

serco



Serco Guardian JV

EcoPark Operation EM&A

Quarterly Report

February 2010 to April 2010



Serco Guardian JV

EcoPark Operation EM&A

Quarterly Report

February 2010 to April 2010

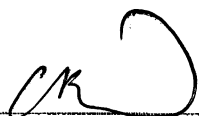
Certified By Antony WONG
ET Leader



Verified By Harold INSLEY
IEC



Approver C F WONG
EcoPark Officer-in-charge



Hyder Consulting Limited
Company Number 126012
47th Floor, Hopewell Centre
183 Queen's Road East
Wanchai
Hong Kong
Tel: +852 2911 2233
Fax: +852 2805 5028
hyder.hk@hyderconsulting.com
www.hyderconsulting.com



Serco Guardian JV

EcoPark Operation EM&A

Quarterly Report

February 2010 to April 2010

Author Carman CHUNG

Checker Antony WONG

Approver Roger LEUNG

Report No EB000198-R16-01

Date 14 May 2010

This report has been prepared for Serco Guardian JV in accordance with the terms and conditions of appointment for *EcoPark Operation EM&A* dated 24 January 2007. Hyder Consulting Limited (Company Number 126012) cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.

CONTENTS

1	EXECUTIVE SUMMARY	1
2	BASIC PROJECT INFORMATION.....	4
2.1	Overview	4
2.2	SGJV Organisation.....	4
2.3	Operation Programme	4
2.4	EM&A Organisation	5
3	SUMMARY OF EM&A REQUIREMENTS.....	7
3.1	Monitoring Parameters	7
3.2	Environmental Quality Performance Limits and EAP.....	8
3.3	Environmental Audit of Non-monitored Parameters	8
3.4	Environmental Mitigation Measures.....	9
3.5	Environmental Requirements in Tenancy Agreements.....	9
4	OPERATION STATUS	12
4.1	Tenants and Processes.....	12
4.2	Throughput Statistics.....	14
5	IMPLEMENTATION STATUS OF ENVIRONMENTAL PROTECTION MEASURES.....	16
6	MONITORING RESULTS	17
6.1	Monitoring Date, Time, Frequency and Duration.....	17
6.2	Monitoring Methodology, Parameters and Equipments.....	17
6.3	Types of Equipment Used and Calibration Details	18
6.4	Results and Graphical Plots of Monitoring Parameters	18
7	WASTE GENERATION STATISTICS	19
8	SUMMARY OF ENVIRONMENTAL AUDIT	20
8.1	February 2010	20
8.2	March 2010	20
8.3	April 2010	21
9	COMPLAINTS	22
10	CONCLUSIONS	23

APPENDICES

1	Environmental Mitigation Measures (from the Implementation Schedule)
2	Environmental Requirements in Tenancy Agreements
3	Endorsed PRC for Shiu Wing
4	Material and Waste Throughputs
5	Calibration Certificate of Infra Red Gas Analyser
6	LFG Monitoring Results and Graphical Plots of Monitored Parameters
7	Approved Site Audit Checklists for Champway in February, March and April 2010
8	General Site Audit Checklists in February, March and April 2010
9	Draft Site Audit Checklist for Yan Oi Tong in April 2010
10	Complaints Log [Not included – no complaints received]
11	Proforma [Not included – no recycling activities within EcoPark at this time]

FIGURES

Figure 1-1	Location of EcoPark in Tuen Mun Area 38
Figure 2-1	SGJV Organisation
Figure 2-2	EM&A Organisation
Figure 3-1	LFG Monitoring Locations within EcoPark Phase I
Figure 3-2	Replacement Figure for EM&A Manual Figure 6.1
Figure 4-1	Current Lot Usage Within EcoPark

TABLES

Table 2-1	Personnel Contact Names and Contact Number for the Project
Table 3-1	Operation Phase LFG Monitoring Locations in EcoPark Phase I
Table 3-2	Action Levels, Limit Levels and Event and Action Plan for LFG
Table 6-1	Sampling Schedule of LFG Monitoring
Table 6-2	Parameters and Measurement Ranges of LFG Monitoring
Table 6-3	Equipment List of LFG Monitoring
Table 6-4	LFG Monitoring Results

1 EXECUTIVE SUMMARY

- 1.1.1 EcoPark is a key element in the Government's waste management policy that aims to promote the local recycling industry and jump-start a circular economy to provide a sustainable solution to our waste problems. EcoPark is being developed in two phases at a site in Tuen Mun Area 38 (see **Figure 1-1**). In November 2006, the seven-year contract for the operation of EcoPark – EP/SP/53/06 Provision of Management Services for EcoPark in Tuen Mun Area 38 – was awarded to Serco Guardian JV (SGJV) by the Environmental Protection Department (EPD). SGJV, the “Operator” of EcoPark, have engaged Hyder Consulting Limited as their Environmental Team (ET) to carry out the Environmental Monitoring and Audit (EM&A) works required by the EM&A Manual in accordance with the conditions of the Environmental Permit. This is the twelfth (12th) quarterly EM&A report prepared for the operation phase of EcoPark and covers February to April 2010.
- 1.1.2 In terms of auditing, the tenants' recycling activities are to be audited on a monthly basis, and the results are to be summarised in this report. At present, while most of the eight tenants (Hong Kong Hung Wai Wooden Board Company, Li Tong Group, Hong Kong Telford Envirotech Group Limited, Shiu Wing Steel Limited, Cosmos Star Holdings Co., Limited, Champway Technology Limited, St. James Settlement and Yan Oi Tong Limited) have already signed their tenancy agreements, two of them (Champway and Yan Oi Tong) are carrying out operations within their lots. Champway has already started testing and commissioning its recycling process, whilst Yan Oi Tong has started to conduct recycling process.
- 1.1.3 Although no recycling process was carried out in most tenant lots, the ET has conducted monthly site inspections and some general observations have been made. Since the site inspection in October 2009, the approved checklist has been used in the monthly site inspections for Champway. From April 2010 onwards, the approved checklist will be used in the monthly site inspections for Yan Oi Tong.

Throughput of Materials / Waste Generated

- 1.1.4 As of end April 2010, no tenant except Yan Oi Tong has commenced recycling process within their lots. However, Champway has conducted a simple treatment for waste cooking oil. In this reporting quarter, 326,844 kg of cooking oil and 69,780 kg of grease trap waste were delivered to Champway's site. 368,860 kg of treated cooking oil and a total of 27,764 kg of waste including 19,831 kg of organic waste and 7,933 kg of water waste (semi-solid and slurry inclusive) were generated in the reporting quarter. For Yan Oi Tong, 80,986 kg and 50,870 kg of plastics were received and processed respectively, and 13,185 kg of general refuse was sorted from the mixed plastics in April 2010.

Exceedances of any Measured Action / Limit Levels

- 1.1.5 In terms of monitoring, only quarterly monitoring of landfill gas (LFG) is required during operation phase EM&A and “following construction”. As the construction of Phase I of EcoPark has been completed, operation phase LFG monitoring for Phase I has been carried out since October 2009. The LFG monitoring of this reporting quarter was undertaken on 28 April 2010,

and no action / limit level exceedance was recorded. LFG monitoring for Phase II of EcoPark continues to be carried out by the works contractor.

Summary of Complaints, Summons and Prosecutions

- 1.1.6 To-date, there have been no complaints received; no notifications of summons; and no successful prosecutions.

Reporting changes

- 1.1.7 No reporting change has occurred during the reporting months.

Future Key Issues

- 1.1.8 By end of this reporting quarter, six tenants have commenced preparatory works within their lots, and two tenants (Champway and Yan Oi Tong) have started operations. Whilst Yan Oi Tong has started to conduct recycling process, Champway has started testing and commissioning its recycling process. The recycling processes of Champway are expected to commence in May 2010. In addition, it is likely for Hung Wai, Shiu Wing and Li Tong to operate in May / June 2010.
- 1.1.9 For Phase II of EcoPark, the construction works of St. James Settlement is anticipated to complete before June 2010. The lot will then commence operation in June 2010.
- 1.1.10 In the coming quarter, the operation phase LFG monitoring for Phase I shall continue. While the Process Review Checklists (PRCs) for Cosmos will be further reviewed pending receipt of further information on wastewater treatment facilities from the tenant, the PRC of St. James Settlement shall be prepared as soon as the supporting information is available.

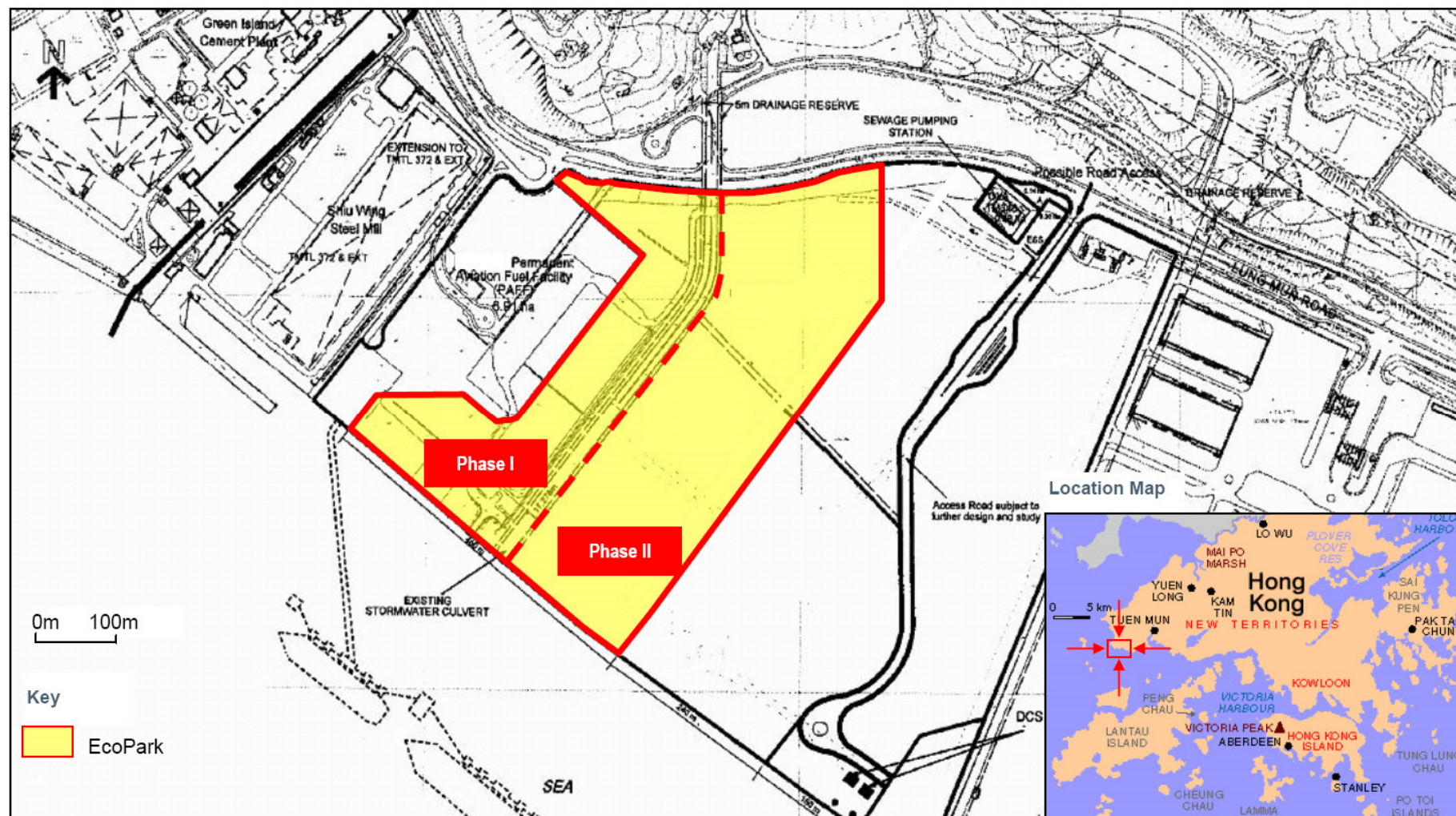


Figure 1-1 Location of EcoPark in Tuen Mun Area 38

EcoPark Operation EM&A

Quarterly Report (February 2010 to April 2010)

Hyder Consulting Limited – Company Number 126012

k:\ea01464 ecopark em&a\reports\em&a report\2010\feb-apr\eb000198-r16-01 em&a report (feb-apr10) rev3.docx

2 BASIC PROJECT INFORMATION

2.1 Overview

- 2.1.1 In the document "A Policy Framework for the Management of Municipal Solid Waste (2005-2014)" the Government set out a comprehensive policy to support the recycling industry. This included allocating suitable land, encouraging research and development, introducing environmental legislation and providing effective support measures. To this end, EcoPark is a key element that aims to promote the local recycling industry and jump-start a circular economy to provide a sustainable solution to our waste problems. By encouraging and promoting the reuse, recovery and recycling of our waste resources and returning them to the consumption loop, EcoPark will help to realize the full potential of the local recycling industry and alleviate the heavy reliance on the export of recyclable materials recovered from Hong Kong.
- 2.1.2 EcoPark is to be developed in two phases at a site in Tuen Mun Area 38 (see **Figure 1-1**). The construction contract for EcoPark – EP/SP/52/06 Development of EcoPark in Tuen Mun Area 38 – was awarded to Kaden Construction in June 2006 by EPD. This contract covers development of Phase I (completed) and extends to Phase II (ongoing).
- 2.1.3 In November 2006, the seven-year contract for the operation of EcoPark – EP/SP/53/06 Provision of Management Services for EcoPark in Tuen Mun Area 38 – was awarded to SGJV by EPD. SGJV, the "Operator" of EcoPark, has engaged Hyder Consulting Limited as their ET to carry out the EM&A works required by the EM&A Manual in accordance with the conditions of the Environmental Permit.

2.2 SGJV Organisation

- 2.2.1 Organisation of SGJV is shown in **Figure 2-1** below.

2.3 Operation Programme

- 2.3.1 As end of April 2010, six tenants (Hong Kong Hung Wai Wooden Board Company, Li Tong Group, Hong Kong Telford Envirotech Group Limited, Shiu Wing Steel Limited, Cosmos Star Holdings Co., Limited, and St. James Settlement) have commenced preparatory works within their lots, and two tenants (Champway Technology Limited and Yan Oi Tong Limited) have started operations. Champway has already started testing and commissioning its recycling process, whilst Yan Oi Tong has started to conduct recycling process.
- 2.3.2 Environmental deficiencies noted during the monthly site inspections were detailed in **Section 8**. Starting from October 2009, Champway has stockpiled treated waste cooking oil in the reserved area for wastewater treatment plant (WWTP) of EcoPark for temporary storage. By end of April 2010, about 50 tonnes treated waste cooking oil was stored there. Preventive measures to avoid potential ground contamination such as placing canvas underneath the storage tanks and enhancing the monitoring frequency were provided to Champway during the site inspections on 23 February and 22 March 2010, yet oil stain could still be found on ground during the site

inspection on 28 April 2010. Remedial actions were recommended to Champway, and the remedial status shall be followed up in the next monthly site inspection.

2.4 EM&A Organisation

2.4.1 The EM&A is carried out by the ET, but SGJV and the Independent Environmental Checker (IEC) are also involved. The key personnel contact names and telephone number are summarised in **Table 2-1**, and the current EM&A organisation is illustrated in **Figure 2-2**.

Party	Position	Name	Contact Number
Project Proponent – EPD	EcoPark Officer-in-charge	C F WONG	2872 1700
Operator – SGJV	Project Manager	Noel AU	2496 7633
	Park Manager	TC HON	6323 0298
ET – Hyder	ET Leader	Antony WONG	2911 2744
	ET Site Inspector	Carman CHUNG	2911 2730
IEC – Scott Wilson	IEC	Harold INSLEY	2410 3858

Table 2-1 Personnel Contact Names and Contact Number for the Project

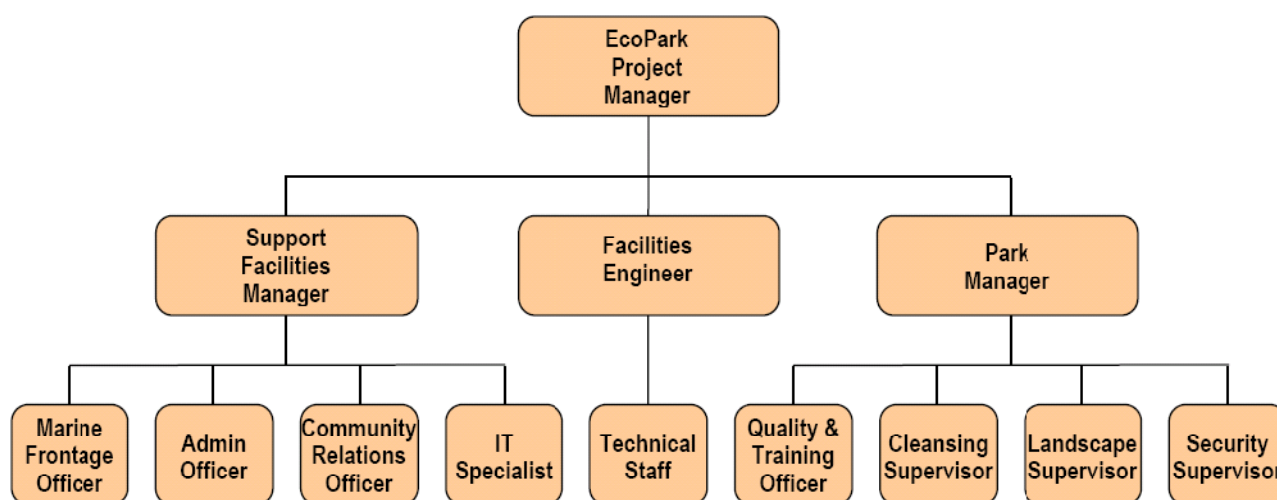


Figure 2-1 SGJV Organisation

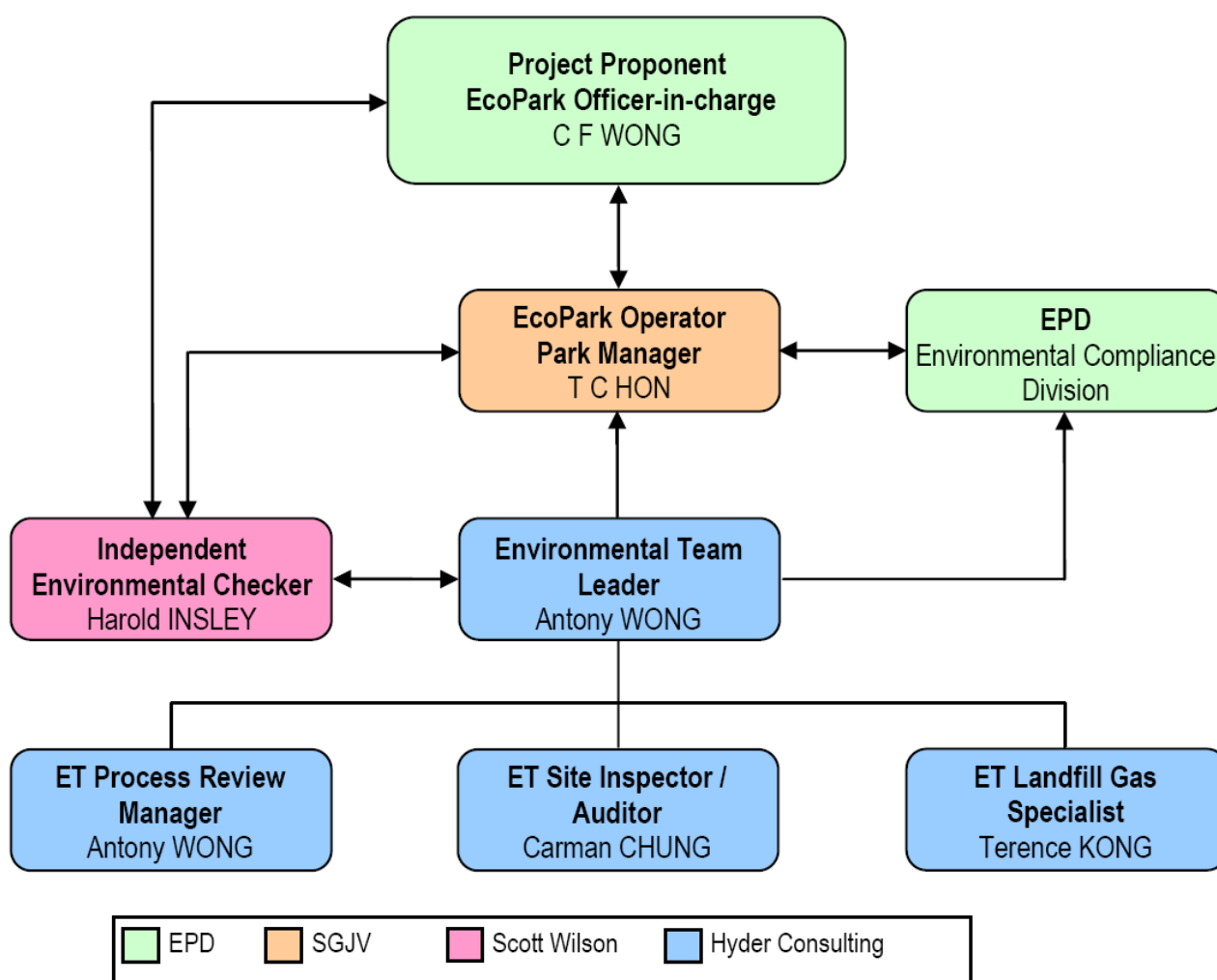


Figure 2-2 EM&A Organisation

3 SUMMARY OF EM&A REQUIREMENTS

3.1 Monitoring Parameters

- 3.1.1 The only parameter to be monitored as part of the operation phase EM&A programme is LFG.
- 3.1.2 Following completion of Phase I construction, routine monitoring is required at service voids and utility boxes. Since construction of Phase I of EcoPark was completed, quarterly LFG monitoring has been carried out by the ET since October 2009.
- 3.1.3 The location for monitoring was not specified in the EM&A Manual since the final design of EcoPark had not been completed when the EM&A Manual was approved. Therefore, during the joint site inspection on 27 July 2009, three monitoring locations were identified and agreed as suitable monitoring locations by the ET, IEC and SGJV. These three monitoring locations are listed in **Table 3-1** and shown in **Figure 3-1**.

Monitoring Station ID	Type of Monitoring Station	Locations
EP1-1	LFG vent pipe with cap	Inside the landscaping area of Administration Building
EP1-2	Service void	PCCW below-ground chamber outside Lot EP08-01
EP1-3	Service void	HGC Broadband below-ground chamber outside Lot EP08-03

Table 3-1 Operation Phase LFG Monitoring Locations in EcoPark Phase I

- 3.1.4 **Figure 3-2** is a replacement page for the EM&A Manual, in accordance with footnote to **Figure 6.1** in the approved EM&A Manual, and shall be deemed to be included in the EM&A Manual.
- 3.1.5 Routine monitoring shall be carried out on a quarterly basis, however, should EPD alert the Operator that high LFG levels had been detected during monthly monitoring under the Siu Lang Shui Landfill restoration contract, then the Operator may be required to increase LFG monitoring to monthly until such time as EPD inform the Operator that quarterly monitoring can be resumed.
- 3.1.6 Since operation phase LFG monitoring is required “following construction” and construction has not yet been completed for Phase II, construction phase LFG monitoring for Phase II is ongoing and is reported in the Monthly EM&A Reports prepared by the construction contractor's ET. These reports can be downloaded from:

http://www.epd.gov.hk/eia/english/register/index8/vep2212006_content.html

3.2 Environmental Quality Performance Limits and EAP

3.2.1 The Action / Limit Levels and Event Action Plan (EAP) for LFG are shown in **Table 3-2**. These refer to LFG detected in excavations, utilities and any enclosed on-site areas. No other A/L Levels or EAPs are specified in the EM&A Manual for operation phase EM&A.

Parameter	Level	Action
Oxygen (O ₂)	Action Level <19% O ₂	Ventilate trench/void to restore O ₂ to > 19%
	Limit Level <18% O ₂	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore O ₂ to > 19%
Methane (CH ₄)	Action Level >10% LEL	Post "No Smoking" signs Prohibit hot works Increase ventilation to restore CH ₄ to <10% LEL
	Limit Level >20% LEL	Stop works Evacuate personnel/prohibit entry Increase ventilation to restore CH ₄ to <10% LEL
Carbon Dioxide (CO ₂)	Action Level >0.5% CO ₂	Ventilate to restore CO ₂ to < 0.5%
	Limit Level >1.5% CO ₂	Stop works Evacuate personnel / prohibit entry Increase ventilation to restore CO ₂ to <0.5%

Table 3-2 Action Levels, Limit Levels and Event and Action Plan for LFG

3.3 Environmental Audit of Non-monitored Parameters

3.3.1 Site inspections provide a direct means to trigger and enforce the environmental protection and pollution control measures specified in the Environmental Impact Assessment (EIA) Report. To examine operational practice, site inspections are to be undertaken regularly by the ET once per month, and joint site inspections are to be carried out by the ET and IEC once per quarter. Ad hoc site inspections are also carried out if significant environmental problems are identified. In addition, inspections may be required subsequent to receipt of an environmental complaint, or as part of the investigation work, as specified in the EAP. The following parameters are required to be audited as part of the operation phase EM&A programme:

- Air Quality
- Water Quality
- Waste Management
- Land Contamination

3.4 Environmental Mitigation Measures

- 3.4.1 Environmental mitigation measures applicable to the operation phase EM&A as stated in the Implementation Schedule are summarised in **Appendix 1**.

3.5 Environmental Requirements in Tenancy Agreements

- 3.5.1 Environmental requirements specified in tenancy agreements are summarised in **Appendix 2**.

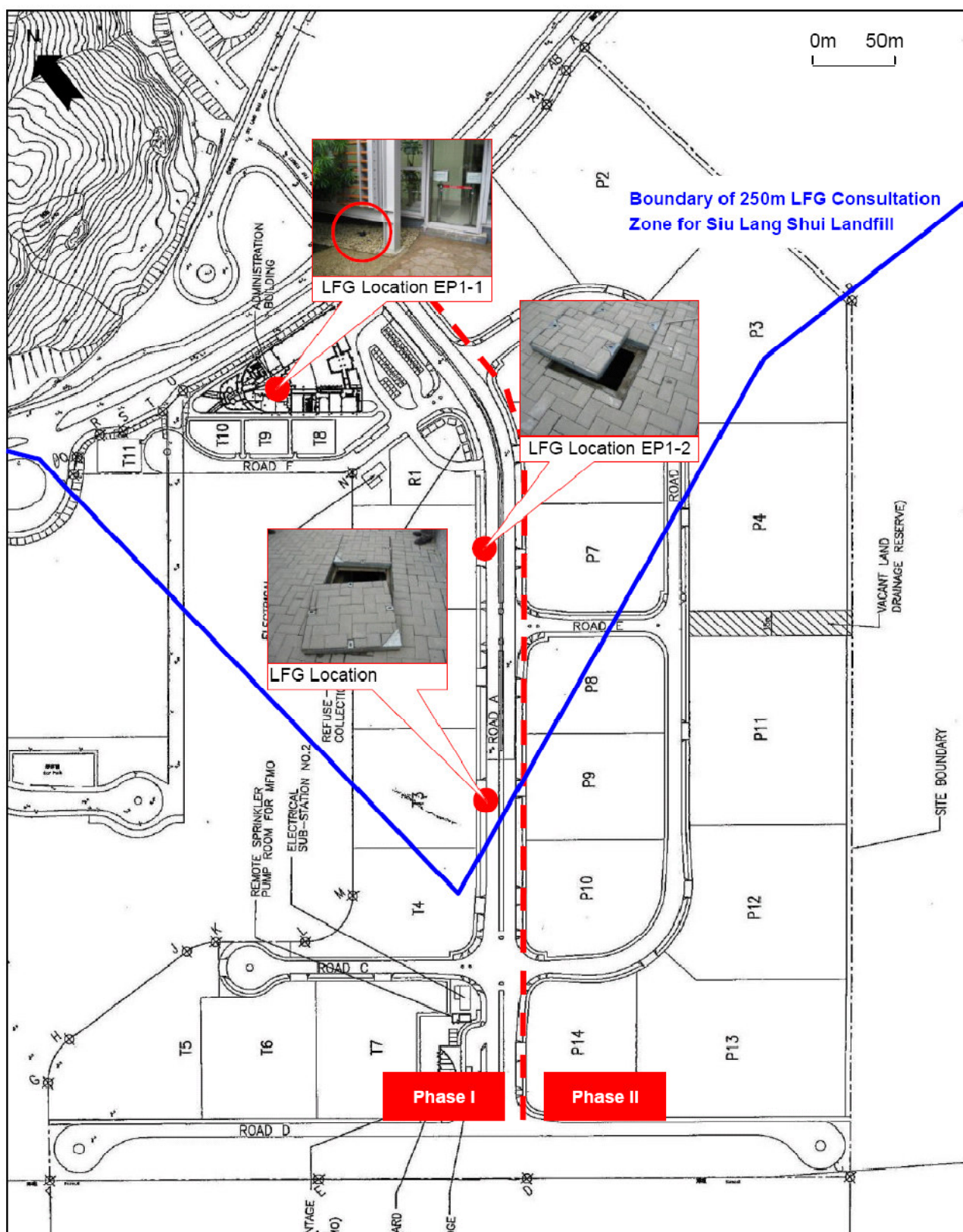


Figure 3-1 LFG Monitoring Locations within EcoPark Phase

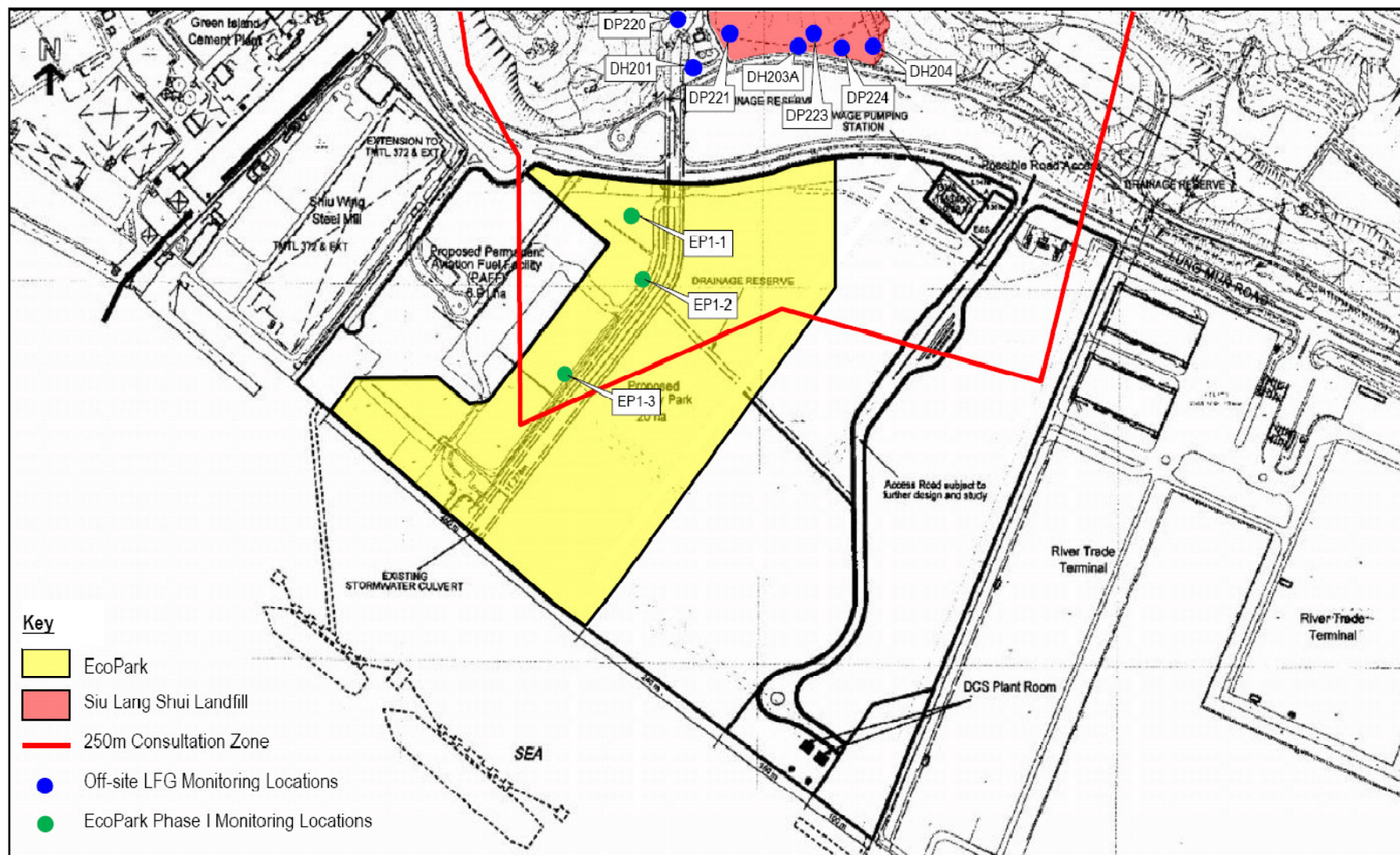


Figure 3-2 Replacement Figure for EM&A Manual Figure 6.1

4 OPERATION STATUS

4.0.1 **Figure 4-1** shows the location of lots within EcoPark, the tenancy numbers and tenant names.

4.1 Tenants and Processes

Tenancy EP06-034

- **Tenant:** Hong Kong Hung Wai Wooden Board Company
- **Lot Size:** Approx. 5,000m²
- **Activity:** Recycling of waste wood
- **Recycling Process:** Shred waste wood into wooden chips for further processing in Mainland China. Ferrous metals will be separated by magnets.

4.1.1 Recycling process has not yet been commenced. Preliminary works and construction works have been commenced since February 2010, and the installation of machines was in progress by end April 2010. In addition to the waste wood stored in the tenant lot since June 2008, large amount of waste wood was stockpiled in the lot in April 2010. Trial run and operation of the lot is expected to take place in May and June 2010 respectively.

Tenancy EP07-02

- **Tenant:** Li Tong Group
- **Lot Size:** Approx. 6,500m²
- **Activity:** Recycling of waste electrical and electronic equipment (WEEE)
- **Recycling Process:** Manually dismantle WEEE, particularly CRT glass and LCD panel into metals (ferrous materials, aluminium, etc.) and non-metals (fibres, plastics, etc.).

4.1.2 Recycling process has not yet been commenced. Construction works was commenced on 1 June 2009, and was almost complete by end of this reporting quarter. The application of Occupation Permit is pending by end of this reporting quarter. The lot is expected to operate in June 2010.

Tenancy EP07-03

- **Tenant:** Champway Technology Limited
- **Lot Size:** Approx. 6,000m²
- **Activity:** Recycling of organic waste (waste cooking oil)
- **Recycling Process:** Turn waste cooking oil into biodiesel by extraction, neutralisation, separation and distillation

- 4.1.3 The Occupation Permit and the Dangerous Goods Licence were obtained on 25 March 2010 and 19 April 2010 respectively. As of end April 2010, the tenant has commenced trial run and operation in the lot, and phase I recycling process is expected to be carried out in May 2010.
- 4.1.4 The testing and commissioning of recycling process has already started in April 2010. Although recycling process has not yet been commenced, waste cooking oil has been delivered to the lot for simple treatment and treated waste cooking oil was generated. Starting from October 2009, the tenant has stockpiled treated waste cooking oil in the reserved area for WWTP of EcoPark for temporary storage. By end of April 2010, about 50 tonnes treated waste cooking oil was stored there. Details of waste throughout are provided in **Section 4.2**.

Tenancy EP08-01

- **Tenant:** Hong Kong Telford Envirotech Group Limited
 - **Lot Size:** Approx. 5,000m²
 - **Activity:** Recycling of waste plastics
 - **Recycling Process:** Sorting, shredding and extrusion of waste plastics
- 4.1.5 As of end April 2010, the tenant has commenced preparatory works but has not yet commenced recycling activities. Plastic bags have been stockpiled in the tenant lot since July 2009. Other plastic waste and some recycling equipments could also be found.

Tenancy EP08-03

- **Tenant:** Shiu Wing Steel Limited
 - **Lot Size:** Approx. 9,500 m²
 - **Activity:** Recycling of waste metals
 - **Recycling Process:** Turn waste metals into light ferrous scrap and heavy ferrous scrap by sorting , baling and shearing
- 4.1.6 As of end April 2010, the tenant has commenced preparatory works but has not yet commenced recycling activities. The installation of machines was in progress by end of this reporting quarter. The Process Review Checklist (PRC) was finalised and approved in March 2010. Details of PRC can be referred in **Appendix 3**. On the other hand, the Occupation Permit was obtained on 12 March 2010. The lot is anticipated to operate in May 2010.

Tenancy EP08-04

- **Tenant:** Cosmos Star Holdings Co., Limited
- **Lot Size:** Approx. 4,000 m²
- **Activity:** Recycling of waste batteries
- **Recycling Process:** Separate waste lead-acid and lithium batteries by mechanical / physical means. The battery acid will be drained and treated by the on-site wastewater treatment system

- 4.1.7 Building contractors were invited to submit tenders in April 2010, yet no construction has been carried out by the end of this reporting quarter. The PRC is outstanding, pending receipt of further information on wastewater treatment facilities from the tenant.

Tenancy P7

- **Tenant:** Yan Oi Tong Limited
- **Lot Size:** Approx. 5,000 m²
- **Activity:** Recycling of waste plastics
- **Recycling Process:** Turn mixed waste plastics into pellets / flakes / baled materials by pre-washing, sorting, flaking, secondary washing, drying, extrusion and chip-forming

- 4.1.8 The construction works was completed in March 2010. The workshop has commenced trial operation since the grand opening in early March. Details of waste throughout are provided in **Section 4.2**.

Tenancy P5

- **Tenant:** St. James Settlement
- **Lot Size:** Approx. 4,070 m²
- **Activity:** Recycling of WEEE
- **Recycling Process:** WEEE will be sorted on site first. The WEEEs suitable for reuse will be repaired and refurbished, whilst those irreparable / not suitable for repair will be manually dismantled to recover the reusable parts and recyclable materials

Preliminary works and construction works have been carried out at the tenant lot since February 2010. By end of this reporting quarter, the workshop is still under construction. As soon as the construction completes in June 2010, the lot will commence operation.

4.2 Throughput Statistics

- 4.2.1 As advised by the Operator, no waste plastic was delivered to the tenant lot of Telford in the reporting quarter. For Champway, 326,844 kg of cooking oil and 69,780 kg of grease trap waste were delivered to the site in the reporting quarter and the output was 368,860 kg of treated cooking oil. For Hung Wai, 141,880 kg of waste wood was delivered to the site for storage in April 2010. For Shiu Wing, 220,000 kg of waste metal was stored at the tenant lot in April 2010. For Yan Oi Tong, 80,986 kg and 50,870 kg of waste plastics was received and processed in April 2010 respectively, and 13,185 kg general refuse was sorted on site.

- 4.2.2 As of end April 2010, no tenant except Yan Oi Tong has yet commenced recycling process within their lots. Throughput details are shown in **Appendix 4**.

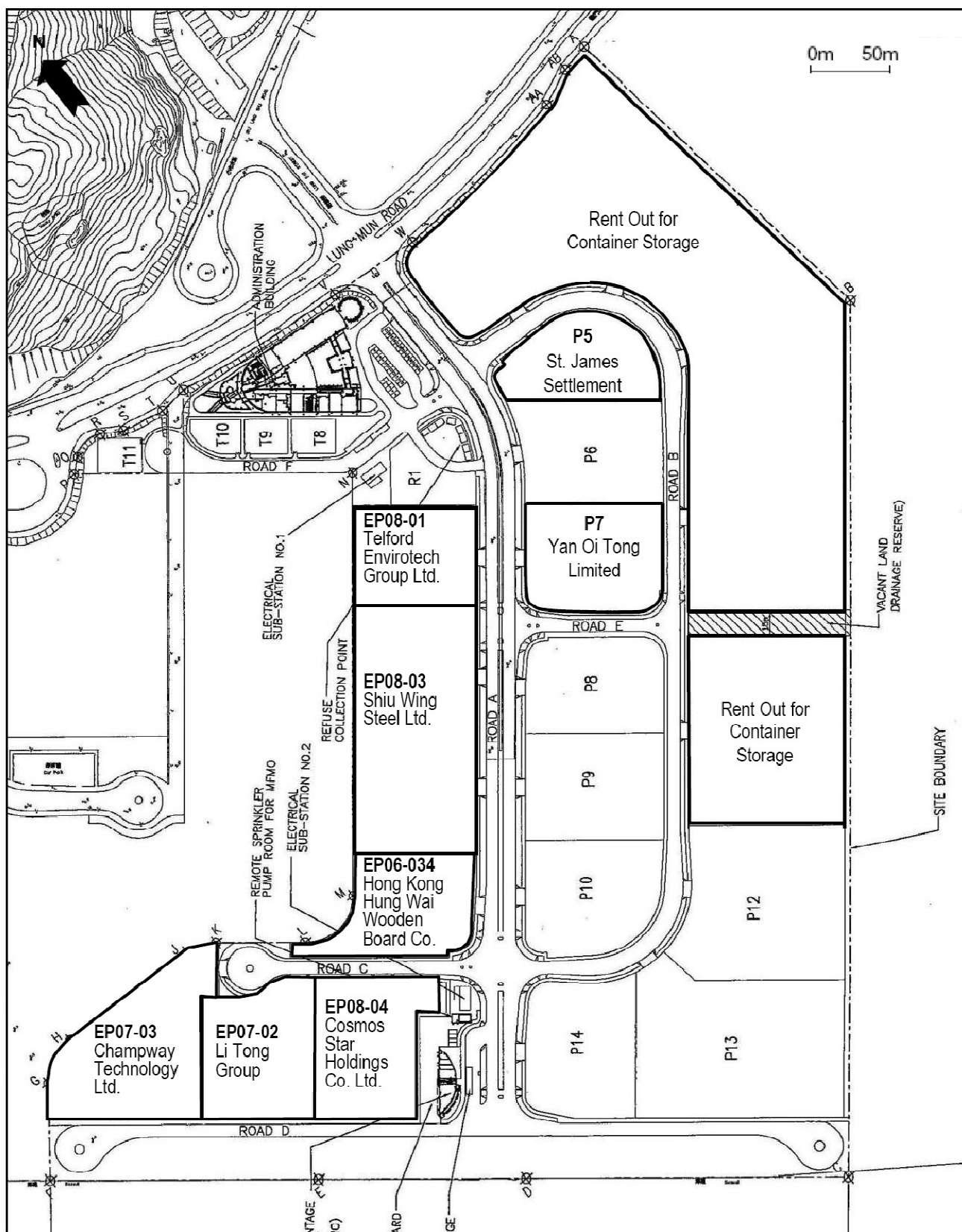


Figure 4-1 Current Lot Usage Within EcoPark

5 IMPLEMENTATION STATUS OF ENVIRONMENTAL PROTECTION MEASURES

- 5.1.1 Environmental mitigation measures applicable to the operation phase EM&A as stated in the Implementation Schedule are summarised in **Appendix 1**. Environmental requirements specified in Tenancy Agreements are summarised in **Appendix 2**.
- 5.1.2 As of end April 2010, two tenants (Champway and Yan Oi Tong) have already commenced recycling process within their lots. Appropriate environmental protection measures are in place.

6 MONITORING RESULTS

6.1 Monitoring Date, Time, Frequency and Duration

- 6.1.1 A set of LFG measurement was conducted on quarterly basis. In this reporting quarter, the measurement was undertaken during the joint IEC site inspection on 28 April 2010. When the LFG monitoring is underway, monitoring data, time, duration for monitoring and the weather condition, are recorded and listed in **Table 6-1**.

Station ID	Date	Time	Duration	Weather Condition
EP1-1	28-Apr-10	1017 – 1022	5 minutes	Fine
EP1-2	28-Apr-10	1026 – 1031	5 minutes	Fine
EP1-3	28-Apr-10	1034 – 1039	5 minutes	Fine

Table 6-1 Sampling Schedule of LFG Monitoring

6.2 Monitoring Methodology, Parameters and Equipments

- 6.2.1 The LFG monitoring requirement and methodology are stipulated in Section 6 of the EM&A Manual. The LFG monitoring parameters and their measurement ranges are detailed in **Table 6-2**.

Parameters	Measurement Ranges
Methane (CH ₄)	0-100% LEL & 0-100% v/v
Oxygen (O ₂)	0-25% v/v
Carbon Dioxide (CO ₂)	0-100% v/v
Barometric Pressure	mBar (absolute)

Table 6-2 Parameters and Measurement Ranges of LFG Monitoring

- 6.2.2 LFG monitoring shall be carried out using intrinsically-safe, portable multi-gas monitoring instruments. The gas monitoring equipment shall:

- Where possible, comply with BS6020 and be approved by BASEEFA as intrinsically safe, suitable for use in a Zone 2 are to BS5345.
- Be capable of continuous monitoring of methane, oxygen and carbon dioxide.
- Be capable of continuous barometric pressure and gas pressure measurements.
- Normally operate in diffusion mode unless required for spot sampling, when it should be capable of operating by means of an aspirator or pump.
- Have low battery, fault and over range indication incorporated.

- Store monitoring data, and shall be capable of being down-loaded directly to a PC.
- Measure in the following ranges:
 - Methane 0-100% LEL & 0-100% v/v
 - Oxygen 0-25% v/v
 - Carbon dioxide 0-100% v/v
 - Barometric pressure mBar (absolute)

6.2.3 The monitoring equipment shall alarm (both audibly and visually) in the event that the concentrations of the following are exceeded:

- Methane – rise to 10% LEL.
- Oxygen – fall to 18% by volume.
- Carbon monoxide – maximum short term (1-hour) exposure of 300ppm with long term average (8-hours) not to exceed 50ppm.

6.3 Types of Equipment Used and Calibration Details

6.3.1 Infra Red Gas Analyser as detailed in **Table 6-3** was used. The gas analyser is calibrated every 18 months. **Appendix 5** presents the monitoring equipment calibration records.

Equipment	Model	Serial no.	Qty.
Infra Red Gas Analyser	GA94A	GA3385	1

Table 6-3 Equipment List of LFG Monitoring

6.4 Results and Graphical Plots of Monitoring Parameters

6.4.1 LFG monitoring results are summarised in **Table 6-4** and detailed in **Appendix 6**. Graphical plots of the monitoring results are also provided in **Appendix 6**. No action / limit level exceedance was recorded.

Station ID	Monitoring Results					Action / Limit Level		
	CH ₄ (% v/v)	CH ₄ (% LEL)	O ₂ (% v/v)	CO ₂ (% v/v)	Barometric Pressure (mBar)	CH ₄ (% LEL)	O ₂ (% v/v)	CO ₂ (% v/v)
EP1-1	0.0	0.0	20.8	0.0	1013			
EP1-2	0.0	0.0	21.2	0.0	1013	Above 10 / 20	Below 19 / 18	Above 0.5 / 1.5
EP1-3	0.0	0.0	20.8	0.0	1013			

Note: (1) Shaded area indicates an exceedance of Limit Level

Table 6-4 LFG Monitoring Results

7 WASTE GENERATION STATISTICS

- 7.1.1 As of end April 2010, two tenants (Champway and Yan Oi Tong) have commenced operations within their lots. In April 2010, 13,185 kg of general refuse was sorted from the mixed plastics at Yan Oi Tong's lot, and subsequently disposed of at WENT Landfill.
- 7.1.2 Since October 2009, Champway has conducted a simple treatment for waste cooking oil. In this reporting quarter, such treatment generates a total of 27,764 kg of waste, including 19,831 kg of organic waste and 7,933 kg of water waste (semi-solid and slurry inclusive). The collected waste cooking oil was heated up and separated into organic waste and cooking oil. No wastewater was discharged but water waste such as semi-solid and slurry were generated from the separation process. These organic waste and water waste were collected by licence collectors, transported to and disposed of at WENT Landfill as general refuse.
- 7.1.3 Waste generation details are shown in **Appendix 4**.

8 SUMMARY OF ENVIRONMENTAL AUDIT

8.1 February 2010

- 8.1.1 The environmental audit was carried out by the ET on 23 February 2010. Construction of EcoPark Phase I was completed and no tenant has commenced recycling process within EcoPark. As such, there were no processes to be audited.
- 8.1.2 The audit at Champway's lot was carried out based on the verified site inspection checklist used since October 2009. One of the two observations recorded in January 2010 was rectified, and another one about oil stain and uncovered waste cooking oil bucket remained outstanding. In addition, one environmental deficiency about oily patch near drains was found during the site inspection, and the approved checklist is shown in **Appendix 7**. For the temporary storage of treated waste cooking oil at the reserved area for WWTP, Champway was again reminded to place canvas underneath the storage tanks and enhance the monitoring frequency so as to prevent ground contamination. The stagnant water on canvas shall also be removed after raining.
- 8.1.3 Following the site inspection in January 2010, observations at the lot of Yan Oi Tong and Shiu Wing were rectified, whereas two of the three observations found at Li Tong's lot still remained outstanding. During this month's site inspection, three environmental deficiencies were found at the lot of Hung Wai, Li Tong and P9. The details of observation, together with the advice provided to operator / tenant, are attached in **Appendix 8**. The remedial status shall be followed up in the next monthly site inspection.

8.2 March 2010

- 8.2.1 The environmental audit was carried out by the ET on 22 March 2010. Construction of EcoPark Phase I was completed and no tenant has commenced recycling process within EcoPark. As such, there were no processes to be audited.
- 8.2.2 The audit at Champway's lot was carried out based on the verified site inspection checklist used since October 2009. The observation about oily patch near drains recorded in February 2010 was rectified, and another one about oil stain and uncovered waste cooking oil bucket remained outstanding. In addition, no environmental deficiency was found during the site inspection, and the approved checklist is shown in **Appendix 7**. For the temporary storage of treated waste cooking oil at the reserved area for WWTP, Champway was again reminded to place canvas underneath the storage tanks and enhance the monitoring frequency so as to prevent ground contamination. The stagnant water on canvas shall also be removed after raining.
- 8.2.3 Following the site inspection in February 2010, observations at the lot of Hung Wai and P9 were rectified, whereas two of the three observations found at Li Tong's lot still remained outstanding. During this month's site inspection, no major environmental deficiency was found; as a result, no remedial action is required. The site audit checklist is shown in **Appendix 8**.

8.3 April 2010

- 8.3.1 The environmental audit was carried out by the ET and IEC on 28 April 2010. Construction of EcoPark Phase I was completed and no tenant has commenced recycling process within EcoPark. As such, there were no processes to be audited.
- 8.3.2 During the joint site inspection, LFG monitoring was undertaken at the three monitoring locations agreed by the ET, IEC and SGJV in July 2009. These three monitoring locations are listed in **Table 3-1** and shown in **Figure 3-1**. The monitoring results are presented in **Section 6.4**. No action / limit level exceedance was recorded.
- 8.3.3 Similar to previous month, the audit at Champway's lot was carried out based on the verified site inspection checklist. Since no environmental deficiency was found during last month's site inspection, no follow-up action was required. On the other hand, no environmental deficiency was recorded during the site inspection, and the approved checklist is shown in **Appendix 7**. For the temporary storage of treated waste cooking oil at the reserved area for WWTP, Champway was again reminded to place canvas underneath the storage tanks and enhance the monitoring frequency so as to prevent ground contamination. The stagnant water on canvas shall also be removed after raining.
- 8.3.4 The site inspection checklist verified by IEC was used to carry out a trial audit at Yan Oi Tong's lot. No observation was recorded, and the draft checklist is shown in **Appendix 9**.
- 8.3.5 Following the site inspection in March 2010, the two observations at Li Tong's lot still remained outstanding. During this month's site inspection, three environmental deficiencies were found at the tenant lots of Shiu Wing, Telford and P9. The details of observation, together with the advice provided to operator / tenant, are attached in **Appendix 8**. The remedial status shall be followed up in the next monthly site inspection.

9 COMPLAINTS

- 9.1.1 As of end April 2010, no tenant except Yan Oi Tong has yet commenced recycling process within their lots. As a result, no complaint has been received related to recycling activities.

10 CONCLUSIONS

- 10.1.1 As of end April 2010, no tenant except Yan Oi Tong has yet commenced recycling process within their lots. No conclusion is therefore drawn relating to the operation phase EM&A programme in this reporting quarter.

Appendix 1

Environmental Mitigation Measures (from the Implementation Schedule)

EIA Ref.	EM&A Ref.	Environmental Protection Measures Identified in the Implementation Schedule that are Applicable to the Operation Phase of EcoPark	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Relevant Legislation and Guidelines
General					
5.5.23 to 5.5.25, 10.2.24 & 10.2.37	4.2.5 to 4.2.8	The Operator shall develop and implement an Emergency Response Plan (ERP) that lists the procedures to be followed in case of fire, fuel or chemical spillage or other emergency within the EcoPark.	Throughout the duration of the operation.	Operator	
12.2	7.2	No process shall be allowed to operate within EcoPark without approval from WFBU. Approval will be based on the ten-step Process Review, which may include a Design Audit if deemed to be necessary.	Throughout the duration of the operation.	ET IEC Project Proponent	
	8.1.2	All reports (including Process Review Checklists and any Design Audits) shall be prepared and certified by the ET, verified by the IEC and approved by the Project Proponent.	Throughout the duration of construction works until construction is substantially completed. Throughout the duration of the operation.	ET IEC Project Proponent	
12.3	7.3	The Operator shall prepare and implement an Environmental Management Plan (EMP) to define mechanisms for achieving the environmental requirements specified in the EIA, EP and in statutory regulations.	Throughout the duration of the operation.	Operator	
Air Quality					
13.2		The Operator shall ensure that the EcoPark “base case” assumptions for air quality shown in Table 13.1 of the Final EIA Report are met by tenants, as a whole.	Throughout the duration of the operation.	Operator	Table 13.1 of the Final EIA Report
Water Quality					
5.4.11 & 5.6.7		To minimise the chance of accidental spillage during loading and unloading, and thereby reduce marine water quality impacts, well established cargo handling guidelines should be followed.	Adjacent to EcoPark marine frontage when loading or unloading goods.	Operator Operators of bulk carriers	Sections 5 and 6 of IMO Code of Practice for the Safe Loading/Unloading of Bulk Carriers

EIA Ref.	EM&A Ref.	Environmental Protection Measures Identified in the Implementation Schedule that are Applicable to the Operation Phase of EcoPark	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Relevant Legislation and Guidelines
5.5.19		Contaminated water collected in the surface drainage systems shall be treated at the WTF or other appropriate treatment facility.	Within EcoPark throughout the life of the facility.	Operator	
5.5.23 to 5.5.25	4.2.5 to 4.2.7	An Emergency Response Plan (ERP) will be formulated to address various accident scenarios. The ERP will be certified by the Environmental Team (ET) and verified by the Independent Environmental Checker (IEC) under the operation EM&A programme.	Within EcoPark throughout the life of the facility.	Operator	
5.6.4		For uncovered areas where recovery process identified as causing potentially high level of contamination are located, stop-logs will be installed in the perimeter drainage system to isolate contamination.	Within EcoPark throughout the life of the facility.	Operator	
	4.2.2	The ET should develop an audit checklist, with the agreement of the IEC, to ensure that each mitigation measure is implemented when appropriate and operated correctly when implemented.	Within EcoPark throughout the life of the facility.	ET with IEC	
Waste Management					
6.8.7	5.2.4	The Operator should register with EPD as a chemical waste producer.	Within EcoPark throughout the life of the facility.	Operator	Waste Disposal (Chemical Waste) (General) Regulation
6.8.16		The dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.	Within EcoPark throughout the life of the facility.	Operator	Practice Note for disposal of dusty waste at landfills & Admission Ticket System
6.8.18 & 6.8.22	5.2.4	Sludge will be disposed of at WENT landfill, or at any future dedicated sludge treatment facility. Sludge will be collected by a Licensed collector at regular intervals, as determined by the operation of the WTF	Within EcoPark throughout the life of the facility.	Operator	
6.8.21	5.2.4	Chemical wastes shall be stored in appropriate containers in a covered area. "No Smoking" signs will be clearly displayed to prevent accidental ignition of any flammable materials. Drip trays capable of storing 110% of the volume of the largest container will be used to mitigate possible leakage.	Within EcoPark throughout the life of the facility.	Operator	Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes

EIA Ref.	EM&A Ref.	Environmental Protection Measures Identified in the Implementation Schedule that are Applicable to the Operation Phase of EcoPark	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Relevant Legislation and Guidelines
	5.2.3 & 5.2.5	The ET should develop an audit checklist, with the agreement of the IEC, to ensure that each mitigation measure is implemented when appropriate and operated correctly when implemented.	Within EcoPark throughout the life of the facility.	ET with IEC	
Prevention of Contaminated Land					
7.3.1	5.3.2	Any spillages of contaminating material shall be cleaned up immediately through the use of an absorbent. Any such used material should then be considered chemical waste and disposed of appropriately.	Within EcoPark throughout the life of the facility.	Operator	
7.3.3		Any areas within the lot to be used for recycling processes shall be concrete paved before recycling activities commence.	Within EcoPark throughout the life of the facility.	Operator	
7.3.5	5.3.2	<p>During operation, the greatest risk of land contamination will come from the storage of chemical wastes, therefore the following measures should be followed :</p> <ul style="list-style-type: none"> All chemical storage areas shall be provided with locks and be sited on sealed areas. The storage areas shall be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil and chemicals from contaminating the ground. Management of chemical waste is implemented through the control of waste storage, labelling of waste, transportation and treatment of chemical waste at an appropriate facility. Chemical wastes will be collected, stored and disposed of in accordance with the Regulation. Disposal of other construction waste will be undertaken by Licensed contractors in accordance with applicable statutory requirements in the WDO. Chemical wastes shall be handled according to the relevant code of practice. Spent chemicals shall be stored and collected by an approved operator for disposal at a licensed facility in accordance with the relevant regulation. 	Within EcoPark throughout the life of the facility.	Operator	<p>Waste Disposal (Chemical Waste) (General) Regulation</p> <p>Code of Practice on the Packaging, Labelling and Storage of Chem Wastes & Chemical Waste (General) Regulation</p>

EIA Ref.	EM&A Ref.	Environmental Protection Measures Identified in the Implementation Schedule that are Applicable to the Operation Phase of EcoPark	Location / Duration of Measures / Timing of Completion of Measures	Implementation Agent	Relevant Legislation and Guidelines
	5.3.3	The ET should develop an audit checklist, with the agreement of the IEC, to ensure that each mitigation measure is implemented when appropriate and operated correctly when implemented.	Within EcoPark throughout the life of the facility.	ET with IEC	
Landfill Gas					
8.7.10 & 8.7.11	6.1.2	<ul style="list-style-type: none"> Alert workers and visitors of possible LFG hazards Prohibit smoking and open fires on site Conduct regular (quarterly) LFG monitoring at mobile offices, equipment stores, etc. 	Within EcoPark throughout the life of the facility.	Operator	
	6.4.3	Following construction, routine monthly monitoring may be required at service voids and utility boxes. The monitoring requirement and specific locations of monitoring points shall be established based on the findings of the monitoring carried out during construction (i.e. if no LFG is detected during construction then no routine monitoring is required). The need for continued monitoring shall, however, be reviewed through discussion with EPD.	Within EcoPark throughout the life of the facility.	Operator	
Hazard to Life					
10.4.3		Building height limit within EcoPark shall be applied to structures within which people may work at elevated levels.	Within EcoPark throughout the life of the facility.	Operator	EIA Report Table 10.2
Landscape and Visual					
9.4.4		It recommended that this commonality be promoted throughout EcoPark by the Operator and adopted by tenants, if practicable.	Within EcoPark throughout the life of the facility.	Operator	

Appendix 2

Environmental Requirements in Tenancy Agreement

GENERAL ENVIRONMENTAL RESPONSIBILITIES

- 9.1 The Tenant shall at its own cost(s) comply with and shall ensure that the Premises is used, designed, constructed, operated and maintained in accordance with:-
- (a) All relevant Ordinances, by-laws, regulations, statutory technical memorandums, codes of practice, rules, non-statutory guidance notes, schemes and abatement notices for the time being in force in Hong Kong including those relating to the environment and governing the control of any form of pollution (see specific Ordinances mentioned hereinbelow) and licensing requirements under relevant Ordinances and regulations.
 - (b) All information, mitigation measures, prohibitions, restrictions, recommendations and requirements under the Environmental Impact Assessment Report for Development of an EcoPark in Tuen Mun Area 38 with Appendices, i.e. the EIA Report (Register No.: AEIAR-086/2005) dated April 2005, the Final EM&A Manual dated April 2005, the application documents including all attachments (Application No. AEP-226/2005) and other relevant documents in the Register (or in any other places, any internet websites or by any other means as specified by the Director), including the prohibitions and mitigation measures for processes in Table 14.1 and the material throughputs, processes and remarks in Table B.1 of the EIA Report (in so far as applicable).
 - © All information, conditions, submissions, mitigation measures, orders, notices, requirements, prohibitions, restrictions and time limits under the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 (including updated information about the Permit, any amended permit and any further permit) and all mitigation measures recommended and to be recommended in submissions that shall be deposited with or approved by the Director as a result of permit conditions contained in the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 (including updated information about the Permit, any amended permit and any further permit). The Tenant shall refer to, inter alia, Conditions 4.1 to 4.14 (and Annexes A and B) and Conditions 3.7 and 3.8 (and Figures 2 and 3) of the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 regarding measures to mitigate air quality impact, measures to mitigate hazard to life impact, measures to prevent land contamination, measures to mitigate landfill gas hazard, maintenance of landscape and visual measures (see also hereinbelow regarding Condition 5 of the Environmental Permit and specified Ordinances).
 - (d) All information, conditions, submissions, mitigation measures, orders, notices and requirements under on going surveillance and monitoring activities during all stages of the Project and during the tenancy under the Tenancy Agreement (e.g. any additional mitigation measures recommended and to be recommended under the Process Review and Design Audit (carried out and to be carried out in accordance with the EM&A Manual) for various environmental impacts including, but not limited to, noise pollution, air quality, hazard to life, landfill gas hazard, landscape and visual measures, waste management and land contamination).
 - (e) All recommendations referred to in the documents of the EIAO Register which are not expressly referred to in Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 and any amended Environmental Permit (unless expressly excluded or impliedly amended in the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 and any amended Environmental Permit).
- 9.2 Further to Condition Nos. 6 and 8 hereinabove, the Tenant shall at its own cost provide relevant environmental monitoring data, information, documents and assistance to the Director and/or the Environmental Protection Department and shall permit authorised representatives of the

Environmental Protection Department to access, inspect, take samples and monitor the Premises and operations for the Process Review and the Design Audit carried out and/or to be carried out pursuant to Conditions 4.1 and 5 of the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 (and any updated Permit, amended permit and further permit).

- 9.3 If the Tenant's operations (i.e. activities and facilities for recovery and/or recycling and/or reprocessing) are not covered by the EIA Report and/or deviate from the development parameters mentioned in inter alia the EIA Report, the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 (including the parameters at Annex A) and/or any environmental licence (e.g. the Water Treatment Facility ("WTF") Discharge Licence), and if additional mitigation measures are not available or are not effective in the opinion of the Director, to ensure compliance with the EIA Report, the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 (including any updated Permit, amended permit and further permit) and the relevant environmental licence(s), the Tenant shall comply with any modified parameters and/or the Tenant shall immediately modify its operations in such a way that the findings and requirements of the EIA Report, the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 (including any updated Permit, amended permit and further permit) and the environmental licence(s) are complied with and shall immediately cease to continue the offending part of the operations or activity in question.
- 9.4 The Tenant shall at its own cost(s) apply for, obtain, renew, maintain and comply with all the relevant licences related to compliance with all relevant Ordinances, by-laws, regulations, statutory technical memorandums, codes of practice, rules, non-statutory guidance notes, schemes, abatement notices and the environmental permits for the time being in force in Hong Kong (including those relating to the environment and governing the control of any form of pollution). The Tenant shall obtain, renew and comply with all the said licences within the relevant time limits (in any event, within one (1) calendar month of the date of signing and/or execution of the Tenancy Agreement), shall comply with all abatement notices, orders, directions and requests of the relevant authorities and public officers and shall be responsible for paying all relevant fees, costs, fines and penalties.
- 9.5 The Tenant shall not do anything or omit to do anything which would cause, contribute to or involve a breach or potential breach by the Director relating to any of the matters mentioned in Conditions 9.1 to 9.4 hereinabove (and other Conditions hereinbelow).
- 9.6 The Tenant shall fully indemnify the Government and/or the Director for any fees, costs, damages, expenses, fines, penalties, losses and claims arising (a) out of any breach of any of the matters mentioned in inter alia Conditions 9.1 to 9.4 hereinabove (and other Conditions hereinbelow) or (b) from the use of the Premises or (c) out of any works carried out at any time during the term to or at the Premises or (d) out of anything now or during the term attached to or projecting from the Premises or (e) from any neglect or default by the Tenant or by its respective servants or agents or by any express licensee of the Tenant.

SPECIFIC ENVIRONMENTAL RESPONSIBILITIES

Air Pollution

10. Save with an appropriate exemption under the Air Pollution Control Ordinance (Cap. 311 of the Laws of Hong Kong) any regulations made thereunder and any amending legislation, the Tenant shall not install or permit or suffer to be installed upon the Premises or any part thereof or any building(s) or structure(s) or part of any building(s) or structure(s) erected or to be erected thereon any furnace, oven, chimney or flue or any other combustion equipment or use or permit or suffer to be used any fuel or any method or process of manufacture or treatment that might in any circumstance result in, cause or contribute to the discharge or emission of any pollutant or any noxious, harmful or corrosive matter, whether it be in the form of gas, smoke, liquid, solid or otherwise (including but not limited to

air pollutant as defined in Section 2 of the Air Pollution Control Ordinance (Cap. 311 of the Laws of Hong Kong)), which exists or which is imminent, without the prior written approval of the Director.

11. No alteration to the installation and method of manufacture shall be made without the prior written consent of the Director. In any event, the Tenant shall at its own cost(s) comply with, inter alia, Conditions 4.2 to 4.7 and Annex A of the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 regarding design, installation and operation of chimney, location of fresh air intakes and use of ultra-low sulphur or other cleaner fuel(s) as agreed by the Director (and the conditions of any updated Permit, amended permit and further permit regarding measures to mitigate air quality impact), good practices and relevant provisions of the EIA Report and Final EM&A Manual.

Noise Pollution

12. The Tenant shall take all necessary measures as may be required by and to the satisfaction of the Director to ensure that the operation of all plant and equipment, installed or used on the Premises or in any building(s) or structure(s) or any part of any building(s) or structure(s) erected or to be erected thereon, will not result, not cause and/or will not contribute any noise (which exists or which is imminent) which disturbs or annoys the residents or occupiers of any adjoining or neighbouring lot or lots or premises, or causes and/or contributes to disturbance to the general public under the Noise Control Ordinance (Cap. 400 of the Laws of Hong Kong) any regulations made thereunder and any amending legislation.
13. The decision of the Director as to whether any such plant and equipment are causing disturbance or annoyance as aforesaid shall be final and binding on the Tenant.

Waste Management

14. The Tenant shall not permit, allow or suffer any fuel or chemical and any sewage, waste water or effluent containing sand, cement, silt or any suspended or dissolved material to flow, escape or run from the Premises onto any adjoining land or allow any waste matter which does not form part of the recovery and/or recycling and/or reprocessing operation or is not part of the final product of such operation to be deposited, kept, held or stored anywhere within the Premises and other areas of EcoPark. The Tenant shall at its own cost(s) have all such matters and all waste arising from recycling activities, chemical waste arising from maintenance of plant and equipment, sewage sludge (from WTF) and general daily waste from the operation removed from the Premises or any building(s) or structure(s) or any part of any building(s) or structure(s) erected or to be erected thereon in a proper manner to the satisfaction of the Director.
15. In any event, the Tenant shall at its own cost(s) comply with, inter alia, Conditions 4.11 and 4.12 of the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 regarding paving all areas of the Premises with concrete/using concrete hardstanding and siting all fuel tanks and chemical storage areas on the specified sealed areas, respectively (and comply with the conditions of any updated Permit, amended permit and further permit regarding measures to prevent land contamination). The Tenant shall at its own cost(s) comply with relevant provisions of the Waste Disposal Ordinance (Cap.354 of the Laws of Hong Kong) good practices and relevant provisions of the EIA Report and Final EM&A Manual.

Water Pollution

16. In the event that the Tenant produces, generates, permits, causes, allows or suffers any discharge which is subject to control under the Water Pollution Control Ordinance (Cap. 358 of the Laws of Hong Kong) any regulations made thereunder and any amending legislation, and is not covered by a WTF Discharge Licence issued under the Water Pollution Control Ordinance (Cap. 358 of the Laws of Hong Kong) the Tenant shall apply to the Director for a licence and comply with the terms and conditions stipulated in the licence and the WTF Discharge Licence at the Tenant's own cost(s). Otherwise, the Tenant is not allowed to discharge directly or indirectly or to produce, generate,

permit, cause, allow or suffer any discharge into any public sewer, storm-water drain, channel, stream-course, sea or any area inside or outside the Premises any trade effluent or foul or contaminated water or cooling or hot water. Subject to the said licence from the Director and WTF Discharge Licence, the Tenant shall at its own cost(s) separate, collect, discharge and send all process or industrial wastewater to the WTF for treatment to the standard required for discharge into a sewer leading to the sewage treatment works at Pillar Point or other treatment works specified in the licence.

17. Subject to obtaining advance written approval of the Director, the Tenant shall at its own cost(s) provide, install, operate and maintain its own waste water pre-treatment plants within the Premises if such process or industrial wastewater could not meet the influent limits / exceeds the maximum influent criteria of the WTF (in accordance with paragraph 7.2.9 of the Final E&MA Manual). The Tenant shall at its own cost(s) separate, collect, discharge and send all domestic wastewater (i.e. other than process or industrial wastewater) to the Pillar Point Sewage Treatment Works directly for treatment or other treatment works specified in the licence.
18. In any event, the Tenant shall prevent any spilled materials from entering the surface water drainage system and prevent contamination of the sea at its own cost(s) by, inter alia, providing, installing, operating and maintaining stop-logs or interceptors in the surface water drainage system and at the marine frontage area, respectively, or as required by the licence. The Tenant shall at its own cost comply with relevant provisions of the Dumping at Sea Ordinance (Cap 466 of the Laws of Hong Kong) good practices and relevant provisions of the EIA Report and Final EM&A Manual.

Hazard to Life Impact

19. To mitigate hazard to life impact, the Tenant shall comply with, inter alia, Conditions 4.8 to 4.10 of the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 (and comply with the conditions of any updated Permit, amended permit and further permit regarding measures to mitigate hazard to life impact) and shall not:-
 - (a) Bring, keep, store or transport chlorine within the Premises and other areas of EcoPark;
 - (b) Bring, keep, store, locate or transport dangerous goods, substances and fuels supporting combustion including oxygen, acetylene, hydrogen peroxide, rubber tyres and diesel within 10 metres from the boundary of the site of EcoPark; and
 - © Exceed the building height restrictions for buildings on the Premises which are on/near the western boundary of the site of EcoPark as mentioned in Annex B to the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 (including any updated Permit, amended permit and further permit).

Landfill Gas Hazard

20. To mitigate landfill gas hazard, the Tenant shall at its own cost(s) comply with, inter alia, Condition 4.13 of the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 regarding raising clear of the ground all buildings and enclosed structures as specified in inter alia Condition 3.7 (and comply with the conditions of any updated Permit, amended permit and further permit regarding measures to mitigate hazard to life impact).

Landscape and Visual Impacts

21. To mitigate landscape and visual impacts, the Tenant shall at its own cost(s) comply with, inter alia, Condition 4.14 of the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit – Application No.VEP-221/2006 regarding maintaining landscape, planting, treatment and mitigation measures as specified in inter alia Condition 3.8 and Figure 3 (and comply with the conditions of any updated Permit, amended permit and further permit regarding measures to mitigate landscape and visual impacts).

Appendix 3

Endorsed PRC for Shiu Wing

EcoPark Process Review Checklist

General Details

PRC No. 005 (PRC 1 of 1)
 Tenant Ref. No. / EcoPark Lot No. EP08-03
 Tenant Name Shiu Wing Steel Limited (Shiu Wing)
 Related Processes PRC N/A

Process Overview and Throughput

Material Type Metals
 Process Name Waste metal recycling
 Process Specifics Metal sorting
Baling of light ferrous scrap
Shearing of heavy ferrous scrap

Details Attached ☒ Yes (attached) ☐ No, not required
 • Extracts from the Tender Document (Section C, Appendices 9, 12, 18, 21, 24, 25 and 27);
 • Updated Layout Plan;
 • Reply from Shiu Wing dated 8 September 2009; and
 • Facsimile to Shiu Wing dated 2 October 2009.

Associated Material Throughput (incl. DGs, if any)

Material	In/Out	Throughput (tonnes/yr)
Waste metal, steel scrap, construction waste	In	160,944
Light ferrous scrap (baled) /	Out	160,944
Heavy ferrous scrap (sheared)	Out	
Non-ferrous scrap / general refuse	Out	

Throughput < EIA Limit? ☒ Yes ☐ No, exceeds by _____

Risk Assessment
 Classified as DP? ☐ Yes (attached) ☒ No, not required
Iron will be recycled by sorting. As provided by the tenant (attached Appendix 18 from the Tender Document refers), the processed metal will be about 160,944 tonnes per year which will be less than 200,000 tonnes per annum of K.4 of Schedule 2. As such, the project is unlikely to be a DP.

EcoPark Process Review Checklist

Impact Assessment

☒ Process has already been assessed in the EIA (from EIA Table 14.1):

Impacts to:

AQ ☐ Yes ☒ No _____

WQ ☐ Yes ☒ No As confirmed by the tenant, no waste metal washing is required in the recycling process

WM ☒ Yes ☐ No Minimal (non-metal) waste generation

CL ☐ Yes ☒ No _____

Note : AQ=Air Quality | WQ = Water Quality | WM = Waste Management | CL=Contaminated Land

Proposed Mitigation Misting system and industrial dust collector with filter bag are proposed to minimise dust generation. Concrete platform and oil interceptor will be provided at the shearing area to avoid land contamination and surface water pollution. Sorted non-metal waste will be stored and delivered to other recyclers. Wind and solar power supply are proposed on site.

Includes Chimney ? ☐ Yes ☒ No

If Yes, Complies with EIA Table 13.1? ☐ Yes ☐ No ☐ Pending Confirmation

☐ Process has not been assessed in the EIA but is unlikely to warrant a full Design Audit because:

N/A

Summary

- ☒ Process meets EP Conditions
- ☒ ❶ Process meets EIA requirements (see above).
- ☒ ❷ Process is unlikely to warrant a full Design Audit (see above)
- ☒ No unacceptable environmental impacts – allow process to operate
- ☐ ❸ Unacceptable environmental impacts – do not allow process to operate until Design Audit has been completed and approved

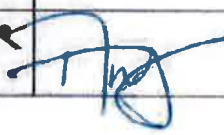
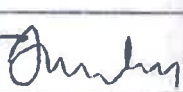


Note : ❶, ❷ and ❸ relate to the process review flowchart, EIA Report Figure 12.1

EcoPark Process Review Checklist

serco



Sign-off Requirements

	ET	IEC	EPD	Operator
Name	Hyder Consulting Limited	Scott Wilson Limited	Waste Reduction and EcoPark Group	Serco Guardian JV
Sign-off	Certified	Verified	Approved	Tenant Advised
Date	25 March 2010	25 March 2010	31 Mar 2010	31 Mar 2010
Signed By	Antony WONG	Harold INSLEY	CF WONG	T C HON
Role	ET Leader	IEC	Officer-in-charge	Park Manager
Signature				

Appendix 4

Material and Waste Throughputs

Throughput of Hong Kong Hung Wai Wooden Board Company (EP06-034)

Date	Waste Input (kg)	Product Output (kg)*	Waste Disposal (kg)*
	Waste Wood	Wooden Board	General Refuse
Jun-08	21,000	-	-
Jul-08	7,000	-	-
Aug-08	-	-	-
Sep-08	8,000	-	-
Oct-08	1,000	-	-
Nov-08	1,000	-	-
Dec-08	-	-	-
Jan-09	60	-	-
Feb-09	60	-	-
Mar-09	-	-	-
Apr-09	-	-	-
May-09	-	-	-
Jun-09	-	-	-
Jul-09	-	-	-
Aug-09	-	-	-
Sep-09	-	-	-
Oct-09	-	-	-
Nov-09	-	-	-
Dec-09	-	-	-
Jan-10	-	-	-
Feb-10	-	-	-
Mar-10	-	-	-
Apr-10	141,880	-	-

Note: * Tenant has not yet commenced recycling process within the lot

Throughput of Champway Technology Limited (EP07-03)

Date	Waste Input (kg)			Product Output (kg)*				Waste Disposal (kg)*			
	Cooking Oil	Grease Trap Waste	Total	Treated Cooking Oil	Biodiesel	Glycerin	Total	Inorganic Waste	Organic Waste	Water Waste^	Total
Oct-08	120,000	-	120,000	-	-	-	-	-	-	-	-
Nov-08	8,000	-	8,000	-	-	-	-	-	-	-	-
Dec-08	2,000	-	2,000	-	-	-	-	-	-	-	-
Jan-09 [#]	93,454	-	93,454	86,912	-	-	86,912	-	4,673	1,869	6,542
Feb-09	86,855	-	86,855	80,775	-	-	80,775	-	4,343	1,737	6,080
Mar-09	88,883	-	88,883	82,661	-	-	82,661	-	4,444	1,778	6,222
Apr-09	82,530	-	82,530	76,753	-	-	76,753	-	4,127	1,650	5,777
May-09	91,022	-	91,022	84,650	-	-	84,650	-	4,551	1,820	6,371
Jun-09	114,143	-	114,143	106,153	-	-	106,153	-	5,707	2,283	7,990
Jul-09	106,287	-	106,287	98,847	-	-	98,847	-	5,314	2,126	7,440
Aug-09	115,096	58,190	173,286	161,156	-	-	161,156	-	8,664	3,466	12,130
Sep-09	125,091	41,950	167,041	155,348	-	-	155,348	-	8,352	3,341	11,693
Oct-09	145,139	324,800	469,939	437,043	-	-	437,043	-	23,497	9,399	32,896
Nov-09	111,053	215,600	326,653	303,787	-	-	303,787	-	16,333	6,533	22,866
Dec-09 [@]	117,688	85,600	203,288	189,058	-	-	189,058	-	10,164	4,066	14,230
Jan-10	122,673	19,780	142,453	132,481	-	-	132,481	-	7,123	2,849	9,972
Feb-10	105,641	-	105,641	98,246	-	-	98,246	-	5,282	2,113	7,395
Mar-10	110,579	-	110,579	102,838	-	-	102,838	-	5,529	2,212	7,741
Apr-10	110,624	69,780	180,404	167,776	-	-	167,776	-	9,020	3,608	12,628

Notes:

* Tenant has not yet commenced recycling process within the lot

[#] As advised by Tenant, the amount of waste cooking oil input in January 2009 has been revised from 4,443 kg to 93,454 kg

[^] Water waste includes slurry and semi-solid waste and is disposed of at landfill

[@] As advised by Tenant, the following throughout data for December 2009 have been modified:

- Cooking oil: from 105,448 kg to 117,688 kg;
- Treated cooking oil: from 177,675 kg to 189,058 kg;
- Organic waste: from 9,552 kg to 10,164 kg; and
- Water waste: from 3,821 kg to 4,066 kg

Throughput of Hong Kong Telford Envirotech Group Limited (EP08-01)

Date	Waste Input (kg)	Product Output (kg)*	Waste Disposal (kg)*
	Waste Plastic	PO, PE, PET, PWC	General Refuse
Jul-09	20,000	-	-
Aug-09	-	-	-
Sep-09	-	-	-
Oct-09	-	-	-
Nov-09	-	-	-
Dec-09	-	-	-
Jan-10	-	-	-
Feb-10	-	-	-
Mar-10	-	-	-
Apr-10	-	-	-

Note: * Tenant has not yet commenced recycling process within the lot

Throughput of Shiu Wing Steel Limited (EP08-03)

Date	Waste Input (kg)	Product Output (kg)*			Waste Disposal (kg)*
	Waste Metal / Steel Scrap / Construction Waste	Light Ferrous Scrap (Baled)	Heavy Ferrous Scrap (Sheared)	Total	General Refuse
Apr-10	220,000	-	-	-	-

Note: * Tenant has not yet commenced recycling process within the lot

Throughput of Yan Oi Tong Limited (P7)

Date	Waste Input (kg)	Product Output (kg)	Waste Disposal (kg)
	Waste Plastic	Processed Plastic (sorted/baled)	General Refuse
Apr-10	80,986	50,870	13,185

Appendix 5

Calibration Certificate of Infra Red Gas Analyser

FUGRO TECHNICAL SERVICES LIMITED

MaterialLab Division,
Fugro Development Centre,
5 Lok Yi Street, 17 M.S. Castle Peak Road,
Tai Lam, Tuen Mun, N.T., Hong Kong.

Tel : +852-2450 8233
Fax : +852-2450 6138
E-mail : matlab@fugro.com.hk
Website : www.materiallab.com.hk

MaterialLab**REPORT ON CALIBRATION OF INFRA RED GAS ANALYSER**

Client : Fugro Technical Services Limited – MaterialLab Division

Sample description : One sample of Infra Red Gas Analyser (GA94A)

Sample identification : E / 084 / 1

Serial number : GA3385

Test required : Calibration

Date of calibration : 22/01/2010

Next calibration date : 22/07/2010

Method used : In-house method (Comparison with Standard Gas)

Results :

Parameters	Standard Gas Concentration, % volume	Infra Red Gas Analyser Reading, % volume	Deviation, % volume
Methane (CH ₄)	1.02	1.0	-0.02
Carbon dioxide (CO ₂)	1.01	1.0	-0.01
Oxygen (O ₂)	1.03	0.9	-0.13

Calibrated by : C. F. LeungCertified by : 
Approved Signatory : Raymond K. F. Wong
Assistant Manager – Chemical & EnvironmentalDate : 22/01/2010*Note : This report refers only to the sample(s) tested.*

Appendix 6

LFG Monitoring Results and Graphical Plots of Monitored Parameters

Contract No. EP/SP/53/06

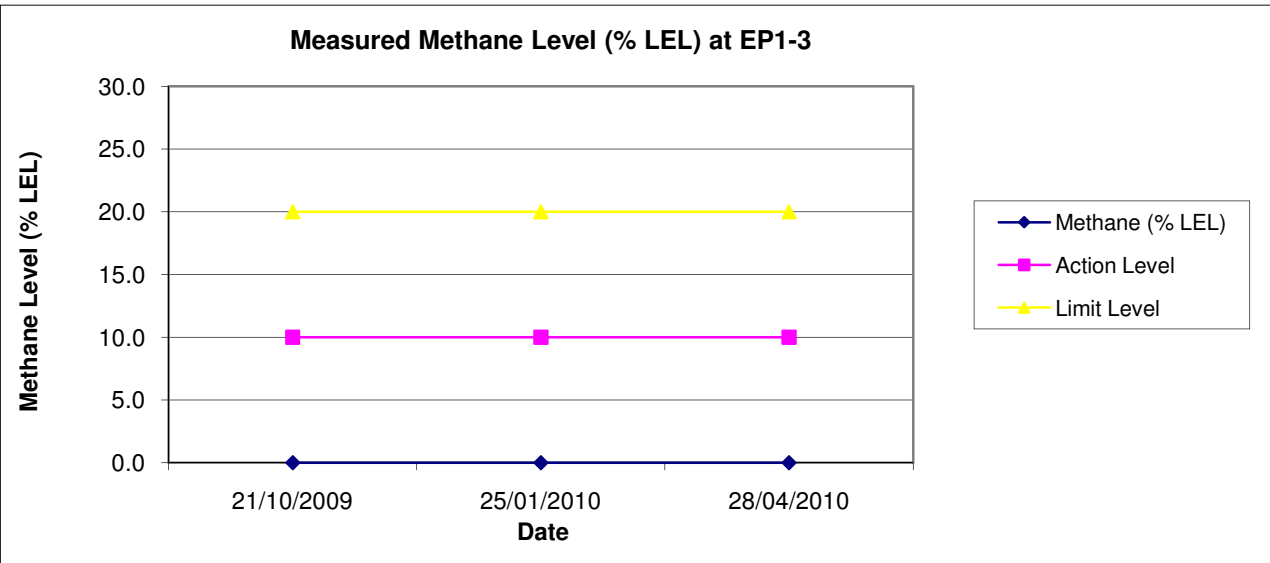
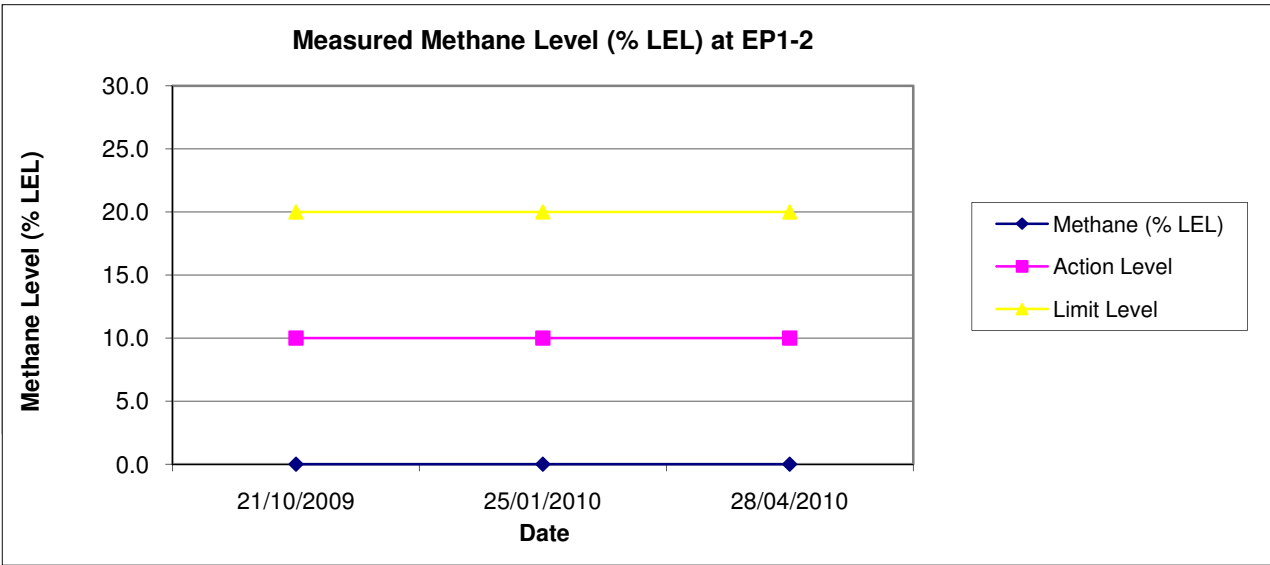
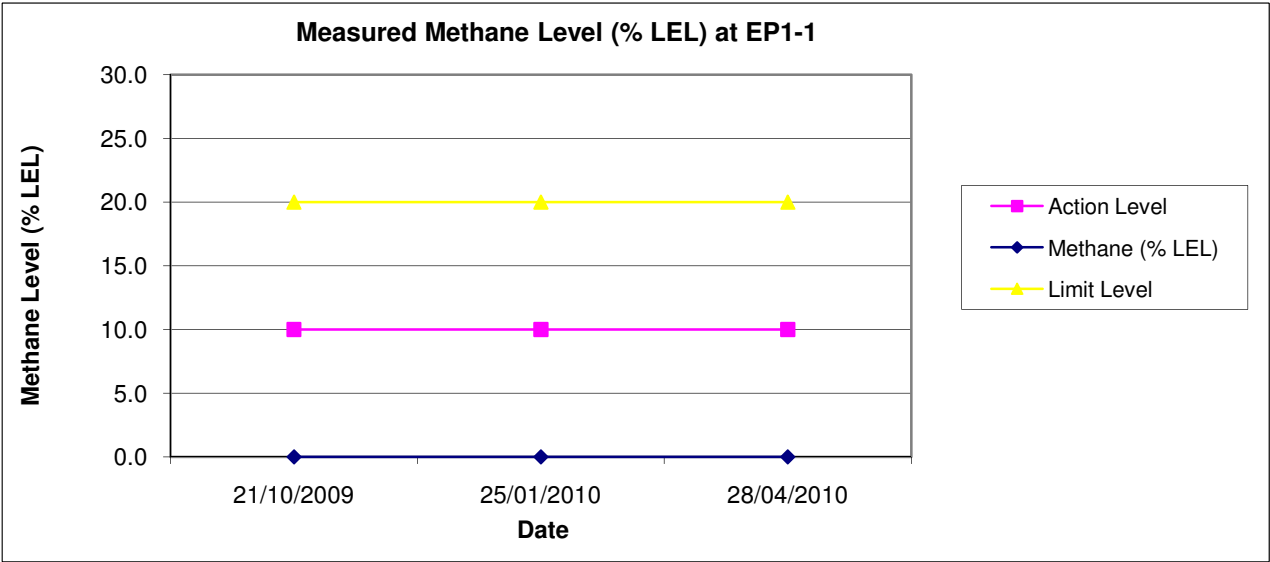
Provision of Management Services for EcoPark in Tuen Mun Area 38

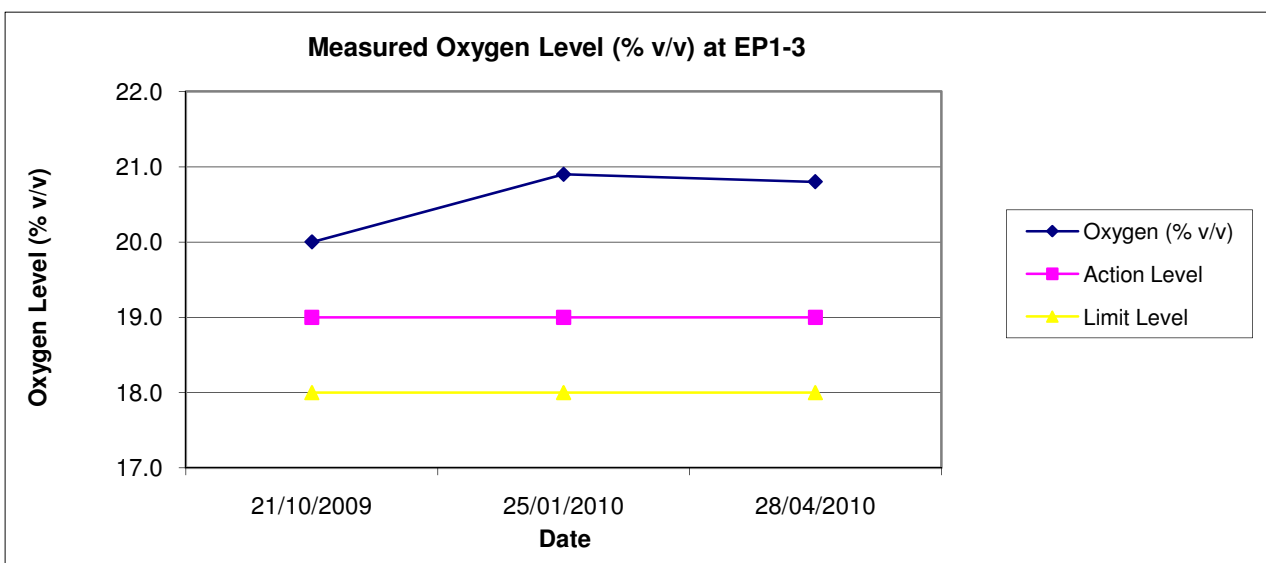
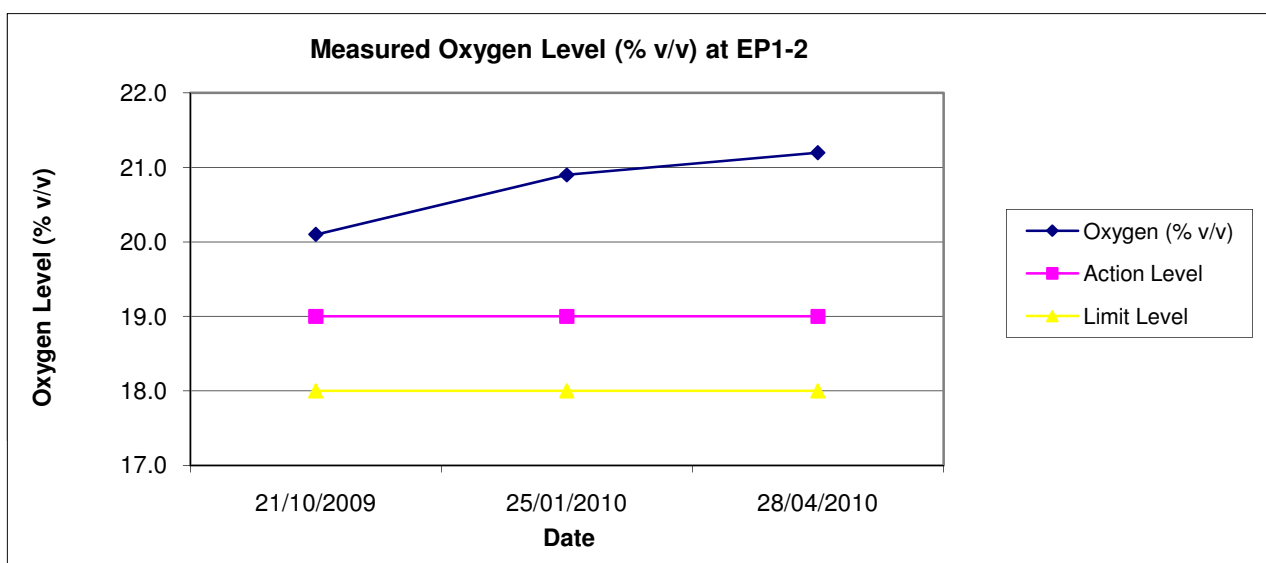
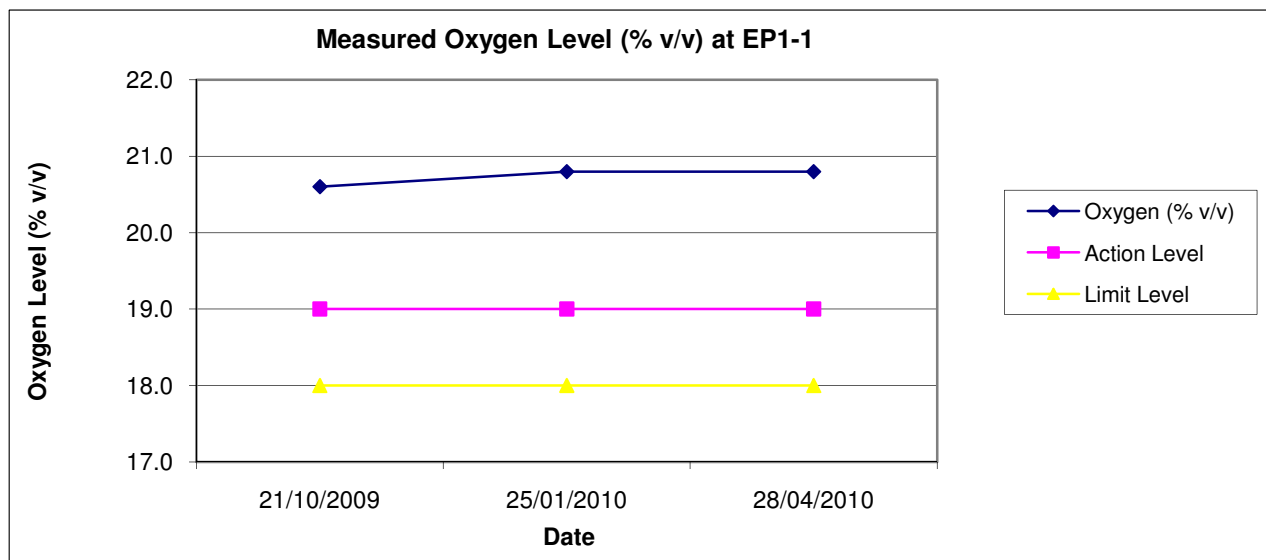
EM&A Services

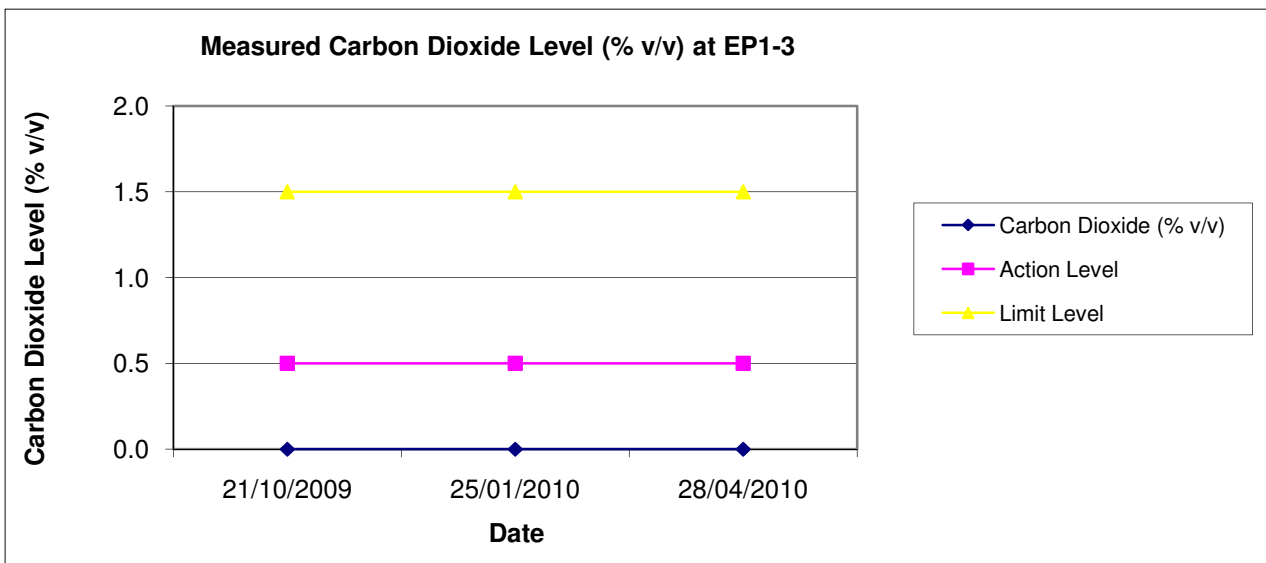
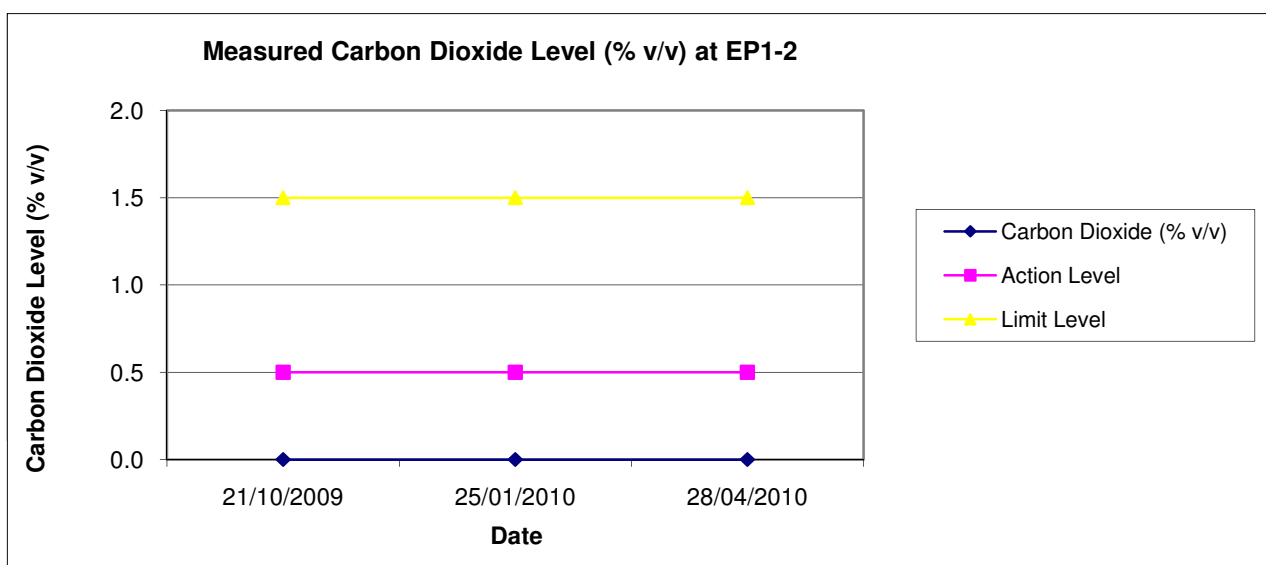
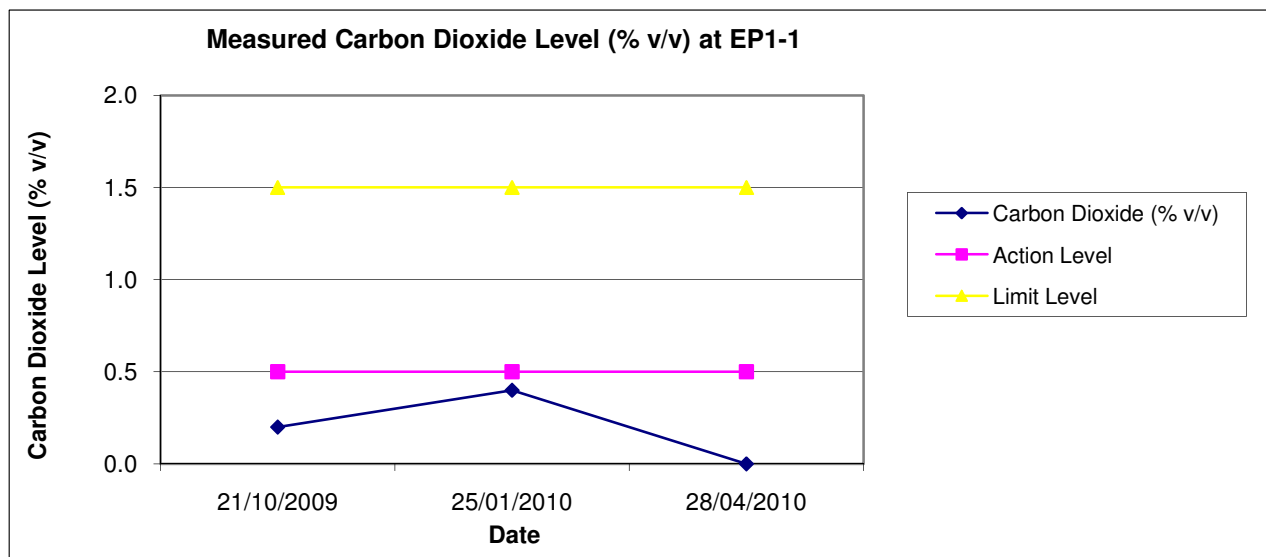
Landfill Gas Monitoring Results - Jan 2010

Monitoring Station ID	Monitoring Locations	Date	Weather Conditions	Temperature (degree)	Start Time	End Time	Measurement Results					Action Level			Limit Level			Remarks
							Methane		Oxygen	Carbon Dioxide	Barometric Pressure	Methane	Oxygen	Carbon Dioxide	Methane	Oxygen	Carbon Dioxide	
							% v/v	% LEL	% v/v	% v/v	mBar (absolute)	% LEL	% v/v	% v/v	% LEL	% v/v	% v/v	
EP1-1	Inside the landscaping area of Administration Building	28-Apr-10	Fine	21	10:17	10:22	0.0	0.0	20.8	0.0	1013	> 10	< 19	> 0.5	> 20	< 18	> 1.5	Nil
EP1-2	PCCW below-ground chamber outside Lot EP08-01				10:26	10:31	0.0	0.0	21.2	0.0	1013							Nil
EP1-3	HGC Broadband below-ground chamber outside Lot EP08-03				10:34	10:39	0.0	0.0	20.8	0.0	1013							Nil

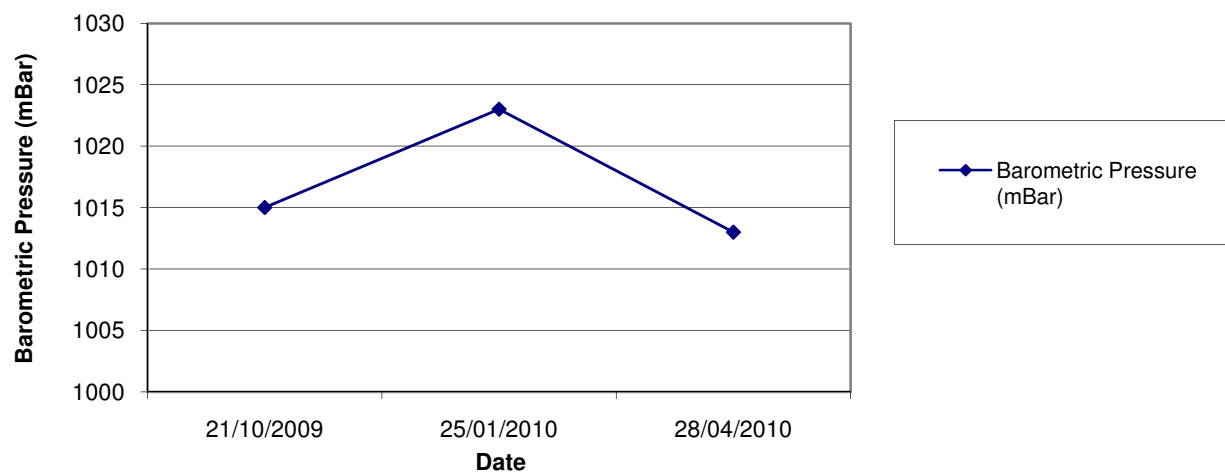
Note: (1) Shaded area indicates an exceedance of Limit Level



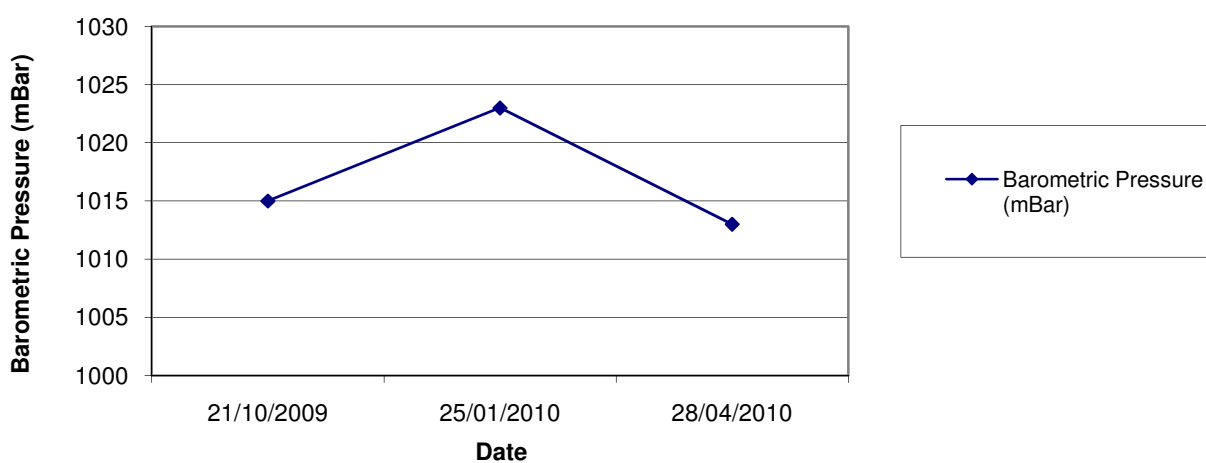




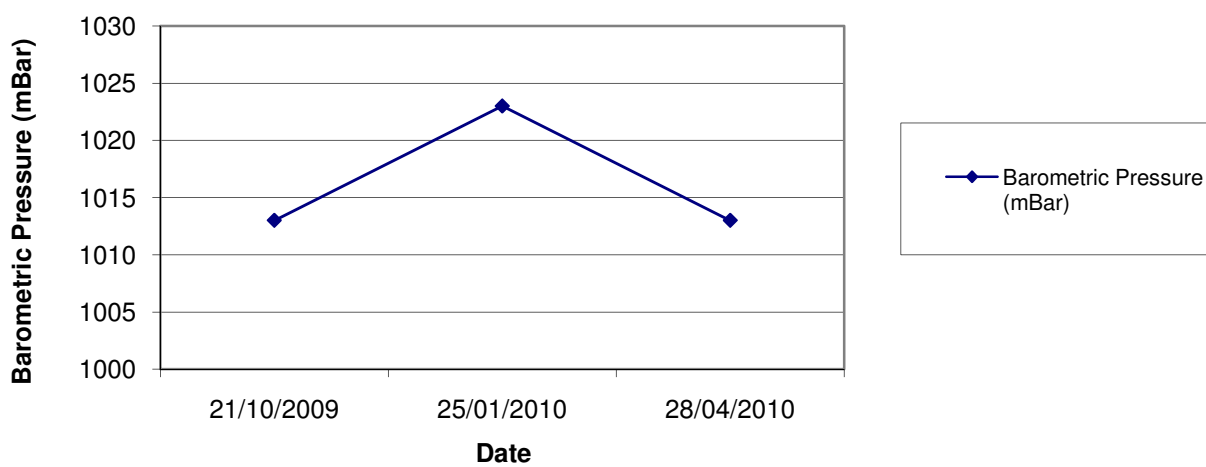
Measured Barometric Pressure (mBar) at EP1-1



Measured Barometric Pressure (mBar) at EP1-2



Measured Barometric Pressure (mBar) at EP1-3






Appendix 7

Approved Site Audit Checklists for Champway in February, March and April 2010

AUDIT DETAILS

Tenant:	Champway Technology Limited		
Ref. No.:	5		
Inspection Date:	23 February 2010	Time :	11:00 am
Lot No:	EP07-03		
Weather Condition:	Sunny / Fine / Hazy / Overcast / Drizzle / Rain	Temperature:	19°C
Wind:	Calm / Light / Breeze / Strong	Humidity:	High / Moderate / Low
IEC Joint Inspection:	Yes / No		

SIGN-OFF

ET's Rep.	EcoPark Operator's Rep.	Tenant's Rep.	IEC's Rep. (if joint Inspection)
			
Name: Carman Chung	Name: TC Hon	Name: Hoppy Chan	Name: N/A

1. GENERAL

Item	Description	Yes	No	N/A	Remarks
1.1	EP for Tenant displayed on notice boards / at entrance?			✓	EP for EcoPark (EP No.: EP-226/2005/A) displayed at the entrance of EcoPark
1.2	Environmental Policy documented?			✓	Operator's Environmental Policy is documented
1.3	Environmental Management Plan updated?			✓	
1.4	a. Emergency Response Plan (ERP) documented?			✓	Operator's ERP is documented
	b. Drill / training records available?		✓		Tenant did not keep proper record for each activity
1.5	Employee's training record available?		✓		Tenant did not keep proper record for each activity
1.6	Any record of prosecution / complaint?			✓	
1.7	Waste Management Plan?			✓	Operator's Waste Management Plan is documented

2. WATER QUALITY

Item	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?	✓			Licence No.: WT00004430-2009
2.2	Any wastewater treatment facility prior to effluent discharge?		✓		
	If yes, facility is properly maintained and function normally?			✓	Maintained by licensed collectors twice a month
2.3	Effluent Monitoring a. Sampling / Monitoring Record available?		✓		With reference to the discharge licence, self-monitoring shall be performed when required
	b. Monitoring frequency met the license requirement?			✓	No sampling was undertaken
	c. Any exceedance?			✓	No sampling was undertaken
	d. If yes, follow-up action taken?			✓	No sampling was undertaken
2.4	Surface run-off control measures in place and adequately maintained?	✓			Regularly maintained
2.5	Surface run-off discharging into drainage system?	✓			
2.6	All manholes are covered?	✓			
2.7	Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided?	✓			
2.8	Drainage system is well maintained to prevent flooding and overflow?	✓			
2.9	Processes with high Risk of Contamination a. Processes / activities are located under a covered area?	✓			
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?		✓		The stop-logs have been passed to the Tenant, which shall be placed near the drain when necessary
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			✓	Not in operation
2.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?			✓	The replacement of equipment oil and lubrication (required by the heat (oil) transmission system) are carried out at off-site garages. This may be necessary once every ten years or not at all.
2.11	Oil interceptor provided for drainage discharging from maintenance area?	✓			
	If yes, oil and grease removed regularly?			✓	Not in use
	Collected by licenced collector?			✓	Ditto
2.12	Cargo Handling a. Cargo Handling Guideline is available and followed to minimize the chance of accidental spillage during loading and unloading?			✓	Ditto
	b. Materials and bulk cargo are properly packed?			✓	Ditto

3. AIR QUALITY

Item	Description	Yes	No	N/A	Remarks
3.1	a. Valid Specified Process License for all specified process available?	✓			SP No. L-25-017 (1)
	b. SP License conditions / monitoring requirements met?			✓	The process is not yet in operation.
3.2	Odour	✓			
	a. Any odour detected?	✓			
	b. If yes, can the source be identified?	✓			From the process
	c. Odorous materials are covered?	✓			
3.3	d. If odour control system is installed, is it operating normally?	✓			
	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?			✓	Not likely to use dusty materials in the tenant lot
	Dust Monitoring			✓	
	a. Monitoring Record available?			✓	
3.4	b. Monitoring frequency met the requirement?			✓	
	c. Any exceedance?			✓	
	d. If yes, follow-up action taken?			✓	
3.5	Enclosures are provided around the main dust-generating activities?			✓	
3.6	Open burning is avoided?	✓			
3.7	Dark smoke emitted from chimney or powered plant is avoided?			✓	No chimney
3.8	Vehicles and equipment are switched off while not in use?	✓			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:			✓	Cert. No.
	a. >25L of conventional liquid fuel per hour			✓	
	b. >35kg of conventional solid fuel per hour			✓	
	c. >1,150 MJ of any gaseous fuel per hour			✓	
3.10	Approval from Authority is available for the use of liquid fuel with a viscosity point of ignition >30 centistokes or an equivalent viscosity?			✓	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			✓	
3.12	a. Approval from Authority for the use of controlled refrigerant?			✓	
	b. If yes, record of refrigeration equipment service available?			✓	
3.13	All air pollution control systems are properly maintained and function normally?	✓			
3.14	Only Ultra-Low Sulphur Diesel is used?	✓			Used by all diesel vehicles, fork-lift truck and emergency generator.


4. WASTE / CHEMICAL MANAGEMENT



Item	Description	Yes	No	N/A	Remarks
4.1	Chemical Waste Producer Registration completed?			✓	Reg. No.
4.2	Provision of sufficient waste disposal points/ receptacles?			✓	
4.3	Waste disposed of regularly and properly?	✓			Twice a week
4.4	Sorting of materials on-site for reuse or disposal to designated outlet?		✓		
4.5	Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection?	✓			
4.6	Sludge is collected by a licensed collector at regular intervals?	✓			
4.7	Packaging of Chemical Waste			✓	
	a. Stored in suitable container?			✓	
	b. Container properly closed or sealed?			✓	
	c. Spillage cleaned up immediately through the use of an absorbent?			✓	
4.8	d. Approval obtained for capacity of containers > 450L?			✓	
	Labelling of Chemical Waste			✓	
	a. Label is securely attached, clean and visible?			✓	
	b. Label is in proper dimension and bilingual?			✓	
4.9	c. Information is accurate and sufficient?			✓	
	Storage of Chemical Waste			✓	
	a. Proper "Chemical Waste" signs are displayed?			✓	
	b. Incompatible wastes separated by an impermeable partition?			✓	
	c. Containers kept in cabinet or receptacle of suitable material and construction (<i>if quantity < 50L</i>) or drip trays capable of storing 110% of the volume of the largest (<i>if quantity > 50L</i>)?			✓	
	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?			✓	
	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?			✓	
4.10	f. Adequacy of area ventilation?			✓	
	g. Outdoors storage area should be covered?			✓	
4.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			✓	
4.11	Liquid Waste Storage			✓	
	a. Storage area floor/surface permeation-proof?			✓	
	b. Capacity of retention structure sufficient to accommodate contents of the largest container or 20% volume of waste in storage?			✓	
	c. Walls or partitions of stacked container storage area constructed of impermeable material?			✓	

5. OTHER ISSUES

Item	Description	Yes	No	N/A	Remarks
5.1	Landfill Gas Hazard (within LFG Consultation Zone)			✓	Outside the LFG consultation zone
	a. Workers and visitors alerted to possible LFG hazards?			✓	
	b. Smoking and open fires prohibited?			✓	
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?			✓	
5.3	Good housekeeping?	✓			
5.4	Any areas within the lot to be used for recycling processes are concrete paved?	✓			
5.5	Valid calibration certificate for any monitoring equipment?			✓	
5.6	Dangerous Goods			✓	Licence has been applied, approval is pending
	a. Valid license for manufacturing / storing dangerous goods?			✓	
	b. Storage area in compliance with the approved plan?			✓	
	c. Storage area(s) has been securely locked?			✓	
	d. Total storage capacity in compliance with the relevant statutory requirement?			✓	
	e. Proper Labelling?			✓	
	f. Dangerous goods properly packaged?			✓	
5.7	Potential stagnant pools cleared and mosquito breeding prevented?			✓	

6. OBSERVATIONS / FOLLOW UP / PHOTOGRAPHS

No.	Observation (Please include location and recommended remedial action)	Expected Date for Action Taken
1	<p>Oily patch was found near the drains. The tenant was reminded to clear the patch and prevent washing it into the drains.</p> 	8 March 2010

No.	Follow-up from Previous Audit Dated <u>25 January 2010</u> (Please state date of previous audit)	Completed / Outstanding?
1	<p>Movable air compressor and handheld breaker that require noise emission labels (NELs) were removed.</p> 	Completed
2	<p>At the reserved area for EcoPark's Wastewater Treatment Plant (WWTP), oil stain was found near the storage tanks. In addition, uncovered waste cooking oil bucket was observed on the bare ground. The tenant was reminded to remove the oil stain and dispose of the waste properly; and provide cover and drip tray / canvas underneath the buckets / storage tanks.</p> 	Outstanding

[Photographs Attached]

AUDIT DETAILS

Tenant:	Champway Technology Limited		
Ref. No.:	6		
Inspection Date:	22 March 2010	Time :	11:00 am
Lot No:	EP07-03		
Weather Condition:	Sunny / Fine / Hazy / Overcast / Drizzle / Rain	Temperature:	19°C
Wind:	Calm / Light / Breeze / Strong	Humidity:	High / Moderate / Low
IEC Joint Inspection:	Yes / No		

SIGN-OFF

ET's Rep.

EcoPark Operator's Rep.

Tenant's Rep.

IEC's Rep. (if joint Inspection)



Name: Carman Chung



Name: TC Hon



Name: Hoppy Chan

Name: N/A

1. GENERAL

Item	Description	Yes	No	N/A	Remarks
1.1	EP for Tenant displayed on notice boards / at entrance?			✓	EP for EcoPark (EP No.: EP-226/2005/A) displayed at the entrance of EcoPark
1.2	Environmental Policy documented?			✓	Operator's Environmental Policy is documented
1.3	Environmental Management Plan updated?			✓	
1.4	a. Emergency Response Plan (ERP) documented?			✓	Operator's ERP is documented
	b. Drill / training records available?		✓		Tenant did not keep proper record for each activity
1.5	Employee's training record available?		✓		Tenant did not keep proper record for each activity
1.6	Any record of prosecution / complaint?			✓	
1.7	Waste Management Plan?			✓	Operator's Waste Management Plan is documented

2. WATER QUALITY

Item	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?	✓			Licence No.: WT00004430-2009
2.2	Any wastewater treatment facility prior to effluent discharge?		✓		
	If yes, facility is properly maintained and function normally?			✓	Maintained by licensed collectors twice a month
2.3	Effluent Monitoring a. Sampling / Monitoring Record available?		✓		With reference to the discharge licence, self-monitoring shall be performed when required
	b. Monitoring frequency met the license requirement?			✓	No sampling was undertaken
	c. Any exceedance?			✓	No sampling was undertaken
	d. If yes, follow-up action taken?			✓	No sampling was undertaken
2.4	Surface run-off control measures in place and adequately maintained?	✓			Regularly maintained
2.5	Surface run-off discharging into drainage system?	✓			
2.6	All manholes are covered?	✓			
2.7	Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided?	✓			
2.8	Drainage system is well maintained to prevent flooding and overflow?	✓			
2.9	Processes with high Risk of Contamination a. Processes / activities are located under a covered area?	✓			
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?		✓		The stop-logs have been passed to the Tenant, which shall be placed near the drain when necessary
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			✓	Not in operation
2.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?			✓	The replacement of equipment oil and lubrication (required by the heat (oil) transmission system) are carried out at off-site garages. This may be necessary once every ten years or not at all.
2.11	Oil interceptor provided for drainage discharging from maintenance area?	✓			
	If yes, oil and grease removed regularly?			✓	Not in use
	Collected by licenced collector?			✓	Ditto
2.12	Cargo Handling a. Cargo Handling Guideline is available and followed to minimize the chance of accidental spillage during loading and unloading?			✓	Ditto
	b. Materials and bulk cargo are properly packed?			✓	Ditto

3. AIR QUALITY

Item	Description	Yes	No	N/A	Remarks
3.1	a. Valid Specified Process License for all specified process available?	✓			SP No. L-25-017 (1)
	b. SP License conditions / monitoring requirements met?			✓	The process is not yet in operation.
3.2	Odour	✓			
	a. Any odour detected?	✓			
	b. If yes, can the source be identified?	✓			From the process
	c. Odorous materials are covered?	✓			
3.3	d. If odour control system is installed, is it operating normally?	✓			
	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?			✓	Not likely to use dusty materials in the tenant lot
	Dust Monitoring			✓	
	a. Monitoring Record available?			✓	
3.4	b. Monitoring frequency met the requirement?			✓	
	c. Any exceedance?			✓	
	d. If yes, follow-up action taken?			✓	
3.5	Enclosures are provided around the main dust-generating activities?			✓	
3.6	Open burning is avoided?	✓			
3.7	Dark smoke emitted from chimney or powered plant is avoided?			✓	No chimney
3.8	Vehicles and equipment are switched off while not in use?	✓			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:			✓	Cert. No.
	a. >25L of conventional liquid fuel per hour			✓	
	b. >35kg of conventional solid fuel per hour			✓	
	c. >1,150 MJ of any gaseous fuel per hour			✓	
3.10	Approval from Authority is available for the use of liquid fuel with a viscosity point of ignition >30 centistokes or an equivalent viscosity?			✓	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			✓	
3.12	a. Approval from Authority for the use of controlled refrigerant?			✓	
	b. If yes, record of refrigeration equipment service available?			✓	
3.13	All air pollution control systems are properly maintained and function normally?	✓			
3.14	Only Ultra-Low Sulphur Diesel is used?	✓			Used by all diesel vehicles, fork-lift truck and emergency generator.


4. WASTE / CHEMICAL MANAGEMENT


Item	Description	Yes	No	N/A	Remarks
4.1	Chemical Waste Producer Registration completed?			✓	Reg. No.
4.2	Provision of sufficient waste disposal points/ receptacles?			✓	
4.3	Waste disposed of regularly and properly?	✓			Twice a week
4.4	Sorting of materials on-site for reuse or disposal to designated outlet?		✓		
4.5	Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection?	✓			
4.6	Sludge is collected by a licensed collector at regular intervals?	✓			
4.7	Packaging of Chemical Waste			✓	
	a. Stored in suitable container?			✓	
	b. Container properly closed or sealed?			✓	
	c. Spillage cleaned up immediately through the use of an absorbent?			✓	
4.8	d. Approval obtained for capacity of containers > 450L?			✓	
	Labelling of Chemical Waste			✓	
	a. Label is securely attached, clean and visible?			✓	
	b. Label is in proper dimension and bilingual?			✓	
4.9	c. Information is accurate and sufficient?			✓	
	Storage of Chemical Waste			✓	
	a. Proper "Chemical Waste" signs are displayed?			✓	
	b. Incompatible wastes separated by an impermeable partition?			✓	
	c. Containers kept in cabinet or receptacle of suitable material and construction (<i>if quantity < 50L</i>) or drip trays capable of storing 110% of the volume of the largest (<i>if quantity > 50L</i>)?			✓	
	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?			✓	
	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?			✓	
4.10	f. Adequacy of area ventilation?			✓	
	g. Outdoors storage area should be covered?			✓	
4.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			✓	
4.11	Liquid Waste Storage			✓	
	a. Storage area floor/surface permeation-proof?			✓	
	b. Capacity of retention structure sufficient to accommodate contents of the largest container or 20% volume of waste in storage?			✓	
	c. Walls or partitions of stacked container storage area constructed of impermeable material?			✓	

5. OTHER ISSUES

Item	Description	Yes	No	N/A	Remarks
5.1	Landfill Gas Hazard (within LFG Consultation Zone)			✓	Outside the LFG consultation zone
	a. Workers and visitors alerted to possible LGF hazards?			✓	
	b. Smoking and open fires prohibited?			✓	
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?			✓	
5.3	Good housekeeping?	✓			
5.4	Any areas within the lot to be used for recycling processes are concrete paved?	✓			
5.5	Valid calibration certificate for any monitoring equipment?			✓	
5.6	Dangerous Goods			✓	Licence has been applied, approval is pending
	a. Valid license for manufacturing / storing dangerous goods?			✓	
	b. Storage area in compliance with the approved plan?			✓	
	c. Storage area(s) has been securely locked?			✓	
	d. Total storage capacity in compliance with the relevant statutory requirement?			✓	
	e. Proper Labelling?			✓	
	f. Dangerous goods properly packaged?			✓	
5.7	Potential stagnant pools cleared and mosquito breeding prevented?			✓	

6. OBSERVATIONS / FOLLOW UP / PHOTOGRAPHS

No.	Observation (Please include location and recommended remedial action)	Expected Date for Action Taken
	No major environmental deficiency was found during the site inspection.	N/A
No.	Follow-up from Previous Audit Dated <u>23 February 2010</u> (Please state date of previous audit)	Completed / Outstanding?
1	<p>Oily patch was no longer found near the drains.</p> 	Completed

2	<p>At the reserved area for EcoPark's Wastewater Treatment Plant (WWTP), oil stain was found near the storage tanks. In addition, uncovered waste cooking oil bucket was observed on the bare ground. The tenant was reminded to remove the oil stain and dispose of the waste properly; and provide cover and drip tray / canvas underneath the buckets / storage tanks.</p> 	Outstanding
---	--	-------------

[Photographs Attached]

AUDIT DETAILS

Tenant:	Champway Technology Limited		
Ref. No.:	7		
Inspection Date:	28 April 2010	Time :	11:25 am
Lot No:	EP07-03		
Weather Condition:	Sunny / Fine / Hazy / Overcast / Drizzle / Rain	Temperature:	21°C
Wind:	Calm / Light / Breeze / Strong	Humidity:	High / Moderate / Low
IEC Joint Inspection:	Yes / No		

SIGN-OFF

ET's Rep.

EcoPark Operator's Rep.

Tenant's Rep.

IEC's Rep. (if joint
Inspection)



Name: Carman Chung



Name: TC Hon



Name: Hoppy Chan



Name: Eric Lim

1. GENERAL

Item	Description	Yes	No	N/A	Remarks
1.1	EP for Tenant displayed on notice boards / at entrance?			✓	EP for EcoPark (EP No.: EP-226/2005/A) displayed at the entrance of EcoPark
1.2	Environmental Policy documented?			✓	Operator's Environmental Policy is documented
1.3	Environmental Management Plan updated?			✓	
1.4	a. Emergency Response Plan (ERP) documented?			✓	Operator's ERP is documented
	b. Drill / training records available?		✓		Tenant did not keep proper record for each activity
1.5	Employee's training record available?		✓		Tenant did not keep proper record for each activity
1.6	Any record of prosecution / complaint?			✓	
1.7	Waste Management Plan?			✓	Operator's Waste Management Plan is documented

2. WATER QUALITY

Item	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?	✓			Licence No.: WT00004430-2009
2.2	Any wastewater treatment facility prior to effluent discharge?		✓		
	If yes, facility is properly maintained and function normally?			✓	Maintained by licensed collectors twice a month
2.3	Effluent Monitoring a. Sampling / Monitoring Record available?		✓		With reference to the discharge licence, self-monitoring shall be performed when required
	b. Monitoring frequency met the license requirement?			✓	No sampling was undertaken
	c. Any exceedance?			✓	No sampling was undertaken
	d. If yes, follow-up action taken?			✓	No sampling was undertaken
2.4	Surface run-off control measures in place and adequately maintained?	✓			Regularly maintained
2.5	Surface run-off discharging into drainage system?	✓			
2.6	All manholes are covered?	✓			
2.7	Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided?	✓			
2.8	Drainage system is well maintained to prevent flooding and overflow?	✓			
2.9	Processes with high Risk of Contamination a. Processes / activities are located under a covered area?	✓			
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?		✓		The stop-logs have been passed to the Tenant, which shall be placed near the drain when necessary
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			✓	Not in operation
2.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?			✓	The replacement of equipment oil and lubrication (required by the heat (oil) transmission system) are carried out at off-site garages. This may be necessary once every ten years or not at all.
2.11	Oil interceptor provided for drainage discharging from maintenance area?	✓			
	If yes, oil and grease removed regularly?			✓	Not in use
	Collected by licenced collector?			✓	Ditto
2.12	Cargo Handling a. Cargo Handling Guideline is available and followed to minimize the chance of accidental spillage during loading and unloading?			✓	Ditto
	b. Materials and bulk cargo are properly packed?			✓	Ditto

3. AIR QUALITY

Item	Description	Yes	No	N/A	Remarks
3.1	a. Valid Specified Process License for all specified process available?	✓			SP No. L-25-017 (1)
	b. SP License conditions / monitoring requirements met?			✓	The process is not yet in operation.
3.2	Odour	✓			
	a. Any odour detected?	✓			
	b. If yes, can the source be identified?	✓			From the process
	c. Odorous materials are covered?	✓			
3.3	d. If odour control system is installed, is it operating normally?	✓			
	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?			✓	Not likely to use dusty materials in the tenant lot
	Dust Monitoring			✓	
	a. Monitoring Record available?			✓	
3.4	b. Monitoring frequency met the requirement?			✓	
	c. Any exceedance?			✓	
	d. If yes, follow-up action taken?			✓	
3.5	Enclosures are provided around the main dust-generating activities?			✓	
3.6	Open burning is avoided?	✓			
3.7	Dark smoke emitted from chimney or powered plant is avoided?			✓	No chimney
3.8	Vehicles and equipment are switched off while not in use?	✓			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:			✓	Cert. No.
	a. >25L of conventional liquid fuel per hour			✓	
	b. >35kg of conventional solid fuel per hour			✓	
	c. >1,150 MJ of any gaseous fuel per hour			✓	
3.10	Approval from Authority is available for the use of liquid fuel with a viscosity point of ignition >30 centistokes or an equivalent viscosity?			✓	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			✓	
3.12	a. Approval from Authority for the use of controlled refrigerant?			✓	
	b. If yes, record of refrigeration equipment service available?			✓	
3.13	All air pollution control systems are properly maintained and function normally?	✓			
3.14	Only Ultra-Low Sulphur Diesel is used?	✓			Used by all diesel vehicles, fork-lift truck and emergency generator.


4. WASTE / CHEMICAL MANAGEMENT

Item	Description	Yes	No	N/A	Remarks
4.1	Chemical Waste Producer Registration completed?			✓	Reg. No.
4.2	Provision of sufficient waste disposal points/ receptacles?			✓	
4.3	Waste disposed of regularly and properly?	✓			Twice a week
4.4	Sorting of materials on-site for reuse or disposal to designated outlet?		✓		
4.5	Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection?	✓			
4.6	Sludge is collected by a licensed collector at regular intervals?	✓			
4.7	Packaging of Chemical Waste			✓	
	a. Stored in suitable container?			✓	
	b. Container properly closed or sealed?			✓	
	c. Spillage cleaned up immediately through the use of an absorbent?			✓	
4.8	d. Approval obtained for capacity of containers > 450L?			✓	
	Labelling of Chemical Waste			✓	
	a. Label is securely attached, clean and visible?			✓	
	b. Label is in proper dimension and bilingual?			✓	
4.9	c. Information is accurate and sufficient?			✓	
	Storage of Chemical Waste			✓	
	a. Proper "Chemical Waste" signs are displayed?			✓	
	b. Incompatible wastes separated by an impermeable partition?			✓	
	c. Containers kept in cabinet or receptacle of suitable material and construction (<i>if quantity < 50L</i>) or drip trays capable of storing 110% of the volume of the largest (<i>if quantity > 50L</i>)?			✓	
	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?			✓	
	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?			✓	
4.10	f. Adequacy of area ventilation?			✓	
	g. Outdoors storage area should be covered?			✓	
4.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			✓	
4.11	Liquid Waste Storage			✓	
	a. Storage area floor/surface permeation-proof?			✓	
	b. Capacity of retention structure sufficient to accommodate contents of the largest container or 20% volume of waste in storage?			✓	
	c. Walls or partitions of stacked container storage area constructed of impermeable material?			✓	

5. OTHER ISSUES

Item	Description	Yes	No	N/A	Remarks
5.1	Landfill Gas Hazard (within LFG Consultation Zone) a. Workers and visitors alerted to possible LGF hazards?			✓	Outside the LFG consultation zone
	b. Smoking and open fires prohibited?			✓	
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?			✓	
5.3	Good housekeeping?	✓			
5.4	Any areas within the lot to be used for recycling processes are concrete paved?	✓			
5.5	Valid calibration certificate for any monitoring equipment?			✓	
5.6	Dangerous Goods a. Valid license for manufacturing / storing dangerous goods?	✓			DG licences for storing sulphuric acid, methanol and fatty acid methyl esters (FAME) were obtained, and the corresponding licence no. are: 021229, 021228 & 021227, and 021225 & 021226. DG licence for manufacturing FAME was also obtained (licence no.: 001456).
	b. Storage area in compliance with the approved plan?			✓	To be inspected in May 2010
	c. Storage area(s) has been securely locked?			✓	To be inspected in May 2010
	d. Total storage capacity in compliance with the relevant statutory requirement?			✓	To be inspected in May 2010
	e. Proper Labelling?			✓	To be inspected in May 2010
	f. Dangerous goods properly packaged?			✓	To be inspected in May 2010
5.7	Potential stagnant pools cleared and mosquito breeding prevented?			✓	

6. OBSERVATIONS / FOLLOW UP / PHOTOGRAPHS





No.	Observation (Please include location and recommended remedial action)	Expected Date for Action Taken
	No major environmental deficiency was found during the site inspection.	N/A
No.	Follow-up from Previous Audit Dated <u>22 March 2010</u> (Please state date of previous audit)	Completed / Outstanding?
1	<p>At the reserved area for EcoPark's Wastewater Treatment Plant (WWTP), oil stain was found near the storage tanks. In addition, uncovered waste cooking oil bucket was observed on the bare ground. The tenant was reminded to remove the oil stain and dispose of the waste properly; and provide cover and drip tray / canvas underneath the buckets / storage tanks.</p> 	Outstanding

[Photographs Attached]

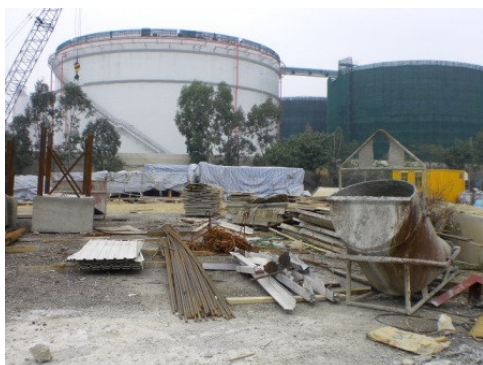
Appendix 8

General Site Audit Checklists in February, March and April 2010

Follow-up from Previous Audit

ET Findings / Recommendations (25 Jan 2010)	Operator / Tenant's Follow-up Actions
<p>1. Outside the tenant lot of Yan Oi Tong, muddy trial was found near the drains. SGJV was advised to liaise with the RE for clearing the muddy trial.</p>   	<p>During the site inspection on 23 Feb 2010, no muddy trial was found near the drains outside Yan Oi Tong's tenant lot. (Closed)</p> 

2. Piles of construction materials lied around in Shiu Wing's lot. The tenant was reminded to enhance housekeeping.



During the site inspection on 23 Feb 2010, the construction materials inside Shiu Wing's lot were removed. (Closed)



3. Chemicals were found without drip tray inside Li Tong's lot. The tenant was reminded to provide drip tray for all chemicals to prevent potential land contamination.



During the site inspection on 23 Feb 2010, chemicals inside Li Tong's lot were removed. (Closed)



4. Large stockpile of soil were observed inside Li Tong's lot. The tenant was reminded to cover the stockpile with canvas so that the potential air quality impact could be minimised.






During the site inspection on 23 Feb 2010, large stockpile of soil were still observed inside Li Tong's lot. The tenant was again reminded to cover the stockpile with canvas so that the potential air quality impact could be minimised. (Outstanding)



	
<p>5. Piles of construction materials lied around Li Tong's lot. The tenant was reminded to enhance housekeeping.</p> <div data-bbox="250 676 732 1037">  </div> <div data-bbox="250 1050 732 1411">  </div>	<p>During the site inspection on 23 Feb 2010, piles of construction materials still lied around Li Tong's lot. The tenant was again reminded to enhance housekeeping. (Outstanding)</p> <div data-bbox="976 824 1469 1144">  </div> <div data-bbox="976 1158 1469 1523">  </div>

Observations

ET Findings / Recommendations (23 Feb 2010)	Operator / Tenant's Follow-up Actions
<p>1. Large stockpile of soil were observed inside Hung Wai's lot. The tenant was reminded to cover the stockpile with canvas so that the potential air quality impact could be minimised.</p> 	<p>To be found out in the next Monthly Site Audit.</p>
<p>2. Chemicals were spilled on the ground of Li Tong's lot. The tenant was reminded to clear the chemicals and provide proper treatment to the dirty soil. Drip tray should also be provided to all chemicals to prevent potential land contamination.</p> 	<p>To be found out in the next Monthly Site Audit.</p>
<p>3. Muddy trial was found near the drains outside the tenant lot "P9". SGJV was advised to liaise with the RE for clearing the muddy trial.</p> 	<p>To be found out in the next Monthly Site Audit.</p>

Follow-up from Previous Audit

ET Findings / Recommendations (23 Feb 2010)	Operator / Tenant's Follow-up Actions
<p>1. Large stockpile of soil were observed inside Li Tong's lot. The tenant was reminded to cover the stockpile with canvas so that the potential air quality impact could be minimised.</p>  	<p>During the site inspection on 22 Mar 2010, large stockpile of soil were still observed inside Li Tong's lot. The tenant was again reminded to cover the stockpile with canvas so that the potential air quality impact could be minimised. (Outstanding)</p>  
<p>2. Piles of construction materials lied around Li Tong's lot. The tenant was reminded to enhance housekeeping.</p> 	<p>During the site inspection on 22 Mar 2010, piles of construction materials still lied around Li Tong's lot. The tenant was again reminded to enhance housekeeping. (Outstanding)</p> 

EcoPark General Site Audit Checklist – March 2010

	
<p>3. Large stockpile of soil were observed inside Hung Wai's lot. The tenant was reminded to cover the stockpile with canvas so that the potential air quality impact could be minimised.</p> 	<p>During the site inspection on 22 Mar 2010, the soil inside Hung Wai's lot was removed. (Closed)</p> 
<p>4. Chemicals were spilled on the ground of Li Tong's lot. The tenant was reminded to clear the chemicals and provide proper treatment to the dirty soil. Drip tray should also be provided to all chemicals to prevent potential land contamination.</p> 	<p>During the site inspection on 22 Mar 2010, chemicals inside Li Tong's lot were removed. (Closed)</p>

5. Muddy trial was found near the drains outside the tenant lot "P9". SGJV was advised to liaise with the RE for clearing the muddy trial.



During the site inspection on 22 Mar 2010, no muddy trial was found outside the tenant lot "P9". (Closed)



Observations

ET Findings / Recommendations (22 Mar 2010)	Operator / Tenant's Follow-up Actions
No major environmental deficiency was found during the site inspection.	N/A

Follow-up from Previous Audit

ET Findings / Recommendations (22 Mar 2010)	Operator / Tenant's Follow-up Actions
<p>1. Large stockpile of soil were observed inside Li Tong's lot. The tenant was reminded to cover the stockpile with canvas so that the potential air quality impact could be minimised.</p> 	<p>During the site inspection on 28 Apr 2010, large stockpile of soil were still observed inside Li Tong's lot. The tenant was again reminded to cover the stockpile with canvas so that the potential air quality impact could be minimised. (Outstanding)</p> 
<p>2. Piles of construction materials lied around Li Tong's lot. The tenant was reminded to enhance housekeeping.</p> 	<p>During the site inspection on 28 Apr 2010, piles of construction materials still lied around Li Tong's lot. The tenant was again reminded to enhance housekeeping. (Outstanding)</p> 

Observations

ET Findings / Recommendations (28 Apr 2010)	Operator / Tenant's Follow-up Actions
<p>1. Oil stain was found inside Shiu Wing's lot. The tenant was reminded to clear the stain and disposed of the contaminated materials properly. Drip tray should also be provided to all chemicals to prevent potential land contamination.</p> 	<p>To be found out in the next Monthly Site Audit.</p>
<p>2. Large stockpile of soil were observed inside Telford's lot. The tenant was reminded to cover the stockpile with canvas so that the potential air quality impact could be minimised.</p> 	<p>To be found out in the next Monthly Site Audit.</p>

3. Muddy water was discharged directly into the drains outside the tenant lot of "P9". SGJV was advised to liaise with the RE for providing proper treatment to the muddy water (i.e. treated in the sedimentation tank) before discharge.



To be found out in the next Monthly Site Audit.





Appendix 9

Draft Site Audit Checklist for Yan Oi Tong in April 2010

AUDIT DETAILS

Tenant:	Yan Oi Tong Limited		
Ref. No.:	1		
Inspection Date:	28 April 2010	Time :	11:45am
Lot No:			
Weather Condition:	Sunny / Fine / Hazy / Overcast / Drizzle / Rain	Temperature:	21 °C
Wind:	Calm / Light / Breeze / Strong	Humidity:	High / Moderate / Low
IEC Joint Inspection	Yes / No		

SIGN-OFF

ET's Rep.	EcoPark Operator's Rep.	Tenant's Rep.	IEC's Rep. (if joint Inspection)
			
Name: Carman Chung	Name: TC Hon	Name: Fanny Tang	Name: Eric Lim

1. GENERAL

Item	Description	Yes	No	N/A	Remarks
1.1	EP for Tenant displayed on notice boards / at entrance?			✓	EP for EcoPark (EP No.: EP-226/2005/A) displayed at the entrance of EcoPark
1.2	Environmental Policy documented?			✓	Operator's Environmental Policy is documented
1.3	Environmental Management Plan updated?	✓			To be inspected in May 2010
1.4	a. Emergency Response Plan (ERP) documented?	✓			To be inspected in May 2010
	b. Drill / training records available?			✓	
1.5	Employee's training record available?	✓			To be inspected in May 2010
1.6	Any record of prosecution / complaint?		✓		
1.7	Waste Management Plan?	✓			To be inspected in May 2010

2. WATER QUALITY

Item	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge Licence available?	✓			Licence No.:WT00006013-2010
2.2	Any wastewater treatment facility prior to effluent discharge?	✓			
	If yes, facility is properly maintained and function normally?			✓	
2.3	Effluent Monitoring a. Sampling / Monitoring Record available?			✓	With reference to the discharge licence, self-monitoring shall be performed when required
	b. Monitoring frequency met the license requirement?			✓	Ditto
	c. Any exceedance?			✓	Ditto
	d. If yes, follow-up action taken?			✓	Ditto
2.4	Surface run-off control measures in place and adequately maintained?	✓			To be inspected in May 2010
2.5	Surface run-off discharging into drainage system?		✓		To be inspected in May 2010
2.6	All manholes are covered?	✓			To be inspected in May 2010
2.7	Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided?	✓			To be inspected in May 2010
2.8	Drainage system is well maintained to prevent flooding and overflow?	✓			To be inspected in May 2010
2.9	Processes with high Risk of Contamination a. Processes / activities are located under a covered area?	✓			Recycling activities take place under a covered area
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?			✓	To be inspected in May 2010
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			✓	To be inspected in May 2010
2.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?	✓			To be inspected in May 2010
2.11	Oil interceptor provided for drainage discharging from maintenance area?			✓	To be inspected in May 2010
	If yes, oil and grease removed regularly?			✓	To be inspected in May 2010
	Collected by licenced collector?			✓	To be inspected in May 2010
2.12	Cargo Handling a. Cargo Handling Guideline is available and followed to minimize the chance of accidental spillage during loading and unloading?			✓	To be inspected in May 2010
	b. Materials and bulk cargo are properly packed?			✓	To be inspected in May 2010

3. AIR QUALITY

Item	Description	Yes	No	N/A	Remarks
3.1	a. Valid Specified Process License for all specified process available?			✓	Not required
	b. SP License conditions / monitoring requirements met?			✓	Ditto
3.2	Odour			✓	
	a. Any odour detected?			✓	
	b. If yes, can the source be identified?			✓	
	c. Odorous materials are covered?	✓			To be inspected in May 2010
	d. If odour control system is installed, is it operating normally?	✓			To be inspected in May 2010
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?			✓	Not likely to use dusty materials in the tenant lot
3.4	Dust Monitoring			✓	
	a. Monitoring Record available?			✓	
	b. Monitoring frequency met the requirement?			✓	
	c. Any exceedance?			✓	
	d. If yes, follow-up action taken?			✓	
3.5	Enclosures are provided around the main dust-generating activities?			✓	
3.6	Open burning is avoided?			✓	
3.7	Dark smoke emitted from chimney or powered plant is avoided?			✓	No chimney
3.8	Vehicles and equipment are switched off while not in use?	✓			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:				Cert. No.
	a. >25L of conventional liquid fuel per hour			✓	
	b. >35kg of conventional solid fuel per hour			✓	
	c. >1,150 MJ of any gaseous fuel per hour			✓	
3.10	Approval from Authority is available for the use of liquid fuel with a viscosity point of ignition >30 centistokes or an equivalent viscosity?			✓	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			✓	
3.12	a. Approval from Authority for the use of controlled refrigerant?			✓	
	b. If yes, record of refrigeration equipment service available?			✓	
3.13	All air pollution control systems are properly maintained and function normally?	✓			To be inspected in May 2010
3.14	Only Ultra-Low Sulphur Diesel is used?	✓			To be inspected in May 2010

4. WASTE / CHEMICAL MANAGEMENT

Item	Description	Yes	No	N/A	Remarks
4.1	Chemical Waste Producer Registration completed?	✓			Reg. No. 9211-421-Y2453-03
4.2	Provision of sufficient waste disposal points / receptacles?	✓			To be inspected in May 2010
4.3	Waste disposed of regularly and properly?	✓			To be inspected in May 2010
4.4	Sorting of materials on-site for reuse or disposal to designated outlet?	✓			To be inspected in May 2010
4.5	Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection?	✓			To be inspected in May 2010
4.6	Sludge is collected by a licensed collector at regular intervals?			✓	
4.7	Packaging of Chemical Waste				To be inspected in May 2010
	a. Stored in suitable container?			✓	
	b. Container properly closed or sealed?			✓	Ditto
	c. Spillage cleaned up immediately through the use of an absorbent?			✓	Ditto
	d. Approval obtained for capacity of containers > 450L?			✓	Ditto
4.8	Labelling of Chemical Waste			✓	To be inspected in May 2010
	a. Label is securely attached, clean and visible?			✓	Ditto
	b. Label is in proper dimension and bilingual?			✓	Ditto
	c. Information is accurate and sufficient?			✓	Ditto
4.9	Storage of Chemical Waste			✓	To be inspected in May 2010
	a. Proper "Chemical Waste" signs are displayed?			✓	Ditto
	b. Incompatible wastes separated by an impermeable partition?			✓	Ditto
	c. Containers kept in cabinet or receptacle of suitable material and construction (<i>if quantity < 50L</i>) or drip trays capable of storing 110% of the volume of the largest (<i>if quantity > 50L</i>)?			✓	Ditto
	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?			✓	Ditto
	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?			✓	Ditto
	f. Adequacy of area ventilation?			✓	Ditto
	g. Outdoors storage area should be covered?			✓	Ditto
4.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			✓	To be inspected in May 2010
4.11	Liquid Waste Storage			✓	To be inspected in May 2010
	a. Storage area floor/surface permeation-proof?			✓	Ditto
	b. Capacity of retention structure sufficient to accommodate contents of the largest container or 20% volume of waste in storage?			✓	Ditto
	c. Walls or partitions of stacked container storage area constructed of impermeable material?			✓	Ditto

5. OTHER ISSUES

Item	Description	Yes	No	N/A	Remarks
5.1	Landfill Gas Hazard (within LFG Consultation Zone)			✓	Inside the LFG consultation zone. To be inspected in May 2010
	a. Workers and visitors alerted to possible LGF hazards?				
	b. Smoking and open fires prohibited?	✓			
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?	✓			
5.3	Good housekeeping?	✓			
5.4	Any areas within the lot to be used for recycling processes are concrete paved?			✓	Most of the area for recycling processes are concrete paved
5.5	Valid calibration certificate for any monitoring equipment?			✓	
5.6	Dangerous Goods			✓	To be inspected in May 2010
	a. Valid license for manufacturing / storing dangerous goods?			✓	Ditto
	b. Storage area in compliance with the approved plan?			✓	Ditto
	c. Storage area(s) has been securely locked?			✓	Ditto
	d. Total storage capacity in compliance with the relevant statutory requirement?			✓	Ditto
	e. Proper Labelling?			✓	Ditto
	f. Dangerous goods properly packaged?			✓	Ditto
5.7	Potential stagnant pools cleared and mosquito breeding prevented?	✓			To be inspected in May 2010

6. OBSERVATIONS / FOLLOW UP / PHOTOGRAPHS

No.	Observation (Please include location and recommended remedial action)	Expected Date for Action Taken
	No major environmental deficiency was found during the site inspection.	N/A
No.	Follow-up from Previous Audit Dated <u>N/A</u> (Please state date of previous audit)	Completed / Outstanding?
	N/A	N/A

[Photographs Attached]