

**Contract No. : DE/99/12**  
**Outlying Islands Sewerage – Stage 1 Phase 1**  
**Upgrading of Siu Ho Wan Sewage Treatment Plant**  
**– E&M Works**

**ENVIRONMENTAL MONITORING AND AUDIT**  
**MONTHLY EM&A REPORT No. 6**

**BioEnviroLink Technologies Limited**  
**November 2003**

## **APPROVAL & DISTRIBUTION SHEET**

DOCUMENT DATE: 29 November 2003

### **APPROVAL**

Prepared by: ET Leader (BioEnviroLink Technologies Limited)

Signature: \_\_\_\_\_  
Miss Patricia Chung

Date: \_\_\_\_\_

Audited by: \_\_\_\_\_  
Mr. Ivan Ng

Date: \_\_\_\_\_

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## **EXECUTIVE SUMMARY**

This is the sixth monthly Environmental Monitoring and Audit (EM&A) Report for the Drainage Services Department Contract No. DE/99/12 entitled “Upgrading of Siu Ho Wan STP – E&M Works Outlying Islands Sewerage – Stage 1 Phase 1C”. (Environmental Permit No. EP-076/2000)

This report contains the results and findings of site inspection activities and EM&A works carried out by the Environmental Team (ET) of the E&M Contractor as required in the contract during November 2003.

The site activities in the reporting period mainly consist of installation of drive shaft unit and sum collection pipe for sludge scrapers at the Primary Tank, installation of Alum & Anionic Polymer Stock Tanks and 0.5T overhead crane at the Chemical Building, installation of centrifuge feed pumps, machine and motors, as well as cationic polymer stock tanks at Centrifuge Building, and installation of building services, electrical equipment and HVAC system air ductwork at Administration Building.

Ponding rainwater was found in some locations at site during the site inspections of 6, 13, 21, and 27 November 2003, appropriate corrective actions had been applied such as installation of pumping facilities and application of mosquito drugs. C&D and Chemical waste storage facilities have been provided at site. The majority of work activities and site mitigation measures were in compliance with environmental protection regulations and contract requirements. Only minor deficiencies were found during the site inspections of November 2003.

There were no complaints received or notifications of summons or successful prosecutions during November 2003.

The main planned activities for December 2003 with regard to E&M equipment installation consist of

1. Installation of centrifuge feed pumps and pipework at centrifuge pump area of Centrifuge Building
2. Installation of anionic polymer stock tanks, preparation unit and pipework at chemical

building

3. Installation of building services, electrical equipment and HVAC system air ductwork at Administration Building
4. Installation of bottom rails for scraper and drive chain for scraper motor at Primary Tanks
5. Installation of Sludge transfer pump and pipework at Sludge Transfer Chamber
6. Installation of grit pump and pipework at Detritor
7. Installation of Anchorage for odour duct & cable bridge at Sludge Buffer Tanks
8. Installation of cable trays and accessories at Cable Trench
9. Installation of return liquor pumps & pipework at Return Liquor P/S
10. Installation of HV cables and accessories at Excavation Trench

## **1. BACKGROUND INFORMATION**

### **1.1 Introduction**

This is the sixth monthly Environmental Monitoring and Audit (EM&A) Report for the Drainage Services Department Contract No. DE/99/12 entitled “Upgrading of Siu Ho Wan STP – E&M Works Outlying Islands Sewerage – Stage 1 Phase 1C”. The site layout plan, with the indication of a temporary storage of installation items as well as the designated waste storage area, is shown in Appendix 1. The report was prepared by the Environmental Team, BioEnviroLink Technologies Limited, of the E&M Contractor, Mitsubishi Corporation (Hong Kong) Limited. The report is to be submitted to the Contractor, the Engineer and the Environmental Protection Department.

This report presents the results of the environmental monitoring of the project activities conducted during the month of November 2003. This included regular site inspections once per week for verification of implementation of the mitigation measures as recommended in the EM&A Manual.

The E&M installation works has already commenced in June 2003 and is anticipated to be completed on 11 October 2004.

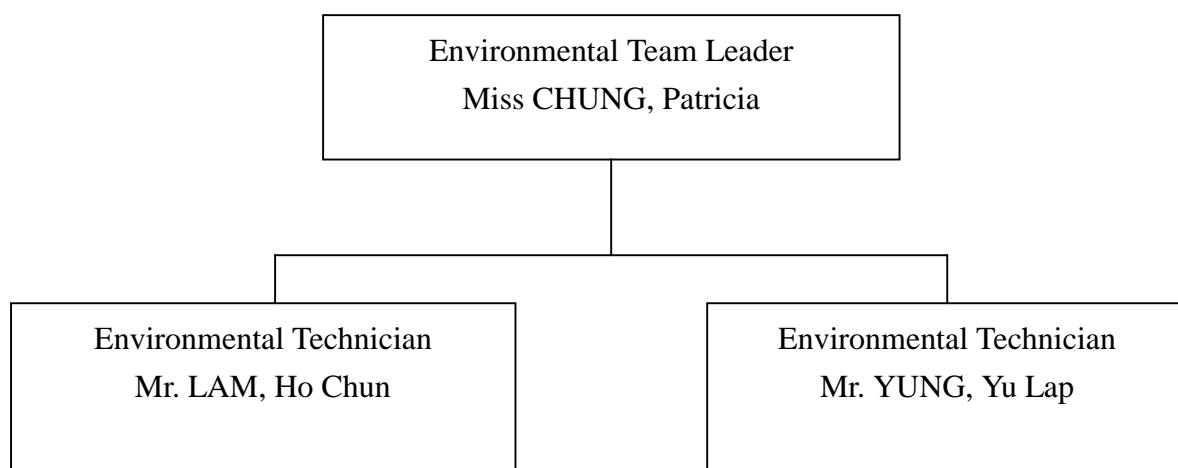
The contact persons and telephone number of key personnel for the captioned project are shown in Appendix 2.

### **1.2 Project Organization and Management**

The Environmental Team, which comprises the environmental team leader and the environmental technicians to undertake the environmental monitoring and audit work for this project, has commissioned BioEnviroLink Technologies Limited. The project Organization Chart of Environmental Team is shown in Figure 1.2.

Figure 1.2 Organization Chart of Environmental Team

Environmental Team Organization Chart



## 2. SUMMARY OF WORK ACTIVITIES

A summary of the site works in this month, with the information of locations, details of each activity, equipment/materials and dates of occurrence, is listed in Table 1.

Table 1: Work Activities for November 2003

<b>Item</b>	<b>Location</b>	<b>Work Activities</b>	<b>Date of Occurrence</b>
1	Primary Tank	- Checking of Civil Works for Tank bottom profile - Installation of drive shaft unit and scum collector pipe for sludge scrapers - Installation of return rails at tank top	1 – 30 November 03
2	Chemical Building	- Setting out of electrical installation - Installation of Alum & Anionic Polymer Stock Tanks - Installation 0.5T overhead crane	1 – 30 November 03
3	Centrifuge Building	- Installation of centrifuge steelwork platform chequer plate support - Cutting and drilling of centrifuge outlets, stand supports and motor supports - Installation of centrifuge machine and motors - Installation of centrifuge feed pumps and pipework at Centrifuge Pump Area - Installation of Cationic Polymer Stock Tanks	1 – 30 November 03
4	Administration Building	- Installation of building services and electrical equipment - Installation of HVAC system air ductwork & chilled water pipework	1 – 30 November 03
5	Sludge Transfer Chamber	- Setting out of sludge transfer pump & pipework installation	1 – 30 November 03
6	Detritor	- Installation of grit pump and pipework	1 – 30 November 03
7	Chemical Pipe Trench	- Installation of containment pipe for mock up	1 – 30 November 03
8	Cable Trench	- Civil Works inspection and Dimensional checking	1 – 30 November 03
9	Other Area	- Civil Works inspection and Dimensional checking	1 – 30 November 03



### 3 IMPLEMENTATION OF WASTE MANAGEMENT PLAN

A Waste Management Plan has been prepared for governing a good waste management, which is essential to avoid, minimize, salvage for reuse, recycle, dispose of waste and reduce the load on landfills to improve the standards of environmental protection.

The information and the implementation status of waste management are summarized in Table 2.

Table 2: Information and the implementation status of  
Waste Management in November 2003

<b>Information of Waste Management Plan</b>	<b>Implementation Status</b>	<b>Remarks</b>
<p><u>Municipal Solid Waste Management</u> Sorting and classification of aluminum cans, plastics are required at site. Paper and cardboard generated from site office should be reused or recycled.</p>	<p>Sorting and classification of municipal solid waste are available at work site. Waste sorting facilities (bins) are provided.</p>	<p>Collection of municipal solid waste has been carried out since September 2003.</p>
<p><u>Construction &amp; Demolition (C&amp;D) Waste Management</u> Waste sorting and classification by using a 100 m<sup>2</sup> sorting shed at site are required.</p>	<p>Waste dumper for temporary storage of C&amp;D Waste are provided.</p>	<p>C&amp;D Waste has been appropriately handled since 14 October 2003.</p>
<p><u>Chemical Waste Management</u> A licensed chemical waste collector is engaged for collecting the chemical wastes generated from this project. Storage facilities must follow the Code of Practice.</p>	<p>No chemical waste was generated in November 2003. The E&amp;M Contractor has registered with EPD as chemical waste producer. Chemical waste storage enclosure was provided in September located near the site office.</p>	<p>The permit has been issued in September.  Proper label and signage for Chemical waste storage enclosure and container(s) are provided.</p>
<p><u>Disposal and Recording</u> A complete record, in the format of compiled logbook is maintained for every vehicle trip transporting C&amp;D materials. Adequate record of recycled and reused waste materials must be well kept.</p>	<p>Adequate record forms for recycled &amp; reused waste materials for municipal waste are available and are in proper use.  C&amp;D wastes generated at site have been recorded and filed adequately.</p>	<p>C&amp;D waste collector was arranged to collect the wastes on 17 November 2003.  C&amp;D wastes such as timbers are reused at site.</p>

## **4 STATUS OF ENVIRONMENTAL PROTECTION AND SITE INSPECTIONS**

### 4.1 Site Inspections

The ET leader and the ET technician conducted four site inspections on 6, 13, 21 and 27 November 2003.

All environmental aspects in the work areas were inspected during the weekly site walk, including air dust, surface water quality, waste management, site tidiness and hygiene.

A detailed checklist of each site inspection together with comments, relevant photos and maps have been filed and kept in site office.

The findings and results of site inspections in November 2003 are provided in Section 4.2.

### 4.2 Status of Environmental Protection

#### Air Dust

Air dust will be a concern in dry, windy weather, especially at site area next to Primary Tank at Portion B. The Contractor has sprayed water for dust suppression measures. The photos are provided in Appendix 4.

The Contractor has used canvas sheets for dust suppression, after dredging of trenches at site.

#### Surface Water Quality

In general, the E&M installation work does not cause significant environmental impact on surface water.

Pumping facilities have been installed to remove accumulated rainwater found in uneven surface and pits at site. Besides, the said water was directed and discharged at a sedimentation channel with silt removal facilities. Also, the stagnant water located in the Return Liquor Pumping Station has been cleared up.

The Contractor has submitted an application for registering a wastewater discharge

permit. The permit has been issued on 29 November 2003 and was effective since 30 November 2003 (See Appendix 5).

A chemical toilet has been provided by a licensed contractor, of which sewage generated is collected weekly without causing contamination on surface water. Weekly records are kept properly for each sewage collection.

#### Noise

All installation activities were being carried out within normal working hours during November 2003. There are no existing sensitive receivers identified in the vicinity of Siu Ho Wan works. A noise permit for working during restricted hours has been issued effective since 26 September 2003.

#### Waste / Chemical Waste

Site activity has started in June 2003. No chemical waste was produced at site up to November 2003.

A designated waste storage area is provided for the storage of general wastes and C&D wastes, as specified in the waste management plan. An adequate chemical waste storage enclosure and containers for storage of chemical wastes in accordance with WMP have already been provided on-site (See Appendix 1). A C&D waste dumper has been provided since October 2003 for the disposal of C&D waste. The follow-up work for proper handling of chemical wastes has been carried out in November.

Sorting and classification of municipal solid wastes have been carried out at work site during November 2003. Properly labeled waste collection bins are available for sorting and collecting aluminum cans, waste paper and plastic bottles.

Information of recycled and collected wastes (for the month of November 2003) are summarized as follows:

<b>Types of wastes</b>		<b>Estimated quantity</b>
Municipal	Paper	2.2 kg
Municipal	Aluminum Cans	45 pcs
Municipal	Plastic Bottles	60 pcs
C&D Waste	Timber	1.2 tonnes

The Municipal wastes are temporarily stored in the sorting bins at site whereas C&D wastes, such as timber, are reused on-site.

Registered waste collectors, as listed in the following table, have been arranged to collect and transport the wastes whenever necessary.

<b>Type of Wastes</b>	<b>Collector Company Name</b>	<b>Tel No.</b>
Municipal wastes	Luen Hop Environment Dev. Ltd.	6083 3208
C&D wastes	Strong Base Environmental Services & Engineering Co. Ltd.	2797 9812
Chemical waste	Enviropace Ltd.	2435 7700
	Strong Base Environmental Services & Engineering Co. Ltd.	2797 9812

## 5 SUMMARY OF DEFICIENCY, NON-COMPLIANCES AND REMEDIAL ACTIONS

<b>Deficiency</b>	<b>Action taken</b>
<ul style="list-style-type: none"> <li>It was noted that ponding water and accumulated rainwater have been found on the uneven surface &amp; pits within site area including portion G, Detritor, Flowmeter Chamber and Flow Separation Chamber, hopper and inlet trench of Primary Tank in November 2003.</li> </ul>	<ul style="list-style-type: none"> <li>The Contractor has installed pumping facilities to pump away water from large rainwater ponds.</li> <li>Mosquito drug was applied in the accumulated water to prevent mosquito breeding.</li> </ul>
<ul style="list-style-type: none"> <li>It was noted that some wasted packaging materials were found at site, including the chemical building and the storage area.</li> </ul>	<ul style="list-style-type: none"> <li>The contractor has disposed the packaging materials accordingly and properly. The timbers were re-used on-site.</li> </ul>
<ul style="list-style-type: none"> <li>It was noted that the Chemical Waste Storage Enclosure and Containers lacked proper labeling and signage.</li> </ul>	<ul style="list-style-type: none"> <li>The contractor has painted appropriate signage on the Chemical Waste Storage Enclosure and properly labeled containers inside.</li> </ul>
<ul style="list-style-type: none"> <li>It was noted that C&amp;D wastes are accumulated after dredging of trenches at site.</li> </ul>	<ul style="list-style-type: none"> <li>The Contractor has applied canvas sheets to the accumulated wastes to suppress dust problem.</li> </ul>

## 6 CUMULATIVE LOG OF COMPLAINTS AND REMEDIAL ACTION

There is no complaint received in association with installation activities during November 2003. The cumulative of complaints is referred in Appendix 3.

## 7 CUMULATIVE LOG OF NOTIFICATION OF SUMMONS AND PROSECUTIONS

No notification of summons and no prosecutions occurred during November 2003.

## 8 FUTURE KEY ISSUES

The planned activities for the coming three months (December 2003 – February 2004) and anticipated environmental issues with regard to E&M equipment are summarized as follows:

Item	Location	Works	Anticipated Environmental Issues
1	Administrative Building	- Fire Services Installation - Building services and electrical equipment installation - HVAC air ductwork & chilled water pipework installation	- Plastic packaging material will be generated and should be re-used on site or disposed properly.
2	Primary Tank	- Sludge scraper and scum collector pipe installation - Scum pumps & pipework installation	- Timber will be generated and should be re-used on site, or disposed properly. - Ponding water should be pumped away.
3	Chemical Building	- Electrical system installation - Polymer preparation system, Alum & Anionic Polymer Stock Tanks installation - 1/2T overhead crane installation - Chemical pump installation	- No environmental issue is anticipated

4	Centrifuge Building	<ul style="list-style-type: none"> <li>- Chequer plate supports for centrifuge steelwork platform installation</li> <li>- Centrifuge machine and motors installation</li> <li>- Centrifuge feed pumps and pipework installation</li> <li>- Cationic Polymer and Preparation unit installation</li> <li>- Fast rolling door installation</li> <li>- Sludge train installation</li> <li>- Electrical installation and cable wiring</li> <li>- MCC control panels installation</li> </ul>	<ul style="list-style-type: none"> <li>- Timber will be generated and should be re-used on site, or disposed properly.</li> </ul>
5	Sludge Transfer Chamber	<ul style="list-style-type: none"> <li>- Sludge transfer pump &amp; pipework installation</li> </ul>	<ul style="list-style-type: none"> <li>- Timber will be generated and should be re-used on site, or disposed properly.</li> </ul>
6	Detritor	<ul style="list-style-type: none"> <li>- Grit pump &amp; pipework installation</li> <li>- Detritor installation</li> </ul>	<ul style="list-style-type: none"> <li>- Ponding water should be pumped away</li> </ul>
7	Chemical Pipe Trench	<ul style="list-style-type: none"> <li>- Containment pipe installation</li> </ul>	<ul style="list-style-type: none"> <li>- Plastic packaging material will be generated and should be re-used on site or disposed properly.</li> </ul>
8	Cable Trench	<ul style="list-style-type: none"> <li>- Electrical power cable installation</li> <li>- Excavation</li> </ul>	<ul style="list-style-type: none"> <li>- Timber will be generated and should be re-used on site, or disposed properly.</li> <li>- Stock piles of soil should be covered with canvas sheets to avoid generation of dust.</li> </ul>
9	Other Area	<ul style="list-style-type: none"> <li>- Overhead crane in portable water P/S Installation</li> <li>- Booster pump and pressure vessel installation</li> </ul>	<ul style="list-style-type: none"> <li>- Timber will be generated and should be re-used on site, or disposed properly.</li> <li>- Plastic &amp; timber will be generated and should be re-used on site, or disposed properly.</li> </ul>

The site inspection schedule for the next month (December 2003) is designated on 4, 11, 18, 27 December 2003.

## **9 CONCLUSION**

No non-compliances were found during the weekly site inspections being conducted. Also there is no summon nor prosecutions reported during November 2003.

The contractor has taken actions to meet environmental requirements such as applying pumping facilities to pump out stagnant water, proper sorting out and disposal of municipal wastes, reusing C&D wastes (timbers) at site, provision of chemical waste storage facility, and C&D waste dumper, and application of relevant environmental permits. Application of water at open site area with water truck mitigates air dust problem.

The contractor was reminded to pay more efforts on environmental concerns and awareness such as the discharge of accumulated rainwater at site; proper action taken on disposal of wasted packaging material, proper mitigation to potential air dust problem, and proper management of site activities which may lead to any possible environmental impacts.

In general, the environmental condition at site is satisfactory in November 2003. The contractor has made progress in implementation of the environmental requirements.





Appendix 2

**THE CONTACT PERSONS, TELEPHONE NUMBERS OF KEY PERSONNEL  
FOR UPGRADE OF SIU HO WAN SEWAGE TREATMENT WORKS**

<b>Company/Department</b>	<b>Name</b>	<b>Position</b>	<b>Telephone</b>
Maunsell Environmental Management Consultants Limited	Mr. Ivan Ng	Independent Environmental Checker	61917256
Maunsell Environmental Management Consultants Limited	Mr. Titus Yeung	Resident Site Engineer	90209585
Mitsubishi Corporation (Hong Kong) Limited	Mr. W B Chu	Site Agent	29840779
Mitsubishi Corporation (Hong Kong) Limited	Mr. Stephen Gu	Site Engineer	29840779
BioEnviroLink Technologies Limited	Miss. Patricia Chung	Environmental Team Leader	2185 0123
BioEnviroLink Technologies Limited	Mr. Ho-Chun Lam	Environmental Technician	2185 0154

Appendix 3

**CUMULATIVE LOG OF COMPLAINTS**

<b>Environmental Parameters</b>	<b>Cumulative no. Brought forward</b>	<b>No. of complaint November 2003</b>	<b>Overall Total</b>
<b>Air</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Noise</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Water</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Waste</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

**DETAILS OF COMPLAINTS AND REMEDIAL ACTIONS**

<b>Log Ref.</b>	<b>Date of Complaint received</b>	<b>Location</b>	<b>Complainant /Date</b>	<b>Details of Complaint</b>	<b>Investigation /Mitigation Action</b>	<b>Investigated by/ Date</b>
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Appendix 4

**Photos of Air Dust Mitigation Measure**



Appendix 5

**Wastewater Discharge Permit**

本署檔號 ( ) in EP760/950/008542 I  
OUR REF:  
來函檔號  
YOUR REF:  
電話  
TEL. NO.: 2417 6591  
圖文傳真  
FAX NO.: 2411 3073

Hong Kong Government  
Environmental Protection Department  
Local Control Office (Urban West) &  
Islands  
8/F., Tsuen Wan Government Offices,  
38 Sai Lau Kok Road,  
Tsuen Wan, N.T.



環境保護署  
污染管制辦事處  
(市區西)及離島  
荃灣西樓角道38號  
荃灣政府合署八樓

**BY REGISTERED POST**

Mitsubishi Corporation (Hong Kong) Limited  
15/F., Tower 1, Admiralty Centre,  
18 Harcourt Road,  
Hong Kong  
(Attn. : Mr. CHU Wan-bun/ Site Agent)

Dear Sir,

26 NOV 2003

**Water Pollution Control Ordinance (WPCO)**

**North Western Water Control Zone**

**Issue of Licence**

**Siu Ho Wan Sewage Treatment Plant at Cheung Tung Road,  
Tung Chung, Lantau Island.**

I refer to your application for a licence made under Section 19 of the Ordinance for the discharge or deposit from your above premises. A licence pursuant to Section 20 is enclosed. Your attention is drawn to the details, terms and conditions subject to which the licence is granted. You should note in particular, the stipulated sampling, treatment and disposal requirements and should also read the notes at the back of the licence.

If you are aggrieved by any of the terms and conditions of the licence, you may appeal to the Appeal Board by lodging a notice of appeal under Section 29 in the prescribed manner and form within 21 days after receipt of this licence.

Our granting of this licence to you does not imply that we regard the discharge from your premises to be in compliance with the required standards as stipulated in the licence. You must take all necessary actions to ensure that the terms and conditions of the licence are complied with.

Should you have any enquiry, please feel free to contact Ms. Y. L. TSANG at 2417 6071.

Yours faithfully,

( T.T. NG )

Environmental Protection Officer  
for Director of Environmental Protection

Encl.

Appendix 5

Wastewater Discharge Permit



WS



Licence No.: EP760/950/008542 I  
牌照編號：  
This Licence is Valid to: 30 November, 2008  
本牌照有效期至：二零零八年十一月三十日

ENVIRONMENTAL PROTECTION DEPARTMENT  
環境保護署  
WATER POLLUTION CONTROL ORDINANCE (CAP. 358)  
水污染管制條例(第358章)  
LICENCE PURSUANT TO SECTION 15/20/23A\*  
按第15 / 20 / 23A\*條簽發的牌照

The Director of Environmental Protection ("the Authority") grants this licence under the Water Pollution Control Ordinance ("the Ordinance") on the terms and conditions stated below.

環境保護署署長(「監督」)按下列的條款及條件，根據水污染管制條例(「本條例」)批給此牌照。

26.11.2003  
Date  
日期

C.C. TSANG  
( C.C. TSANG )  
For the Authority  
監督( 曾就照 代行)

PART A 甲部 : GENERAL TERMS 一般條款

Name of Licensee ("the Licensee") 持牌人名稱(「持牌人」)	Mitsubishi Corporation (Hong Kong) Limited 香港三菱商事會社有限公司
Discharge Premises ("the premises") 排放處所(「處所」)	Siu Ho Wan Sewage Treatment Plant at Cheung Tung Road, Tung Chung, Lantau Island 大嶼山東涌翔東路小濠灣污水處理廠
Water Control Zone 水質管制區	North Western Water Control Zone 西北部水質管制區
Discharge Category 排放種類	Discharge of Industrial/Commercial/Institutional *Trade Effluent 工業/商業/機構*污水排放
Nature of Discharge and Wastewater Treatment Facilities 排放性質及廢水處理設施	Effluent arising from construction site 由建築地盤所產生的污水 sedimentation 沉澱
Discharge Point(s) 排放點	Discharge into communal storm drain 排放進入共用雨水渠
Sampling Point(s) 取樣點	At ending of water trench 於水坑之末端

\*Delete as appropriate  
將不適用者刪去

Appendix 5

Wastewater Discharge Permit

**PART B 乙部 : SPECIFIC CONDITIONS 特別條件**

**B1. Limitations on Discharge 排放限制**

The quantity and composition of any discharge from the premises shall not exceed the limits stated in the table below<sup>(Note a)</sup>. All figures are upper limits unless otherwise indicated. All units are expressed as concentration in milligramme per litre unless otherwise stated.

任何源自處所之排放的量和成份不得超過下表所列的限度<sup>(註a)</sup>。除另予表明外，所有數字均為上限。除另予說明外，所有單位均以毫克/升的濃度表示。

Determinand 測量物	Limit 限度	Determinand 測量物	Limit 限度
Flow Rate (m <sup>3</sup> /day) 流量 (立方米 / 日)	10	Suspended Solids 懸浮固體	50
Chemical Oxygen Demand 化學需氧量	100	pH (pH units) 酸鹼值	6-9
/		/	

**B2. Self-monitoring and Reporting 自行監測及報告**

- The Licensee shall perform self-monitoring as and when required by the Authority.  
持牌人須在監督要求時進行自行監測。
- The Licensee shall sample the discharge at the Sampling Point(s) and, at his own expense carry out analyses in accordance with the sample type and measurement frequency specified for each determinand named below:-  
持牌人須在取樣點為排放抽取樣本，並依照下列指定的測量物、取樣形式及頻率，自資予以分析。

Determinand 測量物	Unit 單位	Sample Type 取樣形式	Frequency 頻率
-----------------	---------	------------------	--------------

Results of these monitoring shall be summarized in a report on a monthly/bi-monthly/quarterly\* basis and shall be submitted to the Authority.

所有監測結果須以摘要形式，每一個月/兩個月/三個月\*作出報告，並須呈交監督審閱。

\*Delete as appropriate  
將不適用者刪去

## Appendix 5

### Wastewater Discharge Permit

#### PART C 丙部 : STANDARD CONDITIONS 標準條件

##### C1. The Discharge 排放

C1.1 The discharge shall not contain polychlorinated biphenyls (PCB), polyaromatic hydrocarbon (PAH), fumigant, pesticide or toxicant, chlorinated hydrocarbons, flammable or toxic solvents, calcium carbide; any substance likely to damage the sewer or to interfere with any of the treatment processes, or to be harmful to the health and safety of any personnel engaged in the operation or maintenance of a sewerage system; waste liable to form scum or deposits in any part of the drainage or sewerage system, or the waters of Hong Kong; waste liable to form discolouration in any parts of the waters of Hong Kong; sludge, floatable substances or solids larger than 10 mm; and sludge or solid refuse of any kind.

排放不得含有多氯聯苯、聚芳烴、薰蒸劑、殺蟲劑或毒劑、氯化烴、可燃的或有毒的溶劑、碳化鈣；會損毀污水渠結構或干擾任何處理程序的物質，或有損操作及維修排污系統人員健康及安全的任何物質；足以在排水或排污系統，或香港水域任何範圍內形成浮渣或沉積物的廢物；足以在香港水域任何範圍內形成變色的廢物；污泥、漂浮物質或體積超越 10 毫米的固體；及任何種類的污泥或固體垃圾。

C1.2 No discharge shall bypass the wastewater treatment facilities, the Sampling Point(s) or the Discharge Point(s) unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternative exists.

除非避免人命傷亡或嚴重財物損失或無其他可行代替辦法，排放不得繞流不經其廢水處理設施，取樣點或排放點。

C1.3 Dilution of the discharge to achieve compliance with the limits contained in this licence is prohibited.

不得將排放稀釋，以求達到本牌照內所訂的限度。

##### C2. Flow Measurement 量度流量

The Licensee shall determine the flow rate of the discharge by installing, operating and maintaining a continuous flow measuring device with an accuracy certified by its manufacturer to be within plus or minus 3 percent of the actual flow, and calibrating the flow measuring device regularly according to manufacturer's recommendations. If no such device is installed, the Licensee shall determine the flow rate through using calculation methods agreed by the Authority, by making reference to the amount of water used in the premises being served by mains supply and other sources, less process consumption and any other losses.

持牌人必須設置、操作及保養一個連續性流量計作為測定排放的流量率之方法，其準確程度須經製造商證實為不超過或低於真正流量的 3%，並應根據製造商建議的方法，定期校準流量計。如沒有設置該設備，持牌人須依照監督同意的計算方法，根據處所由自來水及其他水源供應的總用水量減去工序耗水量及其他耗水量來測定流量率。

##### C3. Treatment 處理

C3.1 The Licensee shall provide necessary wastewater treatment facilities, and shall engage personnel with adequate qualification and experience to properly operate and maintain all wastewater treatment facilities at all times. Standby equipment shall be provided to guard against failure of major treatment equipment.

持牌人須提供必需的廢水處理設施，並須僱用有足夠資格及經驗的人士，時常妥善操作及保養所有廢水處理設施。主要處理設施須配有後備裝置，以應付故障發生。

C3.2 In the event of loss of efficiency of operation, or failure of all or part of the wastewater treatment facility, the Licensee shall take all reasonable steps to the extent necessary to maintain compliance with this licence. Such steps shall remain until operation of the wastewater treatment facility is restored or an alternative method of treatment is provided.

倘若部份或整個廢水處理設施操作失靈或發生故障，持牌人須採取所有必要的合理措施，以求達到符合本牌照的規定。此等措施須維持至廢水處理設施恢復如常操作或有其他代替的處理方法可供採用為止。

C3.3 If the wastewater treatment facilities are not properly operated and maintained to the satisfaction of the Authority, the Licensee shall take immediate and effective remedial actions as required by the Authority.

倘若廢水處理設施的操作及保養未能令監督滿意，持牌人須按監督之規定，採取即時及有效的補救行動。

##### C4. Disposal 棄置

Sludges, screenings, solids, oil and grease, filter backwash, or other pollutants removed in the course of treatment shall be disposed of in a proper manner<sup>(Note b & c)</sup>.

處理過程中所產生的污泥、隔濾物、固體、油脂、過濾器回洗或其他污染物，必須妥善地棄置<sup>(附註 b 及 c)</sup>。

Appendix 5

**Wastewater Discharge Permit**



## Appendix 5

### Wastewater Discharge Permit

Notes 附註	
(a)	<p>For the purposes of determining compliance with the limits stated in Specific Condition B1, samples shall be taken by the duly authorized officer(s) of the Authority at the Sampling Point(s) or any other points from which the samples so taken are regarded by the Authority as being representative of the quality of the discharge. When any single sample analyzed for a determinand is proved not complying with corresponding limit set out in the table, the discharge is deemed to have failed to comply with Specific Condition B1.</p> <p>為確定排放是否符合特別條件第 B1 項內所列的限度，獲監督授權的人員須在取樣點或在監督認為可以抽取到具代表性的樣本的任何其他位置抽取樣本。只要在任何一個經分析的樣本中，證實任何一個測量物不符合表中所列的相應限度時，排放即被視為不符合特別條件第 B1 項。</p>
(b)	<p>An example of proper disposal method for sludge is sending dewatered sludge to landfill for disposal.</p> <p>妥善棄置污泥方法中的一個例子是將脫水後的污泥運往堆填區棄置。</p>
(c)	<p>Proper disposal of grease trap waste includes but is not limited to employing registered grease trap waste collector to conduct the disposal work. All registered collectors should have a Certificate of Registration issued by the Environmental Protection Department. The most updated list of the registered collectors can be obtained from the Environmental Protection Department.</p> <p>妥善的隔油池廢物棄置方法包括卻不限於聘用已登記的隔油池廢物收集器進行有關的棄置工作。所有已登記的隔油池廢物收集器，均須有由環境保護署發出的登記證明書。已登記的隔油池廢物收集器最新名單，可向環境保護署索取。</p>
(d)	<p>The Licensee may make reference to Annex 1 of the &lt;Technical Memorandum on Effluent Standards&gt; for analytical methods used by the Government Chemist.</p> <p>持牌人可參照「流出物標準技術備忘錄」附件 1 有關政府化驗師所採用的分析方法。</p>
(e)	<p>The Licensee shall keep this licence in the premises and make it available at all times for inspection by duly authorized officer(s) of the Authority.</p> <p>持牌人須在處所內保存此牌照，以備獲監督授權的人員隨時查閱。</p>
(f)	<p>(i) The Licensee shall allow duly authorized officer(s) of the Authority to enter the premises for the purposes of inspection, sampling, records examination or any other duties authorized by Section 37 and Section 38 of the Ordinance.</p> <p>持牌人須准許獲監督授權的人員進入處所內進行檢查、抽取樣本、審查紀錄或執行其他根據本條例第 37 及第 38 條所授權的職務。</p> <p>(ii) Where the premises has security measures in force which would require proper identification and clearance before entry, the Licensee shall make necessary arrangements such that upon presentation of evidence of identity and of authorization, duly authorized officer(s) will be permitted to enter, without delay, for the purposes of performing duties.</p> <p>倘若由於處所的保安理由而需先行鑑定來人的身份，持牌人必須作出必要的安排，以便獲授權人員在出示身份證明及授權文件後，即可內進執行其職務而不會受延誤。</p>
(g)	<p>(i) For a licence granted under Section 15 of the Ordinance, the Licensee may, not less than 2 months before expiry of the licence, apply under Section 19 of the Ordinance for a new licence. The Authority may grant the licence or otherwise.</p> <p>持有根據本條例第 15 條所批給牌照的人士，可於牌照屆滿前不少於 2 個月內，根據本條例第 19 條的規定，申請一面新牌照。監督可批給或拒絕批給牌照。</p> <p>(ii) For a licence granted under Section 20 or 23A of the Ordinance, the Licensee may, not more than 4 months and not less than 2 months before expiry of the licence, apply under Section 23 or 23A respectively of the Ordinance for renewal of licence. The Authority may renew the licence or otherwise.</p> <p>持有根據本條例第 20 條或第 23 A 條所批給牌照的人士，可於牌照屆滿前不多於 4 個月及不少於 2 個月內，根據本條例的第 23 或 23 A 條的規定，申請牌照續期。監督可將牌照續期或拒絕將牌照續期。</p>
(h)	<p>Under Section 24 of the Ordinance, the Authority may by notice in writing, impose new or amended terms and conditions on this licence or cancel this licence. Under Section 25, 26 and 27 of the Ordinance, a Licensee whose licence has been so varied or cancelled may be entitled to compensation.</p> <p>根據本條例第 24 條的規定，監督可以書面通知，向本牌照施加新訂或經修訂的條款及條件，或取消本牌照。根據本條例第 25、26 及 27 條的規定，被更改或取消牌照的持牌人可能會獲得補償。</p>
(i)	<p>Under Section 28 of the Ordinance, the Licensee may apply to the Authority for a variation of this licence.</p> <p>根據本條例第 28 條的規定，持牌人可向監督申請更改本牌照。</p>
(j)	<p>Under Section 49 of the Ordinance, this licence shall not be construed as a dispensation from the requirements of any other Ordinance except where that other Ordinance so provides.</p> <p>根據本條例第 49 條的規定，本牌照並不得解釋為豁免符合任何其他條例的規定，除非該其他條例如此訂定。</p>