2. Construction of a secondary sewage treatment works including sludge treatment facilities inside the caverns, with a design capacity of 340,000 m³/day at average dry weather flow (ADWF); 在岩洞中建造一個設有污泥處理設施的二級污水處理廠，其按平均旱季流量計算的設計處理量為每日340,000立方米；</p> <p>3. Construction of the main and secondary access tunnels and portals for access to the CSTW; 建造通往岩洞污水處理廠的主要和輔助隧道及入口；</p> <p>4. Construction of ancillary facilities to the caverns, including ventilation system, fire services, safety measures, communication systems, utilities, etc.; 建造岩洞輔助設施，包括通風系統、消防設施、安全措施、通訊系統、公用設施等；</p> <p>5. Site formation and construction of ancillary facilities including a multi-storey administration building with laboratories, workshops, staff office, visitor facilities, etc, ventilation building, electrical substation, and other minor buildings and internal access road at the main portal located on A Kung Kok Street; 於亞公角街主入口進行平整工地和建造輔助設施，包括一座多層行政樓，當中設有實驗室、工作室、職員辦工室、訪客設施等，以及通風機樓、變電站和其他小型建築物及道路配套設施；</p> <p>6. Site formation and construction of ancillary facilities including a ventilation building, secondary electrical substation and internal access road at the secondary portal located on Mui Tsz Lam Road; 在梅子林路第二入口進行平整工地和建造輔助設施，包括一座通風機樓、第二變電站及道路配套設施；</p> <p>7. Construction of pipelines from the CSTW for connection to the existing emergency submarine outfall of the existing Sha Tin Sewage Treatment Works (STSTW) by trenchless pipe-laying method; 從岩洞污水處理廠使用無坑敷管法建造管道，以便連接至現有沙田污水處理廠的現有緊急海底排水口；</p> <p>8. Construction of new effluent tunnels and pipelines for the discharge of treated effluent from the relocated STSTW to the existing Tolo Harbour Effluent Export Scheme (THEES) tunnel;</p>
--	--



	<p>建造新的排放水輸送管道，以便將搬遷後的沙田污水處理廠所排放的已處理排放水導引至「吐露港經處理排放水輸送計劃」的隧道（以下簡稱“排放水輸送隧道”）；</p> <p>9. Associated slope stabilization, natural terrain hazard mitigation and geotechnical works; 附近相關的山坡固定工程、天然地形危險緩解工程，以及土力工程；</p> <p>10. Landscaping and architectural works; 環境美化和建築工程；</p> <p>11. Construction of a ventilation adit connecting the CSTW to a ventilation shaft located in Nui Po Shan, together with a surface access road of around 500m in length leading from the end of A Kung Kok Shan Road; 建造一條通風隧道，從岩洞污水處理廠連接至位於女婆山的通風豎井，連同一條從亞公角山路末端延伸出約500米長的地面通道；</p> <p>12. Construction of a temporary project specific magazine at Nui Po Shan next to the location for the ventilation shaft, using same access road from the end of A Kung Kok Shan Road, for storage of explosives to be used for construction of CSTW, and decommissioning of the magazine after the completion of blasting works; 在女婆山的通風豎井旁建造一個為本項目而設，並使用從亞公角山路末端延伸出的同一條通道進出的臨時爆炸品儲存倉庫，以便儲存爆炸品，供岩洞污水處理廠建造工程之用。在爆破工程完成後，爆炸品儲存倉庫便會被拆除；</p> <p>13. Operation and maintenance of the CSTW; 岩洞污水處理廠的營運和維修保養；</p> <p>14. Decommissioning and demolition of the existing STSTW; and 現有沙田污水處理廠的解除運作和拆卸工程；及</p> <p>15. Reuse of treated effluent for non-potable uses inside the CSTW. 在岩洞污水處理廠內再使用經處理的排放水作非飲用水用途。</p>
--	--



PART C (PERMIT CONDITIONS)

C 部 (許可證條件)

1. GENERAL CONDITIONS

一般條件

- 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 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-202/2016), the application documents for Environmental Permit (Application No. AEP-533/2017), other relevant documents in the Register, the information and mitigation measures described in this Permit, mitigation measures to be recommended in the 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. 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 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 1 month of the receipt of the Director's comments or otherwise as specified by the Director.
- 1.9 All submissions approved by 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 EIAO. All submissions or any variation of the submissions shall be certified by the Environmental Team (ET) Leader and verified by the Independent Environmental Checker (IEC) referred to in Conditions 2.3 and 2.8 below before submitting to the Director under this Permit.
- 1.10 The Permit Holder shall release all finalized submissions, as required under this Permit, to the public by depositing copies in the EIAO Register Office, or in any other places, or any internet websites as specified by the Director, or by any other 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 EIAO Register Office (currently at 27/F, Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong). Electronic copies of all finalized 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 date of construction of the Project no later than 1 month prior to the commencement of construction of the Project. The Permit Holder shall notify the Director in writing immediately if there is any change of the commencement date of the construction.
- 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.
- 1.14 The Permit Holder shall notify the Director in writing the commencement date of operation of the Project no later than 1 month prior to the commencement of operation of the Project. The Permit Holder shall notify the Director in writing immediately if there is any change of the commencement date of the operation.



2. **SPECIFIC CONDITIONS**

特定條件

Submissions and/or Measures to be Implemented before Construction of the Project

Setting up of Community Liaison Group(s) and Hotline

- 2.1 To enhance transparency and communication with the public, the Permit Holder shall, no later than 1 month before the commencement of construction of the Project, set up Community Liaison Group(s) comprising the Environmental Team (ET) Leader and the Independent Environmental Checker (IEC) appointed under Conditions 2.3 and 2.8 respectively together with members of affected parties including local residents and relevant professional/experts to facilitate communications, enquiries and complaints handling on all environmental issues relating to the Project. The Permit Holder shall take a proactive approach to disseminate information to the group(s), promote community cooperation and participation and implement suitable local environmental enhancement works. All relevant information of the Project including the detailed design, the progress of construction and operation and environmental monitoring and audit results shall be provided to the group(s). The Permit Holder shall inform the Director in writing the membership and terms of reference of the group(s). The Permit Holder shall make the minutes of the group(s)' meetings and all papers and documents available to the public through a dedicated website to be set up by the Permit Holder under Condition 4.2 below.
- 2.2 A telephone hotline shall be set up prior to the commencement of construction and shall be operated during the construction of the Project to handle complaints, comments, suggestions or requests for information from the public. The Permit Holder shall notify the Director the date of setting up the hotline and the contact details of the hotline at least 2 weeks before the commencement of construction of the Project. The record-keeping of hotline messages shall be recorded in the log-book as mentioned in Condition 2.4(v) below and made available to the public via the dedicated website to be set up by the Permit Holder under Condition 4.2 below.

Employment of Environmental Team (ET)

- 2.3 A single full time on-site ET, unless otherwise approved by the Director, shall be employed by the Permit Holder no later than 3 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 or the IEC for the Project. The Permit Holder shall provide a site office to the ET for use. The ET shall be headed by a full time on-site ET Leader. 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.
- 2.4 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 1 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-202/2016) 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-202/2016) and this Permit or by the Director or his authorized officers.

2.5 Failure to maintain records in the log-book, or failure to discharge the duties of the ET Leader as defined in the EM&A Manual and Condition 2.4 above 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 such replacement, or further failure to comply with this Condition despite the employment of a new ET Leader may render the Permit liable to suspension, cancellation or variation.

Employment of Qualified Ecologist(s)

2.6 The Permit Holder shall, no later than 3 months before the commencement of construction of the Project, appoint qualified ecologist(s) to form part of the ET to carry out work relating to ecological aspects including but not limited to advising on, monitoring and ensuring proper implementation of measures for habitat loss due to the Project, and preparing submissions for the Project as required under Conditions 2.13 to 2.17 respectively. The qualification and experience of the qualified ecologist(s) shall be certified by the ET Leader and verified by the IEC.

Employment of Registered Landscape Architect

2.7 The Permit Holder shall, no later than 1 month before the commencement of 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 auditing the implementation of mitigation measures to ensure compliance with the recommendations of the approved EIA Report (Register No. AEIAR-202/2016) and to certify submissions for the Project as required under Conditions 2.18 to 2.20. The qualification and experience of the Registered Landscape Architect shall be certified by the ET Leader and verified by the IEC.



Employment of Independent Environmental Checker (IEC)

- 2.8 A single full time on-site IEC with a supporting team, unless otherwise approved by the Director, shall be employed by the Permit Holder no later than 3 months before the commencement of construction of the Project. The IEC and his team shall not be in any way an associated body of the ER, the Contractor or the ET for the Project. The IEC shall be approved by the Director before appointment by the Permit Holder. The Permit Holder shall provide a site office to the IEC and his supporting team for use. The IEC shall be a person who has at least 7 years of experience in EM&A or environmental management.
- 2.9 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 1 month before the commencement of construction of the Project, a proposal on the reporting mechanism covering the approaches for the IEC and the supporting team to report to the Director on:
- (i) how to discharge all the IEC duties specified under the EM&A programme and this Permit, taking into account the construction activities and programme of the Project and Conditions 2.3 to 2.7 above;
 - (ii) how to handle each and every change of circumstances, emergency events relating to violation of environmental legislation (such as illegal dumping and landfilling) or non-compliance (including suspects of non-compliance) with the recommendations (such as construction methods, mitigation measures, and environmental standards) of the approved EIA Report (Register No. AEIAR-202/2016), the EM&A Manual and this Permit, which might affect the monitoring or control of adverse environmental impacts from the Project; and
 - (iii) how to keep proper records in order to respond to questions and enquires from the Director on the EM&A programme and duties discharged by the IEC.
- 2.10 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 design plans and submissions required in the EM&A Manual and under this Permit;
 - (iii) to verify the log-book mentioned in Condition 2.4(v) above;
 - (iv) to notify the Director by fax or email, within 1 working day of receipt of notification from the ET Leader, or identification by the IEC and his team, of each and every change of circumstances and emergency events mentioned in Condition 2.9(ii) above. Notification by the Permit Holder is the same as notification by the IEC for the purpose of this Condition;



- (v) to accompany the Director in carrying out site inspections and attending meetings when requested;
- (vi) to offer objective and professional advice on environmental issues, when requested, and to respond to questions and enquires 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
- (vii) to allocate adequate resources, including any necessary specialist support having regard to the specialists in the ET under Conditions 2.6 to 2.7, for discharging the duties required in this Permit and the EM&A Manual.

2.11 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 so notify the Director despite employment of a new IEC may render the Permit liable to suspension, cancellation or variation. Notification by the Permit Holder is the same as notification by the IEC for the purpose of this Condition.

Submission of Management Organizations

- 2.12 The Permit Holder shall, no later than 1 month before the commencement of construction of the Project, inform the Director in writing with the following information which shall include at least an organization chart, names of responsible persons and their contact details:
- (i) the management organization of the main construction companies and/or any form of joint ventures associated with the construction of the Project;
 - (ii) the management organization of the ET; and
 - (iii) the management organization of the IEC and his supporting team.

Submission of Detailed Vegetation Survey Report and Protection and Transplantation Proposal

- 2.13 To minimize the potential impact on flora species of conservation interest due to construction of the Project, including Lamb of Tartary (*Cibotium barometz*), Butulang Canthium (*Canthium dicoccum*), Club-spurred Tentacle Orchid (*Peristylus tentaculatus*) and any other flora species of conservation interest, the Permit Holder shall:
- (i) no later than 1 month before the commencement of site clearance works, submit 6 hard copies and 3 electronic copies of a Detailed Vegetation Survey Report showing the methodology as well as survey results, including the updated conditions, number and locations of the individuals of flora species of conservation interest identified within the works boundary confirming whether any individuals of these species would be directly affected by the proposed works, recommending protective measures for



identified individuals of each species where in situ preservation is feasible, and assessing the suitability and / or practicality of the transplantation of those individuals to be directly affected to the Director for approval; and

- (ii) no later than 1 month before the commencement of site clearance works, submit 6 hard copies and 3 electronic copies of a Protection and Transplantation Proposal to the Director for approval; and this Proposal shall include at least the following information:
 - (a) the target species;
 - (b) methodology for pre-construction survey, in situ preservation and/or transplantation for each species;
 - (c) identification of suitable receptor sites;
 - (d) an implementation programme of in situ preservation and/or transplantation; and
 - (e) a post-transplantation monitoring and maintenance programme

2.14 The Detailed Vegetation Survey Report and the Protection and Transplantation Proposal shall be prepared by the qualified ecologist(s) appointed under Condition 2.6 above and shall be certified by the ET Leader and verified by the IEC as conforming to the information and recommendations contained in the EIA Report (Register No. AEIAR-202/2016). All recommended measures as set out in the approved Detailed Vegetation Survey Report and the Protection and Transplantation Proposal shall be fully and properly implemented. The implementation of the recommended measures shall be certified by the ET Leader, verified by the IEC and reported in the EM&A programme required in the EM&A Manual in the following month of the measure(s) implemented.

Submission of Detailed Woodland Compensation Plan

- 2.15 To facilitate successful planting, a Detailed Woodland Compensation Plan shall be prepared by the qualified ecologist(s) appointed under Condition 2.6 to form the basis to guide the implementation of the proposed compensatory planting. The Detailed Woodland Compensation Plan shall include implementation details, management requirement, as well as monitoring requirements (e.g. frequency and parameters) of the compensatory planting area; and it shall be submitted to the Director for approval no later than 3 months before the commencement of compensatory woodland planting.
- 2.16 Upon completion of compensatory planting, monitoring by local ecologist with experience in maintenance works (e.g. irrigation, weeding, pruning, control of pests and diseases, replacement planting, repair of damage, etc.) shall be conducted. The monitoring frequency shall be monthly within the first year after planting. Parameters including health condition, survival rate of the plant and presence of weedy plant shall be monitored.

Submission of Baseline Survey Report on Egret

- 2.17 The Permit Holder shall conduct a baseline survey for the egret in Penfold Park at Sha Tin Race Course no later than 1 year before the demolition of the existing STSTW. No later than 1 month before the start of the demolition works, a report on the survey results and appropriate measures to minimize the impacts on egret,



such as by the adoption of best practices, avoidance of the breeding season, and use of better demolition technology shall be provided to the Advisory Council on the Environment (ACE) for comments before submitting to the Director for approval.

Submission of Landscape & Visual Mitigation and Tree Preservation Plan(s)

- 2.18 The Permit Holder shall no later than 1 month before the commencement of construction of relevant part(s) of the Project (including new buildings and demolition works), submit 6 hard copies and 3 electronic copies of Landscape & Visual Mitigation and Tree Preservation Plan(s), which shall be certified by the Registered Landscape Architect appointed under Condition 2.7 above, and shall be certified by the ET Leader and verified by the IEC as conforming to the information and recommendations contained in the EIA Report (Register No. AEIAR-202/2016) to the Director for approval. All recommended measures as set out in the approved Landscape & Visual Mitigation and Tree Preservation Plan(s) shall be properly implemented and maintained for the Project. The implementation of the recommended measures shall be certified by the Register Landscape Architect and ET Leader, verified by the IEC and reported in the EM&A programme required in the EM&A Manual in the following month of the measure(s) implemented.
- 2.19 A review on the architectural design of the ventilation building(s) with a view to harmonizing with the surrounding natural environment shall be included in the Landscape & Visual Mitigation and Tree Preservation Plan. The final design of the building(s) shall be submitted to the Director for approval before commencement of construction of the building(s).
- 2.20 The Landscape & Visual Mitigation and Tree Preservation Plan(s) shall include the protection/preservation/transplantation of existing trees, landscape reinstatement, compensatory planting as well as new planting for the works of the Project (including construction of new buildings and demolition works) with clear indication of location, size, number/spacing and plant species, design details; implementation programme; maintenance and management schedules of the landscape and visual mitigation measures recommended in the EIA Report (Register No. AEIAR-202/2016). All drawings shall be in the scale of 1:1000, or other appropriate scale as agreed by the Director.

Submission of Supplementary Contamination Assessment Plan (CAP)

- 2.21 Detailed assessment of land contamination shall be carried out before the commencement of demolition/construction of the Project when access to the concerned site(s) identified in Appendix 6.01 of the approved EIA Report (Register No. AEIA-202/2016) is available. The Permit Holder shall submit 4 hard copies and 2 electronic copies of the supplementary CAP to the Director for approval. All recommendation(s) in the approved supplementary CAP shall be implemented. Remediation action plan shall be devised and implemented to ensure decontamination of the site(s) if found necessary. No demolition/construction works at the concerned site(s) shall be commenced before the approval of the supplementary CAP by the Director and the satisfactory completion of necessary decontamination works. Contaminated soil shall not be used for planting and landscaping.



Measures to Mitigate Traffic Noise from Ma On Shan Road

- 2.22 The Permit Holder shall, no later than 1 month before the commencement of construction of the Project, deposit with the Director 4 hard copies and 2 electronic copies of a plan to show clearly the locations, dimensions and implementation programme of the noise barrier(s) along Ma On Shan Road, its temporary provision on the proposed temporary access haul road and the re-provisioning of the noise barrier(s) on Ma On Shan Road after the completion of construction of the CTSW. If there is any change to the plan, the Permit Holder shall, no later than 1 month before the works of the proposed change(s), deposit with the Director 4 hard copies and 2 electronic copies of an updated plan to show clearly the proposed change(s). The plan and any changes(s) to the plan shall be certified by the ET Leader and verified by the IEC as conforming to the information and recommendations contained in the approved EIA Report (Register No. AEIA-202/2016). All recommendations in the plan and any updated plan shall be properly implemented and reported in the EM&A programme required in the EM&A Manual in the following month of the associated works taken.

Submissions and/or Measures to be Implemented during Construction of the Project

Measures to Minimize Vibration

- 2.23 To minimize disturbances to any cultural heritage resources and wildlife within the Project site(s), the best practical means shall be adopted during the construction of the Project to minimize the vibrations generated by the blasting works on and below ground level. The preparation and adoption of the best practical means shall be certified by the ET Leader, verified by the IEC and reported in the EM&A programme required in the EM&A Manual in the following month of the associated works taken.

Measures to Mitigate Construction Noise Impact

- 2.24 The number of powered mechanical equipment to be operated at the same time within 120m of the Neighbourhood Advice-Action Council Harmony Manor shall be limited during construction of access road to achieve the noise level of not more than 75 dB(A).
- 2.25 In order to minimize the noise impact during the examination period(s) of Ma On Shan Holy Spirit Primary School, the contractor shall liaise with the school representative(s) to obtain the examination schedule to avoid noisy construction activities in the examination period(s).

Measures to Mitigate Water Quality Impacts

- 2.26 The construction of new pipelines from the CSTW underneath Shing Mun River shall be built by trenchless method with a view to avoiding any disturbance to the riverbed. The preparation and construction works of the pipelines shall be certified by the ET Leader, verified by the IEC and reported in the EM&A programme required in the EM&A Manual in the following month of the associated works taken



- 2.27 The THEES connection works shall be split into sections and each section shall be no more than once per year during the construction of the Project and shall be conducted within the regular THEES maintenance windows for a duration not longer than 4 weeks each and outside the algae blooming season (i.e. January to May in every year). The preparation and construction of the THEES connection works shall be certified by the ET Leader, verified by the IEC and reported in the EM&A programme required in the EM&A Manual in the following month of the associated works taken.

Measures to Mitigate Air Quality Impacts

- 2.28 The rock crushing plant to be used in construction of the Project shall be configured as an enclosed system. Dust collector with dust removal efficiency of 99% shall be provided at the exhaust of the rock crusher during rock crushing.

Measures to Protect Species of Conservation Importance

- 2.29 To protect the freshwater crab species *Cryptopotamon anacoluthon* recorded from a natural stream section at Nui Po Shan as indicated in the approved EIA Report (Register No. AEIAR-202/2016), the alignment of proposed access road(s) shall follow the topography level of the existing steep natural terrain as far as practicable to avoid potential extensive excavation works of hilly terrain and to minimize slope cutting and vegetation removal and shall be elevated across stream section(s) in order to protect the natural stream habitat. The preparation and construction works of proposed access road(s) shall be certified by the ET Leader, verified by the IEC and reported in the EM&A programme required in the EM&A Manual in the following month of the associated works taken.

Measures to Minimize Risk due to the Use and Transport of Explosives

- 2.30 To minimize the potential risk associated with the use and transport of explosives, the return of unused explosives to the magazine shall be avoided as far as practicable and a minimum of 10 minutes headway between two consecutive explosives carrying vehicles shall be maintained.

Submissions and/or Measures to be Implemented during Operation of the Project

Measures to Mitigate Water Quality Impacts of Reclaimed Wastewater

- 2.31 For the reuse of treated effluent from sewage treatment works, the reclaimed water quality shall meet the standards set out in [Table 1](#) of this Permit. The following precautionary measures shall be adopted for treated effluent reuse:
- (i) to avoid cross connection and hence contamination, all pipes and fittings used for the treated effluent water supply and distribution system shall be in special colour code, such as in purple, for distinguishing them from the pipes and fittings used for the potable or fresh water supply and distribution systems;
 - (ii) regular checking and inspections of the treated effluent supply and distribution systems for possible cross connection to the fresh water supply and distribution

system shall be carried out. The use of non-toxic dye may be adopted in the checking/inspections; and

- (iii) warning signs shall be permanently displayed where public access to treated effluent is possible (except for toilets) notifying the employees, visitors and the public at large that treated effluent is being used and is not suitable for drinking.

Measures to Mitigate Odour arising from the CSTW

- 2.32 All sewage treatment units with potential odour emission shall be covered and the exhausted air shall be conveyed to the deodourization system(s) for treatment before discharging to the environment via the ventilation shaft.
- 2.33 The ventilation shaft shall be located at the remote location on the hill. Not less than three sets of deodourization system with 97% odour removal efficiency and one set of deodourization system with 80% odour removal efficiency shall be installed to treat the odour emission before discharging to the environment via the ventilation shaft.
- 2.34 To minimize the potential odour impact from sludge handling, the loading and unloading activities shall be conducted at the plant inside cavern. The loading/unloading bay shall be properly vented to deodourization system(s) for treatment before discharging to the environment. Sludge tanks with totally enclosed design shall be deployed for transporting sludge.

Measure to Mitigate Operation Noise Impacts

- 2.35 Not later than 1 month before the commencement of operation of the Project, a commissioning test shall be conducted for the ventilation building(s), ventilation shaft, ventilation fan for chiller plant room at administration building and cooling tower at the administration building. No later than 2 weeks after completion of the commissioning test, the Permit Holder shall deposit with the Director 4 hard copies and 2 electronic copies of report showing the compliance with the relevant design maximum Sound Power levels determined in the approved EIA Report (Register No. AEIAR-202/2016). The report shall be certified by the ET Leader and verified by the IEC.

3 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS
環境監察及審核規定

- 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 changes to the programme shall be justified by the ET Leader and verified by the IEC as conforming to the information and requirements contained in the EM&A Manual before submission to the Director for approval.
- 3.2 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 3 electronic copies of relevant Baseline Monitoring Reports to the Director at least 1 month before the commencement of construction of the Project. 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 Baseline Monitoring Reports shall be provided upon request by the Director.
- 3.5 The Permit Holder shall submit 4 hard copies and 3 electronic copies of Monthly EM&A Reports for the construction stage 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 and landfilling). 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.
- 3.7 To ensure a high degree of transparency regarding the monitoring data and results in view of the public concern about the Project, all environmental monitoring and audit data and results and all submissions and all performance test data and results required by this Permit shall be made available by the Permit Holder to the public through a dedicated website to be set up by the Permit Holder under Condition 4.2 below, in the shortest practicable time and in any event no later than 2 weeks after such information is available, unless otherwise agreed by the Director.



4 ELECTRONIC REPORTING OF EM&A INFORMATION
環監資料的電子匯報

- 4.1 To facilitate public inspection of the Baseline Monitoring Report 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 sub-section 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.
- 4.2 The Permit Holder shall, within 1 month after the commencement of construction of 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 2 weeks after the relevant environmental monitoring data are collected or become available, unless otherwise agreed with the Director. All finalized submissions and plans 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 and reports throughout the entire construction period and until 6 months after the last EM&A report is uploaded, 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 EIA Report, the environmental permit(s) and project profile of the Project. 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) searching by date;
 - (iii) searching by types of monitoring data; and
 - (iv) hyperlinking to relevant monitoring data after searching;
- or otherwise as agreed by the Director.



Notes:

註：

1. This Permit consists of three parts, namely, Part A (Main Permit), Part B (Description of Designated Project) and Part C (Permit Conditions). Any person relying on this permit shall obtain independent legal advice on the legal implications under the EIAO, and the following notes are for general information only.

本許可證共有 3 部，即 A 部 (許可證主要部分)；B 部 (指定工程項目的說明) 及 C 部 (許可證條件)。任何援引本許可證的人士須就環評條例的法律含意徵詢獨立法律意見，下述註解只供一般參考用。
2. If there is a breach of any condition of this Permit, the Director or his authorized 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 authorized officer.

如違反本許可證的任何條件，署長或獲授權人員徵得環境局局長的同意後勒令停止相關工程，直至許可證持有人為所造成的環境損害採取補救行動為止。在此情況下，許可證持有人未經署長或獲授權人員同意，不得進行任何相關工程。
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.

許可證持有人可根據環評條例第 13 條的規定向署長申請更改本環境許可證的條件。許可證持有人須將經修改的許可證替換在建造工地內展示的原有許可證。
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.

承擔工程項目整項或部分工程的責任的人，在承擔責任之前，可根據環評條例第 12 條的規定向署長申請新的環境許可證。
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.

根據環評條例第 14 條的規定，署長可在環境局局長的同意下暫時吊銷、更改或取消環境許可證。遭暫時吊銷、更改或取消的環境許可證必須從工程項目工地除下，不再展示。
6. If this Permit is cancelled or surrendered during the 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 Parts 1 and 2 of Schedule 2 of the EIAO without a valid environmental permit.

如果本許可證在工程項目建造或營辦期間取消或交回，則在繼續營辦工程項目之前，必須先根據環評條例規定取得另一份環境許可證。根

據環評條例第 26(1)條的規定，任何人在沒有有效環境許可證的情況下建造或營辦環評條例附表 2 第 1 及 2 部所列明的指定工程項目，即屬犯罪。

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:
如任何人在違反本許可證的條件下建造或營辦工程項目，根據環評條例，即屬犯罪—
- (i) on a first conviction on indictment to a fine of \$2 million and to imprisonment for 6 months;
一經循公訴程序首次定罪，可處罰款 200 萬元及監禁 6 個月；
 - (ii) on a second or subsequent conviction on indictment to a fine of \$5 million and to imprisonment for 2 years;
一經循公訴程序第二次或其後每次定罪，可處罰款 500 萬元及監禁 2 年；
 - (iii) on a first summary conviction to a fine at level 6 and to imprisonment for 6 months;
一經循簡易程序首次定罪，可處第 6 級罰款及監禁 6 個月；
 - (iv) on a second or subsequent summary conviction to a fine of \$1 million and to imprisonment for 1 year; and
一經循簡易程序第二次或其後每次定罪，可處罰款 100 萬元及監禁 1 年；及
 - (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.
在任何情況下如該罪行屬持續性質，則法院或裁判官可就其信納該罪行持續的每天另處罰款 10,000 元。
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.
許可證持有人可在接獲本許可證後 30 天內，根據環評條例第 17 條就本許可證的任何條件提出上訴。
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.
上述註解只供一般參考用，欲知有關詳情，許可證持有人須參閱環評條例及徵詢獨立法律意見。



Environmental Permit No. EP-533/2017
環境許可證編號:EP-533/2017

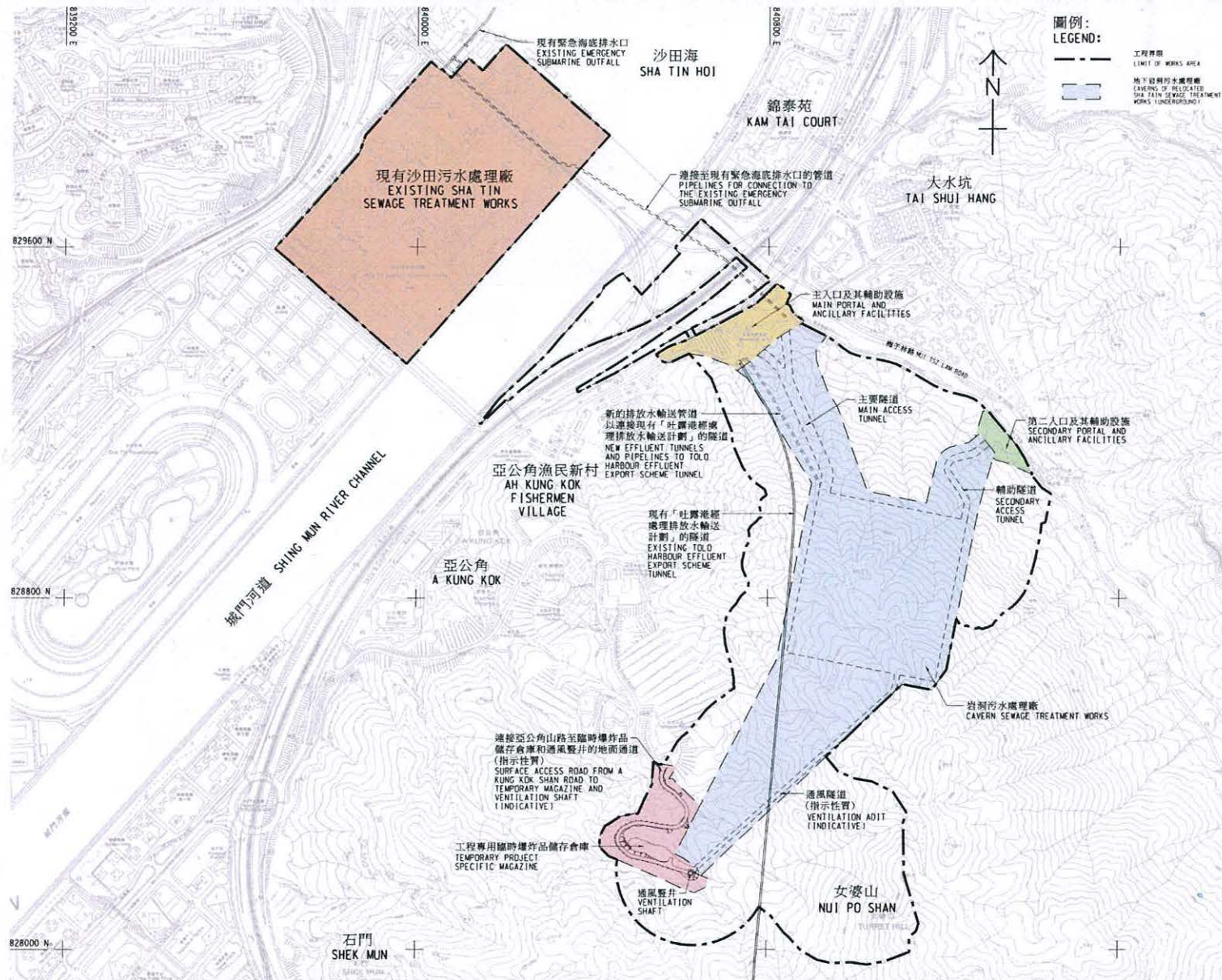
Table 1: The water quality standards of reuse of treated effluent (referred in Condition 2.31 of this Permit)

Water Quality Parameter	Unit	Recommended Standards for non-potable uses including use in the laboratory, polymer solution preparation, irrigation and toilet flushing inside the CSTW
pH	-	6.2 – 8.0
Total Suspended Solids	mg/L	< 2
Total Dissolved Solids	mg/L	< 450 for Polymer Preparation, Irrigation & Cooling and Not Specified for toilet flushing, ground and facility washing & make-up water
Turbidity	NTU	≤ 2
<i>E. coli</i>	CFU/100 mL	Not detectable

Note:

- [1] The water quality standards for all parameters shall be applied at the point-of-use of the system.
- [2] “NTU” means “Nephelometric Turbidity Unit”. “CFU” means “Colony-Forming Unit”.
- [3] The above Table is prepared based on the information in Section 2.5.1.2 of the approved EIA Report (Register No. AEIAR-202/2016).





Project Title: Sha Tin Cavern Sewage Treatment Works

工程項目名稱: 沙田岩洞污水處理廠

Figure 1: Location of the Project 圖一: 工程項目位置圖

[Extracted from Figure 1 of the Application for Environmental Permit (No.: AEP-533/2017)]

[摘錄自環境許可證申請 (編號: AEP-533/2017) 的圖 1]



Environmental Permit No:

環境許可證編號:

EP-533/2017

